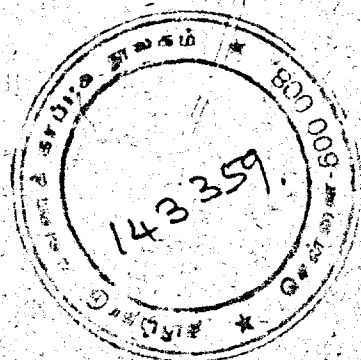


JL
 L: 500211, N 3 HE
 N 39, 17. 8



1315

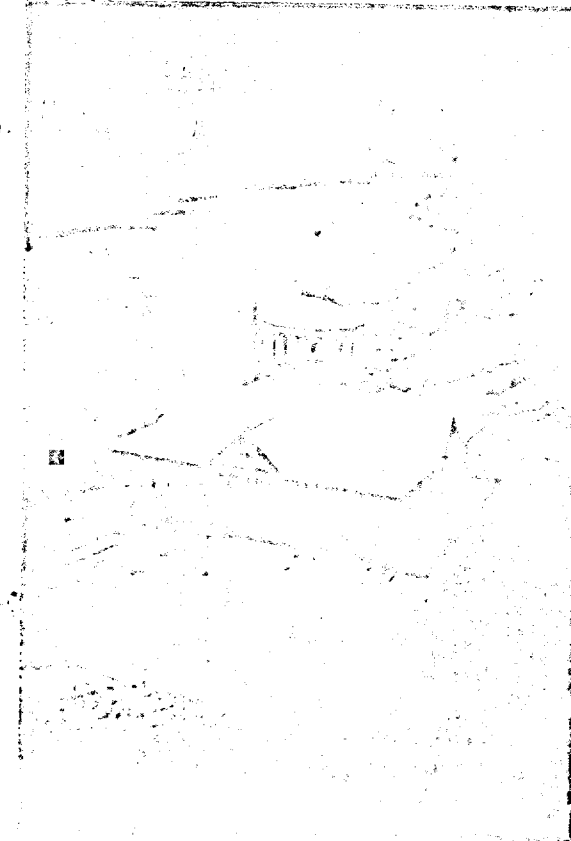
std. 1923

A Journal Devoted to
Healthful Living

HEALTH

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

17/5



Vol. XVII, No. 18
 Aug. 1937.

Select Contents

The Lover.

—Editorial.

Some Errors in the
Indian Diet.

By Dr. L. R. Fernandez.

Care of the Ears.

By S. K. Gupta, M.D., S.C.

The Loose Danger.

By Dr. R. W. Saha.

Guinea-worm.

By Dr. Joseph S. Elin.
L.O.P. & S.

Price 3 As.

Office:

323, Thambu Chetty
 MADRAS.

'KHUS-RAJ' SOAP



Made of purest materials and perfumed with natural flower odours. It is medicated and refreshing. It removes the body odour keeping the skin velvety soft.

S. VISWANADHAM & CO.

MADRAS, VIZIANAGARAM AND VIZAGAPATAM.

BETTER BUY



COUPONS IN EVERY PACKING FOR ATTRACTIVE GIFTS

Simplifies digestion. 1-14-0 per lb.

RASHID JAMSHED & SONS CO, 222, Govindappa Naick Street, MADRAS.

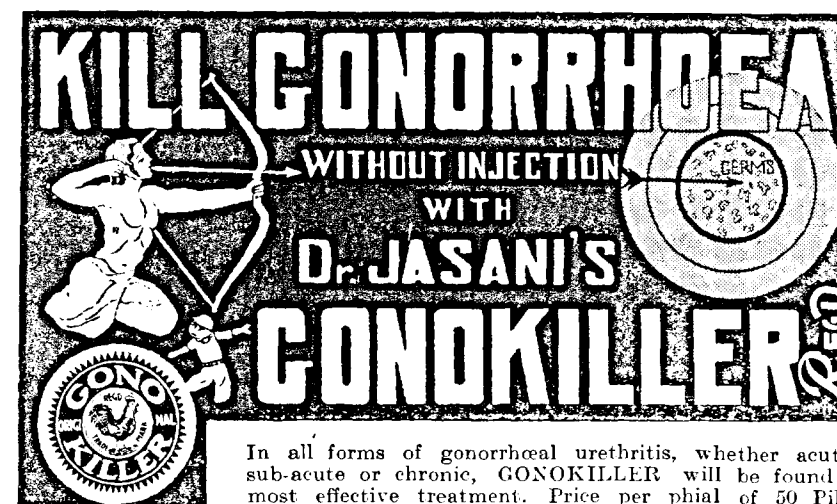
Head Office:—Bombay, 3.

Branches:—Madura & Kumbakonam.

HEALTH CONTENTS, AUG. 1939.

Editorial:—	PAGE.		PAGE.
THE LOVER.	169	GUINEA-WORM. By Dr. Joseph S. Khan, L.C.P.S., (Bom.) Officer-in-charge, Shantipur Hospital, Dhamtari, C. P.	186
Original Articles:—		DIETETICS IN MATERNITY. By Dr. J. Mukherjee, Ranchi.	187
HOW TO PRESERVE HEALTH. By Dr. Haridas De, Late Senior House Physician, Campbell Hospital, Calcutta.	172	Topics From Medical and Health Periodicals	
THE HINDU WAY OF EXAMINING A PATIENT. By Yogaratnakara.	174	PROBLEMS CREATED BY AIR-CONDITIONING.	189
SOME ERRORS IN THE INDIAN DIET. By Dr. L. R. Fernandez, Trichinopoly.	177	THE CURFEW BELL IN EDLINGTON, AN AID TO HEALTH OF CHILDREN.	189
CARE OF THE EARS. By S. K. Gupta, B.D.Sc., B.O., (Ph.), Laboratory Clinic (Analyst), Railway Road, Pasrur, (Pb.)	179	A FRENCH VIEW OF REFUSE DISPOSAL.	190
DIGESTION. By T. D. Mukherji, M.B., D.P.H., Burdwan Bengal.	180	ALCOHOL AND DRIVING.	191
THE LOUSE DANGER. By Dr. R. R. Sukla, Medical Officer, Kekri P. O., Rajputana.	183	SALT LOSS CAUSES HEAT CRAMP.	191
		Health Tit-Bits.	192
		Book Review.	192

GONORRHOEA CONQUERED!



In all forms of gonorrhoeal urethritis, whether acute, sub-acute or chronic, GONOKILLER will be found a most effective treatment. Price per phial of 50 Pills Rs. 3/- (three) V. P. P. Charge -/8/- Extra.

Sole Manufacturer: **DR. D. N. JASANI**, (H.M.) Vithalbhai Patel Road, BOMBAY No. 4.

Madras Stockists: APPAH & CO., China Bazaar.

Beware of Imitations:—Watch for Cock Brand and Name Gonokiller—Before Buying.

Ashtangasareeram

By

P. S. VARIER.

A Concise and Complete work on Anatomy and Physiology in Sanskrit. Certified by the All-India Ayurvedic Conference in 1926. Indispensable to lovers of Ayurveda. Price Rs. 12.

Apply to:—P. M. Warriar,
Asst. Manager,
Aryavaidyasala, Kottakal, S. Malabar.

Degrees! Books! Medicines!
H.L.M.S., H.M.B., H.M.D., Baidyaraaj
etc. Homœo-Ayur-Unani free degrees
by regular and postal tuition examination. No degree fee. Homœo Materia-
medica Rs. 5. Homœo Practice
of Medicine Rs. 4. Independent bread.
Enclose 2 annas stamps:

Indian Homœopathic Institute and Society,
P. O. Datha, Kathiawar, India.

THE HEALTH ALBUM

The **Health Album** is a superb collection on matters of Health, Hygiene, Exercise, Food, Water, Sanitation, Maternity and Child Welfare, Air and Sunshine, Infectious and Communicable Diseases, Physiology etc., etc., and is useful for every man, woman and child. It is a necessity for every home.

Price Re. 1 per copy.

Publishers:

SRI KRISHNAN BROS.,
323, Thambu Chetty Street, Madras.

THE NAME BEHIND

"SADHANA"

Sir P. C. Roy Says:

"I visited Sadhana Ausadhalaya. The preparations are all made in large scale in strict accordance with Ayurvedic process. Its preparations are daily gaining in popularity in all provinces of India and even outside."

"You prepared your medicines strictly according to the individual Ayurvedic Sastras. I know that you are doing something of material benefit for the patients and that it was something new to the world. I realise that medicines prepared in that manner are all powerful to heal. I am very much interested in those methods and would like to know more about it. (Sd.) WM. BROWN, M.D. YOUNGSTOWN, OHIO. (United States of America)"

Speciality in prescribing medicines with Suggestions free of cost by our eminent Kavirajas.

SADHANA AUSADHALAYA

Adhyakha JAGES CHANDRA GHOSE, Ayurvedic-Sastri, M.A., F.C.S. (London), M.C.S. (America), Formerly Prof. of Chemistry, Bhagalpur College.

Head Office & Factory—DACCA.

Branches—ALL OVER INDIA & BURMA.

Agencies—LONDON & CEYLON.

Madras Branch—17/18, Broadway.

WANTED

Candidates to qualify with Homoeopathic, Biochemic, Ayurvedic, Unani, Dental, Optical Degrees by post. Prospectus from: Registrar, Homoeopathic University, Sialkot City.

A FEW OUTSTANDING BOOKS

Practical Rejuvenation, detailing the various methods of keeping up health and virility in old age. Rs. 3-12.

Seven Circles Round Childhood, describing the various stages of the development of the child. Rs. 2.

Practical Prevention, giving the latest methods of Prevention of conception etc. Rs. 10.

Sexual Disorders and Diseases of young men and women, describing their prevention, causes, symptoms and Treatment. Rs. 5.

Food value of Vegetables, giving various recipes. Re. 1-8.

Postage Extra.

Available at: SRI KRISHNAN BROS., P.B. 166, Madras.



LEARN TO DELIVER HEALTH LECTURES

You can do a lot of good to the masses by imparting knowledge to them on matters of Sanitation and Hygiene by studying the **HEALTH LECTURES** series by Dr. U. Rama Rau.

Send for a list of publications.

HEALTH LECTURE

SERIES in ENGLISH, TAMIL & TELEGU
By Dr. U. RAMA RAO.

SRI KRISHNAN BROS.
323, THAMBU CHETTY STREET, MADRAS.

WHOOPING COUGH

Don't allow your Children to go on for 3 months helplessly struggling in the grip of a prolonged and suffocating Cough until it turns into Pneumonia and Asthma when you can cure them within 12 days with Dr. Pereira's Whooping Cough Specific. Rs. 2-12-0 per bottle.

ASTHMA CURE

If you have failed with other medicines, make a last trial and be sure to succeed, as has been the case with so many. Rs. 4-8-0 per bottle.

ANTIDIABETIN

Its use for six months will restore you to your former condition, being free from your long standing Diabetes. Rs. 4-12-0 per bot. PEREIRA & CO., Chemists, No. 20, Calicut (S. India). "Customers are requested to mention the No. 29 when ordering"

NOTICE.

The Public are hereby informed that Messrs. J. F. Pereira & Co. Calicut—have not opened their business at Connemara, Perambur, Madras. A notice to that effect, now appearing in the papers, has not been inserted by them. Their business is still being carried on in Calicut, as it has been for the past 30 years.



Our's for Quality

L.G.

ASAFOETIDA

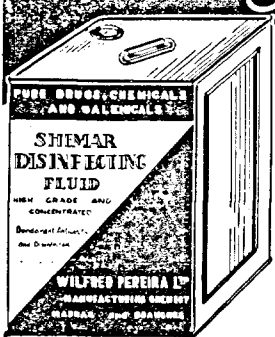
Its taste Quality & Flavour has won the Public Favour

Re 1/14 Per lb

Sold Everywhere

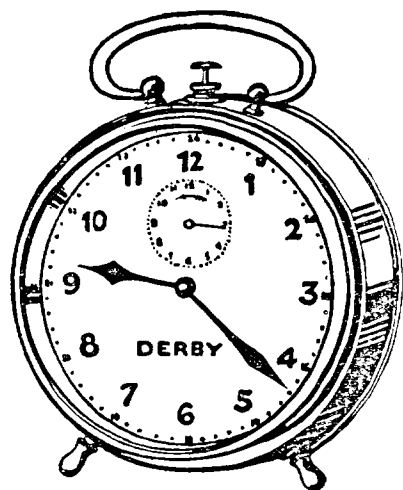
LALJEE GODHOO & Co.
SOWCARPET, MADRAS.
Head Office: BOMBAY.3 Branch Office: KUMBAKONAM.

L. S. M. 211, 22311E N 31.17.8

SIEMAR*Disinfecting Fluid*

A STRONG DISINFECTANT AND DEODORANT. IT HAS POWERFUL GERMICIDAL PROPERTIES, BEING HIGHLY CONCENTRATED. IT IS CHEAPER THAN THE SO-CALLED CHEAP DISINFECTANTS. ONE GALLON OF SIEMAR REPRESENTS 300 GALLONS OF DISINFECTING FLUID READY FOR USE.

WILFRED PEREIRA LTD.
QUALIFIED CHEMISTS MADRAS & BRANCHES

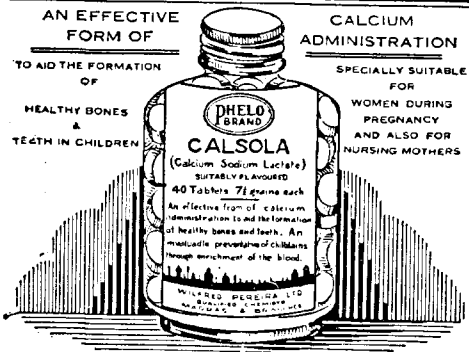


DERBY ALARM TIME-PIECE

Reduced Price Rs. 4-7.

Guaranteed Two Years.

E. A. WATCH CO., MADRAS.

Phelo Brand**CALSOLA****CALCIUM SODIUM LACTATE**

Available from all Chemists:

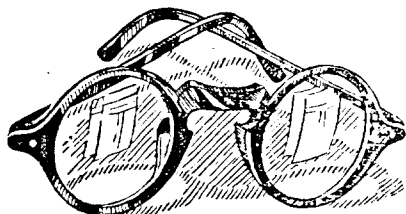
WILFRED PEREIRA LTD.
QUALIFIED CHEMISTS MADRAS & BRANCHES

DEPENDABILITY

HIGH CLASS FRAMES OF

TESTED MERIT!!

Concession Rates for Students!!



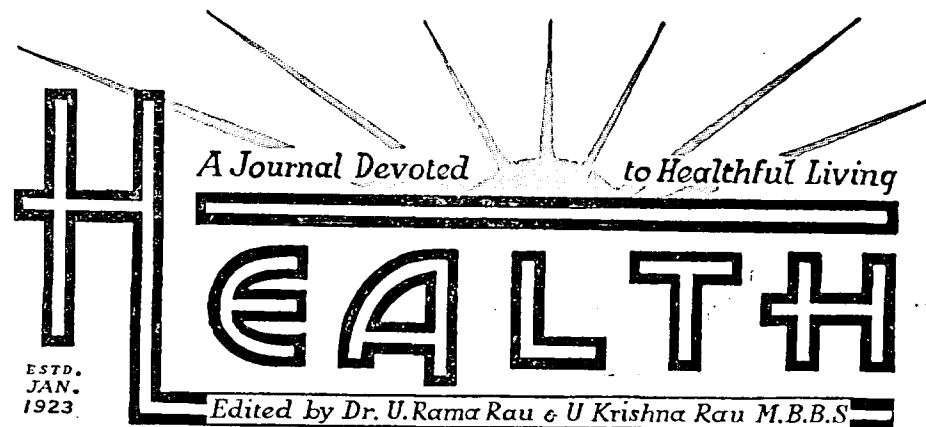
We stand for quality since 26 years

Patronised by
Maharajahs, High Court Judges,
Doctors etc.

RADHA BROS.,

Ophthalmic Opticians,

174, Broadway, :: MADRAS.



Annual Subscription: Rs. 2. Foreign—Rs. 3. Post paid.

Editorial and Publishing Offices:—

323, Thambu Chetty Street, George Town, Madras.

Vol. XVII.

AUGUST, 1939.

No. 8.

Editorial

THE LOVER

.....And then the Lover
Sighing like furnace, with a woeful ballad
Made to his mistress' eyebrow"—*Shakespeare.*

WE now come to the third stage in man's life, that of the lover. The schoolboy attains the age of puberty. This is the age at which the reproductive organs become functionally operative. The age of puberty can be put down at 16 for males and 12 for females. Tremendous changes take place in their constitution. "The voice of the boy grows rough and deep; his bony framework develops rapidly, his shoulders grow broader, the soft down of his childish face is fast turning to a heavy beard. But with the girl, all developments of bone or anything dependent upon earthy properties nearly or quite cease when puberty

is reached. Her pelvis widens and she grows physically fine or what is called feminine and the young man physically coarse or what is termed masculine". The sign of puberty in the male is seminal discharge while menstruation is the sign in the female. Sexual instincts are now aroused in both the sexes and sexual passions require to be satisfied. But when and how is this to be effected is the question now. Some medical men opine that 6 to 10 years must elapse after puberty for marriage or consummation to take place. While a few urge this to be done immediately after puberty. This latter view is strongly upheld by Dr. Foote of America and he gives expression

to it in his own inimitable style in the following passage in his book, "Home Cyclopedia of Popular Medical, Social and Sexual Science". "Nature makes known her wants usually under the age of fifteen, while custom in our civilization holds the sexes apart from 6 to 10 years thereafter; long enough to make women feeble, sexually, apathetic, and disqualified

to become satisfactory companions or healthy mothers; long enough to make our boys coarse, rakish or imbecile and in marriage, the fathers of puny children. In our large cities and to a considerable degree everywhere that our civilization extends, we have reached an era when a young woman is left to select for her husband, one who is weakened by solitary

vice or poisoned with syphilis; when a man may take for a wife, a buxom widow or a frail, breathless young virgin. Perhaps this last statement may appear somewhat exaggerated; but if not always frail in appearance, pray how many young women can you find in fashionable society who are physically sound."

So, early marriage soon after puberty is the ideal, taking all the circumstances into consideration. This is the custom of the Hindus from time immemorial. Unfortunately,

marriage has been confounded with betrothal or the consecration ceremony. The question of early and post-puberty marriage has been thrashed out so exhaustively in some of our previous years' issues that we do not wish to dilate on the subject further. We would however, wish to say a few words here about the method of marriage that is obtaining in the various countries of the world and determine what is best. Mutual love by wooing and final engagement by the parties is the method in vogue at present in all European countries. It will however interest our readers to know the customs prevalent in other countries, about which Dr. Foote gives a vivid description in his book cited above. Among the Zulus, "a young man selects a girl and pays her attention and if he be her choice, she will allow him to sleep with her. If the woman is impressed and decides on marriage, the young man consults his father about the matter who then interviews the father of the girl, and the fathers settle between them dowry to be paid, the amount of which is largely determined by her beauty and rank. This dowry is paid in cattle or sheep or goats. Twelve cows are considered the just equivalent of an ordinary Zulu woman. The marriage is celebrated with pomp and gaiety such as feasting, dancing and song by the warriors and women gathered together".

"In Chira, those of the higher class are betrothed by the parents at three or four years of age and although the marriage may not take place for twenty years, the parties are bound by the arrangements thus made".

Among the Congoes "in order to be engaged, a man must take food to

the parents of the girl and if they partake, it is favourable to the man's interest: then he must make a 'Mozamba' or dress for the girl and if she approve of it, the preliminaries are settled. He then takes cloth to the amount of thirty dollars to the parents and the matter is finally settled and if the girl is old enough and desires co-habitation and the man has his hut prepared, they start out on a period of probation which, if it prove unsuitable of either party to the other, the girl returns to her mother. The Congoes justify this by saying that they do not wish to see their daughters unhappy".

"In Abyssinia, a kind of free-love system prevails. Mutual consent is one form of marriage among them and this is dissoluble at pleasure".

"In the Barbary States, marriage negotiations are conducted entirely by parents, the candidates for matrimony not seeing each other, in many cases, before the bargain has been agreed upon. Divorce is easy for both parties and the wife can dissolve the contract if the husband curses her more than twice".

"Among the Brahmins (Hindus?), the first three castes choose their wives before they had arrived at puberty and it was considered a disgrace among them to pass that period without being married".

The system of late marriages and free-love marriages prevalent in most of the countries today, has serious defects. As one writer has observed, it "culminates in divorce courts, the action of breach of promise, seduction, prostitution, infanticide; abortion, desertion, cruelty, husband-poisoning, wife-kicking, contagious



"Love is blind", so goes the saying and it cannot be better demonstrated than in the case of these two lovers in the above picture who got themselves married through mutual love and adoration.

disease, suicide, illegitimacy, unnatural vice etc.". So, the Hindu system of marriage, where the parents, in the interest of their children, select the best mates, physically, mentally and morally fit and get the couple married in proper age which has recently been fixed by legislative enactments at 14 for girls and 18 for boys, seems to us to be a mar-

riage in the real sense. We, therefore, warn our youths not to be swayed by the glamour of modern civilization which, by its trial marriages, companionate marriages and the like is fast returning to the days of savagery, above alluded to, and thereby court all the matrimonial troubles which that civilization is at present inflicting on mankind.

HOW to PRESERVE HEALTH

HEALTH is the greatest asset that a man may have.

By Dr. HARIDAS DE,
*Late Senior House Physician, Campbell Hospital,
Calcutta.*

the Indians laid special emphasis on the intellec-

No earthly possession can compare with sound health. A healthy cooly is happier than a delicate prince. So, it has been said that 'an ounce of health is better than a ton of gold'. No man can enjoy perfect happiness and peace of mind without good health. So every one should try to preserve it.

Health is the secret of success. No man can attain success in any sphere of activity without sound health. For, to succeed in any undertaking requires sustained labour, perseverance and an iron will. A man who suffers from constant illness lacks that energy which gives vitality and cheerfulness to do his work properly. Life is a struggle. And no man can win the struggle for existence if he is not physically, mentally and spiritually equipped for the purpose. Hence the ancient Romans had a remarkable proverb. "Mens sana in corpore sano" i. e., a sound mind in a sound body. The three great peoples of the world, the ancient Athenians, the Spartans and

tual, the physical and the spiritual aspects of man respectively. So they failed. The three ideals must be harmonised. In other words, there must be a true synthesis or harmonious development of these three ideals. We must have sound mind in a sound body. Nor should we neglect the moral and spiritual growth of our nature. Mere theories will not do. We must be eminently practical. We must speak less and do more. Mere knowledge of hygienic principles will not make us healthy. We must be trained from our childhood in forming health habits and cleanliness of body and mind.

The true foundation of health is to be found in the ancient Indian ideal of Brahmacharya or absolute purity of thought and conduct and moral discipline in our student life. The lack of moral discipline and purity of body and mind lies at the root of the alarming physical degeneracy, at the present time, of the health of our young men.

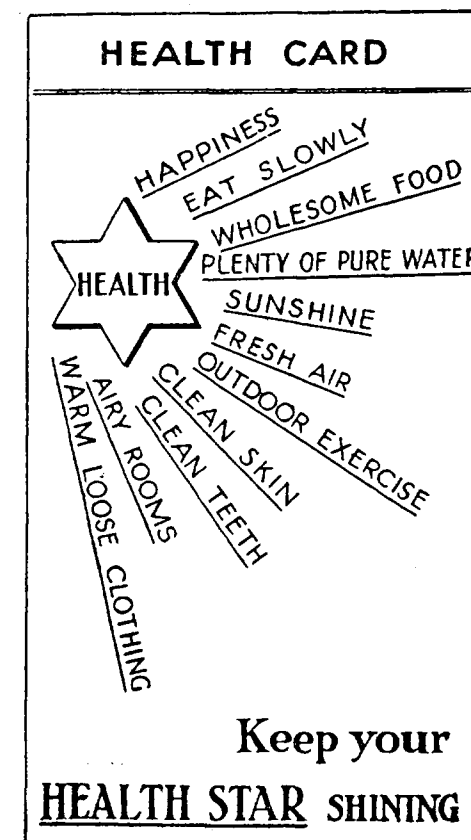
Our students and young men especially are notoriously undersized, cramped in their bodily development, thin and emaciated in their limbs, with wrinkled faces, pale and faded countenance, without fire or lustre in their eyes, leading a miserable existence, without push or energy, the victims of circumstances and not the lords of their destiny. But if we look at the young men and students of the more forward countries of the West, we find them full of vigour and energy with sound physiques and shining faces looking to life with confidence, hope and cheerfulness.

What is the cause of the physical weakness of our people? Why should our people remain cramped or stunted in their growth while others grow to the full height of their stature, strength and development.

The first and foremost of the causes of our physical breakdown is the profound ignorance of the vast masses of our people of the most elementary principles of hygiene. So we must organise ourselves and diffuse the elementary knowledge of hygiene, so as to lead to the formation of health habits amongst the vast masses of our countrymen. In every village there must be health associations and sporting clubs for the spread of hygienic principles amongst the lay people. Lantern lectures and educational films, journals on Health now-a-days play an important part in the formation of health habits amongst the masses. The problem of rural health should engage the attention of the leaders of our country, for health is the foundation of national efficiency and greatness. In all the progressive countries of the world, the problem of health engages the serious attention of all

concerned. So we Indians must tackle this problem in all earnestness. For, weakness is a crime. No nation will respect us if we are not physically, morally and mentally strong and efficient. To have sound health we must :—

- (1) Breathe pure air.
- (2) Be neat and clean in body and mind.



- (3) Drink pure water.
- (3) Avoid intoxicating drinks and stimulants.
- (5) Drink more milk.
- (6) Play games and take regular exercises.
- (7) Be pure in thought and conduct.
- (8) Eat food rich in vitamins.

Deep breathing exercises are very useful in making us healthy and strong.

Another important cause of our physical weakness is malnutrition and a defective diet. The food habits of our people must be regulated by certain scientific investigations accepted by the medical authorities all over the world and must suit our constitution and climatic conditions. An analysis of the foods taken shows it to be composed of some fixed efficient constituents.

(1) Proteins, which conduce to the growth of our body and the repair of living tissue. Fish, flesh, milk and eggs contain a high percentage of protein of good quality.

(2) Fat, animal fats of good quality such as butter and cream and of poorer quality such as vegetable fats and oils.

(3) Carbo-hydrates, which are present in abundance in cereals such as rice, atta, etc.

(4) Vitamins. The most important for India are probably vitamin A, present in milk, fat and carotene, a yellowish substance present in green vegetables which the human body is capable of transforming into vitamin A. Vitamin B is concerned in the prevention of Beri-Beri.

(5) Minerals: Calcium or lime and phosphorus are the minerals which tend to be deficient in Indian dietaries; the only really good source of lime is milk which is not available for the poor.

An increased consumption of milk for all is to be recommended. The consumption of more atta in rice eating areas is also to be recommended on account of its higher content in certain minerals such as calcium. If we have a good doctor, pure air, pure water and abundant sunshine and if we live according to hygienic principles and take regular exercises we may live long and healthy lives. So we must follow the hygienic principles and form health habits.

The Hindu Way of Examining a Patient

BY YOGARATNAKARA.

Examination of Urine.—I shall now say about the examination of urine by which the nature of the disease becomes clear. The physician, having awakened the patient in the last quarter of the night during the four *ghatis* (i.e., between 3-30 and 6-00 A.M.) and having taken the urine in a glass vessel, should examine it at sun-rise. (How closely it resembles the modern method!) The first flow of urine

should be thrown away and the middle flow should be examined very carefully to know the cause of the disease and proper treatment should be given for the benefit of the patient. The urine is white in *vatha* (wind), that of the *kapha* (phlegm) patient, is foamy (possibly due to phlegm or albumen); it is red in *pitha*; it is mixed (i.e., white and red, red and foamy or white and foamy) in *dvandaja* (any

derangement of any two humors of the body). In *sannipata* it is dark; this is the nature of urine. The examination of the patient's urine should be done carefully and systematically. With the blade of a grass, a drop of oil is to be put in the urine, because it is very light. If the oil-drop spreads at once in the urine, the patient is curable; if not, he is curable with great difficulty; if it goes to the bottom * he is incurable; this is the examination done by *Nagarjuna*. From *Charpata*: when *vayu* is in excess, the urine is dark blue and dirty (rough or astringent); in *pitha* it is yellowish red and like oil (viscous!); in *kapha* it is fatty (heavy) and dirty like the water in a pond, when blood is in excess (or spoilt) it is oily and like warm blood. The urine of those devoid of food (who fast or can't take food) is of the colour of citron juice with the colour (tinge) of gruel and like sandal. When the illness is of indigestion, the urine is like rice water. In fresh or recent fever (as opposed to chronic or intermittent fever; or it may mean on the very first day of fever), the urine is profuse and of the colour of smoke. In *vatha* and *pitha* it is warm and of the colour of smoky water; in *vatha* and *kapha* it is white and shiny like bubbles of air (rising in it); in *kapha* and *pitha* it is dirty, with colour of blood; in slow fever (or after the fever has continued for sometime as opposed to the first day), it is like blood (thick) and yellow. From *sanni-*

* Possibly it may form a compound with the urine and being heavier, sink in it. If so their knowledge seems well advanced. This should be investigated by at least Indian doctors to verify the truth or otherwise of this statement.

pata too its colour is mixed, so should be known by the physician. When the drop (of oil mentioned previously) spreads in the region of the East (in the urine) the patient becomes well soon; if it spreads in the South, fever is to be understood, but health is restored gradually; if the drop spreads in the North, then sure, there is no illness in the person, no doubt. If it spreads in the West region, the physician should declare health. If the drop spreads in the North-east, the patient dies within a month. If it expands in the South-east, similar is to be known. If it spreads in the South-west, the person is shattered in health and then there is sure death. If the drop spreads in the North-west he perishes even by nectar. Seeing the form of the drop (of oil) in the urine as an open plough, tortoise attached to the shape of a buffalo, group of baskets (or the shape of the liver), man without head, part of a limb (i.e., limb broken), weapon, sword the sharp edge of a spear (or a house lizard), arrow, stick, so also three or four paths meeting (i.e., 3 or 4 lines meeting), the physician should give no treatment anywhere. If a tank full of swans, ducks, lotus, elephants and fly-whisks, umbrella, portal (or arch), a house full is seen, then health is sure to be known (i.e., the sickness will disappear); one should begin treatment. When the drop of oil in the urine becomes like a sieve (split up into a number of separate minute particles to appear so), *Kuladosha* * is sure to be known due to excess of working of any portion of the body; if there be the form of a man, or two

* *Kuladosha* is injurious nature of the body (collection of any foreign body or crystallisation like stone in the bladder).

heads, one should know there is *bhuta-dosh* (an error in the elements), then he should use the knowledge of the elements to bring about the necessary adjustment to keep them in equilibrium so that the body is in health. Knowing the urine to be the colour of Bengal madder, smoky, dark-blue, and oily, cold like water, the wise should understand and do the treatment for treating internal diseases of the patient. When it assumes the shape of a serpent (wavy) the illness is due to wind; umbrella-like, due to *pitha*; if the shape of a pearl is seen, it is due to consumption; this is the nature of urine.

Here, the ancients combined astrology too with medicine. The shape is to be taken metaphorically. Modern medical theory does not see any relation to astrology. That there is some connection between disease and astrology cannot be denied. This is bound in time to be realised and accepted. Traces of such can be already found when the physician fears a crisis on the waxing and waning of the moon especially the full moon and new moon days in fevers like Typhoid and Pneumonia.

Examination of Fæces. — From *Rudratanttra*: due to wind fæces becomes firm and dry; due to *pitha* it is yellow; from *kapha* it becomes white. In *sannipatha* all these are seen. Due to excess of wind, it is broken (split—not consistent), foamy, rough, brownish-

red; in derangement of *vata* and *sleshma* (wind and phlegm) faeces is reddish-brown. In *pitha* and *vata*, it is congested, cut (incoherent), yellowish dark; due to *pitha* and *kapha* it is yellowish white: slightly coarse, slimy (or oily). It is dark, slimy, split, yellow, hard and white due to *tridosha* *. When ordure is emitting a very bad odour, and cold, then it is said to be due to full digestion and assimilation. When ordure is black, like pellets (balls), it is due to excessive weakness (of digestion). In dropsy, it is white and very bad smelling. In asthma, it is black, in constipation, it is yellow and gives pain in the hips (while evacuating); also when very black, very white and very yellow and reddish, it is prognostic of death, but if it is too hot, it is sure death. Fæces of *vata* is dark, of *pitha* is yellowish, due to *kapha* it is of a colour like blood and little white. When it is mixed, they say it is due to a disorder of any two humours of the body. In indigestion, it is not uniform (not fully assimilated and hence particles of food are seen in it); in assimilation, it is clear and consistent; in excess digestion, it is in the form of balls and dry; in weak digestion (dyspepsia), it is semi-liquid, bad smelling, white like moon-light and incurable; this is the nature of ordure.

* Tridosha is vitiation or combined derangement of all the three humours of the body.

(To be Concluded)

Some Errors in the Indian Diet

By

Dr. L. R. Fernandez,

Trichinopoly.

In the diet of Indians some errors are chiefly responsible for a large amount of disease and suffering. Several forms of dyspepsia and indigestion, appendicitis, obesity, biliousness, etc., are due to dietetic errors.

Under-feeding and unbalanced diet, chiefly among the poor and middle-classes, is the most common of all dietetic errors. The usual diet of rice and sambhar is defective in quality. In the husking and polishing the rice is

deprived of its most important part namely, the vitamins. In the preparation of vegetables like potatoes, the skin is peeled off and then spoiled by cooking, as by boiling for a long time the vitamins which are essential to good health are destroyed. The rice water or congee which is usually rejected, has a high nutritive value

as soup. It is a pity that people throw away such a good source of nutrition. The stomach of an average Indian can hold nearly 2½ pounds. But the usual weight of the daily diet is roughly six pounds and this quantity is generally introduced into the stomach in three instalments and in two instalments in those cases where people take only two meals a day. This naturally leads to an increase in the size of the stomach and disproportionate development of the abdomen. This is particularly the case with the children of the poor classes who develop "pot-bellies," due their excessive intake of an indigested diet in order to make up for the deficiency of other ingredients, particularly proteins and mineral



salts. A good or well-adjusted dietary should therefore consist of the various proximate principles of food, namely, proteins, carbohydrates, fat and mineral salts in adequate proportions with vitamins which are present in abundance in green vegetables, germinating cereals, fresh milk, butter-milk and fresh fruits. A healthy diet

should comprise of rice or chapaties, milk, oil or ghee, fish or mutton, vegetables and fruits.

Over-eating is the most common of all dietetic errors among the well-to-do classes. The general obnoxious effects of over-eating are indigestion, lassitude, drowsiness, sleeplessness and an excessive increase in body-weight. Over-fed people are very often liable to get attacks of liver and kidney troubles, high-blood pressure, cancer, thickening of the arteries, gas or flatulence and biliousness. Excessive eating causes injury to the organs of digestion and urination by imposing more work upon them than they are capable of doing. The well-meant habit of resenting the most highly palatable dish at the close of the dinner and coaxing the guests into eating it in spite of their already over-filled stomach is productive of great harm indeed. In many cases special injuries result from an excessive intake of particular food-stuffs. For example, excessive use of fatty foods like bacon, pork, cheese, etc. very rapidly leads to obesity, intestinal putrefaction and biliousness. Too much of protein causes kidney troubles, rheumatism, uric acid complaints and skin eruptions. Taking a good deal of cereals is conducive to acidosis.

People of India are well known for their irregularity in the hours of taking their meals. One day some take their dinner at 12 noon, the next day at 1 p. m., and the third day at 1-30 p. m. This irregular practice of taking meals at different hours of the day and night is highly detrimental to health. Let us hear what the great physiologist, Dr. Kellogg says in this connection. "Irregularity in the times of eating is highly injurious for numerous reasons which become at once apparent when one recalls some of the simple facts relating to the physiology of gastric digestion. The stomach empties itself in about 4

hours normally. When an interval of 5 hours is allowed between meals, it has an hour in which to completely empty and disinfect itself, as well as to recruit the energies of its gland cells in preparation for the work of digesting the next meal. This is essential for good digestion. There is a close relation between the taking of food and the normal rhythmic activity of the colon. During the taking of a meal, the food residues are moved forward in the colon four times as far as during the hour preceding the meal. When a meal is omitted, this physiologic stimulation of the colon is lacking, and the result may be the failure of the colon to evacuate its contents at the normal time, leading to distension of the colon and stagnation which may become the starting point for chronic constipation. Thus regularity of meals is necessary in order to secure normal rhythmical action of the colon in the evacuation of food residues and other body wastes."

Some food combinations are quite unsuitable for evident reasons. For instance, eggs with beans or cheese, as both are very rich in nitrogen; butter with almonds or cashew nuts, as both are rich in fat, milk and meat are unsuitable combinations to which majority of the eaters don't pay attention. In order to possess the maximum amount of physical and mental efficiency, it is advisable to combine those foods which harmonise with each other. Thus fatty or nitrogenous food should be mixed with carbohydrates and vegetables; milk is best mixed with cereals. Foods which are lacking in appetising flavours, while not actually injurious to the body, are however objectionable for the reason that they fail to promote the secretion of gastric juice through the sense of sight and smell. So that the food may be well-digested, it must be attractive and please the senses of sight, smell and taste as well.

CARE OF THE EARS

BY S. K. GUPTA, B.D.Sc., B.O., (Pb.).

Laboratory Clinic (Analyst), Railway Road, Pasrur, (Pb.).

OBERVE the following rules respecting the care of the ears:—Never clean the ears with a pick or with the twisted end of a towel. The ear-wax dries up and falls out of itself. Efforts to keep the ear free from wax increase the difficulty by irritating the membranes and causing it to make more wax.

Never allow cold water to enter the ears and do not let cold wind blow into them. If they must be exposed to cold air or to cold water, protect them by a little wad or cotton placed in the ears. Care should be taken to remove the cotton when it is no longer needed. Much mischief sometimes results by leaving portions of cotton or paper in the ear.

If a seed or other foreign substance has got into the ear, do not try to remove it by introducing a knitting-needle or by any similar means. The only safe plan is to syringe the ear with warm water, leaning the head to one side so that the object may drop out if loosened. If a pea or bean has been in the ear so long that it has swelled and hence cannot be dislodged by the syringe, it may be contracted so that it will fall out by holding alcohol in the ear for a short time.

If an insect gets into the ear, pour in a little oil, which will suffocate it, when it may be removed by syringing.

Shouting into the ear may cause deafness. This is true of any loud or unexpected sound. Such sounds are liable to cause rupture of the drum head, which takes some time to heal and may leave the hearing permanently impaired. When a loud sound is expected, the ear is prepared

for it by loosening of the drum head. It is also well to keep the mouth of the ears closed and to cover them with the palms of the hands.

Ear-ache may usually be allayed, if early attention is given to it by applying flannel clothes wrung out of water as hot as can be borne. This common complaint among children is often the result of a cold and, if it occurs frequently, may cause permanent deafness.

Partial deafness is much more common among children than is usually or generally supposed; and a child should not be punished for inattention until its ears have been carefully tested by stopping each one in succession, and testing the other by speaking into the child at a distance while the eyes are covered. A person is often able to hear well when giving close attention; but when not expecting to be spoken to, will hear nothing.

Boxing and pulling the ears are barbarous practices, which often cause loss of hearing and sometimes disease of the ear which proves fatal.

A cold in the head often causes partial loss of hearing for a few days, due to obstruction of the eustachian tube. If often repeated, permanent deafness results.

Discharge from the ears is usually the result of an inflammation of the middle ear with rupture of the drum head. Such a case should never be neglected. A physician must be consulted at once.

The use of tobacco in any form often leads to deafness by causing diseases of the throat, which leads to ear disease. The same may be said of the use of liquors.

DIGESTION

By

Dr. T. D. Mukherjee, M.B., D.P.H.,

Burdwan, Bengal.

THE following is an analysis of the important principles of human digestion and is meant for the general reader not possessing any scientific or technical knowledge of the physiology of digestion. The purpose of this article is to bring home to the reader the importance of certain general principles to which particular attention should be paid in the choice and taking of our food which is essential to the keeping up and enjoyment of life. Ignorance of the rules of diet has caused and is causing endless suffering; and knowledge thereof, I hope, will alleviate considerable human misery in this respect.

The food we take is first digested, then it is absorbed and finally it is metabolised. By different digestive juices, the complex nature of the substance of the food is reduced to simpler bodies, so that it can be absorbed in the human system. After it is absorbed, it repairs the tissue wherever required in the body and it combines with the oxygen in the body and thus it is combusted and energy is produced. This energy for the sake of understanding and proper measurement has been standardised and the unit of heat to raise one kilogram of water (about 1 seer) to one degree centigrade is called one Calory. Different kinds of food produce different

amounts of calory. There are six proximate principles of food: protein, carbohydrate, fat, salt, water and vitamin. The last three mentioned have got no caloric value but are essential to maintain the biology of life. The first three kinds of food are required for the production of heat and energy and of these, one gram of protein yields approximately 4 calories, one gram of carbohydrate yields also 4 C, while one gram of fat yields 9 C. Meat, egg, fish, Chhana (Curd) etc. are rich in protein materials. The cereals, sugar, vegetables are the examples of carbohydrate foods. All sorts of animal and vegetable fat, ghee, butter, oil etc. are the fatty foods. Different kinds of protein have got different names: the protein derived from meat is called myosin, from egg is albumen from chhana is casein and so forth; and whichever form of protein we eat, it is converted first in the stomach into peptones and finally in the intestines into Amino Acids and in this form only it is absorbed. Similarly, whichever form of carbohydrate we eat, it is converted into glucose so that it can be absorbed. There are different kinds of sugar: cane-sugar is called saccharose, fruit-sugar is called fructose, milk-sugar is called lactose, grape-sugar is called glucose etc. For the maintenance of the body, a healthy adult person requires about 3000 calories which differ according to age, sex, climate, amount of exercise etc. When no work is done and perfect rest is enjoyed, only to maintain the essential process of life, that is, only for the Basal Metabolism, an adult person requires 1800 C. We have seen that any one kind of food

if taken in proportionate quantity, can supply the required amount of calory, but that does not nourish the body. For the proper nourishment, the diet must contain all the proximate principles of food in the proportion of about 5 parts of carbohydrate, 1 part of protein and 1 part of fat and sufficient quantity of salt, water and vitamin. The peculiar demand of the body requires this sort of mixed diet.

Without proper knowledge of the subject as stated above, it is not possible for us to discuss about the points which help the digestion of food. Metabolism of food requires absorption of it in our body and before it is digested it is not possible for the food to be absorbed. For the digestion, various gastric and intestinal juices called Enzymes are required to come into action; and unless metabolism is in good order, these become lacking both in quality and quantity; and for the health and nourishment of the body, proper amount of food must be digested. Thus it is found, the processes are in a cyclic order and what affects the one, affects the others also.

The food must be of mixed type and balanced. One kind of food upsets digestion and the dish should contain mixed varieties of articles. Unbalanced diet cannot be digested; it should contain the different nutritive principles of food in the particular proportion. Out of 3000 calories required, about 1800 should be derived from carbohydrates, about 400 from the protein and about 800 from the fat, again protein and fat derived from animal kingdom are better and more easily digested than those derived from the vegetable kingdom and one must not forget that milk and its

products are freely used by the so-called vegetarians.

Quantity of food should not be small and should not be deficient in any respect. The body according to weight, exercise etc., requires a certain amount of food and unless the proper quantity is taken, hyperchlorhydria etc., occurs and after some time, digestion is found upset; on the other hand, nutrition suffers and various diseases due to malnutrition and lowered vitality such as Tuberculosis, etc. appear. By deficiency we mean the lack of some of the proximate principles of food. We know for want of the different vitamins or the different salts, different diseases occur. Common salt is the chief precursor of Hydrochloric Acid, secreted in the stomach for the purpose of digestion of food. Lowered vitality retards the secretion of all the digestive ferments and the relation is well understood.

Excess of food taxes the digestive power too much and the organs become unable to digest even the normal quantity. Indigestion becomes the prominent symptom and the person suffers from various ailments. Unless the food is properly digested it supplies a good food-medium to the otherwise harmless micro-organisms, the normal inhabitants of the alimentary canal and causes development of harmful acid and gas in the system and acts like a poison to the whole body. Digestive power fails, fats are deposited in the body and the person suffers from chronic indigestion.

Human system requires to be handled with certain precisions both in the time of intake of good articles and in our expulsion of bad articles from the body. There should be fixed times

for taking food as well as of defæcation, otherwise digestion with all other functions of the body suffers.

Adulterated food and unwholesome food also cause indigestion. If, instead of flour we take a quantity of soapstone, instead of ghee we take vegetable oil, the result is well understood. The rotten food harbours various sorts of putrefactive organisms, which, taken in with the food, act as a poison. The foods contaminated with dust, flies, etc., that is, with various sorts of disease-producing organisms also act in the same way and with the production of diarrhoea, etc., the digestive power is also hampered.

Rest and exercise help the digestion to a great extent. If we fail to take rest when it is required, if we fail to take sufficient exercise, the digestion is impaired. Rest and exercise help metabolism and are therefore essential for the proper function of the digestive system. Excessive rest as well as over-exercise are also detrimental. No food should be taken just after exercise and constant fatigue impairs the digestion.

Impure air causes retardation of digestion. Keeping inside a crowded room or closed room for sometime upsets digestion; while pure fresh air helps it to a great extent. Oxygen fixation of the digestive material is the aim of metabolism and oxygen in the body is derived from the air; so, fresh air is absolutely necessary for the proper function of digestion.

The climate also plays some part in regard to the impairment or improvement of digestion. Dry and cold places favour digestion. Dampness retards it and excessive humidity impairs it. We should try, therefore, to change the climate whenever

possible; if not, to avoid dampness and humid air as far as practicable.

The food should be appetising, should be masticated well and should be according to the cravings of one. The articles of food should be according to the tastes of the individual. Different kinds of food are liked by different persons and only those foods should be taken. Bad cooking of food often upsets digestion; the preparation must be appetising. The food should be swallowed slowly after proper mastication, otherwise it impairs digestion. We often experience a craving for some particular article of food, the system wants it and therefore that particular kind of food should be taken but the quantity must be according to the type of food. If this food be of indigestible variety, very small quantity should be taken. This craving is specially perceptible during pregnancy and should be treated with favourable consideration.

Certain articles, such as tea, coffee, alcohol etc., when taken in excess, impair the activity of the digestive system and these should be avoided as far as practicable. The tea in most of the modern restaurants is often not prepared according to the prescribed method, and instead of water raised to the boiling point, boiled water is used and thereby considerable quantity of Caffein passes in the liquor which is injurious to health. Moreover, the cups and dishes used indiscriminately by all persons may carry germs of diseases. In this connection the use of tobacco also may be mentioned and the chewing of tobacco is most harmful.

Some people often suffer from indigestion and seek advice for its remedy. They take the advice of medical man

and use various sorts of drugs to alleviate their sufferings and finding no proper relief go from one doctor to another; and not finding cure in one system of medicine, have recourse to another, from Allopathy to Homeopathy, from Homeopathy to Ayurveda and so on. Suffering continues, they become depressed and melancholic and symptoms of inanition occur and health breaks down to utter hopelessness.

Most of the cases of indigestion are due to the above stated causes and

the fault lies upon the person who neglects the dietetic rules. I have seen persons who can digest chhana, luchi well but whenever rice is taken indigestion occurs. They are the examples of persons who do not take the balanced diet or take carbohydrate in excessive quantity.

To summarise, digestion is impaired in most cases due to negligence on the part of the sufferers, by not following the dietetic rules, which are described above in some detail.

THE LOUSE DANGER

LOUSE is a common pest of the villages. It produces irritation and itching especially at night causing sleeplessness—lowering the vitality thereby. It is now proved that the new type of fevers—Relapsing, Typhus and Trench—are spread by the agency of this small insect.

Structure and life history.—Three species are common all over India:—

1. Head Louse,
2. Body Louse,
3. The Crab Louse. (pubic).

Its body consists of three main parts—(1) Head, (2) Thorax and (3) Abdomen.

1. *The Head*:—Is oval and consists of a pair of 5 segmented antennae, 2 simple eyes and mouth parts. The mouth contains sucker which the animal can stretch out as desired, and which when extended represents a tubular body terminating in 6 little pointed hooks, bent back and serving in retaining the instrument in skin. This organ is surrounded with 4 fine

AUG. 1939]

By

Dr. R. R. Sukla,

Medical Officer,

KEKRI, P. O., RAJPUTANA.

pincers fixed to one another. It is through this that it pricks the skin.

2. *Thorax*:—is flat and has 3 pairs of legs terminating in powerful claws.

3. *The Abdomen*:—Is oval and carries excretory and generative organs.

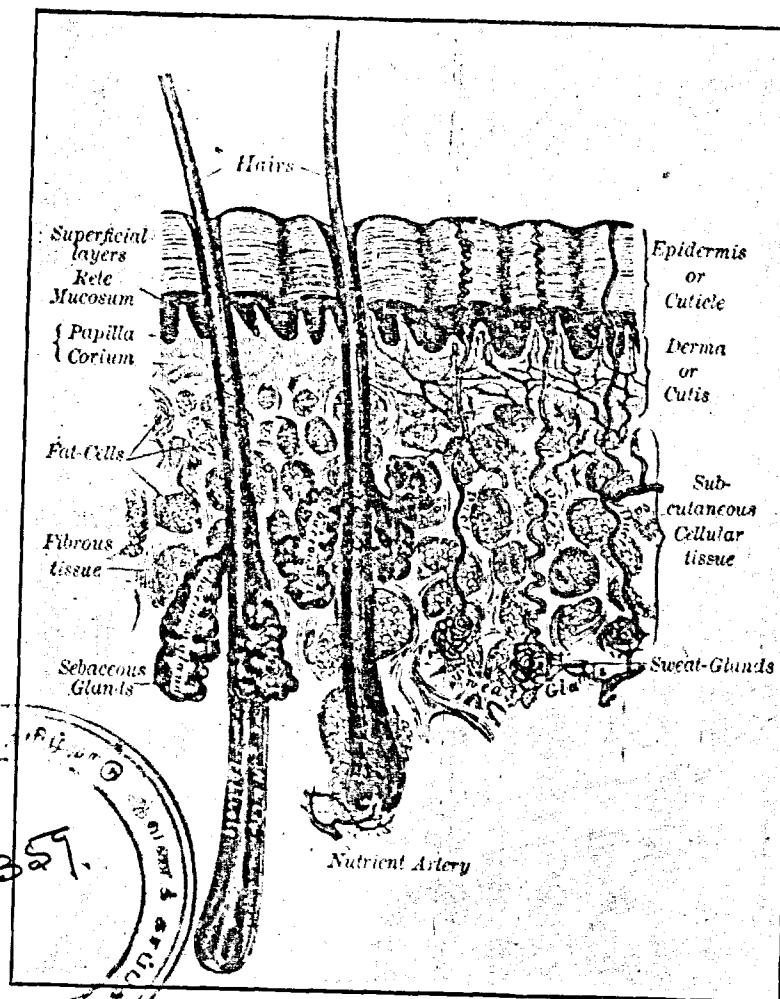
Eggs or nits:—Are white in colour and stick to hair and clothes. They hatch out in 6 days, and become adult in 10 days. In 18 days they are able to produce their kind. It has been calculated that in 2 months, 2 female lice could produce 10,000. The second generation of a single individual can amount to 25,000

[PAGE 183

and the third to one hundred and twentyfive thousand. They are very prolific.

How to avoid Lice:—1. Wash your clothes and bed sheets at least twice a week. 2. Avoid contact with Lice-infected persons. Lice will travel quite easily from one head to another.

How to get rid of Lice:—1. Take a hot bath or preferably a warm bath containing 4 to 5 ozs. of Bi-carbonate of soda to allay itching every day. Change your clothing and immediately disinfect the previous day's garments by soaking them in boiling water.



The Skin and the Hair over it, which are the victims of Lice.

How to detect Lice:—The presence of lice is indicated by itching. Search carefully the inside of your clothes, the arm-pits and other hairy parts of the body.

2. If the head is infested with lice or nits, shave the hair or clip it short. In the case of grown-up women's heads, wash the hair with an insecticide lotion such as Lysol or

kerosine oil emulsion soap vermijelli* which can be prepared by boiling one part of soap in 4 parts of water and then adding 2 parts of kerosine oil. The resultant jelly when mixed with 4 parts of water makes a liquid soap that is convenient to use and which may be applied effectively.

2. Following the bath the body may be anointed with Kerosine, mixed with little gingelly oil, special care being devoted to the hairy parts. Skin irritation may however require early removal of the oil or after washing the hairs with Lysol lotion or with the above white precipitate ointment or Naphthaline ointment 1 in 10 with vaseline or coconut oil or custard seed paste or Neem seed paste may be rubbed to kill the nits. Kerosine or Petrol mixed with small quantity of Sesame oil may be applied to the roots of hairs.

3. The hair must be combed with a fine metallic comb dipped in vinegar to get the nits out because the vinegar dissolves the sticky material which fixes the eggs or nits to the hair. The comb should be boiled in water after such use, in order to render it uninfected to subsequent users.

* Crude Oil Emulsion (Vermijelli) :—

Crude mineral oil	...	56 grms.
Soft soap	...	30 "
Water about	...	6 c. c.

Rub Vermijelli on the hairy parts of the body and on the seams of under clothing and trousers. Dust N.C.I. powder on the body and on the inside of under-clothing.

4. *To disinfect clothes and bedding:*—It has been found that lice on clothing removed from the body may remain alive for 9 days and their eggs (nits) as long as 40 days. The clothes therefore should be disinfected by one of the following methods :—

- (1) Exposure to sun for a long time.
- (2) Steam.

(3) By boiling in water. All the articles of clothing and bedding that are washable should be soaked in boiling water and maintained hot for at least 20 minutes. Blankets etc. should be treated with Naphthaline. A small handful of Naphthaline flakes, scattered between the blankets is very effective.

(4) Wring out the under-clothes in 5 per cent compound croesal solution for 30 minutes and expose them to the sun for a long time. In the absence of the above the following dusting powders are recommended :—

(i) N. C. I. powder (commercial Naphthaline 95 grams, 96% Creosote 2c.c. 2% and Iodoform 2 grms. or 2%.

(ii) Moore's powder Creosote 1 c.c., Sulphur 0.5grms and Talc (soap stone) 20 grms. (This is less irritating and 6 times stronger than the above).

To prevent infection, keep yourself and your clothes and beddings quite clean. Cleanliness is Godliness.

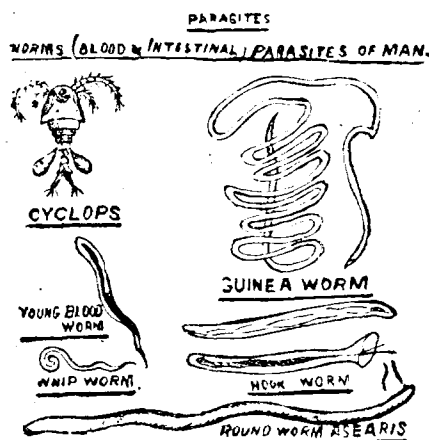
Children who get enough vitamin D in their diet when their permanent teeth are forming are less apt to have the molar teeth decay in later years, according to British researchers.—*Science News Letter*.

GUINEA - WORM

Distribution.—Guinea Worm is a parasite and causes a disease known as Guinea Worm disease. It is prevalent in Central India, Hyderabad, Deccan, Punjab, N. W. F. P., Bombay Presidency and Mysore, and West Madras.

The female parasite is thread-like in appearance and is generally 18 to 30 inches long. The parasite is transparent, rather milky-white, and shows no markings on its body. The mouth end is blunt and round, while the tail-end curves in a hook-like process. Almost the whole of the parasite is stuffed with embryos. Just below the mouth is a small opening through which the parasite discharges the embryos.

Life-history.—The embryos of the Guinea Worm are taken into the body



in the months of July and August and it takes about 11 months for the embryos to develop into adult worms and appear on the surface. The intermediate host of this parasite is

BY

Dr. JOSEPH S. KHAN, L.C.P.S., (Bom.).

Officer-in-charge, Shantipur Hospital,
Dhamtari, C. P.

the cyclops. When the embryos are discharged into water they swim actively and enter the body cavity of the cyclops. These infected cyclops are taken with water and go into the stomach. In the stomach the cyclops die in the presence of free Hydrochloric acid, and the embryos are set free; they become very active and move about in the stomach and burrow through the walls of the stomach into the loose areolar tissue and travel through the retroperitoneal space, and develop into adult worms, and rapidly begin to wander about. The male parasite dies in the stomach, or body, but the pregnant female travels along the connective tissue, generally of the leg, and then it comes to the surface of the skin. It can sometimes be felt under the skin as a bundle of string. When it reaches the surface of the skin it produces itching and burning followed by a blister, which finally bursts, and shows a small round hole and the mouth end of the worm protrudes. The distended uterus ruptures and the embryos are discharged in a milky fluid which contains myriads of them! Now at this stage if a person of this disease washes his legs in water, these embryos are shed there and they are swallowed by cyclops, and if a man drinks this infected water, the cyclops will go into his stomach and the same cycles begin again.

Treatment.—1. *Prophylactic*:—From the life history of the worms it is

evident that the chief source of infection is by drinking infected water, and that therefore one should boil the water, or add a trace of Potassium permanganate, both of these processes kill the cyclops readily. Tanks and wells with steps should be discouraged as they allow easy access to water. There should be arrangement to draw water either by a pump or bucket.

2. *Curative*:—When the worm first appears, it should not be disturbed, as it is seen that after discharging the embryos the parasite may leave the host spontaneously. In two of my cases I simply applied a continu-

ous wet pack of a saturated solution of Magnesium Sulphate, and the worm came out easily. Some people roll the worm round a portion of smooth wood, thereby preventing retraction of the worm, and wind a little each day, until the worm is out. Asafœtida (*Hindi - Hing*), in the form of poultice to the part is said to kill the worm. Some recommend the use of injections of Biochloride of Mercury 1:1000 which kills the worm. Special care must be taken to prevent tearing of the worm, as severe inflammation may follow this, and then extraction will be difficult.

DIETETICS in MATERNITY

By Dr. J. Mukherjee, Ranchi.

To adjudge the quantity and quality of food during pregnancy one has to take into consideration the fact that maternity is a physiological function and human mother has to propagate and save the race at her own sacrifice. The high place the humans hold in the field of biology is practically entirely due to the sacrifice of the mothers. For instance, from the time of conception onwards upto the stage of infancy, the mother supplies the food to the babies. The greatest drain is on her own stock or source of calcium, phosphorus, iron and vitamin D. Of these, calcium and vitamin D are supplied from the mother's bone, teeth, as well as from milk. There is no stock of vitamin D in the mother's body. The exposure of the skin to the sun may convert what is called ergo-

sterol in the skin into vitamin D. If the mother's food supply is imbalanced, her bones and teeth will suffer in consequence.

Now, regard being had to such a state of affairs, it stands to reason that the mother should get a fair supply of these ingredients through her food. It is not nice that she should supply calcium and phosphorus to the baby from her bones and teeth. That would be like drawing from the reserve in the bank without earning any thing. Whoever does that soon becomes a bankrupt and breaks down in no time. The failure to ensure sufficient supply of good food, the quantity matters not so much as the quality, may produce ricket and teething trouble in the baby, and a disease called osteomalacia in the mother. A mother requires 1.6 grammes of lime or calcium daily to supply a fair quantity to the baby.

The bones of the baby are formed with lime and phosphorus; so are also the teeth. One pint of milk contains 0.7 gramme of calcium. Therefore, an expectant mother must get 2 pints of milk every day.

The foods that contain calcium should be selected from amongst cheese, milk, eggs, salads and lettuce. Cod liver oil or halibut oil, butter, cream, milk, eggs, cabbages, lettuce and other green vegetables grown in sunshine are the sources of vitamin D. A mother must get calcium and vitamin D, together because without the Vitamin D calcium cannot be properly utilized in the system. Vitamin D is the calcium utilising factor. The cows that pasture in sunshine produce this vitamin in their milk. This is rather important to remember.

To meet the drain in the iron constituents in mother's system, she should eat red meat, figs, tomatoes, spinach, turnip, treacle, liver and lettuce. The baby stores iron in its liver during intra-uterine life. It is needed to enrich the blood in the the extra-uterine period. Because

mother's milk contains so little iron in it, nature has considerably made this provision. The mother in the last 3 months of her pregnancy is therefore likely to develop anaemia. To forestall this eventuality a good supply of iron should be made through food stuffs. Some ardent workers on health suggests administration of iron through medicine. But this step should be kept for those cases in whom the food supply, for economic or other reasons, would remain handicapped.

In conclusion, it may be mentioned that an expectant mother need not eat twice as much her normal food in order to supply the needs of two souls. She ought to receive a daily supply of two pints of milk, sufficient fresh green vegetables, fruits like bananas, oranges etc., fresh fish, meat, liver and a little cod liver oil or halibut oil or butter, cream or cheese. The source of supply of phosphorus and iodine would be fish, the brain of the goat or sheep, and cod liver oil. One or two eggs may also be taken.

Vitamin K

In 1935 Danish biochemists produced abnormal bleeding in chickens by feeding them special diets. When tomatoes and kale were added to the birds' meals, however, the fowl recovered, and researchers started hunting for a new health substance, Vitamin K. In a recent issue of Science, four doctors at St. Louis University described isolation of colorless chemical crystals from a mixture of alfalfa-leaf oil, alcohol and benzene. The specks of matter are so effective in curing the chicken "bleeders" that the St. Louis workers believe they have finally obtained pure Vitamin K. The new vitamin is likely to be useful to speed blood coagulation after human operations.—*Newsweek*, Sept. 26, 1938.—*National Health Review*.

● Topics from Medical and Health Periodicals ●

Problems Created by Air-Conditioning

WITH air-conditioning coming into widespread use in large public buildings, the heating and ventilating engineers who have made this advance in human comfort possible are now faced with some serious problems which they have thus created. As one example, what health risks are there involved in the recirculation of cool air through a crowded motion picture theatre, restaurant, or office building: It is hardly economical to use the cooled air only once and take in completely fresh air at each cycle in the air flow. Thus only a fractional part of fresh air is taken in.

Since this situation exists, the question arises whether the bacteria content of the air in an air-conditioned building gradually rises. If it does, does it approach a bacteria concentration which is potentially menacing to health? In hospitals, too, there is the problem of what to do about the ventilation of contagious disease wards whose air passes into a common system and, potentially, may be recirculated through the whole air-conditioned hospital.

More widely known among laymen is the problem of ridding restaurants and railroad cars of the odour of smoke. Here the problem is complex because it not only involves the cleaning of the air and its recirculation but the removal of elusive odours.—*Robert D. Potter of Science Service in The Scientific Monthly*, Feb. 1939.—*National Health Review*.

AUG. 1939]

The Curfew Bell in Edlington, an aid to Health of Children

NONE of us are unaware that most children go to bed too late and get to sleep still later. Some mothers are so careless that they will keep their children out in the streets until after nine o'clock, and others are so loving that they will continually wake them up to see if they are asleep. In neither case is it realised that children need a longer period of sleep than adults and that white faces and frayed nerves are more often the fault of the parent than of the child. But these things no longer happen in the famous village of Edlington which is in the West Riding of Yorkshire. Here they still retain dim memories of William the Conqueror, and 1066, or perhaps it was the Danes, and they have started once more to ring the curfew bell at 8 o'clock. And when that bell starts ringing the good little children run away to bed, and fathers put their feet on the table, while mothers mend their socks. In other words, domestic bliss reigns supreme and inhibitions are abolished from the village of Edlington. According to the *Daily Sketch*, an "unofficial" body of parents in Oldham have decided to pay a visit to Edlington to see how the scheme works. That the unofficial parents of Oldham should be so numerous and so organised, and that such a visit should be possible, shows only too clearly that the day of miracles is not yet past for Oldham and Edlington.—*Medical World*.

[PAGE 189]

A French View of Refuse Disposal

THERE appears in the *Annales d'Hygiene* for October a special plea for the disposal of all kinds of refuse collected in the course of dry scavenging in towns, by means of incineration. In his opening remarks, the contributor refers to the fact that formerly agriculturists were willing to purchase refuse for use as manure, but until latterly it became the custom for municipalities to pay the agriculturists a fee for the removal of the rubbish. Such a method of disposal has many disadvantages in practice, as well as being neither economic nor hygienic, as has been proved by experience on this side of the Channel as well as in France.

The actual value of dry refuse as a manure is, as the analytical chemist shows, comparatively low, for it rarely contains even 1 per cent. of available nitrogen, while the farmer is inclined to assess its apparent value by the strength of its putrefactive odour. Added to that, there is much useless—even dangerous—material, such as clinker, crockery, glass, etc. The analyses of materials contained in the refuse which he quotes for Bordeaux, Rouen and Nancy are similar, the chief items being (in round figures), paper 10 to 18 per cent., rags 4 per cent., animal matter $2\frac{1}{2}$ per cent., vegetable matter 4 to 13 per cent., metals 1 to 2 per cent., crockery and glass 4 per cent., cinders and ash 66 per cent.

The method of disposal by controlled tipping in dumps—Manchester and Bradford being quoted as examples—does not find favour with the writer, chiefly on account of the large area of land required for the purpose,

the cost of transport, the rat and fly nuisance, subsequent fermentation, danger of fire, also the odour and dust during the process of discharge and covering, to which the workers are exposed. With approval he describes the oven-installations of Heenan and Froude of Worcester, whose plant is exploited under licence in France by L'Union des Services Publics, there being over 300 installations in use there and elsewhere. This form of incinerator answers the writer's requirements in that the refuse is kept under cover, adequate ventilation obviates nuisance from smell and dust, the workmen are not exposed to these, the process is carried out almost entirely automatically, the residue is innocuous and is used for making paving, etc., while the heat generated is transformed into electricity—both the latter being marketable products. Analysis of the fumes escaping from the tall chimney stack (75-80 metres—say 250 feet), consists of approximately 80 per cent. nitrogen and 14 per cent. carbon dioxide, while the ash or clinker consists of silica 46 per cent., alumina 25 per cent., lime and magnesia together 12 per cent., metallic oxides 4 or 5 per cent., and various other bases. The proportion of residue (ash) is calculated at about 60 lbs. per ton of refuse, and the electricity produced round about 180 kilowatt hours.

For communities of 100,000 and over, this method of dealing with refuse is regarded as the most economical for, in spite of the heavy initial cost and the fact that the marketable products do not entirely pay for overhead charges and cost of running. (actual figures being given), there are indirect benefits, especially in the way

of hygiene, that put the balance on the right side.

In conclusion, regret is expressed that straitened financial conditions in in the author's country prove such an obstacle to furthering the "armature hygienique," for undoubtedly destruction of refuse by fire is the "methode de choix" both for, the present day and for the future.—*The Medical Officer*.

* * * Alcohol and Driving

ALCOHOL impairs skilled movements and this fact is most important in the driving of motor cars. By means of an artificial motor driving apparatus Vernon made an experimental study on the effect of small quantities of alcohol (20 to 40 c.c. in the form of whisky) taken on a practically empty stomach on the driving capacity of various persons. He found that most of them drove more quickly and more erratically than in normal circumstances. For the most part they did not realise that they were driving faster but one deliberately drove more slowly because he realized his reduced control, and several drove for short distances with a rush and then slowed down before again driving faster. There was far greater variability not only in speed but also in accuracy and carefulness of driving after alcohol had been taken. This was noticeable even after reducing the amount of alcohol to that contained in half a tumbler of mild beer (5 c.c.). Some were certain that they were driving better though they were driving worse. Other experiments revealed not only an impairment of attention to signal and environment but also slower response of the eyes, hands and feet. There were wide individual differences in the mental effects depending on the kind of alcoholic drink and previous habituation to alcohol.—(*The Clinical Journal*.)

Salt Loss Causes Heat Cramp

IF your work is such that it causes excessive perspiration, add a pinch of ordinary table salt to each drink of water you take to help prevent heat cramps.

Labourers, mechanics, farmers, and white collar workers whose work causes them to sweat profusely, are in danger of having their body salt content become deficient with resulting heat cramps or heat fog. Salt is a prominent constituent of sweat; the body may lose as high as 40 to 50 grams of salt during hot days.

In industry, a method of preventing heat cramp is to take a tablet of pure salt or a mixture of salt and dextrose with each drink of water. Workmen whose duties require much muscular exertion should be especially careful to add more than the usual amount of salt to what they eat and drink.

Salt deficiency may be prevented by taking salt in various ways. Where prepared tablets are not available, table salt may be added to each drink of water. Milk is a source of salt and will help make up for the deficiency caused by sweating. Alcoholic drink should be avoided.

Heat cramp is characterized by pains (cramps) in the abdominal region, headache and, in severe cases, by nausea and vomiting. The body temperature remains about normal, likewise the pulse rate. Body salt losses occur without the knowledge of the individual until there is a deficiency, then the abdominal muscles give warning in the form of cramps.—G.H.F.—*National Health Review*.

Health Tit-Bits

THE trouble with the rising generation is that it rises too late.

WHAT travels slower, heat or cold? Cold, for you can catch it.

DYSPEPSIA is the reward of a guilty stomach.

"MY dear doctor, I suffer a great deal with my eyes."

"Be patient, madam", said he, "you would probably suffer a great deal more without them."

"Do you sell dog biscuits in this rotten little shop?"

"Yes Sir, will you eat them here or, shall I send them round to your kennel?"

"I've lost my appetite," said a gigantic fellow.

"I trust," said a friend, "that no poor man has found it, for it would ruin him".

JANIS Leimanis, of Riga, Latvia, who has just celebrated his one hundredth birthday, is still employed on a farm. His recipe for long life, given in an interview, is: Hard work. He said he wished all young people would realize the healthgiving qualities of hard work, so that at the age of one hundred they might be as fit and happy as he is—O. W.

A juror, who was deaf in one ear, was excused from duty, as it was necessary to hear both sides.

STOUT Lady: "Doctor, what will I do to reduce?"

Doctor: "Take a proper kind of exercise".

Lady: "What would you recommend?"

Doctor: "Push yourself away from the table three times a day."—*Missouri Pacific Lines.*

Book Review

Essentialism to Defend Truth—Published by Essentialism, 7, Park Lane, London, W. 1. Price 5/- net.

Truth is the Essence of all religions and if this doctrine is accepted and acted upon, humanity is sure to live in harmony and universal brotherhood, instead of as warring nations, trying to cut one another's throat for trifling material gains or a poor spiritual solace. This first book on Essentialism brings home to the reader the new dynamic philosophy of life in a common-sense acceptable form. In this book not only the soul but also the mind and the body are treated and a separate chapter on "Disease" has been incorporated, which is at once illuminating and instructive. The book deserves to be in the hands of every individual, who is eager to keep his body and mind pure and his soul elevated.

1939]

HEALTH

v

Select Contents of Back Issues.

February '39

Public Health Regulations in Ancient India.

Cancer.

Weight-Lifting.

How to feed your Baby.

March '39.

Air Raid Precautions—Students & Sadhanas of Health.

Myopia in Schools.

April '39.

The Care of the Child from the Cradle to the School.

The Naughty Child.

Cheap ounce of Prevention.

Pyorrhæa.

May '39.

Health Co-operative Societies for Villages. The Road to Manhood and Oldage.

Leprosy.

Soya-Beans.

June '39.

The Tobacco Tax in Madras—A Purely Health Measure.

The Healthy Infant.

Vegetable Chee.

Flower and Health.

The Hindu Way of

Examining A Patient

July '39.

The Schoolboy.

Common Eye Diseases

and Their First-Aid

Treatment.

Ankylostoma Duode-

nale. (Hook-worm).

AN APPEAL.

DEAR FRIEND,

I wonder if you have yet come across the monthly journal "Health".

It is one of the oldest journals in India, devoted to the interests of health, happiness and welfare of our people. It aims at bringing into every home, in a simple and informal way, the truths about health and diseases, as propounded by eminent Medical and Public Health authorities. 'Health' advocates vegetarianism, temperance, purity, simplicity and moderation in all phases of life—in short, nature's way to better health and longer life. It is of special interest to the health seeker. The social and health worker will find in "Health" the best means of keeping himself informed of the progress made in this and in kindred subjects throughout the world.

Articles on vital health topics, such as Diet, Nutrition, Prevention of disease, Care and feeding of infants, Child training, Management of the sick, Guidance for the prospective mother, Healthful beauty, Exercise, Occupation, Recreation, Contagious diseases, School hygiene, Sanitation, First Aid in Accidents, Health News, Vital Statistics, Reviews of Books on Health etc. are published in it.

Interpretation of ancient ideas relating to dress, diet, rituals, beliefs, sanitation, household sayings, remedies, menus etc., in the light of modern science, is a special feature of the Journal. In short, "Health" seeks to be a reliable, instructive and interesting health adviser for mothers, teachers, students, health workers and seekers, children etc.

It is highly spoken of by everyone who has read it.

To make it most popular, the rate of subscription is fixed very low, i.e., Rs. 2/- per year including postage.

Will you subscribe for a copy and induce your friends also to do so?

Yours sincerely,
MANAGER.

ENROLMENT FORM.

To

The Manager, "Health", 323, Thambu Chetty St., Madras.

DEAR SIR,

Please enroll ^{my}_{our} name as a subscriber of your monthly magazine 'Health' from.....(state month) and arrange to send the issues regularly to the following address. The amount of Rs. 2/- being the subscription for one year is forwarded to you by ^{M. O.}_{Cheque} or send the next number by V. P. P. for the full amount of annual subscription.

Name..... Signature.....

Designation..... Date.....

Address.....

CAN YOU TAKE PHOTOGRAHS ?

If so, here is a chance for you to convert
your talents into money.

We wish to have photos for publication in this journal. We pay from Re. 1 to Rs. 5/- for every photo accepted. Here-under we give a list of items on which photos or drawings are welcome:—

Health Resorts, Ideal Scenaries, Hill Stations, Ideal places of pilgrimage, Places of prayer, Ideal Gardens, Dwelling houses, Dining Halls, Schools and Colleges, Factories and offices, Laundries, Diaries, Milk supply, Markets, Lavatory, Bathing places, Eating Houses, Bazaars, Fruit Market, Sweet-meat shops, Ideal Theatres and such places of Public resort, Ideal water supply, Recreation, Relaxation, Play-ground, Shaving Saloon, Sick room, Nursery and Maternity Room, Handling of foodstuffs, Healthy Surroundings, Exercise, Sports, Dress, Good habits, Foods, Vegetables and Fruits, Healthy Babies, Healthful Beauties, Healthy youngsters, youths and old people, Athletes, Healthy postures at rest, work study or play, Healthy occupation, Camping-outs, Journeys, Holiday enjoyment, prevention of Diseases and Contagious diseases, Conservancy etc. etc.

Photos or drawings of unhealthy aspects of the above are also welcome to be published side by side with healthy aspects.

With the acceptance of photographs by the editors, it will be understood, that they acquire the right to reproduce them wherever and whenever they please.

The preparation of all blocks is done free. But satisfactory photographs should be supplied by the author. Photographs which may be snapshots or studio portraits should be clear and distinct and preferably black and on glazed paper.

On the back of each photograph should be written in pencil its number, the author's name and an indication on the top of the picture. Descriptions for the photographs should be typewritten in a single list, with numbers corresponding to those on the photographs. It is not necessary to attach description to the photos themselves. The Journal reserves the right to return photographs which are not accepted. Stamped envelope should be sent for the purpose. We take no responsibility for loss in transmission.

Further particulars can be had from:

Manager, Health, 323, Thambu Chetty St., Madras.



The Joy of Easy Breathing for Asthmatics Assured!

Asthmatics will find in ROWJEE'S ANTI-ASTHMATIC MIXTURE a real God send, because it stops that choking suffocating sensation quickly and promotes easy breathing. All Asthmatics should keep a bottle in the house.

ROWJEE'S ANTI-ASTHMATIC MIXTURE

Rs. 2/8 PER BOTTLE

SRI KRISHNAN BROS:
323, THAMBU CHETTY ST. MADRAS.

STARS OF OUR CINEMA WORLD

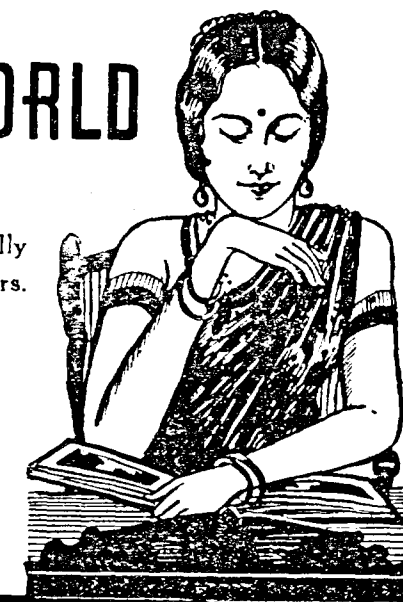
Everyone can now possess a beautifully illustrated album of our Indian Cinema Stars. It is neatly printed and priced low.

AN ALBUM OF
INDIAN CINEMA STARS

ANS 12/- PER COPY

SRI KRISHNAN BROS:

323 THAMBU CHETTY ST: MADRAS.





Grey Hair Makes You Look Old

You may be young, but grey hair will give your friends the impression that you are old. Use KRISHNA HAIR DYE and regain the youthful charm for your hair.

KRISHNA HAIR DYE

• FREE FROM UNPLEASANT ODOUR •
RS 2/8 PER BOTTLE

SRI KRISHNAN BROS.
323, THAMBU CHETTY STREET, MADRAS.



CONVERT YOUR SPARE TIME INTO MONEY

We are looking for people to represent 'HEALTH' everywhere, so that it may have wider hearing. We would therefore be glad to correspond with those ambitious people in every town who will use their spare time in getting new members for 'HEALTH'. Liberal commission will be allowed.

For further particulars apply to:—

Manager, 'HEALTH,' P. O. Box 166, Madras.

JL

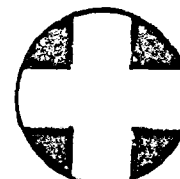
L: 5 on 21, N 23 HE N 39. 17. 5

Help! help!!- can YOU answer the call



Many a man to his utter despair failed to answer the agonising call for help when a dear one was either bitten by a snake, run over by a motor car or enveloped by a fire simply because he did not know what to do. Perhaps his inability to answer the call meant the loss of life.

Every man and every woman should learn to render first aid and learning to render first aid is not at all difficult as it is made easy by Dr. U. Rama Rau's book on First Aid. In simple clear English Tamil, Telugu, Canarese or Malayalam it explains what to do. Equally useful is the First Aid Case which contains all the necessary appliances. Get these two to-day and learn to be a life saver.



Price of book on First Aid As. 12. for any edition.
Price of First Aid Case, Rs. 2.

SRI KRISHNAN BROS
323, THAMBU CHETTY ST. MADRAS

