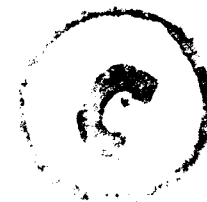


2621

Indian Medical Journal

Ap. 1936

Copyright



TL
Lm2, N06
N36.30.4
123935

5 24
BD 1906

THE Indian Medical Journal

Organ of The All India Medical Licentiates' Association

(with which Agra Medical Club Journal is incorporated)

Co-Editors

JAI GOPAL
T. C. BASU CHOWDHARY



Associate Editors

A. N. ROY
Y. SURYANARAYANA RAO

Managing Editor:—A. VISWANATHAN

264

Vol. XXX. No. 4 }

MADRAS, APRIL, 1936

ANNUAL SUBSCRIPTION Rs. 6
FOREIGN Rs. 7-8
PRICE PER COPY As. 8

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.

Results extremely pleasing to patients and physicians alike

Bottles of 60 pills ... Rs. 3

Dr. Khurshid's

● KUSHMOL

(The Asthmatic's Delight)

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

Superior to all the drugs yet known to physician

ARM YOURSELF WITH 'KUSHMOL' AND DEFY ASTHMA

Life-long chronic cases are

CURED IN DAYS

Bottles of 80 gra. ... Rs. 3-4

Postage extra in each case

PHTHISIN

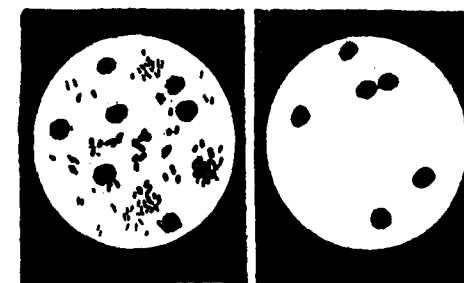
REGD.

Indicated in

PHTHISIS and ASTHMA

Full course 10-20 Bi-weekly subcutaneous injections

Innumerable tests and testimonials



Sputum of Mrs K. S. before and after 13 injections

SYRUP PHTHISIN

for oral use in Phthisis, Asthma, and Chronic Cough

HÆMO-SARSOL

The ideal Blood-purifier, Blood-former, Alterative and Tonic

PHTHISIN LABORATORIES

BENARES CITY—(INDIA)

GLYKERON

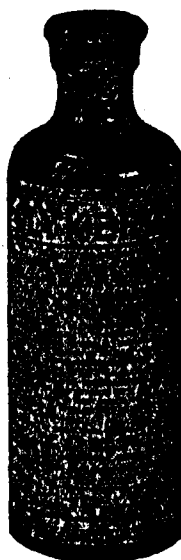
Coughs, Bronchitis, Asthma, Laryngitis and other Respiratory Affections

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

N36-30

TWO OUTSTANDING LIVER-PRODUCTS

FOR

PRIMARY AND SECONDARY ANÆMIA**1. LIVER EXTRACT No C****(For Oral Administration)**

Available in tubes.

Each representing 1½ oz. of fresh liver substance

2. LIVER EXTRACT**(For Injection)**

Available in 1 c.c., 2 c.c., and 5 c.c. Ampoules

One c.c. represents:

Active Principle of 1 grm. fresh liver

Literature on request**Bengal Chemical :: Calcutta****CONTENTS**

	PAGE		PAGE
ADDRESSES AND ARTICLES ...		EDITORIAL	
RESEARCH IN CHEMISTRY AND ITS INFLUENCE ON MEDICINE by Dr. B. B. DEY ...	193	EPIDEMIOLOGY OF CHOLERA ...	218
FIRST EIGHTEEN MONTHS' PROGRESS OF NAWANAGAR SOLARIUM by Dr. P. M. MEHTA, M.D., M.S., F.C.P.S. ...	199	CURRENT COMMENTS ...	219
EPIDEMIC DROPSY by Dr. SANTI LAL ROY, L.M.F. ...	204	NEWS AND NOTES	
PSORALIA CORYLIFOLIA by Mr. J. C. GHOSH, B.Sc. ...	212	OUR GERMAN LETTER ...	221
CLINICAL MEMORANDA		BIOGRAPHY IN BRIEF	
A CASE OF HYMENOLEPIS NANA by DOCTORS N. C. BHATTACHERJEE AND K. C. BANERJEE ...	215	DR. JOTTRAM MOTIRAM PANDYA ...	223
A CASE OF PLACENTA PREVIA by RASAMAY BHATTACHARYA, L. M. P., (ASSAM), D.T.M. (CAL.) ...	215	MEDICAL COUNCILS ...	224
PRACTICAL SUGGESTIONS ...	216	LETTERS TO THE EDITOR ...	226
		REPORTS & REVIEWS ...	227
		NOTICES ...	229
		SERVICE NOTES ...	229
		ASSOCIATION ACCOUNTS ...	232
		ASSOCIATION NOTES ...	235

**HEWLETT'S MIXTURE**

WITH OR WITHOUT OPIUM

MIST. PEPSINAE CO. c. BISMUTHO. (HEWLETT)

Useful in all forms of Dyspepsia, Pyrosis, Gastric pain, Vomiting and for alleviating the pain in cases of Ulcer and Cancer of the Stomach.

"The production of high grade pharmaceutical preparations has been the aim of Hewlett's since they first introduced Mist. Pepsinæ Co. (known generally as 'Hewlett's Mixture')"

--Indian Medical Record.

DOSE—HALF TO ONE FLUID DRACHM DILUTED

Price in England 4-oz. bottles 10d. oz.; 10-oz., 22-oz., 40-oz., and 90-oz., bottles, 12/6 per lb.

INTRODUCED AND PREPARED ONLY BY

C. J. HEWLETT & SON, LTD.,

35 to 42, Charlotte Street, London, E. C. 2.

Agents who stock Hewlett's Preparations:—

BOMBAY:

Beli Ram & Bros., Princess Street.
COCHIN: Natham & Co.
CEYLON: Cargills Ltd., Colombo.

CALCUTTA:

B. K. Paul & Co.
M. Bhattacharyya & Co.
Frank Ross & Co., Limited

LEPROSY PREPARATIONS ORIGINAL 'STANISTREET' BRAND

SODIUM HYDNOCARPATE
SODIUM MORRHUATE
"HYDNESTRYLE"
(Distilled Ethyl Esters)
ETHYL ESTERS UNDISTILLED
E.C.C.O.
"HYDNOCREOL"

As prescribed and approved
by
THE SCHOOL OF TROPICAL MEDICINE
CALCUTTA

SMITH, STANISTREET & CO., LTD.,
CALCUTTA

Agents in Madras:—

THE MADRAS DRUG STORES,
98, Nyniappa Naick Street

OUR NEW YEAR'S FREE OFFER

A copy of Dr. Narayan Rao's
"Materia Medica" (Costing Rs.
2/8 and Postage As. 7.) which has
proved to be a Standard book of
Reference of Patent Medicines
will be sent FREE of Charge to
those who Purchase our—

Sphygmomanometer 'Mercuri-
rius'. It is cheaper in price and
stands second to none. Most
handy and portable, in Bakelite
case.

Price Rs. 30 net.

OR

"Mercurius-
Miniatur" or Poc-
ket Model. 260 mm.
Calibration.

This is a very
attractive instrument
fitted nicely in a light
unbreakable Duralu-
min Case.

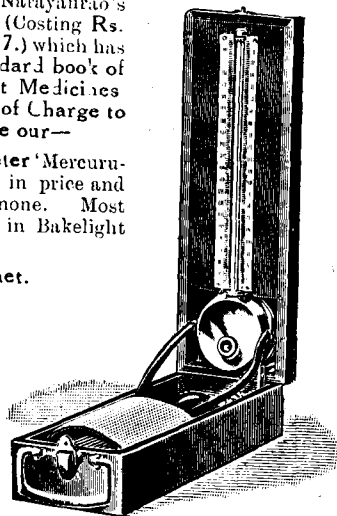
Reliability and ease of Readings—No leakage of Mercury
—Perfect shape and Perfect quality are its advantages.
Price, Rs. 40 net.

Each Instrument Is Guaranteed.
FOR FREE OFFER

Please mention "INDIAN MEDICAL JOURNAL

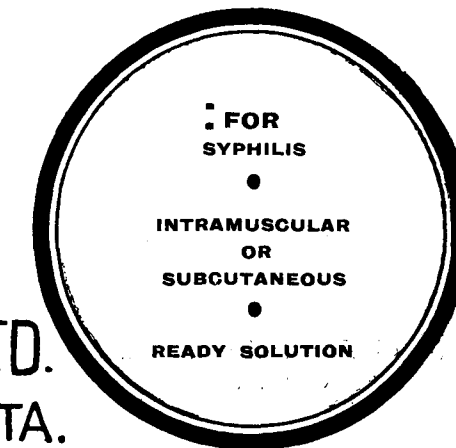
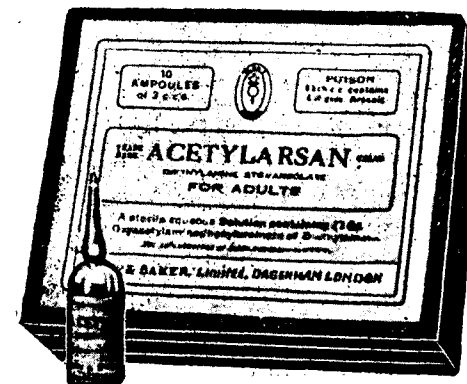
For literature etc., write to:—

International Surgical Co.,
Sandhurst Road :: BOMBAY 4



ACETYLARSAN

ADULT :: INFANTILE



MAY & BAKER (INDIA) LTD.
11, CLIVE STREET, CALCUTTA.

In all cases of
Oral
Infectious
Diseases

In the Robert Koch Institute for Infectious
Diseases the bactericidal power of Forma-
mint on cultures of influenza bacilli and
pneumococci has been examined with the
result that 5 tablets of Formamint des-
troyed the bacilli completely (Ztrbl. f.
Innere Med., 1934, No. 43.).

FORMAMINT

Formamint is the proved disinfectant
and prophylactic in all infectious dis-
eases of mouth and throat. In "The
Lancet," No 4338, Formamint is called
"a non-toxic and trustworthy antiseptic
for all ages and in all kinds of oral sepsis."

the effective
oral
Disinfectant and
Prophylactic

Let us tell you once again the
benefits you derive from your join-
ing the Family Fund of the
All-India Medical Licentiate's
Association

You will be helping yourself
when you are incapacitated by
disease or accident. You will
be providing for your family in
case of your unexpected death.
You will be indirectly helping
your professional brother under
similar circumstances. You
know that we work for you
without remuneration. If you
hesitate for any reason please
do clear your doubts by writing
to

The Secretary, Family Fund, All-
India Medical Licentiate's Asso-
ciation

Indore

SALVITAE

GOUT, ARTHRITIS AND CHRONIC
RHEUMATISM



—In the lowered blood alkalinity so often observed in these states, SALVITÆ is of the greatest utility. Patients cannot easily get rid of their endogenous and exogenous purins, oxidize badly and cannot eliminate their uric acid adenine, guanine, hypoxanthine and xanthine. Their urine is apt to be highly acid, scanty, high coloured and characterized by heavy deposits of urates on cooling. With intestinal and acidotic influences entering largely into their causation, SALVITÆ most aptly meets the therapeutic need for amelioration in these cases.

Samples and literature to the medical profession on application to Sole Agents in India :

Muller Mclean & Co., 8, Old Court House Corner, Calcutta :: Hashim Building,
38, Church Gate St., Bombay :: G. Y. Knight & Co., 71, Lewis St., Rangoon,
British Burma :: Wilson & Co., 5-8, Jehangier St., Georgetown, Madras

American Apothecaries Company, New York

GOING CHEAP

● A Complete set of Tice Loose-Leaf Medicine (10 Vol. with up to date additions). As good as new. Reasonable offer.

● Write to: Dr. x c/o Dr. G.K. KULKARNI
CONGRESS NAGAR
NAGPUR

LYMPH DEPOT

SHIVPURI, GWALIOR STATE

Fresh Glycerinated Calf lymph supplied in one gramme tubes at Re. 1/- less 25% for orders of 1000 doses or over.

Special terms for large quantities

For particulars apply to :—

SUPERINTENDENT

GLYCERODINE

Colloidal Iodine for
(Subcutaneous Injection)

Dose $\frac{1}{2}$ to 2 cc. Subcutaneous injection painless. Efficacious in Plague, Puerperal Fever, Diphtheria, Carbuncle, Cellulitis, Rheumatism, Gout, Intractable Neuralgias, Staphylococcal and Streptococcal infection and all conditions where Intravenous Iodine is indicated. Supplied in 24 cc. and 12 cc. bottles and in boxes of 1 cc. ampoules 6 in a box @ Rs. 5, Rs. 5, & Rs. 2, respectively.

**The Indian Chemical and
Pharmaceutical Works
MEERUT**



Pneumonia—

WHEN pneumonia is first suspected, but not definitely established, the prompt application of an Antiphlogistine jacket is indicated in order, if possible, to inhibit its development.



Lung Tissue
firm and airless

Once the disease is established, the use of Antiphlogistine is helpful in carrying the patient safely through the crisis.

Antiphlogistine

Sample on request

The Denver Chemical Mfg. Co.
163 Varick Street - - New York

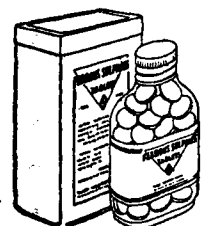
**Antiphlogistine is hyper-
emic, decongestive and relaxant and promotes relief of pleuritic pain**

MULLER & PHIPPS (INDIA) LTD.,
P. O. Box 773 Bombay

EFFECTIVE DAILY DOSES

Iron and ammonium citrate 90 grs.
 Bland's pill B.P. 45 grs.

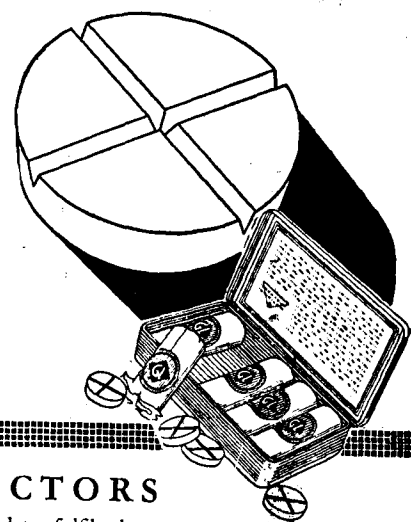
FERROUS SULPHATE G.L. 9 grs.



Each 3 gr. tablet of Ferrous Sulphate G.L. contains exsiccated ferrous sulphate in an amount sufficient to give exactly one grain of ferrous iron. Each tablet contains also 1/100 grain each of copper and manganese, both present as sulphates. The value of Ferrous Sulphate G.L. was clearly brought out in a paper on "The Etiology and Treatment of Anæmias due to Deficiencies" (Med. Press and Circ., 1933, cxxxvi, 517), in which it was pointed out that whereas the effective daily dose of iron and ammonium citrate was 90 grs., and of Bland's pill 45 grs., of this new preparation it was only 9 grs., i.e. 3 tablets. This is in keeping with the modern belief that the efficiency of an iron preparation depends largely on the amount of ferrous ions liberated in the small intestine. Detailed information on request.

PRODUCTS OF THE
GLAXO LABORATORIES

Successful Calcium Therapy



TWO ESSENTIAL FACTORS

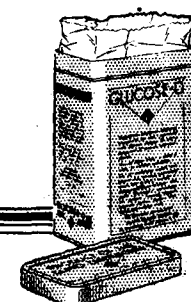
ONE: The calcium salt used must be assimilable by the body and its assimilation must not be associated with any undesirable by-effects.

TWO: It must be given with enough vitamin D to ensure its full absorption by the body.

Ostocalcium Tablets fulfil these requirements. Each tablet is standardised to contain 7½ gr. of calcium sodium lactate—a clinically desirable salt—and 500 international units of Ostelin vitamin D to make assimilation certain.

IN TINS OF 50
GLAXO
LABORATORIES Ltd.
Greenford
Middlesex

OSTOCALCIUM TABLETS



264
IN FEBRILE ILLNESSES . . .

*Specific remedies treat
the infection—GLUCOSE-D
TREATS THE PATIENT*

IT IS THE EXTRA, the unnecessary, burdens that febrile patients carry which eventually bring them down. Anorexia, by making them reject food and live on their own tissues, lowers their resistance. Ketosis increases their nausea and drowsiness. Toxic myocarditis is often fatal.

Glucose-D lightens the patient's load. It supplies immediately available energy even in extreme anorexia. It overcomes starvation ketosis. It provides "fuel" and strength to the weakened myocardium. Its calcium and vitamin D content promote normal myocardial rhythm and tone. Specific remedies treat the infection; Glucose-D treats the patient.

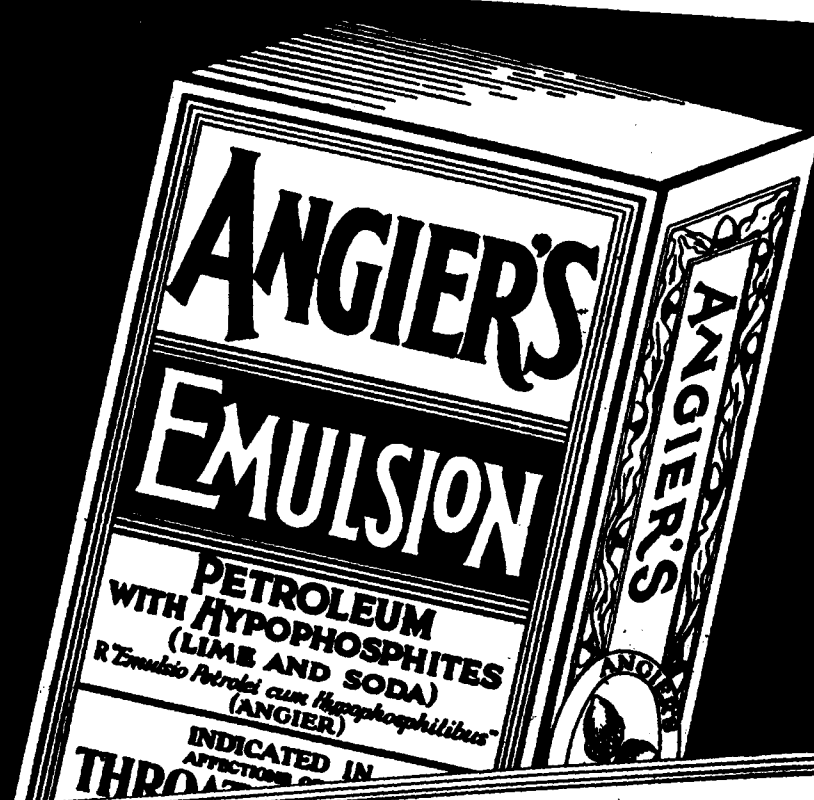
The only glucose reinforced with Ostelin vitamin D and calcium.

PRODUCT OF THE
GLAXO LABORATORIES

AVAILABLE IN 1-LB. AND 14-LB. TINS

GLUCOSE-D

H. J. FOSTER & CO. LTD. P.O. Box 202 BOMBAY. P.O. Box 2257 CALCUTTA P.O. Box 108 MADRAS



The Original and Standard Emulsion of Petroleum.

Angier's Emulsion is made with petroleum specially purified for internal use. It is the original petroleum emulsion—the result of many years of careful research and experiment.

Bronchitis, Sub-Acute & Chronic.

There is a vast amount of evidence of the most positive character proving the efficacy of Angier's Emulsion in sub-acute and chronic bronchitis. It not only relieves the cough, facilitates expectoration and allays inflammation, but it likewise improves nutrition and effectually overcomes the constitutional debility so frequently associated with these cases. Bronchial patients are nearly always pleased with Angier's Emulsion, and often comment upon its soothing, "comforting" effects.

Free samples to the Medical Profession.

MARTIN & HARRIS, LTD., ROWLETTE BUILDING, PRINSEP ST., CALCUTTA
Proprietors—THE ANGIER CHEMICAL COMPANY, LTD.

Pneumonia and Pleurisy.

The administration of Angier's Emulsion during and after Pneumonia and Pleurisy is strongly recommended by the best authorities for relieving the cough, pulmonary distress, and difficult expectoration. After the attack, when the patient's nutrition and vitality are at the lowest ebb, Angier's Emulsion is specially indicated because of its reinforcing influence upon the normal processes of digestion, assimilation and nutrition.

In Gastro-Intestinal Disorders

of a catarrhal, ulcerative, or tubercular nature, Angier's Emulsion is particularly useful. The minutely divided globules of petroleum reach the intestines unchanged, and mingle freely with intestinal contents. Fermentation is inhibited, irritation and inflammation of the intestinal mucosa rapidly reduced, and elimination of toxic material greatly facilitated.

LOCAL OCULAR VACCINE THERAPY IN TRACHOMA & OCULAR INFECTIONS

WITH

"LACMIN"

(SPECIAL INDIA PACKING.)

(UNDER ITALIAN STATE CONTROL)

(Manufactured by M/S. S. A. R. M., ROME (ITALY).)

"This Ophthlmo-Vaccine Collyrium of Professor RUATA of the Royal University of Rome has been *officially tested* with most favourable results in Italian University oculistic clinics under the direct control of the Direction General of Italian Public Health. At present it is employed on a large scale by the Italian Government in the war waged against Trachoma."

This Vaccine used as a collyrium provokes a *local immunity* that is it immunises in a direct manner the elements with which it comes in contact and (as in all cases of local immunisations) its results are manifested most rapidly. This Vaccine is *not* a bouillon Vaccine like that of BESREDKA but a bacterial polyvalent emulsion, containing more than a hundred kinds and varieties of isolated strains of the pathological conjunctivae.

Safest therapeutic remedy not only in TRACHOMA and its complications but also in all infections of the eye, as conjunctivitis, keratitis, blepharitis, corneal ulcers, dacryocystitis, and in traumatic infections of the eye (infected lesions).

THIS PREPARATION IS PAINLESS AND IT IS INNOCUOUS.

Directions of use enclosed in each bottle.

Rs. 6-4 a Bottle of 15 gr. with dropper.

FORMULA:—Emulsion of dead germs divides thus for every cm.c.
Micrococci 125 millions gram Positive.
Bacilli 50 millions gram Negative.
Bacilli 75 millions gram Positive.

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:
"GOPAL", MADRAS.

**A TRIAL
IS WORTH
A HUNDRED
WORDS ~ ~**

"GONEAL"
PRODUCT OF I.O.N. ITALY
FOR GONORRHEA & ITS COMPLICATIONS

Rs. 9/- a Box of 5 amps. of 2 c. c. for intramuscular use.
Silver and Calcium Caseinate in colloidal solution.
Approved and used by Venerologists.

A PROMINENT BOMBAY SURGEON

M.S. F.R.C.S.

(25-5-1935)

OPINES

"GONEAL stands **FIRST** in the therapeutics of **GONORRHEA**, it **STOPS** urethral discharge and prevents complications of that terrible Disease."

Usually one box is more than sufficient for one course. Injection painless. Little or no reaction

Postage and Packing Charges **FREE** for orders from **DOCTORS** only.

Sole Agents for India

GOPAL & CO.,

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

TELEGRAMS: **GOPAC-MADRAS.**

Solden & Co., Madras.

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

CARIPEPTIC LIQUID (UPJOHN)

Manufactured by
THE UPJOHN COMPANY,
U. S. A.

Caripeptic Liquid contains in palatable, stable and active form, the active proteolytic, amylolytic and rennetic enzymes of Carica Papaya, fortified as to starch digesting power by the addition of diastase. It affords in one prescription a combination of vegetable digestant, carminative and psycho-secretory factors in treatment.

Caripeptic Liquid is a pronounced carminative. When it is taken after a meal, the immediate subjective effect is a sensation of gastric stimulation; 'the sense of well being and comfort' spoken of by pharmacologists in describing carminatives. This carminative phase is frequently soon succeeded by evidence of digestive active action apparent in subsidence of the feeling of oppression or discomfort occurring in dyspeptic subjects.

For further particulars
Apply to:—

T. M. THAKORE & Co.,
5, Sunkurama Chetty St.,
G. T., MADRAS.

Head Office:
43, Churchgate Street,
Fort, BOMBAY



In nervous irritability
of the intestinal tract

SANATOGEN

EASILY DIGESTED AND ASSIMILATED

Sanatogen meets the following requirements:

1. *It stimulates the appetite without the need of drugs.*
2. *It has a high food value in a small volume.*
3. *It is an easily digestible concentrated food.*
4. *It stimulates the nervous system without irritation*

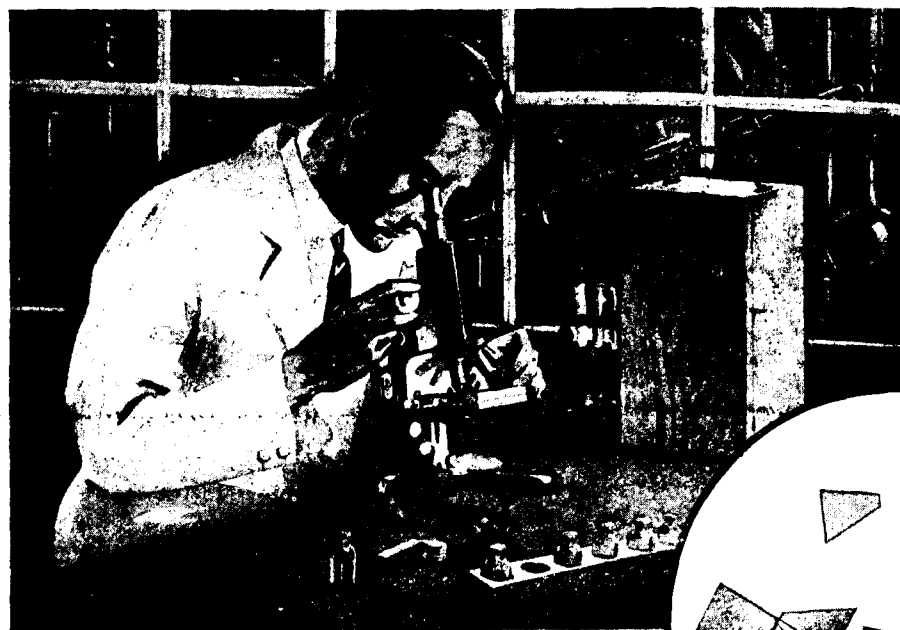
Lit.
J. of Trop. Med.,
9, No. 20.
Med. Press &
Circ., 34, No. 17.
Univ. Med.
Record, 6, No. 1.
Lancet, No. 4341

THE INDIAN MEDICAL JOURNAL REACHES ONE OUT OF
NINE REGISTERED, QUALIFIED MEDICAL
PRACTITIONERS IN INDIA

Our Special Number on Leprosy will be published on 15th July, 1936. Eminent leprologists are contributing. Price Re. 1/- postage extra. Book your copy in advance. Firms manufacturing Anti-leprosy medicaments who desire to advertise in this Number should send their matter and/or block to reach us on or before the 10th May, 1936. Rates on application.

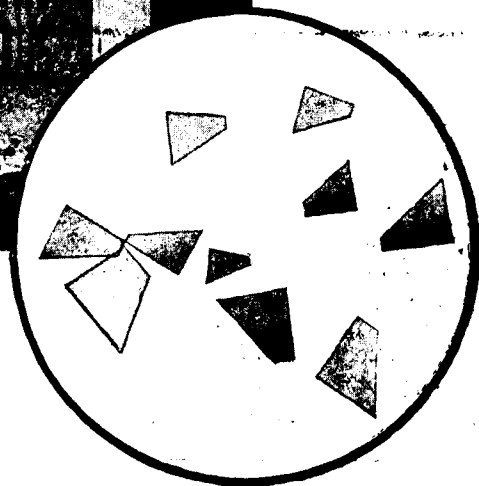
The Indian Medical Journal

131, CORAL MERCHANT STREET
Madras



DIGOXIN (B. W. & Co.)

is a pure, stable, crystallized glucoside isolated from leaves of *Digitalis lanata* which is much more active therapeutically than *Digitalis purpurea*.



A triumph of research DIGOXIN (B. W. & Co.)

TRADE MARK 'TABLOID' BRAND DIGOXIN

0.25 mgm. For Oral Use

Bottles of 25 products, Rs. 1-15 each
" " 100 " " Rs. 6-10 "

SOLUTION OF DIGOXIN (B. W. & Co.) 0.5 mgm. in 1 c.c.

Bottles of 30 c.c. (with Pipette), Rs. 4-0 each
Bottles of 250 c.c., Rs. 27-10 each

TRADE MARK 'HYPOLOID' BRAND DIGOXIN

For Injection

Each ampoule contains 0.5 mgm. Digoxin
in 70 per cent. alcohol

Boxes of 10 'Hypoloid' ampoules of 1 c.c.,
at Rs. 3-7 per box

Discovered and introduced as the result
of pioneer investigations in the Burroughs
Wellcome & Co. Laboratories.

Enlarged photo-micrograph of a representative
field of Digoxin crystals reveals sharp edges
and regular shape, characteristics indicating
homogeneity.

May be used whenever digitalis therapy is
indicated. Especially valuable in auricular
fibrillation when rapid effects are desired.

Prices in Bombay to the Medical Profession

Subject to Medical Discount and liable to fluctuation



BURROUGHS WELLCOME & CO., LONDON
AND COOK'S BUILDING, HORNEY ROAD, BOMBAY

4-7394 En.

The Indian Medical Journal

Published under the Auspices of the
All-India Medical Licentiates' Association

Vol. XXX No. 4

Madras

April, 1936

ADDRESSES AND ARTICLES

Research in Chemistry and its Influence on Medicine

• Dr. B. B. Dey, Professor of Chemistry,
Presidency College, Madras

The Influence of Chemical research on Medicine

The development of Chemical Science falls into four main periods. The first or the alchemical period extended from the earliest times to 1500 A. D. Chemistry as an art was practised thousands of years before the birth of Christ, although as a science it dates only from the middle of the seventeenth century.

In India, chemistry has been evolved chiefly as a handmaid of medicine. The two great works *Charaka* and *Susruta* of the Ayurvedic Period were, it is said, written as early as the 6th century B. C. The works of Nagarjuna (4th century B. C.) and Patanjali (2nd century B. C.) contain numerous references to these two works.

In Europe, the honour of pressing chemical knowledge into the service of medicine belongs to Paracelsus (1493-1544).

During the second or the iatro chemical period (1500 A. D. to 1700 A. D.) chemical investigations came more and more to be directed to the advancement of medicine.

The third or the Phlogiston period (1650 A. D. to 1775 A. D.) marked chiefly the unproductive and wrong efforts of scientific workers to explain the changes occurring in combustion and chemical combination, although it paved the way for the last period which may be said to date from Priestly's discovery of Oxygen in 1774 and which witnessed the rapid growth of modern scientific chemistry.

Liebig (1803-1873) may be regarded as the founder of organic chemistry. He elaborated the methods of ultimate organic analysis by combustion and his work exercised a profound

influence on his four lectures delivered under the auspices of the University of Madras, February 1936 as taken down by our staff reporter.

influence on the development of chemical theory and in placing the kindred subjects of physiology and agriculture on a scientific basis.

Pasteur—Founder of Bacteriology

Pasteur may rightly claim to be the founder of bacteriology and of modern medicine. He was the first to study the processes of fermentation so important to wine industry of France, and his results gave rise to modern bacteriology. The work of Pasteur has conferred upon the human race benefits so great that it is difficult to describe our indebtedness in words. Similarly, the work of Emil Fischer in the realm of organic chemistry has given a great impetus to the advancement of medicine and physiology. His work on sugars and proteins led to an understanding of the constitution of these bodies and of the methods of their metabolism in the body. Moreover, this synthesis of numerous physiologically active drugs has greatly enriched that important auxiliary to medicine known as Pharmacology. The chemical researches of Paul Ehrlich and their application to medicine have been one of the most important factors in modern times in the advancement of medical science.

Within recent years a considerable amount of knowledge has been obtained concerning the importance of certain glands in relation to health. The subject of internal secretions has offered a wide and fertile field for chemical researches and these have ultimately led to the isolation by chemists of the active principles of these internal secretions or 'Hormones'.

The problems of nutrition and the vitamins are being attacked now by chemists who have succeeded in isolating and even determining the chemical constitution of some of these elusive bodies.

On the analytical side, the last century witnessed many important discoveries such as the Marsh test for arsenic, Fresenius and Babo's method of determining mineral poisons, Stas' process for extraction and estimation of alkaloidal poisons, etc. These methods of toxicological analysis have been perfected during the last few years. The Marsh-Berzelius electrolytic test in which zinc, which might be a source of probable error, is dispensed with may be quoted as an example.

Many sure and specific tests for alkaloidal poisons have been recently discovered. By these delicate chemical and biological tests even minute amounts of these in the viscera can readily be detected.

Recent Developments in Medicine

Of other recent developments in medicine which owe their origin to the perfection of analytical chemical methods are the modern methods of diagnosing renal diseases, gastric troubles, jaundice and liver diseases and diabetes. During the last two decades several methods of blood analysis have been devised and perfected. The estimation of urea in blood depends on 'urease' fermentation and estimation of the ammonia produced thereby. Several micro-chemical methods have been devised to estimate the non-protein nitrogen in the blood by the micro-kjildhal method while creatinine and uric acid in blood can be estimated by colorimetric processes. All these methods have added to our knowledge of renal disease since it is now recognised that the best criterion of the function of kidneys in disease will be shown by the estimation of the excretory products in the blood, the main function of the kidneys being the removal of waste products from the blood.

Again gastric analysis after test meals whereby the free and the organically combined hydrochloric acid and also organic acids can be determined by chemical methods have proved to be of the utmost importance in medical diagnosis.

Vanden Bergh's method of estimating the 'bilirubin' in the serum from a small quantity of blood reveals the condition of the liver, a knowledge of which is essential for treatment of jaundice and liver diseases.

During the last ten years rapid and accurate methods have been devised for the determination of sugar in the blood, for the estimation of acetone and acetoacetic acid in the blood and urine, for the determination of the basal metabolism, and of the respiratory quotient, etc. These have proved to be of invaluable

assistance in the diagnosis and treatment of diseases.

The isolation of insulin, the active principle of the internal secretion of the pancreas, is yet another chemical triumph in which the knowledge of the properties of proteins and of such phenomena as absorption, elusion, isoelectric point, hydrogenion concentration, etc. were fully applied. From this brief survey, it would be abundantly clear that chemical research has had a profound influence on the progress of medical science. What appears to be a purely medical problem to-day becomes often the chemists' problem tomorrow.

II

Development of Pharmacology

Pharmacology as a science is of very recent growth, although pharmacy had been known and practised from the earliest times. Indeed, the usual significance of the word 'chemist' amongst common people even to-day, was that he was a pharmacist or the proprietor of a drug store. It is necessary for the chemist to obtain statutory recognition of his status in the country and to be raised above the level of a mere druggist.

Pharmacology might be said to have started with the knowledge of the molecular structures of the various compounds prepared by the organic chemist since the middle of the last century. Before that, pharmacy consisted merely of a number of empirical recipes for metallic preparations as well as decoctions and tinctures of plants, the pharmacist being content with the making of these crude extracts, powders and pills and supplying them to the medical profession. An example of this was to be found in quinine which had been in use in Europe in the form of the powdered bark of the cinchona plant long before its isolation by the chemist in his laboratory. The bark of the cinchona tree which was indigenous to South America was first introduced into Europe about the beginning of the 17th century by certain Roman Catholic priests who had gone to Peru, the powdered bark which rapidly acquired a reputation as a cure for malarial fever being sold in the markets under the name of the "Jesuits Powder."

As organic chemistry began to develop, however, the chemist could no longer remain satisfied with such crude attempts made by pharmacists to prepare a drug by making an extract or a powder; he began to analyse the extract and to isolate the active principle responsible for its therapeutic action. This was exactly what happened with quinine. The valuable curative principle was ultimately

extracted from the powdered bark in the form of beautiful white crystals by two French chemists, Pelletier and Caventou, in 1820. Quinine was only an example of the numerous crystalline principles obtained from crude drugs, both of vegetable and animal origin, through the researches of the chemist during the last century. The isolation of the medicinal principle was immediately followed by attempts to determine its chemical structure and finally to synthesise it in the laboratory with the object of making the drug more readily available, by lowering its price if possible. The structure of an important drug having thus been determined, the next steps were naturally directed to the syntheses of related compounds and getting these examined by the medical man with regard to any possible therapeutic action. Chemists were not slow to discover that there was an intimate connection between the chemical constitution of these products and their physiological action and new drugs and medicines began thus to be prepared synthetically based on these relationships. Thus were laid the foundations of modern pharmacology.

Chemists' Contribution to Medicine

The first clear demonstration of the connection between physiological activity of a substance and its chemical nature was given in 1868 by Crum Brown and Fraser, Professors of Chemistry and Medicine respectively in the University of Edinburgh. Their discovery that tertiary amines of widely differing character could be converted into quaternary bases of almost uniform physiological activity marked the beginning of a long series of attempts to correlate chemical structure with physiological action. Unfortunately, the hopes entertained at the beginning that these investigations would result in the prediction of the properties of a new therapeutic substance from a mere inspection of its formula had not been realised yet. These relations hold only within narrow limits outside which scientific generalisations were apt to break down. Illustrations of the profound change in physiological activity brought about by a small and seemingly insignificant change in chemical constitution may be found in the cocaine and the tropeine families, and also in stero-isomerides which often showed considerable difference.

There are many difficulties in connection with the work in this field which prevent the laying down of any general laws enabling one to predict with accuracy the therapeutic action of a new compound. Lack of knowledge of the precise nature of the chemical reactions which took place in the living cell in association with protoplasmic matter, the complexity of

circumstances and the number of adjustable physical conditions under which physiological experiments were carried out, the effect of physical properties such as solubility, volatility, etc., in aiding or hindering the action of a drug, ignorance of the precise mechanism of the physiological action taking place, i.e., if it be a direct or an indirect one, the looseness of experimental technique among investigators often leading to generalisations based on insufficient evidence, and finally differences in the interpretations of results, were some of the factors which had contributed to the slowness of progress which had been found. Indeed when all these factors were taken into consideration, it became a matter not for disappointment, but for wonder that so much had been achieved in the course of the last two or three decades.

Main lines of advance were made in correlating chemical structure and medicinal action by classifying the chemicals into separate groups such as anaesthetics (general and local), antiseptics, antipyretics, hypnotics and analgesics, replacement drugs—those replacing the natural supply of an essential physiological compound which owing to a pathological lesion could not be obtained naturally, etc.

The mechanism of action of the general anaesthetics and hypnotics on the nervous system is an interesting problem. Ehrlich's theory of selective action of these drugs on certain definite cells of the central nervous system and Overton's, Hansmever's, Cushny's and Traube's attempts to find a relation between the physical properties such as solubility in cell liquids, osmotic permeability, etc., of these anaesthetics affecting their narcotic action are some of the current theories in this connection.

III

Anaesthetics, Antipyretics and Analgesics

Local anaesthetics are a group of bodies which had no action on the unbroken skin, but caused anaesthesia only locally when they came into contact with the peripheral nerves of the system in that region. Cocaine which was the most important member of this group for a long time, has now been superseded by various synthetic chemicals, the preparation of which is the direct outcome of the results of research in pure chemistry. Soon after the constitution of cocaine was revealed by the work of Willstätter and others, chemists attempted to prepare compounds analogous to cocaine in structure which might be of value as substitutes for this drug. "B-Eucaine" and "Novocaine" are standing examples. Many synthetic processes were fully worked out in

the laboratories of the Imperial College of Science during the summer of 1915. When, during the war, the supplies from Germany were cut off, there was a sudden and dangerous shortage of these medicaments in the United Kingdom. The difficulties which were encountered by me and my co-workers at that time were ultimately overcome through the team-spirit prevailing amongst the different students engaged in research in that laboratory under the direction of Professor Thorpe. The amino-benzoic esters formed another new series of compounds which combined local anaesthetic action with antiseptic properties. But owing to their insolubility there were difficulties which stood in the way of hypodermic medication of these drugs. This was finally overcome by introducing a glycol residue and thus increasing the basic properties of these molecules.

Antipyretics and Analgesics

The same promising results had been obtained by pursuing the same line of research with another class of bodies which have proved to be extremely valuable in reducing the body temperature in fever and also in relieving pains and which are extensively used at present under the names of "antipyretics" and "analgesics," respectively. As in the case of the cocaine-like anaesthetics, the discovery of the various antipyretics and analgesics was made as a direct consequence of the efforts of chemists to produce compounds having properties similar to those of quinine. When it was found that quinine was a member of the quinoline family having a methoxyl group, researches were directed to the preparation of substituted quinolines and the examination of their therapeutic properties. Many of these substances were, of course, found to be useless as drugs owing to their toxic action on various organs, but several were found to have valuable physiological action. One of these was the drug which had now attained such an extended use in medicine under the name of "Antipyrine," and which was made by Knorr in the course of his attempts to prepare a compound having a structure similar to that attributed to quinine. Knorr, who believed that the Antipyrine belonged to the quinoline series, later perceived his error and gave it its correct structure. The preparation of this body and some of its derivatives such as "Pyramidon" which had met with such surprising success in medicine, are some of the brilliant achievements of chemistry.

The antipyretic properties of the aniline derivatives are well known to the physicians. Their physiological effects can be traced to the

slow liberation of free aniline in the body leading to symptoms of aniline poisoning appearing after some time. Although the use of antifebrin (acetanilide) and other similar drugs had to be given up on this account, the discovery that these simple derivatives of aniline were partially converted by the organism into a p-aminophenol which was eliminated in the urine of the patient in combination with sulphuric acid, led to results of far-reaching interest. The assumption that p-amino-phenol was less toxic than aniline appeared to be a legitimate one, and a series of attempts having for their object the modification of the amino-phenol nucleus so as to produce a maximum of physiological activity and a minimum of blood toxicity led to the discovery of "Phenacetin" and other allied bodies which had strong anti-pyretic and anti-neuralgic actions. The chemical structures of these products are, indeed, very complex and there is no doubt that any little variations in their structure will affect their therapeutic usefulness.

IV

Antiseptics—Old and New

We have to distinguish between compounds like phenols and cresols, mercuric chloride solutions, etc., which had been used for a long time as external disinfectants, and the new series of substances prepared by organic chemists which attacked and eliminated infections of the blood. Investigations of a purely scientific type carried out in this field in recent years had, provided medical science with some of the most potent remedies for a special group of diseases caused by infections of the blood by protozoa, and thus led to the development of an altogether new department of science known as Chemotherapy. The object of this new therapy was a cure or arrest of diseases due to such infection by directly suppressing the specific cause of the infection. This fascinating branch of study might be regarded as the direct outcome of the close co-operation of synthetic chemists and of medical men, having originated in the study of such natural products as quinine and emetine, the latter being isolated from a plant, long familiar to the natives of Brazil as providing an excellent remedy for dysentery and called by them *Ipecacuanha*. Modern chemistry had separated the active principles of these plants and fully worked out their molecular structures, while modern protozoology had revealed the exact nature of the infections in the diseases—malaria and amoebic dysentery cured by these drugs. Quinine was shown to act as a specific exterminator of the parasites causing malaria, just as emetine was

found to act not merely as a remedy for dysentery in general, but as a specific exterminator of the particular micro-organisms, the *Entamoeba histolytica*, which caused tropical dysentery. Parasitologists had shown that these chemicals possessed an intensely specific affinity for the organisms of the infecting toxins and for no others, while they were perfectly harmless to the patient and behaved as the normal constituents of body fluids and tissues. Ehrlich, who might be regarded as the founder of chemotherapy, was led from a consideration of these results to conceive the bold idea of producing in the laboratory compounds similar to the natural quinine or emetine which might kill eventually the protoplasm of the parasites while leaving the tissues of the patient unaffected.

Natural Immunity

Immunity may be either natural or acquired. Natural immunity against diseases is enjoyed by healthy animals—a matter of daily experience—and artificial immunity is got by the introduction of foreign bodies which act as toxins causing the production in the blood of certain natural antibodies, which enable the animal to fight and overcome the infection. Such natural immunity had its limitations, and it has been recognised that in the case of most diseases caused by protozoal infections, the body is unable to produce antibodies of sufficient potency to eliminate the infection. It is in such cases, therefore, that the use of chemical specifics which would either take the place of antibodies or act as stimulants in their production, is felt to be necessary.

The technique generally adopted in experimental Chemotherapy is now much advanced and more satisfactory than before. Small animals such as mice, rats, guinea-pigs, rabbits, fowls, etc., which are bred and kept with great care, are generally used for such experiments. After infecting the animals with the disease, which it was desired to study—the most common organisms examined in this way being the *Spirillæ* which caused venereal diseases like syphilis and the *Trypanosomes* which caused the dreadful African disease of sleeping sickness—the effect of the drug on the blood of the animal was examined both *in vitro*, i.e., outside the body and *in vivo*, i.e., inside the living cell. Once a substance was found in this manner to have a specific action on the pathogenic organisms, the next step was to exploit the resources offered by synthetic organic chemistry and to so modify its structure as to produce a derivative having a maximum parasitotrophy and a

minimum organotrophy—a property usually measured by the ratio T/C called the therapeutic index, T denoting the maximum dose of the drug tolerated by the animal and C the minimum curative dose. It would be obvious that for a chemical specific to be useful in chemotherapy this ratio should be as high as possible.

Investigations in this field during the last 25 years have proved to be most fruitful. The two distinct groups of chemicals which appear to be most promising in the treatment of these diseases are certain dye-stuffs derived from the benzidine, acridine, thiazine and also to some extent the triphenyl methane series, and certain organometallic compounds, chiefly those of arsenic and antimony and also to some extent of bismuth. The use of dye-stuffs in the treatment of these diseases originated with the observations made by histologists of the selective distribution of dye-stuffs by certain tissues of plants and animals, this property being frequently made use of in staining tissue preparations for microscopic examination. The possibility naturally suggested itself to the early workers that a substance might be discovered among this group which would selectively stain the parasite and thereby poison its protoplasm without injuring that of the host. The theory could be put to the test of experiment, however, only after the development of the remarkable technique of Laveran and Mesnil who showed how a trypanosome infection of standardized type and virulence could be produced in a series of rats or mice thus enabling one to study scientifically the effects of dye-stuffs on these micro-organisms. As a result of these studies, a number of substances belonging to this group having powerful parasitocidal action and a high therapeutic index were discovered. The preparations and chemical structures of a few of these such as trypan red, trypan blue and afriol violet and also of two others which, although not dye-stuffs, closely resembled them in their molecular constitutions, viz., "Bayer 205" and "Fournau 309" are very interesting and have opened a new therapeutic vista.

The most promising members of the acridine and triphenyl methane series of dye stuffs are Proflavine, Trypaflavine, Flavicide, etc., which were first introduced by the late Dr. Dakin and were used with great success in the British army during the Great War for preventing bacterial septicæmia in superficial wounds. Interesting work is being carried out in recent years by studying the effects of homologous series and also of lengths of side chains on

antiseptic action and also on physiological activity in general. The results of systematic examination of the homologues of phenols, the homologous series of alkyl harmols and of the alkyl hydro-cupreines of which the most active members were Optoquin (ethyl) and Vuzin (isooctyl hydro-cupreine), are being carefully studied. There is also another similar series of products having anti-malarial action prepared under the direction of Professors Barger (Edinburg) and Robinson (Oxford) which had followed directly from the discovery of two valuable anti-malarial remedies named 'Plasmoquin' (Diethylamino-isoamyl-8, amino-6, methoxy-quinoline) and 'Atebrin' (Diethylamino-isoamyl-9 amino-2, ethoxy-6, chloro-acridine) which had been placed in the market a few years ago by the firm of I. G. Farbenindustrie A. G. In both of these products the same side chain is noticed and is very probably responsible for their remarkable therapeutic action. Investigations in this field are still in their infancy, and it is not unreasonable to expect great developments in the near future.

Organo-Arsenic and Antimony Compounds

Although arsenious oxide and its salts had long been used as tonics and antimony salts such as tartar emetic used for their irritant properties, the modern development of the therapeutics of arsenic and antimony compounds in the treatment of protozoal diseases started with the preparation of aromatic compounds containing these elements. The history of the preparation and use in medicine of the various aromatic arsenic compounds beginning with Atoxyl and ending with Salvarsan, Neosalvarsan, Sulpharsphenamine, Stabilsarsan, Stovarsol, etc., are now well known.

In the case of antimony compounds their therapeutic application has not yet reached the prominence attained by the arsenical compounds. Great advances, however, had been made in the syntheses of aromatic antimonials, the antimony analogues of atoxyl, salvarsan etc., having now been made chiefly by the firm of Chemische Fabri Heyden. Certain members of this family had acquired great importance in the treatment of Indian Kala-Azar, and said that it was a matter for congratulation that one of the most successful remedies in the treatment of Kala-Azar had been discovered by an Indian medical practitioner, Dr. U. N. Brahmachari of Calcutta, who prepared his product technically known as "Urea Stibamine" by the interaction of urea and p-amino-phenyl-stibinic acid. Oil-soluble salts of bismuth, such as, Stabismol, Cardyl, Neocardyl

etc., which were all basic salts of bismuth and organic acids, and also of inorganic bismuth salts, such as, sodium iodo-bismuthite, in the treatment of syphilis and neuro-syphilis are also gaining importance.

National Importance of Research

I have, in the course of these lectures, examined only one aspect of the problem of the influence of chemical research on progress in medicine; but even from the brief review of this single aspect of the relationship which I been able to give, it would be clear that this co-operation between chemists and medical men held out hopes of a bright future for the relief of suffering humanity and the general amelioration of the conditions of life. None can question the national importance of such researches in this country. There is pressing need at the moment for the organisation of teams of workers in certain specified centres in India who should be entrusted with the duties of drawing up schemes of research on definite groups of indigenous herbs, preparing long series of related compounds of possible therapeutic value and having their clinical actions studied by skilled pharmacologists. Chemistry had become an exact science only during the last 130 years or so, and for this it is only fair to acknowledge our debt to physics to a large extent. Would it not be reasonable, then, to hope that the close alliance of medicine with chemical research would lead, in time, to medicine changing from its present uncertain position among the sciences into an exact science, in which empirical theories and speculations would gradually give place to deductions based on rigid scientific laws?

Goneal :—It is a silver and calcium caseinate in colloidal solution, intended for intramuscular use in the treatment of gonorrhoea in all its stages. It has been tried in a number of cases—the injections are painless, very little reaction and the results are comparable. Messrs. Gopal & Co., Triplicane, Madras, are the sole agents for the same in this country.

Hydronal :—Is largely composed of aluminum hydroxide and prepared in Hoechst Laboratories. The value of this preparation is not solely in the alkalisng value of aluminum hydroxide but in rendering the same in such a way that it has a marked peptonising action also. The three fold action of hydronal, viz., gel formation, absorption and neutralisation of the gastric hydrochloric acid, makes it eminently suitable for cases of hyperacidity and its sequelae. It only absorbs the acid in excess and thus does not upset or interfere with the physiological action of the gastric acid secretions. It is in the form of tablets, pleasant to take, quick in results and does not lead to habit formation. Being Bayer's products, its reliability can be taken for granted.

First eighteen months' progress of Nawanagar Solarium*

● By Dr. P. M. Mehta, M.D., M.S., F.C.P.S., Chief Medical, Officer Nawanagar State

The Solarium has been working for more than a year and a half and we are now in a position to put before the profession the results of our experience extending over this period. The Solarium being an absolutely new thing naturally evoked great curiosity and before it was actually set up all sorts of conjectures were formed about it. Some thought it was some wonderful variety of Sun flower, some that it was something in the nature of an aquarium, while there were others who looked forward to a fairy crystal palace adding to the beauty of Jamnagar. These surmises were laid at rest when the structure was completed. People then came to know what it really was, although the incorrect notion that it moves round by the energy of the Solar Radiations still persists even among the educated classes. Its reputation has now spread far and wide; besides thousands of visitors who specially come to see the Solarium, we receive inquiries from all parts of India. In order to meet the peoples' desire to know what it is and what it does we have through the columns of some leading Medical papers published detailed information about it. Some papers regarding its technique and therapeutic use have also been published in well known Medical Journals of India and England.

We need not say that Solarium treatment is nothing but Ray Therapy, its distinction being, as its name suggests, that it makes a greater use of Rays of the Sun. Although it is equipped with the necessary apparatus for artificial rays, as far as possible natural radiations are used which we have found to be more efficacious. An year and a half's experience has proved to us that the claims of ray-therapy are not exaggerated. Our practice has been to assign such cases to the Solarium as are not amenable to other modes of treatment. These are generally of the chronic type such as Surgical Tuberculosis, Skin diseases, Nervous diseases, Rheumatic and allied conditions and metabolic

disorders. These are very obstinate diseases in which cure is often dispaired of. The patients, having met with disappointment so far, are a dejected lot and hardly come with a hopeful attitude of mind towards a new kind of treatment. So it may be said that we have put ray therapy to a rather severe test. Without having the partiality of a faddist for it, we can say with confidence that the Ray treatment brings indeed a ray of hope to the unfortunates suffering from almost incurable diseases. It is not a panacea for the cure of all the diseases but no disease of the chronic type should be given up as hopeless till this treatment is tried. The table given at the end will show the results we have obtained and justify our faith in Ray therapy. We must acknowledge that the Irwin Hospital to which the Solarium is attached is of a special advantage to it. Its various Departments including Laboratory and Electro-Therapeutic Department and Radium Institute are generally helpful in diagnosis and investigation and often supplement the treatment at the Solarium.

Ranjit Institute of Poly-Radio-Therapy may now claim to be a complete ray and Electro-Therapeutic centre. It has got the following fully equipped Departments :—

1. Short Wave Therapy.
2. Helio Therapy. Natural & Artificial.
3. Deep X-Ray Therapy.
4. Radium Therapy.
5. Electro Therapeutics.

The Solarium is well adapted for research purposes. Its mechanism for measuring the Solar radiations should be of great use in the study of tropical climates and diseases. There is also good scope for the study of sensibility of the skin, particularly of tropical races. The special instrument, the Konimeter, which counts the dust particles in the atmosphere is very much useful for the study of the effect of dust on the Solar Radiations.

The Medical profession are at present taking great interest in Ray Therapy and we are sure

*A paper read before the meeting of the Nawanagar Medical Society on the 15th December, 1935. Submitted for publication on 8-1-36.

that this report of our working for a year and a half would interest them. The popularity of the Solarium can be judged by the crowds which flock to it every day. The deaf, the lame, the crippled and deformed, the paralytic and many others, come for relief to be obtained by the miraculous touch of the Sun God. In pre-scientific days Sun was worshipped as the most glorious object in the Universe. It was a religious worship, the worship of a dazed humanity, but in this modern scientific temple people congregate with full of reasoned faith and hope of relief from loathsome and painful diseases.

The Solarium will always remind the people here of the Great Ranji, who brought this blessing to their door and also of their present Ruler, his worthy successor, who is doing his best to make the Solarium as useful as possible to the rich and poor alike.

Herewith are annexed two tables one being a classified list of the result of treatment at the Solarium and another showing the number of patients treated during the period under review. A glance at the latter table will show the increasing popularity of the Solarium. In the first 12 months the number of the patients treated was 1797 making an average of 149.7 per month; in the subsequent 6 months the number was 1520 raising the average to 253.3. The increase in the number of Female patients is very remarkable. Whereas in the first 12 months their total number was 527 making an average of 43.9 per month, in the latter 6 months their number rose to 564 averaging 94 per month, an increase of almost cent per cent. Of these patients 221 hailed from outside Jamnagar State; of these 2 from Greece will attract attention.

TABLE I

Diseases treated at the Solarium with end-results

	Total.	Cured.	Relieved	Discontinued
Diseases due to Pyogenic Infection				
Abscess	47	27	16	4
Boils	415	388	24	3
Carbuncle	1	—	—	1
Cellulitis	2	2	—	—
Furunculosis	3	3	—	—
Inflammation	98	78	11	9
Osteomyelitis	26	13	10	3
Sinuses	9	4	2	3
Ulcers	150	107	32	11
Whitlow	3	3	—	—
Diseases due to Trauma				
Injuries	4	4	—	—
Burns	7	3	4	—

	Total	Cured	Relieved	Discontinued
Fracture	9	—	2	7
Hæmatoma	1	1	—	—
Sprain	15	22	3	—
Diseases of Metabolism				
Debility	54	34	19	1
Osteomalacia	2	—	1	1
Rickets	76	26	34	16
Surgical Tuberculosis				
Adenitis	97	73	14	10
Lupus	6	—	4	2
Pott's disease	12	—	5	7
Tuberculosis of Joints	67	4	51	12
Tubercular Peritonitis	7	—	4	3
Some Surgical Lesions				
Piles	1	—	1	—
Fistula	1	—	1	—
Diseases of the Respiratory System				
Asthma	264	112	81	71
Tuberculosis of Lungs	10	—	7	3
Bronchitis	99	68	13	18
Diseases of the blood				
Anæmia	2	—	1	1
Diseases of the Nervous System				
Chorea	1	1	—	1
Hemiplegia	51	21	20	10
Headache	1	1	—	—
Malencholia	1	—	1	—
Neuralgia	428	292	76	60
Facial Paralysis	6	5	1	—
Paraplegia	10	7	2	1
Infantile paralysis	73	37	13	23
Sciatica	45	23	11	11
Vertigo	2	—	1	1
Rheumatism & Allied conditions				
Fibro-Myositis	2	1	1	—
Lumbago	60	24	13	16
Rheumatism	202	143	53	6
Diseases of the Lymphatic Gland				
Hodgkins' disease	2	—	1	1
Lymphangitis	5	2	1	2
Diseases of the Generative System				
Endometritis	1	—	1	—
Enlarged prostate	3	1	2	—
Orchitis	3	1	1	—
Tropical Diseases				
Elephantiasis	23	5	7	11
Diseases of the Nose				
Coryza	1	1	1	—
Rhinitis	2	1	—	—
Diseases of the Eye				
Conjunctivitis	2	2	—	—
Trachoma	4	1	2	1
Diseases of the Ear				
Deafness	123	46	47	30
Earache	17	11	3	3



Case No. 1. Leucoderma Before, During and After Treatment.



Case No. 4. Back View.



Case No. 2. Leucoderma Before and After Treatment.



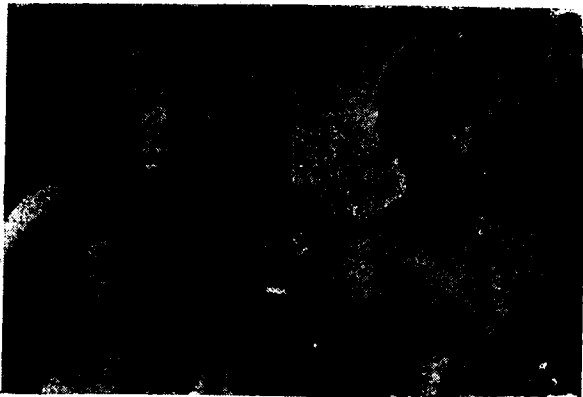
Case No. 5. Keloid Before and After Treatment.



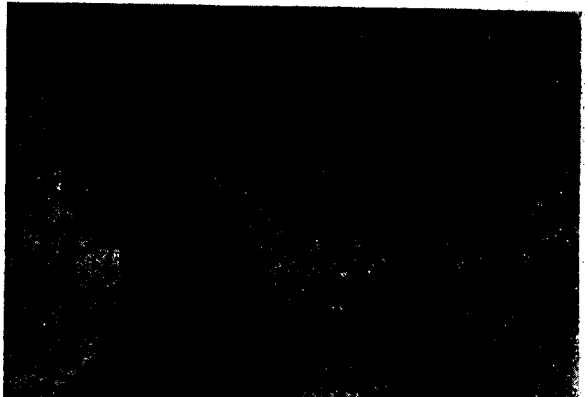
Case No. 3. Leucoderma Before and After Treatment.



Case No. 6. Lupus Before and After Treatment.



Case No. 4. Herpes Before and After Treatment.



Case No. 8. Tuberculous Glands After and Before Treatment.



Case No. 7. Tuberculous Glands After Treatment.



Case No. 8. Tuberculous Glands Before and After Treatment.



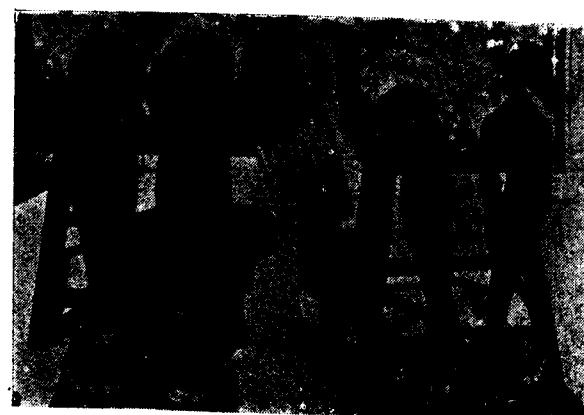
Case No. 10. Facial Paralysis Before and After Treatment.



Case No. 11. Psoriasis Before and After Treatment.



Case No. 12. Facial Paralysis Before and After Treatment.



Case No. 13. Elephantiasis Before and After Treatment.

	Total	Cured	Relieved	Discontinued
Otorrhoea	136	29	83	24
Mastoid sinus	5	—	4	1
Neoplasms				
Neoplasm Malignant	8	—	—	8
Diseases of the skin				
Acne	16	13	2	1
Alopecia	6	3	2	1
Corns	8	6	2	—
Dermatitis	38	28	3	7
Eczema	211	103	61	47
Erythema	3	1	1	1
Impetigo	21	18	2	1
Keloid	7	1	4	2
Leucoderma	50	26	13	11
Pigmentation	1	1	—	—
Pemphigus	6	5	1	—
Prurigo	6	4	1	1
Psoriasis	12	2	9	1
Scabies	83	74	1	8
Seborrhoeic dermatitis	1	—	1	—
Ringworm	40	36	4	—
Warts	2	1	1	—
Diseases of joints				
Ankylosis	28	—	19	9
Arthritis	56	29	13	14
Synovitis	14	10	2	2

TABLE II

Number of cases treated during the period under review and classified as per sex and Province

From 1st April 1934 to 31st March 1935				
1st Year			...	1797
From 1st April 1935 to 30th September 1935				
1st half of the 2nd year			...	1520
				3317
1st Year	2nd Year.		(1st. Half)	
Male	1270	Male	956	
Female	527	Female	564	
Total	1797	Total	1520	= 3317
Average	149.7.	Average	253.3	

Nawanagar State Subjects	...	...	3396
Kathiawar	...	...	125
Gujrat	...	...	12
Sind	...	...	6
Cutch	...	...	69
Bombay	...	...	3
Mysore	...	...	1
Agra	...	...	1
Baichur	...	...	1
Nagpur	...	...	1
Greece	...	...	2
			3317

Conclusions

1. Coloured skins are as sensitive to Solar Radiations as white skin.

2. The capacity to bear the Solar rays is greater in coloured skins than in the white ones. So larger doses can be administered to the coloured skin with less risk of overdoses.

3. In order to facilitate the skin sensibility test, we have classified the local varieties of skins into ten types which are represented by paintings of their respective colours. By comparing the patients' skin to these types it is easily determined to which type it belongs. The sensibility of each type is determined beforehand. So when we get the type we get the sensibility also. The sensibility thus got is verified by independent tests and found to be correct.

4. The skin sensibility test may become useful in determining the race of a man.

5. The bulk of the patients treated at the Solarium are such as have been disappointed by the ordinary hospital treatment for rheumatism, nervous diseases, surgical tuberculosis, skin lesions and such other chronic diseases. The results obtained have been encouraging.

6. The advantages of the Solarium being attached to a well equipped hospital are great. The laboratory is useful for diagnosis, so also the X-rays. Medical or Surgical treatment can be given with the Solarium treatment.

7. The Meteorological Observatory and the Observatory of the Solarium are useful for the study of Solar radiations. The Konimeter is useful for the study of effects of dust particles in the atmosphere on the rays of the Sun.

8. Solar radiations are more effective than artificial rays, the latter are dearer also.

9. Short wave therapy has great possibilities.

10. We obtained good results in the following cases:—

1. Surgical Tuberculosis, chiefly glands.

2. Rheumatism and allied conditions.

3. Skin diseases.

4. Nervous diseases. In cases of paralysis electric treatment is combined.

5. Surface infections. Solar radiations have a most powerful germicidal effect.

6. Elephantiasis, Leucoderma and deafness.

The knowledge of Radio Therapy should be more wide spread and I think that an elementary course of Radio Therapy should form part of the Medical education.

Epidemic Dropsy*

• Dr. Santi Lal Roy, L.M.F., Campbell Hospital, Calcutta

Macleod described this disease in 1880 as a separate clinical entity and named it as Epidemic Dropsy, because of its two most outstanding features:—(1) epidemic nature (2) constant presence of dropsy. Since then, no other suitable term could be found to describe it more satisfactorily and even today we are neither in a position to classify it in any known group, nor to apply a more scientific name to it. Diverse and increasing literature on this particular subject from various writers reveal more clearly than anything else the inadequacies of our knowledge. Observation has contradicted observation, leading to a mass of doubt and divided opinion. Much confusion exists and theories abound, all of which have some plausibility but lack convincing proofs.

It will not be possible here to discuss in detail the various controversial points for and against each and every particular individual theory; but I shall try to review them briefly and to present a general conception of the disease as it stands today.

Definition.—It can be defined as a disease of epidemic onset characterised by dropsy, fever, and cutaneous manifestations, accompanied by cardiac and ocular complications.

Etiology.—Before entering to discuss the etiology of epidemic dropsy I want to impress upon my readers to bear in mind that Beri-Beri and epidemic dropsy are not identical diseases.† The two diseases differ as regards to their pathology, symptomatology and etiology. "The pathology varies so very widely that any similarity of symptoms between them should rather be looked upon as accidental and superficial."

The disease commonly breaks out during and immediately after the rainy season when the epidemics are most prevalent. It is comparatively rare in other months of the year. Rice eating people are mainly affected; Europeans and Marwaris are mostly free from attacks. Persons belonging to middle and upper class of society are mostly affected. This can be corroborated by the huge number of service-men and students falling victims in

the last epidemic. Labouring classes are seldom affected.

Though no age is practically exempt, epidemic dropsy yet spares those in extremes of age. Children under 5 years and old persons are seldom affected; young adults are easily prone to it. Both sexes are equally attacked. Defective dietary forms the most important and main contributing factor in precipitating an attack.

Rice is the staple food of the people of Bengal. Use of "undermilled parboiled rice" is mainly held responsible, specially when it is stored up in a damp place for consumption throughout the year. Diseased rice is identified by its central opacity and friability and "on culture are shown to be heavily infected with spore-bearing organisms." It is worthwhile to remember in this connection that "Sun dried or *Atap* rice are not friable and lack in opacity". (It is much safer, therefore, to take recourse to *Atap* rice in epidemic places as a precautionary measure against the infection).

The exciting cause of the disease is uncertain. Various hypotheses have been suggested.

(1) **Rice Toxin Theory.**—Rice stored up in damp places favours formation of toxins. Being infected by micro-organisms, the decorticated rice supply a suitable nidus for bacterial growth and hasten the process of intoxication and infection. Increased humidity, damp and moisture during the rainy seasons give an additional help to this process. Originally suggested by Col. Megaw, it has now been supported by Col. Chopra and Acton. They suggest that symptoms of epidemic dropsy arise out of ingestion of poisonous bases formed in rice by "Spore forming proteolytic bacilli of the *Bacillus Vulgatus* group" which they have been able to isolate from infected rice. Further, Col. Acton has described two kinds of toxin formed out of *Bacillus Vulgatus* group: "one in aerobic condition producing a water-soluble toxin which causes vasomotor symptoms—the other in anaerobic condition producing an alcohol-soluble toxin which causes the nerve symptoms." The exact mode of action of these toxins in different physical states and the role played by them in epidemic dropsy are not yet clearly understood or worked out.

Toxi-Infection Theory. (Amine allergy)—Dr. Ghose holds the view that epidemic dropsy is dependent upon absorption of products like histamine formed out of the protein constituents of the rice being infected by a Fungus. He thinks that absorption of histamine in the system is responsible for the symptoms of the disease. Proteolytic Bacilli of the *vulgatus* group which is present in the diseased rice may so change its protein constituents as to give rise to the formation of histamine-like bodies. Vascular phenomenon observed in epidemic dropsy corresponds to that of histamine poisoning but the oedema cannot be explained satisfactorily. Dale has shown that histamine produces oedema by capillary distension, and by increased permeability through the capillary walls. Samson Wright on the other hand asserts that histamine can undoubtedly produce oedema but that oedema never pits on pressure. This is accounted for by Dr. Ghose who suggests that the altered nature of oedema in epidemic dropsy is due to supervention of an additional secondary infection on the top of it (histamine). The possibility of streptococcus as a secondary invader is worth remembering in this connection as suggested by anæmic and hæmorrhagic manifestations.

Recently, The School of Tropical Medicine, Calcutta, has reported isolation of histamine-like substance from analysis of aqueous humour obtained from epidemic dropsy patients with glaucoma. This perhaps gives further plausibility to this view, though the exact nature, cause and site of formation of histamine in the system in epidemic dropsy cases is not definitely known.

(3) **Bowel Infection Theory.** That epidemic dropsy is an infective condition is almost an undisputed fact. This is suggested by its epidemic form, acute nature and course of the disease, presence of fever and toxæmia. But so far no specific organism has been definitely implicated. It is suggested that the different intestinal organisms normally present may become pathogenic under factors and circumstances that operate in each particular case and that a bacterial nidus is formed in the intestines which develop quickly in altered rice media.

Workers in Carmichael Medical College have reported isolation of non-lactose fermentors belonging to the *Salmonella* and *Para-colon* group of bacilli by special methods from the stools of patients. They tried this culture by injecting into rats which died within 24 hours with changes in tissues similar to what is noticed in those of epidemic dropsy patients.

They have prepared a vaccine from it and tried it upon their patients with beneficial results.

That bacterial infection of the intestines is a potent factor is shown by the presence of gastro-intestinal symptoms exhibited from the very start of the disease. It is interesting to note here that some of the human intestinal organisms of the non-lactose fermentor group are capable of converting histidine into histamine during the process of digestion.

The explanation of the whole etiology is an extremely complex and intricate problem. Not one of the views stated above can by itself explain all the facts which constitute the syndrome of epidemic dropsy. In short, it appears that each of them forms only a link in the whole chain; exact co-relation and connection of these links to the whole chain remains still to be worked out. On the whole, it can be said that combination of all the above factors may be responsible for this condition. The position may be summed up as follows. Epidemic dropsy is an infective condition, the nidus for bacterial growth being supplied from the infected rice. The rice is infected by spore-forming proteolytic bacilli whereby the protein constituents of rice are changed partly into histamine-like bodies and partly into its precursors. The intestinal flora of non-lactose fermentor group grow and flourish in this altered rice-media and some of them ultimately change histidine and its allied substances into histamine.

Gastro-intestinal inflammation set up by bacterial infection of bowels leads to the damage of mucous membrane and through breaches in the surface of the mucosa thus produced, are absorbed the histamine and various other toxic products. These toxic bodies may either be derived directly from deteriorated, adulterated and infective food stuff or from the altered constituents of rice produced by the action of infective agent or agents. The gastro-intestinal symptoms are apparently caused by abnormal activity of intestinal organisms and the vascular phenomenon by formation and absorption of histamine bodies. Nothing more definite can be said at present unless more convincing experimental work come out on this aspect of the subject. The writer would, therefore treat this matter as *sub judice*.

(4) **Vitamin deficiency theory.** For some time, it was held that epidemic dropsy is caused by deficiency of vitamin B in diet. It has been conclusively proved that epidemic dropsy is not a deficiency disease by various

*Submitted for publication on 80-1-36.

†We would be less dogmatic on this point, Ed. I. M. J.

workers on the basis of feeding experiments*. Further, it seems quite improbable, in view of its epidemic nature, that such a thing as sudden shortage or acute deficiency of vitamins occurs in cases of epidemic dropsy.

5. Food toxin theory.—(food toxæmia). Adulterated mustard oil and ghee have also been put forward as probable causes of the disease on account of certain toxic substances contained in them. These are supposed to produce the symptoms by their action on the body, somewhat identical to that of ptomaine poisoning. This view gets very little support now, since the disease has been known to prevail in families who consume best and pure food-stuffs.

6. Biochemical theory.—Disorders of metabolism of carbohydrates, lipoids and cholesterol have been put forward, in turn, as probable causes. This view has practically been ruled out and it is now generally held that changes that are noticed in epidemic dropsy in the shape of metabolic alterations should not be looked upon as primary causal factors but as effects of the disease. It should be borne in mind in this connection that hypo-adrenia and hypo-thyroidism increase the susceptibility to the attack of this illness and the metabolic changes may partly be the effects of hypo-function of these two important endocrine glands.

Pathology.—Of all the pathological changes, generalised endothelial damage and dilatation of the capillaries throughout the body stand out most pre-eminently. Next come the changes in the skin. The superficial blood vessels of skin are dilated leading to the formation of characteristic erythematous rash, often attended with petechial hæmorrhages on the surface of the skin. These vascular changes are entirely limited to the superficial layers of skin and rarely affect the deeper layers. No inflammatory reactions are noticed in any part of the skin.

"Development of fleshy, dark-red, cutaneous warty growths and nodular excrescences constitute another remarkable feature, a condition of capillary angioma with marked telangiectasis containing angioblastic tissues." These have been described under the term of *Sarcoids* which primarily grow in the superficial layers of the skin and then gradually protrude out on the surface, forming a swelling beneath the epidermis. These growths may also arise

*This is not so. The writer is referred to MacCarrison's experiments as published in *I. J. M. R. Memoir* No. 10, 1928.

from the mucous surfaces as well, specially from that of the nose and the mouth.

The heart muscles are stretched and separated by dilatation of the intermuscular capillaries in between them, resulting in thinning of the musculature and dilatation of both the chambers of heart, specially that of right side. Unlike in beri-beri, no inflammatory or degenerative changes have so far been noticed in any part of the heart or its individual muscle fibres.

Similarly other organs of the body show identical changes e.g., capillary dilatation, increased vascularity and stasis in stomach, intestines, uterus, adrenals, etc.

Of the changes in nervous system, increased vascularity of coverings of spinal cord and perineural sheath of peripheral nerves only are noticed. The nervous structures of the cord and peripheral nerves do not show any sign of abnormality in them, not to speak of any degenerative changes. This feature presents a vivid contrast to that of beri-beri where we find parenchymatous degeneration of the peripheral nerves and sometimes nerve centres as well. The vagal endings and even vagal nuclei in medulla are degenerated leading to atrophy and paralysis of the muscles supplied by the degenerated nerves. This later phenomenon is unknown in epidemic dropsy.

Lastly, another important condition is noticed as a result of vascular changes in the eye. This is the development of non-inflammatory glaucoma. "The increased intra-ocular pressure of glaucoma is due to dilatation of all capillaries of the whole uveal tract—formed by an increased permeability of the endothelial walls which leads to an increased out-put of the intra-ocular fluid in the anterior segment of the eye". The capillaries of the choroid and ciliary processes are mostly affected but no structural changes could be detected in them.

The hæmorrhages from stomach, intestines, uterus, etc., so often met with in this malady, are brought about by distension, stasis and consequent rupture of the capillaries of these organs.

Clinical features.—The symptoms that are noticed in epidemic dropsy may be looked upon as a special group of bodily reactions which depend upon the nature and severity of the infective agent. The manifestations are more or less of a nature of protein anaphylaxis. The allergy in epidemic dropsy is manifested on various systems of the body in a generalised manner just like bronchial asthma which exhibits itself as a local allergic phenomenon in the lungs indicated by vascular turgescence and bronchial spasm.

In epidemic dropsy, allergy is manifested in the shape of dilatation of the peripheral blood vessels of the skin causing different types of cutaneous lesions such as rashes and nodules to appear; by dilatation of the mesenteric blood vessels favouring increased transudation and diarrhoea; by inducing changes in cardiac vessels producing the cardiac symptoms, and so on.

But it must be realised at the same time that such symptoms depend upon the allergic predilection of a particular organ or system, modified or accelerated by factors that operate in each individual case. Besides, some symptoms of epidemic dropsy cannot be explained by the theory of protein anaphylaxis.

The disease most often starts with a preliminary diarrhoea accompanied by certain amount of fever of irregular nature and soon followed by some oedema of the ankle which is specially marked towards the evening. During this early stage when the patient passes a frequent number of stools and when other symptoms have not yet developed, the diarrhoea may be mistaken for amœbic dysentery. But very soon, fever and oedema appear associated with a sensation of fatigue, sense of tiredness, breathlessness on exertion, palpitation, sense of oppression or tightness over the chest and even cardiac pain after some extra strain. The gastro-intestinal symptoms may be mild in nature or assume the form of severe enteritis or enterocolitis which proves very resistant to treatment in majority of cases. Though diarrhoea is a common complaint, constipation may be present in a few number of cases.

Fever is usually slight and intermittent in character of which patient himself is not always conscious. In some cases, fever is only transient and comes down with the subsidence of acute symptoms. In others, temperature of low intermittent character is maintained during the whole period of the illness. The possibility of co-existent malarial infection should never be forgotten as in that case the nature of pyrexia may be greatly modified and the patient develops a high irregular temperature.

Oedema is a constant feature of the disease. The swelling first appears on the ankles and remains confined to the lower extremity for a long time. Gradually it may extend upwards and the whole body may be involved, the patient presenting a picture similar to that of congestive heart failure.

Oedema in epidemic dropsy is due to dilatation and distension of capillaries and damage to their endothelial wall leading to increased permeability which, coupled with inefficient

functional capacity of heart, favours transudation into cellular spaces. The heart muscles fail to contract and co-ordinate effectively due to separation of the muscle fibres by enormous dilatation of capillaries in between them.

This oedema has got certain distinctive features which differentiate it from other types. It is stiffer and does not markedly or readily pit on pressure. The skin over the oedematous part is comparatively hard and rough. It is tense, shiny with a sub-cuticular reddish flush and a general erythematous appearance. The erythematous rash presents a mottled appearance and is usually confined to the affected region (oedematous part) though it may be seen in other parts of the body as well.

The cutaneous rash may be macular, petechial and even faintly hæmorrhagic. These rashes are due to capillary damage and escape of altered blood into the subcuticular tissue. When the rashes disappear, certain amount of temporary pigmentation is left behind.

Palpitation, dyspnoea and breathlessness on exertion are common and their extent and severity depend upon the degree of damage to the functional efficiency of the heart. The respiratory rate becomes increased, in effort to remove the excess carbon-di-oxide. It should, however, be borne in mind that dyspnoea, breathlessness or palpitation, may be and are at times quite out of proportion to the degree of cardiac damage and cannot be accounted for by the physical signs present. This is a very important point in as much as it helps to differentiate this condition from that of organic heart disease.

The heart becomes dilated. First sound in mitral area becomes short, sharp and clean resembling more or less the normal second sound in character. In some cases with mild infection and sufficient reserve power, it is accentuated. Not infrequently a systolic murmur "the murmur of dilatation" is often heard over the apex when the first sound becomes faint, muffled or even displaced. Pulmonary second sound is usually normal unless complicated with bronchitis, pulmonary congestion or oedema when it is accentuated. The pulse rate is increased and is of low tension and volume. Blood pressure is below normal.

In a small number of cases, specially at the advanced stage of the disease severe signs and symptoms of cardiac failure are present.

Liver is enlarged (congestive) and frequently palpable below the costal arch.

Glaucoma is so marked a feature in the clinical history of epidemic dropsy, that its

presence, along with other symptoms, may be considered as almost pathognomonic of this disease. It may develop during the early stage of the disease or as a complication later on. Glaucoma of epidemic dropsy is of a primary non-inflammatory character arising out of increased permeability of the capillaries of choroid and ciliary body leading to increased output of intra-ocular fluid into the anterior segment of eye-ball. This is evident from the fact that "swelling of the vitreous body is absent, anterior chamber is never shallow and there is no pushing of the lens or iris forward." The eye remains quite white even when the tension is very high and never presents a congested appearance. Early signs of glaucoma are: appearance of rainbow colours, halo around lights and gradual diminution of vision. Peripheral vision is first affected. Sensation of discomfort and slight amount of pain are often complained of. But severe pain with nausea and vomiting of inflammatory glaucoma are absent in these cases. Pupils are normal. Light and accommodation reflexes are not impaired. Gradually vision becomes blurred and hazy. The intra-ocular fluid, when greatly increased in bulk, presses upon optic disc leading to varying grades of optic atrophy. If no prompt measures are taken the eye-sight may partially or totally be lost. Apart from this, blindness in some cases is due to retinal hæmorrhage and consequent detachment. Neglect of ocular symptoms in epidemic dropsy has often ended in most regrettable results.

Development of hæmorrhagic symptoms is no less an important feature of this disease and not infrequently proves fatal. These are hæmatemesis, melæna, hæmoptysis and the like brought about by sudden rupture of the dilated capillaries in the particular organ or organs concerned. Abortion with frank hæmorrhage is an usual termination in pregnant women suffering from epidemic dropsy and this uterine hæmorrhage, in great majority of cases, ends fatally.

Nervous symptoms are practically absent and nothing of the nature of neuritis can be detected. The knee-jerks are usually normal, may be slightly exaggerated but rarely lost. Burning sensation and pain in limbs and joints are commonly met with.

Blood Picture.—Total red blood cells are diminished in number. Hæmoglobin value is much reduced in comparison with that of total red cells so that there is marked anæmia. Leucocytosis may be observed temporarily during early stage of the disease. Eosinophiles vary according to the stage and severity of the disease. They increase when the disease is a milder one and

when the patient is on the road to improvement and *vice versa*. Eosinophilia therefore serves as a good prognostic index.

In this connection it is interesting to note the appearance of toxic cells as described by some workers on hæmatology of epidemic dropsy. They appear in greater numbers when the disease assumes a severe form and disappear slowly when convalescence sets in. "Toxic cells are characterised by vacuolisation of the protoplasm and appearance of coarse basophilic granules in place of fine neutrophilic ones in the polymorphonuclear cells. The toxic cells are not present in normal blood. Their appearance has been regarded as a sign of toxæmia and their continued and sustained increase indicates a very bad prognosis."

The amounts of total protein and non-protein nitrogen are more or less normal, but that of calcium and cholesterol are diminished.

Diagnosis. The typical cases seldom present any difficulty. Epidemic onset, seasonal prevalence, premonitory gastro-intestinal symptoms, characteristic œdema, cardiac phenomenon, presence of non-inflammatory glaucoma, and cutaneous manifestations are so characteristic as to preclude possibility of error.

Epidemic dropsy and Beri-beri should never be considered as one and the same disease. Each is distinct from the other as mentioned under etiology. The following are the main distinguishing points:

EPIDEMIC DROPSY	BERI-BERI
Etiologically	
Epidemic dropsy is an infective condition though immediate cause and nature of infection is not definitely known. It is in no way dependent on vitamin deficiency.	Beri-beri is definitely a deficiency disease caused by want of vitamin B in rice flour and other articles of diet.
Pathologically	
No degenerative changes could be ascertained in any of the organs of the body except dilatation of the capillaries and its effects on heart, peripheral nerves, etc.	Degenerative changes are noticed in peripheral nerves and even nerve centres, in cardiac musculature and vagal terminations.
Clinically	
1. Epidemic dropsy breaks out in an epidemic form specially in an endemic area with a seasonal prevalence, during or immediately after the rains.	Beri-beri has got no such epidemic outbreaks and no seasonal prevalence. Stray cases of beri-beri can be seen almost throughout the year.
2. Absence of any true signs of neuritis. No loss of knee jerk or sensory disturbances.	Definite signs of neuritis are present. Loss of knee-jerk, paresthesia, partial or complete anæsthesia.

thesia, hyperalgesia, specially of calf muscles, marked muscular wasting of these areas are common features.

The disease runs an a-pyrexial course, unless otherwise complicated.

3. Fever of low intermittent character, for however short a period it may be, is always present.

4. Development of glaucoma is almost a common and constant factor.

Not so.

5. Hæmorrhagic manifestations are very common.

„

6. Cutaneous manifestations; characteristic œdema, already described, form important aspects of the disease.

„

Epidemic dropsy may occasionally be mistaken for amœbiasis on account of large number of stools during the preliminary stage of diarrhœa. A careful and critical survey would certainly help in proper diagnosis. The stools in epidemic dropsy seldom assume the form of that in amœbic dysentery. Here the stools look frothy, the colour varying from yellow to green. Mucous may be present but blood is extremely rare. Though laboratory examination of stool will provide one with correct diagnosis, possibility of exacerbation of latent amœbic infection in a case of epidemic dropsy should never be lost sight of.

Quick sense of fatigue and easy tiredness combined with fever, increased pulse rate and altered heart sounds are rarely met with in a case of amœbiasis. Subsequent development of other symptoms in epidemic dropsy makes differentiation easy.

In this connection, I would like to add that not infrequently epidemic dropsy in early stage is diagnosed and treated as a case of neurasthenia. I would also point out that grave cases of epidemic dropsy, specially in advanced stage of the disease with general anasarca, simulate cases of primary cardiac failure. Previous history, marked alteration in the limits of heart boundaries, evidences of gross valvular defects and absence of glaucomatous changes in the eye are helpful factors to distinguish a case of heart disease from that of epidemic dropsy.

In short it can be said that, if the diagnosis of epidemic dropsy is doubtful in a particular case, careful observation of each and every detail would certainly help one to arrive at a right conclusion.

Treatment.—Treatment of epidemic dropsy is on the whole unsatisfactory and is to some extent

empirical directed towards amelioration of symptoms rather than a rational attack based on proven etiology. It is an undisputed fact that methods of treatment based on pathological findings give the best possible results. So, if a more or less rational line of treatment in consideration of the various causal factors of epidemic dropsy be adopted and followed, as far as practicable, it will undoubtedly arrest the progress of the disease in great majority of cases.

The treatment of epidemic dropsy can be conveniently considered under the following heads:—

1. **General:** (a)—*Rest.*—Absolute and perfect rest in bed is of cardinal importance which must be ensured from the onset up to the establishment of convalescence. This is necessary to provide sufficient cardiac rest and to increase the reserve force of heart. No hard and fast rules can possibly be laid down regarding this; but physical exertion must be guided by cardiovascular manifestations and response to effort by exertion which again depends upon individual merits of each case. "Any exertion which the patient may undergo should not be attended or followed by breathlessness, palpitation, undue fatigue, a sense of discomfort or pain in any part of the chest and giddiness or faintness."

(b) *Diet.*—Dietary forms an important item in the treatment of these cases, proper selection of food being highly essential. It is an admitted fact that it is better to exclude rice in any form to avoid possibility of infection through it. Further, toxins which are formed and multiply in intestines when a person is kept on rice diet is thus checked, thereby preventing their absorption. If rice cannot totally be dispensed with in a particular case it can be given once daily in the form of sundried *atap* rice, husked recently. The rice used must be raw and un-refined and on no account rice water must be thrown away. *Stored rice should never be consumed.* Atta or brown bread should form the main substitutes of rice. The principle of avoiding vegetable ghee, mustard oil and in fact any kind of bazar food-stuffs which are highly adulterated, should strictly be adhered to. This is to prevent possible introduction of extraneous toxic substances with the food and also ingestion of products of decomposition. In fact, any kind of food that is taken by the patient must be under reliable supervision and inspection.

There are many who advocate high protein diet in cases of epidemic dropsy and this administration of diet rich in protein is a con-

troversial point. The supporters most probably give it on the analogy of nephritic oedema where there is a tremendous loss of serum albumin leading to unbalanced activity of the colloids in tissues and blood. In epidemic dropsy, however, there is no definite sign of protein deficiency as shown by the absence of hyper albuminuria in urine and no appreciable reduction of serum albumin in blood. Protein will further help to furnish with toxic amines due to defective absorption by irritated and inflamed intestinal surface as already suggested under etiology. The non-lactose fermentors group of the intestinal bacterial flora would assist in conversion of incompletely broken down protein constituents into histamine-like substance and is therefore likely to add to the allergic phenomenon. It is apparent therefore that there is no justification for the administration of proteins in a case of epidemic dropsy.

It is better to follow the slogan "Relieve the body of its load and the body will cure itself"—that is to say, lighten the burden of endogenous metabolism by preventing those foodstuffs whose intermediate products, the amino-acids, require as little detoxication by the liver as possible. This will include all the proteins of meat in any form. Substitutes must be found in milk, butter, cream, eggs, etc. for the purpose of preserving nitrogenous equilibrium of the body.

Vitamin A and vitamin B complex (B₁, B₂, etc.) are largely used indiscriminately in epidemic dropsy most probably on the ground of good results that are obtained in beri-beri. Here the benefits that arise out of the use of vitamins are of limited value and most often do not give satisfactory results. This is due to the fact that epidemic dropsy is not a primary deficiency disease like beri-beri. Yet the use of vitamins, though not of prime importance, cannot altogether be neglected.

Vitamin A is anti-infective; so, by its administration we can give the patient an advantage of increased resistance to infection and cut short the progress of the disease.

Vitamin B complex is also beneficial as it helps to maintain the integrity of intestinal epithelium thus preventing local absorption of toxic amines. Finally "supply of adequate amount of vitamins in the dietary would undoubtedly activate the endocrine board specially thyroid and adrenals under whose directions whole bio-chemical process of the defence measures of the body are elaborated."

Fruit juices specially that of pine-apple and oranges and fresh vegetables such as cabbages,

cauliflowers, tomato, sprouting grams and cereals are very good.

Of the various vitamin preparations that are in the market yeast tablets (yeastone), marmite and vitys give satisfactory results. To my mind intelligent use of naturally combined vitamins as they exist in different food-stuffs specially in fruits and vegetables is sufficient to bring about necessary beneficial results that are credited to them.

2. **Medicinal.**—First of all, retention of intestinal contents must be guarded against by the use of an initial purgative which will help to wash out toxic, accumulatory products of the intestines. Ol. Ricini mixture serves the purpose best. Subsequent use of purgatives should be handled with caution as irritation induced by them may disintegrate the already damaged mucous membrane thus favouring toxic absorption. Moreover this leads to weakening of tissue resistance.

Pulv. Jalap compound and saline purgatives which act by irritating the intestinal cells or by altering osmotic pressure of the tissue fluid should better not be used, as the mucous membrane is likely to be damaged in either way. Preparations of liquid paraffin and mild vegetable purgatives combined with oil which act by softening and lubricating the intestinal contents and thus ensure an easy passage of stools would serve the purpose. Diarrhoea indicates nature's attempt to eliminate the toxins. Astringent medicines, therefore, should never be prescribed at this early stage. Kaolin in colloidal form (Osmo-kaolin) can be used with advantage during this stage. It will help to prevent absorption of bacterial and metabolic toxins in the alimentary canal. Later, Kaolin can very suitably be combined with mist. creta or its equivalent. It is only when complete elimination of toxins has been ensured and when only irritative diarrhoea and not a toxic one persists, that one should think of giving astringent medicines, such as bismuth, orphol, Dover's powder and other similar preparations.

An alkaline diaphoretic and diuretic mixture may be prescribed from the very beginning to promote elimination, to prevent and combat acidosis and finally to add to the alkaline reserve of blood. Punarnava liq. in 1 drachm dose added to the above mixture gives excellent results. Of the alkalies, potassium and sodium citras should be discarded as these tend to decalcify blood and in epidemic dropsy there is always a hæmorrhagic tendency due to enormous capillary dilatation. Administration of alkalies are further helpful as these tend to change or modify the contents of alimentary



"CALCINOL"

IS THE FOUNDATION STONE.....writes a physician."

Perhaps that is why numerous physicians apply it to families foundation stone too.

If in your turn you like to apply it in your patients families too our samples and particulars will be gladly sent on to you.

Agents: RAPTAKOS, BRETT & CO., LTD. Bombay, Calcutta.

canal so as to lower the toxicity of intestinal organisms specially the cocci and coli group; otherwise they might become pathogenic during the period of weakened resistance and lead to serious disturbances.

As the main pathological lesion of the disease is capillary dilatation and endothelial damage, measures to combat them would form the mainstay of treatment. For this, drugs which cause capillary constriction and prevent transudation are to be used from the very beginning of the illness.

Ephedrine and adrenalin give most effective results. Of the two again, ephedrine is the drug of choice. Ephedrine acts directly on the musculature of smaller blood-vessels and produces generalised capillary contraction. It also "stimulates vasomotor mechanism, enhances vaso pressure effects, and stimulates acceleratory mechanism". Capillary dilatation is thus prevented and process of circulation improved. Ephedrine is preferred as it has got a slow and sustained action whereas the action of adrenalin though prompt is only temporary.

Ephedrine hydrochlor gr. $\frac{1}{2}$ —1 combined with calcium lactate gr. 15, 3 times daily give excellent results.

Theo-calcin which is a combination of calcium with theobromine lessens oedema by profuse diuresis and has got no irritating effect on the kidneys and is given in the form of tablets, 3—4 times daily.

Tr. ephedra vulgaris ($\frac{1}{2}$ —1 dr) can be used with better advantage as it contains a large amount of pseudo-ephedrine which acts on the heart muscles increasing the force and strength of cardiac contractions.

Adrenalin should only be used temporarily and in urgent and advanced cases while waiting the action of ephedrine to be established.

Calcium by mouth and intravenously gives satisfactory results. Calcium not only reduces inflammatory process but also retards capillary transudation. It increases coagulability of blood and, being hæmostatic, lessens the chances of any serious hæmorrhagic issue; colloidal calcium with vitamin D to favour better assimilation should be given intravenously in 1 c. c. dose 3 times a week. Calcium with parathyroid tablets 3—4 times daily give also good results.

Liberal use of digitalis in epidemic dropsy seems to be superfluous. This becomes quite obvious if one remembers the main pathological lesion which is primarily one of capillary crisis and not a cardiac one. Digitalis group

of drugs can only usefully be employed in a few cases, specially in advanced stage of the disease with general anasarca and signs of right heart stasis such as marked dyspnoea, venous engorgement and quick irregular pulse. Its use in other cases can claim successful results only when it is employed after the capillary crisis has been combated by regular and systematic use of ephedrine or Tr ephedra vulgaris. Digitalis would certainly control the genetic centres of heart and protect the ventricular muscle from exhaustion. Digifortis (in 20—30 m. doses 3 times daily) gives most efficacious results. In urgent cases, reflex cardiac stimulants are required. Adrenalin $\frac{1}{2}$ —1 c.c., cardiazol 1—2 c.c., camphor gr. 3, spt. ether sulph m. 15 and liq. strychnine m. 3 may be mixed together and injected hypodermically, stropanthin gr. 1/250 intravenously can be used, when time is of vital importance, to bring the heart under control quickly.

During the stage of convalescence a mixture containing iron as a hæmatinic and strychnine as a general and nerve tonic gives excellent results. Myeladol restores and regains the normal health in a very short time.

Mention has already been made regarding a new line of treatment initiated by the workers in Carmichael Medical College, Calcutta. They have been able to prepare a vaccine from isolated intestinal organisms, chiefly belonging to salmonella and paracolon group. They claim very good results by its employment—the beneficial result being shown by relief of oedema and gastro-intestinal symptoms. Though this vaccine cannot be called a specific one at this stage, yet it may be given a trial as a new and hopeful method of treatment. The vaccine is given bi-weekly starting from 10 millions per c. c., the total number of injections being six only.

Prevention of complications.—The numerous complications that are met with in the disease can be treated on general principles which are too well-known to require any detailed description. The complication in short are, enteritis, enterocolitis, broncho-pneumonia, pulmonary oedema, hæmatemesis, hæmoptysis, mælena, uterine hæmorrhage and hæmorrhages from various other mucous surfaces, glaucoma, hæmorrhagic retinitis, congestive heart-failure and sudden syncope.

The only complication which requires special mention is glaucoma. One should always be on guard for its development so as to be able to apply the brake before the disaster sets in. Glaucoma of epidemic dropsy is very obstinate to dietetic or medicinal treatment and not infrequently leads to blindness.

(continued at the foot of next page)

Psoralia Corylifolia

● Mr. J. C. Ghosh, B. Sc. (Manchester), F.C.S., Principal, School of Chemical Technology, Calcutta.

In the July 21st. 1928, issue of the "Pharmaceutical Journal" London, an article on the treatment of Leucoderma with Psoralia Corylifolia was first published with the result that it roused an amount of interest in India and abroad in the subject and several enquiries were received. Despite the particulars furnished in the article and in replies to enquiries, an impression gained ground in some quarters that Psoralia Corylifolia was claimed to be a specific for leucoderma. This was an entirely erroneous impression. Moreover, the article contributed was by a pharmacist and not by a medical man, and the subject was dealt with from a pharmaceutical point of view alone. It, therefore, seems necessary to restate some of the facts connected with Psoralia Corylifolia and

(Continued from previous page)

In this connection Col. Kirwan's advice is of vital importance and worth remembering: "Mitotics such as pilocarpine and eserine are absolutely useless. It is very important never to prescribe eserine drops. Eserine is a very potent drug causing pain in the eye and symptoms of irritation, so adds to the disadvantage causing hyperæmia of the conjunctiva thus making operative treatment much more difficult. As long as visual fields show no defect there is no necessity for carrying out an immediate operation. It is possible that the general disease and with it the glaucoma will be cured before the optic nerves become permanently damaged by the increased intra-ocular tension. The patient should be kept under observation and as soon as the defects in the visual fields become evident operation should not be delayed." This clearly elucidates everything about the treatment of this type of glaucoma and hardly leaves any room for further addition.

Finally, a change of place as after-treatment does often produce a remarkable improvement in the condition of patients not always possible to induce by the usual methods of treatment alone. Change of place is necessary to avoid the possible local sources of infection, and the adverse climatic and other conditions of the endemic area.

to ask, that those who are using the drug, as issued by the School of Chemical Technology, P. 154, Lake Road, Calcutta, may be good enough to send to the School a report on their trial.

The facts, briefly re-stated, are as follows:

Psoralia Corylifolia, which commonly grows in the Deccan but generally throughout India from the Himalayas to Ceylon, is known by various vernacular names, which are derived from Sanskrit *Vakuchi*. There is, however, another plant, *Vernonia Anthelmintica*, which is also called *Vakuchi* in Sanskrit. This fact, as also the existence of apparently therapeutically inert varieties of *Psoralia Corylifolia*, render it difficult to identify the plant and to determine its efficacy in the treatment of leucoderma, a dreaded skin disease hitherto considered incurable.

Both *Psoralia Corylifolia* and *Vernonia Anthelmintica* were known in India for centuries past as remedies for various skin diseases including leucoderma. There was, however, no precise information and the designation of more than one plant as *Bauchee* resulted in confusion.

There is another factor which adds to the confusion. In Sanskrit literature leucoderma is known as "white leprosy". No doubt leucoderma is depigmented skin, but it is not leprosy as understood in modern science. Moreover, the treatment in either case is not the same. The basis of leucoderma treatment under modern scientific methods is still chiefly *Psoralia Corylifolia*. But unless sufficient care is taken at the outset to use the right drug in the right way, there are less chances of success. This aspect of the question was originally discussed in an article, which the School of Chemical Technology, Calcutta, published in the "Pharmaceutical Journal," London, July 21, 1928 issue, pp. 54-55, and subsequently in the "Antiseptic," Madras, August 1928 issue, pp. 473-77, and in the "Indian and Eastern Druggist," London, October 1928 issue, pp. 232-33. Patients from London and elsewhere wrote to the Calcutta School of Chemical Technology, asking for supplies of oil from the seeds of

Psoralia Corylifolia and their requisitions were complied with. It was never expected that the result would be uniformly encouraging in each and every case and this was clearly pointed out in the article referred to. Portions from that article may well be reproduced here for the information of those who have used the oil either with effect or without effect, and they may be reminded that in several cases a prolonged use of the oil with patience and intelligence is absolutely necessary, although there may be a few fortunate cases of rapid recovery from the use of the very first ounce of the oil as already reported to this School on many occasions. The general experience is perhaps one of slow but permanent progress by the application of *Oleum Psoralia Corylifolia*, as reported by the Medical Officer, Mwanza Hospital, Tanganyika Territory, East Africa, who asked for a fresh supply of the oil, and also by many other persons. The facts, to which particular attention is invited, are :—

(1) *Psoralia Corylifolia* seeds are sweet scented—a fact indicated by its chief Sanskrit name *Sugandha* (lit. "scented"), their agreeable aromatic odour resembling that of the *bael* fruit, whereas *Vernonia Anthelmintica* seeds are not scented. There are other distinguishing features as well, namely :—

PSORALIA CORYLIFOLIA	VERNONIA ANTHELMINTICA
N. O. Leguminosæ	N. O. Compositæ.
Leaves cordate both sides, conspicuously dotted with black dots.	Leaves acuminate.
Seeds dark-brown or brownish black, kidney shaped, flat, oblong, about 2 m.m. long and aromatic.	Seeds black or dark brown, covered with whitish scattered hairs, cylindrical, tapering towards the base and with about ten paler longitudinal ribs.
Oil thick, reddish-brown, with an agreeable aromatic odour. S. G. . . 0.910 at 100°F.	Oil dark-brown and strong smelling. S. G. 0.916 at 100°F.

(2) Confusion, and consequently inefficacy, arises from seeds of entirely different plants being known as *Bauchi*, and inferior as well as adulterated varieties of *Psoralia Corylifolia* are often used with unsatisfactory and negative results. Further, the action of *Psoralia Corylifolia* often needs to be accelerated by subsidiary measures, such as emetine injection, internal use of some intestinal antiseptic, external use of liniment, alteratives, ointments, etc., according to the requirements of a case, and in all cases patients must either report progress or remain under observation of a local

doctor for the treatment to be successful. These are important facts and may be carefully noted.

(3) In the event of the drug prescribed being of the required strength and purity (as is the case with the oil issued by the school of Chemical Technology, Calcutta,) the results observed are generally satisfactory, particularly when patients strictly follow instructions with patience and intelligence. The oil of *Psoralia Corylifolia* has an irritant action, its effect on leucoderma being specific. The skin becomes red, which varies in intensity according to individual tolerance and idiosyncrasy, the melanoblasts are stimulated, leading to pigment formation, and finally pigment is diffused into the depigmented leucoderma patches. Some patients get frightened at the first indication of irritation and discontinue applying the oil, and some develop no irritation at all. In any case the patient should exercise intelligence and try to keep up the effect by either reducing or increasing the frequency of application, which normally consists of gently rubbing the oil over the affected part thrice a day, for at least half an hour each time. It is sometimes necessary to dilute the oil with olive oil to suit individual tolerance, the quantity of the olive oil to be added being determined experimentally by each individual, and to apply an emollient as a soothing agent. With attention to these details, thereby providing sufficient safeguards against all apprehensions, progress is generally assured and the oil may be safely used even on eye lids and on other delicate parts, although it is not claimed that a specific cure for leucoderma has been arrived at in the sense in which salvarsan is understood and used for syphilis.

Samples of oil from seeds of *Psoralia Corylifolia* were exhibited at the stall of the School of Chemical Technology, Calcutta, during the Calcutta Exhibition of 1923 and from the way visitors to the stall were scared away by pictures representing different stages of leucoderma, it appeared that both leprosy and leucoderma were repugnant to all communities. Doubtless it will be doing a real service to science and to humanity if this School, which is very much interested in indigenous drugs investigation, is kept kindly informed of the results obtained by patients from the use of *Psoralia Corylifolia* oil, as supplied by the School. It is earnestly hoped that this request will not be lost sight of.

Leucoderma is called (though erroneously) "white leprosy" in Hindu medicine, there being several varieties of leprosy under that system of treatment, and although this ancient

system, as it stands at present, generally lacks in what we call scientific procedure and precision, it is still described by several European scholars "as a marvel to the modern scientific investigator" and provides, in many instances, materials of considerable value, as well as facts of close observation. Several of them have been scientifically tested and found to be of real value, for instance, modern medical science has so far failed to find better remedies than those of Indian origin for the treatment of either nodular leprosy or leucoderma, the medicine used in either case being entirely Indian in origin and in conception, and the knowledge handed down from at least 1,500 B. C., forms the basis of modern investigation not only in regard to leprosy, but also in several other directions.

In the annual report published in 1928, the British Empire Leprosy Relief Association predicted that leprosy would be completely stamped out within the next ten years by means of treatment with oil extracted from the dried fruit of *Hydnocarpus* tree which grows on the Malabar Coast. It was announced that arrangements had been made for a deputation of doctors from all parts of India to undergo a course of training in the diagnosis and treatment of leprosy in Calcutta, thereby widely diffusing knowledge of the subject. A similar propaganda seems necessary for stamping out leucoderma by treatment with oil obtained from the seeds of *Psoralia Corylifolia*, the sufferers from this disease being presumably no less numerous and no less widely distributed than leprosy patients.

The remedy for leprosy is popularly known as *Chaulmoogra*. In his pamphlet issued on the subject in 1917, the writer first identified *Chaulmoogra* with *Hydnocarpus* from a chemical consideration of the oil extracted therefrom (*The Pioneer*, March 1st, 1928), all previous leprosy work having proceeded on *Gynocardia Odorata* and *Taraktogenos Kurzii*, as mentioned in the British Pharmacopoeia (1898 and 1914) under *Chaulmoogra*. There is a similar misunderstanding in regard to *Psoralia Corylifolia** which has definitely proved to be as efficacious for leucoderma treatment as *Chaulmoogra* (*Hydnocarpus Wightiana*) for leprosy. Both these drugs are ancient Indian remedies and

**Oleum Psoralia Corylifolia*, as manufactured and issued by the School of Chemical Technology, Calcutta, is being used, with satisfaction, throughout India, Burma and Ceylon, on requisitions mostly from the medical profession (including the Dermatologist of the Calcutta Medical College and Carmichael Medical College Hospitals and of the Tropical School of Medicine, Calcutta, and it may be added that requests for the supply of this oil are sometimes received from London, the United States, America, Hungary, Federated Malay States, Siam, British East Africa, etc.

the misunderstanding arises from (1) inaccurate identification, (these are facts which are often overlooked) (2) from use of adulterated varieties, and (3) from inexperienced handling of the drug.

Dextrosol :—It is a glucose powder manufactured by Messrs. Corn Products Refining Co., New York, readily soluble and identical with the sugar of the blood and tissues. It can be given orally, rectally and intravenously as per indications of the cases where glucose is needed. The reviewer who has used this preparation extensively in his practice can conscientiously recommend it to the profession as one of the best preparations of glucose in the Indian Market.

Counterfeiting of standard pharmaceutical products in India has become such a grave menace to public health, that it needs Government investigation. As for example, scores of spurious imitations of *Antiphlogistine* have appeared on the drug market, many of which pass into oblivion as readily as they are "boomed". The physicians may easily imagine the seriousness of applying a cheap and inferior, and often deleterious preparation, in cases of Pneumonia, Pleurisy and Bronchitis. For over four decades *Antiphlogistine* has maintained its unrivalled clinical supremacy throughout the world as a topical application for the treatment of all inflammatory and congestive conditions. It has been imitated, but never duplicated.

Mrs. Sanger, the famous birth-control writer and advocate, has been touring India during the last few months. She is meeting with much opposition but on the whole, it can be said, she has put her case fairly and openly. She attended the All-India Women's Conference at Trivandrum during the last Christmas and also the first obstetric and gynaecological conference at Madras in January, this year. She placed her case very ably and we presume she carried conviction among her hearers. She is a shrewd propagandist and it was this shrewdness that was, perhaps, responsible for her interviewing Mahatma Gandhi and Maharishi Ramana of Madras. Both were for control by continence and not by artificial methods.

Mrs. Sanger : Is birth-control immoral ?

Maharishi : Morality does not come into the question at all.

It is a "desire" and it must be controlled. Continence is the only remedy.

Mrs. Sanger : Continence is impossible for most people. Should they not utilise scientific knowledge.

Maharishi : "To try to control desire by indulgence is like quenching fire with fuel" so says *Upanishads*.

To one of the questions put to her in one of the Madras lectures regarding chemical contraceptives, she said that it is unfortunate that the contraceptive sold and available in India are almost given up in the West and are not safe or reliable. She further said that in America, they have succeeded in evolving a cheap, safe and efficient contraceptive, the chief ingredient of which is starch. She hoped that some one in this country will buy this formula. She is in correspondence with Bombay Surgical Company in this connection.

CLINICAL MEMORANDA

A CASE OF HYMENOLEPIS NANA

(Dwarf Tapeworm)

BY DRS. N. C. BHATTACHERJEE,
M.O., KURIGRAM,
AND

K. C. BANERJEE, P.O. CHANDIJAN,
(DURGAPUR)

On the 2nd September 1935 we had to attend a married lady living with her father at Kurigram Town said to have been suffering from fermentative dyspepsia, low fever and nervous debility. She gave us the following history:

Burning sensation in the stomach and cardiac region, bowels irregular, alternate constipation and diarrhoea, anorexia and salivation. She had intense head-ache, palpitation of the heart and frequent micturition. She has no children and her menstruation was regular. She had never left her native place.

On examination of her urine it was found turbid with a slight increase of phosphates. The blood examination showed increase of eosinophiles to 12% and decrease of hæmoglobin (60%). No malarial parasites. Examination of her stools showed numerous ova of Hymenolepis Nana and a few of Ascaris. She was given carbontetra chloride and oil of chenopodium (combined). This relieved her symptoms. But a re-examination of the stool was not possible with a view to find out the disappearance of the ova under reference.

Remarks

Children of poor families are, as a rule, apt to be infected with Hymenolepis nana, but the case under report is rather peculiar in view of her hygienic living and age. It is possible that the dyspeptic troubles of some patients may be due to this infection and hence microscopic examination of such patients is essential for a proper diagnosis.

We are indebted to Dr. J. N. Sen Gupta, Civil Surgeon, Rungpur, for his kind permission to publish this note.

A CASE OF PLACENTA PRÆVIA*

BY RASAMAY BHATTACHARYYA, L.M.P.
(ASSAM), D.T.M. (CALCUTTA)

Bokpara Tea Estate, Doom Dooma, Assam

Sombari, F., aged 22 years, a triparous woman, nearly full term pregnant, was brought

*Read in a meeting of the Assam Frontier & Budla Beta Medical Society held on 22nd February 1936. Submitted for publication on 27-2-36

to the hospital on 7-1-36 at 12 noon with a history of profuse hæmorrhage.

Previous history

Health was good all along. First pregnancy terminated in abortion. Her second pregnancy was normal and she delivered a male child which is now about three years old and quite healthy. This is her third pregnancy.

Condition on admission

No hæmorrhage was noticed. Uterine contractions were few and far between. Pulse and general condition were quite good. Stools and urine were normal. On abdominal palpation, uterus was soft, foetal parts were easily felt and vertex presentation could be made out. Vaginal examination was deferred and the patient was kept in complete rest with foot of the bed elevated and a dose of mixture containing chloral hydras gr. xv, pot. bromide gr. xv and liq. morphine hydrochlor m. x was administered. She had no sleep but nothing untoward happened until 4 p.m., when, getting up from her bed to pass urine, severe hæmorrhage set in. Head was palpable on the pelvic brim but not engaged. Uterine contractions were more frequent and fairly powerful; the os admitted three fingers and the margin of the placenta could be felt definitely in the lower uterine segment.

Management

A bipolar version was done by Dr. Whaley, M.D. Membranes were ruptured and a leg was pulled down to which a weight of about 2 pounds was applied by means of a foot-tape for continuous traction. Hæmorrhage was thus stopped. This procedure was completed at about 7 p.m. Usual aseptic precautions were taken but gloves not used. Chloroform anaesthesia was given. At 10 p.m. the patient delivered a still-born child; but after-coming head gave rise to some difficulties and was delivered by *grip method*. Immediately afterwards placenta came out. A hot intra-uterine douch with iodine solution (1 dram to a pint) was given and necessary restorative measures were resorted to. There was no further hæmorrhage and the patient had a restful night. Next day 20 c.c. of anti-streptococcic serum (puerperal) was injected as a prophylactic measure.

Later symptoms

On 12-1-36 there was a sharp rise of temperature which continued for nine days ranging between 99°F. and 103°F., but finally subsided

on intravenous iodine. Blood film showed no malarial parasites. She had also developed severe anæmia for which she was treated with big doses of iron and nutritious food. She was eventually discharged from hospital on 18-2-36 cured.

Points of interest

1. Such a case is rare in Tea Garden practice.

2. Perhaps early admission to hospital prevented the patient from drifting into a condition too bad for manipulation.

My hearty thanks are due to my chief Dr. W. F. Whaley, M.D., for his suggestion to read this case note before this society and kind permission to send it for publication.

PRACTICAL SUGGESTIONS

Matters Medico-legal

Persistent thymus, status lymphaticus, and hæmophilia are pathological factors which may render a simple wound fatal owing to persistent and profuse bleeding. The first two are revealed only at the post-mortem table. The position of a certifying medical man may be puzzling under such circumstances. I have always classified such wounds as simple but that death was due to a particular morbidity.

Apart from well-known symptoms of death due to drowning, *fine froth in the trachea* can be taken as the most conclusive and confirmatory evidence.

An extraordinary case of alleged cut-throat: In the year 1929, in a far off township in Burma, a man with cut-throat was brought to the dispensary by his wife and son. Both averred that they saw him cut his own throat with a pocket-knife in a corner of their garden. The patient was conscious but could not talk as the wind-pipe was wholly severed. I sent for the magistrate to take a dying declaration. He was in a quandry as to how to get the declaration when the patient is not in a position to talk, though conscious. I suggested questioning him by gestures. The magistrate doubted whether such a procedure was valid in law. When gesticulated, he replied by signs which meant to convey that three persons attacked him, two of whom took hold of him and the third cut his throat. It, at once, struck me that he may be asked to write down. A paper and pencil was given and he wrote cleanly, distinctly and unambiguously the same story as we understood from his gestures. 15 minutes later, he died. The time between the injury and his death was just about one hour. On examination I found his trachea and œsophagus practically severed and the left jugular vein partially injured. These were confirmed by a

post-mortem examination. The peculiarities in this case were: (1) the direction and tapering of the skin-wound looked like a self-inflicted wound. (2) The depth of the wound suggested homicide. (3) The patient was completely conscious even though the left jugular vein was cut. (4) His wife and son averred that they saw him "with their own eyes" cutting his own throat when they raised an alarm and went to his rescue. (5) The patient on the other hand, had gesticulated and written consistently that he was murdered. It was indeed a case which did not admit of a definite opinion, though I was inclined to believe it was homicide. I gave a certificate where-in I mentioned the points in favour of suicide and the points against it and that I could not give any affirmative opinion in favour of suicide or homicide. The case remained "undetected". In cases like this, a straight-forward opinion of our inability to decide is safer and more prudent than our assertion. The trying magistrate may find such circumstantial evidence as will throw light on the case; but that is not within the purview of the certifying physician.

2. *Alleged suicidal hanging by a boy of 9 years.* This was one of the sensational cases in which I had to give an opinion. The facts of the case were, briefly, thus: the boy was 3½ feet in height. He was found hung to a beam about 3 feet high above the ground, at the back of his own house. His father saw him in this position early morning when he immediately reported the incident to the district magistrate, who was also the police superintendent. The latter came to take me to the actual scene of the tragedy. I found the typical marks of hanging and the rigor mortis had not passed off. I was asked to say whether it was suicidal or homicidal. The following possibilities crossed my mind:—(1) He might have been hung in a different place and foisted here to

incriminate the father. But the position of the dead body, the presence of rigor mortis, and the absence of any kind of injury other than the oblique mark of hanging negated this theory. (2) He might have been held forcibly and hung by even a single person, as he was only a young boy who could not offer much resistance. (3). The boy himself might have committed suicide. But since the height of the beam from the ground-level was actually lesser than his own height, I thought that even while in the act of kneeling down, necessary to tighten the rope round his neck, the instinct of self-preservation would come to play and he would or could have stood up when the noose would have become loose enough not to strangle him. Besides, he was a young boy and was found to be merry during the earlier part of the tragic night. This could not be reconciled with the theory of suicide. I gave a tentative opinion that it was a case of homicidal hanging. Later, when I thought more deeply over the problem than was possible under such sensational circumstances, it struck me that my argument No. 3, above, was not sound. For, as soon as the boy knelt down to be hanged, the noose might have sufficiently tightened itself around the neck as to make him unconscious by pressure over the vessels of the neck. Thus he would have been deprived of the power of volition and with it the instinct of self-preservation. I, therefore, subsequently changed my original opinion into one probably of suicide. This case will illustrate that the certifying physician should not prejudice his mind by considerations other than the medico-legal merits of the case, such as the absence of a cause, the temperament of the diseased and similar other circumstances that may not exactly fit in with his medical observations.

A. V.

The Glaxo Laboratories.—The transfer, from cramped and adapted town premises to a spacious semi-rural site, of a manufacturing concern based on scientific control is a vast undertaking. The Glaxo Company is to be congratulated on the successful way in which they have done this. A site of 15 acres at Greenford—that classic spot where Perkin discovered the first aniline dye—has given opportunity for considered and ordered design, an opportunity which has not been lost. A long, well-lighted, very modern building with only one floor above ground level is arranged so that raw materials brought in at one bay, adapted for easy unloading of lorries, pass through the various processes in their way across the factory part of the building to a dispatch bay, without confusion or unnecessary handling. In some cases raw material is brought to the upper floor so that it may be ground, sieved, mixed with

other products, or otherwise treated; so the final preparation then gravitates to the lower level where it is divided into appropriate measured or weighed units and put in suitable containers for sale and use. All this necessary preparation is done with the minimum of effort and with proper regard to cleanliness, but without the eyewash of redundant precautions designed to make an impression on visitors.

The substances prepared at Greenford include vitamins A, B₁, B₂, C and D, parathyroid extract, the oestrogenic hormone, ergot alkaloids, pituitary extract, and antiviruses and similar bodies; many of them are sent out in admixture with suitable food products or mineral constituents which may be deficient in the human body and form useful adjuncts to the organic preparations. Milk and Malt products and cod-liver oil of guaranteed potency are also handled at Greenford. Most of the products mentioned can only be offered with confidence to medical men and their patients if their activity and composition can be guaranteed as suitable and reasonably constant in batches made or sold at different times. The greater part of the upper floor of the Greenford laboratories is therefore devoted to control and research.

The chemical laboratory consists of one large room where research and analytical control goes on side by side. The arrangement which, although not usual, is followed in some other large laboratories, such as those at County Hall, has the advantage of enabling the scientific staff to survey the whole of the work and ensures the pooling knowledge, experience and initiative, besides easing the dislocation caused by sickness or holidays. Chemical control is supplemented by physical examination where this is of service, as, for example, in the spectrometric assay of vitamin A. Chemical or physical examination suffices for some purposes and in others enable batches of material to be packed ready for issue, but where the question of activity is important, as in the case of vitamins, actual issue is delayed until experiments on animals have shown that the preparation is up to standard. For this purpose a large animal department is kept up, in which thousands of white rats of the well known Wistar strain are bred and stored, both for sale to research workers and for experiments in the laboratory itself. Besides the laboratories mentioned others are devoted to bacteriology and the preparation of vaccines.

The occupation of the new laboratories was carried out very carefully: an illustrated pamphlet was distributed among the workers before the move was effected, and everyone could see from it where he would be working and how to get there, besides finding his way to any part of the building which might concern him. When a visit was paid to Greenford, a few weeks after the move, everyone seemed as "native and to the manner born"; the obvious newness of the building and some plant erection which was going on were the only signs that the place had not been running smoothly for years. (*Lancet*, Feb. 15, 1936, P. 407.)

TWO OUTSTANDING PRODUCTS OF UTILITY

● **GREENOSAN TABLETS**: Controlled by the Danish Government Vitamin Laboratories. Grown and Extracted on the Fruit Farm of Skelskor, Denmark. Each tablet contains a small therapeutic dose of the essential vitamins A, B₁, B₂, C, D and E in carefully balanced proportion, extracted with great care from VEGETABLES AND FRUIT WITH ORGANIC IRON, CHLOROPHYLL, LECITHIN, Ca, Mn, Mg, K, CU, in combination with Natural Organic Acids. All these vitamins are essential to life, and when extracted from natural sources are more assimilable than artificially and chemically produced vitamins.

● **SULFOSIN LEO**: Useful in General Paralysis, Syphilitic and Non-Syphilitic Affection of the Central Nervous System. Treatment with sulphurated oil (Sulfosin) was introduced in 1924 by Knud Schroeder (Odense, Denmark) as a chemical fever therapy in general paralysis of the insane, and subsequently, in other syphilitic and non-syphilitic affections of the central nervous system. It has proved fully to come up to expectations as is evident from a number of reports on this question (the present literature comprises over two hundred papers in twelve languages, from twenty different countries altogether.) The method has proved effective also in cases where other fever therapy (e.g. malaria therapy) has failed. The method is safe, easy to dose and employ, and very economical, requiring no hospital measures or expensive apparatus.

(Vide Article "Treatment of Chronic non-specific Arthritis with intra-muscular injections of Sulphur"—*British Medical Journal* dated December 14th, 1935).

AGENTS:—

Messrs. ALBERT DAVID & CO.,
8, ESPLANADE EAST, CALCUTTA

Telegrams: "Remit" Calcutta



FAMOUS OVER 25 YEARS

● Personal cleanliness and the spacing of child-birth are essential to healthy womanhood. On the other hand suppression of natural instinct and elimination of physical satisfaction are not advisable.

● **PATENTEX** is the safest, most convenient and effective contraceptive available to-day. Supplied in a collapsible tube with a glass nozzle, **PATENTEX** is easily and quickly used. The gelatinous substance seals the entrance of the womb and prevents the entry of spermatozoa, killing them. The chance of conception is annihilated.

● **PATENTEX** has served thousands of women, through the Medical Profession.

Per tube Rs. 3-8-0

Stockists:—

APPAH & Co., MADRAS

Sole agents in India:

MALGHAM BROS.,

26, Old Custom House Road, Fort, Bombay

Doctor,

● Qualify yourself for the Cambridge Senior Certificate by private study at home.

● You will then become eligible for admission into higher courses of studies in Medicine and Surgery either in India or in England: M.B. B.S. (Mad.) I.R.C.P., M.R.C.S. (Eng.)

● We have the necessary experience and equipment to help you and will gladly respond to your enquiries if you but just write to the Principal.

Instruction by correspondence
—a speciality

Postal and Personal Tuition
on Cambridge Double Track Plan

THE CITY COLLEGE, MADRAS

Re-mineralize with
FELLOWS SYRUP

IRON
SODIUM
POTASSIUM
PHOSPHORUS
MANGANESE
CALCIUM

to overcome the marked mineral depletions caused by such acute infections as acute bronchitis, coryza, the debility of old age, and postoperative cases.

It is the most valuable preparation in these conditions.

Suggested dose: One teaspoonful t.i.d. in water.

SAMPLES ON REQUEST

FELLOWS MEDICAL MFG. CO., INC.
26 Christopher Street, New York, N.Y.

JUST OUT! JUST OUT!!
MODERN MEDICAL TREATMENT
By JAMIAT SINGH
M.D., (Pb.), 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 therapeutics, giving treatment of Tropical Diseases, diseases of Heart, Lungs, Kidneys etc., and also diseases of skin, children and women.

Recommended by Col. N. S. Sodhi, I.M.S., Inspector General of Civil Hospitals, Burma, Lt. Col. D. H. Rai Officiating I. G. Punjab and Lt. Col. Amir Chand, I.M.S., Principal, Medical School, Amritsar.

Get up is excellent. Pages nearly 400. Price Rs. 10-4-0 or Sh. 15 excluding packing & postage.

Can be had from:—

1. Messrs Thacker, Spink & Co. (1933) Ltd., Post Box No. 210, Calcutta.
2. The Popular Book Depot, Grant Road, Bombay.
3. Messrs Atma Ram & Sons, Booksellers, Lahore.

LEUCODERMA
Treatment with
OLEUM PSORALIA CORYLIFOLIA
(S.C.T.)

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

Other (S.C.T.) Products:—
Allyl Co. for Asthma, Beri-Beri, Influenza, Tuber-culosis (early stage).
Anti-Cholera Drops.
Anti-Dyspepsia Pills.
Baldness Cure.
Oleum Hydnocarpus Co. (A) and (B) for Leprosy.

Free Literature and free Medical advice
Apply, enclosing a nine ples stamp, to:
School of Chemical Technology
P. 154, Lake Road Kalighat, CALCUTTA

● Only ethical advertisements are accepted. Our readers may, therefore, confidently prescribe what is advertised in *The Indian Medical Journal*

The Indian Medical Journal

EDITORIAL BOARD

A. N. ROY	T. V. RANGANATHA RAO
Y. SURYANARAYANA RAO	U. D. GOPAL RAO
J. G. GAYAL	G. SUBBARAYUDU
R. RAMANJULU NAYUDU	A. D. MUKHARJI
A. SRINIVASAN	T. C. BASU CHOWDHARY
A. V. BALIGA	C. V. C. RAO
P. RAMA RAO	MIT SINGH
P. MURUGESAN	D. V. VENKAPPA
K. S. S. AYYAR	A. VISWANATHAN

APRIL 1936

EPIDEMIOLOGY OF CHOLERA*

The epidemiology of cholera has been ably dealt with and discussed by eminent observers; but the recent advent of the concept of bacteriophagy has apparently given a short shrift to the hitherto accepted beliefs and notions.

Lt. Col. Russell† observes that the incidence of cholera during 1932 and 1933 is the lowest recorded in India during the last 60 years and that the violently explosive outbreaks of earlier years are now less frequent. At the same time he writes:

"Judging from the provisional data, now available, the cholera wave has continued to rise during 1934, so that the usual cycle seems to be in course of development. At the same time, no very serious epidemic is anticipated as the large decline in incidence during recent years suggests that certain new factors have been at work throughout the country in recent times (italics ours) in reducing the severity of this endemic disease."

And these new factors are, in his opinion, the vigorous preventive work by the Public Health Department, the increasing use of anti-cholera vaccine and the relative absence of famine conditions. He, however, warns that:

"Whilst some cause for optimism exists, there is nothing in the present situation which can permit of any relaxation on the part of public health officers; rather does it require renewed effort that India may eventually become free of this dreaded scourge."

In spite of the high, splendid and valuable research work that is being done in many of the Government Research Institutes of India, notably at The School of Tropical Medicine,

*The cholera vibrio and the bacteriophage was dealt with editorially, vide Vol. XXIX p. 569.

†Annual report of The Public Health Commissioner with the Government of India for 1933, Vol. I, p. 33.

Calcutta, regarding cholera vibrio, we are yet to understand conclusively how the epidemic of cholera starts and spreads. The current belief is that water plays the predominant role in the epidemiology of cholera. But it is probable that it is only subsidiary and that flies are more culpable in this respect than water.

Certain broad facts are to be remembered in this connection, facts which, to our knowledge, have not yet been contradicted. Firstly, that epidemics of cholera are of more frequent occurrence in India than in other parts of the globe. Secondly that Bengal and Indo-China are considered to be the only two endemic centres of cholera in the world and that if this endemicity is rooted out, cholera infection may be extinct from the world. Thirdly, a study of the history of cholera epidemics in India, as elsewhere, reveals that modern rapid methods of communication have not in any way increased the incidence of the disease and have not been the means of "crossing oceans and deserts" for its epidemic dissemination. Fourthly, no epidemics have been directly traced to carriers in the accepted sense of the word; for, cholera—unlike typhoid—is not a disease that is capable of producing a carrier condition, at least that is our present knowledge. Fifthly, there is no such thing as acquisition of acquired immunity of the individual or of the general population and the people have not become less susceptible, as we see that the epidemics which began in pre-historic times have not ceased but continue to rage in varying intensity. It is no wonder, therefore, that Col. Gill writes*:

"May it not be that undue stress laid upon water-borne transmission is largely responsible for the small progress made in controlling this disease."

A host of other observers have also brought home the fact that samples of water from different sources in epidemic locality, when the epidemic is actually raging, were free from the typical and virulent type of cholera vibrio. This is said by D' Herelle to be due to the co-existing development of corresponding bacteriophage and its lytic action on the former.

Yet there are epidemics which have been apparently traced to the drinking of infected water. If the epidemic of cholera is to be considered mainly water-borne, two conditions seem to our mind to be necessary, namely, the infection of water must be recent and the use of such a water should be within, at the most,

*Gill and Lal, The epidemiology of cholera with special reference to transmission, I.J.M.B. 1931, VOL. XVII p. 1255.

a period of 24 hours of its pollution. For, it has been pointed out in our November editorial that, in places where epidemics prevail, concomitant passage of corresponding bacteriophage into the water occurs which transmutes the virulent, infective vibrio into a non-virulent, non-infective vibrio. It is therefore, obvious that water cannot be the chief means of epidemic spread of cholera. If water is supposed to be the cause of epidemic transmission, it beats hard against acknowledged facts. Are the towns where the water supply is by means of pipes or tube wells free from the memory of cholera epidemics? Is there any particle of evidence to show that along the course of the infected waters of the rivers Ganges and Jumna, Kaveri and Krishna, the epidemic is disseminated? Have the tons of potassium permanganate or chlorinated lime spent in the disinfection of wells, tanks and lakes of India reduced substantially the spread of cholera epidemics in this country?

The truth may be that water is the least important source of epidemic transmission but that contact and food contamination by means of flies play a significant role in the epidemiology of cholera. And the appreciable reduction in its epidemic incidence which Col. Russell notes in his report for 1933 is, we believe, due more to the improved sanitation than to large-scale disinfection of water.

The significance of this statement will be apparent if our readers bear in mind the typical commencement of an epidemic of cholera.

A gets the attack, and before he is conscious of it, he becomes the source of infection to those in immediate contact with him. His stools abound with cholera vibrios. He infects his hands while performing his ablutions. He infects the food stuffs he may handle. Flies, the most ubiquitous of domestic pests in India and Burma, sit on infected stools, ingest the vibrios and thus transmit the infection to a series of food-stuffs to which they have easy access. Then very much before the fly enters the scene, B is infected and the contact C, and the seeds of the epidemic are thus sown. Insanitary habits, promiscuity, and the flies do the rest. If B or C leaves the place either in the stage of incubation and premonitory diarrhoea or in the stage of acute onset he in turn sows the seeds in the place to which he is destined and the epidemic skips from place to place, the severity and extent depending on the virulence of the vibrio, the topographical sites infected, and the corresponding insanitation and fly population. If one can picture the presence of a case of cholera in an ordinary Indian home, the way in which the evacuations are removed, the number of flies hovering in the very citadel of the disease, the incessant siege by flies of men and food-stuffs, the communication of people and flies between home and home and to the market-place where putrid fish and flesh and vegetables offer a favourable nidus of infection, he will then feel inclined to assess the importance of insanitation, and its product, the fly, in the right understanding of the problem of cholera transmission.

As Col. Gill and Lall* observe, the house-fly hypothesis provides a reasonable explanation of the part played by climatic and meteorological conditions in the natural history of cholera.

The one and only sustainable argument in favour of water-borne infection is the endemicity of cholera in Bengal. The water supply of Bengal is mostly from tanks and it is reported by D' Herelle that the water of these tanks reveals only non-agglutinating vibrios which are not pathogenic. He suggests that the vibrios live or may live for a long time in intestines of aquatic animals, such as, the annelid, crustacean or mollusc. This is not accepted by other workers who, on the other hand, believe that the non-agglutinating and non-virulent vibrios generally found in the waters of the epidemic areas become virulent and infective under some favourable circumstances and that, thus, the water so infected may act as a reservoir of infection and starting point for epidemics.

Though we confess that the problem of endemicity of cholera in Bengal is yet to be solved and constitutes, as it were, a supreme challenge to the intelligence of man, yet we believe that the question of prevention of cholera will assume a more practical aspect if our public health workers concentrate on vigorous attack against insanitation than spend inordinate time and money on disinfection of water in the belief that it is the chief source of cholera epidemics in this country.

The tropical fly is the favourite child of insanitation; it is, next to the mosquito, one of the scourges in Indian cities and villages. There is, perhaps, more number of tropical infectious diseases caused by means of flies than we, at present, actually know. Prevention of epidemics, like cholera, means prevention of insanitation. We wish our countrymen realise this truth in an ever increasing degree and voluntarily help the public health authorities who, with such a co-operation and aided by recent research investigations, are bound to succeed in preventing and controlling the epidemics, specially cholera, in this land.

Current Comments

It is unfortunate that in our country there is a fierce controversy between the allopathic and the Indian systems of medicine (by which we mean the Ayurveda and the Unani) as regards the superiority of one over the other. This attitude on either side is obviously borne of bigotry and pre-

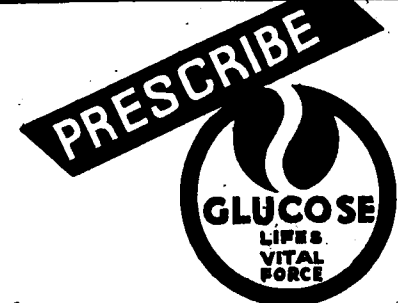
*Ibid.

DEXTROSOL

The ENERGY-REPLACER

Where illness has so depleted the patients' reserves of energy as to make convalescence unduly protracted a course of "Dextrosol" will facilitate complete recovery. This is identical with blood sugar, needs no digesting, and assists the liver to fulfil its antitoxin functions. In simple cases of Exhaustion, Nervousness, Intestinal Disorders, Acidosis, and the like its prescription will be found most efficacious.

A sample for clinical trial, and bibliography, "Remedial Uses of Dextrose," will gladly be sent on request, free of charge, to Medical Practitioners



DEXTROSOL

PURE DEXTROSE [D-Glucose Powder]

CORN PRODUCTS Co. [INDIA] LTD.

BOMBAY
P.O.B. 994

CALCUTTA
P.O.B. 2191

Gobhai



The diet of the average person to day tends more and more to the exclusion of foods containing "Bulk". To this tendency can be traced very largely the cause of common constipation.

In the treatment of such a condition the supply of "bulk" can be rectified by prescribing bran. Laboratory tests have proved that in the majority of cases bran is effective. The few instances in which failure was noted were due to the inability of the patient to tolerate bulk in such form as fruits, vegetables, or bran.

Kellogg's ALL-BRAN is specially prepared, by flavouring and crumbling processes, to be soft and palatable. It absorbs a large amount of moisture, forming a soft mass which gently clears the intestines of waste.

Because of its delicious flavour Kellogg's ALL-BRAN is readily enjoyed by the patient. Serve with cold milk or cream or cook into biscuits, cakes or omelettes, etc. A full-sized packet will be sent free to any doctor requesting it.

Kellogg's ALL-BRAN

the gentle, natural way to relieve CONSTIPATION

DOLGE & SEYMOUR 51, Sulepagoda Road Rangoon, BURMA

judice—at least it lacks proper perspective and correct historical sense.

We do not like the word Allopathy as it does not convey the full scope and ideals of Modern medicine. It is a Greek word which means the curing of diseased action by inducing a different kind of action in the body and as Dorland's medical dictionary puts it, is 'an erroneous designation for the regular system of medicine and surgery'. We therefore, discard the word Allopathy and use in its stead, Modern Medicine, for the purpose of these comments.

One of the soundest cannons in the art of criticism which involves comparison and contrast is that any science or art or thought that is sought to be criticised should be viewed in its historical setting. It should not be displaced from its contemporary trappings and criticised adversely and ungenerously. From this point of view it will be a wrong criticism and conclusion to say that because Ayurveda did not use microscope or the culture tube as diagnostic aids, it did not know the art of diagnosis and therefore it is a futile system. It is not only a wrong but a vulgar criticism.

These short words of preamble will convince our readers that we do not criticise in a spirit of partisanship but for elucidating the truth and trying to share it with them.

To say or argue—as is often done in the press and the platform—that the Ayurveda or the Unani is superior to Modern Medicine will not be putting the issue right. The right issue is, whether these ancient systems of Indian medicine as practised to-day is as scientific as Modern Medicine.

To answer or even to understand this question satisfactorily we must probe a little into the pages of Indian history. The conception behind the word Ayurveda is true for all times to come. It means, the science, a knowledge and practice of which will prolong life. That is also the true aim of Modern Medicine. Ayurveda in its best days included both curative and preventive medicine. It included not only medicine but also the study and practice of surgery and midwifery. It was held to be scientific according to the then current canons of science. It was taught in the Universities of Taxilla and Nalanda in a very systematic manner and the rules for admission, their curricula and length of studies were more exacting than those, perhaps, of the medical colleges and schools of to-day. It had State encouragement just as Modern Medicine is now having. Down to the end of Buddhistic epoch, it was progressive. During this period, however, Ayurvedic surgery became extinct owing to the discouraging attitude of Buddhist kings and Emperors of India. At the end of this period Moghul empire was slowly established and with it came the Unani system of medicine. But there was no antagonism between it

and Ayurveda—they practically coalesced. Some of the great Moghul Emperors were treated by Hindu physicians and the Hindu kings by Unani physicians.

With the decline of the Moghul empire, Ayurveda also declined. It not only declined but it also deteriorated. What was once a scientific system fell into hands who never understood it. It became a secret science; it had no leaders or regular schools for teaching as in the days of Hindu and Moghul Emperors. It slowly degenerated into personal beliefs and fads and there was unhealthy rivalry among its own votaries. Be it also noted that the decline of Ayurveda coincided with the political fall of India.

Ayurveda during the Hindu and Moghul periods was a progressive science based on experience and experiment and took full advantage of psychology, physics, chemistry and biology to the extent of progress then made in these basic sciences. For aught we know from genuine Ayurvedic treatises, it never claimed perfection: progress and adaptation to new knowledge were their ideals. If historical records are to be believed, the then Ayurveda utilized human dissection to acquire a correct knowledge of theoretical and applied anatomy and employed the then available knowledge of the basic sciences for the evolution of organic and inorganic drugs in the treatment of diseases. It had also known anaesthesia and painless surgical operations. It is not right to decry Ayurveda because it did not use microscope or thermometer as we do not decry Hippocrates, the father of Modern Medicine, for not discovering the stethoscope or chloroform or salvarsan.

The decline and deterioration of Ayurveda was mostly due to historical causes and partly due to its votaries who neglected the other allied sciences and failed to adapt and assimilate the growing scientific knowledge. They converted it into a dogma with tiresome exegesis of scriptures where everything meant something different from what it obviously implied. Thus strange infatuations, obliquity of judgement, perversity of intellect and arrogance of fancied perfection marred its further development.

Historically, it looks as if the branch of the Aryan race which peopled India and China came to a standstill in the progress of material sciences and the thread of further development was taken vigorously by the Hellenic and the Latin races and still later by the Teutons who are now practically ruling three fourths of the globe.

By the end of the reign of Queen Elizabeth, the Teutonic races had almost consolidated their political power and had begun to make enormous strides in the study, development and practical application of different sciences during the last 200 years of Teutonic hegemony. The one great feature of modern science is that it keeps an open mind, rarely

deludes itself as perfect, grows from good to better and better to best. Everything is tested by the blazing light of scientific canons and submitted to the sledge-hammer blows of modern research, experiment and verification.

We are indeed now living in a period of scientific renaissance. During our own life time we have seen some of the old knowledge have been given up in favour of newer and more correct form of it. The basic sciences have become more exact and the Modern Medicine is fully utilizing the progress made in these sciences and is itself trying to be more exact. Biochemistry and bacteriology are in process of fruitful developments. The microscope and the x-rays, the sphygmomanometer and the electro-cardiogram, and other similar mechanical aids to medicine have been discovered and are put to practical use. We do not pretend that it has become perfect but there is no denying the fact that it is progressive and open minded, corrects its own mistakes and submits itself to rigorous tests.

Similar was the spirit of the ancient Seers of Ayurveda. But that spirit is not found anywhere near the present practitioners of Ayurveda. They trade in its past traditions and gloat in their fancied perfection. It is they who have rung the death-knell of the glorious Ayurveda.

There is still a way to conserve what is best in Ayurveda. It should be merged with the modern scientific medicine. It will do no good to our country and to the science of medicine at large if the practitioners of both the ancient and modern medicine work in rivalry and antagonism. They should coalesce at the earliest possible moment.

We do not overlook the few impediments, which look well-nigh insuperable, to this, what we may call, cultural commingling. The first impediment is, the imposters who, in the fair name of Ayurveda, exploit the masses with their gunshot diagnosis and quack-nostrums. This is no doubt directly due to the absence of systematic Ayurvedic education by its genuine leaders for the last 7 or 8 centuries. The second impediment is the step-motherly attitude of the British Government of India. The third impediment—this to our mind is the most important—is the almost incorrigible attitude of the physicians of both the ancient and modern schools of thought who wrongly believe in mutual superiority.

The result, on the whole, is unhappy. What ought to be dedicated at the altar of science is given as a homage to a system.

The Government have, of late, been opening a few Ayurvedic and Unani dispensaries—mostly out-door dispensaries and some of the provincial governments have opened a register to register the names of Ayurvedic and Unani physicians—hereditary and

otherwise—under the compulsion of legislative opinion. We are afraid that this is not the right way of reviving Ayurveda and it is better if our legislators come to realise early the stupendous folly of this move.

The legislators should see that Ayurveda is merged with the modern scientific medicine. They should see that our universities and medical schools should take up what is best in Ayurveda and make it a part and parcel of their curriculum.

We do not pretend to have studied Ayurveda extensively but the little study we had made makes us think that these systems of medicine are not at all contradictory either in their ideals, theories or practice and that there is certainly no necessity for the existing flaming difference of opinion and acrimonious controversy.

Patriotism, prudence and the demands of science require that the votaries of both the systems of medicine should shed off their prejudices which, we believe, are based more on sentiments than on facts. The leaders of medicine in our country should put their heads together and see that the noble science and art of medicine is not divided into compartments of past and present or into systems working against each other. Why should we divide time artificially when God Himself has made it a continuous whole? We also fail to understand why there should be a quarrel in doing a good thing like saving human life and in mitigating the suffering from disease.

We do not fool ourselves into the belief that our suggestions for amalgamation of the ancient Indian and Modern Medicine will be acted upon either by the Government or by the practitioners of both the Schools. We have written these rather lengthy comments urged by a sense of duty to the Indian medical profession. And we are quite confident that, 50 or 100 years hence, the medical science of that period in our country would have done what we are now reluctant to do.

Notes and News

OUR GERMAN LETTER

(From our own special Correspondent)

New Regulations of the Medical Profession

The "Medical Laws of the Reich" which have long been asked for by the German doctors and in which directions for the practice of medicine are set forth have finally been published and will be put into force on April 1, 1936.

In the first part, general view-points on the medical profession are set up according to which a

doctor is dedicated to the service of the health of individuals and the whole people. He performs a public duty regulated according to these laws. Medical practice is not a business. In the German Reich, he only is allowed to practice medicine who has been appointed by the proper German authority. (The old German word for appointed "bestallt" has been revived to take the place of "approved", used up-to-now.) This first part also contains regulations regarding the refusal and withdrawal of the appointment.

The regulations ruling a doctor's pledge of secrecy read as follows: a doctor who unduly divulges a secret told or made evident to him during a consultation or in the course of medical treatment will be punished by imprisonment or fine. In this respect, any professional assistants or the like are equally responsible for secrecy. This duty does not cease with the death of the doctor. He is not to be punished if he reveals a secret in the fulfilment of a legal or moral duty or for a reason of sane and human common sense and if the legal aspect is more important than the personal.

The Secretary of the Interior of the Reich has legalized a tariff of doctors' fees. The maximum fee may be increased only by permission of the Reich's Chamber of Medicine, unless the charges of the doctor for certain performances have been agreed upon beforehand in writing.

The Reichs Chamber of Medicine is the representative of the medical doctors of the German Reich all of whom belong thereto, except the medical officers of the army. At its head is the Leader of the Doctors of the Reich. Its regulations are binding on all doctors. It can fine up to 1000 Marks. Individual doctors belong to the District Association of Doctors of the district in which they reside.

The Reichs Chamber of Medicine has the following tasks: to set up and maintain a high moral and scientific standard among the medical profession; to guard the professional honour of doctors; to see that professional duties are properly fulfilled; to encourage the study of medicine; to encourage advanced study and research by doctors; to encourage mutually advantageous relations between doctors; to advise in the distribution of doctors over the Reich; to arrange for the welfare of doctors. Furthermore, this Chamber may take measures regarding the insurance of doctors and may pass special rules for a participation of doctors in the task of preserving and improving the inheritance and the race of the German people. This Chamber alone has the right to make contracts with Sick Insurance Commissions regarding medical work by doctors.

The third part deals with the penalization of professional crimes. Doctors will have their own professional Courts of Justice. The penalties are, first, warning; then, successive reprimand; fines up to 10,000 Marks; withdrawal—temporary or final—of the permission to practice in public welfare; statement that the culprit is unworthy to practise medicine.

The Secretary of the Interior is in charge of the Reichs Chamber of Medicine. When this law goes into effect, the Association of German Doctors' Clubs (Deutsche Ärztevereinsbund) at Potsdam and the Association of the Doctors of Germany (Verband der Ärzte Deutschlands (Hartmannbund) in Leipzig will be dissolved.

The Number of Doctors and Nurses in Germany

Dr. Gleitze has published a summary of those results of the census of 1933 in the German Reich pertaining to workers for German health. According to this source, more than 400,000 persons are employed in the treatment and nursing of the sick. To this number must be added 28,000 persons employed in apothecaries and drug stores.

In independent positions there were:

	Male.	Female.	Total.
Medical Doctors	33,667	2,309	35,976
Practitioners	4,199	966	5,165
Dental doctors	9,177	692	9,869
Dentists & dental technicians	15,049	1,975	17,024
Midwives	—	13,004	13,004
Nurses and charity nurses	227	1,857	2,084
Apothecaries	5,825	241	6,066
Veterinary surgeons	3,904	15	3,919

The following were employed in dependent positions:

	Male.	Female.	Total.	unempl.
Medical doctors	13,633	2,058	15,691	411
Practitioners	207	63	270	120
Dental doctors	1,693	558	2,251	339
Dentists & dental technicians	10,923	3,034	13,957	3,276
Midwives	—	8,579	8,579	149
Male nurses	17,446	—	17,446	1,524
Nurses and nuns	—	1,29,937	1,29,937	11,202
Apothecaries	8,679	3,475	12,154	1,299
Veterinary surgeons	2,350	38	2,388	49

From 47,904 in 1925, the number of approbated doctors rose to 51,067 in 1933. Among these, there were 2572 female doctors in 1925 and 4,367 in 1933. In 1925, 9,137 doctors of dental surgery were counted (855 of which were female); in 1933, there were 12,120 (1,250 female).

The number of nurses has also increased. In 1925, there were about 117,000 nurses and 16,000 male attendants; in 1933, 181,800 nurses and 17,700 men. In the same period of time, however, the number of midwives decreased from 28,452 to 21,588.

To every 100,000 German inhabitants there were:

	1876	1898	1909	1928	1934
Doctors	32	40	42	73	73
Dentists	—	2	4	14	17
Apothecaries	—	—	—	23	25
Midwives	77	68	—	44	40
Nurses	—	—	—	160	184

War on Narcotics

A Reichs Central Office for the penalization of offences against the narcotic laws has been founded in order to centralize and thus increase the efficiency and effectiveness of the drive against illegal traffic

in narcotics and, especially, the smuggling of drugs. All correspondence with foreign countries is attended to by this Office, also such notifications of the International Bureau in Vienna as may be necessary. This Office is in close co-operation with the Reichs office of Public Health.

Diagnosis of Cancer

The president of the Reichs Office of Public Health, Prof. Reiter, has published the results obtained by the commission charged by this Office with the examination of the cancer diagnosis of von Brehmer. According to the statement, the bacillus described by von Brehmer exists, but there are no inherent relations between it and the beginning of cancerous growths. Therefore, cancer cannot be diagnosed according to these methods.

Heinrich Schade

Heinrich Schade, professor of physico-chemical medicine at Kiel, died recently at Würzburg. His book "Physikalische Chemie in der Inneren Medizin" (Physical Chemistry in Internal Medicine) is a fundamental work about this new branch of medicine of which he was a founder.

Biography In Brief

Dr. Joitram Motiram Pandya

"Let not Ambition mock their useful toil,
Their homely joys, and destiny obscure;
Nor Grandeur hear with a disdainful smile
The short and simple annals of the poor."
Thomas Gray.

Amongst the great and noble band of workers of the All-India Medical Licentiates' Association, Dr. Joitram Motiram Pandya is perhaps the least known in India. But his life is an example of silent yet effective work on behalf of the professional class to which he belonged, of well-directed endeavour towards personal attainments and public utility and of sincere enthusiasm in all causes that appealed to his head and heart. In a sense, he was the originator of the idea of *Hospital Assistants' Association*.

As a medical man he was very studious. He was keeping in touch with all the latest advances in medical and sanitary science by regularly reading medical journals, foreign and Indian, and by purchasing latest medical books every year out of his small savings. His medical knowledge and professional skill were easily the subject of praise and appreciation by those who knew him. He was poor—poor by birth and poorly paid as a *Hospital Assistant*—yet he was generous to the very core and used to help the students, especially medical students, during his stay at Mahim and Bombay.

He began his life from the bottom and his undaunted efforts at academic achievements were ever obstructed by the mysterious hand of destiny. He died without achieving this object.

He studied up to the 5th form and then joined the Medical School, Ahmedabad. He passed out in the year 1889. Soon after, he was posted to Rajkote (Kathiawar), where again he continued his studies for the matriculation examination during his off-duty hours, taking regular lessons from his teacher friends. He passed this examination at the first shot. He then wanted to join The Grant Medical College to qualify himself for the licentiate-ship in medicine and surgery of the Bombay University. This was refused, since his second language was Gujrati. He accordingly joined The Wilson College, Bombay, and studied Sanskrit along with other necessary subjects. He requested The Surgeon-General, Bombay, to transfer him to the city to facilitate his studies, or to grant him leave for that purpose or to allow him some concession and assist him in studying in The Grant Medical College. This was refused, not even the necessary leave was granted.

In the natural course of events he was posted to The Mahim Dispensary, near Bombay. It was then that Dr. Jamaitram Desai, the present Vice-President of the A.I.M.L.A. and one of its distinguished Founders, introduced him to the late Dr. Ramachandrier and gave him opportunities to meet at his place, Parel Old Government House, the compound of the present Haffkine Laboratory. Joitram used to talk passionately about the various difficulties and disabilities of the Bombay Hospital Assistants and the need for starting an association. It was then decided between Ramachandrier, Jamaitram and Joitram to see as many of the Bombay Hospital Assistants as possible and to arrange to gather at a meeting for common discussion. Joitram generously invited this first gathering of local Hospital Assistants to his place at The Mahim Dispensary, entertained them to a sumptuous dinner and talked to them about unity and united action. The gathering acclaimed with one voice that they should all join into an association and meet periodically to improve social relation and medical knowledge. The next meeting was held at Parel Laboratory where Jamaitram and Ramachandrier were working. The latter entertained the friends with tea and lively discussion. It was on this memorable day that The Bombay Hospital Assistants' Association was founded which was soon extended to cover the whole presidency, and a month later to cover the whole of India. The first inaugural meeting of The All-India Hospital Assistants' Association—now known as All-India Medical Licentiates' Association—was held in Bombay in 1907. Joitram's heart rejoiced and from this day onwards he took active and abiding interest in the affairs of the Association and its *Journal*.

Soon after, he was transferred to Nasik. But a happy turn of events brought him back to Bombay within a few months. The post of the Assistant to the Police Surgeon fell vacant due to the early retirement from Service of our best friend and first President of the Association, Dr. Abdul Razack. Dr. Powell, the Police Surgeon, wanted the best man as his assistant. Drs. Abdul Razack and Ramachandrier warmly recommended Joitram to the Police Surgeon who appreciated the latter's merit from his able articles in the *Hospital Assistants' Journal*.

Starchy Indigestion?

A highly concentrated and stable pancreatic enzyme preparation with additional hemicellulase.

All digestive disturbances due to pancreatic insufficiency.



FESTAL

«Bayer»

I. G. Farbenindustrie Aktiengesellschaft
LEVERKUSEN



Subacidity Achyilia etc.

With their associate symptoms of anorexia, heart-burn, gastric discomfort, yield readily to

Original packings:
Tube of 10 pastilles of
7½ grs.

ACIDOL-PEPSIN

KILL THOSE MALARIA PESTS

In order to be efficient, a prophylactic must be capable not only of smothering larvae but it should kill them direct by toxic action.

This is exactly the action of an efficient larvicide such as MALARIOL.

In proportion to the extended use of MALARIOL by public health bodies, planters, factory owners and labour employers, the annual toll of the Malaria fiend will be reduced.



MALARIOL

THE
EFFICIENT LARVICIDE

BURMAH-SHELL OIL STORAGE & DISTRIBUTING CO. OF INDIA LTD.
AGENTS: CALCUTTA BOMBAY MADRAS KARACHI NEW DELHI
(INCORPORATED IN ENGLAND)

BSMK 2

Medical Councils

Extracts from the proceedings of the meeting of the C. P. Medical examination Board, held on 29-4-35.

The Board considered the results of the Primary, Intermediate, Pre-Final and Final examinations held on 1st October 1935 and following days as reported by the examiners and accepted them. The suggestion of the examiner in Chemistry and Physics was considered and it was decided that other medical schools should be addressed with a view to ascertaining whether practical Physics are taught in their schools. The suggestions of the other examiners were read and noted.

The Board considered the means by which the present 4 year course at the Robertson Medical School, Nagpur, could be improved and decided that a small Sub-Committee should be formed to consider the matter and submit a report to the Board for its consideration in April 1936.

The Board decided that the oral and practical examinations in all subjects should be arranged, that they are completed on the same day afternoon and that the examiners should be asked to send the results immediately after the practical examination direct to the Secretary, C. P. Medical Examination Board duly sealed with their private seal and not through any other agency. The examiners should further be requested to attend the examiners' meeting as required by regulation 30 of the Regulations of the Board.

The Board decided that the examiners should be asked to finish marking written answer papers before the oral and practical examinations were commenced. In future an interval of a fortnight should be given between the written and the practical examinations.

The Board decided that the system of appointing co-examiners for the (1) Primary, Intermediate, Pre-Final and Final examinations (2) Medical and Surgical Nursing and (3) Senior Midwifery (with Elementary Nursing) examinations should be abolished and that moderators should be appointed by the President to watch the conduct and methods of examinations for report to the Board.

The Board decided that in future external examiners in Medical and Surgical as well as in Senior Midwifery (with Elementary Nursing) examinations should be appointed in the same way as is done in the case of L. M. P. examinations. The examiners should be selected from amongst those who have teaching experience and up-to-date knowledge in the subject.

Extracts from the proceedings of the United Provinces Medical Council, Lucknow, held on 26-11-35.

The following resolution was considered:

"That Vide United Provinces Medical Council Act, 1917, section 20 (b) two members of the Medical Council be deputed to be present at the examinations to be held at Agra Medical School in 1936, and furnish their reports to the Medical Council for necessary action."

Resolved—That Government be requested to provide funds for meeting the travelling allowance and daily allowance at the rate of Rs. 50 a day for ten days for deputing two members of the United Provinces Medical Council to be present at the examinations at the Agra Medical School as this is the

Chancing to live at Bombay now, all his old zeal for admission into The Grant Medical College and for studying for the University medical degree was aroused in him. Fortunately, through the generous efforts of his officer, he joined the medical college, though he was now advancing in age and seventeen years in Service. Doing duty at the Police Hospital single-handed and reading during night, he passed the first University examination with credit. But ill-fortune stepped in the middle. Immediately after the first examination, he caught plague while doing a post-mortem examination and unfortunately succumbed to the infection. He thus left the world without realising his ambition, leaving a young widow, two minor sons and a number of friends to mourn his death.



Dr. Joitram Motiram Pandya.

A few of his admirers decided to perpetuate his memory. They collected about Rs. 400 and founded *Dr. Joitram Motiram Pandya's Memorial Prize* to be offered annually to the student who tops the list of successful candidates from among the three medical schools of the Bombay Presidency. Through the efforts of the Association, the Bombay Government had sanctioned a pension to his widow and sons till the latter attain the majority.

He shall ever be remembered by the Medical Licentiate of India with profound feelings of respect and gratitude; for, it was he who first conceived collective action and common service, worked out so faithfully and gloriously by Ramachandrier and Sarju Pershad, Benjamin and Jamaitram Desai in later years. The biographer knows only too well the present mood of despondency and despair of the medical licentiates over the objects of the Association not yet realised. But let them remember and know for certain that an Association which has been slowly and steadily built by sacrifice and devotion of workers like Joitram will never die and is bound to fulfil its destiny sooner or later. Be up and doing like these giants of old whose difficulties were greater than ours of the present decade, but whose conception of the future was as realistic as it was grand and who overcame the obstacles with the unbounded faith, ease and optimism of a Hanuman.

*Vide I.M.J. Vol. XXX. Vol. 2. P. 91.

duty imposed on the Medical Council by section 20 of the United Provinces Medical Act III of 1917. The Registrar should be asked to work out expenses. Meanwhile, members of the Medical Council, who happen to be examiners at the Agra Medical School, should be asked to submit their reports as to the qualifications shown by the candidates and the standard of teaching in the subject in which they are examiners.

Resolved—further that this report should be special and separate, distinct from their report to the State Medical Faculty.

The following resolution was considered :

"With a view to provide minimum registrable or recognizable qualification to the products of Agra Medical School, under the Indian Medical Council Act, 1933, the Standing Committee of the United Provinces Medical Council is requested to suggest the required minimum standard with ways and means for its adoption and put their report before the next meeting of the Council, for its consideration and recommendation to the Government."

Resolved—That it be brought to the notice of the Government that the Medical Council consider the education imparted at the Agra Medical School inadequate. Time has come to bring the education of this institution to the level of the minimum registrable qualifications within the meaning of the Indian Medical Council Act of 1933. The Council are of opinion that they are no longer justified in according recognition to the inadequate qualifications obtainable at the Agra Medical School.

The following resolution was considered :

"That a sub-committee of five members of the United Provinces Medical Council be appointed (1) to bring the United Provinces Medical Act on the lines of the British Medical Act by suggesting amendments and providing in the preamble, the dealing of all matters affecting the registered medical practitioners professionally, (2) to suggest amendments to the code of medical ethics in consonance with the provisions of the Medical Act keeping in view the existing conditions in India (3) to provide joint electorate and increased representation of the independent practitioners and that of licentiates according to their strength on the register.

Resolved further that the recommendations of the sub-committee be put before an extraordinary meeting of the Council in January, 1936, so as to enable the Council to recommend to the Government to get the suggested amendments to the Act moved in the next budget session of the United Provinces Legislative Council."

With the permission of the Chair, the mover withdrew the second paragraph of this resolution.

Again with the permission of the Chair, the resolution was split into two parts, viz. points 1 and 2 forming one part and point 3 forming the second part.

Part 1 was considered and it was resolved unanimously that a committee of: Lt. Col. R. S. Townsend, I. M. S.—Convener, Rai Saheb Dr. Ram Narain Lal, L.M.P., Rai Bahadur Dr. B. N. Vyas, M. B., Drs. Kunj Behari Lal Varma, L.M.P., Rabindranath Bose, M. B., be formed for the purpose of reporting on points 1 and 2. Part II was negatived.

The following resolution was carried :

"That the Government be requested to so amend the rules as to do away with the counter-signature of certificates given by the Registered Medical Practitioners, by the Civil

Surgeons of the District, as the Registered Practitioners are under direct control of the Medical Council and they can be punished severely by the Medical Council, if the guilt be proved.

The following resolution was considered :

"That the United Provinces Medical Council recommends to the Government to be pleased to rescind amendment no. 1 to the rules framed under section 2 of the Poisons Act and published in the United Provinces Gazette, vide Judicial (Criminal) Department no. 1273/VI—1776—1930, dated the 29th September, 1933, and no. 1000/IV 1776—1930, dated the 15th April, 1935, because the said amendments adversely affect qualified Medical Practitioners in the exercise of their profession and are contrary to the provisions of section 9 (1) of the said Act, which, specially exempt Medical Practitioners from any rule made under that Act."

Passed unanimously.

Resolved—unanimously that Government be requested to rescind the amendments to the rules regulating subsequent elections notified in their notification no. 2285/V—343, dated the 21st September, 1935.

Resolved—That Government be requested to amend rules 2, 7 (2), 7 (4) and 13 regulating subsequent elections published, vide Government notification no. 513—C. dated the 6th August 1917, by making the following additions :

Rule 2.—Add at the end of rule 2 "Such precept shall also be published in two important daily papers of the province—provided that no expenditure is incurred in doing so."

Rules 7 (2), 7 (4) and 13.—Add "and two important daily papers of the province, provided that no expenditure is incurred in doing so" after "the United Provinces Gazette."

Resolved—That the directions contained in Dr. Sharma's resolution No. 4 (printed on page 5 of the minutes of the meeting held in November, 1933) are adequate and should be given effect to. An additional districtwise index should, however, be published along with the next issue of the list of registered practitioners.

Resolved—That the meetings of this Council should not be open to the Press Representatives, but qualified medical practitioners, not exceeding five in number, may be admitted as visitors on producing admission passes signed by the President.

Extracts from the minutes of the General Business Meeting of the Madras Medical Council held on 28th October 1935 at 2 p. m.

Read report of Lt. Col. C.A.F. Hingston, I.M.S. (Retired) on L.M.P. Examinations and the opinion of the sub-committee appointed by the Council.

After a prolonged discussion, it was proposed by Major J.A.W. Ebdon and seconded by Dr. U. Krishna Rao that in view of the recent formation of the Indian Medical Council and their recommendations in regard to medical education, this Council resolves to appoint a Committee to go into this question of L.M.P. curriculum and examination and report, in supercession of the reports of Lt. Col. Hingston and of the Committee appointed by this Council at its meeting of October 1934.

This was carried, Lt. Col. V. Mahadevan voting against. It was then proposed by Dr. U. Krishna Rao, seconded by Dr. Y. Suryanarayana Rao and carried that the Committee

be constituted of the following members, with Dr. R. J. Dyson as the Convener:—Major J.A.W. Ebdon, M.D., M.S., F.R.C.S., I.M.S., Dr. (Miss) Jessie Findlay, B.A., M.D., Drs. V. Rama Kamath, L.M.P., M. R. Guruswami Mudaliyar, B.A., M.D., & C.M., R. J. Dyson, M.B., Ch.B.

Resolved further that the terms of reference of this committee shall be as follows:—(1) that this committee has to deal only with the Medical Schools of the Presidency (2) that they are to examine the curricula which they invite from governing bodies and to make suggestions for their improvement and for any additions, if considered desirable, (3) that they should report to the Council on the L.M.P. curricula, instructions and examinations of January and April 1936, and (4) that the powers under Section 21 of the Act shall apply to this Committee for the purpose of this enquiry.

The Madras Medical Council is of opinion that the preliminary General Educational Qualification for admission into the Medical Schools should be not lower than the University Intermediate Standard, as otherwise the students of the schools will not be able to cope up with the higher standard of Medical Education now introduced in the Medical Schools and therefore requests the Government to raise the standard of Preliminary Education to the Intermediate Standard.

This was seconded by Lt. Col. V. Mahadevan and carried unanimously.

The Madras Medical Council respectfully suggests to the Government the desirability of bringing into existence in this Province a State Medical Faculty in the place of the Medical Board of Examiners for the purpose of controlling education and conducting examinations of the Medical Students for Non-University Medical Qualifications.

Lt. Col. V. Mahadevan seconded the motion which was carried unanimously.

Letters to the Editor

Treatment of Leucoderma

SIR,

Would you kindly insert the following in your valuable Journal and oblige?

Will some of the readers of your Journal oblige by enlightening me on the subject of Leucoderma—loss of or diminished pigmentation of skin? This depigmentation is more prominently visible in the Indian than in the white skinned people in whom it is practically indistinguishable with the normal skin. Some have advocated drugs more or less with irritant properties but their use in delicate part is liable to set up acute inflammation. If the patient is having such patches on eye lids, the application of such drugs may set up conjunctivitis even. In hair-bearing parts, such an application turns the hair white. Oil Bauchi has been spoken highly by some people. I do not find it so in my practice. I do not know if the stuff used by me is defective or the oil itself has got but little effect. Powdered Bauchi seeds act better when applied in the form of paste with water. It brings about not only inflammation but vesiculation as well, sometimes with big blebs. The skin peels off and leaves red raw skin behind it. In the beginning it looks that the patch is gone but in course of time the red skin again turns white. The use of Emetine Hydrochloride hypodermi-

cally is advocated by some with the idea that the depigmentation is probably due to autotoxic infection and torpidity of liver resulting in Ch. Intestinal Toxaemia. I am not, however satisfied with this much. I therefore request the readers of this Journal to favour me with their valuable information about it as to its curability, etiology and line of treatment, both local and general. This may be either published in this Journal or sent directly to me.

GAZIPUR

28—1—36.

H. P. TIWARI.

[The correspondents' attention is drawn to the article, in this Issue, on Psoralea Corylifolia by Mr. J. C. Ghosh, B. Sc. The oil prepared by his school and by Messrs. Smith Stannistreet, Calcutta, are, perhaps, the best of its kind. Ed. I. M. J.]

Working of the Provincial Medical Councils

SIR,

It is well known to the members of the Central Legislature and the public how a toy council under the name of the Indian Medical Council was established some time ago with the ostensible object of serving the cause of the Indian Medical profession and the public. In reality the Council has been merely an instrument for registering and carrying out the mandates of the British Medical Council, directly or indirectly. I do not wish to enter into any controversy about it in this note but my present purpose is to show to the public in general and the medical profession in particular, as to how the Provincial Medical Councils are being worked. Being a member of the Bombay Medical Council, I have some knowledge of the working of these Councils and have been sorely disappointed. The Council, which is predominantly an official body, cannot claim to have done any really useful work since its inception in the year 1912. It has simply served as a Policeman for its creators by removing under the charge of breach of "Medical Ethics" the names of some of those medical practitioners whose misfortune is to get themselves registered. The medical practitioners would not object to action being taken in such cases, but they would wish that at the same time the Council should safeguard the rights of the medical practitioners equally zealously and protect the public from unqualified persons, who style themselves as 'Doctors' and carry stethoscopes, give injections and practice Allopathy without any let or hindrance or any fear of consequences.

This Council was created under the Bombay Act VI of 1912 and consists of 13 members, with the Surgeon-General as the Ex-Officio President, and six nominated members. Out of the remaining six, four are to be elected by the Bombay University Medical Graduates, and the remaining two by all other Medical Practitioners.

I have moved in the Bombay Medical Council certain resolutions to recommend to Government to alter the constitution so as to make the Council a democratic institution in the real sense and to allow it greater independence in working. The Bombay Medical Council after considering these resolutions for more than a year adopted them and requested the Governor-in-Council to amend the Act, as under:—

1. That the number of nominated councillors be reduced from seven to five.

*The Provincial Medical Councils have no such legal powers to penalise unregistered practitioners. It is therefore not a fair criticism to blame these Councils in this respect. Ed. I. M. J.

2, 206
N36-30-4

2. That the Ex-Officio President be replaced by an elected President.

3. That the number of representatives of the non-graduates i.e. L.C.P.S. etc. be increased from two to four, as the total number of such practitioners on the roll is more than that of the medical graduates.

The resolutions were passed by the Medical Council of Bombay after very careful consideration, and the demands made therein are, it will be admitted, very moderate and legitimate. To the surprise of all, however, the Government have seen it fit to turn down these legitimate demands of the Council.

The resolutions embody the legitimate aspirations of the Council and are in consonance with the declared policy of both the Central and the Provincial Government, who have themselves from time to time liberalized the constitution of other democratic institutions and replaced nominated and Ex-Officio Presidents by elected Presidents. It has also been openly declared by the Central Government that the proportion of nominated members in institutions under their control should be as small as possible and be totally done with. The Bombay Government have also declared from time to time a similar policy. When the Government have conceded and actually put in practice the above principle in important institutions like city Municipalities and Local Boards, it cannot be understood why this should be denied in the case of the Bombay Medical Council. Although the council was formed nearly a quarter of a century ago, its constitution remains unchanged, while the constitution of other Bodies and Institutions has undergone many changes and have been liberalised to be in accord with the democratic spirit of the times.

I have therefore sent the following resolutions to be considered at the next meeting of the Bombay Medical Council, to be held on 10th February 1936 and hope that the Medical Council will reaffirm their legitimate rights by passing them.

"That this Council regrets to note that the Governor in Council has disapproved the proposed amendments to the Bombay Medical Act VI of 1912, passed by the Medical Council in its session of 1934.

That the Council respectfully draws the attention of the Governor in Council to the avowed policy of the Government enunciated in Government Resolution of 1884, affirmed by Lord Ripon in 1882 and confirmed in the preamble to the Government of India Acts of 1919 and 1935.

And whereas, according to this policy, the Government have declared their intention to help towards the gradual development of Local Self-Governing Institutions in the provinces of India and to replace the official control by non-official control and to gradually reduce the former, so as to give the latter the largest measure of independence as is compatible with the due discharge of their duties, and whereas in the opinion of this Council time is ripe when the Council should have the entire control of their affairs in their own hands without any outside official control, and whereas the Council feels that it can stand on its own legs, this Council requests the Governor in Council to reconsider its decision and sanction the proposals forwarded by this Council, referred to above."

29-1-36

ROCHIRAM A. AMESUR,

Member, Bombay Medical Council, Karachi.

[His motion was since voted against by a majority of the Bombay Medical Council at its sitting on 10-2-36. Ed. I.M.J.]

A Misleading Advertisement

SIR,

I shall be highly thankful to you if you publish the following few lines in your esteemed journal.

It was advertised in the C. P. Gazette of the 25th (or 26th) October, 1935, inviting applications for the posts of Assistant Medical Officers and the following terms were laid out:—

1. That the applicant must have passed the Final Examination of the C. P. Medical Examinations Board from the Robertson Medical School, Nagpore.

2. That he must be a bonafide resident of the Central Provinces and Berar.

3. The applicant who did not deposit Rs. 3/- on previous occasions was required to attach a *treasury chalan* for Rs. 3/- as registration fee to consider his application.

4. The date of birth of the applicant was to be stated in the application.

If only the Inspector General of Civil Hospitals was kind enough to add one more condition that none need apply who was above 25 years of age, it would have saved a lot of botheration to himself in considering a heap of applications, and the applicants who were over-age would have saved the registration fee of Rs. 3/- and also the feeling of suspense for about three months.

In the absence of the condition that none need apply who is above 25 years of age, the applicants who were of over-age were under the presumption that the Inspector General has got powers to condone the question of over-age of such applicants.

In the advertisements of various Government Departments it is clearly mentioned that "None need apply who is above 25 years of age." It is not known why this was omitted in the advertisement under reference.

26-1-36.

A disappointed applicant.

Reports and Reviews

Seventy-first Annual Report of the Director of Public Health for the Government of Bombay for the year 1934.

Extracts. The estimated mid-year population of Bombay Presidency including Sind (1934) is 22,670,288; birth rate per mille is 84.48 and death rate per mille is 24.45. The excessively high birth-rate in Bombay Presidency as in the rest of India continues to be a drain upon the health of woman of child-bearing age and contributes to the enormous waste of infant lives. Deaths according to causes:

Cholera	...	11,382	Dysentery and	
Small-pox	...	5,516	Diarrhoea	...
Plague	...	13,307	Respiratory disease	...
Fever	...	201,405		...
Other causes	...	181,798	Injuries	...
				8,059

The rate of infant mortality for the year under reference is 167.87 per 1000 (under one year).

Now Available in India

DETTOL

TRADE MARK

the modern antiseptic

'DETTOL', used by the majority of Doctors and leading Hospitals in England, is now available in India.

Is non-poisonous and can be used at highly effective strengths.

Is non-staining to linen and to the skin.

Is three times as effective as pure carbolic acid by the Rideal-Walker test.

Is stable in the presence of blood, faeces and all organic matter.

Has effective penetrating power.

Is readily miscible with water.

SEND A POST CARD FOR
FREE CLINICAL SAMPLE
TO ANY OF THE
ADDRESSES BELOW:



Atlantis (East) Limited, Pharmaceutical Dept. P. 1 20/1 Chetla Road, Calcutta

MARKETING AGENTS FOR RECKITT AND SONS LTD., LONDON & HULL, ENGLAND

DISTRIBUTING AGENTS				GRAHAM'S TRADING COMPANY (INDIA), LTD.,		PARRY & CO., LTD.,		E.B. CREASY & CO., Ltd.,	
Dept. P. 1	Dept. P. 1	Dept. P. 1	Dept. P. 1	Post Box 90	Post Box 147	Post Box 30	Post Box 150	Post Box 12	Post Box 37
BOMBAY	CALCUTTA	KARACHI	RANGOON	MADRAS					COLOMBO

The health of the Province for the year was comparatively unsatisfactory. Cholera showed an increase but plague and small-pox were less prevalent. There were 555 deaths due to cerebro-spinal fever. Ahmedabad and Poona cities were the two epidemic centres, though it prevailed in more or less sporadic form in other parts of the Presidency. The epidemic in Ahmedabad reached its peak in March 1934, during which month 285 cases and 109 deaths were recorded. It was not confined to any particular locality though the incidence was higher in the congested parts of the city. Proportion of attacks among males and females was about 4 to 1; highest age incidence between 20 and 30; case mortality 47 per cent. Preventive measures taken were: closing of schools, cinemas, etc., during the height of the epidemic; the Friday fairs prohibited; places where the disease occurred were disinfected and white-washed; inoculation with prophylactic anti-meningococcal vaccine prepared by the Haffkine Institute; special arrangements for treatment in the Isolation wards and Isolation Hospitals. Treatment reported: lumbar puncture, intravenous injections of trypaflavine, mercurochrome and serum tried in suitable cases; serum as a rule tended to produce severe anaphylactic shock.

There were 29,249 deaths due to phthisis (1.06 per mille).

Remarks. The report is altogether a routine one. There seems to be a dearth of Health-officers in the municipal and rural areas. The municipalities and Local Boards should realise that money spent in this direction will give good returns in the long run. As regards the preventive measures against cholera epidemics undertaken or advised by the Department, we are inclined to think that disinfection of water and the amount spent on it is an avoidable waste. In view of D'Hérèlle's contention that water is not and cannot be the chief source of epidemic spread of cholera, the Department should undertake to review the position. The Assam Public Health Report for 1934 gives a favourable report as regards Cholera bacteriophage in prevention and treatment. We invite the attention of the D.P.H., Bombay to this report.

Field trials of cyanogas fumigation as a plague preventive measure were begun during the year, with due precautions and under proper supervision. We await the result of this interesting experiment.

A text-book of Midwifery for Students and Practitioners by R. W. Johnston, C.B.E., M.A., M.D., F.R.C.S.E., M.R.C.P.E. Eighth edition, with 278 illustrations, 1936. Publishers: Messrs. A. & C. Black, Ltd., Soho Square, London. Price 18s. net.

The reviewer has got a personal attachment to this text-book and its 1918 edition carried him through the examination with credit on the subject. Since then, it has been his chief book of reference.

The present edition is revised and all the accredited latest advances in Midwifery are incorporated. The author's warning that 'the function of antenatal care is to preserve normal health of body and mind and not to magnify the significance of trifling disorders' is certainly a sound and necessary advice

in view of the tendency of the practitioners, particularly the specialists, to think dangerously in advance.

It is not possible, neither it is necessary, to point out the best chapter in the book. And even were we disposed to do so, it will be a difficult task, because every chapter is as good as the next. The book is well planned, brief without loss of details and authoritative because of the experience behind the author. The student will find his examination easy if he reads the book intelligently and the practitioners will find in it a ready and exact direction in case of doubt and difficulty.

The get up is good; the paper used is thick enough to withstand even rough usage by careless students.

We heartily recommend the book to the medical students and the profession.

The Bloodless Phlebotomist, Vol. VIII No. 3, published by the Denver Chemical Manufacturing Co. of New York.

This little journal is replete with interesting articles written by physicians of different countries and while its main purpose is to acquaint its medical readers with Antiphlogistine, they will find in it other items of unusual interest. Any medical man in India who desires to get the journal regularly may write to the Publishers who will gladly put them in the regular mailing list.

Reconstruction of Education in India. New Chemical Industries, by J. C. Ghosh, B.Sc., late pharmaceutical chemist, Government of India Medical Stores Department, now Principal of The School of Chemical Technology, Calcutta.

These are two of the pamphlets issued by the author in the first of which he lucidly discusses an effective scheme of secondary education which will relieve the present unemployment crisis. The second pamphlet stresses on the need for the development of manufacturing and productive industries which alone, according to the author, will add to the wealth of the country and solve the serious problem of unemployment, dis-appointment and discontent. Adulteration and malpractices in respect of drugs in India is pointed out and the consequent need for a Pharmacy and Drugs Act.

The result of election to the Bengal Council of Medical Registration under section 4 clause (b) i.e., group of Licentiate and Medical graduates of Universities beyond Calcutta was declared by the Returning Officer Rai Saheb R. M. Das, Registrar of the Council at 8-30 p.m. on 23rd March 1936.

Of the seven candidates who stood for election Dr. Amulyadhan Mukherji of Calcutta (sitting) secured 1829 votes, Rai Saheb Dr. Satis Chandra Gupta of Jalpaiguri 1260 votes and Dr. Narendra Kishore Roy, Teacher, Dacca Medical School secured 1007 votes and were declared duly elected for a term of three years. This is the third successful election of Dr. Mukherji to this Council from this group of medical practitioners.

Dr. A. D. Mukherji was once the distinguished editor of this Journal. We congratulate him and his other colleagues on the successful election.

Notices

Mohd. Ahmad Kazmi Esqr., M.L.A., Saharanpur has given notice of the following to be moved in the current sessions of the Assembly :

A Bill to amend the Indian Medical Council Act No. XXVII of 1933.

Whereas it is expedient to amend the Indian Medical Council Act No. XXVII of 1933 it is hereby enacted as follows :—

In the Preamble of the principal Act omit the word 'higher'

1. This Act may be called the Indian Medical Council Amendment Act of 1933.
2. It extends to the whole of the British India.
3. It shall come into force on such date as the Governor-General in Council may by notification in the Gazette of India appoint.
4. In clause 3 (1) c all the words after the word "Register" from "who possess" to "University" be deleted.
5. In clause 3(1)d the word 'three' to be deleted and substituted by 'six' and after the words "Governor-General in Council" the existing full stop to be deleted and the following words be added "of whom three shall be licentiates having been elected by the All-India Medical Licentiates Association."
6. In the first schedule, below Punjab University the following is to be added

Medical Schools recognised by Provincial Governments.	Medical diplomas recognised by the Provincial Government and the Provincial Medical Councils	L.M.P. L.C.P.S. L.M.F. L.S.M.F. M.S.M.F. M.P.L. M.C.P.S.
---	--	--

Statement of objects and reasons

Ever since the Indian Medical Council Act of 1933 came into force, the discontent among that large and important class of Medical men known as L.M.Ps had become deeper and deeper. This state of affairs cannot be allowed to continue long.

It is but right that the All-India Medical Council should be seized with the problem of setting right the Medical standard in this country and unless the Medical Council for India exercises its central control and authority over Medical education in Medical Schools, as it does at present with that of the University Medical Colleges, the Provincial Governments who are in sole charge of Medical School Education are not likely, in any near future, to bestow the desired and much needed attention.

It is unimaginable that a vast body of Medical men who are entitled to practise by law and statute of the Provincial Governments and who are recognised by the Provincial Medical Councils as legally qualified Medical practitioners should be denied their

legitimate right of being included in the All-India Medical Council.

It is patent that if the Medical Council for India has to justify its title it must include within its scope the medical licentiates who form a preponderating majority of medical men with responsible official and public situations.

It may be mentioned the original intention, as was proposed in the draft bills previous to the passing of the Act in the final form, was to constitute a Medical Council in India in order to establish a uniform standard of qualifications in Medicine for all provinces, but that this laudable proposal was given up at the selfish behest of the General Medical Council.

It is therefore now proposed by the above amending bill to make the Indian Medical Council Act No. XXVII of 1933 more comprehensive and equitable and make it acceptable to the Indian Medical Profession.

[Some other Members of the Assembly have also given notice of a similar amending Bill. Paras 1 and 2 are same as the above but paras 3, 4, 5 & 6 are replaced by Para 3 as below:]

3. It shall come into force on such date as the Governor-General in Council may, by notification in the Gazette of India, appoint.

In clause 3 (1) add new clause (d) as under :—

(d) One member from each province where a provincial register is maintained, to be elected from amongst themselves by persons enrolled in the Register.

Clause (d) of the old Act to be reconstituted as clause (e) and amended as under, if the latter provision in new clause (d) is not acceptable.

(e) Six members to be nominated by the Governor-General in Council of whom three shall be Licence-holders and having been elected already by the All-India Medical Licentiates' Association.

In the first schedule, below Punjab University and as an additional item add :

Medical Schools recognised by the Provincial Governments.
Medical Diplomas recognised by the Provincial Governments and the Provincial Medical Councils.

Service Notes

LIST OF CHANGES AMONGST MEN SUB-ASSISTANT SURGEONS, PUNJAB, DURING THE MONTH OF DECEMBER, 1935

Dr. Ram Gopal Bhatla, Police and Sub Jail Hospitals, Sheikhupura, to Sharaqpur Dispensary, Sheikhupura District.

Amar Das Kohli, General duty, Punjab, Dental Hospital, Lahore, to Police Hospital, Ferozepore, Vice 1st Class Senior Doctor Fateh Chand granted 8 months and 19 days leave preparatory to retirement.

Ghulam Mohammad, General duty, Civil Hospital, Banga, Jullundur District, to Civil Hospital,

Banga, Jullundur District, Vice Dr. Prem Nath, M.S.M.F. (Pb.) proceeded on one month's leave.

Dr. Ghulam Mustafa Ahmady, On return from leave, posted as Anaesthetist, Mayo Hospital, Lahore.

„ Muhammad Yusuf Khan, Anaesthetist, Mayo Hospital, Lahore, to General duty, Mayo Hospital, Lahore.

„ Sidh Das, General duty, Civil Hospital, Sargodha, to Jail Hospital, Campbellpur, Vice Dr. Mool Raj Abbott granted 3 months leave.

„ Ata Muhammad Khan, Mithankot Dispensary, Dera Ghazi Khan District, to Canal Dispensary, Muzaffargarh.

„ Udho Das, Canal Dispensary, Muzaffargarh, to General duty, Civil Hospital, Multan.

„ Pokhar Das, Second Class Senior, Borstal Institution, Lahore, to Civil Dispensary, Mozang, Lahore, Vice 2nd Class Senior Doctor Shiva Ram granted 2 months and 10 days leave preparatory to retirement.

„ Hori Ram Singh Chaudla, Canal Dispensary, Muzaffargarh, to Mithankot Dispensary, Dera Ghazi Khan District.

„ Bishambar Das Sharma, General duty, Civil Hospital, Ludhiana, to Machhiwara Dispensary, Ludhiana District.

„ Hans Raj, Machhiwara Dispensary, Ludhiana District, to Dhar Dispensary, Simla District.

„ Kalyan Singh Makhania, L.T.M. (Cal.), D.T.M. (Cal.), General duty, Civil Hospital, Gujranwala, to Clinical Laboratory, Civil Hospital, Lyallpur.

„ Suraj Kaul Bakshi, L.T.M. (Cal.), Clinical Laboratory, Civil Hospital, Lyallpur, to General duty, Civil Hospital, Lyallpur.

„ Shiv Nath Razdan, Pattoki Dispensary, Lahore District, to Anandpur Dispensary, Hoshiarpur District.

„ Sultan Singh Jemadar, Anandpur Dispensary, Hoshiarpur District, to Sambrial Dispensary, Sialkot District.

„ Parma Nand Malhotra, Sambrial Dispensary, Sialkot District, to General duty, Civil Hospital, Gujrat.

„ Parmeshwar Singh Sodhi, Mehta Dispensary, Amritsar District, to General duty Civil Hospital, Ferozepore.

„ Muhammad Yaqub Gakhar, On return from leave, to General duty, Civil Hospital, Gurdaspur.

„ Inderjit Mehta, Vehari Dispensary, Multan District, to Boyleganj Dispensary, Montgomery District.

„ Kewal Ram, Boyleganj Dispensary, Montgomery District, to General duty Civil Hospital, Montgomery.

„ Ambu Lal Sharma, General duty, Civil Hospital, Kuln Kangra District, to General duty Civil Hospital, Dharmasala.

„ Ambu Lal Sharma, General duty, Civil Hospital, Dharmasala, to Dnnera Dispensary, Gurdaspur District, Vice Dr. Hari Singh, granted 2 months leave.

Dr. Parma Nand Bali, Sharaqpur Dispensary, Sheikhpura District, to General duty, Civil Hospital, Lyallpur.

„ Nanak Chand Lakhanpal, General duty, Civil Hospital, Gujranwala, to Borstal Institution, Lahore.

„ Sujan Singh, On reversion from the one month's military training, to General duty, Civil Hospital, Rawalpindi.

„ Khuda Bakshi, M.B., B.S., General duty, Civil Hospital, Muzaffargarh, to General duty, Civil Hospital, Gujranwala.

„ Dhani Ram, Alakhpura Dispensary, Hissar District, to General duty, Civil Hospital, Ludhiana.

„ Sohawa Singh, General duty, Civil Hospital, Ambala, to Alakhpura Dispensary, Hissar District.

„ Udho Das, General duty Civil Hospital, Multan, to Phularwan Dispensary, Shahpur District, Vice Dr. Rahmat Ali granted 3 months leave.

„ Karam Singh, General duty Civil Hospital, Gujranwala, to Sanawan Dispensary, Muzaffargarh District, Vice Dr. Pritam Singh granted 2 months leave.

„ Abdul Wadood Qureshi, General duty Civil Hospital, Gurdaspur, to General duty, Punjab Dental Hospital, Lahore.

„ Pirthi Singh Dabbas, On reversion from the one month's military training, to Jail and Police Hospitals, Hissar.

„ Ganga Singh, 2nd Class Senior, Jail and Police Hospitals, Hissar, to General duty, Civil Hospital, Jullundur.

„ Kewal Ram, General duty Civil Hospital, Montgomery, to Central Jail, Montgomery.

„ Muhammad Aslam Qureshi, Central Jail, Montgomery, to General duty Civil Hospital, Montgomery.

„ Muhammad Yusuf Khan, General duty, Mayo Hospital, Lahore, to General duty, Ripon Hospital, Simla.

„ Amar Nath, On expiry of leave, relieving Dr. Najim ud-Din granted 2 months leave, to Garhshankar Dispensary, Hoshiarpur District.

„ Feroze-ud-Din, Dhar Dispensary, Simla District, to General duty, Civil Hospital, Ambala.

„ Mela Singh, Central Jail, Montgomery, to General duty, Civil Hospital, Jhang.

„ Hira Nand, General duty, Civil Hospital, Gojra, Lyallpur District, granted 15 days leave.

„ Jai Deva, General duty, Civil Hospital, Dera Ghazi Khan, to Khangarh Dispensary, Muzaffargarh District, Vice Dr. Panna Lal Khanna granted 1½ months leave.

„ Swami Saran Mehta, On return from leave, to Chintpurni Dispensary, Hoshiarpur District.

„ Sukh Dayal Babar, On expiry of leave, to General duty, Civil Hospital, Dera Ghazi Khan.

„ Gopal Das, 2nd Class Senior, General duty, Civil Hospital, Lyallpur, to Chak Jhumra Dispensary, Lyallpur District.

„ Muhammad Ismail, Chak Jhumra Dispensary, Lyallpur District, to General duty, Civil Hospital, Lyallpur.

STATEMENT SHOWING THE TRANSFERS, LEAVE AND POSTINGS OF SUB-ASSISTANT SURGEONS OF ASSAM MEDICAL SERVICE (JN.) DURING THE MONTHS OF DECEMBER 1935 AND JANUARY 1936

(Through the courtesy of Dr. S. C. Barooa)

Dr. Saroda Charan Chakrabarty, Supy. duty Sylhet to Prithimpasa Dispy. Sylhet.

„ Satish Chandra Dutta 1. Prithimpasa Dispy. to Kulaura Dispy. Sylhet.

„ Benode Behari Choudhary, Kulaura to Chhatak Dispy. (Sylhet).

„ Sudhansu Prasad Nath from training at Campbell Medical School and Hospital to 1st. Demonstrator of Anatomy B. W. Medical school, Dibrugarh.

„ Surendra Mohan Majumdar, B. W. Medical School, to 1st S.A.S. Tura Civil Hospital (Garu Hills)

„ Atuleswar Das Gupta from Tura, to leave 4 months.

„ Prakas Chandra Majumdar, extension of leave 7 days.

„ Abdul Matlib, (S. grade) from leave to Nowgong, Civil Hospital.

„ Abhaya Charan Das from leave to Jail and Police Hospital, Nowgong.

„ Nrimol Chandra Das from Jail and Police Hospital, Nowgong to Mankachar Dispensary, (Goalpara).

„ Jogesh Chandra Choudhary from Mankachar to leave three weeks.

„ Suresh Chandra Das Gupta from leave to Supernumerary duty, Shillong.

„ Suresh Chandra Das Gupta, extension of leave 3 weeks.

„ Umesh Chandra Bhattacharyya, Barpathar Dispy. to leave 2 months.

„ Hiranmay Bhattacharyya Supy. duty, Shillong to Barpathar Dispy. (Sibsagar).

„ Suresh Chandra Das Gupta from leave to Supy. duty Gauhati.

„ Ramesh Chandra Kar, Supy. duty Sylhet to Lakhimpur Dispy. (Cachar).

„ Nagesh Chandra De, from Lakhimpur to Aijal (Lushai Hills) as 2nd S.A.S. Civil Hospital.

„ Abhoyd Charan Das, extension of leave 1 month.

„ Pulin Behari De, No. 11. Supy. duty Silchar to leave for 1½ month.

„ Abdul Matlif, extension of leave, 2 months on medical certificate.

„ Deveswar Bhattacharyya Supy. duty, Jorhat to Nowgong Dispensary, Temporarily.

„ Ashutosh De Purkayastha from leave reposted to Bogribari (Goalpara).

„ Prokash Chandra Mozundar, from Bogribari to Supy. duty, Dhubri.

„ Rohini K. Bhattacharyya from leave to Supy. duty, Silchar.

„ Kamakhya Charan Chakrabarty from Doom Dooma to Supy. duty, Dibrugarh.

„ Homena Kumar Sen Gupta from Supy. Duty, to Nowgong Dispensary (temporarily).

SELECTED MEDICAL BOOKS

Stock-Taking CLEARANCE SALE at 25% Discount

FOR LIMITED TIME ONLY

(1) LORD LISTER (1827-1912), by C. Dukes, M.D., M.Sc. The difficulties he overcame, the brilliant researches which secured him success, the revolution made in SURGICAL TREATMENT by the discovery of the antiseptic system; displaying also his modesty and whole-hearted love for truth. Rs. 3-6-0.

(2) WILLIAM HARVEY (1578-1657), by R. Harvey-Wyatt. His revolutionary methods of work and the value of his example in scientific research, the effect of his discovery of the circulation of the blood on medical knowledge and its development; his studies in Italy, his journeys in France and Scotland, the reforms at St. Bartholomew's. Rs. 3-6-0.

(3) NOORDEN (Prof. Carl von): METABOLISM AND PRACTICAL MEDICINE: A compilation of facts and a critical discussion divided into 3 parts—(i) The Physiology of Metabolism; (ii) The Pathology of Metabolism; and (iii) The Pathology of Metabolism (from the practitioner's point of view). Translated under the general editorship of Prof. I. Walker Hall of Bristol. Tables, Bibliographies, and Index. Complete Set in 3 vols. Rs. 39-6-0.

(4) KETHAM: FASCICULUS MEDICINÆ. Translated and adapted by Dr. Charles Singer. The 18 very interesting and curious plates are carefully reproduced on the original scale and mounted on thick cartridge paper. Rs. 34-8-0.

(5) BINNIE: OPERATIVE SURGERY Rs. 55-2-0.

33 1/3% Reduction for orders with advance remittance till 30th April 1936.

FOR ANY BOOK ON MEDICAL, SURGICAL and Allied subjects at competitive price write to me to your advantage.

Supplier to Libraries, Colleges and Medical Profession

S. R. GUPTA, (Medical Bookseller)

Nagarkhann Road, NAOPUR CITY, C. P.

Dr. Nagendra Chandra Ray from Nowgong Dispensary to leave 3 months from 17-12-35.

„ Sribas Das, from Assam Medical Research Society to Medical Department and deputed to undergo a course of training in Bacteriology in the Pasteur Institute, Shillong, for a period of 2 months.

„ Anukul Chandra Sengupta from Maulvi Bazar to leave 21 days.

„ Pulin Behari De, No. 11, from Supy. duty Sylhet to Maulvi Bazar from (18th Oct. to 24th Oct. 1935.)

„ Surendra Chandra Deb, from Supy. duty Sylhet to Maulvi Bazar.

„ Snahil Chandra Dutta, from Jail Hospital, Gauhati to Jail and Police Hospital, Nowgong.

„ Abhaya Charan Das from Jail and Police Hospital, Nowgong to Jail Hospital, Gauhati.

„ Prokash Chandra Mazundar, Supy. duty Dhubri to Bordolani Dispensary (Lakhimpur).

„ Hrdioy Ranjan Paul from Bordolani to Bajingdoba (Goro Hills).

„ Promath Nath Sen from Titabar to leave for 2 months from 25-1-36.

Dr. Suresh Chandra Das Gupta from Supy. duty Gauhati to Titabar Dispensary.

„ Dwijendra Nath Sen Gupta from Silghat Dispensary (Nowgong) to leave 2 months.

„ Ketaki Ranjan Chakravarty from Supy. duty, Gauhati to Silghat Dispensary.

„ Hementa Kumar Sen Gupta from tempy. Charge of Nowgong Dispensary to Supy. duty Nowgong.

Public Health Department

„ Ramani Kanta Das, Epidemic Unit, Nowgong to leave 1 month.

„ Ayodhya Nath Bhattacharyya from Nowgong to Gauhati (Malaria Duty).

„ Surendra Chandra Chakrabarty, Sylhet to leave 1 month.

„ Md. Nizamur Rahman Majundar, Epidemic duty, Goalpara to leave 3 months.

„ Harinath Das leave 2 months.

„ Md. Abdul Bari extension of leave 15 days.

„ Md. Habibar Rohman, Epidemic Unit, Gauhati leave for 1 month.

„ Ghnanashyam Das, Epidemic Unit, Gauhati, leave for 7 days.

Association Accounts

MONTHLY STATEMENT OF ACCOUNTS OF THE ALL-INDIA MEDICAL LICENTIATES' ASSOCIATION FAMILY FUND

October 1935

Receipts	Rs.	A.	P.	Payments	Rs.	A.	P.
Balance brought forward from last Month's Acct.	287	12	6	Postage	15	0	0
By credit to call No. 141 and 154 @ Re. 1 each	14	0	0	Stationery	1	0	0
By credit to call No. 155	2	0	0	Deposited into Post Office Saving Bank	220	0	0
By credit to call No. 156 and 157 @ Rs. 3 each	6	0	0				
By credit to call No. 158	4	0	0				
„ 159	10	8	0				
„ 160	18	0	0				
„ 161	15	0	0				
„ 162	14	0	0				
„ 163	15	0	0				
„ 164	81	0	0				
„ 165	84	0	0				
„ 166	98	8	0				
„ 167	105	0	0				
„ 168	17	0	0				
„ 169	14	0	0				
„ 170	10	0	0				
By further calls in advance	20	8	0				
Suspense	5	0	0				
By credit deposits to calls	105	0	0				
„ Penalty calls	96	0	0				
„ cost of certificates	1	0	0				
Total	988	4	6	Total	286	0	0
				Balance in hand	692	4	6
				Total	888	4	6

November 1935

Receipts	Rs.	A.	P.	Payments	Rs.	A.	P.
By balance brought forward from last month's Acct.	682	4	6	Office Establishment	20	0	0
By credit to calls Nos. 161	1	0	0	Stationery	4	7	0
By credit to calls Nos. 162 & 163 @ Rs. 3/ each	6	0	0	Postage stamps	2	0	6
By credit to calls Nos. 164	10	0	0	Death calls paid	821	8	3
„ 165	12	8	0	Money order commission charges	9	4	0
„ 166	47	0	0	Miscellaneous charges	2	14	0
„ 167	49	0	0	Deposited into post office savings Bank.	488	0	0
„ 168	9	0	0				
„ 169	8	0	0				
„ 170	8	8	0				
By credit to further calls in advance	5	0	0				
By credit to deposits	54	0	0				
				Total	887	1	9
				Balance in hand	2	9	
Total Rs.	887	4	6	Total	887	4	6

December 1935

Receipts	Rs.	A.	P.	Payments	Rs.	A.	P.
By Balance brought forward from last month's Acct.	0	2	9	Office establishment	20	0	0
By credit to call No. 162	1	0	0	Stationery	1	8	0
„ 163	2	0	0	Propaganda work	9	0	0
„ 164 & 165 @ Rs. 6/- each	12	0	0	Postage stamps	15	8	0
„ 166	10	8	0	Money order Commission charges	5	10	0
„ 167	11	0	0	Journal and association fees	6	0	0
„ 168 & 169 @ Rs. 6/- each	12	0	0	Miscellaneous charges	0	8	0
„ 170	8	8	0	Advances Paid	100	0	0
By credit to further call in advance	4	0	0	Death calls paid	84	8	8
„ admission fees	6	0	0				
„ cost of certificates	1	0	0				
„ Journal & Association fees	6	0	0				
„ Deposits	18	0	0				
Withdrawn from P. O. Savings Bank.	201	0	0				
				Total	191	18	8
				Balance in hand	96	5	6
Total	288	2	9	Grand Total	288	2	9

(Sd.) G. V. MOTHWALE,

Secretary

A.I.M.L.A. FAMILY FUND

(Sd.) M. R. FADNIS,

Manager

A.I.M.L.A. FAMILY FUND

CONSOLIDATED ACCOUNTS OF THE ALL-INDIA MEDICAL LICENTIATES' ASSOCIATION

RECEIPTS

PAYMENTS

NOVEMBER 1935							
	Rs.	As.	Ps.		Rs.	As.	Ps.
To Subscription (old & new) ...	429	4	—	By Printing I. M. J. ...	526	—	9
„ Advertisement ...	1267	1	2	„ Establishment ...	351	5	—
„ Interest ...	—	—	—	„ Office Rent ...	60	—	—
„ Miscellaneous ...	13	14	—	„ Stationery ...	6	—	—
Total ...	1,710	3	2	„ Travelling allowance ...	76	4	—
Balance from last month ...	38,432	2	1	„ Postage etc. ...	180	13	3
Grand Total ...	40,142	5	3	„ Miscellaneous ...	61	11	—
Detail of Balances				„ Other Printing ...	3	11	—
New Loans Govt. Security ...	10,600	—	—	„ Propaganda Work ...	24	—	—
5 Years Postal Cash Certificates ...	10,261	14	—	„ Expenses for Branches ...	159	13	3
G. P. Notes ...	500	—	—	„ Furniture ...	—	—	—
Government Security Loans 3½% 1947-50 ...	13,200	—	—	„ Audit fee ...	—	—	—
6½% Treasury Bonds ...	—	—	—	Total ...	1,449	10	3
With Dr. S. P. Sen Gupta, Ex-Manager ...	1,199	—	1	Balance in hand ...	38,692	11	—
Postal Savings Bank, Mussoorie ...	146	11	9	Grand Total ...	40,142	5	3
With Branches ...	499	—	8				
With Manager:—							
In hand ...	9	1	6				
In Bank ...	1567	13	11				
Cheques ...	1,576	15	5				
With Gen. Secy.—In hand ...	175	—	—				
In Bank ...	21	11	11				
With Treasurer.—In hand ...	6	14	—				
In P. N. Bank ...	189	7	2				
In P. S. Bank ...	366	—	—				
Total ...	38,692	11	—				

RECEIPTS

PAYMENTS

DECEMBER 1935							
	Rs.	As.	Ps.		Rs.	As.	Ps.
To Subscription (old & new) ...	689	15	—	By Printing I. M. J. ...	627	12	—
„ Advertisement ...	709	6	8	„ Establishment ...	360	—	—
„ Interest ...	—	5	—	„ Office Rent ...	60	—	—
„ Miscellaneous ...	24	14	—	„ Stationery ...	89	10	—
Total ...	1,424	8	8	„ Travelling allowance ...	—	—	—
Balance from last month ...	38,692	11	—	„ Postage etc. ...	186	—	—
Grand Total ...	40,117	3	8	„ Miscellaneous ...	35	2	6
Detail of balances				„ Other Printing ...	12	—	—
New Loans 3½% Loans 1947-50 ...	13,200	—	—	„ Propaganda Work ...	115	—	—
5 Years Postal Cash Certificates ...	10,261	14	—	„ Expenses for Branches ...	120	12	6
G. P. Notes ...	500	—	—	„ Furniture ...	—	—	—
Govt. Security Loans ...	10,600	—	—	„ Audit fee ...	—	—	—
6½% Treasury Bonds ...	—	—	—	Total ...	1,556	5	—
With Dr. S. P. Sen Gupta, Ex-Manager ...	1,199	—	1	Balance in hand ...	38,530	14	8
Postal Savings Bank, Mussoorie ...	116	11	9	Grand Total ...	40,117	3	8
With Branches ...	465	9	—				
With Manager:—							
In hand ...	93	1	3				
In Quilon Bank ...	877	10	4				
Cheques ...	37	8	—				
With Gen. Secy.—In hand ...	22	6	2				
In Bank ...	74	10	—				
In Transf. from M. Editor ...	97	—	2				
With Treasurer.—In hand ...	288	12	—				
In P. N. Bank ...	149	—	10				
In P. S. Bank ...	366	—	—				
Total ...	38,530	14	8				

RECEIPTS

PAYMENTS

JANUARY 1936							
	Rs.	As.	Ps.		Rs.	As.	Ps.
To Subscription (old & new) ...	2,559	—	—	By Printing I.M.J....	567	—	6
„ Advertisement ...	734	14	—	„ Establishment ...	355	—	—
„ Interest ...	10	7	8	„ Office Rent ...	60	—	—
„ Miscellaneous ...	15	10	—	„ Stationery ...	25	13	—
On loan from Gen Secy. ...	15	—	—	„ Travelling allowance ...	—	—	—
Total ...	3,334	15	8	„ Postage etc. ...	589	3	9
Balance from last month ...	38,560	14	8	„ Miscellaneous ...	95	2	—
Grand Total ...	41,895	14	4	„ Other Printing ...	28	12	—
Detail of Balances				„ Propaganda Work ...	207	2	—
New Loans 3½% 1947-50 ...	13,200	—	—	„ Expenses for Branches ...	145	6	6
5 Years Postal Cash Certificate ...	10,261	14	—	„ Furniture (Independent pen) for Dr. K. B. L. Varma Secy. Anti-poison rule committee ...	3	13	—
G. P. Notes ...	500	—	—	„ Audit fee ...	—	—	—
Govt. Security Loans ...	10,600	—	—	„ Propaganda Anti-poison rule Committee ...	20	9	—
With Ex-Manager Dr. S. P. Sen Gupta ...	1,199	—	1	Total ...	2,097	13	9
Postal Saving Bank, Mussoorie ...	116	11	9	Balance in hand ...	39,798	—	7
With Branches ...	485	—	—	Grand Total ...	41,895	14	4
With Manager:—							
In hand ...	12	15	—				
In Quilon Bank ...	972	15	—				
Cheques ...	985	14	—				
With Gen Secy.—In hand ...	6	6	11				
In Bank ...	131	—	6				
With Treasurer:—In hand ...	**1,439	5	3				
In P. N. Bank ...	506	12	1				
In P. S. Bank ...	366	—	—				
Total ...	39,798	—	7				

*Heavy cash balance in hand with the Treasurer was due to the Savings Bank Pass Book being with the Auditors since 7-12-35 and without which the amount could not be deposited in the Savings Bank.

(Sd.) N. R. KARANDIKAR, (Sd.) A. N. KHOSLA, (Sd.) U. B. NARAYAN RAO,
Chairman, Finance Committee. Hony. Treasurer. General Secretary.

Dr. Jai Gopal, Provincial Secretary, Punjab,
A.I.M.L.A. Dipal Pur, Dist. Montgomery, Punjab,
writes under date 26-3-36:

Association Notes

Hissar Branch

1. Proceedings of a meeting of the above Branch of the A.I.M.L.A. held on 8-12-35 at Hissar in the Civil Surgeon's Office, Dr. Ran Lal Gajral presiding. Dr. S. L. Rawal, Branch Secretary, could not attend on account of his sudden illness but he arranged through Dr. Parbhakar to conduct the business. The following resolutions were passed:—

1. (a) That this Association records with profound sorrow the said death of R. B. Dr. Sarju Pershad, *Musahib-i-khas Bahadur* and begs to offer most heart-felt condolence to Mr. Ram Bharsa Tiwari and other family members in their sad bereavement. May God grant the bereaved members strength to bear the loss. It is also a loss of great magnitude to the Association, the plant nourished by the life blood of the Association.

of the deceased. May his great soul rest in eternal peace! The resolution was passed, all standing.

(b) Resolved that a copy of the above resolution be sent to Mr. Ram Bharosa Tiwari, Tukoganj, Indore, C. I.

(2) That this Association requests the Punjab Government to kindly amend section 5 (1) (e) of the Punjab Medical Registration Act II of 1916 and be pleased to make provision to entitle the registered practitioners who hold diploma of the Local Government to elect three members to the Punjab Medical Council in view of the fact that the present elected representation of the medical licentiates is inadequate and not based on their numerical strength and that the representation in other province in their respective Medical Councils far exceed that of the Punjab and above all in view of the sympathetic attitude of the Punjab Medical Council itself towards our demand for increased representation, vide resolution No. 8 (ii) adopted at its meeting held on 9th November, 1935.

(3) That the bill of the postage of the Branch from June to November 35 was checked and passed.

(4) The minutes of the last meeting were read and confirmed.

Copy of resolution No. 2 adopted at the above Branch meeting held on 16-2-36.

"That this Branch fully endorses the demands as outlined in item No. i to iv under para (a) of G. S. circular letter No. 2 of 1936 and that it is most desirable and advisable to enlarge the scope of the existing Family Fund on an Insurance basis for which some authority on the subject should be consulted."

That a copy of the above resolution be sent to the G.S., Bombay for information and necessary action.

* *

Calcutta Branch.

Annual Report of the above Branch for the year ending December 1935, adopted at its annual general meeting held on 17-2-36.

The Executive Committee of the above Branch of the A.I.M.L.A. has great pleasure in presenting the annual report of its activities. The Committee for the year 1935 was entrusted to look to the interests of the Association from December, 1934. It consisted of the following members:—Drs. A. D. Mukherjee: president, S. N. Maitra: vice-president, A. N. Roy: secretary, Md. M. U. Khan & S. L. Roy: joint secretaries, K. N. Mukherjee: auditor. Members of the Executive Committee:—Drs. K. P. Sen, P. N. Ghosh, S. P. Sen Gupta, N. B. O'Brien, Rai Sahib P. C. Roy, S. C. Roy, Drs. K. C. Chakraborty and A. N. Roy were elected as representatives of the Branch for provincial Branch of the Association.

Meetings: Besides three sub-committee meetings, there were ten meetings of the Branch of which four were specially convened for considering the following important matters:—(1) to consider the proposal of the President regarding the amalgamation

of the A.I.M.L.A. with the Indian Medical Association, (2) to consider the draft rules amended by a Sub-Committee, (3) to inaugurate "Sarju Pershad Week" and to commemorate the memory of Rai Bahadur Dr. Sarju Pershad Tiwari the former President and Patron of the Association, (4) to elect delegates for and consider resolutions to be placed before the provincial conference held in December 1935 at Dacca.

Activities: (1) The members had a lively discussion on the question of amalgamation of the A.I.M.L.A. with the Indian Medical Association as suggested by the President of the former, Rai Sahib Dr. Ram Narain Lal. The members were of opinion that amalgamation could not be brought about till the unification of all medical qualifications was inaugurated and the statutory rights of the medical licentiates were recognised in all spheres of medical service and practice.

(2) To consider the draft rules formed by The Rules Committee of the Mother Association a Sub-Committee entitled "Rules Sub-Committee" was formed consisting of Drs. K. P. Sen, P. N. Ghosh, K. N. Mukherjee, M. S. U. Khan and S. L. Roy with Dr. A. N. Roy as convener. The Sub-Committee sat for three consecutive days and placed their views before a special general meeting which, after discussion, sent them for consideration to the Twenty-seventh Annual Conference of the Association held at Indore. (3) The Branch observed the 20th of September 1935 as "Anti Indian Medical Council Day" as it was on this day that the much protested Indian Medical Council Act was passed. A protest meeting was held when a large number of medical licentiates assembled and passed a resolution protesting against the exclusion of the medical licentiates from the purview of the Act and the attention of the members of the Legislative Assembly was drawn to these legitimate grievances. (4) The first week of December 1935 was observed as "Sarju Pershad Memorial Week" during which time a Sub-Committee named "Sarju Pershad Memorial Committee" consisting of Drs. M. L. Ghosh, E. Ahmad, A. K. Maitra, S. Roy, S. L. Roy, P. N. Ghosh, A. N. Roy and A. Malek took upon itself the task of enlisting new members of the Association as a mark of respect and remembrance to the hallowed memory of Rai Bahadur Dr. Sarju Pershad who did his best for the realisation of many of the objects of the Association. And it is a matter of great pleasure to report that six new members were brought under the banner of this Association as a result of this enterprise.

Representations: The Branch sent a representation to the Minister-in-charge of Medical Portfolio and to the Surgeon-General with the Government of Bengal to throw open the newly created posts of Associate visiting physicians and surgeons in the Campbell Hospital to the medical licentiates. The Branch secretary saw the superintendent of the hospital, Lt. Col. N. C. Kapur, I.M.S. personally in order to get his support. He, however, viewed the matter in a different light from what we aimed at. We regret to report that our representation was not considered sympathetically. But the attention of

the Government has been drawn to this fact through a resolution in the Conference at Dacca.

A Sub-Committee entitled "University Education Sub-Committee" consisting of Drs. Rai Sahib P. C. Roy, A. D. Mukherjee and R. C. Sircar with Dr. A. N. Roy as convener waited upon the Vice-Chancellor of the Calcutta University with a deputation in July 1934 for affording better facilities to the medical licentiates for higher study in the University. The matter was put before the Syndicate who referred the matter to a Committee consisting of Lt. Col. T. C. Boyd, I.M.S. and Sir K. N. Das, Kt. The members of the Sub-Committee met the members of the Syndicate and Lt. Col. T. C. Boyd I.M.S. and Sir K. N. Das, Kt. "University Education Sub-Committee" further gave a scheme of study for consideration of the members of the Syndicate. The matter is still under consideration and our members are trying to have the grievances of the medical licentiates in this respect redressed. It is hoped that the Calcutta University will remove the obstacles in the way of our progress in conformity to its motto, namely, "Advancement of Learning".

Provincial Conference: With a view to hold the Bengal Provincial Conference of the A.I.M.L.A. at Calcutta, a reception committee was formed by this Branch. For some unavoidable reasons the final date was being shifted from time to time when all on a sudden the Dacca Branch invited the provincial conference and thus this Branch had to suspend its activities in this connection. It was ultimately held at Dacca where the Delegates of this Branch took active part in its deliberations. This Branch has invited the next conference to Calcutta.

Future Activity: The Branch has got much work to do but for want of money it is handicapped. It is high time that the members should seriously consider the proposal to appoint a clerk and Bill collector to collect the local subscriptions. The Branch has no house of its own where it can meet. It is for the members to consider and devise ways and means to work out a constructive scheme whereby the stability of the Association may be ensured, the utility of its existence brought home to the members and its objects realised.

In conclusion, this Branch of the A.I.M.L.A. records its deep sense of appreciation of the hospitality offered by Dr. K. P. Sen, who has not only ungrudgingly allowed the members to hold their meetings at his residence but also served them with light refreshments. The Committee also records its thankfulness to the members of the different Sub-Committees for the help they have rendered which had made the members realise their position in the medical world and stimulated them to do something worth the name of their Association which has been serving them for the last twenty-nine years.

* *

Madras Branch

1. Proceedings of the General Body Meeting of the above Branch held on the 8th January 1936. Dr. U. Rama Rao presided. After group photo and tea, the proceedings began.

The Secretary read the following annual report of the Branch for the year ending 1935.

Members: There was a uniform progress in the membership during the year. Some licentiates with foreign qualifications have also joined the Association.

Executive Committee Meetings: There were 10 Executive Committee meetings during the year. Several discussions pertaining to the welfare and progress of the medical licentiates, both in service and in private practice, were held. In this connection the Committee also arranged deputations that waited on the Surgeon-General with the Govt. of Madras. *General Meetings:* A general meeting of the medical profession of Madras was held under the auspices of the above Association on 20th September 1935 under the presidency of Dr. V. D. Nimbkar, F.R.C.S. to protest against the All-India Medical Council Act.

Clinical Meetings: There were six clinical meetings during the year as per particulars below:

DATE.	SUBJECT.	LECTURER	PLACE
19-3-35	Abortion	Dr. K. S. Sivarama-krishna Iyer. President: Dr. (Miss) H. Lazarus, F.R.C.S.	Lady Wel-lingdon Medical School
30-4-35	Gonorrhoea in the male	Dr. K. Ramarao. President: Dr. K. Rathnavelu, L. M. & S.	Gana Mandir
20-5-35	Modern Treatment of Leprosy	Dr. Y. Suryanarayanrao. President: Capt. S. Thambiah, M.R.C.P.	"
10-7-35	Dental Profession as it is practised in India	Dr. S. Bhat, M.B., B.S. President: Major McRobert, L.R.C.P., I.M.S.	"
22-10-35	Black-Water Fever	Dr. C. S. Venkata-subramanyam, M.B. B.S. President: Capt. P. Krishnaswamy, M.R.C.P.	Bryson School.
30-11-35	Ascites	Dr. A. Viswanathan. President: Dr. K.B. Bhujanga Rao	57, Thambu Chetty St., Madras

Finances: The expenses of the Branch which amount to an average of Rs.10/- per month was met by the Mother Association and the Branch also contributed a similar sum towards the expenses by local subscriptions.

Quetta Earthquake Relief Fund:—In response to the request of the General Secretary of the Association, the Branch organised the above Fund and contributed liberally for the same.

Other Matters of interest: The election of Dr. U. Rama Rao to the Presidential chair of the Conference of the Indian Medical Association, 1935, the highest reward in the gift of the medical profession in India, will be remembered as an eventful year in the history of the medical profession in the country when the foundation for the unifica-

tion of the profession may be said to have been well and truly laid in the city of Nagpur. The Branch also feels particularly proud to record the election of Dr. A. Viswanathan to the Editorial Chair of the *Indian Medical Journal*, the official organ of the All India Medical Licentiates' Association. It would not be an exaggeration or simply words of praise, if we were to point out that under the able hands of Dr. A. Viswanathan and with the kind co-operation of the equally able members of the Editorial Board, the *Journal* has now attained a high standard of efficiency, fine get-up, regularity, economy of expenditure and popularity which any recognised Journal could boast of. It is earnestly hoped that the learned Editor, Dr. A. Viswanathan, would continue to keep the Journal as a live Organ of the Association.

Obituary.—The association records with deep regret the demise of Rai Bahadur Dr. Sarju Pershad Tiwari, the Patron of the Association.

Thanks : Our thanks are due to Dr. R. Ramanujulu Nayudu Garu, the Vice-President, who so regularly conducted all the Committee and the General proceedings of the Branch.

We are also grateful to Dr. D. V. Venkappa, Provincial Secretary, Madras whose timely advice and instructions were very useful in carrying out our work successfully during the year.

We are also thankful to the members of the Committee and other members for having so kindly co-operated with us in our activities.

The thanks of the Association are due to the Press, The Antiseptic, The Medical Practitioner, Journal of South Indian Medicine, The Hindu, The Madras Mail and the Indian Express for having kindly published the proceedings of the Association and also to the authorities of the Gana Mandir for the use of the hall.

Following office-bearers were elected for 1936 :—
Drs. U. Rama Rao : President, R. Ramanujulu Naidu : Vice-President, U. D. Gopal Rao : Hony. Secretary, K. Ramarao : Joint Hony. Secretary.

Managing Committee : Drs. A. Viswanathan, A. C. K. Hebbur, B. Venkatrao, K. B. Bhujanga Rao, T. V. Ranganatharao, K. S. Sivaramakrishna Iyer, G. Subbarayudu, Y. Suryanarayana Rao, D. R. Annamalai, K. Venkatrao, P. R. Nagarajan and P. Krishnaswamy.

The meeting terminated with a vote of thanks to the chair and authorities of the hall proposed by Dr. R. Ramanujulu Nayudu.

2. Proceedings of the M. C. Meeting of the above Branch held on 24-1-35, at 6 p. m. under the presidency of Dr. R. Ramanujulu Nayudu.

7 members were present. Dr. U. D. Gopal Rao was at home to the members.

(i) The minutes of the last meeting were read and confirmed.

(ii) The account for the month of December, 1935, aggregating to a sum of Rs. 8-4-6. was placed on the table and passed unanimously.

(iii) The following resolutions were passed.—(a) This branch of the A. I. M. L. A. records with profound sorrow the sudden demise of His Majesty, King George V and conveys its heart-felt condolences to His Majesty, the King Edward VIII and the Queen Mother and the rest of the members of the Royal Family in their bereavement. (b). That the meeting humbly conveys its respectful and loyal greeting to His Majesty, the King Edward VIII, Emperor of India, on his accession to the throne. Dr. D. V. Venkappa, Provincial Secretary, Madras, in a short speech observed how deeply the medical profession at large would mourn the loss of the King George V, particularly the medical licentiates in India for whom the dominant personality of the Late King and his endearing words were a source of great inspiration for many of them to go and fall at the altar of the Great War. He further observed the greatness, simplicity and deep love for the suffering humanity of King George V and pointed out the immense benefits of the huge organization of the late King George V's jubilee Fund.

(iv) While passing the minutes of the last General meeting Dr. Y. Suryanarayanrao raised an objection saying that the last General Body meeting was conducted before the appointed time, 6-15 p.m. But the house was of opinion that the meeting was conducted in right time and therefore in order.

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

3. A General Body Meeting of the above Branch was held on Wednesday the 12th February 1936, when 12 members were present. Dr. U. Rama Rao presided.

The following resolutions were passed :—

(1) Resolved that the above Branch of A.I.M.L.A. expresses its profound sorrow on the sad demise of Lt. Col. Bholanath I.M.S. (Retd.) President of the Indian Medical Association and conveys its condolence to the bereaved family.

(2) Regarding Surgeon-General's letter No. 1020/8 of 1935 dated 17-1-36. The General Body Meeting of this Branch of A.I.M.L.A. whole-heartedly approve of his proposed amendment to the Indian Medical Degree Act, 1916, expected to be introduced in the Assembly under the new Constitution.

(3) Resolved further the abstract of the speech of Dr. R. Ramanujulu Nayudu, Vice-President, be forwarded to the Surgeon-General along with the above resolution.

Letter of Dr. R. Ramanulu Nayudu :—

It is highly desirable to have a draft bill ready to amend the Indian Medical Degree Act of 1916 with a view to provide for the prosecution and punishment of persons who add bogus degrees to their names as M.D.(H), M.B.(Bio.Ch.), L.M.S.(Cal.), etc., also for the checking of unauthorised conferment of such bogus degrees and titles by Bodies which are primarily responsible for this fraud on the public.

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

4. Proceedings of the Committee Meeting of the above Branch of A.I.M.L.A. held on 19th February 1936 at 6-30 p.m. under the presidency of Dr. R. Ramanujulu Nayudu. 8 members were present.

Dr. Y. Suryanarayan Rao was At Home to the members.

The minutes of the previous meeting were read and confirmed.

Resolution No. 1.—The account of the month of January aggregating to a sum of Rs. 15-9-9 were placed on the table and passed unanimously.

Resolution No. 2.—The Branch Secretary may be authorised to correspond with the Principal, Medical College, Madras and Registrar, Madras University, with regard to new regulations for admission of medical licentiates to M.B. examination of Madras.

The meeting terminated with a vote of thanks to the chair and host.

* *

Bombay Branch

1. The adjourned General Body meeting of the above Branch of the A.I.M.L.A. was held on 3-11-1935 with Dr. N. R. Karandikar in the chair.

Minutes of the previous meeting were read and confirmed.

Letter from the Managing Editor, *Indian Medical Journal*, appealing to the members to try to contribute as many articles as possible was read and recorded. The Secretary requested the members to try their level best to give at least an article each to the *Journal* at their earliest convenience.

With reference to the General Secretary's circulars 23 and 24, it was resolved that the Conference may be called in Bombay if no other Branches were forthcoming with an offer and that the time required would be about four months.

Regarding library of the above Branch, the members were informed that the journals and books will be supplied to them on receiving intimation from them. The letter of thanks sent by the Secretary to Messrs, T. M. Thakore & Co., Fort, Bombay, for their offer to supply various journals to the library was read and recorded.

The meeting terminated with a vote of thanks to the chair, after tea.

2. The Managing Committee meeting of the above Branch was held on 3-11-35 with Dr. N. R. Karandikar in the chair.

Minutes of the meetings held on 7-9-35 and 20-10-35 were read and confirmed.

Letter from the Managing Editor, *Indian Medical Journal*, appealing to the members to try to contribute as many articles to the journal as possible, was read and referred to the General Body.

General Secretary's circulars 23 and 24 were read and referred to the G. B. with the recommendation that the conference may be called in Bombay if no other Branches are forthcoming with an offer in view

of the fact that the Conference was held in Bombay only about a year before.

Branch accounts for the months of September and October '35 were scrutinised and passed.

The T. A. Bill submitted by the Hon. Secretary (spent for enrolling 12 new members) was passed for payment.

Branch fund account was also scrutinised and passed.

Regarding library, the Secretary was directed to arrange to send the books to the members whenever a call for the same was received.

Letter from Messrs. T. M. Thakore & Co. offering certain foreign journals to the Branch library was read and recorded. The Secretary was requested to thank the firm on behalf of the Branch for their kind offer and was directed to arrange to get the journals from the said firm.

The Secretary was requested to arrange to hold the next clinical meeting on 1-12-35.

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

3. The Managing Committee meeting of the above Branch of the A.I.M.L.A. was held on 17-11-35 with Dr. N. R. Karandikar in the chair.

Minutes of the last meeting were read and confirmed.

Draft annual report prepared by the Secretary was read and approved after suggesting a few additions.

The Secretary was directed to call the Annual General Body meeting on 1-12-35 and also to arrange to take charge of the Reception Committee account that day. The annual general Body agenda as prepared by the Secretary was approved.

Dr. U. B. Narayanrao was 'At Home' to the members on the occasion.

The meeting terminated with a vote of thanks to the host and to the chair.

4. The Managing Committee meeting of the above Branch was held on 1-12-35 with the President, Dr. A. V. Baliga, in the chair.

The minutes of the meeting held on 17-11-35 were read and confirmed.

The draft annual report was again read and passed for placing before the General Body.

The Branch account for November 1935 was scrutinised and passed.

The Branch fund account also was scrutinised and passed.

Regarding the Reception Committee account, it was resolved that the new Managing Committee should take charge of the same.

Dr. U. S. Rao's resolution, "Resolved that it be recommended to the Annual Conference of the A.I.M.L.A. that the Head Office of the A.I.M.L.A. be permanently situated in Bombay with a paid staff" was directed to be placed before the General Body.

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

5. The Managing Committee meeting of the above branch was held on 12-1-1936 with Dr. B. Y. Paranjpye, the Vice-President, in the chair.

The minutes of the previous meeting were read and confirmed.

The Branch fund account was scrutinised and passed.

General Secretary's circular No. 28 was read. After discussion over the subject, the following sub-committee was elected to wait on deputation on the M.L.As. of Bombay to get their help in amending the Indian Medical Council Act, 1933: Drs. A. V. Baliga, N. R. Karandikar, U. B. Narayanrao, D. R. Prem, U. S. Rao, B. Y. Paranjpye and A. D. Mastakar.

Resolved that the Hon. Secretary be authorised to communicate with the M.L.As. asking for interview.

Regarding General Secretary's circular no. 2 (confidential) about insurance companies, the contents were discussed item by item as follows:—*Opinions*:—(a) i. Rates should be the same for both graduates and licentiates for examining proposals of same denominations.

ii. Medical men, both licentiates and graduates, of below 5 years' standing should be allowed to examine cases up to Rs. 8000/- and those with 5 years' standing or more should be allowed to examine cases of all higher denominations.

iii. This clause is redundant and should be dropped.

iv. Agree.

(b) Resolved that before proceeding to discuss this clause, the G.S. may be requested to get a copy of the existing memoranda and articles of the Family Fund of the A.I.M.L.A. for this Branch to enable to discuss the matter.

(c) Agree.

(d) No commission should be given to the agents.

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

6. The minutes of the Annual General Body meeting held on Sunday, the 1st December 1935, at 94, Girgaum Road, at 4-30 p.m. under the presidency of Dr. A. V. Baliga.

The minutes of the previous meeting were read and confirmed.

Dr. U. S. Rao, the Hony. Secretary, then read the following Annual Report:—

The Managing Committee have much pleasure in placing before the House the following annual report for the year ending 1935.

During the period under review, 11 General Body, 3 Clinical and 12 Managing Committee meetings were held.

There were 66 members on the roll at the beginning of the year of whom four members left; 18 new members were enrolled during the period under report, thus bringing the total to 80.

In the first clinical meeting, Dr. B. Y. Paranjpye, Eye Surgeon, spoke on 'Conjunctivitis'. In the second, Dr. S. N. Ganti opened discussion on 'Infantile Diarrhoea'. In the third clinical meeting, Dr. U. S. Rao read a paper on 'Treatment of Gonorrhoea in Women.' All the meetings were well-attended and the members present took keen interest in the proceedings. The committee regret to state that it was not possible to hold more clinical meetings partly on account of various other activities and partly on account of want of speakers. It is sincerely hoped that all the members will try their utmost to give their medical experiences and help the future committee in making more clinical meetings possible and successful.

The following are a few of the main important items of business transacted in the meetings held during the period under review:—Protest against the invidious distinction made by certain insurance companies, regarding the scale of medical fees, paid to the graduate and licentiate medical practitioners, examining proponents for similar amounts.

The Branch urged on the last conference through its delegate to keep the Head Office of the Association in Bombay with a permanent Secretariat.

The General Body met Dr. Vaishampayan, M.L.C., in a meeting when the Branch was 'At Home' to the guest.

Dr. A. Viswanathan who visited the Branch made an important speech regarding the "Future of Medical Licentiates."

A Branch fund was started on voluntary contribution basis in order to meet the expenses of the Branch not sanctioned by the Mother Association. Out of the fund, a cupboard was purchased for Rs. 17-8-0 for the Branch office.

	Rs.	A.	P.
Receipts (Branch fund)	...	58	1 0
Expenditure:			
For tea, etc. at meetings and			
issuing library circulars	...	29	10 0
Cupboard	...	17	8 0
Balance in hand	...	10	15 0
Total	...	58	1 0

The Managing Committee have great pleasure in thanking all the doctors for their generous contributions and once again appeal to all the members to contribute their mite to this fund and thus make the Branch meetings and other functions a success.

The Branch recorded its protest against the U. P. Govt.'s amended poison rules.

A sub-committee of the following members was elected for waiting on deputation on the M.L.As. of Bombay: Drs. A. V. Baliga, B. Y. Paranjpye, U. B. Narayanrao, N. R. Karandikar, A. D. Mastakar, R. R. Tavergeri and U. S. Rao. The members in deputation have seen all those whom it was possible to see and have been able to enlist their sympathies towards the cause.

The Bombay Medical licentiates under the auspices of this Branch met at a dinner at Brandons. Many

members were present and the function was a grand success.

The medical profession of Bombay met under the auspices of the Branch in a meeting on 20-9-35 and strongly protested against the continuance of the Indian Medical Council Act of 1933 in spite of repeated and unanimous protests of the medical profession all over India. The meeting urged on the Government of India and the legislature the immediate necessity of so amending the Act as to include the medical licentiates in its purview and, amongst other things, to make provision for adequate representation in the Council of independent medical profession.

Dr. A. D. Mukherjee was met in a General Body meeting when he delivered an interesting speech on the 'Standard of Medical Education and the Future of Medical Licentiates in India.'

On learning about the sad demise of the Patron, Dr. R. B. Sarju Pershad Tiwari, a condolence resolution was passed in a general Body meeting and forwarded to the family of the bereaved.

It was unanimously resolved in a general Body meeting to request the authorities concerned to get the memorandum and articles of the Family Fund, printed in the *Indian Medical Journal* for information of the members of the Association.

A Branch library was started. It was the outcome of the ingenious suggestion of Dr. U. B. Narayanrao and his generous offer to lend all his books and a number of Indian and Foreign journals for the use of the library. The Branch had to spend nothing practically as no books were purchased. All that the Branch had to do was to prepare a list of all the books and journals placed at its disposal by the generous members. Each member of the Branch is supplied with a list which contains name of the book or the journal as the case may be and against it the name of the owner. Any member desirous of reading a book or a journal sends a requisition to the Secretary and the latter arranges to send the book from the owner to the member concerned; the member returns the book in good condition to the owner through the secretary within a specified period. The expenses pertaining to the library is for the present met from the Branch fund. The following are the only members who have so far been lending their books for use to the library: Drs. U. B. Narayanrao, B. Y. Paranjpye, A. V. Baliga, A. D. Mastakar, U. S. Rao, and M. N. Bilimoria.

The Managing Committee take the opportunity to thank all the above doctors for their generous offer and sincerely hope that others too will soon follow their noble example.

It is with great pleasure that the Committee records their appreciation of the offer of Messrs. Thakore & Co. of a number of journals to the library.

In this connection we have much pleasure in offering our heart-felt thanks to the Manager, *Medical Digest* for securing the above offer from Messrs. Thakore & Co.

Our special thanks are due to Dr. U. B. Narayanrao who has been, so to say, the very soul of this Branch in all its activities, for so kindly lending his spacious hall with light and all other comforts free for holding the meetings. Our special thanks are also due to Drs. B. Y. Paranjpye, N. R. Karandikar, A. D. Mastakar and others but for whose help we would not have been able to enroll so many new members. Our thanks are also due in no small measure to our able president, vice-president and Dr. N. R. Karandikar for their timely advice on all important matters.

The following office-bearers were elected for 1936:—Drs. A. V. Baliga: President. B. Y. Paranjpye: Vice-president. U. S. Rao: Hon. Secretary and Treasurer. R. R. Tavergeri: Joint Hon. Secretary. Committee Members:—Drs. U. A. Rao, N. R. Karandikar, G. K. Patankar, A. D. Mastakar, U. B. Narayanrao, M. Ramarao, D. R. Prem, T. S. Daruvala, N. P. Narayan Iyer. Passed unanimously.

Election of delegates to the ensuing conference:—Drs. N. R. Karandikar, R. R. Tavergeri, B. Y. Paranjpye, U. S. Rao. Passed unanimously. Substitutes:—Drs. M. E. Meherji, M. Ramarao. Passed unanimously.

Regarding Memorial to the late Rai Bahadur Dr. Sarju Pershad "it was resolved that funds be collected from all over India from the interest of which an annual prize be given in memory of late Rai Bahadur Dr. Sarju Pershad Tiwari for the best thesis on a subject specified by the Committee appointed for the purpose." Proposed by the chair, seconded by Dr. U. S. Rao and passed unanimously.

With reference to Dr. U. S. Rao's letter recommending to suggest to the Annual Conference of the A.I.M.L.A. to keep the Head Office of the Association permanently at Bombay, the following resolution was unanimously passed after a thorough discussion on the subject.

"Resolved that it be recommended to the Annual Conference of the A.I.M.L.A. that the Head Office of the A.I.M.L.A. be permanently situated in Bombay with a paid staff." Moved by Dr. U. S. Rao and seconded by Dr. M. Ramarao.

On learning from the Hon. Secretary about a present of a number of useful books to this Branch library by Major C. Fernandez, the following resolution was unanimously passed:—"Resolved that this meeting of the A.I.M.L.A. of the above Branch thanks Major C. Fernandez for his generous present of several medical books offered to the Branch library through Dr. M. Ramarao."

Further resolved that a copy of the above resolution be forwarded to Major C. Fernandez. Moved by the chair, and seconded by Dr. U. S. Rao.

The retiring committee desire to take this opportunity to appeal to all the members of the Branch to individually try their best to influence their licentiate friends who have not yet become members of this Association and bring them into its fold by enrolling them as members. The committee also desire to

request all the members to regularly attend the meetings, to contribute their quota to the discussions and thus take active part in making the meetings a greater success. The members are also earnestly requested to make best use of the circulating library that is now placed at their disposal free of any charge.

The committee, before retiring, feel it their duty to once again thank all those who have been co-operating with them in their work during the period under report and sincerely hope that the future Committee can count on their support. Dr. M. Ramarao then proposed a hearty vote of thanks to the Hon. Secretary, Dr. U. Seshu Rao and the Joint Hony. Secretary, Dr. R. R. Tavergeri and the same was carried unanimously.

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

* *

Gauhati Branch

1. Proceedings of the Managing Committee of this Branch of the A. I. M. L. A. held on 20-1-36 at 11 a. m. at the Civil Hospital, Gauhati.

5 members were present. Dr. J. N. Ray was voted to the chair.

The proceedings of the last meeting were read and confirmed.

Resolved that the accounts for months of November and December '35 be passed for submission to the General Secretary for necessary action.

Resolved that the propaganda bill for Rs. 10/- only of Dr. S. C. Barooa be approved for submission to the General Secretary for payment.

The committee appreciated the work of Dr. Barooa for the Association in spite of his bad health during the last few months and approve his future plan of work for the enrollment of new members.

With a vote of thanks to the chair, the meeting ended at noon.

2. Proceedings of an emergent meeting of the above Branch held on 24th January, 1936, in the Civil Hospital, Gauhati.

12 members were present. Dr. U. M. Lahiri was voted to the chair. The following resolutions were passed:—

(1) Resolved that the members of the above Branch record their deep sense of sorrow at the sad demise of their beloved Sovereign, His Gracious Majesty George V and beg most loyally to express their most humble condolences to His Majesty King Emperor, Her Gracious Majesty Queen Mary and to the members of the Royal Family in their bereavement.

(2) Resolved that this meeting offer their most respectful homage and record their loyal allegiance to His Imperial Majesty, King Emperor Edward VIII on his accession to the throne. (The above two resolutions were moved from the chair and passed unanimously, all members standing.)

(3) Resolved that the Government of Assam be requested to kindly convey the above resolutions to proper quarters.

(4) Resolved that a copy of the above be sent to all concerned and to the press.

3. Proceedings of the meeting of the M. C. of the above Branch held on 2-2-36 in the Civil Hospital, Gauhati, at 11-30 a.m. with Dr. U. M. Lahiri in the chair. 7 members were present.

(1) Proceedings of the last meeting were read and confirmed.

(2) Resolved that an appeal be printed and sent to all the S. A. Ss of P. H. Department to raise a fund for the deputation to wait on H. E. the Governor of Assam as proposed in the last meeting. It is further resolved that the cost of printing and posting of the same be met, at present, from this Branch fund and the parent Body be requested to bear this expenditure.

(3) Resolved that the cost of printing the memorandum and posting the same to the S.A.Ss of P. H. Deptt. amounting to Rs. 10 8-0 be passed and be accounted in the bill for the month of January 1936 of this Branch and be submitted to the General Secretary for payment.

(4) Resolved that the account for the month of January 1936 be passed and submitted to the General Secretary for payment.

With a vote of thanks to the chair the meeting terminated.

4. Proceedings of an extraordinary meeting of the above Branch held on 5th January 1936 in the clinical laboratory of the Civil Hospital, Gauhati at 11-30 a.m.

(1) 9 members were present. Dr. U. M. Lahiri was voted to the chair.

After a long discussion regarding the present scale of pay after confirmation of the S. A. Ss., serving in the P. H. Deptt., Assam, the following resolutions were passed.

(2) Resolved that all S. A. Ss., serving in the P. H. Deptt. be requested to submit a memorandum to the Head of the deptt. individually.

(3) Resolved that a deputation be sent to wait on H. E. the Governor of Assam in the usual course for amelioration of the grievances of the above mentioned officers.

(4) Resolved that the provincial authorities be requested to send a memorandum to the Government of Assam for the above mentioned cause.

(5) Resolved that the memorial (individual) be printed locally and be posted to all officers concerned and the cost be met from this Branch for the present.

(6) Resolved that the Parent Association be requested to bear the expenditure relating to resolutions 3 and 4 in the interest of the members.

(7) Resolved that this matter be placed before the general meeting of the Branch to be held on the 19th instant.

With a vote of thanks to the chair the meeting came to an end.

5. Proceedings of the Annual General Meeting of the above Branch, A. I. M. L. A. held on the 19th January, 1936, in the out-door block of the Civil Hospital, Gauhati, at 2 P. M.

16 members were present:—

1. Dr. U. M. Lahiri was voted to the Chair.

2. Scientific section:—

(a) A paper on 'Naga sore and Water sore' was read by Dr. N. Huda and the members took part in the discussion.

(b) A paper on 'Abortions due to Malaria' was read by Dr. G. S. Das and the members took part in the discussion.

(c) A brief report on the Malaria survey of Haltugaon (Goalpara) by Dr. G. S. Das and Dr. S. Roy was read by Dr. Roy.

(d) Dr. N. Huda demonstrated a case of 'Filariasis', with a specimen of chyluric urine, and the microfilaria under the microscope.

After comments on all the above papers by the president, the scientific section came to an end at 4 P.M.

3. General Meeting:—

The Branch secretary read the report of the working of the Branch for the year 1935 after which he appealed to the members present to co-operate wholeheartedly in order to fight tooth and nail various humiliating disabilities from which the licenciates in general are suffering a great deal.

Dr. G. S. Das, the ex-Secretary of the Branch, also made a short speech and invited the co-operation of the members in attaining success of the aims and objects of the Association.

The General Secretary's Circular No. 2 was read and discussed and the members authorised the Secretary to reply to the queries.

The following resolutions were discussed and passed unanimously:—

(1) It is resolved that a vote of thanks be offered to the Director of Public Health, Assam and the Honourable Minister, L. S. Government and to the Govt. of Assam for confirming the posts of 82 Sub-Asst. Surgeons of the Public Health Deptt., Assam.

(2) Resolved that the Local Boards of Borpeta and Gauhati be requested to provide all their dispensaries with a microscope each at an early date to enable the medical officers in charge of the dispensaries to ensure diagnosis of cases more scientifically.

(3) Resolved that the authorities concerned be requested to appoint a Sub-Committee in each Local Board and Municipality, consisting of at least three medical men to discuss all medical matters including appointment of medical officers and the local Government be requested to make an amendment in the L. S. Government's Manual accordingly.

(4) Resolved that the Government be requested to make inoculation against Cholera compulsory during epidemic by legislation.

(5) In view of the fact that the Local Board medical officers in charge of various dispensaries are now to do many public health works such as village survey, running out-centres, epidemic duties, etc. in addition to their ordinary routine duties of dispensary works, this meeting strongly urges the authorities to grant a public health allowance to these medical officers for doing these duties.

(6) Resolved that the authorities be requested to designate the doctors serving under Local Boards as 'medical officers' instead of 'Local Board Doctors' which is not a happy expression at all.

(7) In view of the fact that Rs. 10/- being a quite insufficient amount to hire even a moderately comfortable house it is resolved that the house rent allowance of Public Health Sub-Asst. Surgeons be the same as those of the medical department.

(8) Resolved that the Government be requested to give full benefit of length of services of Public Health S. A. S. in fixing the scale of pay at the time of their confirmation.

(9) In view of the fact that the present Refresher course of 8 weeks is too short and as the places where these courses are now held have no facility for training, it should be totally abolished and the old system of post-graduate training be re-established for all Sub-Asst. Surgeons including the Sub-Asst. Surgeons of Public Health Deptt and the same be extended to Local Board medical officers as well.

(10) Resolved that the parent body be requested to take up the present cause of the Sub-Asst. Surgeons of P.H. Deptt. Assam and to allot fund for the same. The Secretary is authorised to carry on the necessary correspondence on the matter with all concerned.

(11) Resolved that the proceedings of the special meeting held on the 5th Jan. '36 for taking up the cause of S.A.S. of the P.H. Deptt. by this Branch is hereby approved. The parent body be requested to meet the necessary expenditure.

(12) This meeting strongly urges the parent Body to sanction the grant of T.A. to the delegates to attend All-India Conferences as usual.

(13) In view of the meaningless attitude and invidious distinction made by the Oriental Govt. Security Life Assurance Company towards the medical licenciates by neglecting them to appoint as Medical Examiners in urban areas, this association urges on each and every licentiate to start immediately a thorough boycott of this Company. This association recommends that medical licenciates should not get their lives insured in such companies in which they are not admitted as medical examiners.

(14) The following office-bearers were elected:— President—Dr. U. M. Lahiri (re-elected). Vice-president—Dr. J. N. Roy, Secretary—Dr. S. C. Borooah, Asst. Secy—Dr. A. Ahmed, Managing Committee:—Dr. R. M. Kar, Dr. G. S. Das, Dr. A. Bhattacharyya, Dr. J. N. Sarma, Dr. S. C. Dutta.

The president in his concluding speech requested all the members to take keen interest in matters of the Association and to try to strengthen it by enlisting more members and to create an unity amongst them.

Dr. G. S. Das then offered a vote of thanks to the President and to Dr. Barooa, the secy., for taking keen interest and doing hard work for the cause of the Association in spite of his indisposed health.

The meeting then terminated at 5-30 P.M.

Fyzabad Branch

A meeting of the above Branch was held on 22nd February 1936 at Dr. G. L. Gupta's residence.

(1) This meeting of the A.I.M.L.A. of the above Branch places on record with profound regret the sad demise of His Majesty King George V, Emperor of India and requests the U. P. Government to convey to His Majesty King Edward VIII, Her Gracious Majesty Queen Mary and other Members of the Royal Family, its deep sympathy in their great bereavement.

(2) This meeting of the A.I.M.L.A. of the above Branch places on record with profound regret the sad demise of Rai Bahadur Dr. Sarju Pershad Tiwari of Indore, Patron of the A.I.M.L.A. and conveys its heartfelt sympathy to the bereaved members of his family and prays for the peace of his soul.

(3) This meeting of the A.I.M.L.A. of the above Branch learns with great sorrow the sad and untimely death of Dr. Har Sahai Saxena, Sub-charge, Sadar Hospital, Fyzabad, our enthusiastic Joint Secretary and conveys its heartfelt sympathy to the bereaved members of his family and prays for the peace of his soul.

**

Dhubri Branch

1. A special meeting was held on 20-1-36 at 11-30 a.m.

Resolved that this meeting of the above Branch of the A.I.M.L.A. records with deep sense of sorrow, the sad and sudden demise of the late revered leader Nabin Chandra Bardoloi, President of the last provincial Medical Licentiates' Conference held at Dibrugarh and prays for the salvation of the departed soul.

2. A general meeting of A. I. M. L. A., of the above Branch, was held on the 14th day of February 1936, in the premises of Dr. S. M. Paul. Dr. P. K. Sen presided. 7 doctors were present.

(1) Proceedings of the last meeting were read and confirmed.

(2) The cash account for the year 1935 was verified and found correct.

(3) As the post of Joint secretary has fallen vacant on account of the transfer of Dr. S. C. Das, it is resolved that Dr. M. S. Sanyal be elected in his place. Proposed by Dr. B. C. Mozumder, seconded by Dr. S. C. Sen, and supported by Dr. A. K. Sen, and carried unanimously.

(4) The meeting expresses its heart-felt gratitude to the Director of Public Health, Hon'ble Minister for L. S. G., and the Government of Assam for making the Public Health cadre permanent.

(5) Resolved that the present Civil Surgeon, Dr. S. B. Sen be requested to be a patron of this Branch.

(6) Resolved that all medical licentiates be requested to dissociate themselves from the Oriental Govt. Security Life Assurance Company and not to insure their lives in this company and other companies, which do not appoint medical examiners from amongst the licentiate class in the urban area.

(7) Resolved that the Government be requested to give full benefit of long services of Public health S. A. Surgeons, according to age basis, as has been done in case of the members of the Assam Medical Service (Senior), in fixing the initial pay at the time of appointment.

(8) A very interesting paper about chronic ovarian pain cured by nerve-stretching was read by Dr. B. C. Mozumder. Other cases about Leprosy and Malaria were discussed by Dr. P. K. Sen, and A. K. Sen respectively.

(9) The meeting dissolved at 8-30 p. m. with a vote of thanks to the Chair and Dr. S. M. Paul, who entertained the party with dainty refreshment.

**

24 Perganas

1. A Monthly meeting of the above Branch of the A.I.M.L.A. was held on 24-10-35 at the premises of Messrs. Bengal Immunity Lab., Barnagore at 7 p.m.

6 members were present. Dr. S. S. Sircar presided.

The proceedings of the last meeting were read and confirmed.

A scientific paper on "Twilight of scientific truth in grand-old quackery" was read by Dr. N. Roy Chaudhary. Lively discussions were raised by Drs. S. S. Sircar and B. M. Paul. As per learned suggestions of Dr. S. S. Sircar, certain additions and alterations were made in the paper. It was finally decided to send it for publication in the Journal.

The members were then served with light refreshments and the meeting dissolved with a vote of thanks to the chair.

2. A Monthly meeting of the above Branch was held on 20-11-35 at 6-45 p.m. at the residence of Dr. S. S. Sircar, Ghugudange, Dum Dum.

Many doctors were present. Dr. S. M. Bhattacharjee was voted to the chair.

Dr. Bhattacharjee had to leave the meeting in the middle of the function owing to prior engagement. Dr. A. T. Chakraborty was offered the chair and conducted the rest of meeting.

Before taking up the agenda of the meeting, Dr. S. S. Sircar discussed in short the origin and history, the ideal and the scope of this Branch association, as on that day we had, amongst us, many a licentiate friend who for the first time participated in the functions of the Branch.

Taking up the usual agenda of the meeting, the appeal (re the death of R. B. Dr. Sarju Pershad Tiwari) issued by the General Secretary, was read. It was decided to hold a condolence meeting on Sunday the 1st December 35, as suggested therein.

Dr. S. S. Sircar then presented an interesting case note in which diagnosis could not easily be made. All the doctors present joined the discussion enthusiastically. After a lengthy discussion, it was found that every suggested diagnosis had its loophole. The discussion was then kept aside to be continued in the next gathering.

It was a day of joyous function for us all, as the following doctors voluntarily offered themselves to become members of this Branch Association—Drs. S. N. Dey, S. N. Das Gupta, S. N. Maitra, R. N. Sengupta, P. K. Das, S. M. Bhattacharjee, K. K. Sengupta and J. C. Biswas.

Dr. Sircar honoured the guests with light refreshments and the meeting dissolved with a vote of thanks to the chair.

NEW BOOKS

OUR LIST OF NEW BOOKS AND NEW EDITIONS IS NOW READY
PLEASE SEND A POSTCARD FOR COPY TO THE PUBLISHERS

A CLASSIC

THE NEW EDITION OF
OSLER'S MEDICINE, 12th EDITION, 1935
IS PUBLISHED Rs. 22-8-0

MODERN ADVANCES

TWO VOLUMES READY

MODERN TREATMENT IN GENERAL PRACTICE
VOLUME 1. Rs. 7-14-0 VOLUME 2. Rs. 7-14-0

THE STANDARD GUIDE TO TROPICAL PRACTICE

OMEARA'S MEDICAL GUIDE & INDEX
OF TREATMENT
(INCLUDING ENGLISH & INDIGENOUS PHARMACOPEIA)
4TH EDITION 1935 Rs. 15-0-0

ENGLISH SURGERY IN A NEW FORM

POST-GRADUATE SURGERY
BY ENGLISH SURGEONS AND PHYSICIANS
VOLUME 1. READY VOLUMES 2 & 3 READY SHORTLY
AVAILABLE ON SUBSCRIPTION

FULL PARTICULARS OF THESE AND OTHER STANDARD MEDICAL PUBLICATIONS
WILL BE GLADLY SENT ON REQUEST BY

BUTTERWORTH & CO. (INDIA) LTD.,

P. O. BOX 251

Avenue House

CALCUTTA

Fifth Edition Revised and Enlarged

TRIPATHI'S "REFERENCE BOOK"

FOR THE YOUNG MEDICAL PRACTITIONER

(Six parts in one Volume, cloth bound, over 920 pages, Price Rs. 5 net.)

Sanctioned for the use of the Medical Institutions under the Governments of Bombay and Bengal and in the Provinces of Bihar and Orissa, Burma, Baluchistan, Delhi, Central Provinces and Berar, and several leading Native States of India. Highly praised by the eminent Members of the Medical Profession, and the Medical Press, and widely circulated all over India, Burma, Ceylon, British East Africa, Straits Settlements and Federated Malay States.

THE INDIAN MEDICAL GAZETTE, CALCUTTA:—This book is quite up to the standard of similar books intended as brief *Vade Mecum* helps to the student and young practitioner.

THE INDIAN MEDICAL RECORD, CALCUTTA:—We find nothing but praise for the book that Dr. Manishankar has designed and so laboriously compiled for the use of students and beginners in practice.

THE INDIAN MEDICAL JOURNAL, MADRAS:—We heartily congratulate Dr. Tripathi for presenting this book to the profession for ready reference.

THE BURMA MEDICAL TIMES, RANGOON:—The name of Dr. M. H. Tripathi, is almost becoming a house-hold name among busy Medical Practitioners and Senior Medical students as a result of his laborious undertaking and tiresome task in successfully bringing out a Reference Book for the young Medical Practitioner.

THE ANTISEPTIC, MADRAS:—The Book is specially useful to students preparing for their final examination and we heartily commend the book.

THE PRACTICAL MEDICINE, DELHI:—We congratulate Dr. Tripathi for presenting to the Medical Practitioners in India, a useful handy work for daily reference.

THE SURGEON GENERAL (WITH THE GOVT. OF BOMBAY):—Desires to commend the book to the notice of the Medical Officers in charge of Civil Hospitals and Dispensaries.

THE SURGEON GENERAL (WITH THE GOVT. OF BENGAL):—The book seems a good and useful one and is likely to serve Sub-Assistant Surgeons at out-lying Dispensaries as a ready reference book for diagnosis and treatment.

THE HON'BLE Col. W. H. B. ROBINSON, C.B., I.M.S. (Inspector-General of Civil Hospitals, Central Provinces):—I recommend the book for use of out-lying Dispensaries if Dispensary Funds can afford it.

THE HON'BLE Col. H. HENDLEY, M.D., I.M.S. (Inspector-General of civil Hospitals, Punjab):—I think the book is quite useful one for its purpose.

THE HON'BLE Col. C. MACTAGGART, C.I.E., M.B., I.M.S. (Inspector-General of Civil Hospitals, United Provinces):—I have no doubt that it will prove useful to Medical Practitioners of the class you mention, and to Medical Students.

COL. F. J. DRURY, M.B., I.M.S. (Inspector-General of Civil Hospitals, Bihar and Orissa):—I appears to the undersigned to be a very useful book for reference and is likely to prove valuable to both Practitioners and Students.

COL. P. C. H. STRICKLAND, I.M.S. (Inspector-General of Civil Hospitals, Burma):—Likely to serve Sub-Assistant Surgeons at out-lying Dispensaries as a ready reference.

COL. R. C. MACWATT, C.I.E., M.B., I.M.S. (Inspector-General, Civil Hospitals, Punjab):—Appears to be a useful compendium and *aide memoire* for those who require it.

TRIPATHI'S GUIDE

TO YOUNG MEDICAL JURIST

(Cloth bound 432 pages, Price Rs. 3/-, postage extra.)

Chiefly intended for the use of the Senior Medico preparing for the qualifying Examination in Jurisprudence and Toxicology, the rising Medical Novitiates 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.

To be had from

MANISHANKER H. TRIPATHI

Senior Grade Sub-Assistant Surgeon, Jamnagar, Kathiawar

CURE AND PREVENTION

based on observations extending over 20 years in 20,000 cases, this preparation is the result of the research work of the noted LUNG SPECIALIST, University Prof. med. Berlin Dr. A. WOLFF EISNER.

In the Medical congress held in Koenigsberg, the learned Prof. was greatly applauded when he declared that 90% of the Tuberculosis patients have been cured is a logical proof that TUBERCULOSIS IS CURABLE

Lt. Col. Dr. F. E. Gunter D. S. O. R. A. M. C., Physician, Consumptive Hospital, London writes (B.M.J.) that he was rather doubtful first of all as to whether he should try this treatment, but he was greatly pleased with the result and now he is so convinced of its effectivity that he is gradually giving up all forms of injections etc., in its favour.

Dr. Hans Stein, Physician, T. B. Sanatorium, Vienna, writes, that Santuben is found to be superior to all other remedies.

TUBERCULOSIS IS CURABLE**SANTUBEN TREATMENT**

is most simple and harmless and consists of Tuberculin ointment to be rubbed once a week and Guaicol Silicate tablets to be taken daily.

SANTUBEN CURES TUBERCULOSIS

including complaints of Catarrhal nature light and medium cases which move between Tuber two and three, also the second stage of Tuberculosis forming in Lung, Intestine or other organ. Grave general symptoms of T. B. disappear, cough stops, bodily weight and appetite increases, temperature falls, night sweats are reduced and finally Tubercle Bacilli in the sputum disappear.

**THE
INTRADERMO THERAPY
BY
SANTUBEN**

PACKING:

Hosp. size : 20-30 days treatment
3×20 tab., 1 tube Ointment Rs. 10.
Large size : cure packing
6×20 tab., 2 tubes Ointment Rs. 19.

For detailed brochure and clinical data apply to.

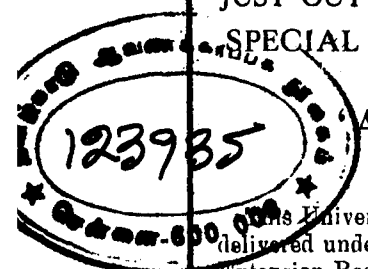
MADAN TRADING COMPANY,
(SOLE AGENTS)

Head Office:
Princess Street,
BOMBAY

Branch Offices:

Washermanpet,
MADRAS

LAHORE :: HARIANA



JUST OUT!

**SPECIAL UNIVERSITY NUMBER
OF THE
'ANTISEPTIC'
March '36**

This University Number contains the lectures delivered under the auspices of the University Extension Board, Madras, during February '36. The list of lectures that have appeared in it will be sent on request. It extends to several pages of the Antiseptic. The price is Re. 1/- post free, if money order is sent in advance. New subscribers to the Antiseptic from January to December 1936 will, however, get the copy without extra charge. As only a limited number of extra copies of this are printed intending subscribers or the purchasers of a single copy are requested to remit without further delay.

**Annual Subscription to the ANTISEPTIC is
Rs. 5/- post paid and is payable in advance.**

It is cheaper to remit than to get the 1st copy by V.P.P.

Manager,

ANTISEPTIC

P.O. Box No. 166 Madras

For latest information

in

"CHILDREN'S DISEASES"

read

"PEDIATRICS' NUMBER"

of

MEDICAL DIGEST

It contains a score of scientific articles on the subject by Specialists of both in India and abroad. Very useful reference book to a General Practitioner, and keeps him quite up-to-date.

Price: Re. 1-8-0 (Postage Free)

Edited by

Dr. U. B. Narayanrao,

(Editor, *Indian Journal of Venereal
Diseases—Bombay*)

IMPORTANT: A Free copy of this number will be sent to those sending Rs. 2/8/- as the Annual Subscription for this

MONTHLY MEDICAL JOURNAL

All communications to be made to:

THE MANAGER,
MEDICAL DIGEST, 97, Girgaum Road,
BOMBAY: 4

**CALCUTTA
MEDICAL JOURNAL**

(THIRTIETH YEAR OF PUBLICATION)

PUBLISHED MONTHLY

OFFICIAL ORGAN OF THE
CALCUTTA MEDICAL CLUB

Annual Subscription: INLAND—
Rs. 5/- only, FOREIGN—10 shillings or
\$ 2.50 or R.M. 10.00, post free

The Journal with the Largest and the Most
Influential Circulation in India,
Burma and Ceylon

Best Medium for Advertisement of Medical
and Scientific Articles

For rates apply to the Manager

62, Bowbazar Street, (1st Floor) Calcutta

CHIKITSA-JAGAT

A Leading Monthly Medical
Journal in Bengalee

Seventh year commences in November, 1935

EDITED BY

AMULYADHAN MUKHARJI.

EX-EDITOR, INDIAN MEDICAL JOURNAL

AND

MEMBER, BENGAL MEDICAL COUNCIL

Circulated extensively in the rural areas
of Bengal, Behar, Orissa, and Assam.

Annual subscription ... Rs. 3-6-0

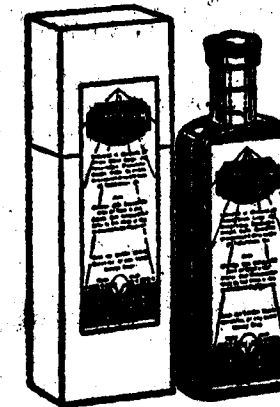
BEST MEDIUM FOR ADVERTISEMENT

Write for Specimen copy and rates to the
Manager,

27-C, Upper Circular Road,
CALCUTTA

**IN OBSTINATE RESPIRATORY DISEASES
FOR PROGRESSIVE
IMPROVEMENT TO NORMAL
SYRUP GUAKOFORM**

arrests the progress of disease, soothes the inflammatory conditions, facilitates and stimulates expectoration, fortifies its disease-resisting properties.



PALATABLE,
NON-POISONOUS,
CONTAINS NO
NARCOTIC OR
HABIT FORMING
DRUG. WELL
TOLERATED
EVEN DURING
PROLONGED AD-
MINISTRATION.

Sample and Literature free on application

Bharat Laboratory & Chemical Works,
10, Prince Anwar Shah Road, Tollygunj,
CALCUTTA

ANTILEON '40
SPECIFIC for LEPROSY

Composition: Antimony, Sulphur and Arsenic blended in proportion to chemical valency and attenuated in cane sugar.

Antileon cures Leprosy radically. It has been extensively used in the sick and its wonderful curative powers in all types of Leprosy recorded in our Charitable Dispensary. Leprosy is a very obstinate disease because in addition to Lepra Bacilli, the patients (most of them) hold the following disease products in their blood, lymphatics, or inside bone marrow: Virus of Syphilis, Gonorrhoea or both (acquired or hereditary), potent molecules of mercury and other virulent drugs. Majority of lepra possess these poisons in addition to L. This is the reason why lepra baffles the most expert treatment. The real medicine for L. should be the one that can attack and neutralize all these poisons at a time. Antileon is such a remedy. It has cured quickly and safely more cases than all other medicines so far known.

Price: Re. 1 per phial (30 pills) oral, B.D.

Literature free to Doctors & Hospitals

P. BANERJI, MIHIJAM, E. I. R. (India)

NEW EDITION IN PREPARATION
**BIRCH'S
MANAGEMENT AND MEDICAL
TREATMENT OF CHILDREN IN
INDIA AND THE TROPICS**

Thoroughly revised and largely re-written

By Lieut.-Col. E. H. VERE HODGE, B.A., M.D. (Cantab.), M.R.C.P. (Lond.),
I.M.S., Professor of Medicine, Medical College, Calcutta, and First
Physician, Medical College Hospitals

This edition has been largely re-written and re-planned by the author, also revised and added to.

ORDERS ARE NOW BEING REGISTERED

THACKER, SPINK & Co. (1933), LIMITED

Medical Book Publishers, 3, Esplanade East, CALCUTTA

Ergoapiol - (Smith)

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

Menstrual Regulator...

uterine tonic and hemostatic
delivery of the

A Men

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.

of Amenorrhea, Dysmenorrhea,
menorrhagia, Ergoapiol

In cases of Amenorrhea, Dysmenorrhea, Menorrhagia and Metrorrhagia, Ergoapiol

Regulator . . .
serves as a good uterine tonic and hemostatic.
Valuable in obstetrics after delivery of the child
and for the menstrual irregularity of the *Meno-*
pause.
Prescribe 1 to 2 capsules 3 or 4 times daily.
Bottles of 20 capsules. Litera-

Prescribe 1 to 2 capsules 3 or 4 times daily after meals.
Supplied only in packages of 20 capsules.
MHS are
safeguard against imposition the letters MHS are
surface of each capsule, visible only when
as shown.

Prescribe 1 to 2 capsules 3 or 4 times daily.
Supplied only in packages of 20 capsules.
ture 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 Gold Preparations of the day
SYRUP AURI COMPOUND

(An unique preparation of Gold, Phosphorus
and strychnia to their adequate
strength)

The highly effective Gold preparation for.—Anaemia (pernicious, malarial and pregnancy), Nervous debility Bieri Beri, Diabetes, Tuberculosis, Chronic bronchitis, Hysteria, Enlarged spleen, Cirrhosis of liver, Chronic alcoholism, in convalescence after exhausting illness and in all conditions in which resisting power of the body decreased.

For the tonic and metabolic action it brings surprisingly rapid and lasting improvement through stimulation of the hematopoietic glands, hence it is extensively prescribed by the medical men. It is the safest medium for administering Gold when required by the patient.

Syrup Auri Triple Bromide
WITH
Arsenate of Antimony

Each fluid dram of the preparation contains Gold Bromide gr 1/16, Potassium and Sodium Bromide grs 5 each and Arsenate of Antimony gr 1/100. It checks Epileptic fits by regulating the over-excitability of the Medulla. It is a specific remedy for melancholia, insanity, hysteria and nervous troubles associated with painful menstruation and menopause. It is also efficacious in sleeplessness, nocturnal seminal emissions, sea-sickness, asthma and vomiting (cerebral and of pregnancy). Price 6 ozs. phial Rs. 5

Dr. Hazra's Laboratory,
27-A, D. L. Roy Street, Calcutta.

Stockists:—SMITH STANISTREET & Co., Calcutta
BOLE BROTHERS, BOMBAY

All rights reserved

VERLIN '29 Regd.

The Remedy of T. B.

Verlin '29 contains ions and free electrons of copper and globulins of the milk of India rubber in sterilized water. $\text{Cu. } 10 \text{ C}_{10}\text{H}_{16}$. Copper quickly kills T.B. germs, rubber supplies elastic fibres for repair of lung tissues.

Dose ; Oral, 10-20 drops on tongue direct from the phial. May be taken with one ounce cold water in a glass.

Directions : In T.B. (or suspected) of the lungs the dose to be taken twice daily, morning and evening, for the first 3 or 4 days. Afterwards only one dose daily at bed time will do. Stop the medicine as soon as fever is checked. For improvement of health, repeat once or twice a week at bed time only.

Consult your doctor at least once a week

In PHTHISIS meat diet strictly prohibited

N.B.—Keep the bottle in a cool place, away from sun's rays. Do not touch the medicine with metal spoons. Other medicines incompatible. Verlin is absolutely harmless. May be given to infants or pregnant women. Bottle of 1 oz. Rupee One nett. No discount.

P. BANERJI, MUMBAI (INDIA).

[illegible]