

272

Indian Medical Journal

July 1939



JL
L-2, NO 6
N39.33-7
123942

450

The Indian Medical Journal



FOUNDED 1906

18 JUL 1939

Organ of the All-India Medical Licentiates' Association

(With which THE AGRA MEDICAL CLUB JOURNAL is incorporated)

Vol. 33. No. 7

CONTENTS

July, 1939

272

Addresses & Articles

The Significance of Constipation	...	227
DR. B. B. SEN GUPTA	...	227
Choice of Place of Change	...	229
DR. T. D. MUKHERJEE	...	229
Occupational Diseases	...	231
DR. S. A. SUBEDAR	...	231
LEPROSY: How it commonly spreads and the need for periodical survey	...	232
DR. B. N. BOSE	...	232
A Case of Erysipelas successfully treated with Soluseptasine and Proseptasine	...	234
DR. S. N. DATTA	...	234

Editorials

The Listerian Idea	...	235
Sterilization of Syringes in General practice	...	236

Current Comments

Diagnosis of Influenza	...	237
Occupational Diseases	...	237
Treatment of Malaria	...	237
Classification of Infantile Diarrhoea	...	238
Amritsar Medical School	...	239

Post-Graduate Articles

CARDIOLOGY: (13) Failure of the whole Heart	...	240
DR. JAI GOPAL	...	240
PULMONARY TUBERCULOSIS: (2) Pathology	...	245
DR. SAMUEL RAM SINGH	...	245
Tuberculosis Notes	...	248

Medical News—Letters to The Editor—Drug Notes—Extracts
WITH MEDICO - POLITICAL SUPPLEMENT

Annual Subscription: INDIAN Rs. 6

FOREIGN Rs. 7-8

Single Copy: Ordinary Number: Annas Eight

Special Number: Rupee One

Editorial and Publishing Office: 121, Cross-Market Street, MADRAS.

Agents in U. S. A.: International Publishers Corporation, 100 East 40th Street, New York.

Ergoapiol-(Smith)

REG. U. S. PAT. OFF. AND FOREIGN COUNTRIES

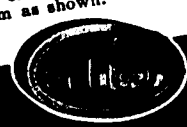
A Menstrual Regulator...

When the periods are irregular, due to constitutional causes, ERGOAPIOL (Smith) is a reliable prescription. Containing superior ergot and apiol (M.H.S. special) together with aloin and oil of savin of the highest quality, this preparation effectively stimulates uterine tone and controls menstrual and postpartum bleeding.

In cases of Amenorrhea, Dysmenorrhea, Menorrhagia and Metrorrhagia, Ergoapiol serves as a good uterine tonic and hemostatic. Valuable in obstetrics after delivery of the child and for the menstrual irregularity of the Menopause.

Prescribe 1 to 2 capsules 3 or 4 times daily. Supplied only in packages of 20 capsules. Literature on request.

As a safeguard against imposition the letters MHS are embossed on the inner surface of each capsule, visible only when the capsule is cut in half as shown.



MARTIN H. SMITH COMPANY
NEW YORK, N.Y., U.S.A.

THE ORIGINAL PREPARATIONS

MIST. DAMIANÆ CO.
(HEWLETT'S)



This reliable preparation contains Damiana, Nux Vomica, &c., combined with Medicinal Bitters and Aromatics, and is perfectly miscible with water. It possesses all the specific properties of Damiana in the most convenient form, viz., its alterative effects on the alimentary canal and tonic action upon the brain and nervous system generally. In the numerous forms of Neurasthenia it has been highly successful, as it soothes the stomach invigorates the nervous system and relieves the exhaustion.

Dose: One to two fluid drachms in water.

Trade "HEPATAGEN" Mark

COMPOSITION.—Ext. Cascara, Rhei, Jalapin, Podophyllin, Cocainæ Hydrochlor. (1/20 gr.) and aromatics in each drachm.

Invaluable in Chronic Bilioussness, Jaundice, and all torpid conditions of the Liver. Useful in constipation, especially when accompanied by depression and general malaise. Does not cause griping or sickness.

Dose: 10 to 60 minims.



These preparations do not come under the Dangerous Drugs Act.
Price in England, 4-oz. bottles 10d. oz.; 10-oz., 22-oz., 40-oz., and 90-oz., bottles, 12/6 lb.

Introduced and Prepared only by
C. J. HEWLETT & SON, LTD.
35 to 42, CHARLOTTE ROAD, LONDON, E.C.2.

Madras Stockists: The Madras Drug Store; Appah & Co.; Dadha & Co.
CALCUTTA : RATILAL HEMRAJ

This Popular DIAGNOSTIC SET



Contains a May Ophthalmoscope, having a brilliant and unobstructed view of the fundus even with undilated pupils. The prism is designed and adjusted so that corneal glare is reduced to a minimum. The instrument is well designed and made so as to be easy and convenient to handle.

The set contains a May Ophthalmoscope, Auriscope with three specula, Duplay Nasal Speculum, Bent Arm Throat Lamp, one each Laryngeal and Post Nasal Mirrors, Tongue Depressor, Spare lamp, Large Battery Handle, complete in case.

The Battery Handle may be had anodised black finish, instead of the more usual black crackle finish, if desired.

Catalogue No. 3004

Obtainable from all
Surgical Instrument
Dealers

MANUFACTURED BY:
GOWLLANDS LIMITED
MORLAND ROAD • CROYDON • ENGLAND

A GENUINE - - - PORT WINE TONIC



LADCOVINE

is an exceptionally palatable re-constructive tonic. It provides (1) Port Wine, to improve digestion and assimilation; (2) Glycero-phosphates, to maintain Neuro-muscular tone; (3) Copper, Manganese, to combat anæmia; (4) Bitters and Malt extract, to act as stomachic. An appetiser, a digestive and nutritive tonic, LADCOVINE is an ideal preparation at all times.

ASK FOR ILLUMINATING
LITERATURE

THE LISTER ANTISEPTICS & DRESSINGS CO (1928) LTD
COSSIPUR, CALCUTTA

BACTERIOPHAGES

Prepared from polyvalent local strains

CHOLERA : : DYSENTERY

CHOLERA DYSENTERY c ombined)

TYPHOID : COLI : INTESTINAL

Stimulate the defensive mechanism against the respective diseases. Clinically tried with brilliant results in private practice and by Public Health authorities.

Special Quotation for Hospitals and Institutions

Bengal Chemical & Pharmaceutical Works Ltd.

CALCUTTA : : BOMBAY

Agents :—N. DASAI GOWNDER & CO., 41, Bunder Street, Madras.



'SALVITAE'

THE TOXEMIA OF PREGNANCY

The keys to success in dealing with the toxemia of pregnancy are to be found in elimination, alkalization and the maintenance of high metabolic efficiency on the part of the organism. The parental care programme should include the systematic use of **SALVITAE**. The nitrogenous products of putrefaction, ordinarily rendered harmless by the liver, may be pathogenic in the pregnant woman. So sensitive is the body in the antitoxic state to slight additional poisoning that **SALVITAE** will tip the scale in the right direction. Under its use in conjunction with proper diet and hygiene both the minor and major evidences of toxemia may be forestalled or controlled and the majority of women of the pre-eclamptic category carried safely to term and delivered without toxemic disaster.

MULLER McLEAN & Co., Inc., Tower House, Chowringhee Square, Calcutta and Hashim Building, 38, Church Gate St., Bombay;
87, Sule Pagoda Road, Rangoon, (British Burma).
WILSON & Co., 5-8, Jehangir St., George Town, Madras.

AMERICAN APOTHECARIES COMPANY, (New York)

The Story of the



is an Old one

The Result of
"GONEAL"

Treatment is assured
Satisfactory and
no Fairy Story.

Rs. 5/- a box
of 5 amps.
of 2 c.c.

Usually one box "GONEAL" is enough for one course in treatment of Gonorrhoeal Complications.

Postage and Packing Charges FREE for ORDERS from DOCTORS only.

Sole Agents for India & Ceylon :—

GOPAL & CO.,

10, T. P. KOIL STREET, TRIPLICANE, MADRAS.

Telegram: "GOPAC" Madras.

Products of "PISA" National Institute.

Ovarial

(Total extract of fresh ovary
An extract of the whole gland)

Interstitial

(Unique combination of the interstitial
and testicular gland)

Caseal Calcico

(A colloidal solution of calicium
caseinate protheinothrapy of
infectious diseases)

Lt.-Col.....I.M.S., writes :

"I have found this preparation of value in
the control of menopausal symptoms.

Brilliant results are obtained in Dysmenor-
rhea, Change of Life, Neurasthenia, Sterility,
etc.

Rs. 6-12-0 a box of 12 amps.

Rs. 5/- a bottle. Oral to be taken by drops.

*

A HEART SPECIALIST writes :

Dr.....M.R.C.S., L.R.C.P.

" 'Interstitial' has given me good results
in cases of Neurasthenia, Cardio vascular
asthenia and Hypertension."

Satisfactory results in Sexual Neurasthenia,
Debility, etc.

Rs. 6-12-0 a box of 12 amps. of 2 cc.

*

A DERMATOLOGIST writes :

Dr.....M.R.C.P., D.T.M., F.D.S.

" 'Caseal calcico' combines in an admirable
way the therapeutic effects of calcium and
casein. Where non-specific protein therapy
is indicated, this preparation has given good
results without reaction. We have exten-
sively used this preparation in weeping and
chronic eczema, urticaria and exudative
dermatitis." Best results are obtained in
all infectious diseases, where protein therapy
is indicated.

Rs. 4-8-0 a box of 3 amps. of 5 cc. or
6 amps. of 2 cc.

Postage and Packing Charges FREE for ORDERS from DOCTORS only.

Sole Agents for India & Ceylon:

GOPAL & CO.,

10, T. P. KOIL STREET, TRIPPLICANE, MADRAS.

Telegrams: "GOPAC", MADRAS.

Industrial, Occupational and Athletic Injuries



Applying Antiphlogistine to a sprained elbow

272

MANY physicians and surgeons have given enthusiastic
expression to the use of Antiphlogistine as a surgical dressing.
Wounds, such as abrasions and contusions tend to do unus-
ually well under its use. An inhibitory antiseptic, exerting
a tonic action on the capillaries, it aids the healing process,

protects against further injury and
helps to prevent any infection, inherent
in a wound, from becoming a major one.
It does not cause pain on application.



Antiphlogistine relieves the
inflammation and pain of a burn

Antiphlogistine

Sample on request

THE DENVER CHEMICAL MFG. CO.
163 VARICK STREET • NEW YORK CITY

MULLER & PHIPPS (India) Ltd.,

P. O. Box 773, Bombay.



HORMON-VITAMIN-LECITHIN FOOD
NATURAL RESTORER OF VITALITY AND VIGOUR

INDICATIONS:

In pregnancy and lactation, for nursing mothers.
In enfeebled conditions, lost energy and appetite.
In rickets, scophula, tuberculosis, dental diseases.
For all brain workers, students, artists, sportsmen.
Improving growth, nerve debility, reconvalescence
TO RESIST AGAINST DISEASES

Dr. Richard Weiss Berlin NW 7

Rp!

Vitamin A	0.04 gr
Vitamin B1	0.04 "
Vitamin C	0.50 "
Vitamin D	0.0012 "
Hypophys. ant.	0.10 "
Calc. glycerophosph.	100% 5.0 "
Calc. lactic.	5.0 "
Lecith. album.	25.0 "
Sacchar. Uvae	25.0 "
Mineral-Vitamin ad.	100.0 "

Directions for use:
one teaspoonful three times a day with water after meals.

LEUCODERMA
TREATMENT WITH
OLEUM PSORALIA CORYLIFOLIA
(S.C.T.)

Oleum Psoralia S.C.T. in demand from Europe, America and other foreign countries, widely used throughout India and strongly recommended by the Dermatologist, Medical College, Calcutta, and Calcutta School of Tropical Medicine.

Other (S. C. T.) Products:

Oleum Hydnocarpus Co. (A) & (B) for Leprosy.
Anti-Cholera Drops.
Anti-Dyspepsia Pills.
Baldness Cure.

TUBERCULOSIS
TREATMENT WITH
ALLYL Co. (S.C.T.) and a Dietetic Course
Free Literature and free Medical advice
Apply, enclosing a nine pice stamp, to:-
School of Chemical Technology,
P. 154, Lake Road, Kalighat, CALCUTTA.

" MODERN MEDICAL TREATMENT "
By
Jamiat Singh, M. D. (Ph.), F. R. C. P., (Edin.),
D. P. H. (Edin.)
King Edward Medical College, Lahore.

One of the best and most up-to-date books on modern treatment giving treatment of Tropical diseases of heart, lungs, and kidneys, diseases of skin, children and women etc.,

OPINIONS

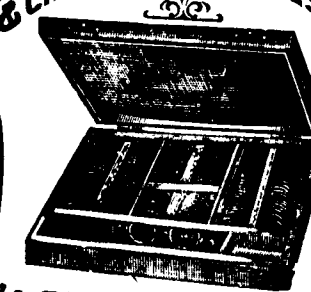
I have carefully read this book and have no hesitation in strongly recommending it to all civil surgeons, assistant surgeons and assistant medical officers throughout the province. SD. N. M. WILSON, COL. I.M.S., *Inspector General of Civil Hospitals, C.P.*

Of special value to medical students and practitioners in India. SD. S. L. BHATIA, I.T. COL. I.M.S., *Dean, Grant Medical College, Bombay.*

Price Rs. 10/4. Postage extra.
Can be had from
THACKER, SPINK & Co., (1933) LTD.,
P. O. BOX 210. CALCUTTA
ATMA RAM & SONS, - Book-sellers, LAHORE.

TRY & BE CONVINCED
TRACHORINE
(REGD.)
Specific for Trachoma & its complications
LEUCOMINE
(REGD.)
Specific for Leucoma, Corneal opacities, Blepharitis, Pterygium, etc., etc.
For free literature and other details write to:-
THE JAWAHIR CHEMICAL WORKS,
AGRA.
Chief Agents for Madras Presidency:-
MESSRS. JAGATH JANANI GENERAL AGENCIES,
119, Big Street, Triplicane, P. O. Box No. 403, Madras.

R.C. GHOSE & SONS
BEST & CHEAPEST WHOLESALE HOME
385/4, BOWBAZAR ST. CALCUTTA.





DATE: 22 I / 38
PATIENT: Shantilal Ambalal
SYMPTOMS: Coughing
DIAGNOSIS: Bronchitis
PRESCRIPTION: Glycodin Terp Vasaka

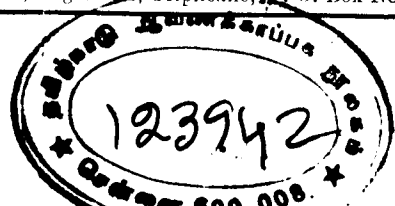
GLYCODIN TERP-VASAKA
ALEMBIC CHEMICAL WORKS COMPANY LTD.

EACH FLUID DRACHM REPRESENTS:

Antimony Tartrate	1/160 Gr.
Terpene Hydrate	1/8 Gr.
Codeina Phosphate	1/8 Gr.
Menthol	1/24 Gr.
Syrup Tolu	15 Min.
Syrup Vasaka	Sufficient.

A PALATABLE PREPARATION INDICATED IN ALL KINDS OF COUGH DUE TO ACUTE OR CHRONIC BRONCHITIS, ASTHMA, THROAT AND PULMONARY TUBERCULOSIS WHOOPING COUGH AND MANY OTHER LUNG DISEASES.

GLYCODIN TERP-VASAKA
ALEMBIC CHEMICAL WORKS Co. Ltd.
Bombay, Baroda, Madras, Calcutta.



JECULIN

For Convalescence and Suboptimal Nutritional States Associated with Secondary Anaemias

JECULIN

Each fluid ounce represents:

Liver (as aqueous concentrate) ... 2.66 ozs.
Orange Juice (as orange juice concentrate) ... 1.35 ozs.
Extract of Red Bone Marrow, Glycerinated ... 10 mins.
Iron and Ammonium Citrates ... 8 grs.
Malt Extract, non-diastasic ... q. s.

Each ounce contains 100 Sherman units of vitamin B and 200 Sherman units of vitamin G.

Supplied in 3, 8 and 24 ounce bottles.

JECULIN CAPSULES

Each Capsule represents:

Liver (as aqueous concentrate) ... 1/3 oz.
Iron and Ammonium Citrates ... 1 gr.
Extract of Red Bone Marrow, Glycerinated ... 1 1/2 mins.

Each capsule is approximately equivalent to 1 teaspoonful of Jeculin and contains 15 Sherman units of vitamin B and 30 Sherman units of vitamin G.

Supplied in bottles of 84 capsules.

LIVER EXTRACT

For Use in the Treatment of Pernicious Anaemia and Other Forms of Macrocytic Anaemia Such As that Associated with Pregnancy, Sprue, Steatorrhea or Tapeworm Infestation.

CAPSULES

EXTRACT OF LIVER U.S.P. XI

50 capsules equal to 1 U. S. P. Anti-Anaemia Unit (oral)

The daily oral administration of 50 capsules of the material prepared by the method employed in making the contents of this package has been demonstrated to produce a satisfactory hemato-poietic response in pernicious anaemia and constitutes a unit according to The United States Pharmacopoeia Anti-Anaemia Preparations Advisory Board.

Supplied in packages of 25 and 100 caps.

AMPOULES JECTATE

Each 2 cc. contains 10 U. S. P. Anti-Anaemia Units (injectable)

The daily intramuscular administration of 0.2 cc. of a solution prepared by the method employed in making this extract has been demonstrated to produce a satisfactory hemato-poietic response in pernicious anaemia and constitutes a unit according to The United States Pharmacopoeia Anti-Anaemia Preparations Advisory Board.

In 2 cc. ampoules.

Supplied in boxes of 6 and 25 ampoules.



Manufactured by:

**THE UPJOHN COMPANY,
KALAMAZOO, MICHIGAN, U. S. A.**

Sole Agents:—

**T. M. THAKORE & COMPANY,
5, SUNKURAMA CHETTY ST.,
G. T. MADRAS.**

Head Office:—

**43, CHURCHGATE STREET,
FORT, BOMBAY.**

Branches:

CALCUTTA — KARACHI — LAHORE — RANGOON — NOVA-GOA.

SCANTY, painful or irregular menstruation usually results in fixed, faulty physiological habits. Treatment is more successful if instituted early.

Take advantage of an endocrine product which represents the best thought of research and clinical medicine.

HORMOTONE



G. W. CARNRICK CO.
20 Mt. Pleasant Ave.
Newark, N. J., U.S.A.

BOTTLES OF 100 TABLETS

Consult

MULLER & PHIPPS
(ASIA) Ltd.
Nicol Rd., Ballard Estate
BOMBAY

a delay in the passage of faeces from the large intestines to the rectum, or dyschezia where the patient loses the power of expelling the contents of the rectum causing inefficient defaecation. The term constipation is really applicable only to such cases as depend upon failure of one or more of the physiological conditions on which regular intestinal evacuations depend. It is more frequent in adults than in children and more frequent in females than in males. Regarded as a whole, that is, as a concrete disorder worthy of separate recognition and attention, its causes must be diagnosed before relief is attempted. The significance of constipation should be carefully determined in each instance as it may be due to hernia, or to cerebral tumour, or spinal disease, or to lead poisoning, or to anemia; to neglect of function or to improper diet. The infrequent and irregular appearance of motions and their dry hard character plainly suggest constipation. Correctly defined, constipation does not consist in morbid infrequency of the bowels but in insufficient evacuation and consequent retention of faeces, attended with various other symptoms.

There are certain structural changes directly connected with the unnatural retention of the contents of the bowels as inflammation, dilation of intestines, loss of nervous irritability of the intestinal muscles, impairment of digestion, absorption and excretion. It deranges intestinal digestion, giving rise to discomfort, depression and other phenomena of dyspepsia. It deranges absorption, and that in two ways: for whilst torpidity of the bowel is attended with reduced activity of lacteal and vascular absorption of the villi, the products of disturbed digestion and faecal decomposition pass into the blood, liver, pancreas and other organs beyond, constituting a process of self-poisoning. It interferes with the excretion of the intrinsic poisons, that is, it permits the retention in the system of highly deleterious effete products. The symptoms of these three different classes of functional disturbance caused by faecal retention are chiefly head-ache, heaviness, languor, confusion, depression, weakness, foul tongue and breath, and anaemia and its endless consequences. The symptoms due to the absorption of toxins all tend to produce an appearance in the patient of premature senility, and the loss of fat is very conspicuous.

Prognosis is very favourable provided all the primary causes are persistently avoided and erroneous habits of the patient can be permanently corrected. When constipation is the result of any form of intestinal obstruc-

tion the prospect of permanent relief will depend entirely on the nature and curability of the obstruction itself.

To secure a permanent cure the actual causes of constipation must be ascertained and removed. Diagnosis is essential of the pathological condition of which constipation is a symptom. Attention should be paid to general management, viz., regular physical exercise or massage; cultivation of regular habit, as constipation may or do generally occur from wilful, careless or unavoidable interference with the habit of regular daily defaecation which had been formed by careful training during childhood on the basis of periodic accumulation and discharge. Persons even of adult age are occasionally met with who have entirely lost this habit and are entirely ignorant of its importance. These must be instructed. In a large set of cases the habit is felt but cannot be practised for want of convenience or opportunity. These cases are met with in young women for whom no special cloak-room provision is available while travelling, or at hotels or even in private houses. When an aperient pill is prescribed for these patients, we should be careful to impress upon them the effect which it is intended to produce, namely, restoration of the lost habit of periodic movements of the bowels. Patients who have systematically neglected this important function may have to be instructed repeatedly on the subject. We tell them that it is not a motion that we desire to obtain as the effect of the pill, but a call to stool at a particular and pre-arranged hour; and that they must respect and encourage this by punctiliously following a well-planned daily rule of observing this personal hygiene.

Attention to diet is of essential importance in all types of insufficient action of the bowels. Food may be found to be insufficient in bulk by the time it reaches the lower bowel, either by being actually taken very sparingly, or so freed from indigestible constituents in the process of selection, or cooking or possibly pre-digestion so that there is little or no residue to evoke peristalsis. The introduction of a balanced common diet containing all vitamins, specially vitamin B, will meet the deficiency and correct constipation. The guiding principle is to give plenty of fruits and green leafy vegetables, which leave an adequate residue to act as a mechanical stimulus to intestinal activity. Foods that are naturally astringent may have to be removed from the diet of costive individuals, and foods that are

Choice of Place of Change *

● Dr. T. D. Mukherjee, M. B., D. P. H.,
Health Officer, Burdwan

Barring a few cases of holiday-makers, seeking changes of place for fun or for luxury, there is a vast body of individuals, who constitutionally or for ailments require change of climate and environments for beneficial effects on their health. Such persons often seek the help of professional men, but unfortunately instances are not rare where even when properly advised the desired result is not always achieved. A so called healthy place does not suit every individual and one naturally gets inquisitive as to why it should be so. I shall therefore try to discuss the general aspect of the matter and would consider my labour amply rewarded if this short discussion of mine gives some help in the matter of the choice of place of change.

The weather of different places is not the same, and the weather of one place is also not the same throughout the year. Therefore the

* A paper read at the Bengal Provincial Conference of the A.I.M. L.A., held at Burdwan during April 1939.

naturally laxative added. It should be remembered that milk is the most constipating of all foods in general use. Beverages should be cautiously used as they occasionally derange the activity of the bowels. A very careful selection of foods should be made in cases of constipation where the cause is referable to errors in diet or not.

Closely allied to the diet in its relation to intestinal activity are the ingestion and excretion of water. Faulty digestion is a very common accompaniment of constipation, and may sometimes be in part a cause of it, and should be remedied. According to clinical indications purgative or enemata are given with advantage to relieve the over-distended organ taking care to use the enemata in gradually decreased quantities to avoid the formation of enema-habit. It is well to remember that excessive use of purgatives or laxatives may sometimes do more harm than good in cases of chronic constipation. I have also noticed in a large number of cases that enormous consumption of proprietary medicines have caused a great damage to the alimentary canal to such an extent that in most cases it was not possible to correct them.

effect on the health of individuals in these different places differs, and the health of individuals in the same place is also affected to a great extent according to the seasons. The temperature, the humidity, the rains, the wind and the soil, indicate the weather of a certain place and all these have got a wide range of influence upon the health of a person. Particular diseases also appear in particular weathers.

First, we may take up the effect of temperature on health. People residing either in hot or in cold climate become adapted to the temperature of the place. Persons living in hot countries have got their skin pigmented. Hot climate has got a great enervating effect. But persons living in cold countries are generally more energetic and their metabolic power is greater. In our country, where there is a wide variation of temperature according to different seasons, we find that in cold season it has got an invigorating influence on our health. For this reason one who can afford goes up to a hill station in summer. Air-conditioned rooms are also gaining favour for the same purpose, and it has been experienced that energy and metabolic power of the body is increased, if the beneficial effect of cold room can be made available.

Humidity has got deterrent effect on health. The air contains always certain amount of aqueous vapour, and there is a point of saturation when the air cannot hold further watery vapour. As this point of saturation advances, that is, when the air contains more watery vapour than in normal condition, the humidity increases. The moisture on the body is not evaporated and the stuffy feeling is very much distressing. Various sorts of bacteria thrive due to heat and moisture. Persons feel fatigued and loss of appetite results.

Rain has got certain effects on health. It clears the atmosphere, removes the dust nuisance, favours growth of vegetation and thus favours the production of food; but it keeps the soil damp and muddy, which favours the growth of various micro-organisms. Stagnant water favours growth of mosquitoes, which is responsible for certain diseases. We also know that level of subsoil water rises with pouring of rains and this condition favours contamination of water supply and thus becomes responsible for diseases like diarrhoea and dysentery.

On the surface of the earth the air is always polluted. The wind blows away the impure air, and fresh pure air takes its place. The wind also dilutes the impurities and thus wind

(Continued at foot of next page)

of moderate velocity is greatly beneficial to health.

The health of a locality greatly depends upon the soil of the place. The soil may be rocky, sandy, muddy, dry, damp, etc., and the surroundings thereby become healthy or unhealthy according to the variation. The porous soil contains air and water in the interstices and this amount of air and water varies according to rainfall. This air and water cause dampness and the ground air is often contaminated. Thus the health of the locality suffers according to this dryness or dampness. Dampness is responsible for certain diseases, viz., rheumatism, nasal catarrh, measles, enteric fever, etc. Subsoil water easily contaminates the water sources and various alimentary diseases appear according to the rise and fall of its level.

The incidence of malaria is closely related to the level of the subsoil water, and when it accumulates easily it becomes the breeding place of anopheles and other mosquitoes.

The difference in the climate of places of high altitude and low altitude is very great. The former is generally dry, the air is not so dusty, and not so impure as the air of low altitude, and is therefore beneficial for health.

We advise a change of place when a patient is run down in health. In India there is no bath or sanitarium* for this purpose. There are a few sanatoria for tuberculosis patients in different places in this country, but their number is very small. These are situated at Madanpalle, Bhowli, Goethia (Nainital), Dharmapur (Simla), Jadapbur (Calcutta), Kurseong, Itki (Ranchi). For the purpose of recouping health, in general sense, there is no sanitarium arrangements, and we are to go to a place and have to accommodate there according to our own arrangements. There is no doubt that a change of place has got an impressive effect upon the health of an individual. It is generally found that digestion is improved, appetite is increased and weight is gained.

The criteria in the choice of places for patients suffering from different diseases are different. Fresh air and sunshine are required in every case, but different temperatures are necessary in different conditions. Some require equable temperature, some hot, and some cold; and the health resorts should be

chosen according to the requirements of the patients.

I shall discuss here a little about the climatic condition of India. The tropic of cancer passes through the country and the climate varies from that of the hottest to that of the temperate. We find every variety of climate; cold and hot, dry and damp, hilly and oceanic. In other words all varieties of climate are found in our country. Surveyed from an aeroplane one would see high mountainous regions, long valleys, hill tracts and coastal plains. In Northern India the temperature reaches the extreme, from the snowy regions of the Himalayas to the desert of Sind, from 32° F. to 120° F. In Southern India, the temperature is equable, and this is found specially in coastal plains. The temperature is hottest in the month of May. Central India is the hottest part of the country.

Health resorts are of three main varieties: (1) Hilly and cold. (2) Hilly and hot. (3) Equable and dry. The country may be divided roughly according to our requirements.

In the first group i.e., hilly and cold, the following places may be mentioned: Darjeeling, Dalhousie, Dehra-Dun, Kashmir, Mussoorie, Nainital, Simla, Shillong, Almora. The climate of these places is cold in general, but during the summer season the temperature is equable. Though particular towns have been mentioned, the surroundings of these places should be also included in this group.

In the second group i.e., hilly and hot, the following places may be mentioned: Ajmere, Duma, Daltongunj, Dehri, Hazaribagh, Jubulpore, Monghyr, Madhupur, Palamow, Ranchi, Sambalpur. Of these places Ajmere is cold in winter. The surrounding parts of these places should be also considered.

In the third group i.e., equable and dry, mention may be made of the following places: Madras, Vizagapatam, Waltair, Puri, Ootacamund, Madura. Rainy season commences in the first three places in autumn, and the health of these places are not good in rainy season. Puri is also not good in rainy season. Madura may be considered hot in summer.

Now the requirements of climate according to the different diseases may be discussed, so that the physician in his advice to his patient for a change of climate will be at ease to recommend a place without any difficulty.

Diseases of the digestive system: Change to any place will do some good as only the surroundings in which the disease occurred require to be changed. But a dry climate suits better. A hilly and hot country is preferable. For the diarrhoeal diseases of children, a dry

Occupational Diseases

● Dr. S. A. Subedar, L.C.P.S. (Bom.),
Kutiyana, West Kathiawar

Man is a vain boaster. His life in this world is short. Even this short existence is encumbered with numerous diseases. Although fortified with the latest methods of prevention and cure, his life hangs on a delicate thread, always at the mercy of flies, mosquitoes and tiny organisms. To these may be added the various occupational diseases characteristic of our present industrial civilization.

For convenience sake the subject may be divided into three parts: diseases of ordinary occupations, diseases of present civilization, and the industrial diseases.

DISEASES OF ORDINARY OCCUPATIONS

Cancer of the lung: Brock-Bank has investigated 898 cases of lung cancer. He found that in sufferers of this disease labourers predominated, i.e., dust workers, workers in mines, gases, and fumes. Chronic irritation seems to play an important part in the causation of this disease.

Heat cramps: This occurs in stokers, firemen, miners, soldiers and those whose occupation necessitates prolonged exposure to heat. The cramps begin in the fingers and toes, and then gradually spread to the neck and back. The hands and feet remain more or less contracted and extremely painful. There is excessive perspiration and the man goes on drinking cold water. Thus the body fluid becomes deficient in salt concentration. It has been suggested that $\frac{1}{2}$ per cent salt water instead of ordinary water would tend to lessen fatigue. This experiment has given good results in soldiers on long march.

Bakers' dermatitis: Bakers have to mix the dough in making loaves. Yeast is the probable cause of dermatitis. This disease is absent when the dough is mixed mechanically. It is also found in workers of marmalade in the preparation of which they have to peel oranges and lemons.

Lead poisoning: Those who work in lead factories suffer from slow lead poisoning. They are lethargic and constipated. They always feel better with the change of air and water.

Heart disease in athletes: Dilation of heart, and albumin in small or large quantities is found in urine of athletes who are subject to excessive physical exertion. No doubt these cases recover. It is an indication of the valvular stress caused by physical effort.

country with equable temperature agrees very nicely, and much improvement takes place even without any medicine. The power of digestion varies with different individuals, and there lies some difficulty in choosing a particular place for a change. A place which suits a certain individual may not be suitable to another, and for this reason if any particular place does not suit one, another place may be tried. But the principle that the place should be a dry one should be followed.

Diseases of the respiratory system: For tuberculosis of lungs, the place should be of equable temperature. There should be sufficient fresh air and sunshine. Equable temperature is obtained in any coastal plain, and fresh air is obtained in hills. A sanatorium should be selected which will fulfil these requirements. Equable and dry climate suits well, and fresh air is absolutely necessary for the disease. The names of the sanatoria have been already mentioned. For all other respiratory diseases, the same rule applies and an equable and dry temperature with fresh air is the point to be sought. Chronic interstitial pneumonia is much improved by living in mild and dry climate. Asthma requires special mention. Being an allergic disease, no hard and fast rule can be laid about the specific climate which will suit the asthmatic patient. Dust, emanation, emotion, all play their part in inducing asthmatic paroxysm. The sweet, flavoured, refreshing air of the villages surcharged with smell of paddy and pollens is sometimes not preferred by an asthmatic to the stuffy air of a city. On the whole "hilly and hot" climate may be recommended.

Diseases of the excretory system: Here an "equable and dry" climate suits the patient well. Chronic Bright's disease may be taken as an example. This disease requires perfect rest and quiet life and a warm and equable temperature is necessary. Thus the change of a place should be selected accordingly.

Diseases of metabolism: A diabetic patient would be benefited in equable climate, and the place should be quiet. A gouty patient also fares well in equable and dry climate and it would be an additional advantage if such a place has a mineral spring, because mineral water helps the gouty patient to a great extent. Thus in all diseases of metabolism, "equable and dry" climate would be one of choice.

General weakness and anaemia: Fresh air is most important. As the altitude increases the air becomes rarified. Therefore coastal regions should be chosen. It will be beneficial to live for a certain time upon the sea.

* Our readers are requested to note the difference between *Sanitarium* and *Sanatorium*. *Sanitarium* is derived from the Latin word *Sanitas* which means health; hence the word means Health Resort. On the other hand *Sanatorium* is derived from the Latin word *Sanare*, meaning to heal, hence *Sanatorium* means a place for the purpose of healing. Ed., I. M. J.

Nervous disease of boxers : A great deal of information has been added to our knowledge of head injuries by investigations on professional boxers who, in the course of their work, receive a number of injuries on the head. Two types of injury occur: one with immediate effects and the other which takes longer period. A special name has been given to this state of affairs, called the "Punch Drunk". This is more often found in boxers who have received a good amount of injury. Early symptoms are ataxia, periods of mental confusion, later on dragging of legs, tremors, deafness and slowness of movement. In severe cases, gross mental and nervous disability, dullness and inco-ordination supervene. After a knock blow, within 24 hours there is ocular palsy, severe headache and defect of memory. Traumatic rupture of cranial vessels is rare.

Disease of deep sea divers : Culpin in the *Lancet* gives a very interesting account of his investigations on symptoms observed in deep sea divers. Depth of 300 feet can now be reached with safety. Some carried out the diving successfully while others gave frantic signals and on being hauled up to the surface were found to be unconscious. One man demanded to be pulled up before he reached his depth and said that he saw his own face looking through the window of his helmet. Culpin saw some more peculiar symptoms. One diver said he did not like to be seen in public and would not go to a tea shop alone. He liked to remain hungry, was always afraid of closed spaces, and thought he was going to be unconscious when he was at 100 feet. Another most important symptom which Culpin noticed was fear of horses. A similar case was reported from Broach when the Narbada bridge was being constructed for the B.B.C.I. Railway. Symptoms were observed after the man came out of his diving suit. There was loss of faculty of speech, hearing greatly impaired, and he was apathetic.

INDUSTRIAL DISEASES

Artificial silk conjunctivitis : With the rise of artificial silk industry this new disease has come to light. It is most prevalent in France. It begins with sharp pain in the eyes and profuse lacrimation. Other examples are: asthma in sheep wool and cotton workers; tumours of bladder in workers in annylene dyes; deafness in boiler-makers and weavers; pulmonary fibrosis in asbestos workers; cancer in coal tar workers; and brass founder's ague.

DISEASES OF PRESENT CIVILIZATION

Jackson says that his attention has been drawn to a new disease of the present civiliza-

Leprosy : How It commonly spreads and the need for periodical Survey*

• Dr. B. N. Bose, Leprosy Officer, Burdwan

Leprosy is known to exist in this country from the vedic times and it has been progressively on the increase. Some districts have become endemic areas, of which Burdwan is undoubtedly one.

It is definitely known that close continuous contact with an active infectious case is the main cause of transmission. It has been proved that microbacterium lepræ is the causative organism of the disease, and it is always found in the active lesions of the body, though sometimes special method of examination becomes necessary for its demonstration. There is still some doubt whether the bacilli are the infective organisms or not, as the disease cannot be produced experimentally. The most difficult problem in this connection is that the microbacterium lepræ cannot successfully be cultured. Despite these facts, leprosy has been certainly proved to spread from one person to another by close continuous contact with an infectious person.

It is often found that the wife gets the infection from her husband; the child from its

* A paper read at the Bengal Provincial Conference, A.I.M.L. Association, Burdwan, during April, 1939.

tion which he calls auto-driver's neurosis. It occurs in taxi drivers. It is confined to the right foot. It begins with numbness, heaviness, tingling sensation in the right foot extending up to the knee. Relief is sought by rubbing but with poor results. Rest affords relief for a time, and then the man becomes limb-conscious. Symptoms are sweating of the right foot, inability to walk long distances as the foot tends to drag. Treatment is unsatisfactory. Jackson hopes that the manufacturers may yet provide their cars with double driving system which may give rest to the foot and avoid this disaster which threatens to become more general.

X-ray workers' disease : Those who work with X-ray and radium for prolonged period suffer from skin diseases, such as dermatitis, burns, etc.

Aero-neurosis : This disease occurs in air pilots. Chief symptoms are irritability, stomach distress, sleeplessness, depletion of higher mental centres.

Sodio-Calcium Lactate with Vitamin D

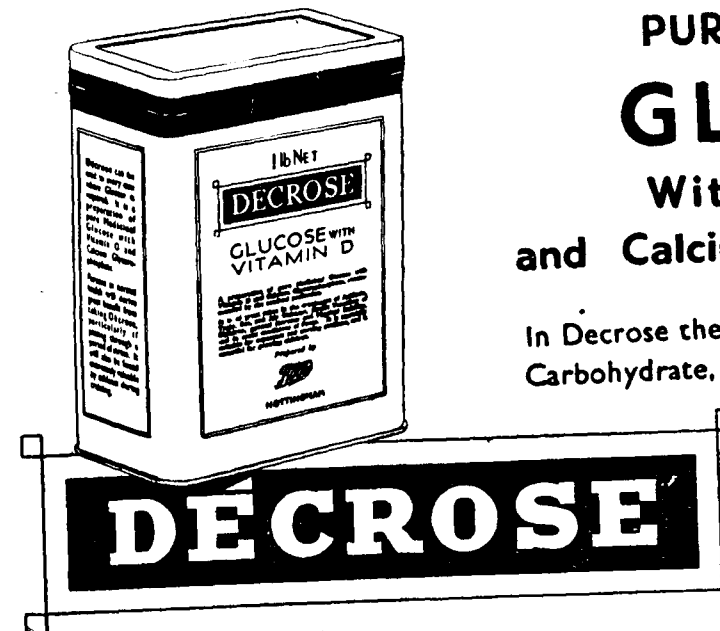
The Calcium salts so necessary to health can only be adequately absorbed in the presence of Vitamin D. Each Salpern Tablet contains 7½ grains of Sodio-Calcium Lactate with a sufficient quantity of the Vitamin to ensure absorption.



SALPERN TABLETS

PURE MEDICINAL
GLUCOSE
With Vitamin D
and Calcium Glycerophosphate

In Decrose the most rapidly assimilated form of Carbohydrate, Glucose, is associated with the necessary minerals, Calcium and Phosphorus, and the correct amount of Vitamin D for their assimilation.



For prices and particulars of Agents and Stockists apply to:
BOOTS PURE DRUG CO. LTD., 10, LALL BAZAR, CALCUTTA

Manufactured by
BOOTS PURE DRUG CO. LTD.
NOTTINGHAM ENGLAND

WHEN YOU ARE DEBILITATED



Horlicks is recommended as a nourishing food which helps to overcome debility and increase tone. Physiological tests show

that it is easily digested and absorbed and speedily affects metabolism. Other tests show that ingestion of Horlicks is followed by a marked leucocytosis, and that it stimulates blood regeneration in nutritional anaemia.

HORLICKS

furnishes first-class protein, readily utilised, energy-giving maltose and dextrin, well emulsified milk fat, and a good proportion of mineral salts.

parent, the worker from his co-worker, the neighbour from his next neighbour, and again the wife being infected from her husband spreads the disease to her brother, and thus the vicious circle goes on.

Incidence of leprosy in the town of Burdwan may be well considered here. More than 400 cases have been detected from the population of about 40,000; that is, there is one case for every hundred, and I may be permitted to state that if there be any gathering of 500 persons, as on this day here, we may find 5 lepers at least out of them.

Let us consider the ratio of leprosy in the two important communities. There are five wards in this municipality and the Hindu population of the town according to census of 1931 is 30,135. There are 308 Hindus suffering from leprosy, therefore the percentage is 0.99. The Mohammadan population is 8621 and there are 113 cases among them; therefore the percentage is 1.3. The figures may be given ward by ward as follows :

Ward	Hindus	Leprosy cases	Moham- madans	Leprosy cases
A	12,744	188	3,155	68
B	8,770	57	2,178	28
C	3,938	32	1,038	7
D	2,097	15	425	6
E	2,586	16	1,825	4

The idea that the rich are not affected with leprosy is wrong. The rich are also affected but less in proportion than the poor. We know that nutrition plays an important part in the etiology of this disease. The rich people get good nutritious diet, good sanitary surroundings, and means for proper treatment.

Education has got a great value in preventing the spread of the disease. The educated people understand the rules of prevention, seek early treatment, and segregate themselves as far as possible. Whereas the uneducated people mix promiscuously and thus spread the disease unwittingly.

Unfortunately the early stages of the disease, which are the most important from the point of view of infectiousness, generally pass unnoticed owing to the absence of active symptoms. Patches on the skin are mistaken for tinea and nasal ulceration goes completely undetected.

When the disease advances it causes numbness, anaesthesia and peculiar pain along the course of a nerve. But before this stage is reached, there is no painful sensation, and this is a very important point in the spread of the disease.

Hence the importance of periodical survey in all endemic areas. The most difficult

problem is to have the early cases diagnosed and to have the cases treated properly.

When a person knows that he is infected with leprosy, owing to the stigma attached to it, he conceals it, mixes freely with others and thereby spreads the disease. Thus he escapes regular and proper treatment. The public must be made to know that leprosy like all other diseases, requires proper preventive measures and treatment to have it eradicated from the country.

Beggars (suffering from this disease) form a fertile source of spread. Though most of them are closed cases, yet there are many in the infective stage. They go abegging from door to door, and thus disseminate the infective micro-organism.

Children are particularly more susceptible to the disease than adults. They also get the infection from their infected servants and maid-servants. Servants and maid-servants generally carry the children of their masters. I am sorry to say that in many houses the servants and maid-servants carrying the infection spread the disease to the children of the rich without the knowledge of their masters.

Thus it spreads from the poor to the rich. When the signs of the disease arise in the body of the children after a few years, the servant, the carrier, may go elsewhere and the family may forget his or her name even. In the meantime, those servants may continue to spread the disease to other families.

The rented houses form another source of infection. When an infected leper resides in a house, he contaminates it and after a time he goes to another house, which also is contaminated; and in this way he goes on for years contaminating one house after another. The healthy persons who take their lodge in these houses are infected with leprosy to their utter surprise. Once a house is infected with lepra bacilli from the nasal secretions and bursting ulcers of an infected person, it becomes a perpetual nidus of infection for years.

The hired conveyances also are responsible for the spread of this disease. Railway trains, omnibuses, tram cars, hackney carriages, rickshaws, etc., all fall under this category. The infected persons are often knowingly or unknowingly allowed to be carried in these carriages. The conductors or the drivers care very little about the welfare of their passengers. Often they cannot discern an infective case and though there is law for action against carrying any infected case in the carriages, it is generally violated. This occurs not always

(Continued at foot of next page)

A Case of Erysipelas successfully treated with Soluseptasine and Propeptasine *

● Dr. S. N. Datta, A. M. O., Bordubi T. E., Doom Dooma (Assam)

Mohadeb, a boy aged 13 years, caste Tanty, garden born, was admitted into the Bordubi Hospital on 1-4-39 with swelling of left cheek and eye as a result of rubbing a pimple of 2 days duration with a dirty hand.

Condition on admission: A small circular pustule of $\frac{1}{4}$ " diameter with a blackish mass in the centre was seen just below the left outer canthus with some serous exudation and raised margins, the whole area being swollen. No pain nor burning sensation. Temperature 98°F . From the observation of the pustule I took it to be a case of anthrax, while the history was negative of recent handling of carcase or eating meat. But the character of the swelling surrounding the pustule suggested the possibility of erysipelas. A smear from the pustule was examined and revealed nothing definite. Urine showed a few staphylococci, specific gravity 1012, reaction acid; no other abnormalities. Blood negative for malarial parasite and anthrax bacilli.

On the first day: (1) Quinine mixture with iron and mag. sulph. (2) 20% ichthyol solution was painted over the swollen area and linament iodine to healthy part. (3) Hot boric fomentation and compress to the eye. (4) N. A. B. 0.15 grm. was given intravenously.

2nd day: The swelling was more pronounced and extended towards right side of face

* Read at a meeting of the Assam Frontier and Budia Beta Medical Society held on 6th May 1939 at Doom Dooma Club.

through the fault of the drivers but from their ignorance about the signs and symptoms of the disease as it is not possible for them to discover the infective patches under the clothings. I often find many leprosy cases travelling in public conveyances.

Thus in a number of ways leprosy slowly and insiduously spreads its tentacles far and wide. Prevention lies in its early detection, treatment and segregation.

I wish to express my indebtedness to Dr. T. D. Mukherjee, M.B., D.P.H., Health Officer, Burdwan Municipality, for the impetus he gave me in writing this article and for his many suggestions in the course of its preparation.

up to forehead. Patient appeared to be more toxic.

3rd day: The swelling had increased and extended upward to scalp and downward to chest. Patient was much distressed and uncomfortable. He could hardly talk and see things, and was highly toxic. Heart weak, temperature 101.6°F . in the morning. I omitted the mixture and prescribed: (1) Cardiazol m. 20, aqua ad oz. 1, oz. 1 t. d. s. (2) *Soluseptasine 5 c. c. intravenously at 8-30. a. m.* (3) *Proseptasine 2 tablets, every 4 hours.* Local application remained the same. Temperature at 12 a. m.— 104.4°F . at 5 p. m. 103.8°F . at 9 p. m. 101.6°F .

4th day: Condition had slightly improved. There was no obvious change in swelling but it had stopped spreading. Morning temp. 99.6°F . *Proseptasine 1 tab. every 4 hours was continued along with another 5 c. c. of soluseptasine intravenously.* Evening temperature was 98.8°F . Patient was less toxic and looked brighter.

5th day: Swelling was very much less and localised to face. He could see and look after himself. Tem. 97.8°F . in the morning and remained normal for the day. *The same treatment was continued and another intramuscular injection of soluseptasine 5 c. c. was given.*

6th day: Swelling still had further decreased. Temperature was normal. *No soluseptasine was given. Proseptasine 1 tab. t. d. s. was continued for some time.*

7th day: Condition improved steadily. The swelling altogether disappeared on the 10th day and there was suppuration from the pustule which also improved with K. C. lotion dressing. *Proseptasine 1 tab. b. d. was given for 2 days and then stopped.* Thereafter he was put on iron and strychnine, and cod liver oil.

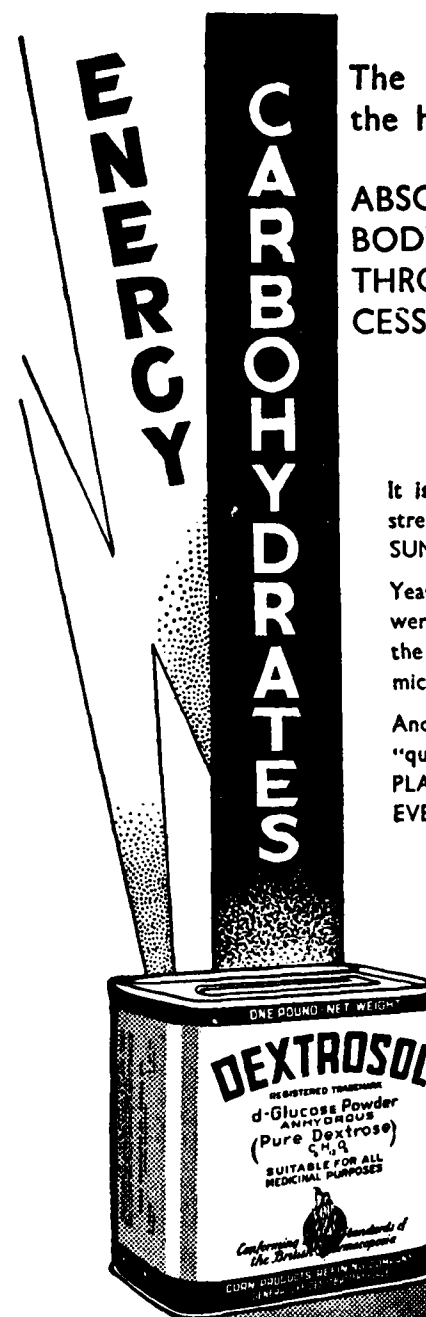
Points of Interest

(1) The lesion looked like a malignant pustule.

(2) All manifestations improved with soluseptasine and proseptasine.

(3) Three injections of soluseptasine (5 c. c. each) and 23 tablets of proseptasine brought about complete cure.

In conclusion, I tender my most respectful thanks to my chief, Dr. D. M. Bertram, for his keen interest and kind permission to read this case note.



The most important single item in the human diet

are

ABSORBED & UTILISED BY THE BODY ONLY AFTER CONVERSION THROUGH THE DIGESTIVE PROCESSES INTO:

DEXTROSE

(Less accurately known as glucose powder.)

It is the combustion of DEXTROSE in the bloodstream which GENERATES THE ENERGY CONSUMED IN PHYSICAL & MENTAL ACTIVITY.

Years of painstaking research and experimentation were necessary before a method could be found for the manufacture of PURE DEXTROSE on an economical scale.

And since a satisfactory method was evolved, the "quick energy" value of Dextrose has gained for it a PLACE OF DAILY INCREASING IMPORTANCE IN EVERY BRANCH OF MODERN MEDICAL SCIENCE.

DEXTROSOL

(d-glucose powder.)

Conforming to the requirements of the BRITISH PHARMACOPOEIA for DEXTROSE

is the SAFEST & SUREST glucose powder for EVERY medical purpose.

Prescribe DEXTROSOL BY NAME to ensure that your patients get the PUREST and at the same time the MOST ECONOMICAL product on the market.

Available in 1-lb., 5-lb., & 50-lb tins.

DEXTROSOL

For sample and booklet "Advances in Treatment with Dextrosol" write to:—

CORN PRODUCTS CO. (India), LTD.
BOMBAY P. O. 8. 994 .. CALCUTTA P. O. 8. 2191.

FELLOWS'

contains essential minerals: Iron, Sodium, Calcium, Potassium, Manganese and Phosphorus. A dependable formula prescribed with satisfaction for over 60 years. "FELLOWS" is a reliable product, manufactured under strict supervision and—with a consistency of quality that only the greatest care in manufacture can ensure.

Samples on Request

Fellows Medical Mfg. Co., Inc.
26 Christopher Street New York, N. Y.



A NOTABLE ADVANCE An Antiseptic to be relied upon

One of the leading Maternity Hospitals in the world reports a reduction in the incidence of Puerperal Sepsis, due to Hæmolytic Streptococci, of more than 50 per cent since the introduction of 'Dettol.'

*Non-poisonous. Pleasant aroma. Persistently antiseptic.
Non-staining. Miscible with water in any proportion.*

'DETTOL'

THE MODERN ANTISEPTIC

Distributing Agents:—

GRAHAMS TRADING CO. (India) LTD., DEPT. P. 5,
P. O. Box 30 KARACHI P. O. Box 90 BOMBAY P. O. Box 150 RANGOON

PARRY & Co., Ltd., DEPT. P. 5, P. O. BOX 12, MADRAS.
E. B. CREASY & Co., Ltd., DEPT. P. 5, P. O. BOX 37, COLOMBO.

A postcard will bring free literature

ATLANTIS (East) LIMITED,

(DEPARTMENT P. 5)

20/1 Chetla Road CALCUTTA

Marketing Agents for Reckitt & Sons.,
Hull, and London, England

THE Indian Medical Journal

All communications regarding contributions, advertisements, books and reports for review, changes of address and non-receipt of the Journal should be addressed to: *The Managing Editor, INDIAN MEDICAL JOURNAL, 131, Coral Merchant Street, Madras.* It is important that the subscribers should report their change of address, if any, immediately to this office to ensure regular supply of the Journal.

All communications regarding subscription and remittances of the same should be addressed to Dr. Khan Chand Wohra, Hony. Treasurer, All-India Medical Licentiates' Association, Civil Hospital, Karnal, (Punjab.)

All communications regarding policy, programme and work of the All-India Medical Licentiates' Assn. should be addressed to Dr. Manohar Lal Kapur, General Secretary, M.O., I/C. Eye Centre, King Edward Memorial Hospital, Karnal Post, (Punjab).

Associate Editors:

A. N. ROY, and JAI GOPAL

Co-Editors:

K. S. S. AIYER, and
T. V. MUTHUSWAMI CHETTIAR

Advisory Committee:

K. B. BHUJANGA RAO, K. VENKAT RAO,
T. V. RANGANATHA RAO, S. BALASUNDARAM
and S. L. ROY

Managing Editor:

A. VISWANATHAN

Vol. 33 MADRAS: July, 1939 No. 7

The Listerian Idea

Rene Leriche's Lister Memorial Lecture given before the Royal College of Surgeons of England in April last is a brilliant and successful attempt to restate the *Listerine Idea in the year 1939** by proving that antiseptics and asepsis are not contradictory terms, and that both aim at riddance of germs from the operating theatre and the surgical wound. While it is true that asepsis is a recent evolution from the original Listerian idea of antiseptics, it is a fact that antiseptics still continues to be our mainstay and a necessity in the surgical ward and the theatre. Rene Leriche points out that there is no essential difference between antiseptics and asepsis, and with this we entirely agree. Both are limited in their application and both are equally valuable in particular situations. It is no longer necessary to dip the instruments in antiseptic lotions because they can be sterilized by boiling, but the skin can only be disinfected by antiseptic methods. As Leriche rightly says, the principle remains the same—the achieve-

* Published in the *B.M.J.*, April, 15, 1939, p. 760.

ment of asepsis by antiseptics, and we may add, antiseptics by asepsis.

Since the time of Lister's advocacy of antiseptics, much progress has been made both in the nature of antiseptics used and in the technique of their usage. Wherever possible antiseptics have been replaced by asepsis, but there is no doubt the Listerian idea is a contribution of permanent value in medicine and surgery, particularly in the latter.

The Listerian idea is, in essence, the science of destroying the germs that affect man. It may be directed towards keeping the surgical theatre sterile by all possible means—physical or chemical—; towards preventing suppuration of surgical wounds; towards killing the germs in an already suppurating wound; and towards minimising or preventing as far as it is humanly possible the too well-known dangers of internal or external bacterial mischief.

At the time of Lister, carbolic acid was the favourite antiseptic. He used it in a spray to disinfect the operation theatre, and in a solution to disinfect the instruments and wounds. He thus made surgical history and rescued surgery from its inevitable doom.

After him, methods were improved, but the Listerian idea is at the back of them all, immutable and ever-abiding. Asepsis by boiling and dry heat; use of gloves; newer and more powerful antiseptics, internal and external; immobilisation of wounds, air conditioned operation theatres; effective surgical toilet; and surgical cleanliness of the surgeons themselves, are some of the outstanding advances in modern surgery. But they are all in substance the logical fulfilment of the Listerian idea, viz., freedom from bacteria, pathogenic or otherwise.

Further fulfilment of the Listerian idea has become possible through the development of the science of nutrition and internal chemotherapy. We know definitely that an optimum state of nutrition is a guarantee against bacterial deprivations, and we also know that sulphonamide is an effective preventive against streptococcal infections. The latter has been well illustrated in the reduced incidence of puerperal sepsis in hospitals where the drug has been used as a prophylactic.

Rene Leriche carries the Listerian idea still further by suggesting ultra-violet irradiation of the wound throughout the operation, Listerization by the intra-arterial route or intra-arterial novocainization.

Ultra-violet irradiation is intended to keep the operation area absolutely free from any kind of organisms, so that the wound may heal, not only heal by first intention but also

may result in a perfect scar which would not break down under any conditions and which would be free from pain or keloidal degeneration.

The other two methods of Reni Leriche are somewhat heroic and controversial but he claims successful results, so successful, he says, that he has stopped the counting of successes it has given him. Intra-arterial Listerization consists in injecting gonacrin or mercurochrome into the main artery of the affected region. Intra-arterial novocainization consists in injecting novocaine into the main artery of a limb in which acute infective process is beginning. Thus he writes:

"It would seem, then, quite probable that, in addition to intra-arterial Listerization—frankly antiseptic in purpose, and aiming at the direct destruction of the germs—we have here a possible method of getting at the very mechanism of the inflammatory process and of averting by physiological means the deleterious consequences of an infective inoculation. We are continuing our researches along this line, and have already obtained some unquestionable results in salpingitis and in certain pelvic infections, as already recorded by Daniel."

This is but a further demonstration, as he himself says, that the Listerian conception is still capable of bearing fruit in more ways than one.

Whatever may be the future advances in the realm of antiseptics and asepsis, Lister would ever be gratefully remembered by successive generations, because his contribution is of permanent value and of abiding benefit to mankind.

Sterilization of Syringes in General Practice

Practically, every physician in general practice has evolved his own method of sterilising syringes and needles intended for hypodermic and intravenous injections at the patient's home. The outfit is usually kept in an antiseptic fluid or oil: chloroform, rectified spirit, absolute alcohol, carbolic or dettol lotion, or medicated olive oil. The needle is thrown away only when it breaks. Most of the practitioners claim that for all practical purposes this method of disinfection has resulted in no serious misadventures or calamities.

But the question is not so simple, and we are amazed at the complacent attitude of the busy physicians. For it has been proved beyond doubt that almost all the popular antiseptic fluids or oils cannot be kept absolutely sterile, particularly when they are frequently exposed or used for the purpose for which they are intended. The mere fact of the absence of suppuration in the injected area should not lull them to a false sense of confidence and security in these so-called antiseptic methods of keeping the injection outfit.

Abscess formation is indeed a direct reproach to the physician. He certainly avoids it, but we think his responsibility does not end there. He is answerable for the complete sterility of his instruments, and anything less than that, despite the excuse of a busy practice, is to invite unknown dangers.

The semi-sterilization in ordinary practice is proved by two events which are usually made light of by the general practitioners. They are: pain of varying degree and induration at the spot of injection. Pain may pass after sometime, but induration lingers. These are certainly the effects of incomplete sterilization, the result of a sub-lethal dose of septic organisms.

Induration is particularly dangerous as, by the very nature of its pathology, it leaves a permanent nidus of slow infection or offers a hiding place for anaerobic organisms like tetanus which may blaze up when the patient's power of resistance is impaired for some reason or other.

An ideal injection should, therefore, not only avoid frank suppuration but also pain and induration. The question then arises: what is the best method of sterilization to achieve these objects?

It must of course be suitable even to a busy practitioner to whom time is too precious to be wasted.

We think that boiling is the best, and a little time spent over this process is nothing compared to the mischievous potentialities of a permanent or temporary induration. Spirit-stove boiling for 15 or 20 minutes would make the instruments practically sterile, and the post-injection complications of pain and induration would be reduced almost to nil.

Another oft-raised objection to boiling is that needles may get blunt and rusted after repeated boiling. It is of course difficult to fix the number of injections which a needle is capable of, even with high-grade rustless steel needles now available in the market. While one needle for one injection is the ideal, just as one gramophone pin for one plate, it may not be an economical proposition for an average practitioner. It may, however, be laid down as a working principle that a needle should only be subjected to minimum use consistent with its sharpness and strength. The greater the number of times it is used, the blunter and weaker it becomes, and what is equally important, it then becomes more difficult of complete sterilization even within half-an-hour of boiling.

(Continued at foot of next page)

CURRENT COMMENTS

Diagnosis of Influenza

The *Prescriber*¹ in its editorial note writes that 'it has been well said that influenza is merely a peg to hang a diagnosis on'. We think this is equally true in this country. Any unaccountable cold and cough with fever, short or prolonged, is diagnosed as influenza in the first count. And the *Prescriber* rightly warns that

"No such diagnosis ought to be made unless the attack comes on suddenly with, as a rule, a short, dry cough and the patient is more or less depressed. Patients who are up and going about in a few days have not been suffering from influenza. We have known a diagnosis of 'influenza' to be made in cases of 'pneumonia'; 'rheumatic fever' and even 'appendicitis'; while, of course, hundreds of cases of ordinary infectious febrile colds are constantly so diagnosed. The term 'flu' ought to be given up. It is, to say the least, a most meaningless one and usually proves to be quite misleading."

This fashion of diagnosing every passing febrile cold and cough as influenza is really deplorable, and it has resulted in much confusion. And like the *Prescriber* we also think that its incidence has been over-stated. Influenza has been proved to be a virus disease, and as such its real bacteriological diagnosis is a matter of great difficulty, and it is therefore not a practical proposition for the general practitioner to seek the laboratory aid in every case. He has therefore to rely on clinical diagnosis. Physical and mental depression, very abrupt onset of cold and fever are the essential diagnostic features of typical influenza, and if this is recognised diagnostic fallacies would obviously be reduced to a minimum.

Occupational Diseases

In this issue of the *Journal* Dr. Subedar gives a brief account of occupational diseases in this country, and though this article is too sketchy there is yet no doubt of the importance of the subject. We are just witnessing in our country the confusion of the early stage of industrialisation, and unless

¹ April 1939, P. 109.

Safety first should be the essential consideration in the sterilizing methods, and any half-baked methods extemporised to save the labour and the time of a busy practitioner will ultimately bring reproach to him and put his patient to the hazard of unknown and hidden dangers. 'A stitch in time saves nine' is a proverb which is literally applicable to the selection of methods to sterilize the injection outfit.

legislation to protect the workers against industrial diseases is enacted they will be subject to hazards which are really avoidable. In this respect, Germany, U. S. A., Great Britain and other countries have introduced proper legislation, besides the improvements in the industry itself by the introduction of newer and better methods of handling a particular industry, such as mechanical devices as a protection against dangerous substances incidental to manual processes, and a change over from a dangerous chemical to a relatively harmless one. Thus in the U. S. S. R., the use of mercury for felting had been abolished and this had definitely reduced the dangers of mercurial poisoning. Therefore State control and State research are the necessary prerequisites in the prevention of industrial diseases, and so much is known about them that it will be a folly to allow history to repeat itself without learning and adopting its lessons. We may also urge for the inclusion of industrial diseases in the medical curriculum. Many practitioners are not at all familiar with the manifestations of industrial diseases, although it is too often said that we are living in an age of industrial civilization. All these gaps must be filled in before the industrial India learns its lessons too late.

Treatment of Malaria

Although Malaria in India still claims the largest toll of mortality yet it has ceased to occupy the 'front-page-news' in the medical press, perhaps because there is nothing new or sensational to be told about this disease. So far as its eradication is concerned, it has become a problem of sanitary engineering which in turn is dependent on State enterprise and initiative. It will be foolhardy on our part to harp on this aspect of this question, and therefore we will be content by reviewing the relative value of quinine, atebrin and plasmoquine in the prevention and treatment of malaria and its too frequent relapses. The criterion of cure is not only that the patient should be free from pyrexia but also that his blood and tissues should be free from malarial parasites. And on this should be based the assaying of relative merits of quinine and its synthetic counterparts. In this connection the recent discussion on the *Treatment of Malaria in a Military Population*² at the Royal Society of Medicine by the military medical officers seems to throw a flood of light. Col. Smith who had large experience in India and China said while atebrin was an excellent drug in many ways it had very little action on the

² B. M. J., April 29th, 1939, P. 890.

relapse rate. Plasmoquine was useless for an acute attack but was absolutely necessary in preventing a high relapse rate. Col. Boyd concurred with the opinion about the effectiveness of plasmoquine in reducing the incidence of relapses. Comodore Wittingham said that for all cases treated with quinine the relapse rate was approximately 40%, with plasmoquine about 10% and with atebirin 5% over a three months period. These results are in accord with clinical experiences in general practice in this country, so much so atebirin-plasmoquine treatment has become a general rule, atebirin during the pyrexial period and plasmoquine during the apyrexial stage. But unfortunately these new synthetic drugs are not capable of mass application as is the case with quinine, and is therefore limited to closed communities over whom medical supervision and control is possible. When plasmoquine was first introduced there were many fatalities owing to overdosage and it was soon found that the addition of quinine not only lessened its toxicity but also increased its effects. The discovery of atebirin soon followed which fortunately proved to be better than quinine in many respects both from the clinical and parasitocidal points of view. The present standard treatment is therefore atebirin first which aims at clinical cure by killing the schizonts, and plasmoquine at a later period with a view to kill the gametocytes which are vital links in the man-mosquito-malaria cycle, and are also the prolific cause of relapses. In brief, the relative position of quinine and synthetic products is that the former is still the sheet anchor in mass prophylaxis and treatment where medical supervision is impossible, while the latter are the drugs of choice in the treatment of individual patients and closed communities where medical supervision is possible. Even while the synthetic products are used, Sinton's advice to control the acidosis and hypoglycemia by alkalis and glucose should under no circumstance be forgotten. We would also like to emphasise in this connection that the controversy, quinine vs. synthetic products, arises from interested quarters, and has very little to do with the scientific aspect of the subject.

Classification of Infantile Diarrhoea

There are no reliable statistics of infantile diarrhoea or gastro-enteritis in any of our provinces, but doubtless it has been the experience of the practitioners that its incidence and mortality is very high. Its various and complex aetiology leaves many cases imperfectly diagnosed, and the treatment followed has

been more or less on the symptomatic line. Smellie's⁸ lecture at the University of Birmingham is bound to be of interest to the Indian readers for the simple reason that diarrhoea is still a menace to infant welfare in this country also. He traces its incidence in Great Britain and observes that its greatest incidence is during the first twelve months of infant's life and among the poor and the malnourished. We think this is equally true of our country. Improved sanitary conditions, a better and cleaner milk supply and the adequate cleansing of feeding utensils have contributed, he says, to the considerable decrease in the incidence of the diarrhoeal diseases in his country. But we are far from attaining these conditions and so inevitably we have to face the consequences of such want of attention. Public Health work in our country is bound to be slow owing to its vastness and the poverty of our people. Things are, however, now in double march after the introduction of provincial autonomy, and we may hope that proper attention would be bestowed by the Ministries of Health in matters like these. What is of particular interest to us, however, in Smellie's lecture is his classification of infantile diarrhoea which we think is a sound and adequate one and offers an useful guidance to the practitioners.

"Infective"	... due to known pathogenic organisms e.g., dysentery and typhoid
Infections	... unknown enteric infection without demonstrable pathogenic organisms
Parenteral infections	... upper respiratory tract, bronchitis, pyelitis and other infections
Dietetic	... improper feeding—e.g., excess carbohydrate or fat, and other errors."

If we keep this classification in our mind, some, at any rate, of the causes of infantile diarrhoea may be traced and fittingly treated. There is a popular belief among the mothers, probably also among the practitioners, that dentition is a common cause of infantile diarrhoea. Dentition is a physiological process, and as such it looks strange that it should upset the infant's health. It is a popular myth, and like all myths it dies hard. Parenteral infection is likely to be a fertile cause of infantile diarrhoea, because it has been our experience that invariably very few children are free from suppurative otitis during the first year of their lives. The decline of breast-feeding, though growing, has not yet become marked and extensive except in cities,

⁸ *Lancet*, April, 29th, 1939, p. 969.

July, 1939]

THE FOR DEPENDABILITY

Complete assurance that the product is reliable, harmless, and convenient to use, are essential features which must be considered before giving medical recommendation.

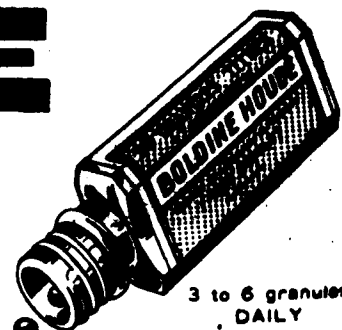
Rendells fulfil these exacting demands, and may be freely prescribed with full confidence knowing it to be the dependable contraceptive.

RENDELLS

W. J. RENDELL LTD · HARDWICK HOUSE · 161-165 ROSEBERY AVENUE · LONDON · E.C.1

BOLDINE HOUDÉ

EACH GRANULE CONTAINS
exactly 0.001 Gm (1/164 gr.)
of active principle



**CIRRHOSIS
BILIARY
LITHIASIS
CONGESTION
OF THE LIVER
CHRONIC CHOLECYSTITIS
HEPATIC INSUFFICIENCIES
BENIGN INFECTIOUS JAUNDICE**

Laboratoires HOUDÉ, 9, rue Dieu, PARIS

United French Laboratories, Francis KLEIN, Pharmaceuticals Ltd.
General Distributors - P. O. Box 777 - BOMBAY

Advertisement in the INDIAN MEDICAL JOURNAL means:



1. Information regarding your products would reach 1657 towns in India.
 2. Nearly 5000 Medical Practitioners would come to know of your products.
 3. Respectability.
 4. Regular monthly publicity.
- For Tariff, Specimen Copy and other details write to: Advt. Dept.

INDIAN MEDICAL JOURNAL,
131, CORAL MERCHANT ST., MADRAS.

NOTICE

THE ALL-INDIA MEDICAL LICENTIATES' ASSOCIATION FAMILY FUND

(ESTABLISHED 1911)

AMOUNT PAID ... Rs. 44,000
GENERAL FUND EXCEEDS ... Rs. 14,000

Best measures of helping our brother Associates and providing for the self.

Condition of membership improved according to the working experience of the previous years and recommendation of the qualified actuary.

All Medical Licentiates up to the age of 45 years can advantageously join the Fund.

Better condition for those who join early. For more particulars or a copy of rules and form of application, write at once to,

DR. G. G. WADHWANI,
SECRETARY, FAMILY FUND,
101, GIRGAUM ROAD, BOMBAY.

and as such it may not be a chief cause of infantile diarrhoea as undoubtedly it is in England which Smellie confirms. He states that so far as his country is concerned, the disease is not co-related with the season and hence he says that "the 'summer diarrhoea' of text-books has to all intents and purposes been completely eradicated and we are called on to deal with a disease that is of mixed aetiology, and moreover is present with us in the whole year through, summer and winter alike". This is however not true of this country, because undoubtedly incidence of infantile diarrhoea is higher in summer than in winter. It may be, and certainly is to our mind, a wrong nomenclature to call it 'summer diarrhoea', but there is no doubt that during Indian summer, the atmosphere is highly humid, there is scarcity of water and a plethora of flies which positively contribute to the lowering of infant's resistance and susceptibility to infection. Indian infants are stuffed with carbohydrates and fats and this also seems to us to be no negligible factor in the complex aetiology of infantile diarrhoea in this country.

Amritsar Medical School

Another province the Punjab, has advanced towards the line of progress by making the standards of teaching at the Amritsar Medical School conform to those of the Indian Medical Council, thereby ensuring that uniformity of standard so essential for the orderly and organised progress of the profession in this country.

The course has been extended from 4½ to 5 years and the standard of preliminary education has also been raised to F. Sc. In the case of non-F. Sc. candidates who have passed the F.A., or the Senior Cambridge, they have to undergo, before the commencement of the medical studies, an extra course of one year in the subjects of physics, chemistry, botany and zoology. The successful candidates will be granted the diploma of the Licentiate in Medicine and Surgery of the Punjab State Medical Faculty. And we are reliably informed that the licentiates of the new order will be eligible for post-graduate course in this country and abroad. The new scheme will take effect from October next.

We congratulate Lt.-Col. Mallik, the Principal of the Amritsar Medical School, for the successful fruition of his endeavour to reform the standards of licentiate education at Amritsar at which, we know, he has been working hard for the last couple of years.

We would also congratulate Col. Jolly without whose co-operation and help the reforms would not have seen the light of day so easily and early.

In a way, this uniformity of standard will minimise greatly the ravages of caste-system in the profession. But frankly, we are not sure whether the proposed changes will entirely abolish the caste-system. Since, however, the foundation is good and strong, we will not show our impatience for a skyscraper which may await a better fortune and better times.

But even this new reform will be meaning less to the profession if the Punjab Medical Registration Act is not amended as it was in Madras. It is a necessary and inescapable corollary. If graduate and licentiate medical education conforms to the same standard laid down by the Indian Medical Council—as it is now in the Punjab—there is no earthly reason to perpetuate an Act which has been grossly dividing the profession into water-tight compartments and classes, for which there has been no excuse even under the old order.

We hope that the Punjab Government will face the logic of the whole affair boldly, as boldly and expeditiously as they have tackled the question of the Amritsar Medical School.

Betaxin in the treatment of leprosy. Very promising results are being obtained with 'Betaxin' in many etiologically diverse forms of polyneuritic and polyneuralgic disorders. The neurotoxic and infective types appear to respond equally well. The usual dosage used by different workers was 1 m. grm, and the total amount administered over some 9 weeks was 45 m. grm. Of late, in the light of further experience, the single dose up to 10 m grm. was reached by some while others state that the rapid cessation of pain and regression of the nerve swellings was most striking. Even advanced bilateral peroneus paralysis improved in a relatively short time so much that practically complete function could be restored.

In conclusion it should be stated that treatment with 'Betaxin' injections has proved of great service in leprosy neuralgia occurring as an isolated symptom and in the course of a general reaction to the disease; the response is equally good in the usually intractable neurotic vaso-dilatory symptoms in the hands and feet, which as a rule are associated with severe pain and paresthesia. The action appears to be highly selective, since the treatment leaves both the general and the arthritic symptom of leprosy wholly unaffected. *Leprosy Review*, X: 109,39.

POST-GRADUATE ARTICLES

Cardiology

Dr. Jai Gopal

(13)

FAILURE OF THE WHOLE HEART

The failure of the whole heart occurs in various conditions. Death generally takes place suddenly or it may be associated with a brief period of illness.

The causes of this type of failure are numerous and operate in a variety of ways, but the ultimate effect, as already pointed out, is that either there is an overload on the heart which leads to the exhaustion of the cardiac muscle; or else the myocardial nutrition is impaired or in a state of toxic condition and therefore it is incapable of coping with a normal load. The detailed description of the various causes is beyond the scope of these articles, but a few of the important conditions will be detailed.

VENTRICULAR FIBRILLATION

When fibrillation occurs in the ventricles, the whole circulation comes to a standstill; and unless normal conditions are introduced quickly, death is usually sudden.

TOXIC OR NUTRITIONAL CAUSES

During severe illnesses depending on serious infections, and sometimes during convalescence, the myocardium is so damaged that it may cause failure. I have many times come across patients progressing favourably in convalescence after influenza, diphtheria, pneumonia, typhoid, that death due to sudden stoppage of heart has occurred, either due to the effect of emotion or due to some depressing influence or exertion. In severe anæmias when the hæmoglobin level falls below 40% for any length of time, failure sets in after the myocardium has undergone fatty degeneration.

ADAM STOKES. SYNDROME

Sudden death may be caused by a paroxysm of heart block due to a lesion of or impairment in the conducting power of auriculo-ventricular node or the bundle of His. The description and details of treatment have already been fully discussed in a previous article; suffice it here to remind the reader that adrenalin sol.

in ten drop doses hypodermically, would enhance the ventricular rate and tide the patient over the critical moment when life is in jeopardy.

ACUTE RHEUMATIC CARDITIS AND PERICARDIAL ADHESIONS

In early life an attack of acute myocarditis may cripple the heart or the little patient succumbs after a succession of attacks smouldering over several years. The pericardial sac may be obliterated or it may become adherent to the surrounding structures thereby hampering the systolic contraction and an overload is placed on the myocardium. In these cases there is generally an associated valvular defect, therefore a heart affected in this way is least fitted to cope with extra load imposed on it for a long time, and the symptoms of failure set in early. In Pick's syndrome, there are dense adhesions inside the pericardial sac and the adequate filling of the right auricle is hampered and this leads to accumulation of blood behind the right side.

CARDIAC ASTHMA

A classical attack of cardiac asthma usually awakens a patient about the middle of night. It is a grave condition of heart and the patient suffers from extreme restlessness due to short and laboured breathing, and in his struggle for breath, he becomes pale or the sweat pours from his livid face, and a fatal failure of heart is imminent. A typical attack is rarely seen in hospital practice as the attacks generally occur overnight and the description furnished by the patient lacks the essential diagnostic points, which are necessary to differentiate the condition from spasmodic attacks of bronchial asthma, and from renal orthopnoea. But in a severe attack the confusion is not possible; thus the following account given by Sir Clifford Allbutt of an attack seen during his ward visit would impress upon the mind of the reader the gravity of such a condition:

"The patient, seized and throttled before he could cry out, sprang up livid to wrestle with death. The desperate conflict made the fell enemy almost visible to us. Now this way, now that, springing up in bed to fight from the edge of it, to sink back in utter exhaustion, but only to rise again panting, with sweat streaming from him, desperately to renew the battle: the scene was almost as distressing to the bystanders as to the victim."

From the foregoing it is clear that *substernal pain* is the distinguishing feature to differentiate it from spasmodic asthma.

The patients usually show diseased state of left ventricle. Fibroid degeneration of the myocardium caused by the coronary artery disease makes the person prone to these

attacks, as these people are barely capable of meeting the simple demands of quiet living and have already received medical attention for the cardiac disability. During an attack there is an urgent desire for more air, in spite of the fact that the airways are patent, and this points to the attack being of central respiratory origin, when the blood supply of these centres falls and there is CO_2 concentration, and therefore it is that the attacks come on during deep sleep in the middle of night, when the metabolism is at its lowest ebb. These attacks may last a few minutes and they are known to have lasted an hour. The attacks which occur in the early part of the night as the patient is dropping off to sleep are frequently initiated by the occurrence of the Cheyne-Stokes respiration. The attacks are generally brought on after a hard day's work by a person whose left heart is already in a weak state, and its efficiency is still further depleted. Thus the dyspnoea which some patients experience in the evening is probably due to the accumulation of the fatigue products of the day, and the severer types of midnight attacks occur when the left ventricle has been exhausted during the day. During the middle of night, the CO_2 concentration cannot be effectively cleared as the blood supply of medullary centres is decreased due to the metabolism being at its lowest ebb, and the degenerate ventricle exhausted by the extra demands of the day is incapable of increasing its output. The breathing is quick but shallow, the inspiration is prolonged and laboured and the expiration occurs with a grunt. In bronchial asthma the expiration is prolonged and wheezing. In renal dyspnoea the breathing is deep and prolonged, hence these points help to differentiate one from the other. The immediate measures to be taken to ward off the attack and the impending dissolution is to give a hypodermic injection of a $\frac{1}{4}$ grain of morphia, and this acts as a specific. It allays the anxiety and the fear which dominates the patient's conduct and thus the restlessness is calmed down; the blood pressure is lowered and the cough is checked. It may sound strange that morphia which is a respiratory depressant should be advocated in a condition in which there is undue depression of the respiratory centres already. It allays the excitability of the patient and protects the higher cerebral centres from the onslaught of the various stimuli, and in the meantime the circulation adjusts itself to the changed circumstances prompted by the law of self-preservation. The left ventricle which is excessively filled up with an increased amount

of blood from the right heart is soon awakened to its new responsibility and the circulation is thus readjusted. Ten minims of adrenaline solution 1 in 1000 may be added to hasten the recovery of the left ventricle. In a case where the acute pulmonary oedema is far advanced, and the signs of failure are present and the veins in the neck are engorged venesection should be done.

Atropine by its paralysing effect on the vagus nerve ending is useful in arousing the sympathetic to its activity, and thus the circulation is quickened. It lessens the bronchial secretions and thus improves the airways. It may be combined with morphia. Cardiac stimulants, viz., Digoxin (B.W. Co.) or Strophanthin should be given. Cardiazol-Ephedrine is another remedy which effects an improvement in the circulation as a whole and is used with great advantage.

ANGINA PECTORIS AND HYPERTENSION

These are the two common diseases which in course of time result in the failure of the whole heart. Both these are generally correlated, but the fallacy that has crept in the profession is that the former is considered as the necessary result of the latter. This conception is so deep rooted that in every case of præcordial pain, blood pressure reading is at once obtained; that in the event of a normal reading the presence of anginal attack is excluded. This theory is unacceptable, because in fixing responsibility on hypertension being the cause of angina, certain factors require keen consideration and careful judgment. The first point to note in this connection is that there are cases of established hypertension with whom the high blood pressure is habitual, yet they are free from anginal pains; conversely in a case of definite angina, the blood pressure may be normal or there may even be low pressure reading. It is also known that that the radial or the brachial arterial wall may be sound and the anginal attacks be the result of local and limited arteriosclerosis affecting the coronary arteries. From this it is evident that normal or low pressure reading is no proof of the soundness of the coronary arterial wall. It should therefore be borne in mind that it is the state of the coronary arterial wall on the patency of which the efficiency of the intracardiac circulation depends is considered to be the cause for the origin of angina. Here again critics have not been lacking to point out that in some definite cases of angina, no coronary lesions could be detected; such cases were then considered to be due to coronary spasm

Intestinal Amœbiasis

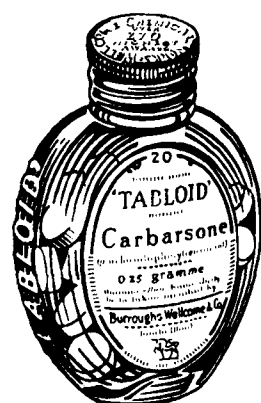
TRADE MARK 'TABLOID' BRAND CARBARSONE p-CARBAMIDOPHENYLARSONIC ACID

A stable, organic arsenical compound with a definite tonic action and a beneficial effect in chronic intestinal amœbiasis.

Readily absorbed after oral administration. When strict control of dosage is maintained and overdosage avoided, 'TABLOID' CARBARSONE may be given over long periods without giving rise to untoward effects.

Precision of 'TABLOID' products simplifies control of dosage.

0.25 gramme (gr. 3½ approx.) Bottles of 20 at Rs. 1-14
Bottles of 100 at Rs. 7-15



*Bombay prices to the Medical Profession (liable to fluctuation)
Subject to Medical Discount*



BURROUGHS WELLCOME & CO., LONDON
(THE WELLCOME FOUNDATION LTD. INCORPORATED IN ENGLAND)
AND COOK'S BUILDING, HORNBY ROAD, BOMBAY

H 3743 Ex.

COPYRIGHT

ADDRESSES AND ARTICLES

The Significance of Constipation *

• Dr. B. B. Sen Gupta, L.M.P., I.M.D.,
M.O., J.P.Rly., Jorhat (Assam)

Constipation may appear from medical point of view to be a too simple subject for notice. The general public also believes that constipation is no disease and does not require any attention or treatment unless and until some serious trouble arises.

Constipation may be defined as prolonged retention of faeces in the alimentary canal with a disturbance of the strictly natural law governing the intestinal evacuations, or in three words, it is *prolonged retarded defecation*.

It may be due to:—(1) Faults of the intestines and associated parts. (2) Faults of ingestion, particularly errors of diet. (3) Faults of habit. (4) In association with acute febrile diseases. (5) Want of regular physical exercise.

Symptoms are, as a rule, very variable. The healthy action of the bowels are enjoyed by one or two daily evacuation. There are, however, persons who enjoy fair health with an evacuation only once in two, three or more days. In a large majority of cases constipation causes a mild auto-intoxication, manifested by a sense of fullness, lassitude, mental depression, or a dull pain in the head, with some impairment of digestion, anorexia, nausea with sometimes colicky pains and distention. In some cases after retention of the intestinal contents for three to five days, a spontaneous diarrhoea supervenes for a single day after which the constipation returns as before. Sometimes there is a desire to go to stool but on account of the formation of hard scabylæ the efforts result in only ineffectual straining. Sometimes a few scabylæ are passed after effort, followed by heaviness and pain in the perineum and anus. The hæmorrhoidal veins may swell and rupture causing piles. Sometimes there is pain down the thigh from the pressure of the faecal masses on the nerves in the pelvis. There may be a moderate distention of the abdomen with perhaps flatulence and eructations, and sometimes vomiting. The tongue is as often very dirty with a thick whitish, or brownish

coating, and at times furred. The mouth often gives out a foul smell along with the breath. There is lack of vigour and freshness. But often, the more habitual the constipation the less is the general disturbance, and many are not conscious of having anything the matter with them, though their last evacuation was many days before. In many cases, however, protracted constipation leads to a violent attack of head-ache every week or ten days, accompanied by vertigo, vomiting, rapid and sometimes irregular pulse, extreme nausea, tremors and colicky pain for a day or two, during which the bowels are evacuated, and the next day the patient returns to his ordinary duties though pale and impaired in strength. Herter has shown that a very large number of micro-organisms are present in each daily stool which causes those morbid phenomena and are in many cases due to auto-intoxication. In such cases indicanuria is often present. Melancholia may also be due to this cause. A faecal sapremia is attended by severe symptoms such as prostration, sharp abdominal pain, sustained high temperature, tachycardia, cephalalgia, a dry coated and furred tongue and urticarial eruptions over the body. In the constipated, appetite is always variable. Sometimes the colon is distended with gases, with slight tenderness on pressure and irregular peristaltic movements with borborogmi. In such cases a purgative is liable to be accompanied by pain across the abdomen and tenesmus; and some mucus may be passed with the faeces. Such symptoms indicate congestion of the rectum which is sufficient, in some cases, to cause frequent slimy discharges while the colon remains filled with scabylæ. Colic occurs when large faecal masses accumulate in the rectum and sometimes being sufficiently violent causes fainting. In some cases a mild colic precedes every daily evacuation. Constipation which resists purgatives and enemas may proceed until symptoms of intestinal obstruction appear with protracted colic, profuse vomiting and collapse—sometimes causing death in the young, or old and very debilitated people.

In endeavouring to attend to the primary ætiological indication it is not always possible to diagnose to which class constipation belongs. Very often several causes are combined, faults of one class aiding the super-vention of others. Structural disease involving the bowel, mechanical and other causes of faecal retention, demand direct attention. An investigation should be made to find out the nature of constipation: whether it is due to muscular atony of the large intestines causing

* A paper read at the A. I. M. L. A. Conference, Gauhati, during December 1938.

and these cases will show no evidence of a morbid change in the myocardium, because spasm is a fleeting condition and while it lasts there is ischaemia. The period of ischaemia varies: it may be so brief that the pain may be over before it is mentioned, or it may last for sometime and its severity may hold the person rooted to the spot. Conversely again there are cases with gross coronary lesions such as thrombosis found on post-mortem and yet there was no record of previous anginal attacks during life. The probable explanation in these cases is that the ischaemic portion of the myocardium has either ceased to function or that ischaemia has not occurred owing to the establishment of collateral circulation. Thus the explanation that coronary lesion is the cause for the production of anginal attacks is not applicable in all cases, that if attention is directed to cardiac muscle, it would soon be found that the anginal attacks are not a constant feature in the hearts showing fibroid degeneration. It was after careful consideration of all the facts, viz., coronary sclerosis, its spasm, and the lesions of cardiac musculature, and finding that none of these theories could be universally applicable that the attention was ultimately focussed to find an adequate explanation for the disease; and the muscular strain or exhaustion depending upon a damaged heart was thought to be the cause. It was soon discovered that this argument too could not hold water long, because anginal attacks are commonly seen in robust persons in apparently good health and uncommonly encountered in asthenic patients with inefficient hearts. It is also known that anginal attacks in persons suffering from cardiac lesions ceased after the onset of oedema, and recurred again, when improvement was effected after the cardiac failure was relieved. Starling records two cases who were under his care, for one and two years respectively, and were of the ages of 48 and 60. The first died of rectal cancer and the second of cancer of liver secondary to gall bladder disease. In both, repeated anginal attacks ceased on the development of marked cachexia and asthenia. Conversely again, anginal attacks are known to have occurred in anaemic patients and persons suffering from pernicious anaemia. In this condition the cardiac muscle is insufficiently supplied with oxygen due to defective blood state; and when an extra demand is made for enhanced circulation, the myocardium which is in a condition of anoxaemia breaks its silence and the anginal attack is the cry of the anguished muscle, the cells of which are already in a condition of starvation. The

association of angina with circulatory deficiency of the myocardium is afforded by cases of aortic regurgitation. Under normal condition, the aortic cusps form a diaphragm to prevent the blood returning to the left ventricle during the diastolic period, and it is during this period that the intracardiac circulation takes place. The regurgitant blood in aortic insufficiency is so much a loss to the myocardium apart from the fact that there is a decrease in the coronary pressure due to a leak in the cusps. This results in incomplete filling of the coronary vessels and the ill-nourished cells of the myocardium ultimately die and the fibrous tissue which is capable of flourishing on meagre supply of metabolites begins to replace them. The onset of angina is seen when the myocardium is thus degenerated and the stage of ischaemia is reached.

The various types of interferences with the blood supply of the myocardium which produce ischaemia as detailed above, deprive the specific cardiac cells of the metabolites, and as the loss of myocardial capillary area is enhanced the clinical picture progresses and is ultimately fully established. This myocardial anoxaemia theory was originally propounded by Allen Burn in 1806, and subsequently in 1928 McWilliam and Webster experimentally showed that a limb made ischaemic by the use of an elastic bandage remained painless for 20 minutes if it is at rest. If the muscles of the limb are contracted the part becomes quickly fatigued and soon becomes sharply painful and the desire for relief becomes urgent. The pain does not subside by the cessation of muscular activity, and only ceases after the removal of the constriction. The fatigue in the muscles continues for sometime even after the removal of the band. McKenzie applying the same principle to the heart considered that when the coronary artery is diseased and its blood supply is deficient, painful impressions arise in the heart, when the demands made upon it for enhanced circulation exceed the supply available, and thus some of the fibres of the myocardium contract without an adequate blood supply. There are instances in which the coronary arteries have been found to be cartilaginous and even ossified, the cardiac circulation in such cases cannot be adjusted proportionately when the muscles of the body are thrown into activity, and thus extra work is thrown on the heart. The heart muscle to which the supply of metabolites and particularly the oxygen becomes deficient is now in a condition of anoxaemia; therefore painful impressions soon arise in it in the manner

SUPPLEMENT TO

THE INDIAN MEDICAL JOURNAL

MADRAS

JULY, 15, 1939

No. 7

CONTENTS

	Page		Page
Indian Medical Council Act—A National Affront by Dr. D. V. Venkappa - - -	117	The Evolutionary Necessity of a State Medical Service by Dr. Somerville Hastings - -	126
A National Health Policy—Its Financial Aspects by Dr. V. Krishna Row - - -	120	Proceedings of the Provincial Medical Councils - - -	128
In Defence of Honorary Medical Service by the Hon'ble Dr. T. S. S. Rajan - - -	123	Service Notes - - -	130
		Association Notes & Accounts - - -	130

Indian Medical Council Act of 1933

—A National Affront

Dr. D. V. Venkappa

[Following is a press statement* issued by Dr. D. V. Venkappa, President of the All-Indian Medical Licentiates' Association, in reply to Dr. Jivaraj Mehta's proposal to the Provincial Governments that they should nominate only Non-I. M. S. Indian medical men to the Indian Medical Council. In this statement, Dr. D. V. Venkappa, on behalf of the All-India Medical Licentiates' Association, reviews incisively and brilliantly the whole problem of the Indian Medical Council and quotes history and experience to substantiate his argument that it is not enough to merely nominate non-I. M. S. men but that the Provincial Governments, as well as the Provincial Medical Councils, should refuse to send their nominees as a protest against the Act itself. It is no use, he writes, straining at a gnat and swallowing a camel or displacing the white bureaucracy by the brown. We entirely agree, and his suggestions are the only possible methods for the Provincial Governments to follow, if they are at all sincere and serious in upholding the self-respect and the honour of the Indian Medical profession which have been seriously compromised by this atrocious and unwanted Black Act, euphemistically called the Indian Medical Council Act. Ed., I. M. J.]

Dr. Jivaraj Mehta's suggestion to the Provincial Governments to send only non-I. M. S. Officers as their nominees to the Indian Medical Council for reasons mentioned by him, which are but partial truths, do more good to his sense of patriotism than reveal a correct understanding of Indian medical politics. It is of course quite within the competence of the Provincial Governments to nominate a non-I. M. S. Officer, just as the Bombay Government has nominated my esteemed friend and colleague, Dr. Jivaraj Mehta, to represent the Government's views in the Indian

Medical Council. But will this single act alone modify or change the statute of the Indian Medical Council Act? My answer is emphatic "No".

My friend, Dr. A. Viswanathan, Editor of the *Indian Medical Journal*, is never tired of characterising the Indian Medical Council Act as a political gift by the Government of India to the General Medical Council of the United Kingdom. So far as I know this is the view of the organised profession as represented by the All-India Medical

* Published in the *Indian Express*, 16th June 1939.

• Dr. V. Krishna Rao, L.M.S., Medical Officer, Presidency College, Madras

[This is the last of the series of articles on a *National Health Policy* dealing with the financial aspects of a scheme propounded by the author in his two previous contributions. But the whole matter is not so simple as the author believes owing to political, social and economic conditions which are in a state of flux to-day, and we do not know where these things will lead us to. We however appreciate his enthusiasm in thinking aloud on a subject which is usually relegated to the back-ground by political leaders of our country. Its importance is undoubted, and the author assures us that he would feel his labour well-rewarded if his articles provoke some serious thought among those who are now guiding the destiny of our nation. Youth is like a virgin parchment on which anything can be inscribed, and the inscription of health will be a fitting legacy to the future of our land. A definite National Health policy is, therefore, certainly a right step in this direction.

We have omitted the publication of the appendices to the article owing to exigencies of space. They deal with budget details pertaining to his scheme.

Ed. I. M. J.]

In the two previous articles, I have detailed a scheme of medical examination, to serve the whole Presidency of Madras, with certain aims and functions; and how it could be worked out on modern lines, following the International activities, with the definite objective of improving the national manhood, health, and physical well-being. India is to have a national army, a federal army for defence purposes of her shores; and in this struggle, when a war is thrust on India, inevitably her sons should not be found to be inferior to those of any other youths in any country. Therefore, I propose the following budget—to make this scheme of School Medical Service—a part of National Health Policy, not only self-contained but also advantageous to a Peoples' Government from all points of view.

Revenue	...	Rs. 6,86,345-8-0
Expenditure	...	Rs. 6,06,150-0-0
1st Year's Surplus	...	Rs. 80,195-8-0

Subsequent Year's surplus ... Rs. 1,55,445-8-0

The statistics for the calculation of the budget figures for this scheme have been taken from the annual report on Public Instruction in the Madras Presidency for the year 1935-36, Volume I. There are in this Presidency 50,633 High, Middle, and Primary Schools (excluding "Special schools"), catering to the needs of 31,22,389 scholars—both male and female. These schools are distributed among the various educational institutions.

According to the Director's report, the number of Municipalities either not levying education cess or are providing free compulsory education is 76. On an average the Municipalities spend nearly 6.3% or 1/16 of the total expenditure; and therefore, for their services, exemption to the 1/16 extent must be made.

The number of scheduled caste scholars in the Presidency is 375,201, requiring exemption.

Revenue: Medical fees.—The following modest scale of fees per year may be adopted:—

1. A flat rate of As. 8 per annum for each High & Middle school pupil.
2. Another rate of As. 4 per annum for each Primary school pupil.

The details of fees collected from all scholars and the necessary exemptions to be made for the Municipalities-services and the Scheduled castes, who are too poor to pay any fees, are worked out. The net Revenue has been estimated to be Rs. 6,86,345-8-0 or 6.9 lakhs nearly.

Expenditure.—The functions and duties of the School Medical Service have been dealt with exhaustively in the earlier articles, which is to serve the needs of 31 lakhs of school children in the whole Presidency—hospitalization for special treatment of school children, installation of school clinic, etc. The establishment charges for the necessary staffs have all been taken into account. The net expenditure has been estimated to be Rs. 5,90,900 (recurring) plus Rs. 75,250 (non-recurring). The total amounts to Rs. 6,06,150-0-0.

Agency and Credit.—The agency for the collection of the medical fees should be the Government, District Board, Municipal, or Private school Headmasters. They should collect the money from the pupils and credit the amount to the Government treasury—a School Medical Service account. The salaries of the establishment staffs would be distributed by the Chief Medical Officer, on the Government's authorisation, on the 1st of every month. The accounts are to be audited like any other Government departments.

Utilisation of Surplus.—By this beneficial scheme of a Health policy, there is a surplus of Rs. 80,000 & odd, for the first year from the date of inception; and Rs. 1,55,445-8-0 for subsequent years, as no amount would be spent on equipment and appliances (Non-recurring). This surplus should be utilised for free feeding of the necessi-

tous poor scholars, and other ameliorative conditions to improve the physical well-being of the nation. But on no account or for any extraneous considerations, should this surplus be appropriated for any extra-school children's activities.

The Advantages of this proposed scheme are—

1. It contributes to the nation's health and wealth by the maintenance of the high level of health, and physical well-being;
2. It raises the man-power of the nation;
3. It is self-contained, practicable, and an economic proposition;
4. It solves the problem of rural medical relief on a systematic scale and in an efficient manner. Therefore, it acts as an *auxiliary body* to the Public Health Department. By co-ordinating the activities of these two agencies, expenditure on Public Health could be economised;
5. It generates in the minds of the public, a higher ideal of citizenship, unity, and national service;
6. It solves the unemployment problem; and lastly;
7. It brings the Government into direct contact with the masses—the rural population—the backbone of India.

Criticisms that might be levelled against this beneficial scheme are—

(a) The pitch is tuned too high: Nothing is of greater importance to the Nation, when considering the health of the Nation;

(b) Medical examiners' pay is low: The scale of pay proposed, Rs. 60 per month, is modest and meets all the needs and wants of an honorary and willing service to the welfare of the people. It is on the same level of pay as that of the Rural Medical Practitioners. No doctor can grudge this permanent income, in these days of economic struggle for existence, and

(c) Objections from the School-managers, in the form of (1) unwilling to levy the modest "medical fees" for a year, and (2) unwilling to have and exercise control over the school medical service in the locality, on a sense of prestige.

It is highly desirable that the District Boards, Municipalities, and Private Managing bodies should not interfere with this honorary School Medical Service. Work would be efficient and thorough if free from outside influences and prejudices. The higher moral value and the greater importance of the health of the Nation must over-ride all considerations and objections, in pushing forward this scheme to a success.

Medical Inspection of College students.—Following up the report of the Calcutta University Commission (1917-19), and realising the need to look after the health of the young citizens in the college classes, and of the paramount importance of military training to college students due to Skeen Committee's report, the Madras University passed a regulation in 1927, by which the medical inspection of college students was made compulsory, in

all affiliated and constituent colleges, with the following instruction—"all that is required of the certificate is that the student is in sound health and if there is any defect, the same should be noted by the medical officer, together with suggested treatment. But beyond this instruction, the University has not taken any steps to improve the health and to make the scheme a live one. The reports of the doctors of the many colleges are merely "filed."

The present medical inspection schedule forms require modification and improvement in the light of the Instructions to the Medical Officers, conducting medical inspection, issued by the Inter-University Board, India (1931).

To make the present scheme of medical inspection working in the colleges a live one, I have offered a few suggestions to the Vice-Chancellor in a memorandum and also with the idea of improving physical fitness of the University students, as a whole. This letter is under consideration of the University at present. It is hoped that with the active sympathies of the present Vice-Chancellor, the health problem of the University students will receive an active and practical consideration immediately. My annual report on the Presidency College students would throw a good deal of light into the diseases and defects of the present younger generation, which are sapping their vitality. This was reviewed by the Hon. Minister of Health, Madras, in the course of a lecture on 19-10-37 (*Hindu* of 19-10-37).

Physical Education.—Closely connected with and included in the scheme of medical inspection is the "Physical Education" exercises and activities. And to draw the attention of the public and the authorities, I have read a paper on the "Trends in Physical education and School-hygiene in South India"—at the Tanjore Educational Conference (May, 1937) a complete article of which has appeared in the special educational issue of the "South Indian Teacher"—October, 1937. I have already submitted general proposals and notes to the Ministers of Public Health and Education, Madras—

(i) To improve the physical fitness of youths, which is admittedly low, and,

(ii) To raise the general level of the health of the masses.

I hope my notes may be of some value to the educational authorities, at this present juncture.

Conclusion.—To sum up, my humble scheme of a School Medical Service is practicable, self-contained, and an economic proposition, when the physical health and well-being is slowly and steadily deteriorating—as it provides for the complete examination of every pupil in the Presidency; a re-examination every year; health examinations, assignments to physical activities and adjustment of school programme in accordance with physical capacity; certificates as to physical fitness for

games; free medical service at any hour of day or night; preventive inoculations and vaccinations; hospitalization for students and pupils; emergency service of all kinds; consultation with a psychiatrist, study of emotional problems of children; and the most important problem of chalking out a *Diet Chart*, suited to the economic conditions of our people (I am at present attempting one, a satisfactory diet for Rs. 2½ a day); and frequent health conferences to bring into contact parents, students, children, and teachers, so as to stimulate community hygiene, health behaviour and habits.

As regards the physical education and exercises, the objective must be to improve the physical fitness and raise the manpower of India—a view advocated by the Sken Committee Report on Military training—to suit Indian talents, sentiments and outlook, and thus bring this scheme of physical education into the body-politic of the country.

All these above programmes of a National Health Policy are meant to serve only one purpose, and that is to translate into action Disraeli's pregnant and historic remark, that "the Youths of the Nation are the Trustee's of Posterity." And the Congress and other Provincial Autonomous Governments in India are in a position to do real service to the masses, so that posterity would thank them and feel grateful for their unstinted efforts.

(Continued from page 119)

Pascal rightly says: "The multitude which does not reduce itself to unity is confusion; the unity which does not depend upon the multitude, is tyranny." The All-India Medical Licentiates' Association appeals, therefore, to the large number licentiates of our country to attain this unity described by Pascal. The member who reads this message would do a service if he puts it into circulation among the non-members of his locality.

(Continued at foot of page 125)

REFERENCES

- (a) G. O. No. 208—Home (Educational), dated 12-2-20.
- (b) G. O. No. 641—Law (Educational), dated 29-4-25.
- (c) Director of Public Instruction Proceedings—R. O. C. No. 934-D'25, dated 22-9-25.
- (d) do. —Circular—R. O. C. No. 685-D'27, dated 22-9-27.
- (e) do. —Circular—R. O. C. No. 113-F'31, dated 26-9-31.
- (f) do. —Letter—R. O. C. No. 133-F'32, dated 8-4-32.
- (g) do. —Annual report on Education in the Madras Presidency, 1935-36, Volume I.
- (h) Registrar, University of Madras—Letter—No. 5648, dated 16-5-27.
- (i) Madras University Regulation, Chapter No. XXXVI, Sec. 2.
- (j) Instructions to Medical Officers, Inter-University Board, India (1931).
- (k) Mysore University Medical Inspection Report (1927-28).
- (l) Calcutta University Commission Report, 1917-19, Vol. XII.
- (m) Calcutta University Students' Welfare Committee Reports (1928 & 1930).
- (n) American World Federation of Education Conferences—Health section reports.
- (o) Reports of the Chief Medical Officer of the Board of Education, England.
- (p) My letters and notes on physical education to the Hon. Ministers of Health & Education, Madras.
- (q) London "Spectator"—of 1-10-87.

In Defence of Honorary Medical Service

● The Hon'ble Dr. T. S. S. Rajan, Minister of Health, Madras

[The following is an extract from the speech of the Hon'ble Minister at the Mysore Independent Medical Practitioners' Association, Bangalore, on May 21 1933, reproduced, with due acknowledgment, from the *Hindu*. He reiterates that the great advantage of the Honorary System lies in the opportunity it gives for all practitioners to gain hospital experience, and thus procure that knowledge which would be necessary for a sound and successful practice. In other words, he wants the practitioners to utilise the period of honorary service as one of post-graduate education. We can only say that this is a very ingenious device, an ostensible plea to shift the burden of medical service from the Government to the profession. It takes our breath away to read further in his speech that this is a kind of "Socialism". Socialism indeed! We rather think it is a form of subtle "conscription" without even an excuse of emergency. Still later on, he goes on to applaud the wonderful response of "Service-men" to the reorganisation in the Medical Department, and says that "the paid Services encouraged the Honorary System in the Presidency". So far as we have been able to gauge the opinion of "Service-men" we can say with some knowledge that they are on the whole greatly opposed to the Honorary System. If the Minister of Health thinks that we are not correct, we respectfully request him to constitute a committee of enquiry, and allow the State Medical Officers the freedom to express their own personal opinion on this subject. If the verdict of this committee confirms the version of the Minister, we promise we shall stop criticising his scheme of Honorary Service, though our opposition to it is based on more fundamental grounds than the 'wonderful response of the Service-men.'

In another page, our readers will find a very illuminating article on "The Evolutionary Necessity of a State Medical Service" by Somerville Hastings which, read along with the Hon'ble Minister's speech, will be a study in contrast. If what Hastings says is true of England, how much truer it is of our country our readers can easily fancy! *Ed., I.M.J.*]

The Hon'ble Dr. T. S. S. Rajan began by saying that this inaugural function had placed him in rather an awkward position. He had been claimed to be an independent medical practitioner and so he had been. But at the present day, he had ceased to be an independent medical practitioner. He was placed in charge of the medical administration in the Province of Madras. In every sense of the term, he was a pucca Government servant. He had lost his independence and he was no more free to do things as he used to when he was not a Government servant. "It is an experience worth having. Every freelance should be made to get through the official routine life, if for nothing else, at least to understand the difficulties of administration in their true perspective." But, there was the other side of the picture. Independent medical practitioners could become Ministers of Government, while service men could not. If the chance happened for one independent medical practitioner to be in charge of the medical portfolio, the ambition and the outlook of every medical practitioner had brightened up.

While the speaker would like every independent medical practitioner to be very dependent on men, he would also point to them the other rosy side, a bright future that every aspiring independent medical practitioner had before him in the Pro-

vinces which enjoyed Provincial Autonomy. What Mysore was going to be with regard to the medical sphere, it was very difficult for him to say in advance. "What we do our neighbours cannot but feel". Dr. Rajan said, "its very strong influence on the public life of this great premier Indian State. While you react on us in very many different ways, we do act in just the same way as you act on us. You have beautiful cities growing up. You have added beauty to town life. You have a modern administration. You have a paternal Government. Time will prove the utility and the sagacity of the great experiment of Prohibition, the readjustment of taxation and the various other legislative measures that have been undertaken in Madras. You cannot expect these vast experiments not to have their repercussions in Mysore."

AN INCURABLE OPTIMIST

Just before coming to the meeting, Dr. Rajan, proceeding, said the question was asked by Sir Mirza M. Ismail as to whether there was any need for an Independent Medical Practitioners' Association in Mysore. The independent medical practitioners had claimed the speaker as a member of the independent medical profession. If his association with this infant Association was going to be a force for good, for the unification and or-

dered progress of the profession as a whole in the Mysore Province, then he would consider himself extremely lucky that he had this opportunity. If, on the other hand, this organisation would mean disaster to the medical profession as such, would mean disruption and chaos, then he would consider himself to have made the gravest mistake in his life. "But my experience, my trust in medical men and the long life that I have put into the profession makes me an incurable optimist. I take the Bangalore and Mysore medical practitioners as honest men, fired with the enthusiasm for the welfare of the profession, for the welfare of the public whom they seek to serve and for the welfare of the State. I am also confident of the great responsibilities which the Government of Mysore have in this matter. And knowing as I do what they have been doing in the past and what they hope to do in the future, I am fully certain that the future of this infant Association is assured and that it would grow to be a healthy one, directed on sound principles".

In inaugurating the Independent Medical Practitioners' Association, Dr. Rajan, proceeding, said he would like to point out one limit for the Association. There were two group interests in the medical profession, viz., service under the Government and service to the public outside Government circles. The ideal and the objective of these two groups were one and the same, viz., service to humanity. The divergence came in where group vested interests came into play. The 'service man' was protected by the terms of the service. Service protection was a fortress which could not be pulled down. Service under an administration was perhaps the greatest security a man would love to have. The speaker knew as the head of the medical administration that he could not dismiss a service man. He could not even pass an adverse remark. The service men had absolute protection, unchallengeable defence.

INDEPENDENT PRACTITIONERS

But the life of an independent medical practitioner was entirely apart from that of the service man. He was called an 'independent' practitioner. The name had amused the speaker often. The independent practitioner was the most dependent of all people. There was no certain protection for him. The independent practitioners rose or fell with the mark of experience they gained. Independent medical practitioners were the most dependent of all and, therefore, they required protection. That was where the ideology of the two groups of medical men fundamentally differed. Like an architect, the private practitioner had to build. When he once reached the top, then he could survey the world. To reach that pinnacle was a tardy struggle. To this end, the independent medical practitioners should work together and an association of the kind he was inaugurating was the best means of achieving that object.

In a profession where every member had to live for it and through it, they could not have divergence of opinion. Service—intelligent and

informed service—was the *sine qua non* of all honest medical men. When once they were all agreed upon that, there was no difference between the two groups. The difference arose in the arduous task of building up that service.

Proceeding, Dr. Rajan referred to the olden days when the Mysore Government used to send men to undergo medical training in Madras and other places. Now Mysore had a University of its own, with a medical college and a school. The whole psychology of the medical profession had taken an absolutely new turn in the State. The number of private practitioners had increased. Only a few persons could be in Government service.

Continuing, Dr. Rajan said: "We see that we have turned out a large number of medical men, who without Government help try to find out a career for themselves. A duty is cast on both the public and the State to utilise their services. The State has necessarily to consider what they are going to do with this vast army. Is it going to be ordered progress or is the State going to leave them alone, thus adding greatly to the problem of unemployment? That is what I consider to be the duty of any intelligent administration. I am fully convinced that the Mysore Government are more than ever conscious of the progress of events in our Province. Time will prove the utility and sagacity of the great experiments we have undertaken in Madras. You cannot expect these vast experiments not to have their repercussions in Mysore."

CONDITIONS FOR HONORARY MEDICAL SERVICE

In the address which the President of the Association had read, they had ventured to suggest some of the schemes which the speaker had undertaken in Madras as being well suited for Mysore. In Madras, they had the honorary medical system. As a consequence, they had the restriction placed on private practice of hospital men. The first condition for honorary service was a large army of well-trained, highly academic and sound enthusiastic men. The second condition was that these honorary men should be prepared to sacrifice a little and go in for knowledge and utilise the opportunities afforded to them. After all, a 'service' man was a man of opportunities. The State had provided them with ample material. It gave him training and education. The hospitals gave him credit. If the State utilised the young enthusiastic men by giving them opportunities the general intelligence of the profession would go up by leaps and bounds. These young men given suitable opportunities would be an ornament to the profession. That perhaps was the greatest achievement one could aspire to. Dr. Rajan would make one suggestion to their astute Dewan Sir Mirza M. Ismail. He would hint to the Dewan that by introducing this honorary system in the State hospitals, he could save some money. The savings might not be much, but there was the imparting of knowledge to young men and a fair distribution of opportunities to all. Dr. Rajan paid a tribute to the Dewan of Mysore who had

induced several people to give donations to hospitals and maternity homes.

The question was often asked, Dr. Rajan proceeding said, why this honorary system for medical men only? There was no system of honorary lawyers. The argument was an incontrovertible one, the speaker would admit. But, there was all the difference between the medical profession and other professions. The medical service was absolutely unique in itself. It was a trust which the medical man had got to accept and discharge. If they put a price, it was most cruel. By all means, those who could afford, let them pay. Others who could not afford, should not be made to suffer. It was a kind of socialism. Medical service honestly rendered reaped its reward. It was the spirit behind the service that counted.

"OPPORTUNITIES FOR ALL"

"Throw all the best in the profession into the furnace and get them through the fire. Burden them with some more education and opportunities and they will bring glory to the profession. There is need for this equalisation of social life. I am sure it is bound to come in Mysore also."

Dr. Rajan, proceeding, said that the State should not perpetuate the difference in knowledge imparted to medical men. A minimum quantum of absolute knowledge was necessary for every medical practitioner. They should not as a State perpetuate a caste. The All-India Conference of Governments held in Delhi recently came to the

deliberate conclusion that the differentiation in the imparting of knowledge to aspiring medical men should be put an end to. Rightly or wrongly, they, in Madras, had forestalled this. The L. M. P. course was abolished without much ceremony.

RESPONSE FROM "SERVICE" MEN

Continuing, Dr. Rajan said that it was a matter for gratification to him that the independent medical practitioners in Mysore had the same charity to understand his position in the various acts that he had been able to put through in the Province of Madras as the practitioners in his Province. A lot more remained to be done. But that they in Madras had reconstructed the thing on proper lines, was perhaps a claim which they intended to make, leaving the results to be judged by others. In whatever he did, Dr. Rajan said, he had wonderful response from the 'service' men. The paid services encouraged the honorary system in the Presidency. That was perhaps the tragedy. But the pleasure of it was that the service men tried to put into practice what they were asked to do. The profession stood up to these new changes boldly.

"In all these things, that I have done," Dr. Rajan concluded, "I have put my faith unreservedly in the good nature of the medical profession. I hope and trust that the members of the medical profession will realise what I have said and prove themselves worthy of the great profession to which it is their privilege to belong."

(Continued from page 122)

Society is built upon trust, and trust upon confidence in one another's integrity. Emerson says, "Trust is the essence of heroism". This is a great lesson which every member of the All-India Medical Licentiates' Association should learn well and practise incessantly. This is the secret of individual and collective success. Who is there who desires to spurn success?

The Evolutionary Necessity of a State Medical Service*

Somerville Hastings, M.S., F.R.C.S., L.C.C.

[In this brilliant speech, Dr. Somerville Hastings lifts the argument for a State Paid Medical Service to a higher plane of an evolutionary necessity, and states that the history of health legislation and administration during the last 50 years is a record of how people who could not believe in State Medicine and did not want it, have been compelled to discard that private enterprise they so much trusted to secure efficiency. In the debate that followed Dr. Hastings' motion for State Medicine, various view points against it were mentioned, but none of them could stand the test of proper reasoning. *Red tapism, restriction in the choice of doctors, loss of initiative and independence in the profession, the undesirability of Government control* were the nightmares that haunted the advocates of *status-quo*. But almost all the speakers were agreed that the profession was at the lowest ebb of prosperity; work was unequally divided among the members of the profession with the resultant unemployment; and all the people do not get the benefit of medical relief. So far as our country is concerned the position is miserable: only 40 thousand doctors for 40 million population. Seventy-five per cent of them are practitioners in cities, and the rest employed by the Government. Unless the position is reversed, medical relief in this country will be a pious dream. Unlike Great Britain, we have a splendid system of State Medical Service with nearly 6200 hospitals distributed in mofussil areas. Instead of augmenting and broad-basing this system, we witness the tragedy of abolition of service and replacing it by a honorary system from top to bottom, and while Britain is veering round to the idea of State Medicine our statesmen are just going the other way round!]

Ed., I. M. J.]

Perhaps I had better explain what I, and those who think as I do, have in mind when we speak of a State Medical Service. First of all such a service should be complete, that is to say, should provide not only general practitioners but also, when required, the assistance of specialists, hospitals, convalescent homes, pathologists, dentists, and efficient nursing both in hospital and at home as well. The service should aim at prevention of disease as well as its cure, and with this in view I would associate the preventive and curative agencies much more closely than at present. I would make it the business of every doctor in the service, to report to the proper quarter everything that he observes in the environment of his patients that militates against their health. He should also give them instruction in the art of keeping fit.

The service should be free to all who care to take advantage of it, and I would encourage the well-to-do to use it as well as the poor. If the service is free, it must necessarily be staffed by full-time doctors, for whoever is going to pay a fee for consultation if at some other time of day he can be seen for nothing by the same doctor; unless indeed, he has reason to suppose he will be less well served during the free period, a condition of affairs which could not possibly be contemplated in a State Medical Service.

But although I would like the service to be complete and efficient, and so attractive to both

doctors and patients that an increasing number are willing to take advantage of it, I would compel no one. Accordingly I would allow private practice to go on just as it does to-day, feeling assured that, as the advantages of the new service become apparent, an ever-increasing number of both doctors and patients will be anxious to transfer to it.

One thing more. It is impossible to envisage a State Medical Service being brought into being suddenly by the waving of some magic wand, or the passage of a single Act of Parliament. Accordingly there will, of necessity, be a transition period, during which the service is being inaugurated by steps and stages, and this is certain to present some difficulties. It is, however, the desirability or otherwise of the completed service that is under discussion.

As a nation we provide for our medical health needs by two separate and distinct methods:—

(1) By co-ordinated co-operative effort through local authorities and State departments. These services are provided for the most part for the benefit of all who are willing to take advantage of them. They were at first mainly preventive in character and still are to a considerable extent, but we are learning that if we want to prevent we must treat as well. The services are paid for by the rates and taxes and, to a much less extent, by individual payment for services rendered.

(2) The medical needs of the public are also in part provided by private enterprise through general practitioners and consultants who are in private practice as well as by voluntary hospitals. The

fact that some of the services of the voluntary hospitals, and for that matter, of the doctors as well, are provided for charity, does not effect the point as there is no public responsibility or accountability in either case.

Every doctor will agree, I think, that it is mainly the preventive services, organised by co-operative effort either locally or nationally, that have been responsible for the increased expectation of life of the average citizen. This has been increased by more than fifteen years during the last half century.

By careful supervision of our water supply we have almost completely wiped out of those terrible epidemics of typhoid fever that we had in the past: by instruction in our maternity and child welfare centres, and cleaner streets, we have to a large extent disposed of those attacks of infantile diarrhoea that used to be such a menace to child life: by notification, isolation and disinfection we have been able to reduce the incidence and mortality of infectious disease.

The history of public health legislation and administration during the last fifty years is a record of how people who did not believe in State Medicine and did not want it, have been compelled to discard that private enterprise they so much trusted to secure efficiency. It was only when each individual householder had been persuaded to give up his own particular well, in his own particular back garden, with the cesspool running into it, and had agreed to the collective provision of a pure water supply and an efficient drainage system, that the health of the people began to improve. Or to take another example, to show the incompatibility of private enterprise with efficient public service, the Local Government Act (1929) makes illegal the appointment, except in a temporary capacity, of a medical officer of health who is also engaged in private practice.

People of all classes are beginning to inquire why this same collective provision of services that has been so successful in the prevention of disease should not be applied to its cure as well. Why, in other words, the State or the local authorities should not be responsible for the organisation of the necessary services for diagnosis and treatment.

There are many reasons why it is unsound to leave the treatment of disease to the tender mercies of private enterprise. When people buy food or clothing or any of the ordinary things sold in shops, they soon discover the quality of the product purchased. But when they purchase the services of a doctor in sickness they are entirely unable to estimate the quality of the services rendered. They can of course say if the doctor is kind and attentive, but they can have no conception whether the treatment they are receiving is up-to-date and efficient.

The quality of most of the goods that are bought and sold is mainly the concern of the purchaser, but the quality of the medical treatment received by the individual in time of sickness is the con-

cern of everyone, because the real strength of a nation depends most of all on the health and capacity of its citizens in both mind and body. It is utterly absurd to spend public money in considerable quantity in educating a child to become a useful citizen, unless at the same time we take every possible care to maintain his health at this critical period of life. It will be remembered that except through the Poor Law there is no public provision for the medical treatment of children of school age in their homes, although certain specific affections are dealt with at the school clinics.

Few middle class people have any conception of the terrible struggle that goes on in the household of an unemployed man, or lower paid worker, where there are more than one or two children to be cared for. There is simply no money to pay the doctor when the mother or children are ill. In the towns there are, of course, the out-patient departments of the hospitals, if the mother can spare the time, but in the country there is nothing of this kind, so that there is generally a considerable interval before advice is sought, and sometimes the result is disastrous.

It is bad for both doctor and patient to be in the position of salesman and purchaser and much better for both the doctor to be in receipt of a salary, so that he can give his whole mind to his patient's health and well-being, and not be distracted by a thousand extraneous considerations.

As has already been pointed out the primary concern of public health administration is the prevention of disease. Because it was found that people suffering from infectious diseases could not be satisfactorily isolated at home, fever hospitals were provided. When these hospitals were first started they were regarded solely as a variety of prison, in which people who were a danger to the public could be shut up until they became harmless, and it was in the first instance mainly because of the cost of long detention that treatment was provided so that the sufferers from infectious diseases might safely return to their ordinary duties in the shortest possible time. What our forefathers discovered as the result of bitter experience was that one could not possibly separate prevention and treatment, that by treatment one actually helped prevention.

Now the great discovery of the close association between prevention and treatment, first made in connection with the infectious diseases, has had to be applied with modifications to many other conditions. To assist in the prevention of venereal disease we have had to open clinics where treatment can be given by experienced surgeons, and where no charge is made. To prevent consumption we have adopted much the same method, and in every town dispensaries "for the prevention of consumption" are to be found although it is true to say that the principal preventive measures that are carried out are the early recognition and treatment of the disease.

But we cannot stop where we are. We must go on. If we provide free treatment for consump-

* Opening speech at a debate organised by the Fellowship of Medicine on 24th March, 1939. Reproduced from the *Medical Officer*, April 29, with due acknowledgment.

tion, venereal disease, diphtheria and small-pox in the public interest, why should we not do the same for cancer, rheumatism, and other diseases which cause as much suffering and national loss. As a matter of fact, so strong a case has been made for public provision for the treatment of cancer that a bill to provide treatment for all has recently been carried through Parliament. But rheumatism in its various forms probably produces even more invalidity than cancer, and heart disease has a higher mortality rate than either. Surely public provision should be made for the treatment of these two diseases. Whenever inquiry has been made (Departmental Committee, B.M.A., etc.), it has been agreed that the present provision for the treatment of fractures is terribly deficient and there is an urgent need for properly organised fracture clinics. Why should not the State take on this task also?

The tendency to add the public provision for treatment to that for prevention of disease, once started, is bound to continue and extend and to be applied to an ever-increasing number of diseased conditions. But this piece-meal provision for the treatment of disease, valuable as it has been in the past, has its own peculiar dangers. We have been so busy with treatment that we have forgotten that something is necessary before treatment is commenced, for a diseased condition must be diagnosed before it can be intelligently treated. It is essential, therefore, to bring in the general practitioner, who is first consulted in illness and whose business it is to recognise the nature of the diseased condition, if the best is to be done for the sufferer.

If it is true to say that to prevent we must treat it is equally true that to treat efficiently we must treat early. However good a service for treatment may be, however specialised the methods adopted, unless it is concerned with the earliest recognition of disease, the result will be imperfect. A State Medical Service must, therefore, include a sufficient number of capable general practitioners whose duty must always be to diagnose disease in its earliest forms, as well as to refer for specialised treatment when this is necessary.

To sum up then, there is no rational stopping place between the first incursion of the State into preventive medicine and a fully developed State Medical Service. If we want to prevent we must treat as well, and if we want to treat intelligently and efficiently, we must make provision for correct diagnosis and for the recognition of disease at its earliest beginning.

Provincial Medical Councils

Extracts from the Proceedings of the Punjab Medical Council dated 29th and 5th April 1939.

Court's judgments in the following cases of unqualified medical practitioners were recorded and it was resolved that publicity be given in the press of proceedings sent to Press about their convictions,

- (i) Abdul Rahman of Khanewal *
- (ii) M. A. Ghani of Ferozepore **

Considered the case of Dr. Milap Chand Sethi, M.B., B.S.

Dr. Milap Chand was present at the meeting.

The Registrar read to the Council the notice of inquiry addressed to Dr. Milap Chand Sethi and stated the facts of the case. Thereafter Dr. Milap Chand Sethi read his written statement.

At the conclusion, the Council deliberated upon the case in camera and the chair put to the Council to vote on the question whether Dr. Milap Chand Sethi is guilty of infamous conduct in a professional respect.

The Council decided that infamous conduct in a professional respect has not been proved to the satisfaction of the Council.

* The Sub-divisional Magistrate, Khanewal, convicted Mr. Abdul Rahman under section 6 of the Indian Medical Degrees Act 1916 who was using the letter "L. M. B." and "L. C. P. S." after his name without any lawful authority. The accused was fined Rs. 25 or in default to undergo simple imprisonment for one month.

** The Additional District Magistrate, Ferozepore, convicted Dr. M. A. Ghani under section 23 of the Punjab Medical Registration Act and sentenced him to pay a fine of Rs. 51. The case was reported by the Punjab Medical Council.

Resolved that the following provision be recommended to Government for incorporation in the Punjab Medical Registration Act, II of 1916, in order to check quackery:—

(i) No medical practitioner in the Punjab will henceforward be entitled to prefix the words "Doctor," "Dr." to his name unless he possesses a degree of doctorate from a recognised University or possesses a medical qualification from any of the medical institutions recognised by the Indian Medical Council or the Provincial Medical Councils.

(ii) Any person not holding a medical qualification registrable under this Act who shall assume, display or make use of any of the medical degrees, diplomas, licences or qualifications included in the schedule under Section 13 of this Act whether used by themselves or with the addition of any prefix or suffix which contravenes the provisions of this Section shall be punishable with a fine which may extend to three hundred rupees.

Considered the application of Dr. Manu J. Trivedi, M. D. (Vienna) D. T. M. & H. (Eng.), for registration in the Punjab Medical Register.

Recommended that the consideration of his application be postponed to the next meeting and an enquiry be made from him as to the reasons for his seeking registration in the Punjab Medical Register when he is practising at Poona.

Considered the application of Dr. Tej Bhan Dev, L.M.P., for the registration of M. D. (Munich) as an additional qualification.

Recommended that the qualification M. D. (Munich) be registered against his name as an additional qualification.

Considered the application of Capt. M. H. Shah, L.M.S., for the registration of D. P. M. as an additional qualification.

Recommended the qualification of D. P. M. be registered as an additional qualification against the name of Capt. M. H. Shah in the Punjab Medical Register and that this qualification be brought on the list of additional qualification approved by the Punjab Medical Council.

JULY, 1939]

MEDICAL COUNCILS

129

Considered the application Dr. Dula Singh Bhatia, for the registration of D. P. H. (Lucknow) as an additional qualification.

Recommended that the qualification of D. P. H. (Lucknow) be registered in the Punjab Medical Register against the name of Dr. Dula Singh and that this qualification be brought on the list of additional qualifications approved by the Punjab Medical Council.

Considered the explanation of Dr. Miss Sarla Nati Dewan, M.B., B.S., regarding her address which appeared in the *Tribune*.

Recommended that her explanation be accepted.

Considered the explanation of Dr. Vidya Sagar Thaper (registered medical practitioner) who was sentenced to pay a fine of Rs. 10/- by the High Court for unlawfully using the letters D. O. after his name.

Recommended that his apology be accepted.

Considered the report of the Conference of Press Representatives held on the 19th November 1938 with a view to put a stop to the laudatory notices appearing in the Press.

Recommended that the report of the Conference be recorded and that the question of publication of inter-recorded and that the question of publication of inter-views with medical practitioners on health problems or other subjects connected with their profession be left open and each case be considered by the Punjab Medical Council on its merits.

Considered the remarks of Dr. B. J. Sahni, on a laudatory notice published in his favour.

Recommended that the explanation of Dr. B. J. Sahni be accepted.

Considered the explanations of Dr. Harish Chandra Suri and Dr. K. B. Kapur regarding an advertisement issued in their favour in the *Tribune*.

Recommended that a warning be issued to Dr. Harish Chandra Suri and the explanation of Dr. K. B. Kapur be accepted.

Considered the explanations of the following registered medical practitioners for the grant of certificates on the efficacy of the preparation known as "Maskhorin" and published by the Maskhorin Laboratories, D. I. Khan:— (i) Drs. P. Haque, L.S.M.F., (ii) Narain Singh Mehta, L.M.S., (iii) Sujay Singh Bindra, M.B.B.S., Chuni Lal Chadha, M.B.B.S.

Recommended that their explanation in this case be accepted and they be informed that they would be well advised to exercise more care in future in giving written testimonials on patent medicines or food vide para 20 of the code of medical ethics.

Considered a complaint against Dr. Ram Lal Marwah, for holding a licence of methylated spirit and his explanation thereto.

Recommended that the Council regard his reply as unsatisfactory in that he has not given a clear answer to the question whether he is in fact selling methylated spirit to the public or using it for any other purposes than those permitted under para 1 (d) of the Code of medical ethics, further that he be required to give a clear answer forthwith.

Considered the case of Dr. Teja Singh who is reported to be associating himself with a compounder.

Recommended that the complainant be informed that sufficient evidence of Baldev Singh acting as "Doctor" under cover of Dr. Teja Singh has not been furnished and, therefore, no action can be taken against Dr. Teja Singh at present.

Considered letter No. 2313/13 dated the 20th December, 1938, from the President, U. P. Medical Council

regarding the acceptance of examinership by registered medical practitioners in clinical subjects at the institutions training Vaidas and Hakims.

Recommended that the matter be taken up when the actual need arises in the Province particularly in view of the fact that a Government Committee is now considering the subject of indigenous systems.

Considered letter No. 2510-M dated the 2nd February 1939, from the Inspector-General of Civil Hospitals, N. W. F. P.

Recommended that it is not necessary to publish separately the names of registered medical practitioners practising in the N. W. F. province in view of the fact that a district-wise index is to be added to the Annual Medical List.

Considered the request of Dr. Bashir Mahmood for the removal of his name from the Punjab Medical Register.

Recommended that Dr. Bashir Mahmood be informed that in view of the fact that a criminal case is pending against him in the District Courts at Gujranwala his request cannot be entertained.

Considered letter dated the 12th September, 1936 from Dr. Mohammad Sagir Ahmad Hashmi, M.B., B.S., regarding an advertisement published in his favour.

Recommended that Dr. Mohammad Sagir Ahmad Hashmi be advised in his own interest to take all possible measures to avoid advertisement direct or indirect.

Extracts from the Proceedings of the Assam Medical Council, dated 8th May 1939.

On a motion from the Chair, it was unanimously resolved "that this Council, after further deliberation, is of opinion that the Association of registered with un-registered practitioners, both being employees of the same industrial concern, as on certain tea-gardens in Assam, though undesirable, cannot be considered as "infamous conduct in a professional respect", within the meaning of Section 25(a) (ii) of the Assam Medical Act of 1916".

On the motion of Dr. C. G. Terrell, seconded by Lt. Col. L. A. P. Anderson, it was resolved "that this Council associates itself with the resolutions of the Conference on Medical School Education held in New Delhi on 7th and 8th November 1938 and recommends that Government should carry them into effect as and when found practicable with the proviso that the Council considers that, as an immediate improvement, the I.Sc. in the subjects of Chemistry, Physics and Biology should be introduced forthwith as the minimum standard of general preliminary education and that further improvements, on the lines suggested in Resolution 4 of the Delhi Conference, should be carried into effect at the earliest possible date".

Dr. Terrell proposed and Lt. Col. Anderson seconded the following motion:

"This Council wishes to record its readiness to assist, if so desired by Government, in the formulation of a statement of improvements immediately necessary in the teaching facilities provided at the Dibrugarh Medical School and in the conduct of examinations and invites Government to consider the formation of a special committee for this purpose".

The President disallowed a motion for the amendment of the Assam Medical Act of which notice had been given by Dr. Md. K. Rahman on the ground that the motion challenged, and sought to alter, the established policy of the Government and that the proper place for raising such a question was the Legislative Assembly.

SERVICE NOTES

[As per Resolution No. 18 of Gauhati Conference, A. I. M. L. A., we are publishing below only the transfer and leave of such of the Sub-Assistant Surgeons in each province who are members of the Association. The numbers given against their names indicate their membership roll numbers—Ed. I. M. J.]

U. P. April 1939

- 218 Dr. Syed Zahir Hasan Naqvi, Zaidpur, Bara Banki, leave, 13-4-39 to 12-6-39.
 631 " Saran Behari Mathur, Jail and Police, Rae Bareilly, leave, 11-4-39 to 10-8-39.
 571 " Madho Ram Tewari, Dalmau, Rae Bareilly, leave 20 days.
 3003 " Inamul Haq., Fatehpur, Bara Banki to Central Jail, Lucknow.
 2433 " Chandan Swarup Gupta, Reserve Duty, Meerut to Bharthana Dispy., Etawah.
 628 " Bhagwati Sahai, Bharthana, Etawah to leave.
 1089 " Atma Ram, Khajurgaon Dispy., Rae Bareilly to Dist. Jail, Lucknow.
 1585 " Raj Narain Mahotra, Dist. Jail, Lucknow to Khajurgaon Dispy., Rae Bareilly.
 1088 " Atma Ram, Khajurgaon, Rae Bareilly to Tambore, Sitapur.
 2855 " Jagdish Datt Pandey, leave to Bilsanda.

Punjab—April 1939

- 1338 Dr. Hari Kishen Nangia, General Duty, Civil Hospital, Multan to Police Hospital, Multan.
 1430 " Khan Chand Wohra, on expiry of leave to General duty, Civil Hospital, Karnal.
 806 " Sain Das Rampal, L. T. M. (Cal.) District Laboratory, Civil Hospital, Lyallpur to Jail and Police Hospitals, Gurdaspur.
 746 " Jiwan Das, 2nd class senior, on expiry of leave to General duty, Civil Hospital, Gurgaon.
 2976 " Allah Baksh, New Central Jail, Multan to Canal Dispy., Jehanian, Multan District.
 2608 " Rattan Chand, Haveli Project Canal Dispy. Sikhanwala, Shapur Dist., to General duty, Civil Hospital, Hissar.
 2608 " Rattan Chand, General duty, Civil Hospital, Hissar to General duty, Tohana Dispy., Hissar District.
 2661 " Ghulam Mustafa, Canal Dispy., Sirsa, Hissar District to General duty, Civil Hospital, Hissar.
 722 " Ghulam Muhammad, Lohian Khas Dispy., Jullundur Dist., to Aritwala Dispy., Montgomery District.
 3186 " Megh Raj, 1st class senior, on expiry of leave retired from service.

Bengal—15th March to 15th April 1939

- 3302 Dr. Abdus Samed Mian, Resident Medical Officer, did the duties of special officer, admission room, Campbell Hospital, from 22-8-38 to 11-10-38.
 2012 " Satindra Mohan Ghosh II, Police Hospital, Suri, Birbhum, held charge of the Rampurhat Sub-dvn. and dispy., on 4-1-39.
 1892 " Joyanta Kumar Bose, Jail and Police Hospital, Pabna, held charge of the Serajganj Sub-dvn. and dispy., on 9-8-39.
 857 " Suresh Chandra Das Gupta, held charge of the Chandpur Sub-dvn. and dispy., on 7-8-39.

ASSOCIATION NOTES

Proceedings printed below refer only to the Branches of the All-India Medical Licentiates' Association, unless otherwise stated.

Khargpur (Bengal). 14th meeting held on 19-8-39. 11 members were present.

Minutes of the last meeting with the exception of item 3 were read and confirmed.

The expenses of the Branch for the month of February 39 amounting to Rs. 2-6-6 was passed unanimously after scrutiny.

Dr. A. D. Mukerji of Calcutta was nominated for presidenthip of the forthcoming Provincial Conference at Burdwan.

Chittagong (Bengal). Monthly meeting held on 21-8-39. Dr. J. C. Chakravarty was on the chair. 8 members were present.

Proceedings of the last meeting were read and confirmed. Unanimously resolved that Dr. K. P. Sen be elected president of the 6th Provincial Conference to be held at Burdwan.

Considered the letter No. BB/CH/1 dated 25-2-39 from the Secretary of the Reception Committee of the 6th Provincial Conference and filed.

Resolved that Drs. S. B. Ghose and J. C. Chakravarty be elected delegates to attend the 6th Provincial Conference at Burdwan.

Considered the letter No. Sc/Chitt/1001 dated 16-3-39 from the Secretary of the scientific section of the 6th Provincial Conference and filed.

Resolved that the Assistant Secretaries be requested to realise the monthly subscriptions from the members of the Branch.

Bareilly (U. P.) Meeting held on 20-1-1939. Resolved that in the vital interest of efficiency of the work of the dispensaries maintained by local bodies, the service of the compounders and menial servants attached to these be placed entirely under the civil surgeon and the medical officers respectively without least intervention of these bodies. An appeal in case of dismissal of compounders shall lie to the Board and in case of menial servants to the

100 Dr. Karunanoy Banerjee, Supy. duty, Campbell Hospital, Calcutta, to Police Training College, Sardah, Rajahahi.

462 " Roma Prosanna Roy, Teacher of Pathology and Physiology, Ronaldshay Medical School, Burdwan, appointed Dv. Supdt., Ronaldshay Medical School and Supdt. of Hospital.

2012 " Satindra Mohan Ghosh II, Police Hospital, Suri, Birbhum, held charge of the Rampurhat Sub-dvn. and dispy., on 21-3-39.

1892 " Joyanta Kumar Bose, Jail and Police Hospital, Pabna, held charge of the Serajganj Sub-dvn. and dispensary, on 15-8-39.

377 " Sudhir Ch. Das Gupta, Supy. duty, Campbell Hospital, Calcutta, to Baraset Sub-dvn. and dispy., 24 Pargannas.

818 " Nepal Chandra Bhattacharjee, Kurigram Sub-dvn. and dispy., Rangpur, to Natore Sub-dvn. and dispy., Dist. Rangpur.

815 " Surat Lal Basak, Ranaghat Sub-dvn. and dispy., Nadia, to Kurigram Sub-dvn. and dispy., Rangpur.

159 " Surendra Mohan Bhattacharjee, Police Hospital, Krishnagar, Nadia, to Ranghat Sub-dvn. and dispy., Nadia.

391 " Ananta Kumar Sen Gupta, Supy. Medical College Hospital, Calcutta, leave on a. p. for 6 weeks.

391 " Ananta Kumar Sen Gupta, from leave to Jail Hospital Comilla, Tipperah.

JULY, 1939]

civil surgeon. A copy of this be sent to the I.G.C.H., U. P., and to the Secretary to U. P. Government Medical Department, through the Provincial Secretary.

Bareilly (U. P.) Meeting held on 6-4-39. Dr. Babu Ram was in chair. 5 members were present.

Resolutions passed:
 The proceedings of the last meeting were read and confirmed.

That the Honorary Secretary be requested to remind the Provincial Secretary, U. P. for immediate action about resolution No. 4 of 20-1-39.

Read G.S. circulars Nos. 6 and 7 dated 21-3-39 and appeal made by G.S. about recruitment of members and recorded.

Read memorandum prepared by U. P. Branch for presentation to the Government and noted.

Dr. M. I. Rather read clinical notes on an apyrexial case of secondary broncho-pneumonia and the members discussed the same.

That the contingent bill of the Branch from 20-1-39 to 5-4-39 be passed.

Tingri Valley (Assam). Proceedings of a meeting held on 23-4-39 with Dr. J. C. Dutta on the chair. 11 doctors were present.

Proceedings of the last meeting were read and confirmed.

The Provincial Secretary's appeal for co-operation with the opium prohibition scheme of the Assam Government was read out by the Secretary and was welcomed by all the members.

A resolution on the formation of Tea Estate Medical Service was moved by Dr. S. C. Dutta of Itakhooli T. E. and was seconded by Dr. B. C. Nandi of Mahakali T. E. and was carried unanimously after thorough discussion.

The following scientific discussions were held:

Dr. A. T. Roy demonstrated a case of Hodgkin's disease in a girl of about eight years old, and a case of anemia which resisted 'iron cum campolon' treatment for a long time ultimately improving on addition of orange-juice in the treatment.

Dr. J. C. Dutta read a case note on "the successful treatment of a sloughing traumatic ulcer of the tongue with Ol. morrhue" and an interesting case note on "aphasia as a complication of atabrin treatment in a case of malaria".

Dr. D. D. Sarma Baruah read an interesting case note on "A successfully treated case of asphyxia pallida followed by haematemesis and melena".

Dr. K. L. Sen Sarma described a case of violent delirium which resisted all sedatives, ultimately suddenly falling into deep sleep just when an intravenous glucose injection was pushed in.

Proceedings of the Managing Committee meeting held on 23-4-39 with Dr. J. C. Dutta on the chair. 4 members were present.

(1) Resolved that the contingent bills for the months of February and March 1939 amounting to annas 13 and pies 6 and Rs. 4-1-6 respectively be passed.

(2) This Branch requests the Mother Association to communicate with the Indian Tea Association regarding the advantages to be gained by everyone concerned by the formation by the latter body of a Tea Estate Medical Service which would replace the present haphazard methods of employment of assistant medical officers on tea estates. This Branch considers that the Service should operate in the following manner.

(3) The present holders of appointments would not be disturbed but would be taken into the Service and their salaries adjusted according to the service scale, provided that if such adjustment would cause a reduction in salary, no such reduction of salary would be made.

(4) All tea estates (for instance in Assam) would be graded on a basis of acreage under tea into four classes as follows: Class 1 under 500 acres, Class 2 from 500 to 750 acres, Class 3 from 750 to 1000 acres, Class 4 over 1000 acres.

(5) This classification would form the basis of a system of promotion. All new entrants to the Service would be

appointed only to Class I estates and would not be allowed to take medical charge of a Class 2 estate until the completion of a minimum period of duty in that grade of two years. Similarly the minimum period of duty on Class 2 estates before promotion to a higher grade would be three years. Three years would also be minimum period of service on Class 3 estates. Class 4 should be compulsory retirement on the completion of 25 years of service.

(6) All salaries would be paid by the Indian Tea Association (or some independent body created for the purpose) who would recover their costs from the employing estates. Salaries would be as follows:—

Class 1:—Initial pay Rs. 80/- per mensem plus free house and one servant, rising by annual increments of Rs. 5 per mensem to a maximum of Rs. 100 per mensem.

Class 2:—Initial pay Rs. 105 per mensem plus free house and two servants, rising annually by Rs. 5 per mensem to a maximum of Rs. 145/-.

Class 3:—Initial pay Rs. 135 per mensem plus free house and two servants, rising annually by Rs. 5 per mensem to a maximum of Rs. 180/-.

Class 4:—Initial pay Rs. 160/- per mensem plus free house and two servants, rising annually by Rs. 5 per mensem to a maximum of Rs. 200/-.

In any case where promotion on this basis would result in a reduction of salary the member would not suffer any reduction but would receive an increment of Rs. 10 per month.

(7) Members of the service would have the same security of tenure as officers of Government medical services and the minimum period of notice of dismissal or resignation should be three months on either side.

(8) A provident fund should be established by the central salary paying authority to which members of the service would be privileged to contribute not more than ten per cent of their salary to which would be added an equal amount by the Estate for the time being employing the member. This fund would bear compound interest and would become due on the final retirement of the member from the Service. In any case where a member had not been in Service employment for at least five years only his own contribution plus interest would be payable. Where the member has done more than five but less than 7½ years service half the company's contribution plus interest will be added. Where the member has done more than 7½ but less than 10 years service three-fourth the company's contribution plus interest will be added.

(9) Provision should be made for one month's leave on full pay after eleven months work in each year. Such leave should, at the discretion of the member, be allowed to accumulate upto three months. Such leave should be taken in whole or in part according to mutual convenience. In addition ten days casual leave should be allowed in each year which should not be cumulative. The expense of providing a locum tenens should be borne by the employing estate.

Gauhati (Assam). Proceedings of a monthly meeting held on 16-5-39. Dr. G. S. Das presided. 6 members attended.

(1) The district branch (Gauhati) protests against and resents the unjustifiable and unjust remarks of Dr. J. J. Cursetji against medical licentiates, contained in the Insurance World, February '39, Pp. 265-67 and informs the insurance companies in this country that Dr. Cursetji's opinions are not those of the organised profession, as will be evidenced from previous resolutions on this subject by both the A. I. M. L. A. and I. M. A.

(2) The copies of the above resolutions be forwarded to all the insurance companies at Gauhati, to the Oriental Office, Bombay, Editor, Insurance World, Calcutta, and also to the General Secretary, A. I. M. L. A., Karnal.

(3) Read letter from the office of the Excise Commissioner, Assam which acknowledged with thanks the receipt of the copy of resolutions passed in a special meeting held on 7th April last.

(4) This Branch congratulates Drs. K. C. Barooah and P. C. Dwara, members of the above Branch, for rendering free service at Dibrugarh opium prohibition camp.

(5) Read a letter from the Hon. Treasurer, Dr. K. C. Wohra, and requested the members who are yet defaulters

for the current year to resume membership without further delay.

(6) That Dr. A. Dutta, S. A. S. Immigration Hospital, Gauhati, is to be congratulated for joining the Association as a new member.

(7) A copy of the report of the Assam Medical College Education Committee, received from the Provincial Secretary, was presented before the members and Dr. G. S. Das explained the report fully as to the means and ways and how effect to the same may be given at the earliest opportunity. Further the members have been requested to make active propaganda among the general public for their appreciation and warm support.

Madras. Proceedings of a Committee meeting held on 6-1-39 with Dr. T. V. Ranganatha Rao in the chair.

The following resolutions were passed unanimously.

(1) Dr. Suryaprakas Rao is elected to act as Secretary in the place of Dr. Vydyanadha Iyer resigned till the next general election.

(2) Then the discussion on the subject of Co-operative Health Scheme in rural areas began. The following resolutions were passed unanimously:

(a) This Association welcomes the proposal of Co-operative Health Society for the purpose of rural medical relief recently adumbrated by the Hon'ble Minister of Public Health at the 7th Andhra Medical Conference held at Ellore and further elaborated in the Government communique dated 28th March 1939.

(b) This Branch thanks the Hon'ble Minister of Health for this useful and practical scheme of rural medical relief and hopes that the proposed experimental scheme would prove to be successful both from the point of view of the medical practitioner and the lay public.

(3) This Branch is very much pleased to note that the Hon'ble Minister of Public Health, Dr. T. S. S. Rajan, has enlisted himself as a member of the Association.

(4) This Branch congratulates Dr. A. Viswanathan, Vice-President, for having successfully carried the work of the Branch during the absence of Dr. K. Rama Rao, Hon'y. Secretary.

Nadia (Bengal). A monthly meeting was held on 18-1-39. 14 members present.

Proceedings of the last meeting were read and confirmed. Circular No. 6 dated 21-3-39 from the General Secretary read and considered. The Secretary of this branch be requested to deal with it.

Contribution of Rs. 5 only to the Reception Committee of the 6th Bengal Provincial Conference, Burdwan, and the T. A. of Rs. 6/13/- to each of the two delegates who attended the same from this Branch was sanctioned.

The delegates of this Branch who attended the last Bengal Provincial Conference narrated the details of the Conference which were much appreciated by the members present.

The invitation of the next 7th Bengal Provincial Conference to our district by our Secretary was approved.

The monthly accounts of this Branch for the month of March 1939 were examined and passed.

The following office-bearers of this Branch have been elected for the year 1939: Drs. P. Pathak—President, H. Sen—Vice-President, Kulajaranjan Ray—Secretary and Treasurer, J. Ray—Asst. Secretary, B. Bhadra—Auditor. Members of the Managing Committee: Drs. D. Bagechi, L. Pramanik, B. C. Mojumdar, R. Sanmyal, B. C. Ghosh.

A monthly meeting was held on 15-5-39. 9 members were present.

Proceedings of the last meeting were read and confirmed. The Branch accounts for April 1939 were examined and passed.

Circulars Nos. 10 and 17 from the General Secretary were read and considered.

As for circular No. 17 it is resolved that letter of protests against the unjust and unjustifiable remarks of Dr. J. J. Cursetji be forwarded to all the local insurance companies. The Oriental Life Assurance Co., Bombay, Editor, *Insurance World*, Calcutta, and a copy to the General Secretary for information.

It is further resolved that as a protest against the remarks of Dr. J. J. Cursetji a circular be issued to all the Branches of the Association that no member of A. I. M. L. A.

Association should henceforth insure their lives with the Oriental Life Assurance Co. and also dissuade their relations and friends not to insure in the said company till the remarks are withdrawn.

This Branch resolved to hold a district conference at Majdia, Nadia, (E. B. Railway) on 27th May 1939. Dr. Abinash Chandra Mozunder, M. O., Majdia Dispensary, has very kindly taken the charge of Reception Committee. All are invited to be present.

Burdwan (Bengal). A monthly meeting was held at Gunananda Mukherjee's Dispensary on 30-4-1939 with Dr. Romaprasanna Roy in the chair. 6 members were present.

Read and confirmed the proceedings of the last meeting. Resolved that the Treasurer is authorised to appoint a peon to collect subscription and to make the appointment on suitable terms.

The contingent bill for the month of February 1939, amounting to Rs. 0-14-6 was passed.

A case of very peculiar type of malaria was discussed by Dr. Romaprasanna Roy, D. T. M., with special reference to bacteriological findings and treatment.

Mymensingh (Bengal). A meeting was held on 8-5-39. 6 members were present. Dr. J. K. Chakravorty was proposed to the chair.

The following resolutions were passed unanimously:

Resolution of protest as per General Secretary's circular No. 17 dated 28-4-1939. The District Branch of Mymensingh protests against and resents the unjust and unjustifiable remarks of Dr. J. J. Cursetji against medical licentiates contained in the *Insurance World*, February 39, Pp. 265-67 and informs the insurance companies in this country that Dr. Cursetji's opinions are not those of the organised profession, as will be evidenced from previous resolutions on this subject by both the A.I.M.L.A. and I.M.A.

It is resolved that copies of above note of protest be sent to the Manager, Oriental Life Assurance Co. and the Editor, *Insurance World*.

T. A. Bills of Drs. T. N. Bhattacharjee and J. K. Chakravorty amounting to Rs. 18 for attending the 6th Bengal Provincial Conference were scrutinised and passed.

Resolved that a sub-committee be formed consisting of the President, Branch Secretary and Dr. M. C. Aich with power to co-opt two more members for the purpose of devising means to call a district medical conference in the near future.

Aligarh (U. P.) An ordinary meeting was held on 16-4-1939 with Dr. P. S. Varma in the chair.

Minutes of the last meeting confirmed.

Resolved unanimously that this Branch approves of the memorandum submitted by the Standing Committee of the U. P. Provincial Branch to the reorganisation committee appointed by the U. P. Government and requests the reorganisation committee to give the memorandum the attention it deserves.

Resolved that efforts be made to enroll every licentiate practising in this district to the membership of the A. I. M. L. A. and that for this purpose it authorises the Secretary to tour in this district.

Lahore (Punjab). Executive Committee meeting held on 2-4-1939.

The memorandum presented to the Hon'ble Education Minister by a deputation of members of the Punjab Branch was read by Dr. Manohar Lal Kapur and was appreciated by all the members present.

The following resolutions were passed unanimously:

(1) That this committee reiterates the demands contained in the memorandum submitted to the Inspector-General of Civil Hospitals, Punjab, on 25th April 1938, and the Hon'ble Minister of Education on 27-10-1938 by a deputation of the Provincial Branch and prays for an early sympathetic consideration to remove general discontentment. Further resolved that the copy of the resolution be forwarded to the Hon'ble Education Minister to the Punjab Government and Inspector-General of Civil Hospital, Punjab, for early action.

(2) That this committee appreciates the pains and keen interest taken by the members of the deputation in representing in an admirable manner the grievances of the

Punjab Medical Licentiates to the Hon'ble Education Minister to the Punjab Government.

(3) Resolved that the Hon'ble Minister for Education, Punjab, be requested through the I.G.C.H., Punjab, immediately to take steps to restore the cuts in the salaries of the medical officers in charge of rural dispensaries wherever in existence in the Punjab such as in Jullundur district where cuts inflicted in 1931 continues till to-day, ranging from 10% to 7½% which cannot be termed as emergent cut.

(4) Resolved that the I.G.C.H., Punjab be requested to invite the attention of the Principal, K. E. Medical College, Lahore, to supply medical books when requisitioned under rules by medical licentiates serving under the Punjab Government.

(5) Resolved that this meeting accepts the invitation of the Montgomery Branch, to hold the Provincial Conference at Okara in October 1939, with thanks. Further resolved that a copy of this resolution be forwarded to Dr. Jai Gopal, Montgomery for information.

(6) (a). That in view of the fact that amendments to the Punjab Medical Registration Act II of 1916 are at present being considered by the Punjab Medical Council, this Branch urges upon the Hon'ble Minister for Education to the Punjab Government and I.G.C.H., Punjab, to press that the strength of the Punjab Medical Council be raised by 4 seats, to be filled by the medical licentiates by election and at least 2 nominated seats out of 8 should go to the medical licentiates by inviting a panel of names from the Punjab Branch of A.I.M.L.A., 3 of which at present go to the British medical graduates and 5 to the Punjab medical graduates.

(b) Further resolved that R. B. Dr. Mathra Dass, the representative of our constituency be requested to press this point in the Punjab Medical Council.

(7) Resolved that Dr. Manohar Lal Kapur be congratulated on his election as General Secretary.

(8) Resolved that Dr. Najmud-Din, Khanna, be elected as Provincial Secretary in the vacancy caused by the resignation of Dr. Manohar Lal Kapur, who resigned owing to his election as General Secretary, A. I. M. L. Association—carried unanimously.

Multan (Punjab). Special meeting held on 10-5-1939.

Read letter of General Secretary and unanimously resolved that this Branch strongly protests against and resents the unjust and unjustifiable remarks of Dr. J. J. Cursetji against the medical licentiates contained in the *Insurance World*, February 1939, Pp. 265-67 and informs the insurance companies in India that Dr. Cursetji's opinions are not those of the organised profession as will be evidenced from previous resolutions on this subject by the A.I.M.L.A. and the I.M.A.

The representation submitted by the last deputation which waited upon the Minister of Education and Health, Punjab, was gone through and resolved that this Branch reiterates its demands as contained therein and requests the authorities concerned to remove the genuine grievances as early as possible and concede the rights prayed for therein.

Bhandara (C. P.). Meeting of the above Branch.

The district Branch of C. P. protests against and resents the unjust and unjustifiable remarks of Dr. J. J. Cursetji against medical licentiates contained in the *Insurance World*, February 1939, Pp. 265-67 and informs the insurance companies in this country that Dr. Cursetji's opinions are not those of the organised profession, as will be evidenced from the previous resolutions on this subject by both the A.I.M.L.A. and the I.M.A.

Bilaspur (C. P.). Meeting held on 4-5-1939. 5 members were present.

Unanimously resolved that Dr. K. P. Sen Gupta, Private Medical Practitioner, Nagpur, be elected as President of the Provincial Branch, C. P. and Berar.

Resolved that the District Branch, Bilaspur, strongly protests against and resents the unjust and unjustifiable remarks of Dr. J. J. Cursetji against medical licentiates contained in the *Insurance World*, February 39, Pp. 265-67 and informs the insurance companies in this country that Dr. Cursetji's opinions are not those of the organised pro-

fession, as will be evidenced from previous resolutions on this subject by both the A.I.M.L.A. and the I.M.A.

Copies to be sent to all the insurance companies at Bilaspur, Oriental Life Assurance Company, Bombay, Editor, *Insurance World*, Calcutta and General Secretary, Karnal.

Amritsar (Punjab). Proceedings of an emergent meeting held on 1-5-39. 20 members were present.

(1) Resolved that this Branch has learnt with great satisfaction from Major S. M. K. Mallick, I.M.S., Principal, Medical School, Amritsar, that the Government are seriously considering the lengthening of the course of studies at the Amritsar Medical School to 5 years, the standard of admission being raised to F. Sc. or other equivalent qualifications acceptable to the Indian Medical Council, the net result of which would be that a better class of medical licentiates would be turned out from this school who would take their place as an equal colleague of the graduates and be better able to serve the public.

(2) That a sub-committee consisting of the following members be formed to convene a meeting of the Branch to be held at the Amritsar Medical School on 9-5-1939 at 5 p. m. in order to give vent to the feelings of satisfaction on the receipt of the above mentioned happy news and to thank the Government for the keen interest evinced by them in the amelioration of the lot of the medical licentiates: Drs. Kishore Chand, Nur Muhammad, Sayed Ali Hassan, Har Bans Singh, Gian Chand Blaggana.

(3) That Major S. M. K. Mallick, I.M.S., be thanked for his kind offer of giving an at home to the guests of that evening.

(4) That R. B. Dr. Mathra Dass Pahwa, President, be requested to grace the occasion with his presence.

(5) That Dr. Najmud-Din, Provincial Secretary, be requested to invite all the members of the Executive Committee to this function and to make it convenient to himself to attend the function.

(6) That the Inspector-General of Civil Hospitals, Punjab be requested to kindly grace the occasion with his presence.

(7) That the Civil Surgeon, Amritsar, be requested to kindly grant facilities to the sub-assistant surgeons and rural medical officers employed in the district to attend the function.

MEETING HELD ON 9-5-'39

(1) That this Branch places on record its keen appreciation of the selfless work done by Dr. Amin Chand Chopra, Secretary, during the time he has been in office.

As he is leaving the station indefinitely his resignation be accepted.

(2) That Dr. Kishore Chand be elected Secretary of the Amritsar Branch, vice Dr. Amin Chand Chopra.

(3) That this branch records its strong protest and resentment against the remarks made by Dr. Jehangir J. Cursetji, C. M. O. (Retd) of the Oriental Life Assurance Company, as published in the *"Insurance World"*, against the licentiates of the state Medical Faculty and its equivalent qualifications; some of his statements; that is, that medical certificates of the licentiates are not recognized in the court of law are baseless and far from truth. It is most surprising that an officer holding such a responsible office has expressed such indiscriminate and unjudicious remarks against a recognized body of medical men, fully qualified and possessed of registerable qualifications accepted by all the Provincial Medical Councils. This display of ignorance on the part of this officer about the existence of such a well-known organization as the "All India Medical Licentiates' Association" is much regretted as besides the oldest organization it has the largest number of medical men on its rolls.

(4) That this branch views with great alarm some of the recommendations of the Civil Surgeons' Conference, relating to the Medical Licentiates and prays that the Government should elicit the considered opinion of the Provincial Branch of the Association before any changes are introduced.

(5) That this branch whilst acknowledging with thanks the courtesy extended to the deputation of the Provincial branch of this association by the Inspector-General of Civil Hospitals, Punjab, and the Honourable Minister for Education in November 1938 prays that the closely reasoned memorandum, moderate in demands and accurate in facts,

should receive the very early and sympathetic consideration at the hands of the Punjab Government, as any further delay in the long over-due reforms, contemplated by the Punjab Government re. the amelioration of the grievances of the Medical Licentiates and Rural Medical Officers is apt to be misconstrued, and tax severely the patience and faith of the members of the class.

(6) That this Branch places on record its sense of satisfaction over the nomination of one of the members of its class to the governing body of the Punjab State Medical Faculty and prays that at least 25% of the seats should be reserved for the Medical Licentiates in that body, as the class of Medical Licentiates are primarily concerned with their own education.

It is further requested that the Government should, as agreed to in I. G. C. H. letter No. 3897 dated 17-4-36, invite a panel of names from the Provincial branch of the Association from among whom to make nominations.

(7) That this Branch places on record its keen appreciation of the valuable and sustained attempts made by various officers of the Government of the Punjab, and the Director General of Indian Medical Services in making arrangements to raise the standard of Medical Education at the Medical Schools as is evident from the proceedings of the Conference on medical education held at New Delhi, in November, 1938, and the subsequent developments which have taken place in the Punjab. This Branch offers its respectful felicitations to Col. G. G. Jolly C. I. E., I. M. S., Inspector General of Civil Hospitals, Punjab, on the most admirable part played by him in this respect and trusts that he will continue to take the same interest in this affair, while holding charge of the highest office of D. G., I. M. S., till the Medical School, Amritsar, attains the standard which shall satisfy the requirements laid down by the Medical Council of India.

(8) That this Branch offers its respectful congratulations to Col. P. B. Bharucha, O. B. E., D. S. O., I. M. S., on his appointment as the Inspector General of Civil Hospitals, Punjab, and prays that the task of introducing reforms in the standard of Medical Education at the Amritsar Medical School, and the uplift of the class of Medical Licentiates so zealously taken up by his illustrious predecessor Col. G. G. Jolly, C. I. E., V. H. S., I. M. S., would be given further impetus by him till the desired results are achieved.

(9) That this Branch owes a deep debt of gratitude to the untiring zeal and interest taken by the Principal, Medical School, Amritsar, Major S. M. K. Mallick, I. M. S., in improving the standard of Medical education in the school and otherwise trying to improve the lot of the Medical Licentiates ever since he has taken over charge of his office.

(10) That this Branch places on record its deep sense of obligation and gratitude towards Col. P. A. Dargan, I. M. S., Civil Surgeon, Amritsar, in his taking keen interest in the welfare of the Medical Licentiates and affording facilities to the employees serving under him in the District, for attending meetings of the Association, and trusts the same indulgence will be shown to the members of the Association by his worthy successor.

(b) That this Branch wishes bon voyage and safe return to Col. P. A. Dargan I. M. S., proceeding home on leave.

(11) That copies of the above resolutions be forwarded to the Provincial Secretary and the General Secretary for communication to the I. G., Civil Hospitals, and Honourable Minister for Education.

(12) That the Provincial Secretary be requested to consider the advisability of directing the various Branch Secretaries to adopt similar resolutions and submit them to the Inspector General Civil Hospital, Punjab, (2) Honourable Minister for Education, Punjab, and (3) Major S. M. K. Mallick I. M. S., Principal, Medical School, Amritsar.

Bombay. Minutes of the General Body Meeting held on 16th October, 1938 under the presidentship of Dr. N. R. Karandikar.

1. Minutes of the last meeting were read and confirmed.

2. The Annual Report for the year ending 30th September 1938 was read and adopted.

3. The following resolutions moved by the Chair and passed unanimously were directed to be moved at the ensuing Annual Conference of the Association at Gaubati:—

1. Resolved that the Government of Bombay be requested to take early steps: (1) to amend the Bombay Medical Council Act as to make it thoroughly democratic and elected body under a common franchise of all the registered practitioners registered under the Act; (2) to move the Central Government to so amend the Indian Medical Council Act as to include amongst other things a more suitable arrangement for reciprocity and the inclusion of medical licentiates in its purview; and (3) abolish the medical schools and the I. C. P. & S. course of medical education.

2. Resolved that the Bombay Medical Council be requested to arrange the names of the medical practitioners registered under the Bombay Medical Act in one common alphabetical list.

3. Resolved that a permanent Secretariat of the Association be early established.

4. Resolved that the fresh negotiations be opened with the Indian Medical Association with a view to have their future Conferences at one and the same place during the same week every year in order to afford opportunities for closer co-operations in all questions affecting the Medical profession in general.

5. Resolved that the Indian Medical Council, the Provincial medical councils and the executive committees of the said councils be urged to throw open their meetings to the registered medical practitioners and the medical Press Representatives excepting during deliberations on penal cases.

6. Resolved that the Family Fund authorities be asked to immediately transfer the Fund from Indore to Bombay.

7. Resolved that all facilities be given to aspiring medical Licentiates to appear for higher medical Examinations in India.

4. Drs. G. G. Wadhvani, U. S. Rao, T. S. Daruwalla and Miss R. K. Mantri were elected as Delegates of this Branch to the Gaubati Conference. Drs. M. V. Hegde, A. D. Patel, M. E. Mehjerji and M. M. Shirali were elected as substitutes.

5. Drs. N. R. Karandikar and U. S. Rao were elected to represent this Branch in the Bombay Provincial Standing Committee.

6. Bombay Government's Draft Bill regarding supervision of Nursing homes was read and discussed. It was then referred back to the managing Committee for consideration and placing its opinion at the next General Body Meeting.

The following are the office bearers for the next year.
Dr. N. R. Karandikar ... President.
Dr. G. G. Wadhvani ... Vice-President.
Dr. U. Shesha Rao ... Hon. Secretary and Treasurer.

Dr. T. S. Daruwalla
Dr. U. S. Rao
Dr. B. Y. Paranjpe
Dr. A. D. Mastakar
Dr. S. V. Kulkarni
Dr. K. M. Shah
Members of the Managing Committee.

8. Dr. K. M. Shah spoke on "Anemias" and exhibited charts prepared by him.
The meeting terminated with a vote of thanks to the Chair.

Dr. E. Y. Paranjpe was at home to the members.

Minutes of the General Body Meeting held on 6th November, 1938 at Dr. U. B. Narayan Rao's Consulting Room, Girgaum. Dr. N. R. Karandikar was in the Chair.

Minutes of the General Body Meeting held on the 10th October, 1938 were read and confirmed.

The question of immediate transfer of the Family Fund from Indore to Bombay was taken up for consideration. This was followed by a prolonged discussion on the subject and as the arrangements made by the Family Fund authorities at Indore for the transfer were incomplete, further consideration of the matter was postponed to next meeting.

For want of time consideration of the remaining items of the agenda, viz., letters of resignation from Drs. N. R. Karandikar and B. Y. Paranjpe and clinical discussion on the treatment of Enteric fever etc., was also postponed to the next meeting.

The meeting terminated with a vote of thanks to the Chair after light refreshments.

Minutes of the General Body Meeting held on 4th December, 1938. Dr. N. R. Karandikar was in the Chair.
Minutes of the last General Body Meeting were read and confirmed.

As Dr. N. R. Karandikar withdrew his letter of resignation, the letter of resignation from Dr. B. Y. Paranjpe only was read. It was then unanimously resolved that Dr. Paranjpe should be requested to withdraw his resignation and the Hon. Secretary was requested to write to Dr. Paranjpe accordingly.

General Secretary's Circular No. 34 was read and the delegates were directed to support all the resolutions excepting the resolution No. 8 of the Circular.

Dr. V. K. Prabhu Desai was unanimously elected as a Delegate to attend the Gaubati Conference in place of Dr. G. G. Wadhvani, now Secretary of the Family Fund.

After a lively discussion on the treatment of Enteric fever, the meeting terminated with a vote of thanks to the chair. Light refreshments were served.

Minutes of the General Body Meeting held on 8th January, 1939 with Dr. G. G. Wadhvani in the Chair.

Minutes of the last General Body Meeting were read and confirmed.

Dr. U. B. Narayana Rao informed the House about the sad demise of Dr. S. L. Sharma one of the old veterans of the Association. He made a touching speech referring to the various activities of the late Dr. Sharma in regard to the medical profession in general and the Licentiates in particular.

Dr. Rao concluded by saying that the Association has suffered a heavy loss by the untimely demise of Dr. Sharma. Similar speeches were also made by Drs. A. D. Mastakar, G. G. Wadhvani and U. S. Rao. The following resolution which was then moved by the Chair was unanimously passed all the members standing:—

"This General Body Meeting of the Bombay Branch of the All-India Medical Licentiates' Association learns with deep regret the sad and untimely demise of Dr. S. L. Sharma one of the veterans of this Association and while condoling with the family of the bereaved, prays that his Soul May Rest In Peace. Further resolved that the Hon. Secretary be authorised to forward the above resolution to the family of the bereaved."

Circular from Secretary, Family Fund, asking for suggestions for modification of Rules and the better working of the Fund was referred to a Sub-Committee consisting of Drs. A. D. Mastakar, G. G. Wadhvani and U. S. Rao.

Delegates who attend the Conference gave a short report of the Conference. They said the arrangements were excellent and the Conference was well attended. They informed the House of the award of a Gold Medal to Dr. U. S. Rao, Provincial Secretary, Bombay, for enrolling the highest number of members during 1937.

The following resolution proposed by Dr. U. A. Rao and seconded by Dr. V. K. Prabhu Desai was unanimously passed.

"This General Body Meeting of the Bombay Branch congratulates heartily Dr. U. S. Rao, Provincial Secretary a member of this Branch, on his receiving a gold medal and a member of this Branch, on his receiving a gold medal at the Conference for his meritorious service to the Association on his enrolling the highest number of members during 1937."

There was a lively discussion on the treatment of Enteric fever. The meeting terminated with a vote of thanks to the Chair.

Light refreshments were served.

Minutes of the General Body Meeting held on 5th March 1939 at 4-30 p.m. with Dr. N. R. Karandikar in the Chair.

Minutes of the last meeting were read and confirmed.

Circular No. 2 dated 27th February 1939 from the Bombay Provincial Secretary was read.

There was a lively discussion on the treatment of Chancre. The meeting terminated with a vote of thanks to the Chair.

Light refreshments were served.

Minutes of the General Body Meeting held at 4-30 p.m. on Sunday the 9th April 1939 at Dr. U. B. Narayan Rao's Consulting Room, 101 Girgaum Road, Girgaum, Bombay, under the presidentship of Dr. N. R. Karandikar.

Minutes of the last meeting were read and confirmed.

The following resolutions moved by the President was seconded by Dr. U. S. Rao:—

"Resolved" that the Bombay Branch of the A. I. M. L. A. fully approves the move of the Bombay Government to enforce total prohibition from August 1st, 1939 in Bombay and offers its full support and services to the cause."

"This General Body Meeting of the Bombay Branch of the A. I. M. L. A. congratulates the Government of Bombay on their inauguration of the Literacy Campaign for mass education in Bombay and offers its co-operation in the move."

The above resolutions to be sent to the Government and the Papers."

The above resolutions were unanimously passed.

There was a lively discussion on the treatment of Influenza. Many members took part in the discussion. The meeting thereafter terminated with a vote of thanks to the chair.

Managing Committee meeting held on 16th October 1938, under the Presidentship of Dr. B. Y. Paranjpe.

1. Minutes of the last meeting were read and confirmed.

2. Branch account for the month of September 1938, amounting to Rs. 17-2-6 was scrutinised and passed.

3. Branch Fund account was also scrutinised and passed.

4. Annual report for the year ending 30th September 1938 prepared by the Honorary Secretary was read, approved and directed to be placed before the General Body for adoption.

5. Account of the 3rd Annual Dinner was scrutinised and passed. The surplus balance of the subscriptions collected for the dinner Rs. 4-6-0 was directed to be paid to the Branch Fund.

6. The Circular from the Bombay Provincial Secretary asking the Branch to elect two representatives to the Provincial Standing Committee was read and referred to the General Body for action.

7. The Bombay Government's Draft Bill regarding supervision of Nursing Homes was also directed to be placed before the General Body.

Minutes of the Managing Committee meeting held on 30th October 1938. Dr. U. A. Rao was unanimously voted to the Chair. The Minutes of the Managing Committee meeting held on 16th October, 1938, were read and confirmed.

Circular No. 30 from the General Secretary was read and discussed. The following resolution moved by the Chair was then unanimously passed:—Resolved that the Bombay Branch of the A. I. M. L. A. reiterates the resolution No. 2 dated 1st October, 1938 of the A. I. M. L. A. Standing Committee and urges on the representatives from Bombay to move (or to support) for the institution of one uniform standard of Medical education and for abolition of the Medical Schools of the Presidency.

The Honorary Secretary was authorised to forward the above resolution to:—

(1) The Director General, Indian Medical Service.

(2) The General Secretary.

Consideration of the Bombay Government's Bill regarding supervision of Nursing Homes was postponed.

Letter of resignation from Dr. B. Y. Paranjpe was read and the Honorary Secretary was directed to place the same before the next General Body meeting.

Letter of resignation from Dr. N. R. Karandikar, President of the Bombay Branch was read. With reference to Clause No. 4 thereof the Honorary Secretary was requested to write to Dr. Karandikar requesting him to enlighten the Committee on the above clause.

The meeting terminated with a vote of thanks to the Chair after light refreshments.

Minutes of the Managing Committee meeting held on 6th November 1938 at Dr. U. B. Narayan Rao's consulting Rooms, Girgaum.

Dr. N. R. Karandikar was in the Chair.

Minutes of the meeting held on 30th October 1938 were read and confirmed.

Branch account for the month of October 1938 amounting in all to Rs. 12-12-6 was scrutinised and passed.

Branch Fund account was also scrutinised and passed.

The meeting terminated with a vote of thanks to the Chair.

Minutes of the Managing Committee meeting held on 20th October 1938 at Dr. U. B. Narayan Rao's Consulting Rooms, Girgaum.

In the absence of the President, Dr. A. D. Mastakar was in the Chair.

Minutes of the last meeting were read and confirmed.

Resolved that the Honorary Secretary of the Bombay Branch be authorised to call a meeting of the members of the Family Fund residing in Bombay and Suburbs and to arrange to form a Working Committee (provisional) from amongst themselves to take over the charge of the Family Fund and carry on the work of the Fund.

Moved by the Chair and passed unanimously.

It was further resolved to call the General Body meeting of the members of the Family Fund on 4th December 1938.

Thereafter the meeting terminated with a vote of thanks to the Chair.

Minutes of the Managing Committee meeting held on 4th December 1938 with Dr. N. R. Karandikar in the Chair.

Minutes of the Managing Committee meeting held on 20th October 1938 were read and confirmed.

Branch account for November 1938 amounting to Rs. 7-16 were scrutinised and passed. Branch Fund account was also scrutinised and passed.

General Secretary's Circular No. 34 was directed to be placed before the General Body for consideration.

Since Dr. Wadhvani, one of the Delegates elected to the Gauhati Conference was subsequently elected as the Secretary of the Family Fund and since by virtue of it he becomes an Ex-Officio Delegate, the Honorary Secretary was directed to refer the subject to the General Body.

The meeting terminated with a vote of thanks to the Chair. Minutes of the Managing Committee meeting held on 8th January 1939. Dr. A. D. Mastakar was unanimously voted to the Chair.

The minutes of the meeting held on 4th December 1938, were read and confirmed.

Branch account for December 1938 amounting to Rs. 0-3-0 (annas three only) was scrutinised and passed. Branch Fund account also was scrutinised and passed.

Dr. Narayan Rao and Dr. V. K. Prabhu Desai were unanimously co-opted as members to the Managing Committee for the year.

T. A. Bills of Drs. Daruwalla, Prabhu Desai, Meherji and Patel for attending the Gauhati Conference as Delegates of the Bombay Branch were placed before the meeting. The Bills were passed and the Hon. Secretary was requested to forward the same to the Provincial Secretary for action.

The Hon. Secretary suggested that it would be advantageous to the members if the dates of the monthly meetings are fixed by the Committee every year at its first session and if the diary of the meetings of the whole year were sent to all the members. By adopting this procedure, he observed, the members will be able to keep the meeting days clear of all other engagements. The matter was then thoroughly discussed and the following resolution was unanimously passed:—

Resolved that the Branch meetings be arranged as far as possible on a Sunday afternoon between 1st and 10th of every month and further resolved that this year's meetings be fixed accordingly and the diary be published with the next month's meeting circular.

With a vote of thanks to the Chair, the meeting terminated.

CONSOLIDATED ACCOUNTS OF THE ALL-INDIA MEDICAL LICENTIATES' ASSOCIATION

Receipts		MARCH 1939		Payments	
		Rs. A. P.		Rs. A. P.	
To Subscription (old and new)	...	1086 1 6	By Printing I. M. J.	...	577 13 6
„ Advertisement	...	1160 7 2	„ Establishment	...	435 0 0
„ Loan from Dr. M. L. Kapur	...	223 0 6	„ Office Rent	...	70 0 0
„ G. Secy. Rs. 223/-/6	...		„ Stationery	...	10 14 3
„ Miscellaneous As. 6 & R.B.S.P. Memorial	...		„ Travelling allowance	...	2189 15 0
„ Fund Rs. 18 & Amount handed over by	...		„ Postage etc.	...	222 0 9
„ R. B. Dr. Hari Ram to the new President	...		„ Miscellaneous	...	149 10 8
„ Rs. 6/18/0 only	...	25 3 0	„ Other Printing	...	25 10 6
Total	...	2494 12 2	„ Propaganda work	...	57 4 6
Balance from last month	...	64726 7 0	„ Expenses for Branches	...	359 8 0
Grand Total	...	67221 8 2	„ Payment to Contributors	...	15 0 0
DETAIL OF BALANCES			„ Advt. Commission	...	18 2 0
New Loans	...	8200 0 0	„ Reception Committee Gauhati	...	98 7 0
5 Years Postal Cash Certificates	...	6511 14 0	„ S. R. Committee	...	23 6 0
G. P. Notes	...	10891 9 0	„ Subscription to foreign Journals	...	31 10 0
10 Years Govt. Bonds for S. S.	...	10000 0 0			
6½% Govt. Bond 1943	...	5600 0 0			
With Dr. S. P. Sen Gupta, Ex-Manager	...	793 12 1			
Postal Savings Bank with President	...	2155 3 11			
With Branches	...	20 6 0			
With Editor:—					
In hand	28 4 9				
In Bank	895 3 6				
Postage Stamps	153 6 0				
		1071 14 3			
With Ex-General Secretary:—					
Dr. U. B. Narayana Rao, 101, Girgaum					
Road, Bombay. 4.		8 0 0			
With Treasurer:—					
In hand	177 0 9				
In P. N. Bank	181 15 3				
In P. S. Bank	17335 2 2				
		17694 2 2			
Total	...	62941 13 5	Total	...	4279 5 9
			Balance in hand	...	62941 13 5
			Grand Total	...	67221 8 2

as shown in the case of a limb. This experimental work in the case of limb is further supported by the occurrence of pain in several other clinical conditions. A familiar clinical picture of pain depending upon ischaemia or anoxaemia is afforded by patients suffering from intermittent claudication, in which the circulation suffices for the restful condition of the legs, but cramp like pain is felt in the calves after walking. Similarly severe and even excruciating pain is felt in the leg below the obliteration of an artery in a case of senile gangrene, or a gangrene following a thrombosis of an arterial aneurysm. The constriction caused by sphygmomanometer bag makes the arm painful after a definite number of contractions of muscles below the constriction.

In coronary occlusion whether due to thrombosis or due to an entanglement of an embolism detached from aortic valve disease or from aortitis of syphilitic nature, the pain and the distress is the outstanding feature. Sometimes a person who leads a sedentary life becomes subject to attacks of angina. The coronary arteries under physiological conditions and in health are capable of enhancing the output about threefold. When the heart is not required to increase its output for which the nature has endowed it, this elasticity is lost in course of time, and when this natural endowment of flexibility of the coronary artery is diminished, it becomes incapable of enhancing the intracardiac circulation in time of stress and strain.

In the treatment of angina pectoris, the first essential is to find out the cause and eliminate it. In anaemia the degenerate state of myocardium will prematurely pass into an anginal condition, hence effort be made to improve the quality and the quantity of blood. Specific treatment should be instituted in syphilitics and eliminative measures adopted in toxic cases. Digitalis therapy in valvular lesion associated with loss of compensation, and diffusible stimulants in critical conditions threatening imminent failure are indicated.

Rest is imperative with a view to avoid loss of reserve power. The majority of the anginal patients are those whose programme of life has been full that rest and proper meals have been neglected. The high rate of activity demands vigorous circulation and this if continued after middle age causes erosion of cardiac reserve—the preservation of which is essential for the maintenance of health in the old age. A sensible man will live within his capacity and will scrupulously avoid wastage of his myocardial potential, the expenditure of

which is in direct proportion to the strain of abnormal living. Rigid rules should be laid down and strict supervision is essential for the conservation of cardiac reserve. The nature of the rest depends on the individual capacity. Indiscriminate confinement in bed is not beneficial.

In coronary occlusion absolute rest in bed for prolonged periods until satisfactory anastomosis is established is necessary. In this connection a writer has humorously remarked that in a case of this type, one would wish for a fracture of leg entailing as it does a prolonged stay in bed with splints.

In angina of exertion, confinement in bed is not necessary though useful from a psychological standpoint. The one thing essential is that strenuous games should be given up, pace should be slow and the activity limited. The activity should cease immediately on the advent of the slightest feeling of discomfort. If the fit comes on, the patient should be confined to bed, and rest should continue for several days after the attack is over till feeling of exhaustion and fatigue has entirely passed off. Neglect of this point is responsible for many deaths which could have been prevented. During the period of rest the legs should be daily massaged to maintain them in a fit condition. In walking one caution is essential: it is the speed which brings on an attack rather than the distance. Hurry in climbing uphill or a dash to catch a train, and in the like manner any sudden effort is dangerous. Exertion is not well tolerated after a meal or on a cold day. The outstanding feature about angina is that it is of a *progressive nature* and this should be borne in mind. In an established case every subsequent attack is more easily induced. The increase in severity as the condition becomes advanced and as the time passes is well illustrated in his dying note on his own case left by Nothnagel, an illustrious physician at the University of Vienna.

“Stomachful attacks with extremely violent pains; pulse altering considerably during the attacks; now slow, 56-60, quite regular, very tense; then rapid, 80-90, fairly uniform and regular; then again quite arrhythmic, quite unequal—now quick, now slow, ever varying tension.”

The first sensation of these attacks date back some years, 3 or 4: MILD at first, then growing in severity as time went on. Typical attacks, with violent pains, not until the last 5-6 days. Written late at night, 6th July 1905, after three severe attacks in quick succession.”

The next attack caused the death of this celebrated physician, who in the very hour of his death stands before us as a great physiologist to the end and whose classical description shows the progressive nature of the disease and the varying behaviour of the pulse during

the attack. This progressive limitation of activity is also described by McKenzie, the great cardiologist of England, whose classical treatment of this disease on scientific basis is a standard work, and who was himself a victim of this fell enemy of many an illustrious personality. His letters record that he could manage 27 holes at golf, later it became restricted to 18, and gradually it became restricted to 7 before he finally gave up the game; his death took place nearly twenty years after the first anginal attack.

Diet:—The patient should rest after a meal for at least half an hour, otherwise the diet should be simple and easily digestible. Any tendency towards dyspepsia needs careful attention, overloading of the stomach should be avoided and the amount of the liquid intake with meals also restricted.

Emotions play a great part in enhancing the ventricular action. The sympathetic nervous system is the medium of transmission of stimuli, and they also influence the muscular coats of the arterioles with the result that there is blushing. The outbursts of anger and emotional excitements are therefore to be avoided as they are sometimes responsible for anginal seizures. The patient should learn to suppress the wave of excitement immediately it arises and attention should be diverted to any cheerful pursuit. I know of a person who kept a regular diary showing details of happy occasions and moments of cheerfulness of his life; he would peruse these notes in order to divert his attention whenever anybody gave him cause for irritation and wrath, which were in his case responsible for anginal attacks being precipitated. He used to say that his life is in the hands of any devil who would annoy him. Bromides and theominol are useful to allay mental excitement.

Removal of septic foci such as dental abscess, pelvic sepsis, and appendix and gall bladder infections, is attended with success, whenever anginal attacks depend upon absorption of toxins from these foci.

The relation of excessive tobacco smoking and precordial pain is known. I know of a person whose pain started while smoking *kukka* and subsequently all his anginal fits were closely associated with smoking. Smoking in strict moderation should be therefore enjoined on persons subject to anginal pain, as the effect of tobacco on heart is harmful.

The treatment of angina thus mainly depends upon the removal of cause. As regards the immediate treatment of the attack, vasodilators are indicated. The patient should

be instructed to carry amyl nitrite capsules in pocket for use in emergency. I know of a doctor, a victim of this disease, who always carried this immediate life-saving measure with him, but who was one summer afternoon sitting leisurely undressed under the shade of a tree in the compound of his house when the attack precipitated and took him away before the capsule of nitrites could be brought to him. Similarly in a case of freedom from attack for over a year, the attack came on after anger, and that happened to be the only occasion he had forgotten to carry the nitrites with him. If amyl nitrites fail, chloroform inhalation may be given or else an injection of morphia. The patient should be confined to bed and warmth applied to the limbs.

In between the attacks, nitroglycerine in one minim doses may be given if the pressure is high, or sodium nitrite in $\frac{1}{2}$ to 2 grain doses used thrice daily till the pressure falls to the normal optimum of the individual. Pot. Iodide in syphilitics and arteriosclerosis; or Entodon ampoules (Bayers) may be given hypodermically.

Preventive:—The use of tea, tobacco and alcohol should be restricted. The injudicious use of cardiac stimulants, viz., strychnia and adrenalin, which act by raising the peripheral resistance, should be shunned as a poison, particularly during an attack, as many a preventible death have occurred due to their use.

The victims of this condition should lead a reasonable life, which means that undue restrictions on the activities of the person and indiscriminate confinement in bed will lead to the deterioration of cardiac capacity. On the other hand, insensible mode of living beyond the myocardial capacity will exhaust the already depleted myocardial reserve. It is therefore imperative that all non-essential interests and activities be eliminated from their daily programme of life and all unnecessary social engagements cancelled; late hours in clubs and cinemas avoided; hurry to catch a bus or train, and haste in mounting upstairs prevented. One should not indulge in a heavy meal and should take rest after a meal and if he is by necessity required to walk out he should go slowly; he should wrap himself well-up before he goes out into the cold. The bed should be fairly warm before retiring for the night.

In case one is faced with a necessity of having to undertake some unavoidable exertion or one has to do an exacting work, which by previous experience is known to induce an

(Continued at foot of next page)

Pulmonary Tuberculosis

Dr. Samuel Ram Singh, M. S. M. F.
(Punjab), D. T. M. (Calcutta)

(2)

Pathology of Pulmonary Tuberculosis

To understand the pathology of the disease a recapitulation of the histology of lungs in brief is necessary. Physiologists differ in their description of the architecture and sub-divisions of the fine bronchial endings. The terminals of the lung have abundant nomenclatures which have caused confusion. Aschoff has made the nearest approach to their true conception. He describes that the lung lobule is the microscopic unit which is somewhat pyramidal in shape and the base measuring about 10-12 sq. m. m. At its apex or tip enters the intralobular bronchus, which gives off several collaterals. After division, these collaterals break up into terminal ducts. The branches of collaterals break up into acinii, and are called terminal bronchioles. The terminal bronchioles divide into the alveolar passages. These eventually sub-divide into canal system of narrower alveolar ducts—the pulmonary acinus or vesicle proper. Each pulmonary vesicle has a distinct septum and is built of one type of epithelium. This is the terminal unit of the lung parenchyma.

Anatomy of intrathoracic glands is also important in connection with tubercular disease of childhood. These glands are located around trachea and bronchi, mainly in front of the bifurcation of trachea. Those around right bronchus get more enlarged and produce signs and symptoms of the disease. At the bifurcation of trachea are tracheo-bronchial nodes; along main bronchi are bronchial lymph

attack, or there is necessity to climb up a hill or an overbridge at a railway station, one or two tablets of nitroglycerine (grain 1.100) should be chewed and swallowed before attempting the exertion, and after waiting a little till the effect is felt the exertion being undertaken slowly and steadily with a calm and confident feeling that it will be accomplished without pain. The routine use of vasodilators with the object of preventing attacks, though recommended, is useless, apart from unnecessary wastage of drug.

nodes; and at the hilum are the pulmonary lymph nodes. In considering the pathology of tuberculosis of lungs one is apt to forget that tuberculosis is tuberculosis regardless of the age of the patient. Primary or childhood type of disease can occur at any age. Re-infection type or adult type can also occur at any age. No one knows in any case when the patient received his first infection, how many times he had been infected or what was the intensity of each infection. One thing we know is that a particular individual has received a sufficient dose of bacteria from some source at some time or other to make him sick. The source of infection is mainly human and less commonly bovine. There is a reciprocal relationship between pulmonary tuberculosis and certain physiological and pathological processes. Pulmonary tuberculosis in its common form is chronic and lasts for years during which period the patient is subject to diverse physiological and pathological processes. Certain physiological processes have great influence on the pathogenesis, course and outcome of the disease. During long months or years that the patient suffers from pulmonary tuberculosis he is liable to contract other diseases which will influence greatly the disease picture, symptoms, course and progress. These relations are important for the clinician to bear in mind so as to understand variety of changes in a specific disease.

Distribution of lesions.—Infection occurs by ingestion or inhalation, and possibly by hereditary transmission. "Ghon" tubercle represents a primary infection of the bronchioles or alveoli in infancy, tends to heal, disappears and is represented by healed lesions in the hilum or peribronchial lymph nodes. These lesions represent a kind of vaccination, and other things being equal tuberculosis is not a menace to such an infected person as it is to one who has not received this early inoculation. If the disease is not arrested in these glands the lung becomes involved, and then we have the adult type of the disease. From this primary deposit, dissemination may occur in lungs due to breaking down of patient's resistance either by direct infiltration or through peribronchial lymphatics and capillaries, *via* sub-pleural and interstitial lymphatics or by inhalation into a bronchus after an attack of haemoptysis, or *via* blood vessels through erosion of a caseous tubercle into a vein as in miliary tuberculosis. In all infections the lymphatic apparatus of the children is the first and most effective barrier in the defence of the body against the micro-orga-

nism. The lymphatic glands become the focus of the disease and they develop and maintain certain immunity against both the endogenous and exogenous re-infection. In infants tuberculosis manifests itself as bacillæmia. As a matter of fact tuberculosis in children is both lymphogenous and hæmatogenous. Bacteria entering via digestive tract may reach the tracheo-bronchial glands with as much ease as via respiratory tract. Pulmonary tuberculosis which is the common cause of death in adults, almost the first cause of death among persons between 15 and 45 years of age, is not necessarily preceded by infection with the causative organism immediately before the manifestation of the disease. The virus is ubiquitous and every infant, surely every child, is bound to become infected sooner or later. Tuberculin test has shown that very few infants and children escape the infection. Up to the age of five 50% are found infected, up to the age of fourteen 94% are infected. Dr. Ukil gives a figure of 11.8% of infected children under 5 years of age. He tested 6500 persons of all ages and found that the percentage of infected persons went on till 50% of infections were found between the ages of 21 and 25 and 70% at 60. In Madras out of 3392 persons of all ages the positive reactors were over 94.2% and under one year 40%, between one to two years 65.7%, and between 21 and 25 years 97.1% were found to be infected. These figures are clear and show that circumstances in India are such that hardly any one escapes infection at one time or the other. Infants, of course, are very susceptible. The infection is mainly familial including servants, relatives and acquaintances. No pathological lesion can be discovered in a tuberculous child except enlarged tracheo-bronchial glands on X-ray. It is the miliary form of meningitis that kills the infants and children during first 2 years when mortality is fairly high. Between the third and fifteenth year, mortality rate diminishes and then again from the age of 20 to 30 years it rises. Mortality is lowest after the age of 30. The site of primary tuberculous infection, the so-called "Ghon Complex" in an infant or child, is situated in the lower half of the upper lobe and rarely in the apices. The primary lesion is encapsulated by a dense hyalinised connective tissue which may undergo calcification, ossification or cicatrization. The organism may remain dormant within these latent and retrogressive lesions. Due to physiological strains of puberty or economical, social and psychological factors the resistance gives way. The primary complex which had remained stationary or had undergone regres-

sive changes, with slumbering organism at the centre of the lesion, will suddenly begin to progress, the capsule becomes permeable to the bacteria which enter the thoracic duct from the lymph node or carried through superior vena cava to the right heart, pulmonary arteries and back to the lungs where they usually settle down in the apices for their further extension of life. It has been a controversial point as to why they localise in apices. Less æration of the apices is one of the assumed theories.

Pulmonary tuberculosis is divided into two classes pathologically: (1) Exudative (2) Productive. Exudative reactions are characterised by high tissue sensitivity to tubercular antigen, so there is an immediate and explosive reaction whenever the tissue of the host comes in contact with the organism. The extent of cell irritation depends on concentration of the organism. Larger the dose greater the irritation and death of the tissue cells. Thus the exudative reaction may again be sub-divided into: (1) Resolving exudative (2) Productive exudative and (3) Non-resolving exudative. Resolving exudative takes always an acute form. One lobule or a whole lobe is involved in the process. Tissue sensitivity is generally great. A small amount of infection produces an exudative reaction which is chiefly serous with little fibrin and small amount of cells. The tissue does not die. The exudate is absorbed. Patient gets well in about six weeks to six months. X-ray will show no evidence of infection. In exudative-productive, tissue sensitivity is high, the dose of bacteria is large, the reaction is more violent, is serous, fibrinous and cellular. There is slight tissue death. Exudate takes longer to absorb and resolution is prolonged. The patient becomes well. X-ray shows a few small areas of productive changes. The non-resolving exudative is commonly known as caseous pneumonia. Tissue sensitivity is high, the dose of organism is much larger, the reaction is severe. Death of tissue occurs with caseation necrosis and liquefaction of the whole mass. The dead tissue sloughs and cavity forms. From the walls of the cavity organisms are constantly shed and thus super-infection occurs. These patients are open cases and they are a source of danger to themselves, their families and associates. These are cases in which laryngeal and abdominal complications occur. About 80% of these die within a year. Productive form of reaction occurs when tissue sensitivity is low and the dose of infection is small. The infection

usually starts in terminal bronchioles. Reaction is mainly cellular. Tubercles with epithelioid, giant and fibrous tissue cells form. Excessive fibrous tissue causes blockade of the vessels. Due to avascularity of tubercles the central areas begin to break down and ulcerate in a small bronchus and gradually get aspirated into various parts of one lung or even both. Usually the process begins in one apex and slowly descends down. It is a chronic productive process running a slow and progressive course. It may take as much as 20 years to involve both the lungs. Aschoff called it the "acinous nodose form". The reaction is cellular and acinar in distribution. In early part of the disease it escapes notice, later, it gives a few symptoms of toxæmia. Patient dies late in life, perhaps due to some inter-current disease. Tubercular lesions cause atonic condition of the capillary bed, depresses muscular tone, causes adrenal deficiency and thus a lowering of blood pressure.

Clinically four varieties of pulmonary tuberculosis are recognised and the changes differ in each with a common factor—a tubercle at various stages of formation. A tubercle situated at one of the apices or in the sub-clavicular regions represents generally a subacute condition. (1) Acute miliary type may develop as a terminal event in chronic fibrocaceous or fibroid type. (2) Acute caseous is extensive pneumonic type with fibrinous or sero-fibrinous exudate. (3) Fibrocaceous is commonest variety. The lesions are miliary or bronchopneumonic involving apex or upper lobe at the back. Pleural adhesions are more common. (4) Fibroid type involving one lobe or whole lung with compensatory emphysema of the other lung is a chronic form.

Secondary Changes:—(1) Caseation occurs due to coagulation necrosis and fatty degeneration, terminating in cold abscesses and calcification. (2) Cavitation may be as small as a pea or as large as a lobe itself. (3) Fibrosis may occur early or after caseation and is revealed in old lesions near the apex.

Description of pathology of pulmonary tuberculosis will be incomplete unless certain problems are explained in the light of our present knowledge.

(1) *Proliferation.*—It is an established fact that due to the action of organisms on one hand and reaction on the part of the body on the other there is proliferation of the tissue cells. Depending on the virulence of infection and low resistance of the body or a virulence

of infection and good reaction on the part of the body, the result may be exudation or proliferation respectively. The proliferation is limited to the connective tissue of the area.

(2) *Giant cell formation.*—Presence of giant cells in a tubercle is diagnostic of the lesion microscopically. These are known as foreign body giant cells. Their nuclei are arranged at the periphery or at the poles or at the centre. Their cytoplasm is abnormally acidophilic. Mycobacterium. Tuberculosis may be present in these cells. There seems to be a purpose in giant cell formation and that is to surround and render harmless the foreign substances—the organisms. The occurrence of giant cells is preceded by proliferation of fibroblasts.

(3) *Avascularity of tubercular proliferation.*—It is a biological fact that all growth involves proliferation of connective or other tissues in association with proliferation of the endothelial structure forming vascular channels or capillaries. Mycobact. Tuberculosis is non-motile and multiplies at a very low speed. Thus there are less exudative fluid, cells and loose net work of tissue. There is present on the other hand much closely packed proliferative connective tissue which by its property of contractility and pressure causes endarteritis obliterans of the vessels and their closure.

(4) *Necrosis.*—Avascularity of the proliferative tissue and the mechanism that gives rise to giant cell formation bring about coagulation necrosis and caseation.

(5) *Healing.*—It is the common observation of the pathologists, the radiologists and clinicians to find healed lesions in the lungs, visceral pleura and peri-bronchial and hilar lymph nodes. These are brought about by the process of caseation necrosis, fatty degeneration and calcium salt permeation of the lesions.

FILARIASIS

SPECIFIC CURE BY ROSBAY TREATMENT (oral or injection). The only medicine hitherto successful. It does not contain Arsenic, Antimony or Vaccine. Absolutely harmless. Many radically cured.

Apply for free literature to:

Dr. A. T. Paul, Specialist in Filariasis
60, Boloram De Street, CALCUTTA

TUBERCULOSIS NOTES

(In this column which will run for a few months will be given the views and news on Tuberculosis in India and abroad. (Ed., I. M. J.)

Dr. G. Gregory Kayne, M. D., M. R. C. P., D. P. H. Tuberculosis Officer, Middlesex County Council writing in the *Medical Officer*, April 22, 1939, on *Modern Tendencies in the work of a Tuberculosis Officer*, reviews the two important diagnostic methods, viz., radiology of the chest and bacteriological methods, in the diagnosis of phthisis. Since his views appear to be precise and straightforward we reproduce them with due acknowledgments to the author and the *Medical Officer*. Ed., I. M. J.

Radiography of the Chest.—The value of radiography in the diagnosis and treatment of phthisis is still not sufficiently appreciated and discussions on the relative merits of radiological and physical examination—and by the last term is often meant stethoscopic examination—still take place. I do not wish to underestimate the value of physical examination, and I would perhaps place more value on palpation and percussion than on auscultation—the position of the trachea and apex beat, the stony dullness of fluid, the hyper-resonance of a pneumothorax give information of the highest diagnostic value. Moreover, I believe that a physician expert in physical examination with adequate time at his disposal and in a suitable environment will detect many tuberculous lesions even at an early stage of development, though even he will not be able without radiography accurately to estimate the extent of the disease, but the average physician who sees a large number of patients during one session in surroundings often not free from traffic and other noises cannot possibly rely on physical signs. Moreover, there is no doubt that even extensive active tuberculous lesions are found unassociated with any abnormal physical signs, and that such signs may be present though the disease is no longer active. Every patient who finds his way to a dispensary should therefore have his chest X-rayed, though a physical examination will precede this and will enable the diagnosis of other or associated chest conditions, such as bronchitis, emphysema, mitral disease, etc. An X-ray film is not diagnostic, of course, and it must be correlated with the history and other clinical findings. By radiography of the chest, it should be pointed out, is meant much more than the taking of an indifferent antero-poste-

rior photograph. The film must be of good quality, and one or more of several ancillary radiographic methods may be needed in some cases: screening for examining the movements of the diaphragm or to assist in the diagnosis of shadows suspected of being due to pleural collections, lateral or oblique films to detect isolated lesions situated behind the cardiac shadow or to assist in the diagnosis of interlobar effusions, heavily over-exposed films to confirm the presence of cavitation in dense shadows, tomography to detect and accurately localise cavities, and bronchography to assist in the differential diagnosis. Kymography, by which a record of the movements of the various thoracic viscera is obtained, is a method that promises further help in the future. These ancillary methods are essential because the tuberculosis officer should not be concerned merely with diagnosing the presence of phthisis, he should be able to estimate the extent and type of lesion so as to be in a position to decide on the initial form of treatment required.

The question arises as to who should carry out the radiological examination and who should interpret the films obtained. In this country these functions are still commonly not carried out by the tuberculosis officer. Abroad—in France, Holland, Germany and the Scandinavian countries—on the other hand, the tuberculosis physician is almost invariably his own radiologist. I know from personal experience and that of others that much bad work results from reliance on interpretation of skiagrams by radiologists with little experience of chest diseases who write their reports without any knowledge of the clinical details of the case. The following report which I quote verbatim may be given as an example—"Left apex rather suspicious, but hidden by bones; rest normal. If any disease present at left apex, it would be inactive." Modern tendencies in regard to radiography in tuberculosis work may be summarised as follows: (a) Every patient attending a dispensary should be X-rayed. (b) Reliance must not always be placed on a single antero-posterior film. (c) The dispensary should have a fully equipped X-ray unit. (d) The tuberculosis officer should be familiar with radiological technique and should himself interpret the films. But (e) an expert chest radiologist should be available for consultation in difficult cases.

Bacteriological Methods.—The use of concentration methods for the detection of tubercle bacilli have been known for many years but they do not appear to be often practised. The methods of culture of the sputum

and of culture and animal inoculation of the gastric contents in those who do not expectorate are of comparatively recent date. Since the finding of bacilli is our only single pathognomonic criterion of active tuberculosis, methods which increase appreciably the percentage of positives are worthy of attention. I would remind you of the figures of Dr. Peter Edwards: In 100 patients in whom tubercle bacilli had previously been demonstrated but who had been negative by direct smears on three consecutive occasions, the gasolene concentration method gave 37 positives and the culture method 49; in 100 patients in whom tubercle bacilli had never been demonstrated (T. B.—and observation cases) and who had been examined by direct smears on at least three occasions, the concentration method gave nine positives and the culture method 14. In regard to gastric contents, in a paper now in press I have shown with Dr. Hounslow that in no less than 35 per cent. of patients who had no sputum or only traces of sputum in which no tubercle bacilli could be shown by other methods including culture, tubercle bacilli were isolated from the gastric lavage by culture or animal inoculation. Neither the culture nor the gastric lavage methods need be confined to in-patients. Both can be carried out at a dispensary when shortage of observation beds or the refusal of the patient to leave home compels completion of the diagnosis at the dispensary. Culture will provide an answer in two to four weeks, and gastric lavage in two to six weeks. At present our voluminous statistics so laboriously collected on sputum negative and positive cases still depend not rarely on the making of a single smear and a glance or two down the microscope.

Of other pathological investigations, the only one of value in the out-patient clinic is the sedimentation rate. While a normal figure by no means excludes the presence of active tuberculosis, a raised figure supports a diagnosis of active disease provided other common causes for it can be excluded.

The tuberculin test should, however, be mentioned here. It is indispensable in dealing with children, and only by its use can rational diagnosis and contact examination of children be carried out. In progressive clinics all children have a complete tuberculin test carried out, and only if this is positive are they X-rayed. The Mantoux test is the only satisfactory tuberculin test, and it should be carried out with a 1 in 100 dilution if necessary. The new product PPD allows completion of the test in two doses. The routine performance

FOREIGN MEDICAL NEWS

Our London Letter

(From Our Own Correspondent)

STATE MEDICAL SERVICE IN ENGLAND

Dr. James Cork writing in the *British Medical Journal Supplement* (May 20, 1939) is of opinion that should the war come the disorganisation would be such that a State Medical Service would come soon and remain. He thinks that the schemes so far suggested for Medical Service for the Nation will founder owing to the following causes:

- (1) The innate disloyalty of doctors to each other prevents betterment of the profession as a whole.
- (2) Economics will dictate the form of medical service for the nation, and as the national economy is stronger than the medical economy we shall need to do what we are told.
- (3) In all the schemes put forward—including extension of national health insurance to dependents—there is more or less limitation of numbers. Free choice of doctor and limitation of numbers are mutually incompatible. Free choice is as dead as the dodo.
- (4) The younger generation on whom our future depends are being trained from birth onwards to look to officialdom for medical aid.
- (5) All political parties are determined on a State Medical Service.
- (6) The public health services have now invaded the personal field and will not rest till they possess it all.
- (7) We cannot fight a rate-aided service.

CLINICAL SENSE AND CLINICAL SCIENCE

Prof. Ryle of the Cambridge University, while addressing the Medical Society of London, deplores the regrettable divorce of clinical sense from the academical training given to medical students and the rigid separation of clinical science from clinical sense. He does not agree with the attitude of scientists that clinical sense is a mere lucky guess-work, nor with these people who believe that it is special faculty of some gifted people. Rather he defines clinical sense as the resultant of experience and observation, and that the development of clinical sense requires as much judgment

of a complete Mantoux test would save many children months of institutional treatment for alleged tuberculous cervical adenitis or peritonsillitis, or for radiological shadows due to non-tuberculous infections.

The modern tendency is therefore to provide at least a small pathological laboratory with a trained technician. The value of this in diagnosis is considerable and the cost is fully repaid in the relief of pressure on beds.

and discipline, study and experience as any scientific subject may demand from a research worker. Clinical sense, he said, may manifest itself in diagnosis, prognosis and treatment. He deplores that in the field of treatment good clinical sense is rarer to-day than in diagnosis and instances the vaccine craze, the proprietary endocrine allurements and the blandishments of advertising chemists. There is something wrong with medical education which while multiplying diagnostic aids fails to cultivate the faculty of perception from which judgment is derived. The fault, he said, is with the teachers and not with the students, and the inevitable sub-divisions of medicine into specialities have broken the continuity of teaching. Consequently, he concluded, we see the anomaly of a man with first class honours in natural sciences being a poor observer at the bedside.

Our American Letter

(From Our Own Correspondent)

FRESH BLOOD VERSUS BLOOD BANK TRANSFUSIONS

The Cook County Hospital in Chicago has inaugurated a blood bank for the purpose of supplying preserved blood from living healthy volunteer donors. Other institutions have taken up the idea. The term blood bank signifies the preserving of citrated blood to be used for future blood transfusions. The blood is drawn into 500 cc. chilled sterile flasks which contain 70 cc. of 215 per cent sodium citrate solution. At the same time, 5 cc. of blood is collected into two test tubes for typing and for a Wassermann test. The blood is then taken to the laboratory, properly labelled, typed, tested for sterility and filed away in the refrigerator at a constant temperature of between 4° and 6° centigrade. Before using, the blood is cross-matched against the patient's blood.

Perry J. Manheims, New York, however, believes that the use of such a blood bank offers too many objections to be substituted for the routine grouping of volunteer or professional blood donors, at the time of or previous to a transfusion, and the administration of their fresh unaltered blood. He believes that it is possible to meet all the conditions of the citrated preserved blood of the blood bank with fresh whole blood, doing the occasional citrate transfusion with fresh citrated blood when necessary. Asking patients or prospective patients to donate their blood, perhaps to strangers, to which they might object, or taking blood from patients who might very well need that extra amount of blood at a later date, the trouble and additional labour and expense of collecting, labelling and preserving numerous flasks of blood and determining when to discard the blood as too old or perhaps partly hemolyzed, offers according to Manheims too few advantages and too many disadvantages to be recommended as the method of choice over the use of fresh whole blood.

The blood bank method, according to him, entails extra expense to the hospital, and complicates a moderately simple procedure. Fantus says that citrated blood should not be kept more than ten days, because of reactions in some cases due to hemolysis and that an average turn over of six transfusions a day is necessary for the successful operation of a blood bank.

THE MOST DANGEROUS MONTH OF THE YEAR

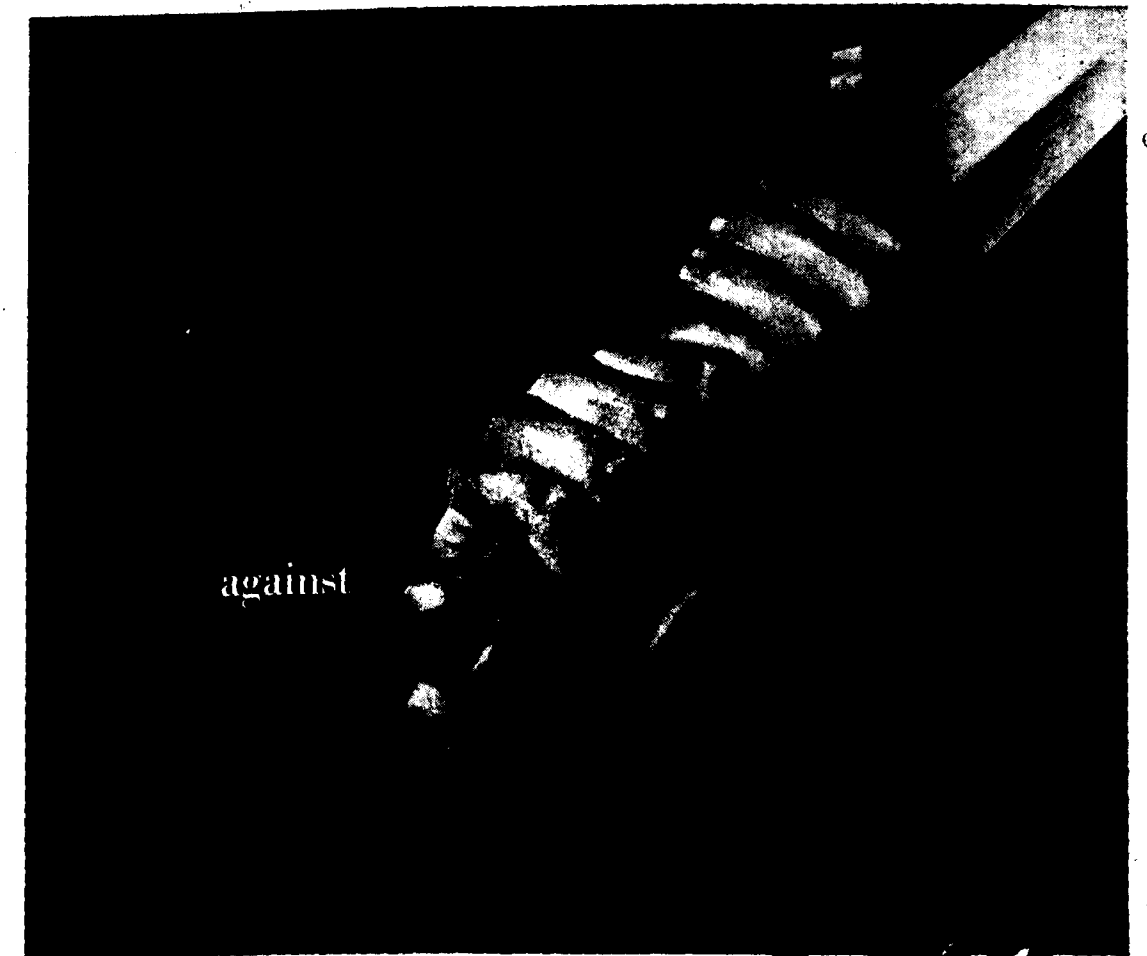
July has the maximum not only for accidents generally, but also for deaths from drowning, falls, rail-road transportation accidents, from poison, from agricultural machinery, and from lightning. According to a survey of the Metropolitan Life Insurance Company, 381 persons were killed daily, on the average, throughout July, in accidents of one kind or another. This is 78 deaths daily more than in August, the second highest month of the year, and 133 daily more than in March, which has the minimum of all months.

Deaths due to electricity (other than lightning) are at maximum in August, July coming second. The high figure for the summer months is probably related to the peak in electrical construction and repair work at that season. The fact that the body is wet with perspiration and hence more susceptible to electric discharge has also been suggested as a contributory factor. It may be surprising to some to find that accidental falls are at the peak in July and not in one of the winter months, when ice and snow cause a great many fatal falls especially among the aged. Lightning, although an unimportant cause of death on an annual basis, becomes a notable factor in the July accident record, accounting for 140 deaths, or on an average of about five per day. In July alone about 1,600 persons drown each year, or on an average of 52 persons per day, whereas the average for the year is 20 per day.

MORTALITY AND LONGEVITY OF DIABETICS

The average length of life of diabetics has definitely increased in recent decades, particularly since the discovery of insulin. E. P. Joslin, L. I. Dublin, and H. H. Marks have constructed life tables for diabetic patients treated at the Baker Clinic, Boston, Mass., during 1897 to 1928 and traced to 1929. These tabulations have been made in the same manner as survivorship experiences in insurance work. Only the period under observation was included, i.e., from first consultation or hospital discharge. These tables give a definite measure of the improvement in the treatment of diabetes.

The outstanding facts are: 1. There has been a continuous decline in the death rate of diabetics. 2. The death rate at all ages in the latter part of the period surveyed, 1926 to 1929, was 75% below that of the first part, 1897 to 1913. 3. The gains have been greatest in young diabetics. 4. The decline in mortality was most rapid after insulin came into use. 5. Large increase in the expectation of life have occurred. At age 10, the increase between 1897 to 1913 and 1926 to 1929 is



against

Gonorrhea Uleron'

the chemotherapeutic par excellence
for peroral administration.

Original Packings: Tube of 24 Tablets of 0.5g. (gr. 7½)
Bottle of 250 Tablets of 0.5g. (gr. 7½)

"It has been extremely well tolerated and has shown no immediate toxic effects . . . employed judiciously it may prove to be the non-toxic substitute for sulphanilamide which have been looking for . . ." (B.M.J., May 28, 1938, p. 1151.)



"Bayer"
Leverkusen

Importers: BAYER REMEDIES LTD. P. B. 17 P. B. 2122 P. B. 142 P. B. 76 P. B. 36
P. B. 642 Bombay Bombay Calcutta Lahore Madras Rangoon

EFFECTIVE TREATMENT OF SECONDARY ANAEMIA WITH



HEPATO GLOBINE

CONTAINING HORSE MUSCULAR PLASMA
EXTRACT OF LIVER AND OF HÆMOGLOBINE

Dose: 2-3
Table spoonfuls
Daily
before Meals

Agents: RAPTAPOS, BRETT & CO. LTD., BOMBAY & CALCUTTA.

estimated at about 30 years. The increase is progressively less with advancing age. 6. The death rate of diabetics are still much in excess of those for the general population.

Male and female diabetics have approximately the same death rate. Prior to the discovery of insulin there was a moderate excess mortality among females, but with the discovery of insulin there was a sharp but temporary reversal in the relative mortality of the sexes. In the second part of the Banting era, however, the death rates at all ages combined were nearly identical. There were, however, distinct variations by age. In most periods the death rates of female patients under 40 have been generally higher than those for males. On the other hand, between 40 and 60 years of age, the death rates of male patients have been higher. At ages over 60 the rates have been moderately close.

MEDICINE AT SAN FRANCISCO WORLD'S FAIR

Latest advancements in medical science, new weapons in the war on disease, and most recent methods of treatment, are demonstrated in the many exhibits in the Hall of Science at the 1939 Golden Gate International Exposition on San Francisco Bay. The "keynote" exhibit of the medical section, sponsored by the American Medical Association, includes material on four important fields of health work: history of medicine and heroes of medicine in U. S. A., animated displays of various subjects involved in modern medicine, contributions of medicine to public health, important combinations of medicine and physics.

Our German Letter

(From Our Own Correspondent)

BLOOD TEST AND SPREAD OF SYPHILIS

R. Mueller, of the Hygienic Institute University of Cologne, made extended blood tests by the Chediak modification of the Meinicke test. 125,000 persons were examined in this way in the course of ten months and about 0.8 per cent of syphilitics were discovered the greater part of whom had had no treatment whatever. Taking these results as the basis for the whole population of the German Reich, it can be calculated that a general thorough examination of the German people would discover approximately 600,000 syphilitic persons who are entirely unknown as disease-carriers so far. According to R. Mueller, the expenses of such a thorough examination are not so high that they would be an impediment to having the entire population in Germany examined.

ARTHROSCOPY

A new method of examination of the knee-joint was introduced into the diagnosis of joint diseases by Ernest Vaubel, Medicine, University Clinic Frankfurt on Main. It is described in a booklet: Arthroscopy (Endoscopy of Knee-Joint), Dresden. Th. Steinkopff. The goal of the new method is the direct inspection of the knee cavity by the arthros-

cope which is introduced like similar instruments (cystoscope, laparoscope, etc.) through a trocar. The method claims to determine pathological changes of the joint-forming parts; the examination may be repeated to follow the progress of the joint disease.

Puncture of the knee-joint can be performed at different points. The simplest method is puncture through the region $\frac{1}{2}$ to 1 cm. above the lateral edge of the patella. A second way leads from the lower third or from just below the patella laterally or medially into the joint. Indications for arthroscopy are considered in many chronic joint diseases, further more traumatic joint disorders and pathological conditions of cartilages and ligaments, loose bodies, hypertrophied synovial fringes, gout etc. There is no danger in examining acute inflammatory processes or rheumatic knee joints while all septic joint diseases must be excluded from the new method. It permits the examination of knees suspected of tuberculosis where no bacilli have been found. If strictest antiseptic precaution has been taken, there is practically no danger of an infection or any other harm to the joint to be examined. Local anaesthesia especially of the fibrous capsule, makes the examination painless; generally no anaesthesia of the joint cavity is needed, only highly inflamed joints are irrigated with a solution of 1:200 novocaine. In support of the endoscopic diagnosis through arthroscopy the endoarthral explanatory excision may be performed but this part of the method has not yet been technically perfected.

MEDICAL PROBLEMS OF FLYING

Both the peripheral and the central circulation are greatly affected by flying. Ernest Gillert, of Berlin, has investigated the problem whether persons with a damaged circulation are endangered by flying in high altitudes. The organs of the circulation are affected by two factors in flying: altitude and speed. The sensibility of the heart for lack of oxygen depends on the intactness of its nervous system. Consequently sick persons in high altitudes are more jeopardized. The greater the changes are in the heart, the more serious the disease of the blood vessels is. The authors' conclusion is, however, that the circulation is no more influenced by the flight in a common airplane at normal weather and in customary altitude than by an ocean trip on a medium size steamship. But as increased speed is needed some times from technical reasons of flying, the use of airplanes by arteriosclerotics, luetics, persons with large varicose veins, hemorrhoids etc., is not advisable without restriction.

Prof. Strughold, instructor in air medicine, told the Berlin Medical Society that the first manifestation of flight in the substratosphere is a weakening of the reflexes. In parachute jumping from great heights a knowledge of the time reserve is necessary. Otherwise the parachute may be unfolded at too great an altitude and the jumper

(Continued at foot of next page)



**DYSENTERY
SPRUE
COLITIS
DIARRHOEA**

THE PHYSIOLOGICAL EFFECTS OF DYSULIN

DYSULIN forms a glutinous mucilaginous coating which adheres to the intestinal tract specially where there are inflammations or lesions. This coating is not only extremely soothing but has toxin absorbent properties, thereby eliminating increase of poison in the system. The ingredients which are germicidal both to Amœbæ and Bacillæ are held by this glutinous coating in close contact with the seat of the disease and thus get full play for their curative action. Finally, whilst the waste products of the body are being evacuated, Dysulin by both its agglutinative and its curative properties promotes the production of formed stools. Dysulin is neither costive nor aperient and thus can never give rise either to constipation or to diarrhoea.

A TRIAL WILL CONVINCE YOU

Powders ... Rs. 1-12 per bottle
Capsules 2-8 ..

Write to Department "C"

Dysulin Pharmaceutical Co.,
12-A, Wood Street, - - CALCUTTA

**RENOWNED PRODUCTS OF
THE KUSHMOL PHARMACY**
E-23, Victoria Park St., Benares

"Kagta Silver Pills"

(Female)

(An Ideal Uterine Tonic)

Radical Cure for Leucorrhœa and Menorrhagia.
No local treatment necessary. The inconvenience of douching done away with.
Result extremely pleasing to patients and physicians alike.

Bottle of 60 Pills ... Rs. 3

Dr. Khurshaid's "KUSHMOL"

(The Asthmatic's Delight)

A weapon of precision. Effective from the very first dose in 98 per cent of cases.

Superior to all the drugs yet known to physicians.
ARM YOURSELF WITH 'KUSHMOL' AND DEFEAT ASTHMA

Life-long chronic cases are

CURED IN DAYS

Bottles of 80 grs. ... Rs. 3-4-0
Postage extra in each case

Madras Stockists: **SRI KRISHNA BROS., G.T.**
DADHA & CO., P.O. Box No. 541
APPAN & CO.

JULY, 1939]

INDIAN MEDICAL NEWS

253

LETTERS TO THE EDITOR

Infantile Morgagnion Cataract treated by Trachomine

With reference to an article—secondary cataract treated by medicine, by Dr. Himmat Singh, L. R. C. P., M. R. C. S., D. O. M. S. (London). Ophthalmic Surgeon, Bikaner State, published in the Nov. 1937 issue of the *Journal*, I beg to send the following, based on my close personal observations, with the hope that you will please publish it in your paper for the information of Dr. Himmat Singh, and for the benefit of the profession and the public at large.

After reading the article in your Nov. '37. issue, I was ever on the look out for an infantile morgagnion cataract, and in February '38, I came across a child aged about 8 years, who was developing cataracts in both the eyes. The nuclei of both the lenses had become somewhat cataractous, while the peripheral portion was clear. The sight in both eyes was 6/12 partial. The fundus details were somewhat dimly seen through the centre. I advised the patient's relatives to use Trachomine, (prepared by The Trachomine Pharmacy, 3097, Pipal Mandi, Agra), in the right eye only and to leave the left eye alone. This was so advised in order to compare and note the difference in sight in the two eyes, as such cases present themselves very seldom. The patient was advised to be brought back two months later.

When the patient was brought to me the second time, he could read 6/12 easily with his right eye while with the left eye he could read only 6/18 with some difficulty. I again advised continuous use of Trachomine, and another examination after two months. This time no appreciable difference was noted in the fundus details.

Condition on 3rd visit:—

R. V. 6/9. with difficulty.

L. V. 6/24.

Ophthalmoscope showed a little clearing up in right eye and the fundus details could be hazily seen through the centre also. In the left eye no fundus details could be observed through the centre, while at the periphery also the dimness had increased.

Condition on 4th visit:—

R. V. 6/9. clear. Fundus details more clearly seen.

L. V. 6/36. with difficulty. Fundus details not visible through the centre, dimly seen at the periphery.

In this way the patient kept on gradually gaining sight in right eye and loosing in the left eye.

Last time I examined the patient again about three weeks ago and his R. V. was 6/6. with some difficulty and L. V. was fingers at about 3'5 metres only. Cataract was far advanced and no fundus examination was possible to give any appreciable idea.

To me this case has served as a test case and I feel sure that these observations of mine will

undoubtedly strains of superior plantation performance and containing a much higher percentage of quinine than the commercial mixed crop. By suitable methods these could be isolated and multiplied. Further experimental work is also required on the improvement of cultivation methods and in the reduction of the cost of extraction and distribution of the quinine.

BOMBAY BLOOD TRANSFUSION SERVICE

Hospitals and recognised nursing homes in Bombay will now have the use of voluntary and paid donors from the Bombay Blood Transfusion Service organised by the Toc-H.

The service will be free to all hospital patients who are unable to meet the cost of a transfusion. If they can pay, the normal cost will be Rs. 50 per transfusion. This cost may be increased or decreased in accordance with the means of the patient at the discretion of the hospital bursar or treasurer.

The donors will be drawn from all sections of the community. A blood donor of European stock may be called upon to give blood to a Hindu, Muslim or Parsi patient if their blood corpuscles are of the same category. There are six categories only and these occur indiscriminately in all castes, races and creeds. Ordinarily blood donors should not be more than 35 years of age. The donors will be classified as paid and voluntary according to their wishes.

Every paid or voluntary donor has to be examined for physical fitness and if he is passed fit, a note is kept of the blood category to which he belongs and he is liable to be called upon to give blood once in two or three months only, if a patient of the same category required it.

Paid donors will be entitled to a normal fee of Rs. 20 per transfusion. In addition to the fee, if any, to which a donor will be entitled, the service will pay the donor's out-of-pocket expenses to and from the hospital or nursing home.

Up to the present, about nineteen volunteers from the European community have come forward.

BOMBAY'S PART IN ANTI-TUBERCULOSIS CAMPAIGN

With his Excellency the Governor of Bombay as the first Patron and the Prime Minister as the President, the Bombay Province Anti-Tuberculosis Association has been formed for the purposes of carrying out the objects of the King-Emperor's Anti-Tuberculosis Fund in this Presidency.

Bombay has collected about seven lakhs of rupees for the fund. According to the recommendations of the Executive Committee, the Association, at its meeting held yesterday, decided to endow two lakhs of rupees as a permanent fund to be vested in the trustees, to grant Rs. two lakhs for the Bel Air Sanatorium, Rs. 60,000 for Bombay clinics and Rs. 98,190 to be allotted to the districts.

The meeting adopted the memorandum and rules and regulations of the new association and authorised the Joint Honorary Secretaries to take steps to get it registered.

THE MOST RECENT ADVANCE IN THE TREATMENT OF
Pyelitis and other Urinary Infections

UROMALINE

*Ammonium Mandelate in a Palatable
Solution B. R. I.*

Prepared for the first time in India

One fluid drachm or one tea-spoonful
contains an equivalent of one
gramme of Mandelic Acid

*Pamphlets on Uromaline are sent free,
on application to:*

**THE BRAHMACHARI RESEARCH
INSTITUTE**

82-3, Cornwallis Street - CALCUTTA

MODERN TREATMENT FOR

GRANULAR LIDS AND CORNEAL OPACITIES

Apply the following:

GRANULAR LIDS:

1. Argento-Cuprum, and
2. Bichloride of Mercury Ointments.

CORNEAL OPACITIES:

Anti-Leucoma Ointment.

Eye Ointments are kept in collapsible tin tubes and tightly packed, costing each Re. 1/- only. Complete instructions enclosed.

Eye Ointments certified and exhibited at the All-India Ophthalmological Conference, Bombay.

Available At:

APPAN & CO, 286, China Bazaar Road, Madras.

J. TIRATH & CO., 4, Bander Road, Karachi.

C. V. SHAH & CO., 5, Devakaran, Manalons, Princess St., Bombay.

or

The South Indian Eye Laboratory,
Chodavaram, (S. India.)

carry Dr. Himmat Singh also a step further in his clinical observations.

As regards other eye diseases also, in which Trachomine is indicated, I fully appreciate and endorse the views expressed by the Ophthalmic Surgeon, Bikaner State, Bikaner.

R. D. Mathur, M. B., B. S.,
105 'E' Tagore Road, New Delhi.

Wasp Bite

I would be grateful to you if you kindly publish the following case in your esteemed *Journal* for the information of its readers and with a view to find out an effective line of treatment.

About 5 days back, a 45 years' old lady of a highly respectable family with normal health had a wasp bite on the right armpit. Just five minutes after the bite, she got sneezing, watering from the eyes, severe itching, urticaria, bronchitis and difficulty in breathing with palpitation of heart. She was restless for the whole day and experienced symptoms of suffocation. After the lapse of four days the symptoms began to abate slowly, but her respiration was not normal even up to the end of the 5th day. Adrenaline injection did her a little good and relieved her symptoms to a certain extent but temporarily. I request the readers of the *Indian Medical Journal* to let the undersigned know if anyone of them has met with a similar case in practice, and if so suggest effective treatment to check the development of untoward symptoms just after the bite.

Manohar Lal Kapur, L.S.M.F.,
K. E. M. Hospital, Karnal.

Sirop THIO-CALCIN

(Plain)

A Super Calcium Tonic & Cough Specific
containing:

Pot. Sulpho Guaiacolate	Grs. 20
Assimilable Calcium	" 30
Glycerine, Orange Juice, Syrup etc.	Oz. 1

ALSO WITH

Vitamins A & D — — — Ephedrine

E. M. H.
(Ethyl Morphine Hydrochlor)

When prescribing Sirop Thio-Calcin for Diabetics, please specify Sirop Thio-Calcin (Diabetes) to ensure a sugar-free preparation.

AVAILABLE AT ALL CHEMISTS AND STORES
For literature and particulars please send your professional card to:

THIO-CALCIN CO.,

Mylapore,

::

MADRAS

Madras Agents.— Dadha & Co., P.O. Box No. 541.
Bombay " — P.M. Zaveri & Co., Princess St.
Calcutta " — do 2, Portuguese Church

BEWARE OF



IMITATIONS

DRUG NOTES

Burroughs Wellcome & Co. Exhibit Irish Medical Exhibition, 1939

Many important therapeutic discoveries were represented in the Burroughs Wellcome & Co. exhibit, affording evidence of the valuable work accomplished by the House in making the results of recent research available to the general practitioner.

Prominence was given to preparations of Stilboestrol, the new synthetic oestrogen, which faithfully produces the action of the natural hormone.

The bacteriostatic action of Sulphonamide-P (Sulphanilamide) was demonstrated by means of a screen carrying photomicrographs, which attracted much attention.

Considerable interest was shown in 'Nicamide', a 25 per cent solution of nicotinic acid diethylamide, which has been found to be a valuable respiratory and circulatory stimulant. Among the indications for its use are pulmonary and circulatory complications arising post-operatively or during acute infections; coronary thrombosis; barbiturate poisoning; and asphyxia neonatorum. 'Nicamide' is issued for oral administration in bottle of two sizes, the smaller being accompanied by a pipette for measuring the dose. 'Hypoloid' 'Nicamide' which is also available is suitable for either intravenous or intramuscular injection.

The mandelic acid treatment of urinary infections has been considerably simplified by the introduction of 'Wellcome' Calcium Mandelate Compound, which has been shown to be as effective therapeutically as the soluble mandelates formerly in use, and at the same time free from many of their disadvantages. 'Wellcome' Calcium Mandelate Compound is a pleasantly-flavoured powder which may be taken in water or milk.

A wide range of serological products, prepared at The Wellcome Physiological Research Laboratories, was on view.

Another product of The Wellcome Physiological Research Laboratories which aroused considerable interest was 'Stypven' Russell Viper Venom. This product provides a reliable and effective haemostatic in convenient form, and is widely used in dental and minor surgery, as well as in the treatment of external wounds in haemophiles.

Vitamin products, both natural and concentrated, were well represented on the stand. They included 'Kepler' Cod Liver Oil with Malt Extract, a pleasant and nutritious medium for the administration of vitamins A and D; 'Ryzamin-B' Rice Polishing Concentrate, a palatable product with a rich content of vitamin B₁; 'Tabloid' Carotene; 'Tabloid' and 'Hypoloid' Vitamin B₁₂ Hydrochloride; 'Tabloid' Ascorbic Acid; 'Tabloid' Calciferol and 'Tabloid' Calcium Gluconate with Calciferol.

Glucose-D. Announcement of Price Reduction.

Glucose therapy is now made more widely available by the 20% reduction recently announced by Glaxo Laboratories Ltd. This welcome step now makes it possible to prescribe the treatment for the patient previously debarred by limited income.

It is particularly indicated in ketosis, anorexia, as a prophylactic against overstrain and fatigue and as a pre-operative routine. The addition of Calcium glycerophosphates & ostelin Vitamin is of definite advantage in glucose therapy.

Syrup Thio-Calcin

Thio-Calcin & Co., Madras, announce that Syrup Thio-Calcin is available in following combinations:

- Syrup Thio-Calcin-plain
- " " with vitamins
- " " Ephedrine
- " " Ethyl-morphine hydrochlor
- " " For Diabetics.

They may be prescribed according to indications while treating a case of pulmonary affection due to various causes, chronic or acute.

Alembic's Organo-Therapeutic Products

Alembic Chemical Works desire to draw the attention of our readers that they have recently taken up the preparation and manufacture of organo-therapeutic products of known clinical value. The purity and efficacy of these products can be relied upon by the profession, since they bear the seal of guarantee by the Alembic Research Laboratory which is fully equipped and efficiently manned to meet the exacting tests of the B. P., 1932, or the accepted International Tests laid down by the League of Nations. Uptill now the House of Alembic have been able to put into the market the following standardised preparations whose clinical value has been definitely assessed and which are therefore in demand by the practitioners in this country:—

- (1) Thyroid Gland Tablets
- (2) Ovarian Tablets
- (3) Orchic Gland Tablets
- (4) Alcaizium Tablets with Parathyroid.

(1) Alembic's Thyroid Gland Tablets strictly conform to the latest B. P. standard and are put up in $\frac{1}{2}$ gr., $\frac{1}{4}$ gr. and 1 gr. doses in bottles of 25 and 50. Each tablet contains 0.1% of iodine in combination with thyroxine, the active principle of the thyroid. The indications for thyroid therapy are well-known to the profession: hypothyroidism as illustrated in infantile cretinism and adult myxoedema; and relative thyroid deficiency or dysfunction as evidenced in various metabolic disorders, obesity, menopausal arthritis, arteriosclerosis, ichthyosis and psoriasis. Owing to the close relationship of the thyroid to the anterior pituitary which is now believed to control the gonadal syndrome, thyroid extract has been suggested as a necessary accessory in the treatment of delayed puberty, amenorrhoea and even sterility.

(2) Alembic's Ovarian Tablets represent the total hormones of the ovary, and are therefore indicated in conditions of general ovarian hormone deficiency. One grain of Alembic Ovarian Tablet approximately equals six grains of fresh gland substance, and is put up in 2 gr. and 5 gr. doses of desiccated gland just to facilitate proper therapeutic dose in accordance with clinical indications. Ovarian hormone therapy has been used in a variety of ovarian dysfunctions such as amenorrhoea, dysmenorrhoea and menopause; in total or relative absence of ovarian hormones as in some cases of sterility, delayed menstruation and mal-development of female gonads.

(3) Alembic's Orchic Gland Tablets represent the whole hormones of the male gonads, particularly the androgens.

EXTRACTS

Minor Types of Splenomegaly in India. Dey and Tribedi (*I. M. G. Jan 39*) discuss the pathogenesis of minor types of splenomegalies. They maintain that the essential underlying basis of the splenic enlargement is a work-hypertrophy to start with, modified by such changes as may intervene from time to time under varying circumstances. This hypothesis excludes such enlargements of the spleen as is due to lymphosarcoma, lymphadenoma, leukemia and cystic formation. The work-hypertrophy lasts only for a short time and as soon as the infective process is over the organ gradually resumes its normal size and structure. If on the other hand the above factors continue to operate the resulting pathological alterations will *pari passu* not only to take place in increasing intensity but will become more or less of a permanent nature. In such chronic conditions, other factors are superimposed sooner or later and these no doubt are responsible for additional pathological alterations. These additional factors are: cellular accumulation, increased formation of reticulum, marked thickening of the capsule and the formation of numerous trabeculae. As a result of these changes, the rhythmic contractions of the organ become very feeble and permanently turgid. The last but not the least important condition which may supervene is a diffuse fibrosis of the entire parenchyma producing a very firm and tough spleen. Still later on, the organ may atrophy and its capsule thrown into wrinkles. These are some of the essential pathological features of splenomegaly due to malaria, kala-azar and Bengal splenomegaly. The last entity is a variety of splenomegaly which is common, particularly in Bengal. It is characterised by a very long course, usually with little febrile disturbance except at the beginning. Both the liver and the spleen undergo enormous enlargement. Most of the patients die of some intercurrent disease (or infection) but a certain number of them develop a type of cirrhosis of the liver with terminal ascites. At this stage, these cases resemble the clinical picture of Banti's syndrome. Laboratory examinations fail to reveal the presence of any infective agent of a protozoal or bacterial nature.

Recent researches have revealed that the androgenic hormones play a significant role in the development of male sexual characteristics. Since analogous androgenic hormones are also excreted in female urine, androgenic hormone therapy has been utilised in the treatment of hirsutism (male characteristics in the female) with dramatic results. In cryptorchidism (late or imperfect descent of the testes) it has been recently found to be of great value. Apart from these two recent advances in male gonad therapy, the classic uses of Orchic Gland substance in Frolich's syndrome, male infantile genitalia and absence of secondary sex characteristics are doubtless known to the profession. It is also being used, as before, in various states of male asthenia due to relative deficiency of testicular secretions. Alembic's Orchic Tablets are put up in 2 and 5 grain doses for convenient administration.

(4) Alembic's Alcaizium Tablets with Parathyroid which by its judicious combination of calcium, sodium, phosphorous and parathyroid gland extract offer a suitable form of sensible calcium therapy in many pathological and physiological conditions where hypoglycemia is the villain of the piece. By the very nature of the combination Alembic's Alcaizium is easily and readily assimilated, and in cases where intensive treatment is adopted the optimum serum-calcium-phosphorous balance is quickly restored with corresponding clinical improvement. The indications for Alcaizium therapy will easily suggest themselves to the practitioner, and it may be used with much clinical benefit in almost all the disorders of calcium metabolism, howsoever brought about.

tyrosine was available to mobilize the iodine, a colloid type of goiter might result or there could be hypothyroidism without thyroid enlargement. Such disturbances could be brought about by intestinal disorders, dietary irregularities, scarcity of iodine in the diet or dysfunction of the tissues normally responsible for oxidizing excess of tyrosine. Either an excess or an abnormal side product of the amino acids would be found in the latter case. The early stages of hypothyroidism produce most bizarre symptoms and for that reason the condition is frequently overlooked. The clinical problem in hypothyroidism is provided by the vague symptoms so commonly attributed to some other organ or organs. One should suspect hypothyroidism when patients present dry skin with falling hair or baldness, apathy, general weakness and nervousness when fatigued, i. e., the fatigue coming on late in the afternoon or early evening. Somnolence and constipation are common complaints. It is at times necessary to treat a patient as hypothyroid, although the metabolism may be reduced only to the lower limits of normal, if one is clinically certain of the diagnosis. The lassitude is more marked on arising in the morning, improves during the middle of the day and returns in the late afternoon or evening. Abdominal pain (more than likely typical of peptic ulcer) is frequently associated with the period of lassitude, as are mental depression and irritability. The periodicity of the pain is lacking. Vomiting is occasionally encountered, usually when the patient is extremely tired. The hypothyroid patient rarely shows any improvement on an ulcer diet, in spite of ulcer symptoms. Obviously, not all patients suffering from the symptoms of ulcer have definite hypothyroidism. Yet some do, and if one is careful to evaluate the symptoms of hypothyroidism these cases can be diagnosed. A basal metabolism will usually verify the diagnosis. The treatment should consist of thyroxine (1 mg.) intravenously once a week, with 0.065 Gm. of thyroid extract orally twice or three times a day. It is important to continue the thyroxine administration intravenously at weekly intervals over a relatively long period: from eight to ten weeks. This may be governed by the clinical course of the patient. From the clinical results obtained from thyroxine administration it would seem that the therapeutic effects lie in the tyrosine radical of the molecule and not in the iodine content of thyroxine. After the patient is free from symptoms and his metabolic determination is normal, he must be made to realize that this state will not continue unless thyroid medication is taken at intervals over a period of months and perhaps years. Improvement is due to a general stimulation of the metabolic processes. Thyroxine tablets, 1/80 or 1/60 grain (0.0008 or 0.001 Gm.) twice a day may prove beneficial in patients who will not tolerate thyroid by mouth.

Repeated Tuberculin Tests.—Forbes (Guy's Hospital Reports, October 1938) studied, in normal subjects, the results of repeated intracutaneous tuberculin tests at intervals of one, two, three, four and six weeks. The results show the almost constant occurrence of super-sensitization after the first test when the test is repeated at an interval of less than three weeks. After this early increase, sensitivity tends to decline gradually under the influence of frequent repeated testing. The results, however, are by no means uniform and unexpected variations of sensitivity are common. It is emphasized that, because of the considerable variability of sensitivity in normal subjects as shown by repeated tuberculin tests, great caution must be observed in attempting to relate the results of such tests to the course of the disease in tuberculous patients.

THERAPEUTIC USE OF ENZYMES

Starchy foods such as rice, bread, potato, sooji, etc., all sweets, cane sugar, etc., belong to the group known as *Carbohydrates*. After digestion they are all converted into sugar or glucose. Starchy food is digested by a special type of enzyme known as *diastase* or *amylase* naturally present in the salivary, intestinal and pancreatic juices. Indigestion, acidity and the like ailments are mainly due to the faulty secretion of the ferments in quality and quantity. Bulk of the diet in this country is mainly composed of a large amount of carbohydrates which gradually exhaust the glands, responsible for these ferments and hamper digestion. Undigested food, retained long in the stomach, leads to heaviness, flatulence and heart burn. Delayed digestion, or indigestion leads to loss of appetite, defective nutrition and chronic dyspepsia. Indigested food gets fermented by the bacteria in the large bowel leading to gas formation (flatulence) and dyspepsia. For the remedy of these defects and particularly to help in the proper digestion of starchy food, the B. I. Research Laboratory has, after a good deal of work, been successful in preparing the potent enzyme preparation, **Bi-Diastase** of vegetable origin, capable of digesting more than 300 times its weight of starch. Each teaspoonful contains sufficient ferment to thoroughly digest about two ounces of starch in ten minutes. It has been found very useful in gastritis, indigestion, heart burn, flatulent dyspepsia etc.

While prescribing any enzyme preparation for therapeutic use one should not only know the specific use of an enzyme but should also see that it is administered in proper form to ensure its full activity. Enzymes are highly sensitive organic bodies and would retain their full therapeutic activity only under restricted conditions. Their activity depends upon condition of the elementary canal, the possible temperature and pH of the substance to work upon. The liquid **Bi-Diastase** retains its full activity in pH 4.5 to 5.5 at the ordinary body temperature. Cooling does not inactivate, but prolonged stay above 50°C. would inevitably destroy a part of its activity. The activity of an enzyme is profoundly affected by any marked change of the pH, hence it is desirable not to prescribe any enzyme preparation in a mixture, where there is risk of the presence of any of the inactivators (acids or alkalies materially affecting the pH and salts of heavy metals, oxidising agents, protein precipitants, nitrites, anilines, specific adsorbants and substrates, glucosides etc.) ADVT.

OVALTINE

IN NERVOUS STATES

A STUDY of the manifestations of nervous disorders, such as neurasthenia, hysteria and the various types of neurosis, shows that there is frequently an associated impairment of the general nutrition of the patient. Conversely, it is found in practice that measures taken to improve the nutrition of the patient are generally followed by a definite amelioration of the nervous state.

'OVALTINE', in addition to its well-known high nutritive value, exerts a distinct sedative effect on the nervous system, which renders its use of special benefit in the treatment of functional nervous states. Where insomnia is an additional feature, its use before retiring is conducive to restful sleep.

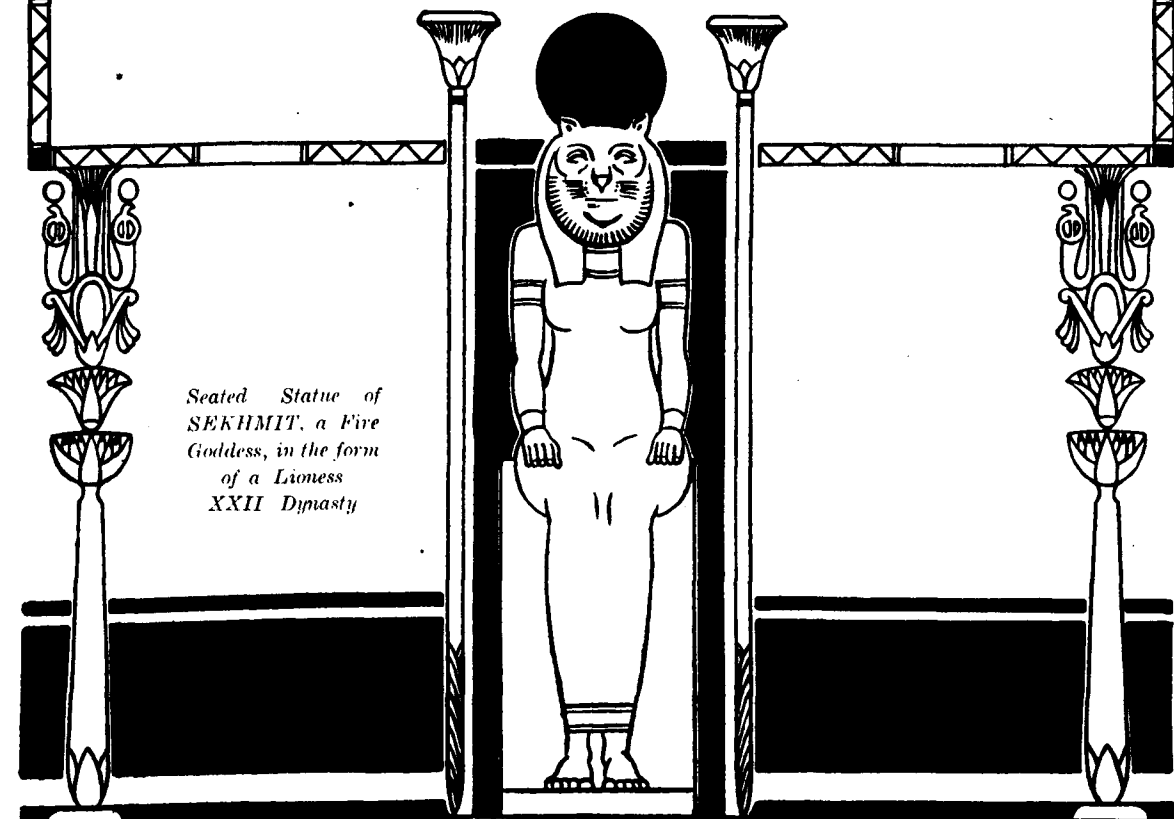
'OVALTINE' is a natural food tonic prepared from full-cream milk and malt extract. It is rich in the vitamins A, B (complex) and D and in readily assimilable calcium, phosphorus and iron. Its carbohydrate content is chiefly in the form of quickly-available maltose.

A liberal supply for clinical trial sent free on request

Indian Distributors: **JAMES WRIGHT Ltd.,**

85-A, Ripon Street, CALCUTTA.

Also at **BOMBAY, MADRAS and KARACHI.**



Seated Statue of
SEKHMIT, a Fire
Goddess, in the form
of a Lioness
XXII Dynasty

*The youngest infant
can digest*

GLAXO

The fat, carbohydrate and protein content of Glaxo has been modified to suit the infant's delicate digestion. The curd formed is soft and flocculent—ensuring that the food will be properly assimilated even by the most "difficult" baby.

Only good fresh milk is used in Glaxo—and the natural goodness of this milk is supplemented further by added vitamin D and iron.



Glaxo Laboratories Ltd., Greenford, Middlesex, England.
Representatives in India:
H. J. Foster & Co. Ltd., P.O. Boxes
202 Bombay; 2257 Calcutta; 108 Madras;
244 Lahore.



Prices Reduced from May 1, 1939.

A-O

A SPECIFIC VACCINE
made of
**TUBERCLE BACILLI
OF HUMAN TYPE**

There are three practical
uses to which

A-O

may be put

- (I) Prophylactic
- (II) Diagnostic and
- (III) Therapeutic

●
Literature on request
●

● Indicated in cases of latent tuberculosis, Pulmonary tuberculosis (*apical catarrh*), surgical and urogenital tuberculosis, ophthalmological tuberculosis, Dermal tuberculosis, pleurisy and peritonitis in convalescence, disorderly menstruation due to innate weakness, glandular affections, laryngeal and intestinal tuberculosis. Is also useful as a diagnosticum and as a prophylactic of tuberculosis. A-O is an agent which calls forth or increases in an organism through biological reaction of its own, the immunizing powers.

Prepared by

THE ARIMA INSTITUTE
Osaka, Japan.

Agents: **T. M. THAKORE & CO.,**
5, Sunkurama Chetty St.
G. T., MADRAS.

Head Office: 43, Churchgate Street, Fort,
Readymoney Mansions,
BOMBAY.

In Pediatrics

'Kalzana' is a most valuable preparation in pediatrics as it counteracts lack of calcium in food and imperfect calcium retention, which predispose a child to rickets, caries and many other illnesses associated with calcium deficiency. By the oxidation of the sodium-lactate in 'Kalzana' into sodium-carbonate, a normal degree of blood alkalinity is ensured, an essential condition for adequate calcium retention. Children like 'Kalzana' and it has no by-effects, even when given for a considerable time.

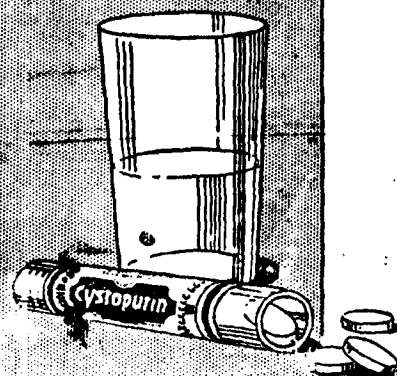
Arch. of Pediatrics,
Vol. XLV, No. 6, etc.

Kalzana

In Gynaecology

"Urinary infections and cystitis in their various phases present considerable difficulties to the gynaecologist. Cystopurin is a strong and effective urinary antiseptic in gynaecological conditions. Especially to be noted is its intensive disinfectant action in bacterial infections of the urinary tract, the rapid clarification of turbid urine and the prompt influence on the general condition. Cystopurin is easily soluble and non-irritant to the stomach, intestines and kidneys."

(Med. Week, Vol. 11, No. 24)



CYSTOPURIN

'All-purpose'
parenteral
liver therapy

PRODUCT OF THE
GLAXO LABORATORIES

Exatrope provides the erythrocyte-maturing principle at a consistently high level of effectiveness. Coupled with this are the important subsidiary B₂ factors common to liver and yeast (including the filtrate factor of Macrae) essential in treating the nutritional macrocytic anaemias of the tropics. Hence Exatrope is an all-purpose liver extract indicated in nutritional macrocytic anaemia; sprue; pernicious anaemia; macrocytic anaemia associated with coeliac disease; and as a general tonic in severe debility.

EXATROPE Liver Extract

In boxes of 3, 6 and 12 x 2 c.c. ampoules.

Glaxo Laboratories Ltd., Greenford, Middlesex, England. Repts. in India: H. J. Foster & Co., Ltd.
P. O. Box 202, Bombay. P. O. Box 2257, Calcutta. P. O. Box 108, Madras. P. O. Box 244, Lahore.

Stilboestrol (Glaxo)—the synthetic oestrogen which recent reports* have proved powerfully oestrogenic—faithfully duplicates the action of the natural substances, and is completely effective by mouth. An equally welcome feature is the economy of the therapy. The initial cost is low, and the small dosage makes possible an even greater saving. It has been estimated** that the cost of Stilboestrol therapy is about one-third that of treatment with naturally occurring oestrogens.

*Winterton and MacGregor,
B.M.J. 1939 I. 5.

**Pharmaceutical J. 1939.192, 31.

STILBOESTROL

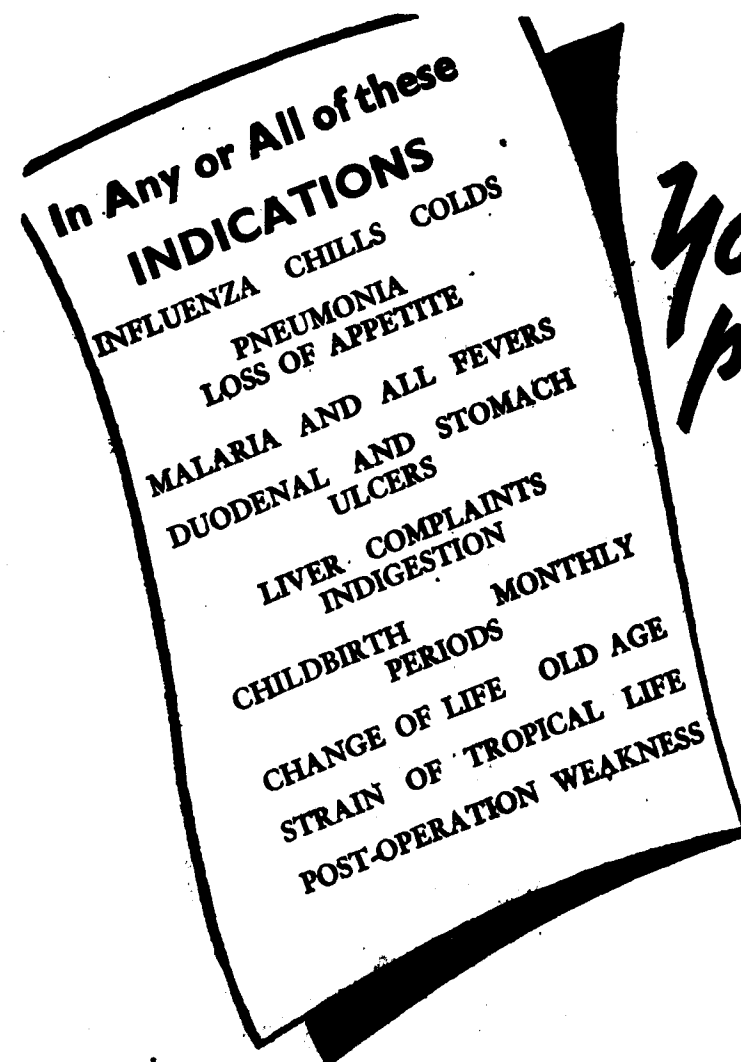
TABLETS (GLAXO)

Also available in ampoules.

convenient
economical
oestrogenic
therapy

PRODUCT OF THE
GLAXO LABORATORIES

Glaxo Laboratories Ltd., Greenford, Middlesex, England. Repts. in India: H. J. Foster & Co., Ltd.
P. O. Box 202, Bombay. P. O. Box 2257, Calcutta. P. O. Box 108, Madras. P. O. Box 244, Lahore.



You should prescribe

A tonic which not only strengthens, fortifies and stimulates, but which is readily acceptable by the most enfeebled digestion—able to absorb entirely the gastric juice released to digest it and leaving no free acid. In short, you should prescribe Brand's Essence of Chicken—the infallible stand-by of the medical profession for over 100 years.

Brand's Essence is a practical and efficient stimulant at all times when the minimum energy can be spared for digestive effort. The ease and speed with which Brand's is assimilated are

due to a complete absence of solids and irritants. Protein-sparing action takes place to a marked degree. The essence does not cause thirst and can be given at a moment's notice with a teaspoon.



BRAND'S
ESSENCE OF ENGLISH CHICKEN

Agents for India and Burma: GRAHAMS TRADING CO., (India) LTD. Calcutta, Bombay, Karachi, Rangoon.

Correcting Anaemic Tendencies

The increase of anaemic conditions found in general medical practice is probably due to the poverty of normal diets in blood-creating foods. In tropical countries especially, lack of iron in the soil, and the rapidity of fruit and vegetable growth both accentuate the tendency to haemoglobin deficiency. Early treatment is particularly urgent in climates where the prognosis of even slight anaemia is so unfavourable.

Hall's Wine is a valuable corrective to such conditions of anaemia, which, even in a mild state, are often the root of general weakness and debility. The thermal-energy value of Hall's Wine is definitely higher than non-medicated wines or spirits, and its tonic ingredients also assist metabolism, thus making its high iron content readily assimilable.

Nervous patients are mentally assisted by the mild stimulus which Hall's Wine exerts. Improved circulation also accompanies the increase in haemoglobin content of the blood.

For haemoglobin-deficiency, Hall's Wine may be prescribed with perfect confidence.

HALL'S WINE

Tonic Restorative



Distributors: J. HALLEY & CO., LTD.

P. O. Box 183,
Calcutta.

P. O. Box 84,
Lahore.

P. O. Box 34,
Karachi.

P. O. Box 466,
Bombay.

H 780

enactment of the Indian Medical Council Act. But what they could do against the overpowering influence of the General Medical Council, and the conspiracy between the Secretary of State and the Government of India to hand over the fate of the medical education and the profession to the tender mercies of the General Medical Council which, by the way, is as unpopular among the general practitioners of England as it certainly is to us on both political and professional grounds? It is more the Government of India that has to be blamed in this matter than the officers of the Indian Medical Service who, for aught I know, are the creators of modern medicine in this country and but for whose sense of fairness and justice the medical licentiates of India would have been beaten black and blue and pushed to the wall with no hope of recovery or retaliation. Let not patriotism cloud the facts of history, and if you would allow me to quote what I have said at Gauhati, let me repeat the same words in this connection which I believe is a fitting reply to the tirade against the Indian Medical Service by Dr. Mehta and men of his kind :—

"Let us not forget the fateful history of the medical licentiates since the time of the East India Company, how they have been exposed to all kinds of ridicule and contempt by a handful of medical graduates who out-heroded herod in their derision of this class of medical practitioners who did them no wrong, and who instead of condemning the system which held the graduates and the licentiates as slaves, in foreign service indulged in the gratification of their own superior claims and needs at the expense and utter neglect of their down-trodden comrades, and how, only 29 years ago, Sir Balchandra of Bombay led a fearing campaign that the medical licentiates should not be included within the scope of the Bombay Medical Registration Act of 1912, because, he said, they were unqualified medical men. Friends, throughout the long history of Medical Services in India, you will not be able to spot out or instance a single act of goodwill and good demeanour emanating from the Provincial Medical Service towards the Subordinate Medical Service. Everywhere and at every time the latter has been beaten with the big stick, but this stick is now broken by the very strength of our numbers and the greater strength of our services rendered."

Therefore, to pour on the I. M. S. the vials of patriotic wrath is obviously unreasonable in the face of all known historical facts. Have our medical graduates who form a majority in the Provincial Medical Councils ever lifted their little finger against the unenviable position of the medical licentiates in the same Council and in the same Medical Register? Not once to my knowledge.

The least which the medical graduates of this country can and should do, as a measure of goodwill

towards their licentiate comrades and as a token of change of their heart and in vindication of the self-respect of our country and our profession, is to follow the footsteps of Prof. Tirumurthy who resigned the membership of the Medical Council and thus escaped from the stinking atmosphere of slavery to and dictation from the General Medical Council. If they do not resign, they will go down in history, when the time for reckoning comes, as having betrayed the cause of a large section of the profession and the larger interests of our country.

The real problem is not I. M. S. versus the Indian Medical Profession. Let the 'big guns' of our profession realise that the Indian Medical Council derives its main sustenance from class quarrels and divisions in our ranks and the moment these cease the Indian Medical Council will be reborn in a new form.

It is no use straining at a gnat and swallowing a camel. It is no use to displace the white bureaucracy by the brown bureaucracy. It is no use to win a cause by a mere patriotic appeal and fervour.

If Dr. Mehta is really anxious and serious to create a real Indian Medical Council, his method, as embodied in his suggestion to the Provincial Government, is merely a symptomatic treatment without attacking the cause of the disease.

I, for one believe, that this particular medico-political problem is but a part and parcel of the larger political freedom movement in India. But if in the meanwhile we have to exert in this direction, it must be on the lines I have suggested in this interview. The Indian Medical Council Act has none of even the meagre virtues of the Provincial part of the Government of India Act of 1935 to justify us to think that more Indian elements in the Indian Medical Council would virtually change the axis or the hub or the wheel of this atrocious Act.

If Dr. Mehta thinks like me and agrees with my diagnosis and treatment of the disease with which he and I and the rest of the profession are afflicted, I, on behalf of my Association, assure him that I would favourably influence it to offer him its men, money and organisation for this common cause of the profession.

I shall await for an answer, and then the press and the public of this country would come to know the truth behind this agitation: whether the fight is for the profit of the indigenous vested interests or for the profit of the rank and file of the medical profession of this country as a whole.

If the press of this country could help me, the truth will be out in no time. But if the voice of criticism is stifled out of respect for personalities, the profession would still be groping in the jungle.

Who doubts the wisdom of Collyer in what he wrote about Faith :
 "Faith makes the discords of the present the harmonies of the future." Let the members of the All-India Medical Licentiates' Association cultivate such a faith among themselves and thus help the Association to gain strength and unity.

(Continued at foot of page 122)

GLYKERON

*Bronchitis, Asthma,
Laryngitis and other Res-
piratory Affections*

A Bronchial Sedative

Control the cough that weakens your patient.

GLYKERON quickly relieves this distressing symptom because it contains medically approved respiratory sedatives.

Your patients with respiratory affections do better when they sleep better—*without coughing.*

GLYKERON may be administered to diabetics freely as it contains no sugar or syrup and causes no disturbance of digestion.



Stimulating Expectorant

GLYKERON loosens the mucus in the bronchial passages and aids in its expulsion.

It lessens the hazard of complications by getting rid of germ-laden secretions.

Prescribe it for the symptom of cough. Very palatable.

GLYKERON supplied in 3 oz. as well as 16 oz. bottles.

DOSAGE: Adults, one to two teaspoonfuls every two or three hours or at longer intervals as the individual case requires. Children, from ten drops to one teaspoonful according to age.

Literature on request

MARTIN H. SMITH COMPANY · NEW YORK

AFTER THE MOST EXACTING TESTS

LEXIN

**The famous treatment of Snake bite
has been recognized by the five
Faculties of Medicine
in Central America - the habitat
of the Rattle snakes. "LEXIN
works wonders" - they recorded.**

SOLD BY CHEMISTS Re. 1 per bottle (4 dra.)

BOX OF 6 AMPOULES. 6 x 2 c.c. Rs. 2-4-0

P. BANERJI, MIHIJAM, E. I. RY.

EDITED AND PUBLISHED BY DR. A. VISWANATHAN, L.M.P., AT 181, CORAL MERCHANT STREET, MADRAS,
ON BEHALF OF THE ALL-INDIA MEDICAL LICENTIATES' ASSOCIATION.
PRINTED BY MR. A. RANGASWAMY, AT THE PROGRESSIVE PRINTERS, NO. 2/17,
CORAL MERCHANT STREET, G. T., MADRAS.

TRIPATHI'S GUIDE

TO THE YOUNG MEDICAL JURIST

(Cloth bound 432 Pages, Price Rs. 3, Postage extra, Foreign Sh. 7 in advance)

CHIEFLY INTENDED FOR THE USE OF THE SENIOR MEDICO PREPARING FOR THE QUALIFYING EXAMINATION IN JURISPRUDENCE AND TOXICOLOGY, THE RISING MEDICAL NOVITIATE AND THE GROWING LEGAL PRACTITIONER, TO SERVE AS A GUIDE ON MATTERS OF MEDICO-LEGAL INTEREST REGARDING A VARIETY OF CRIMES OF EVERYDAY OCCURRENCE, AND HIGHLY PRAISED BY THE MEDICAL AND LEGAL MEN AND THE MEDICAL PRESS.

REVIEWS AND OPINIONS

The Medical Times, London, June 1936 :—This is quite a unique book. For revision purposes, just before examination, it will be found extremely helpful. As a guide to the young practitioner in medico-legal matters, it will prove to be thoroughly reliable. We have much pleasure in recommending it.

The Medical Review of Reviews, Calcutta :—We congratulate Dr. Tripathi on his excellent compilation. This is sure to prove of very great use not only to senior Medical Students in their qualifying examinations in Medical Jurisprudence and Toxicology, but also to Junior Medical Practitioners and Criminal Lawyers as a book of reference. The price is moderate and we warmly commend the book to the notice of the members of the Medical and the Legal professions.

The Antiseptic, Madras :—This is a very handy book. It will be of great service to all junior medical jurists. It contains very practical information gathered by the author during his thirty years' experience of medical service and from various text books on the subject. It cannot replace large standard works, but it is of great service to all Junior Medical Jurists, to the rising Medical Novitiates, and the growing Legal practitioners.

The Indian Medical Journal :—The book is a collection of all practical and useful material in a condensed form from standard works on medical jurisprudence, enriched with the author's personal experience extending over thirty years. It will prove a useful note-book to Medical Students and a helping guide to both Medical and Legal practitioners. The price is (Rs. 3) very low as compared with the thoroughness with which the subject has been dealt with.

The Burma Medical Times, Rangoon :—The above book, we dare say, will meet with the success which it rightly deserves. The book is a complete guide on Medical Jurisprudence not only to medical men, but it will also be a very safe and useful aid to be put into the hands of medical students. We have no hesitation in strongly recommending the book to all young Medical men and students.

COL. A. HOOTON, I.M.S., SURGEON-GENERAL WITH THE GOVERNMENT OF BOMBAY :—I have now seen your little book on Medical Jurisprudence, and think it is a very useful summary of the subject. I shall have much pleasure in commending it to the notice of Dispensary Medical Officers.

LT. COL. C. I. BRIERLEY, I.M.S. :—A book entitled "TRIPATHI'S GUIDE" to the young Medical Jurist is a very useful book on the Jurisprudence and Toxicology and is intended to serve as a guide on matters of Medico-legal importance.

THE INSPECTOR-GENERAL OF CIVIL HOSPITALS, CENTRAL PROVINCES :—Tripathi's Guide to the Young Medical Jurist is being circulated among all the Civil Surgeons in the Province.

LT. COL. J. B. DALZELL HUNTER, O.B.E., I.M.S., is of opinion that it is no doubt a useful book for reference and will prove valuable to the Medical Practitioners and Students.

COL. C. R. BAKHLE, I.M.S., INSPECTOR-GENERAL OF CIVIL HOSPITALS, PUNJAB :—I have brought it to the notice of the Medical Officers in the Punjab, as an useful work for Sub-Assistant Surgeons.

Out of Stock : Fifth edition of Tripathi's Reference Book for the Young Medical Practitioner
(Correspondence is invited for the printing and publication of the next edition, from those interested)

To be had from :

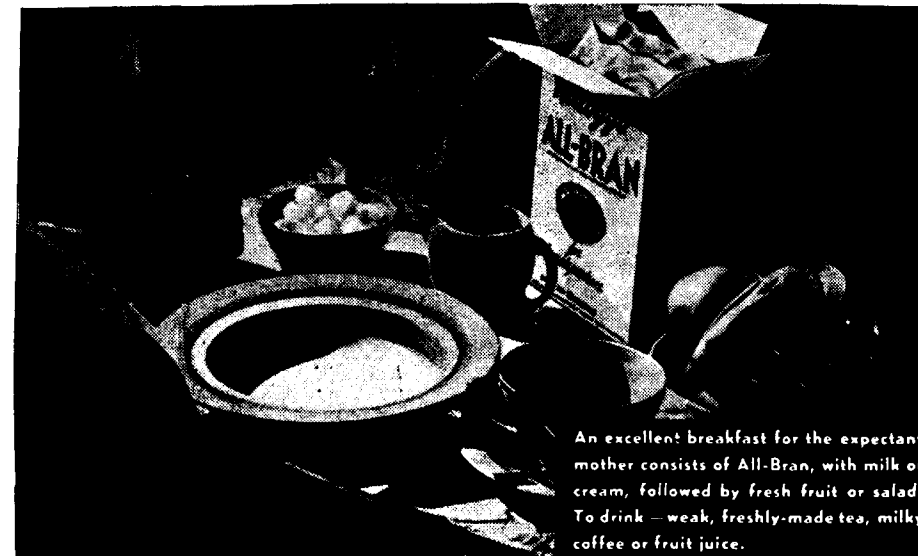
MANISHANKER H. TRIPATHI.

Honorary Assistant Surgeon,

Jamshedpur, KATHIAWAR.

TO DOCTORS WHO DO NOT CARE TO PRESCRIBE APERIENTS DURING PREGNANCY

New way to correct common constipation



MANY leading obstetricians have found that regularity can almost invariably be maintained throughout pregnancy without recourse to aperients simply by increasing the intake of "bulk" in the diet.

For this reason, Kellogg's All-Bran is specially to be recommended in the diet of expectant mothers.

All-Bran is purified wheat bran in the form of an attractively crisp breakfast cereal. It provides the same type of fibrous bulk as that derived from fruit and vegetables but has this striking advantage: the fibrous matter in bran, unlike that of vegetables, breaks down less easily during the process of digestion and is therefore far more effective in promoting regular and thorough action of the bowels.

The function of All-Bran

The great value of All-Bran is that it absorbs water and softens like a sponge. This water-softened mass gently but effectively aids elimination. Eaten regularly, All-Bran promotes normal colonic peristalsis and results in easy, natural

evacuation of the bowel contents without strain on the pelvic organs. And All-Bran supplies iron. Moreover, it is a much richer source of Vitamin B₁ than most of our common foods and for this reason it is a particularly valuable food during pregnancy and lactation.

Eaten daily, All-Bran ensures comfortable regularity even during the later stages of pregnancy when the tendency to common constipation is increased by growing pressure on the internal organs. During the lying-in period it is also invaluable in aiding a quick return to normal habits and as a means of avoiding harmful strain on weakened muscles.

All-Bran may be served as a cereal with milk or cream, or cooked into appetising scones, bread, etc. It may also be taken in combination with other cereals or sprinkled over salads and other foods. To ensure maximum effectiveness, plenty of fluid should be taken, preferably between meals. All-Bran is obtainable from all reliable stores. A packet will be sent free on request to any qualified practitioner. Inquiries should be addressed to: Messrs Dodge & Seymour (India) Ltd. P. O. Box No. 144, Bombay.