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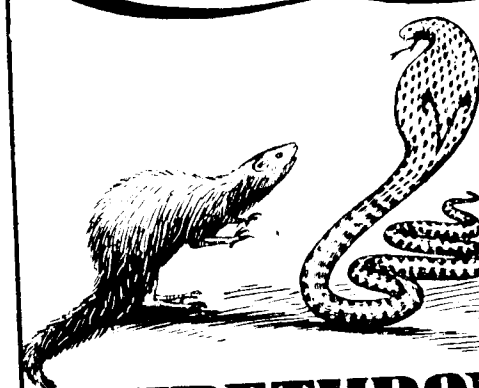
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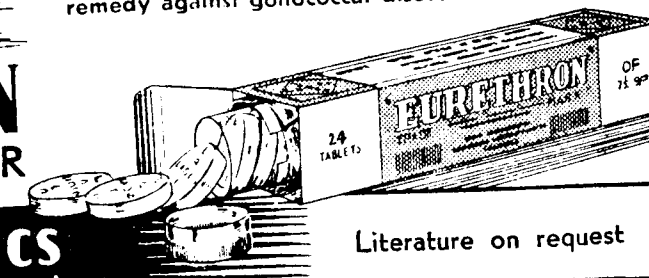
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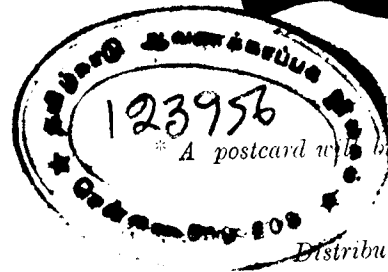
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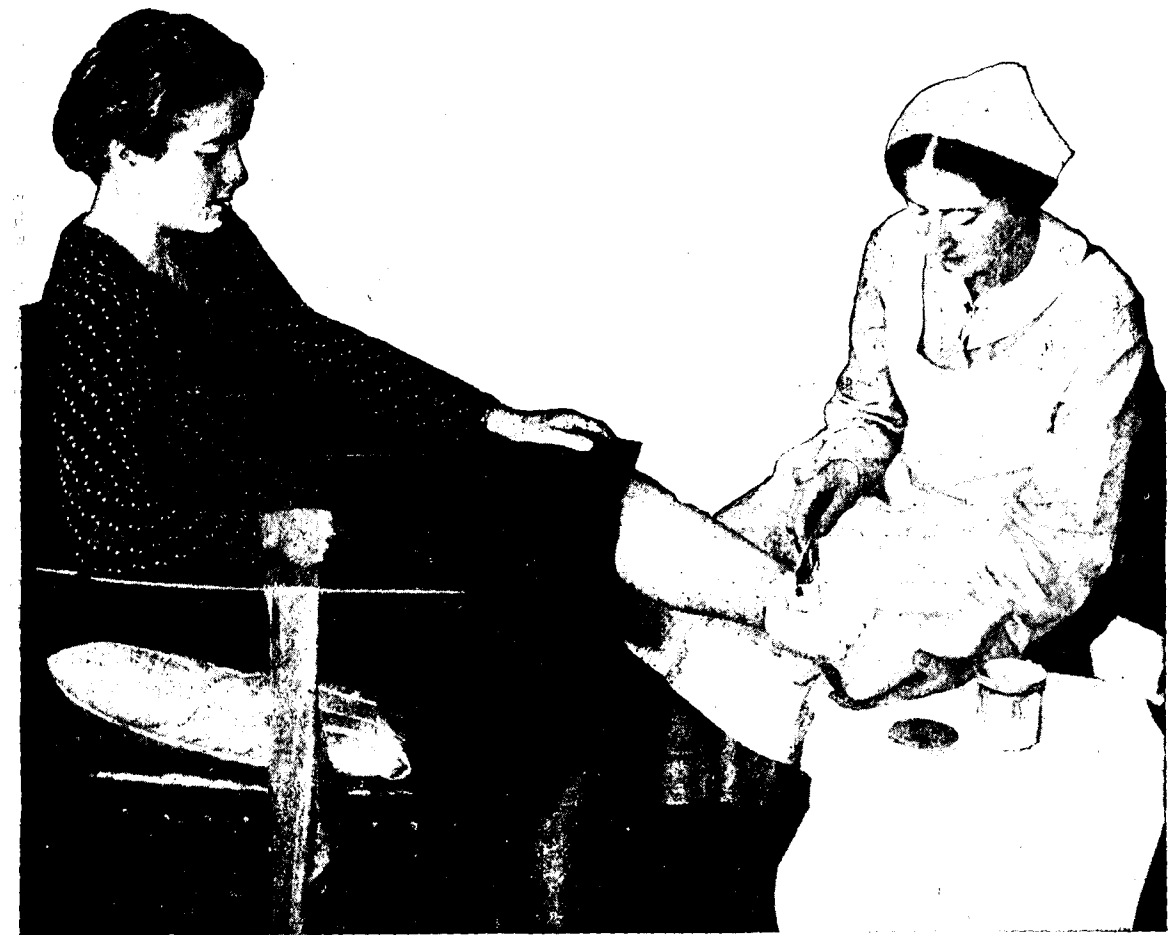
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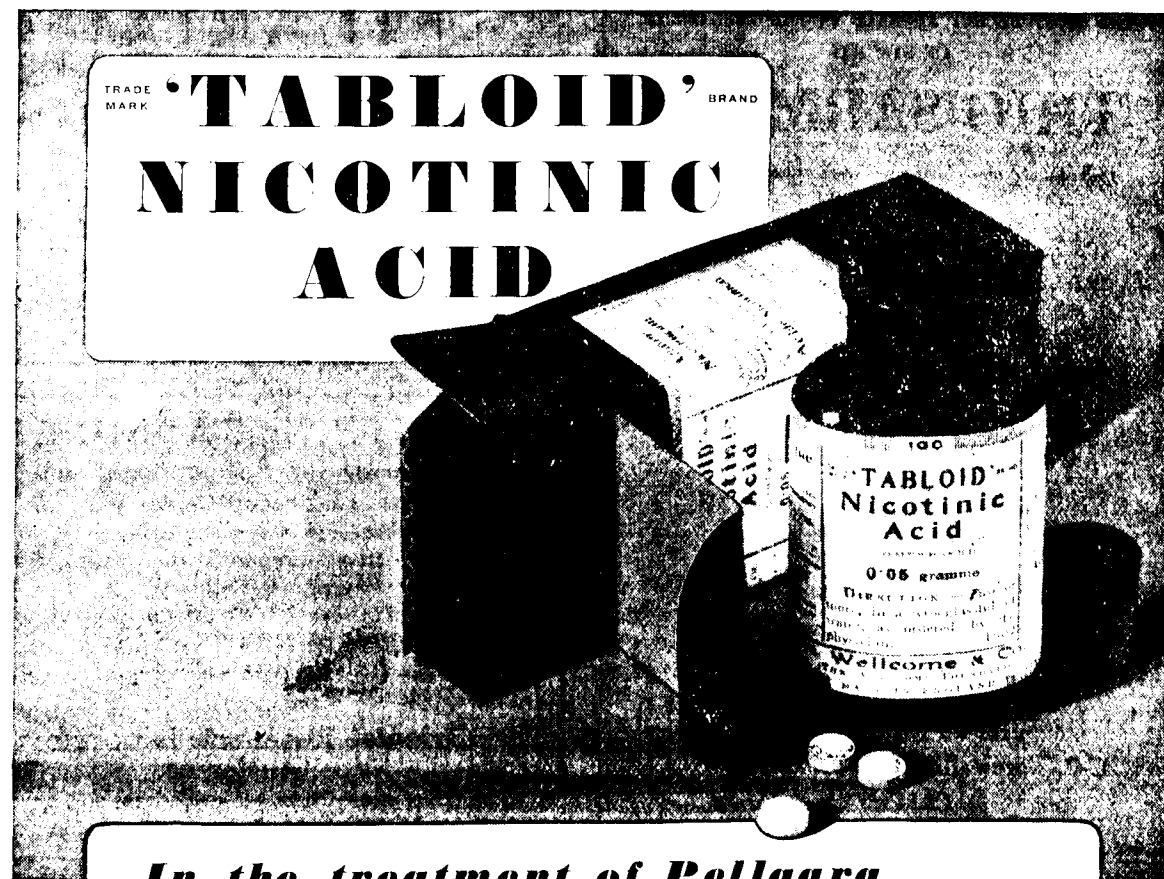
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ADDRESSES & ARTICLES

Febrile Cases due to Virus Infection or unknown Origin

• S. C. Dutta L. M. F., A. M. O., Balijan T E., Hoogrijan, Assam

When considering this group of cases one should remember that some cases are with eruption, and others not. I have grouped here the following main diseases in two classes.

- i. Febrile cases with eruption.
- ii. Febrile cases without eruption.

i. Febrile cases with eruption.

- (1) Variola. (Small Pox.)
- (2) Varicella. (Chicken Pox.)
- (3) Measles.
- (4) Rubella. (German Measles.)
- (5) Typhus Fever.
- (6) Dengue.

ii. Febrile cases without eruption.

- (1) Epidemic Parotitis. (Mumps.)
- (2) Hydro-phobia.
- (3) Rheumatic Fever.
- (4) Acute Tonsillitis.
- (5) Acute catarrhal fever and Influenza.
- (6) Erythema Nodosum.
- (7) Glandular Fever. (Infective mononucleosis)
- (8) Yellow Fever.

I will attempt here to narrate briefly the principal diagnostic points of each separately.

FEBRILE CASES WITH ERUPTION

(1) *Small Pox* (Variola).—Characterised by high fever, intense headache and lumbar pain with characteristic rash of centrifugal distribution appearing on the third or fourth day. The characteristic pocks are umbilicated pustules.

(2) *Varicella* (Chicken Pox).—An illness of slight severity with moderate fever and a rash of central type appearing in successive crops. The pocks are vesicular and not umbilicated.

(3) *Measles*.—It is characterised by moderately high temperature and catarrhal symptoms and a characteristic rash which appears first on the fore-head and behind the ears. It spreads rapidly over the body and is usually fully developed in two or three days. The eruption is at first macular, then becomes maculo-papular. The temperature falls rapidly. The rash generally persists for two or three days, then fades rapidly in order of appearance.

(4) *Rubella* (German Measles).—General symptoms mild. The rash appears on the first or second day, usually first on the face, or neck; spreads rapidly to the trunk and limbs; and generalises within twenty-four

hours. The rash lasts for two or three days and then fades gradually. The eruption consists of round or oval slightly raised spots pinkish red in colour. The fever rarely persists for more than two or three days.

(5) *Typhus Fever*.—Characterised by sudden onset, maculated and haemorrhagic rash, nervous symptoms, and terminate by lysis, usually about the end of the second week.

From the third to the fifth day the eruptions appear, first upon the abdomen and upper part of the chest and then upon the back and extremities, becoming general in two days.

The temperature rises rapidly during the first four or five days and the maximum is usually reached by the fifth day. After reaching the maximum, the temperature is generally continuous with slight morning variation until the twelfth or fourteenth day.

(6) *Dengue*.—The disease, known also as break-bone fever, is characterised by febrile paroxysms, intense head-ache specially behind the eyeballs, severe pain in the body and limbs, specially the spine and knees.

The temperature falls between the second and the fifth day and the general condition improves. The temperature rises again on the sixth or seventh day and the characteristic rash appears. These consist of spots which are at first discrete, red and slightly raised and fading on pressure. It comes out at first on the hand and wrist, then on the neck and face and lastly on the trunk and lower limbs. These persist for a month after the symptoms have disappeared.

DIFFERENTIAL DIAGNOSIS OF FEBRILE CASES WITH ERUPTION

(a) Constitutional symptoms are slight in varicella and rubella, moderate in measles; severe in small pox. Early prostration and toxæmia are marked in typhus, and dengue is characterised by severe pain in the body.

(b) The temperature is moderate and continuous in chicken-pox and measles; rapidly drops in rubella and small pox; is high and continuous in typhus and is of saddle-back type in dengue.

(c) *Onset of eruption*.—First day and for the next three days in chicken pox; second day in rubella; third or fourth day in small pox; fourth or fifth day in measles; fifth day in typhus; sixth day in dengue.

FEBRILE CASES WITHOUT ERUPTION

(1) *Epidemic Parotitis*.—Is an acute infectious disease characterised by swelling of the salivary glands especially the parotid, and

slight constitutional disturbance and a liability to orchitis in males.

(2) *Hydrophobia*.—Irritation about the bitten area, pain and numbness. The patient is depressed, irritable and sleepless, and difficulty in swallowing is experienced. Slight rise of temperature; then great excitability and restlessness; any afferent stimulation causes a violent reflex spasm especially the muscles of larynx and mouth; after lasting for one or two days, the patient then becomes quiet, the spasm no longer occurs and consciousness returns gradually.

(3) *Rheumatic Fever*.—It is a disease of young adults, but common in children also. It is characterised by multiple arthritis with a tendency to ulcerative lesions on the cardiac valves.

The disease begins suddenly with irregular pains in the joints and moderate fever. The joints are not affected together, but successively. The disease is seldom limited to a single articulation.

(4) *Erythema Nodosum*.—Usually sets in with malaise and slight fever persisting for some time; characterised by slightly raised oval areas, dusky red in colour, tender and usually bilateral, most often on the legs especially over the tibia; suppuration does not occur.

(5) *Acute Tonsillitis*.—Begins with chill and aching pains in the back and limbs, with a moderately high temperature and the patient complains of soreness of throat especially on swallowing. On examination the tonsils are seen to be swollen and injected and may present a characteristic exudate.

(6) *Acute Catarrhal Fever*.—Is an affection of the mucous membrane of the upper air passages with a feeling of indisposition; slight head-ache and sneezing with slight fever. The mucous membrane of the nose is swollen and stuffed up, a thin clear irritating secretion flows, eyes weep, and conjunctiva congested, slight soreness of the throat, the pharynx looks red and swollen, voice becomes husky. It simulates influenza. Severe prostration out of all proportion to intensity of the disease is a characteristic feature.

(7) *Glandular Fever*.—An infectious disease usually of children, characterised by slight redness of the throat, moderate temperature, swelling and tenderness of lymph-glands of the neck, particularly those behind the sternocleidomastoid. The fever is of short duration, the enlargement of the glands persists for ten days to three weeks. Blood-film shows an

Differential Diagnosis of Febrile Cases due to Protozoal Infections

● H. C. Das, L.M.F., A.M.O., Keyhung Tea Estate, Hoogrijan, Assam

I propose for the sake of convenience, to class spirochætal diseases with those caused by protozoal and shall therefore deal with the following fevers:—

(1) Malaria (2) Blackwater fever (3) Kala-azar (4) Amœbiasis (5) Syphilis (6) Yaws (7) Trypanosomiasis (8) Relapsing fever and African Tick fever (9) Infective Jaundice (Weil's disease) (10) Rat-bite fever.

The first six are commonly seen in Assam and will be considered in detail. The remaining diseases, I shall only deal with cursorily. I propose first to list the principal diagnostic features both clinical and pathological of each disease and shall later discuss the differential diagnosis.

MALARIA

(1) *Clinical*.—Periodic fever with rigors, characteristic hot and sweating stages, enlargement of the spleen in advanced cases, and generally responsive to quinine treatment.

(2) *Pathological*.—Finding of parasites in peripheral blood, monocytosis and presence of black pigment in the monocytes particularly.

BLACK-WATER FEVER

(1) *Clinical*.—The passage of black or bloody urine with partial suppression in a patient suffering from high fever with pain in the loins.

(2) *Pathological*.—Finding of scanty malarial parasites in the blood and demonstration of blood pigments by the spectroscope.

KALA-AZAR

(1) *Clinical*.—Long continued fever of hectic or double remittent type with night sweats; resistant to quinine.

Enlargement of liver and spleen causing a protuberant abdomen associated with marked wasting of the limbs in spite of a good appetite.

increase in white cells, particularly of the mononuclears.

(8) *Yellow Fever*.—It is characterised by rigor, intense head-ache, pain in back, flushed face, dry skin and rise of temperature which comes down in favourable cases by lysis. Albuminuria, severe jaundice and hæmorrhage from bowels are present as a rule. Pulse rate is quick at the onset but slows down with steady or rising temperature.

(2) *Pathological*.—Napier's aldehyde test, marked leucopenia, leishmania in films made from spleen or liver puncture.

AMŒBIASIS

Amœbic Hepatitis. (1) *Clinical*.—Pain over the hepatic area which may be referred to the right shoulder with symptoms of toxæmia and therapeutic response to emetine.

(2) *Pathological*.—Vegetative amœbæ or cysts in the stool.

Hepatic Abscess: (1) *Clinical*.—Tenderness and enlargement of the liver with pain referred to the right shoulder, hectic temperature with finding of chocolate-coloured pus on exploration with aspiration needle; demonstration of hepatic enlargement by X-rays, often with local bulging.

(2) *Pathological*.—Vegetative amœbæ or cysts in the stool, marked leucocytosis.

Amœbic Dysentery: (1) *Clinical*.—Passage of blood and mucus in, usually, an acid stool.

(2) *Pathological*.—Cytological picture of the stool, the presence of vegetative forms of entamœbæ histolytica with possibly cysts also.

SYPHILIS

Fever may occur in the secondary stage.

(1) *Clinical*.—Characteristic rashes and adenitis following a primary chancre, condylomata in ano etc.

(2) *Pathological*.—Wassermann re-action, spirochaetes in serous exudates from lesions.

YAWS

Fever usually occurs in the primary stage due to invasion.

(1) *Clinical*.—The lesions, usually extra-genital, are not amenable to specific action by mercury.

(2) *Pathological*.—Wassermann re-action positive about the eighth week (well established at the end of secondary stage).

TRYPANOSOMIASIS

(1) *Clinical*.—Irregular fever resistant to quinine with circinate rashes and adenitis in a patient who has lived in a Tsetse fly area.

(2) *Pathological*.—Gland puncture, Napier's aldehyde test, finding of trypanosomes in blood films.

RELAPSING FEVER AND AFRICAN TICK FEVER

(1) *Clinical*.—Sudden rise of temperature with rigor, frontal head-ache and back-ache, enlargement of liver and spleen both being tender, jaundice and speedy apparent recovery followed by characteristic relapses. Association of the fever with famine.

(2) *Pathological*.—Finding the specific spirochaete in blood.

INFECTIVE JAUNDICE (Weil's Disease)

(1) *Clinical*.—Jaundice with enlargement of liver but not of spleen. Hæmorrhages, anæmia, bile in urine, herpes and severe toxæmia.

(2) *Pathological*.—Specific spirochaetes in blood or centrifuged urine.

RAT-BITE FEVER

(1) *Clinical*.—History of rat-bite with or without ulceration in the old wound, rigor, specific rash, lymphangitis and relapsing nature of the disease.

(2) *Pathological*.—Characteristic parasite in discharge from lesions or gland puncture.

DIAGNOSTIC POINTS

Is the disease acute or chronic?—Malaria, black-water fever, relapsing fever and infective jaundice are acute infections. Amœbic dysentery may appear both in acute or chronic form whereas the others are all more or less of chronic nature.

What is the type of fever?—The fever is remittent in black-water fever, hectic in kala-azar, amœbic hepatitis and hepatic abscess; continuous in relapsing and rat-bite fever. In malaria, it may be both remittent or intermittent, whereas in trypanosomiasis and infective jaundice it is irregular.

Are rigors present?—Rigor is present in malaria, black-water fever, relapsing fever and infective jaundice. It may sometimes be present in kala-azar and rat-bite fever.

Is sweating present, if so, what is its nature?—Sweating is present generally in malaria, kala-azar and relapsing fever. In malaria, there is profuse sweating following the hot stage, in kala-azar, sweating occurs at night time, whereas in relapsing fever there is profuse sweating on the fifth night before crisis.

Is there any enlargement of spleen, if so, what is its consistency?—Spleen is enlarged in malaria kala-azar and relapsing fever. In malaria it is softer, whereas in kala-azar it is hard in consistency.

Any enlargement of liver?—This is enlarged in malaria, kala-azar, amœbic hepatitis, hepatic abscess, relapsing fever and infective jaundice. In hepatitis, hepatic abscess, relapsing fever and infective jaundice there is tenderness also; in malaria and kala-azar it is not tender generally.

Is headache present?—Headache is present in malaria, relapsing fever, infective jaundice and rat-bite fever, whereas in kala-azar it is remarkably absent.

Pain and its character.—In malaria there is pain all over the body specially over the limbs; in black-water fever it is in loins, in kala-azar it is in bones specially over tibia; in amoebic hepatitis and hepatic abscess, it is over the hepatic area and may be referred to the right shoulder. In amoebic dysentery there is pain in abdomen; in relapsing fever it is over the back; in infective jaundice it is all over the body, whereas in rat-bite fever pain is in joints.

Appetite and its character.—Appetite is remarkably good in kala-azar, whereas in infective jaundice there is anorexia.

Hæmorrhage.—In infective jaundice there is hæmorrhage. In kala-azar also there may be hæmorrhage from the gums and nose.

Jaundice.—It is present in infective jaundice and relapsing fever. It may also be present in black-water fever.

Rash and its nature.—In syphilis and yaws, the chief manifestations are their characteristic rashes; in trypanosomiasis also rashes are always present and these are circinate in nature. In malaria and infective jaundice there may be rashes like herpes whereas in kala-azar rashes appear as purpuric spots.

Is there any adenitis?—This is present in syphilis, trypanosomiasis, infective jaundice and rat-bite fever, but absent in others.

Is anaemia present?—There is marked anaemia in infective jaundice. Minor degrees of anaemia are present in malaria, black-water fever and kala-azar.

Any toxæmia?—Toxæmia is characteristic of hepatic abscess and infective jaundice.

Blood in urine.—This is characteristic of black-water fever. It may also be present in infective jaundice.

Suppression of urine.—This is characteristic of black-water fever.

Wasting.—Wasting of limbs with protuberant abdomen is very characteristic in kala-azar.

Rate of pulse.—It is rapid in kala-azar, trypanosomiasis and relapsing fever, and slow in infective jaundice.

Any bile in urine?—This is present in infective jaundice only.

Any previous history?—This is important in black-water fever, amoebiasis and rat-bite fever. In black-water fever there may be history of malaria; in amoebiasis, of dysentery; and in rat-bite fever, of the bite.

Aldehyde test.—This is positive in kala-azar and trypanosomiasis only.

Diagnosis of Febrile Diseases of Bacterial Origin

• Dr. P. C. Dutta, L.M.P., A.M.O., Bijlibari Tea Estate, Hoogrijan, Assam

The following are the main diseases of bacterial origin:—

- (1) Pneumonia.
- (2) Enteric Fever.
- (3) Tuberculosis.
- (4) B. Coli. Infection.
- (5) Streptococcal Septicæmia.
- (6) Erysipelas.
- (7) Diphtheria.
- (8) Cerebro Spinal Meningitis.
- (9) Plague.
- (10) Anthrax.
- (11) Undulant fever.
- (12) Tularemia.

For each disease I will first list the principal diagnostic points:—

(1) *Pneumonia*:—High continuous fever with hot dry skin, respiration hurried, signs of consolidation in the lungs, rusty sputum, pain on the chest, fever often terminates by crisis. Pulse respiration ratio is as a rule 2 : 1.

(2) *Enteric Fever*:—A fever of slow onset which is continuous and upgrade in the first week, accompanied by enteritis and intense frontal headache and backache. The patient is toxæmic. Pulse is slow and dicrotic. The centre of the tongue is badly coated. Skin rashes rarely found. The temperature remains on the same level in the 2nd week, the pulse gradually becomes quick and the abdominal symptoms become worse. There may be diarrhoea and the tongue gets covered with thick yellow coating. Gradually all the symptoms get worse, the patient may become comatose, there may be hæmorrhage due to rupture of intestine. The disease may run a long course for six weeks if the patient overcomes the onset of complication.

Any increase or decrease of leucocytes?—In hepatitis, hepatic abscess and infective jaundice there is leucocytosis, whereas in malaria there is monocytosis only. In kala-azar there is marked leucopenia.

Therapeutic effect of any drug.—This should be considered in malaria, kala-azar, amoebiasis, yaws, syphilis and trypanosomiasis. In malaria, the therapeutic effects of quinine and in amoebiasis, of emetine are marked. Kala-azar and trypanosomiasis are resistant to quinine, and yaws to mercury.



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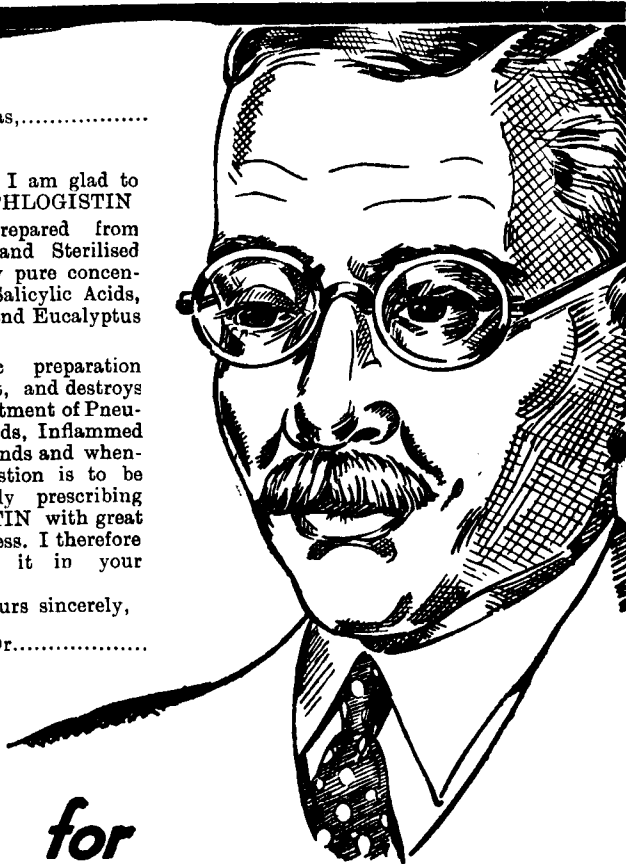
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(3) *Pulmonary Tuberculosis*:—The prominent symptoms are:—Low intermittent fever of hectic type with progressive emaciation, cough (most marked in the morning or after sleep), night-sweats, and haemoptysis. Digestive troubles are found in many cases. The sputum in most typical cases is nummular.

(4) *B. Coli Infection*:—Diagnosis of this condition is usually a matter of exclusion. The infection may be acute or chronic and the fever may be of any clinical type. If the infection attacks the genito-urinary organs signs and symptoms of cystitis and pyelitis will be noted.

(5) *Streptococcal Septicaemia*:—It is characterised by sudden onset of high fever which may be remittent or intermittent in character attended with rigor and followed by profuse perspiration. Rapid compressible pulse of low tension, hurried respiration, sallow skin with progressive haemolytic anaemia are marked features. In puerperal cases there may be sub-involution of uterus with scanty discharge.

(6) *Erysipelas*:—The disease is characterised by an erythema on some part of the body, frequently the face, accompanied by fever of continuous type. The lesion is usually in relation to some small and unnoticed scratch or pimple. The eruption spreads, becomes bright red in colour, tender and painful and pits on pressure. General constitutional symptoms are marked; vomiting, headache, backache, and toxæmia may be present.

(7) *Diphtheria*:—The disease is characterised by high continuous fever with gradual onset, sore throat, croupy cough, husky voice, paroxysmal dyspnoea, dysphagia and enlargement of the sub-mandibular and the cervical glands. Formation of creamy white, wash leather like membrane on the soft palate or on the uvula is diagnostic. It may form on the larynx or on the nasal passage too. The membrane leaves bleeding points when forcibly removed. Albuminuria, lassitude and marked prostration present. Fever bears no relation to the gravity of the disease.

(8) *Cerebro Spinal Meningitis*:—Onset is marked by high continuous fever accompanied by intense occipital headache, cerebral vomiting, photophobia and anteroposterior rigidity of neck. Head retraction, opisthotonos, and positive Kernig's sign are diagnostic. Delirium, coma and convulsion supervene as the disease progresses. Cerebro spinal fluid is found under high pressure on lumbar puncture.

(9) *Plague*:—The disease is characterised by high continuous or remittent fever, of sudden onset with marked toxæmic symptoms.

Glandular swelling particularly of inguinal region is present in bubonic type, whereas symptoms resembling pneumonia with watery and sanguinous sputum is found in penumonic type. Spleen and liver may be enlarged.

(10) *Anthrax*:—In human being anthrax manifests in two forms:—

- (i) Malignant pustule.
- (ii) Wool-sorter's disease.

In malignant pustule the site of inoculation is usually on an exposed surface of the body. The onset is with high continuous fever. A red papule is found on the skin which rapidly becomes vesicular and then incompletely pustular. No pain is present at the site of initial lesion but lymphangitis of the affected part is marked. The constitutional symptoms bear no proportion to the local mischief.

Wool-sorter's disease manifests itself by infecting the lungs, showing signs and symptoms simulating a case of pneumonia and rapidly causing death probably before diagnosis is settled.

(11) *Undulant Fever*:—This is characterised by bouts of fever lasting for about three weeks alternating with periods of apyrexia. The onset is insidious and course is prolonged. Profuse sweating, lassitude, progressive anaemia, transient painful swelling of the joints (not responding to salicylates), and enlarged painful spleen, neuralgic pain, obstinate constipation and abdominal discomfort are marked features. The disease is rare in Assam.

(12) *Tularaemia*.—High fever, marked prostration and enlargement of lymphatic glands are the diagnostic symptoms. Almost unknown in this part.

DIFFERENTIAL DIAGNOSIS

The following diseases are set apart by reason of special characteristics.

Erysipelas	Characteristic rash.
Diphtheria	Faucial membrane.
Plague	Adenitis.
Anthrax	Characteristic pustule.
Undulant fever	Characteristic temperature.

Tularaemia is so rare that it need not be considered.

It must be noted that the most valuable signs are the character of the temperature, the condition of the lungs and type of sputum, if any, and the condition of the bowel.

It may be impossible to diagnose B. Coli infections without a bacteriological examination of urine, and enteric fever without having a Widal reaction done. The presence of streptococcal septicaemia will often be suggested by antecedent child birth or injury.

CLINICAL NOTES

[Only a condensed report of case notes are published below owing to exigencies of space.—Ed., I. M. J.]

ABDOMINAL PAIN IN KALA-AZAR

DR. M. KAHILUR RAHMAN

A Hindu male consulted me on 20-5-40 for abdominal pain in the left hypochondrium which had no relation to food. He gave no history of fever, but his spleen was found enlarged of which he was not, however, aware. Duration of pain 2 years. I examined his blood for Aldehyde and Chopra tests, both of which were positive for K. A. Splenic puncture was done and L. D. Bodies were discovered. He had no leucopenia, anaemia or any other important sign of kala-azar. He was put on urea-stibamine. After the third injection, he was relieved of abdominal pain, and the spleen was gradually reducing in size.

SEPSIS AND ASTHMA

DR. M. S. KATARIA

A patient was admitted to the Mayo Hospital, Nagpur, with an abscess on the forearm below the left cubital fossa. He had a feeling of chill with a temperature of 102° F. He was running a continuous temperature with slight jaundice and itching of the body. On the night of the fifth day after admission, the patient presented all the signs and symptoms of acute bronchial asthma. This recurred during the subsequent night also. The asthma was controlled by an injection of 5 m of adrenalin hydrochloride (1-1000). Since the patient denies all previous history of asthma, it is probable that in this case sepsis may have brought about an attack of asthma by stimulating the vagal nerve endings in the bronchi.

A CASE OF ASCARIS LUMBRICOIDES SIMULATING TETANUS

DR. GRIJA PADA BISWAS

I was called in to see a boy aged 8 years whose prominent complaint was partial lock-jaw and stiffness of the muscles of the neck. On examination, he was found to have a temperature of 100° F and a purulent discharge from right ear.

Believing it to be a case of tetanus, I put the patient on sedatives, and since the patient was too poor to buy anti-tetanic serum I had perforce to abandon the injection of serum and await further developments.

To my surprise, however, I was told that the patient vomited out, on the second day,

two big round worms. I then prescribed santonin and calomel over night to be followed by a saline purgative next morning. As a result, the patient passed nine big round worms. There was some improvement in lock-jaw and stiffness of the neck. On the fourth day I repeated the treatment, and he passed again 14 worms. By this time, he was wholly improved.

I am sending this note for publication as such a complication is rare in ascaris infection.

AN INTERESTING CASE OF DENTAL CARIES

(WITH OBSCURE CAUSE)

DR. N. TYAGI, I. M. D.

A woman, aged 30, strictly vegetarian, quite healthy, complained of severe toothache. On examination a small point of caries was noted on the 2nd right upper molar. The use of the usual hot gargles and analgesic plugs failed to relieve the pain; but, on the contrary, caused some chemical irritation of the oral mucus membrane.

The patient gave a history of similar attacks on several occasions which used to be relieved after expulsion of small "worms" from the tooth socket! This is a strange fact to a modern scientist, but such vague accounts of extracting worms of various sizes by magic, charms, drugs etc., are by no means uncommon amongst country folk.

Further questioning brought forth an unhesitating assurance from the patient that the "worms" did actually come out of the tooth socket. Her husband, who is well educated, attested the assertion and repeatedly said "Give a permanent cure, Doctor. The method of alleviating pain by extracting "worms" is simple and known".

Although I was not convinced about the story, yet I was keen to see if "worms" could be obtained from the tooth and went to visit the patient. Some Ayurvedic medicine, which had relieved previously, was tried in my presence. Some seed-like things were placed on a red hot iron-plate and this evolved aromatic fumes, which were inhaled through the open mouth. Down poured the stream of saliva carrying in it a score of the "worms"!

These, as they trickled out, were motionless, curved and red-tipped, looking like semi-circular, dead white "worms" with red or pinkish mouth, measuring about a centimeter in length. Microscopically, they showed no head, tail, or alimentary canal etc., but had a peculiar striation and a few specules on them.

I wondered whether these were pieces of spongy tissue from the dental pulp or some "worms"; and if the latter, were these the cause of the disease or were they produced by the disease.

The etiology of such a common malady as dental caries is still disputable. Although many workers in dentistry believe B. acidophilus odontolyticus (discovered by McKintosh, James *et al* in 1922, and later confirmed by Bunting) as the sole cause of the mischief yet others still blame a horde of oral inhabitants (organisms like B. mesentericus, streptococci, etc.) believing they produce organic acid (lactic acid) according to Miller—by fermenting carbohydrate food remnant in the mouth and thus destroying the calcium of the dental enamel. Still others attribute dental caries to dietetic errors, such as the deficiency of vitamin D with that of calcium intake or absorption.

While scientists differ in their views, there is one popular age-long belief amongst people in this country "that the disease is caused by worm infestation". So popular is this belief that a sufferer from carious teeth is invariably heard to complain "*Dant ko kira lag gaya sahib*" meaning "tooth is infested or affected by worms". The idea at once came to my mind whether or not there was a possibility of some truth in this so wide spread and so-called layman's belief. With such confused ideas about the etiology, I approached the Pathologist of the Medical College, Lucknow, and the Director of the Tropical School of Medicine, Calcutta, requesting them to throw some light on the case which produced the "worms". Specimens, preserved in formol saline, were sent and the latter was kind enough to refer them to the eminent entomologist, helminthologist and pathologist there, and to give me their views. The reports were as follows:—

(i) "Diagnosed a nematode origin."
(ii) "Very sorry to say that I have been unable to diagnose the exact nature of the two "worms" given by you to me some days back. I have consulted various books in this connection and also showed them to the Professor of Pathology."

(iii) "They were plant like structures and the cellular design had that appearance".

(iv) "The worm-like objects were not segmented worms. All the tissue sent was torn across and if could get any more material, not damaged in any way, will examine it".

Accordingly a few more specimens of the tissue that were left in the formol-saline were sent but nothing further was heard. During this time attempts were made to clear some

of those in carbolxylol, decalcifying fluid, etc. yet no definite structure could be made out by me.

I am often led to think that these were probably pieces of dead tissue which, when fall off, leave semilunar erosions on the bordering compact bone during the process of caries sicca. However, the more I thought the more confused I became about the nature of these tissues.

Since the patient became perfectly well during this time and I have had no opportunity of getting a similar case, I cannot offer any suggestion or explanation as to whether the disease was caused by "worms" or that the case was cured by their expulsion. I would be grateful if some person would oblige with his expert views on the subject. However, I venture to have the case published with the hope that it might be of some help to those who may happen to get a similar case in their dental practice or otherwise, and who might care to do further work on so common a disease, as dental caries.

In the end I must express my sincere gratitude to Captain R. R. Prosser, I. M. S. (my O. C.) for the kind suggestions and permission to publish this case.

NOTES ON CASES OF OPHTHALMIA-NEONATORUM TREATED WITH DAGENAN M & B 693

DR. MISS. M. MOON, LADY ASST. SURGEON, LADY CURZON HOSPITAL, BANGALORE

Case 1:

Baby Muniamma, Born 9-4-40.

Transferred to Isolation Section on 11-4-40 with conjunctivitis (acute) both eyes. *Smear Report*: G. C.

M & B 693 1/10th tab. 4 hourly orally. Acriflavin (1 in 10,000) 4 hourly eye washes. 10% Argyrol eye drops t. i. d.

Result:—Acute inflammatory conjunctivitis cleared up by 3rd day after M & B 693, i. e., from 11th to 13th. Same continued for a further 3 days prior to discharge from hospital. Puerperium of mother normal.

Case 2:

Baby Bagiamma:—Born 21-4-1940.

Transferred to Isolation Section on 25-4-40 for acute conjunctivitis of both eyes.

Report of eye smear: G. C.

Treatment: Orally M & B 693 1/10th tab. from 25-4-40 to 7-5-40. Local for eyes: (1 in 10,000) Acriflavin eye washes 4 hourly. 10% Argyrol drops t. i. d.

Result: Conjunctivitis cleared up only after 12 days of M & B 693 orally. No treatment

given for two days with no recurrence of conjunctivitis. Discharged on 9-5-40.

Puerperium of mother normal.

Case 3:

Baby Laxmamma:—Born on 29-4-40. Wt. 3 lbs. 7½ ozs.

Transferred to Isolation on 3-5-40.

Diagnosis:—G. C. Conjunctivitis right eye from Laboratory Report of smear.

Treatment:—M & B 693 1/10th tab. from 4-5-40 to 12-5-40. Acriflavin (1 in 10,000) eye washes 4th hourly. 10% Argyrol eye drops to t. i. d.

Result:—Completely cured after 8 days' M & B 693. No local treatment from 14-5-40. Detained in hospital due to loss of weight. Weight on discharge 3 lbs. 8 ozs. on 21-5-40.

Puerperium of mother normal.

Case 4:

Baby Balamma:—Born on 3-5-40.

Transferred to Isolation Section on 8-5-40.

Diagnosis:—G.C. Conjunctivitis of left eye from Laboratory Report on smear.

Treatment:—M & B 693 1/10th tab. from mid-day of 8-5-40 4th hourly. Eye treatment with (1 in 10,000) Acriflavin 4th hourly eye washes. 10% Argyrol drops for eyes t. i. d.

Result:—Conjunctivitis cured. Showed response to treatment from 2nd day of M & B 693. All treatment stopped on 13-5-40. Showed no recurrence, Discharged on 14-5-40.

Puerperium of mother normal.

Case 5:

Baby Mariamma:—Born on 18-6-1940.

Tranferred to Isolation Section 18-6-1940.

Diagnosis:—G. C. Conjunctivitis. Smear report returned *negative* on 19-6-40.

Treatment:—M & B 693 1/10th tab. 4th hourly given on transfer of case before return of lab. report, and continued till the morning of 21-6-40. Acriflavin eye wash 4th hourly and 10% Argyrol instilled into eyes t. i. d.

Result:—Condition of Conjunctivitis cleared up in one day. All treatment discontinued from 21-6-40 and baby allowed to go home with mother on 25-6-40.

Puerperium of mother normal.

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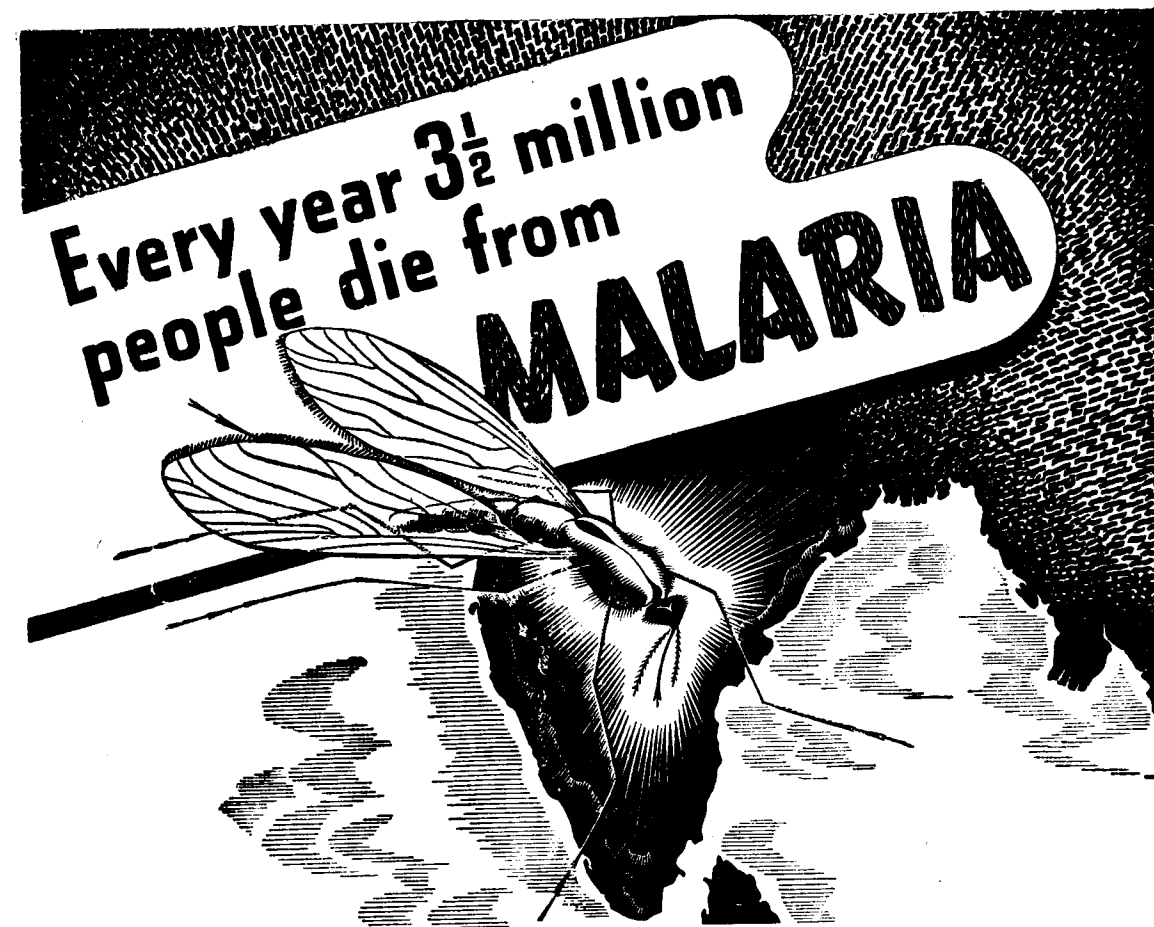
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The Association has decided to observe this month of September as Dr. S. L. Sharma's Memorial Month in token of his great services to the medical licentiates. Those who enlist themselves as members with effect from this month would be allowed to do so at the concession rate of Rs. 4/- per annum, without the usual admission fee of Rs. 2/-.

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Health of the Indian Army*

The report on the health of the army in India was used to be published as a part of the Public Health Commissioner's annual report. But since the year 1938, this responsible task was entrusted to the Medical Directorate of the Indian Army. Its first report for the year 1938 shows that this change is quite justified by its contents which reveal the vigil which the army medical and public health officers keep as the custodians of our army's health. Not only in prevention and treatment but also in the output of special research work in the field and the laboratory have they shown themselves as equal to medical men in civil life.

So far as the general health of the army is concerned, the report indicates that it is on the whole distinctly satisfactory. The sick rates are tending to stabilise at a stationary

* Annual Report on the Health of the Indian Army for 1938, Vol. I, Army Headquarters, New Delhi. Price Rs. 3/4/- or 5 s. 3 d.

level. Admission rates rose by 36 per 1000, but the actual admissions showed a drop of nearly 900. The principal causes of admission were malaria (50.4 per mille), cellulitis (45.2), tonsillitis (38.7), dysentery (26.8) and sand-fly fever (24.8). The two remarkable features, so far as the Indian troops are concerned, were : (1) Only 42 cases of cholera occurred, and that as a sudden outbreak amongst troops travelling into Waziristan at a time when cholera was prevailing in epidemic form extending from Assam to Afghanistan. (2) A very low incidence of small-pox, the admissions for this in all the Commands being only 22. This is indeed a great achievement, and proves once again, if proofs are needed, the value of protective inoculation against cholera and small-pox. The care with which the troops are fully protected, and the corresponding public health measures undertaken have indeed contributed towards such an unique achievement of which our country may legitimately be proud.

The low admission rate (110 per 1000) for malaria is attributed to concentrated anti-malarial measures in all the Commands in which spraying played a large part. But the dysenteric group of diseases showed little signs of real reduction, and this is attributed to the proximity of bazaar areas where infected food-stuffs are easily available to the soldiers. Oriental sore was prominent in Quetta area and a method of treatment by means of infra-basal injections of atabrin is said to have given good results amongst the labourers at the coolie camp.

What is really distressing in the report is the rate of rejection of Indian recruits. For the year ending March 1939, there were 21,088 recruits out of whom nearly 9172 or 43.5% were rejected. The causes of rejection were enlarged spleen (2.7%), pulmonary tuberculosis (0.2%), venereal diseases (1.8%), visual defects (3.4%) and trachoma (5%). The high incidence of trachoma and other eye defects is obviously due to the fact that preference is given to Punjabis among whom trachoma particularly is quite common owing to the extremes of climatic condition in the Punjab. We are however quite certain that if the policy of recruitment is not based on the now exploded theory of martial and non-martial classes, the rate of rejection would be much less than what is really the case at present. This would also enable the Government to have suitable and sufficient recruits from all the provinces and thus facilitate building up of a huge and magnificent army,

CURRENT COMMENTS

Heat-Stroke and Heat Exhaustion

The Army Health Report for 1938 expresses the view that the shibboleth of exposure to the sun means heat-stroke is rapidly dying out. And this view is based on the work and experience of the army medical officers who have found that the inevitable depletion of the total salt content of the body during the hot season on account of excessive perspiration is the most important predisposing factor in the production of heat exhaustion or stroke. It was found that the water requirement of a man marching 8 to 9 miles on a day when the temperature was 104.3 F. in the shade and relative humidity 40%, was approximately 6 pints of water in order to maintain real fighting efficiency, to which must be added the amount of common salt lost during the day. This salt loss was estimated as amounting to half-an-ounce. It was also observed that stokers at hard work in hot climate utilise weak solutions of salt water as their drink. It was further observed that in mines, with high temperature and humidity,

navy and air force so necessary for the defence of a vast country like that of ours.

The invaliding rate of Indian troops was 5.83 per mille, and tuberculous disease formed a third of the total cases invalided. It is however difficult to find out from the report whether the infection was incurred before or after recruitment.

All possible precautions seemed to have been taken by the army authorities in the matter of sanitation and preventive measures. Particularly in the matter of food supply, great care was exercised both from the point of view of quality and adulteration, and samples of food stuffs not approved by the Kasauli Military Food Laboratory were summarily rejected. Improvements in the existing barrack accommodation were carried out, and the military water supply had reached a high standard of excellence.

Another noteworthy feature in the military medical organisation is the maternity and child welfare clinics for the benefit of the families of the Indian soldiers.

On the whole, the report for 1938 reveals a distinctive achievement in Military Medicine and Public Health in India for which the army authorities deserve the gratitude and appreciation of the people of our land.

the effects of salt drinks were dramatic in effecting recovery from incipient heat-stroke or exhaustion. The army authorities are, therefore, issuing extra-salt rations to the troops during the hot weather as a physiological treatment against any possible effects of heat. This procedure would, in our opinion, lessen the incidence of heat-stroke and exhaustion which for the year accounted for 80 cases with 12 deaths, nearly double that of the previous year. The recommendation to avoid the large heavy military topi or turban and not to remain indoors within the barracks is also equally sensible, and we certainly agree with the observation contained in the report, that what predisposes to heat stroke or exhaustion is not heavy physical work in a hot day but insufficient consumption of water and heavy clothing and over-feeding.

Vi Agglutination in Typhoid

In our last Typhoid Number, some of the contributors stressed on the importance of Vi agglutination as a means of clinching the diagnosis. We read in the recent Army Health Report that the employment of "H" suspensions for agglutination was discontinued as it was found inconclusive and of little value as a help to diagnosis, owing obviously to universal inoculation among the troops with the T. A. B. protective vaccine. TO and AO suspensions were therefore substituted and Felix technique of agglutination was employed. But it is reported that the results with Vi suspension were somewhat disappointing, and the reasons also mentioned. One of the reasons alleged is that in small but severe epidemic, the majority of cultures were almost completely devoid of this antigen. We do not think that this is possible as it is contrary to experience in civil laboratory work. We do however hope that the military medical research department would not give up further experiments and observation on this subject but pursue them so that we may know the whole truth about the utility of Vi suspension in the serological methods of diagnosing typhoid.

Treatment of Pregnancy Anaemia

Clinically pregnancy anaemia is characterised by fever, enlarged spleen, oedema, albumin in the urine and gastrointestinal symptoms such as diarrhoea and/or vomiting. Haematologically, the anaemia does not conform to a fixed type. This has given rise to a great confusion in its treatment, and the nature of treatment has been on the basis of the personal opinion of the obstetrician,

SUPPLEMENT TO THE INDIAN MEDICAL JOURNAL

MADRAS

SEPTEMBER 15, 1940

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30th Conference of the All-India Medical Licentiates' Association, Ahmedabad.

RECEPTION COMMITTEE

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(1) Appeal for Scientific Papers

As usual, there will be a scientific section in connection with the 30th Annual Conference of the All-India Medical Licentiates' Association, which is to be held in Ahmedabad during the third-week of December 1940, where papers on different subjects relating to medicine, surgery, midwifery, public health and allied sciences will be presented for discussion.

All the members of the profession are therefore earnestly requested to send their papers which they wish to read before the Conference to Dr. Pranlal R. Trivedi, L.C.P.S., L.T.M., Honorary Secretary, Scientific Section, Dalia Bldg., Ellis Bridge, Ahmedabad, by 7th December 1940 at the latest.

Those members who may not be able to come in person can also send their papers as arrangements will be made to have them read at the Conference.

The papers read at this Conference will be published in the *Indian Medical Journal* and 100 reprints of each article will be supplied free to the author concerned.

(2) Appeal to the Bombay Medical Licentiates

The Reception Committee appeals to all the members residing in the Bombay Presidency and elsewhere to join it in large numbers as early as possible. The minimum fee for becoming a member of the Reception Committee is Rs. 10/- (Rupees ten only).

It has also been decided to hold a medical and sanitary exhibition. All these will require a lot of money. Unless friends liberally help the Reception Committee by becoming its members and/or by offering substantial donations it would be difficult to meet the expenses of the Conference and the Exhibition and bring them to a successful issue.

The Reception Committee therefore appeals to all the members in the Bombay Presidency, especially those belonging to Gujarat, to contribute to the success of the Conference in the manner suggested above. Our province must discharge its present responsibility, both as a privilege and a duty in the service of our All-India Association.

All donations and Reception Committee membership fees should be sent to Dr. Jayantilal J. Vyas, Honorary Treasurer of the Reception Committee, 62, Garden Area, Maninagar, Ahmedabad, No. 2

Why Our Opposition to The Indian Medical Council Act has become Stale ?

● Dr. D. V. Venkappa, President, All-India Medical Licentiates' Association

The members of the medical profession will meet again this year on the 20th September in the different parts of our country to register their protest against the continuance of the Indian Medical Council Act as it is.

It is my considered opinion that our opposition has become stale, and unless we remove the causes of such staleness it will not have its desired effect on the powers-that-be.

There are two reasons for this stalemate.

The one is that our graduate comrades who joined us to fight this Act are keeping it alive by co-operating with it, although they have not yet said openly that it is worth having as it is. It is probable that they are quite willing to give the licentiates a small niche somewhere in the circumference of the Indian Medical Council Act rather than a place in its centre. A friend of mine, who is a member of the Indian Medical Council, suggested an ingenious method of bringing the existing licentiates within the purview of the Act by dividing the medical qualifications under two heads: (1) Qualifications which have foreign reciprocity. (2) Qualifications which cannot obtain foreign reciprocity. Whether this suggestion is acceptable to the Government of India or to the licentiates is altogether a different matter, but it shows the spirit of our tacit acceptance of the Indian Medical Council Act as if it is a settled fact.

The second reason for the stalemate is that even we, the licentiates, are giving an unmerited prestige to the standard of medical education as laid down by the Indian Medical Council by accepting it in

preference to the University standard. Some of us have fallen into the trap of that enticing thought that if the medical school standard is made equivalent to the standard of medical education fixed by the Indian Medical Council, we can easily maintain the separate identity of the licentiates on equal footing with graduates.

The Indian Medical Council, as now constituted, would rather like this arrangement than to bring into effect one standard of medical education, because that would keep the imperial interests of the General Medical Council quite alive and pulsating, and continue to perpetuate the existing divisions in an altered form.

So it is that the strength and volume of our original opposition has given place, more or less, to silent acquiescence. We must stop this rot. We must oppose the Act, not merely because it has excluded the recognition of the licentiates but also because it has not conformed to the true pattern of a medical council.

Let us therefore oppose this Act wholly and whole-heartedly. It is a contemptible device of the bankrupt statesmen of the Government of India to divide our profession and to keep it under the tender mercies of a bureaucracy at home and abroad. I warn both the graduates and the licentiates not to hug this delusion of a medical council which is not intended for their benefit but for the benefit of those whose qualifications are recognised by the General Medical Council. Let us not sell the soul of our profession for a mess of foreign pottage.

NOTICE

The 16th U. P. Provincial Conference A. I. M. L. A. will be held at Fyzabad on 7th and 8th October '40. Dr. Panna Lal, C. I. E., I. C. S., Adviser to Local Self-Govt. and Public Health has been requested to perform the opening ceremony of the conference and Col. T. C. Boyd, I. M. S., for presiding at the inaugural session. Branch Secretaries in U. P. are again requested to send the names of their delegates, two from each branch, to the U. P. Provincial Secretary A. I. M. L. A., Meerut, Vide rule 65 (a) as early as possible and also copies of resolutions to be discussed at the conference. Members are requested to send scientific papers to be read at the conference by the 30th September '40, to the Chairman of the Reception Committee R. S. Dr. Brij Mohan Lal, Retired P. M. S., Fyzabad. Members are cordially invited to attend the conference in large numbers. Intimation regarding time and date of arrival at Fyzabad by delegates and members and any further enquiries in connection with the conference should also be addressed direct to R. S. Dr. Brij Mohan Lal, Chairman Reception Committee, Fyzabad.

Meerut.

Dated, 1-9-'40 }

KUNJ BEHARILAL VARMA,

U. P. Provincial Secretary.

Legal and Constitutional Aspects of the Indian Medical Council Act

THE ULTERIOR OBJECT

It is now seven years since the Indian Medical Council Act was passed. The Act represents the tragedy of little minds having been allowed by the then Indian legislature to handle a big but untenable situation like the one brought about by the threats of the General Medical Council of the United Kingdom. The Act itself is an amazing specimen of squibbling in a statute so vital to the Indian Medical Profession, and yet it was ushered with full official imprimatur and diplomatic panoply. The real bearings of the Act are not even now fully appreciated. Therefore the primary opposition of the profession to its enactment gave way during the passage of time to complacency, and complacency to easy co-operation. Thus its life for the last seven years has been sustained by the very hands that wanted to throttle it at its birth, although the ulterior object for which it was brought into existence is still the same, viz., the undisputed sovereignty of the British Medical Council over the Indian Medical Profession through the Indian Medical Council. Its actual working during the last seven years has brought into glaring relief only its utter dependency on the General Medical Council and the ulterior object with which the latter forced it into the unwilling throats of the medical profession. This is a matter for proof and not for belief. And proofs are easily available.

SECTION 120 of the Government of India Act 1935 has made the statutory position of the Indian Medical Council practically unalterable so far as reciprocity with the General Medical Council is concerned. It is a sort of compulsory reciprocity with only a right of appeal to the Privy Council in case of difference or difficulty. It also means that the statute of the Indian Medical Council cannot be amended by the Indian legislature, so far as its relationship with the General Medical Council is concerned, without at the same time amending the corresponding part of the Government of India Act. Thus the primary object of keeping our Council under foreign subordination has been legally achieved.

This is fully borne out by the fact that countries outside the British Empire have systematically refused to recognise the Indian Medical Council as such, unless the qualifications recognised by this Council are also recognised by the G. M. C. and registered in the British Medical Register. The successive Presidents of our Council, Sprawson, Bradfield and now B. C. Roy, have narrated their painful experiences in this matter, but they have so far sought no solution to end this impasse except expressing pious regrets over this unfortu-

nate position. The latest presidential address of B. C. Roy reveals this more exactly. In the course of his speech he said :

"You are aware that in October 1937 we resolved to put New South Wales degrees on Schedule 2 of the Act because the Medical Board there informed us in June 1937 that reciprocity with our Council was possible. The Sydney University was put on Schedule 2 in October 1937 and we asked the New South Wales Medical Board to implement the scheme of reciprocity on their side. They however intimated to us in April 1938 that their Crown Solicitor regarded that reciprocity was not complete as the Indian Medical Council would not accept all degrees registrable in New South Wales as was laid down in their Act. They informed us however that an amending Medical Bill was under the consideration of the New South Wales Parliament and it was thought that the provisions contained therein would simplify the question of reciprocity. The bill has since been passed. The new Act has made reciprocity still more difficult and the New South Wales Medical Board have now proposed reciprocity through the General Medical Council, a proposal which is being placed before the Executive Committee."

The position taken up by the New South Wales Government raises an important question which I find has also been the subject matter of resolutions proposed to be moved in the Council by members. The question is whether and to what extent we should endorse the scheme of indirect reciprocity, namely, through the General Medical Council. This council, in August 1937 entered into schemes of reciprocity with the authorities of states or countries outside British India; in some cases, 'directly' with these authorities and in others through the General Medical Council of Great Britain. The attitude taken by the New South Wales authority shows that few countries desire direct reciprocity with us. We were under the impression that they agreed to a scheme of 'direct' reciprocity with us as the correspondence with this authority will show. They had meanwhile corresponded with the General Medical Council and they are not now desirous of offering us 'direct' reciprocity. The matter is before the Executive Committee and it is for the Committee to indicate what steps are to be taken. We had asked 27 countries to enter into schemes of direct reciprocity with us, and only 4 countries, New Zealand, Malta, Burma and New South Wales, agreed to enter into schemes of reciprocity with us. What is it that prevents these States from negotiating directly with us? Why is that they desire recognition through the General Medical Council? These are questions we should give serious attention to."

The record of these facts is more important and revealing than all the assertions of friends whose expansive delusion has given more status and prestige to the Indian Medical Council than what really belongs to it. Our Council, we must admit, is a *de jure* and a *de facto* political gift to the General Medical Council by the Government of India. As such, is it any wonder that few countries desire to deal with us directly? They have got enough political common sense to detect our subordinate position, and it is meaningless to quarrel with them so long as the statute of the Indian Medical Council as amplified and protected by the Government of India Act, 1935 remains as it is.

ITS RELATIONSHIP WITH THE PROVINCIAL MEDICAL COUNCILS

This aspect of the problem, so far as the writer knows, has never been considered or discussed. It has been taken for granted that the Indian Medical Council is the supreme authority in matters of medical education in India after the year 1933.

Every Provincial Medical Act lays down that it shall guide and control medical education within

its jurisdiction. In pursuance of the same, the Bombay Medical Council requested the Indian Medical Council to associate with the Inspectors, appointed by the latter to inspect the Bombay Medical Colleges, two of its own nominees. This is by no means an extravagant or illegal request, but it was rejected. The relevant resolution of the Indian Medical Council is given below :—

“ Read—Letter No. G/29-584, dated the 24th February 1939, from the Registrar, Bombay Medical Council suggesting that as regards the medical examinations of the Bombay University two nominees of that Council be associated with Inspectors appointed by the Medical Council of India to inspect the Medical Colleges in the Bombay Presidency.

The Committee approved of the draft reply put up by the Secretary stating that there is no provision either in the I. M. C. Act, 1933, or in the regulations framed under section 18 of the Act, under which the suggestion could be accepted. It was also apprehended that the adoption of the suggestion would affect the independent nature of the Inspectors' Reports. ”

The legality of turning down this request which is within the statutory functions of the Provincial Medical Acts, seems to be questionable, but whether it is legal or otherwise the fact remains that the Provincial Medical Councils are deprived of substantial statutory powers over medical education which, till 1933, were within their purview. These Councils have hence virtually become the tacit agents of the Indian Medical Council without even any statutory provision to that effect either in the Provincial or Central Act.

The only two connecting links between the Central and the Provincial Medical Councils are by virtue of the provisions in section 3 (c) and section 12. That each of these provisions is unjust, and impair the independence and integrity of the Provincial Medical Councils, would be obvious on a critical examination.

Let us take SECTION 3 (C). This enables a representation of the Provincial Medical Council in the Indian Medical Council. But representation is wholly confined to those in the Provincial Medical Registers who possess qualifications recognised by the Indian Medical Council, but not others who are also in the Provincial Medical Registers. In other words, the Indian Medical Council would not accept the standard of medical qualifications accepted for registration by the provincial councils. Is it the case that it is willing to wound but afraid to strike? All Provincial Councils have got mutual reciprocity, which means that the medical qualifications accepted by any Provincial Medical Council would be legal tender within the frontiers of our own country. Therefore the law that the Indian Medical Council would recognise only certain qualifications and not others accepted as registrable by the Provincial Councils effects two things: (1) It profoundly impairs the statutory status of the Provincial Councils. (2) It acts not as a co-operative body for the benefit and support of the qualified members of the profession but as a satellite of the General Medical Council for the benefit and support of British medical qualifications.

SECTION 12 imposes a restriction on the Provincial Medical Council not contemplated by the Provincial Medical Acts. This section lays down that medical qualifications granted by medical institutions outside British India could not be recognised by the medical councils of the provinces unless they are already recognised by the Medical Council of India and included in its second schedule.

Thus it is clear that the Indian Medical Council Act has made the Provincial Medical Acts almost a nullity and created an anarchic state of affairs in the provinces by usurping the statutory functions of the latter without the sanction of provincial legislatures.

SECTION 14 IS AS DEAD AS DODO

SECTION 14 of the Indian Medical Council Act provides permanent arrangements for modifying the second schedule. This section empowers the Council, after the expiry of a period of four years after the commencement of the Act, to accept or to reject reciprocity with any State or Country outside British India. The second schedule referred to is constituted as follows:

“ A. Registrable qualifications admitting primarily to the Medical Register granted by licensing bodies in the United Kingdom, as shown in Table (F) set out in the Medical Register for 1931 printed and published under the direction of the General Council of Medical Education and Registration of the United Kingdom in pursuance of the Medical Acts, 1858 and 1886.

B. Registrable qualifications granted by licensing bodies in British possessions, as shown in Table (I) set out in the said Medical Register, other than registrable qualifications granted by licensing bodies in India.

C. Registrable qualification granted by licensing bodies in Foreign countries, as shown in Table (J) set out in the said Medical Register. ”

From the very wordings of the schedule it is obvious that the provision for modifying it is a stupendous farce, and the actual negotiations between the Indian Medical Council and other foreign medical councils have shown and proved it to be as such. In the face of such stultifying experience, the writer wonders why and how the Indian Medical Council assumes itself to be independent and thus start negotiations for foreign reciprocity. Every self-governing country has so far refused to deal with the Indian Medical Council directly except through the General Medical Council. They have obviously understood the real objective of the Indian Medical Council Act much better and more clearly than ourselves! The best of us do not always remember that our country is a dependency of Great Britain, and hence the delusion that the Indian Medical Council Act is intended for India. When foreigners point this out directly or indirectly, we may be ashamed or wounded but are not in a position to repudiate or retaliate.

THE LACK OF AN ALL-INDIA MEDICAL REGISTER—IS IT A GREAT HANDICAP?

Dr. B. C. Roy addressing the 13th session of the Indian Medical Council during April last said that

the non-provision of an All-India Register was a great handicap in negotiating for foreign reciprocity. He said :

“ To an outside authority it must seem as an anomaly that while we attempt to negotiate *with foreign countries* (Italics mine) which are entrusted by the law of such countries for the maintenance of Register of Practitioners we ourselves have no register. Although we make up this deficiency to a certain extent by the Provisions of Section 12 of the Act such indirect registration is as bad as indirect reciprocity. ”

The writer would humbly submit that there is no use of comparing indirect registration with indirect reciprocity but that the President of the Indian Medical Council should recognise and proclaim openly that “ indirect registration ” is virtually the effect of “ indirect reciprocity ”. It is quite possible that some countries may have refused reciprocity because of the absence of an All-India Medical Register, but this is only a thin veneer to hide an unwelcome and unsavoury statement that they would not recognise any qualification which is not in the British Register, because the Indian Medical Council has no real status apart from the General Medical Council of the United Kingdom. In fact it is reported in the address of General Bradfield that many countries are reluctant to deal with our Council directly without any reference at all to the absence of an All-India Medical Register.

Even if this “ great handicap ” is removed, the writer is definitely of opinion that it will not facilitate easy negotiations for reciprocity unless the fact that the Indian Medical Council is a body dependent on the General Medical Council is removed. That it is entirely a dependent body is proved again and again by the way in which the General Medical Council has flouted the resolution of our Council in the matter of retrospective recognition of the Calcutta University Medical Degrees. Is this a token of dependence or independence?

THE IMPOSSIBILITY OF INSTITUTING AN ALL-INDIA REGISTER UNTIL A UNIFORM MINIMUM STANDARD IS LAID DOWN

The preamble of the Indian Medical Council Act is to establish a *uniform minimum standard for higher qualifications in Medicine* for all provinces. How then can All-India Register be made up under the provisions of such a preamble? If the Indian Medical Council Act was intended to establish a uniform standard of minimum medical qualification, an All-India Medical Register would have been a natural sequel or an essential prerequisite. In fact that was the original proposal in 1929, but it was quietly dropped because it did not please our masters who would rather like confusion to prevail in our home than give a cause or stimulus for homogenous existence. The present members of the Medical Council in particular, and the members of the profession in general, should now, at any rate, realise that this half-

baked Indian Medical Council was enacted more for political than professional reasons. Every word of the Act, and every experience in its working during the last seven years, conclusively prove the hegemony of the General Medical Council and the inconsequential nature of our Medical Council. Seven years of its working have entirely blown up the structure of our make-beliefs. In the face of such experience let us no more part with reason and reality, and hope against hope that an All-India Register is possible under the Act as it is. It will be like the barren woman's son!

WHERE IS THE MINIMUM STANDARD LAID DOWN?

The General Medical Council was enacted to establish a uniform minimum standard of medical qualification within the United Kingdom. The Indian Medical Council was enacted to establish a uniform minimum standard of higher medical qualification within British India. The readers should note that this difference is vital, and it is this that has been the cause of all anomalies in the provisions of the Indian Medical Council Act. One of the greatest anomalies is the non-recognition of the medical licentiates. The apparent and oft-quoted reason is that they do not possess a minimum standard and therefore they cannot be treated otherwise than in the manner they are treated now. May the writer ask the Central Government, the Provincial Governments, and those who sing the song of minimum standard: Have you ever defined or laid down the uniform minimum standard of medical education for our country? If you have not defined, how can you in all fairness say that the medical school standard, as it is in this year of Grace, is not an acceptable minimum standard? Let there be no confusion between the minimum uniform standard as defined in the preamble of the British Medical Act and the standard as defined in that of the Indian Medical Act. These two types of standard are entirely different in their objective and application. If the Indian Medical Council were intended for the benefit of our country its declared objective would have been, as in the case of the General Medical Council, the establishment of minimum uniform medical education throughout our country and the devising of ways and means of attaining it. Thus it is obvious that the statutory omission of the definition of uniform minimum standard of medical education and qualification and consequent indefiniteness of the statutory position of medical licentiates were deliberate and intentional, and due more to political than medical reasons. And so long as the minimum standard is not finally defined or laid down, it would be a height of injustice to consider the licentiates as possessing sub-minimal medical education and qualification.

If, however, the present standard of minimum higher medical education, as defined by the Indian Medical Council, is intended in future to be the uniform minimum standard, not of higher but of

minimum medical education, let it be so. The licentiates have absolutely no objection. But let it be said and done in a manner and by a method which would not wound the self-respect, the dignity and the honour of the huge number of licentiates of our country and which would not harm their position in private practice or public service. They are prepared to be effaced for the sake of a better standard of medical education and for the sake of a more efficient medical relief of our people. The licentiates have been telling for the last 30 years that they do not want different gradations and standards in medical education and that there should be only one standard—high, efficient and comprehensive—to be utilized in the medical relief of our country. Even in the first conference of the licentiates' association in 1907, they declared and emphasized the need and advisability of affiliating all medical schools to the respective Provincial Universities. This would show that they had realised much earlier than the Government of India, much earlier than the new-fangled Medical Council of India, much earlier than the post-mortem wisdom of our graduate comrades that what our profession and country needed, and needs, was, and is, one standard of medical education, one homogenous medical profession and equal opportunities for all medical men. What they said and declared in 1907, they continued repeating every year, and repeat even today that medical education should be remodelled in the interest of our country and not in the vested interests of Indian or British Medicine; should be standardised so as to create equal opportunities for all medical men without the doggerel of superior and inferior medical qualification; and should be such as would evoke confidence and respect from our own people.

THE EXCLUSION OF INDIAN STATES

While SECTION 11, CLAUSE 4, has imposed a statutory duty on the Council to make all necessary arrangements, without application being made, for the inspection of medical courses and examinations of the Universities of Patna, Rangoon and Andhra with a view to their recognition, no such provision on behalf of Osmania and Mysore Universities was made. They are treated as foreign States for the purpose of recognition or reciprocity under sections 12 and 13. This is totally unjust and unfair and we should stoutly resist any such political division of India, and the writer is certain of the fact that no such request for separation was made by the authorities of the State. The fact that these two Universities have recently applied for recognition proves that they are anxious to come within the control and guidance of the Indian Medical Council.

EXCLUSION OF STUDY OF INDIAN PHARMACOLOGY

Recommending the inclusion of Indian Pharmacology and Therapeutics in Medical Curriculum, Cap. Mukherji, a member of the Indian Medical

Council, moved in one of its sessions during 1938-39 the following resolution :

"The Council requests the Executive Committee to collect opinions from the Heads of the Pharmacological Departments of all the Medical Colleges in India and of the Calcutta School of Tropical Medicine regarding the possibility of inclusion of the study of Pharmacology and Therapeutics of the Ayurvedic and Unani systems of Medicine in the curriculum of Pharmacology and Therapeutics as contained in the Recommendations of Professional Education of this Council and to circulate all opinions so collected amongst the members of the Council before its next meeting."

This motion was lost. But the moral of it is obvious.

SUMMARY & CONCLUSIONS

(1) Since the Medical Council of India is not intended to embody the normal duties of a medical council, it is clear that its objective is to establish and perpetuate its own subordination to the General Medical Council of the United Kingdom.

(2) The normal duties of a statutory Medical Council are : (a) Establishment of a uniform minimum medical education. (b) Maintenance of a Register of Qualified Practitioners. (c) Compilation and publication of the country's Pharmacopoea. All these are outside the statutory purview of the existing Indian Medical Council Act, and cannot but be so in view of its present legal and constitutional status.

(3) The working of the Indian Medical Council during the last 7 years has brought into relief these fundamental defects in more ways than one.

(4) The Act has made the Provincial Medical Acts almost a nullity and created an anarchic state of affairs in the provinces by usurping the statutory function of the latter without the sanction of the provincial legislatures.

(5) The amendment of the Act in such a way as to give it a normal position and purpose is obviously difficult since the present Act is fully protected by the India Act of 1935. In other words, the Indian Medical Council Act cannot be altered fundamentally by the Indian Legislature unless the corresponding part of the India Act 1935 is also altered by the British Parliament.

(6) The above legal and constitutional position lifts the Indian Medical Council Act out of its natural professional sphere to that of political relationship with Great Britain.

(7) Yet, there is no doubt that the Act as it is would never be accepted as a final measure, unless it is based in the interest of our country and on a footing of absolute equality with other countries including Great Britain.

A. VISWANATHAN

Proposed Pharmacy Bill (Central) —Financial and other Aspects discussed

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

The Drugs Enquiry Committee (1930-31) recommended early central legislation, preferably a combined, or separate but concurrent, Drugs and Pharmacy Act to save India from the harm done by widespread adulteration of drugs, and by absence of pharmacy regulations, in the country. The desired reform was considered pressing, not only in the interests of public health, but also for India's development of pharmaceutical industries, trade and profession. Under the present war emergency India is being called upon to be self-sufficient in respect of her defence. The requirements are numerous. It is equally necessary as a war measure to make India self-sufficient in respect of drugs. The shortage of drugs is being keenly felt since the outbreak of war. There are, however, vast resources lying untapped in the field of indigenous drugs. Highly trained pharmaceutical chemists are required to develop these resources usefully and scientifically. The chemists we find from among the university and medical graduates here are not pharmaceutical chemists. Pharmaceutical chemistry is a separate branch of Applied Science and has not hitherto been cultivated in India. Unless there is necessary legislation to lay down the duties to be *exclusively* performed by pharmaceutical chemists and qualified pharmacists, there will be no demand for these trained technicians and all talks of a pharmacy college, or of a degree course in pharmacy in the university curriculum, will be futile. A Pharmacy Bill (Central) is, therefore, urgently called for. If this is agreed to, the recognition carries with it obligations to find funds for the purpose. We shall come to this point in the concluding paragraph. The subject requires a further clearing-up.

2. Since the Drugs Enquiry report was submitted to the Government of India, there has been a lapse of ten long years. In contravention of the Drugs Committee's specific recommendation (*vide* para 1) only the Drugs Bill, without any provision for pharmacy therein, was introduced in February 1940 and was passed by the Central Assembly on the 5th April last subject to certain modifications after a heated discussion on the floor of the Assembly. One of the main provisions of the Bill was the constitution of a Drugs Technical Advisory Board and a further important provision was that of Inspectors with their duties and powers defined. Unfortunately there was however, no reference in the Bill to the personnel to provide these Inspectors and to the pay they will receive. The omission evoked pun-

gent criticisms during the debate. Other points apart, the two points specified involve considerable extra expense and there was no mention in the Bill as to how the cost would be met. These points did not escape the notice of the Drugs Committee. Moreover, during over 20 years since 1917, the writer issued a series of articles, explaining the extent of drug adulteration in the country, the remedial measures required, the practice in progressive countries of the West, and the cost involved. Most of these articles have recently been published in book form entitled "Indigenous Drugs of India" with a foreword by Colonel R. N. Chopra, I.M.S., who appreciates the booklet. The writer is exceedingly grateful to him for his congratulatory remarks thereon and for his further remark that "everybody interested in the development of scientific medicine and public health in India will agree with the author that an early legislation for the control of drug adulteration, spurious drug trade and practice of pharmacy in India is urgently called for." Further, as Colonel Chopra considers the publication to be opportune at the present juncture, the public will do well to read the booklet carefully and to prepare the country accordingly. With the public opinion educated and raised to the required pitch there will be no difficulty in getting the legislation passed and the cost met.

3. In reporting on the Drugs Bill already enacted the Select Committee remarked that they would have preferred to find included in the drugs legislation provisions dealing also with pharmacy. They, however, received an assurance that the Central Government would take steps immediately to consult Provincial Governments with a view to undertaking such legislation as early as possible. The consultation promised must have been proceeded with, but all the stages thereof should be gone through as expeditiously as possible, preferably by telegraphic communications in order to have in time the formalities completed of a resolution under section 103 of the Government of India Act moved in all Provincial Legislatures and forwarded to the Central Government with the concurrence of local Governments in the draft Pharmacy Bill. The autumn session of the Central Legislative Assembly may be held in October next and it is confidently hoped that no stone will be left unturned to get the draft Bill scrutinised and completely ready before the Assembly meets. It will be remembered that an expert committee under the chairmanship of Colonel R. N. Chopra was lately appointed by the Government of Bengal to inquire into the feasibility of legislation to ensure that only qualified pharmaceutical chemists should be allowed to carry on druggists' business in future. The committee prepared a draft Pharmacy Bill on lines obtaining in Great Britain and America and it stands to reason that this draft will be taken advantage of so that time and labour may be saved and the matter expedited as desired.

4. As pointed out in paragraph 2 above, ten years have been allowed to pass away without a

finality being hitherto arrived at, and if every thing possible is done, we must inevitably come to the question of funds. Pharmaceutical control in India, as in other countries, is a question of considerable expense on account of the need for provision of requisite pharmaceutical education, supervision, equipment and staff. To meet the expenditure the Drugs Committee recommended several financial measures. Of these (i) an extra 5 per cent import duty on drugs, (ii) a minimum stamp duty of 12½ per cent on locally manufactured patent medicines, (iii) and additional 20 per cent duty on all patent medicines, imported and local, with undisclosed formulæ, and (iv) an export duty on drugs obtainable only from India, are apparently possible to be levied by a central legislation alone. According to available statistical information over two crores rupees worth of drugs are imported into India and a 5% extra import duty thereon will fetch annually one lakh of rupees in a normal year. It is true that, in consequence of present war conditions, there may have been a fall in the amount realised by import duty, but this need not be taken into account for our immediate purpose. The other three items will similarly yield a substantial income to meet the cost of drugs and pharmacy legislation. Further, there will be a number of prosecutions under this legislation, and although the fines realisable will be credited to provincial revenues, there must be an equivalent contribution from local Governments. Under the new legislation pharmaceutical students will have to pay registration fees, and membership fees are leviable annually from qualified pharmacists and other members of the profession. These fees, contributions, and realisations from stamp, export and import duty will produce sufficient income for the whole organisation to be self-supporting and for the welfare of the members to be looked after. The writer is unable to place all figures in the absence of data. But the facts given appear to be convincing and no further explanation seems necessary. It is, however, imperative that duplication either in work, equipment, or staff, as well as thoughtless expenditure, should be avoided by having a single organisation and a single Central Advisory Board to work both the drugs and pharmacy legislation. It is also needed that all efforts should be directed to secure uniformity of procedure and action throughout the Provinces. Subject to these conditions success is certain. If so, the change will usher a new era of progress, social, economic, educational, and introduce scientific as also ethical drug trade and industry.

A Drive against Quacks in Secunderabad and Hyderabad (Dn.)

● M. Sarva Rao, B.A., LL.B., Advocate, Secunderabad (Dn.)

Allopathic, Homeopathic, Ayurvedic and Unani are the four systems of medicine which have been catering to the needs of our people for a long time past. Each and every system has its own votaries even to-day, so much so we find practitioners of all the four systems of medicine existing side by side even in small towns all over the country. Every individual is at liberty to make his own choice from out of the said four systems, and that in which he has more faith attracts him most, though it is not infrequent to find persons changing from one system to another even within short intervals.

Whatever be the merits and demerits of the said systems, one would certainly like to undergo treatment according to one system from qualified people, whether they be English doctors, Vaidyas, Hakims or Homeopaths. None dare dispute the right of qualified people to practise their own system of medicine. But the question for consideration is: whether we are sure of undergoing treatment from people qualified in the various systems of medicine. It cannot be gainsaid that there are side by side both qualified and unqualified persons in the market practising the medical profession, the latter perhaps in larger numbers than the former. It cannot be denied also that both the public and the medical practitioners—to whichever system of medicine they may belong—are aware of this fact, and under their very nose, quacks are practising here as elsewhere with impunity. Unpassed medical men, compounders and ward-boys are to be seen practising as doctors; and persons with little general conception, apart from possessing any medical knowledge, have the audacity to hang sign-boards, open dispensaries and practise as medical practitioners.

We know that there are recognised diplomas and degrees like the L. M. P., L. C. P. & S., L. M. & S., M. B. B. S., M. S., M. D., etc., but besides these we see some practitioners having strange degrees like M. B. B. S. (H.)—to cite only one of the various others—which clearly cannot be of the Osmania University degree or of any other University. Of course, there are Homeopathic degrees like M. B. (H.) and M. D. (H.); and it can be said that there is no such degree as M.B.B.S. (H.).

In Hyderabad there are branches of both the British Medical and Indian Medical Associations, which hold their monthly meetings and carry on their normal activities. It is time that these bodies should look to the interest of their members and to the questions affecting the medical profession. They should move the local authorities and take such other steps as to put down the growing

evil of quackery. Well constituted organisations are the proper bodies to tackle such issues so vital to the public and the profession.

Sometimes, we see that some sign-boards do not at a glance enable us to make out the qualifications of the medical practitioners whom we wish to approach, while quacks are bold enough to style themselves as Dr., some of the allopathic doctors do not even have the prefix Dr. attached to their names on the sign-board, some neither have the prefix, nor their respective qualifications added at the end of their names. The public would really like that private practitioners, at least, would put their qualifications on their sign-boards, enabling the public to make out their qualifications, as also the universities to which they belong.

It is not uncommon to see stethoscopes used by ayurvedic and unani doctors to examine their patients, and on close observation, we find that most of the drugs they use are from the British Pharmacopœa. This is how practitioners of other systems of medicine are transgressing their rights, and the transgression is all the more on the increase, because of the fact that the medical practitioners of the allopathic system have not so far done anything to check the same. Further, some practitioners claim to know all the three systems of medicine, and call themselves as allopathic, ayurvedic and homeopathic doctors, as it suits their convenience. It is incomprehensible as to how one could attain proficiency in three altogether distinct systems of medicine, while it is not possible for one who has spent his whole life-time in one branch of a particular system of a medicine, much less to speak of the system as a whole, to be a master of the particular branch. It would be better both in the interest of the public and the medical profession, if a practitioner of one system does not trespass upon the other systems of medicine.

In fine, it may be added that the local branches of the B.M.A. and I.M.A. should take a keen interest in this matter affecting the public welfare, as also the prestige of their profession by launching a drive against quacks in general, and those practising their system of medicine in particular, and for effectively checking quackery as early as possible in their areas. It is hoped that the two said associations will do the needful in the matter, and earn the gratitude of the public.

U. P. Licentiates' Deputation to Vice-Chancellor, Agra University

Dr. Kunj Beharilal Varma Writes: A deputation of the U. P. Branch of the All-India Medical Licentiates' Association waited on Dr. P. C. Basu, M. A., Ph. D., Vice-Chancellor, Agra University on 22nd April 1940 and submitted the following memorandum.

The Vice-Chancellor was very sympathetic to the members of the deputation and he had free discussion with them on different questions. Before receiving the deputation, he had his Registrar, Sri P. Shyama Sundar Sharma, M. A. and Col. J. C. Bharucha, I. M. S., Principal, Agra Medical School, by his side. He sympathised with the disabilities of licentiates and opined that he would have to approach the Government for amendment of the University Act as a first step. He suggested that our Association should also approach the Indian Medical Council which had the final say in recognising medical qualifications.

A deputation of our Association subsequently waited on the Adviser to the U. P. Government on the 25th May '40 (memorandum published in *I. M. J.* supplement for July '40, pages 92 and 93). The Government press note in this connection is also published below.

TEXT OF THE MEMORANDUM

"We, the representatives of the U. P. Branch of the All-India Medical Licentiates' Association, beg to thank you for so kindly accepting our request to approach and to place before you the view-points of the old students of the Agra Medical School.

The inauguration of the Agra Medical College and affiliating it to the University is a step for which we had been urging the authorities for the last 40 years and we are naturally grateful to you as the same object has been achieved during the tenure of your vice-chancellorship.

The Agra Medical School, established in 1854, one of the oldest medical schools, has turned out numberless qualified men as Medical Licentiates who are at present serving the cause of the suffering humanity to the best of their experience, knowledge, and abilities. As the present changes in the institution is the result of the untiring zeal and efforts of those Medical Licentiates it is but a natural desire that their interests should be safeguarded by allowing them to appear for the Final M. B. B. S. Examination. This may be done through a short course of training in certain subjects in the case of those who have put in more the 5 years' practice, and a separate course with certain facilities for those having less than 5 years' practice or for those reading at present in the Agra Medical School. Our request is on par with the policy of the General Medical Council in Great Britain, where a medical student has to put in only 4 years' study in a medical institution and 5th year as hospital practice, before he is allowed

to appear for the final examination of the British Universities and Conjoint Boards.

In order to achieve these ends, we greatly need your full support and pray that old students of the Agra Medical School as represented by the U. P. Branch of the All-India Medical Licentiates' Association be appointed to all the Committees of the University dealing or concerned with medical education including the Senate, Executive Council and Medical Faculty by reserving a certain number of seats for them.

We thank you again for so kindly acceding to our request and giving us a patient hearing. As the Head of the Agra University with which the lot of our School is now cast, we hope you will be kindly pleased to help our legitimate aspirations for which we shall be highly grateful."

Sd. Ram Narain Lall, F. S. M. F., Rai Sahib, Prem Shankar Verma, Monohar Lal Kapur, Kunj Behari Lal Varma,

AGRA :
22nd April, 1940. }

Press Note Issued by the U. P. Government dated 31st May '40

A deputation representing the United Provinces, Provincial Branch of the All-India Medical Licentiates' Association waited on the Adviser to Governor, Development, on Saturday the 25th instant. The Inspector-General of Civil Hospitals,

Director of Public Health and Secretary to Government were also present. After a full discussion on the various requests, the following decisions were taken :—

Inspector-General of Civil Hospitals will go into the question whether it is practicable to devise a course of study at the new Medical College after attending which licentiates could be allowed to sit for the M. B. B. S. examination. Government will decide finally after considering Inspector-general of Civil Hospitals report and consult the Agra University and other authorities concerned.

Government will consider further the questions of amending the United Provinces Medical Act so as to secure a general electorate and various service matters relating to the provincial subordinate medical service and the subordinate public health service, such as restriction about promoted provincial medical service officers, officiating (as Civil Surgeons) for not more than four months; percentage of promotion from provincial subordinate medical service to provincial medical service; appointment of health officers in third-class municipalities.

As regards the request that the Indian Medical Council Act should be amended so as to afford recognition to licentiates also, the Adviser suggested to the deputation to move the Indian Medical Council first to accept their view. He was further unable to accede to the request that the age of admission of licentiates to provincial subordinate medical services should be raised from 25 to 30.

Notification by The Rules Committee, A. I. M. L. A.

Amendments and suggestions received from different persons re: changes in the Rules and Regulations of the Association.

As members of the Rules Committee appointed by the Gauhati Conference could not meet to discuss these suggestions or formulate jointly their opinion, I am getting all the amendments and suggestions, so far received, published in the *I. M. J.* September issue to enable members to move them at the ensuing Conference at Ahmedabad. Two of the members of the Committee, viz., Drs. G. C. Blaggana and Kunj Behari Lal Varma have sent suggestions which are also incorporated.

As per rule 18, the amendments are published three months before the Conference, and in the meantime the General Secretary is circulating all these amongst the members of the Rules Committee to enable them to place their views before the Conference.

10-9-40 } A. D. MUKHERJEE,
27 C. Upper Circular Road. } Secretary.
CALCUTTA }

AMENDMENTS

Rule 1. Omit "Licentiates" (Dr. K. B. L. Varma).

Rule 2. The Working office of the Association shall be at a place where the General Secretary resides, but the registered office of the Association shall be at a Central place as resolved upon in the open session of the Conference. (Dr. K. B. L. Varma).

Rule 16. Add at the end of the rule "Which trains students for the Licentiate diploma" and substitute *institution* for *School*. (Dr. U. B. N. Rao)

Rule 30 (1). Substitute "Association" for "Conference". (Dr. U. B. N. Rao.)

Rule 30 XII. Standing Committee :—Substitute "two members from each province" instead of "one". (Dr. K. B. L. Varma.)

Rule 30, XII : Instead of "Branches" substitute "Delegates". (Dr. A. D. Mukherji).

Rule 30 (Standing Committee) : The S. C. should contain members in the ratio of 2 : 1 : : Office bearers : Non office bearers.

(1) In line 1 after S. C. add "consisting of Hony. Workers of the Association, i.e., no member

of the Association can be elected to S. C. if he receives salary, allowance or honorarium from the Association."

(2) Para 30, VIII add after *I. M. J.* "if working honorarily."

(3) Para 30, X add after a member of Association "If working honorarily". (Dr. R. S. R. N. Lall).

Rule 37. Add at the end "The Conference of elected delegates shall be followed by a general meeting of the members of the Association which must be held prior to the close of the Conference session". (Dr. K. B. L. Varma).

Rule 37. Delete and substitute :—

"Annual Conference of the elected delegates of all the branches of the Association, shall be held every year preferably during X'mas in any place within India, on invitation from any Branch of the Association.

These elected delegates shall also include representatives elected by the members who are present during the Conference in the manner defined below :

Non-delegate members shall elect from among themselves one for every Twenty-five of them subject to the minimum of two.

If for lack of invitation from any branch a conference is not held successively for two years the Standing Committee will cause a conference to be held at any place and at such time as decided by the majority in the succeeding year", (Poona Branch).

Rule 38. Instead of 2 3rd substitute 1 3rd (Dr. K. B. L. Varma).

Rule 39. Change "Medical Licentiates" to "qualified medical men". (Dr. K. L. Varma).

Rule 41. Delete words "an admission fee of Rs. 2/- and" substitute "Re. 1 and Rs. 3/-" in place of Rs. 2/- and Rs. 4/- respectively. (Dr. K. B. L. Varma.)

Delete "an admission fee of Rs. 2/-" (Dr. U. B. N. Rao).

Rule 42. Substitute "Rs. 2/-" for Rs. "3/-" (Dr. K. B. L. Varma).

Add after India and Burma "which trains students for the Licentiate diploma" and substitute 2 for 3. (Dr. U. B. N. Rao).

(1) **Rule 45.** Add the following clause to rule 45 before the clause beginning with "The Subscription should be sent immediately".

"In order to ensure uniformity and maintenance of an annual correct list of members, a new member paying Rs. 4/- as annual subscription



Members of the Standing Committee of the A. I. M. L. A. who met at Bombay on 15-7-40 to discuss the position of medical licentiates vis-a-vis War Emergency Medical Service and the Indian Medical Council. Resolutions passed at this meeting are published in the August Supplement to the *I. M. J.*, pp. 110-111.

between February and November shall be liable to pay the balance due for the remaining months of the next calendar year on 1st January of that year" (Dr. K. B. L. Varma)

Rule 47. Delete "for a period of 12 months and more from the date of the expiry of his subscription". (Dr. U. B. N. Rao).

Substitute the following:—

In case a member resigns or fails to pay the subscription in due time he shall cease to be a member forthwith. But if he re-enlists himself within 12 months, no admission fee shall be charged. (Dr. K. C. Wohra).

(2) **Rule 47.** Substitute "3 months" in place of "12 months". (Dr. K. B. L. Varma.)

Rule 50. "Subscription to non-members will be Rs. 6/-." (Dr. U. B. N. Rao).

Rule 51. Delete "and 50" (Dr. U. B. N. Rao).

Rule 53. Delete "to those whose subscriptions expires with the December issue.....V. P. cards". (Dr. U. B. N. Rao).

Rule 54. Delete "shall not be liable to admission fee but". (Dr. U. B. N. Rao).

Rule 54. Delete (Dr. A. D. Mukherji).

Rule 55 (i). Add "But no branch can have the power of delegation till it has got at least 10 bona-fide members of the Association on its roll or unless two neighbouring branches combine for the purpose." (Dr. K. B. L. Varma).

Rule 56. Add: But within one municipality or district there shall not be more than one branch. (Dr. A. D. Mukherji).

Rule 60. Add after (iii) thus:—(iv) The Managing Committee shall arrange to hold General body meetings at least once in every three months and cause the proceedings to be published in the *Indian Medical Journal* regularly. (Bombay Branch)

Rule 65. Add "Annually" before "as follows" (Line 4). Delete (c) and substitute:—

That the Provincial Standing Committee members thus elected will, with a mandate from the Branches whom they represent elect annually a Provincial President, a Provincial Secretary and other office bearers before the end of October.

Add (D): The Provincial Secretary shall before the 1st September of each year, invite the Branches to elect 2 representatives on the Provincial Standing Committee and send their names to the Secretary before the 15th September of each year.

On receipt of these names the Provincial Secretary shall immediately circulate this list to each member of the Standing Committee thus constituted and invite nominations from members for the post of the Provincial President, Secretary and other office-bearers before the 30th September. The Provincial Secretary will then circulate to each member of the Provincial Standing Committee a voting paper giving the names of the candidates duly filled in which should be returned by the voters to the Provincial President before the 15th October and the President after scrutinising the papers will announce the results through the General Secretary (Poona Branch).

Rule 65. Delete the last sentence in para 1. "Its work shall be.....as follows" and insert the following in its stead "The Provincial Branch may constitute a Standing Committee as follows:"

(a) Delete this and insert the following:

(1a) Representatives elected by each of the district Branches as follows:

Up to 25 members	...	1 representative
26 to 50 "	...	2 "
51 ,, 75 "	...	3 "
76 ,, 100 "	...	4 "

The maximum number of representatives from anyone branch shall not exceed four.

(b) to be numbered as (1b).

(c) to be rewritten as follows:

(2) The Provincial Standing Committee members thus elected shall elect from amongst themselves a Provincial President, a Provincial Secretary and other office-bearers on the occasion of the Provincial conference if held or at least 2 months before the annual conference each year and the results shall be placed before the annual conference for record. (Bombay Branch.)

Rule 65 (c). Add in the end—"If a Provincial Conference is held, branches are to elect the President of the Conference by majority of votes. (Dr. A. D. Mukherji).

"Two months before the annual Provincial Conference the Provincial Secretary shall ask the members for the nomination of the President and Provincial Secretary and members of the Executive Committee who shall also be the delegates for the Conference. The Branches must send the nomination within a month of the receipt of the requisition.

The Provincial Secretary shall make a list of candidates for President and Provincial Secretary separately and majority wise and shall circulate the Branches for finally electing the President and the Provincial Secretary.

In case of emergency or other unavoidable circumstances the provisions in the rule No. 258 shall apply. (Dr. K. C. Wohra).

Delete "2 months before the Annual All-India Conference each year." (Dr. K. B. L. Varma.)

Delete words from "Its work.....as follows and all the clauses (a), (b) and (c) and substitute the following:—

"It shall elect annually its office-bearers and the Provincial Standing Committee shall include at least two representatives from each district branch" (Ludhiana Branch).

Section (a) to be substituted by the following:—

Those elected by the members of the district branches as follows:—

Up to 25 members	...	1
for each succeeding 25 or fraction thereof	...	1

Section (c) to be changed as follows:—That the Provincial Standing Committee members thus elected will, with a mandate from the Branches whom they represent, elect a Provincial President, a Provincial Secretary and other office bearers by the end of October every year and place the same before the annual Conference for record." (Provincial Secretary, Bombay).

Rule 65. (d) That the Secretary of every Branch should be ex-officio member of the Standing Committee. (Res. No. 1 of 30-10-38)—Gauhati.

Rule 65. Clauses a, b & c, to be numbered as b, c & d.

Add the following as "a" clause:—"Ex-Provincial Presidents and Ex-Provincial Secretaries."

Rule 66. To read as follows:—The Provincial Standing Committee so elected shall act as a custodian of the interests of the Medical Licentiate in its province and shall render all help to the Branches within its jurisdiction and shall be the avenue of all Branch correspondence and appeals to the higher authorities. Add new rule 66(a): The Provincial Secretary shall maintain the list of the members in his province branchwise with such particulars as are mentioned in rule 63. He shall carry out, in concurrence with the Provincial President, such instructions as the General Secretary may give from time to time and shall possess the right of attending the annual conference of the Association as an ex-officio delegate of the Province". (Ludhiana Branch).

Rule 68. From 10 to 25 members one delegate (Dr. K. B. L. Verma).

Add:—Two months before the annual conference the General Secretary shall notify the branches to

elect their delegates to the annual conference, before a specified date. (Poona).

Add the following after "Each Branch shallas fixed hereunder" the following "provided the Branch has held at least four General Body Meetings during the year as per rule No 60 (iv) and has sent the proceedings for publication in the *I. M. J.* and also taken due part in elections as per rules Nos. 65 (a), 253 and 256 and has complied with the requirements of rules Nos. 67 and 70. (Bombay Branch.)

Rule 69. Substitute "the General Secretary shall verify the eligibility of the delegate" for "the General Secretary shall submit.....membership" (Dr. U. B. N. Rao).

Rule 70. Delete "not later than 1st week of October of the year". (Dr. K. B. L. Varma).

Rule 140. Substitute the following: "He shall have the right to point out any errors or discrepancies in the order of payment of the Finance Committee and refer the bill back to the Finance Committee with his observations or comments. In case there is a difference of opinion between the Finance Committee and the Treasurer the matter shall be referred to the President for final decision." (Dr. K. C. Worha.)

Rule 182. Substitute " $\frac{1}{4}$ th of the number of members" instead of "15 members." (Dr. K. B. L. Varma).

Rule 191. Add "No decision of the Standing Committee taken by circular shall be valid unless half the members take part in the voting by post." (Poona).

Rule 200. Delete "With the consent and permission of the President of the Association" and substitute "with the approval of the Standing Committee". (Dr. K. B. L. Varma).

Rule 230. Add after "the office bearers of the Association" "and the members of the Standing Committee". (Nadia).

Rule 242. Add:—The annual general meeting of the Association shall take place along with the annual conference of the Association which shall be empowered to review the working of this conference of the Association. (Dr. K.B.L. Varma).

Rule 244. Add:—The Standing Committee should fix the place of the next conference within four months of the last conference session" (Dr. K. B. L. Varma).

Rule 252. Substitute 3 in place of 4 months and delete "who shall be a member of the Association only". (Dr. K. B. L. Varma.).

Rule 253. Add as 253 (a) "A working President of the Conference would also be elected at the Conference (if this is carried some rules regarding the duties of the President of the year and the working President to be defined)". (Dr. K. B. L. Varma).

Rule 257. In place of the "G. S." substitute "The President of the year." (Dr. K. B. L. Varma).

Rule 260. Make 4 months instead of 6 months. (Dr. K. B. L. Varma).

Rule 266. Add the words "of the province in which the conference is held" between "Licentiate" and "as a whole". (Dr. U. B. N. Rao).

Rule 267. Substitute "four" instead of "three". Add sub-section (iv) "Delegates representing non-delegate members attending the conference vide rule No 37, second para." (Dr. U. B. N. Rao).

Rule 267. (iii) add "12. All the members of the Standing Committee. (Nadia).

Add "IV.....Ex-Presidents". (Dr. K. B. L. Varma)

Rule 267. add... (iv) All delegates are to pay a delegation fee of Rs. 5/- and Rs. 5/- as expenses for board and lodging to the R. C. (Dr. A. D. Mukherji).

Rule 272. Change to as follows:—

All resolutions to be moved before the Subjects Committee of the Conference shall be notified to the General Secretary on month before the date of the Conference; the General Secretary shall tabulate these resolutions and send them to the delegates at least a week before the conference. No other resolution will be taken up by the Subjects Committee unless with the specific permission of the President, who may allow any resolution of urgent importance as a special case". (Dr. U. B. N. Rao).

Rule 284. Change to as follows:—"The agenda of the conference shall be prepared by the General Secretary in consultation with the Chairman of the Reception Committee." (Dr. U. B. N. Rao).

Bye-laws:

8. Add after "office bearers of the Association" the words "Excepting General Secretary and the Managing Editor, *I. M. J.*"

10. Delete "and Branch".

31. Delete the second and third sentences and substitute: The total print order shall not exceed what may be sanctioned by the F. C. (Dr. U. B. N. Rao).

Section 5 Organisation

Add the following new sub-section subsequent to the sub-section "F. *Indian Medical Journal*".

The Association shall maintain a Library for the use of its members. It shall be under the charge of the Editor, *I. M. J.* It shall consist of all the past copies of the *I. M. J.*, all the journals and books received in exchange for review.

The Association shall sanction each year an amount fixed from time to time by the Annual Conference for the purchase of the books. For the 1st year Rs. 1000/- be sanctioned.

The books shall be selected by a Sub-Committee consisting of the Editor, G. S., and three others appointed by the annual conference. It shall call suggestions from all the Branches which shall be given due consideration in the selection of the books.

Rules:—

1. The members shall apply for the books through their respective branch secretaries.

2. In case a member is not attached to any Branch he shall apply through the respective Provincial Secretary.

3. Only two books will be lent at a time for a period not exceeding one month.

4. If a member wants to retain the book longer he shall apply to the Editor, *I. M. J.*, and the period can be extended to one month more if the book is not required by any other member.

5. The outward postal charges shall be defrayed by the Association and the members shall defray the return postal charges. (Dr. K. C. Wohra).

Comments on the proposed amendments to the Rules and Regulations of the All-India Medical Licentiates' Association by Dr. Gian Chand Blaggana:—

Rule 1. As long as there are Licentiates in the country, the word "Licentiates" has to remain. There is no way out of it.

Rule 2. In view of the autonomous provinces working independently of one another, there is hardly any sense in having an All-India organisation and to waste thereby a huge sum of money on a central building. Moreover in view of the coming reforms in the medical education in the country, our Association will ultimately merge into the *I. M. A.*

Rule 30. Two, including the Provincial Secretary, is quite a sufficient number to represent a province on the Standing Committee. But I don't think it would become unwieldy if one more representative from each province is added to it.

Rule 37. Dr. Varma should be a bit more explicit in his proposal.

All-India Medical Licentiates' Association Family Fund

I am forwarding herewith the minutes of the Special General Body Meeting held on 23rd June, 1940 at 5-30 P. M. for publication.

YOURS SINCERELY,
U. B. NARAYANRAO.
Secretary.

Members present: Dr. M. Johnston, Dr. V. K. Prabhudesai, Dr. A. D. Mastakar, Dr. V. V. Oak, Dr. V. D. Sathaye, Dr. U. B. Narayanrao and Dr. U. S. Rao.

82 proxies and 26 opinions were received in the office.

Dr. M. Johnston was unanimously elected to the chair in the absence of the President.

16 proxies were in favour of Dr. Shah and 4 more also in favour of Dr. Shah but failing him in favour of (No. 20 Dr. Mastakar, No. 28 Dr. Narayanrao, No. 43 Dr. Narayanrao and No. 67 Dr. Narayanrao) and 31+3 (34) proxies in favour of Dr. Narayanrao, and 1+1 (2) in favour of Dr. Mastakar and 30 (thirty) in favour of Dr. Oak.

On a point of order raised by Dr. V. V. Oak whether the calling of this meeting was legal it was unanimously resolved that the meeting was in order.

Notice on behalf of Dr. G. G. Wadhvani, Director, by Messrs. Mohile Parick and Manecklal, Solicitors, was read and resolved that the following reply be given to them:—

(1) Re: date of notice of the circular is 12th June, 1940.

(2) The Managing Committee has ceased to exist since 1937 and the Working Committee has taken its place.

(3) The notice is according to rules.

Dr. Chobhe's wire of 22nd June, 1940, read and recorded.

Dr. Shah's letter dated 20-6-40 was also read and recorded.

The report of the Working Committee was read and resolved as follows.

(1) This General Body meeting resolves that the Fund should be wound up for purpose of distribution of the assets, amongst its members in proportion to the payments made by each member. But this General Body meeting in view of section 88 (4) of the Insurance Act, of 1938, (the proprietors of the Fund i. e. this General Body can wind up the Fund, only either for reconstruction or for amalgamation) and in further view of the majority opinion to wind up the Fund, requests the Insurance Superintendent to grant the necessary permission for the same.

Rule 38. 2/3rd must remain.

Rule 39. "Qualified Medical men" is a vague term. It does not convey any meaning. The original rule need not be disturbed.

Rule 41. The rule must remain as it is. Rs. 6/- for a new member is not a big sum. At the most we could do is to reduce the admission fee to Re. 1/.

Rule 42. For students the subscription should be Rs. 2/- instead of Rs. 3/-.

Rule 47. The membership register should as far as possible be a permanent one. The names should be struck off only when the subscriptions are not received for 12 months or more from the date of the expiry of the subscription.

Rule 51. Delete and 50.

Rule 55. 10 shall be the least number entitling a branch to be represented by a delegate.

Rule 65. Delete the words from "Its work..... as follows" in lines 3 and 4, and delete all the clauses (a) to (c) and substitute the following. It shall elect annually its office-bearers and the Provincial Standing Committee which shall include at least two representatives from each District Branch.

Rule 140. The Finance Committee should be the final authority.

Section 5 (Sub-Section F) Dr. Wohra's proposal to have a library should receive due consideration.

Rule 182. 1/4th of the number of members is more reasonable than the figure 15.

Rule 191. Dr. Pranjape's amendment appears to be very sound.

Rule 242. Dr. Varma's amendment seems to be absurd.

Rule 244. Dr. K. B. L. Varma's proposal is a sound one.

Rule 260. 'Four months' is quite reasonable.

Rule 266. The surplus should be spent in the interest of the Licentiates of the province in which the Conference is held.

Rule 267. Ex-officio delegates should be restricted to the office-bearers only.

Rule 272. Dr. Rao's proposal is very sound.

Rule 284. Dr. Rao's proposal is more reasonable than the original rule.

Bye-law 8:—None of the office-bearers be exempted.

Bye-law 10:—Provincial and Branch Secretaries do not have any advance money in their hands.

(2) Further resolved that if permitted this General Body appoints the following liquidators to distribute the assets as follows:

1. Dr. Johnston,
2. Dr. U. B. Narayanrao, and
3. Dr. A. D. Mastakar.

The assets be distributed amongst the members pro-rata after returning the deposits.

(3) If this is not allowed by the Insurance Superintendent this General Body meeting authorises the Working Committee to do according to the directions of the Insurance Superintendent.

(4) Regarding items No. 4 & 5, resolved that the Working Committee be authorised to do the needful as per last para of resolution No. 1 above.

(5) In view of this meeting's decision the usual Annual General Body meeting be postponed until the future of the Fund is decided.

(6) Further resolved that the proceedings of this meeting be sent to all the members of the Family Fund and to the *Indian Medical Journal* and to the Insurance Superintendent.

Dr. U. S. Rao proposed a hearty vote of thanks to the Chair and the meeting terminated.

(Sd). M. JOHNSTON,
President 23-6-40.

(Sd). U. B. NARAYAN RAO,
Secretary.

Dr. Nagindas D. Shah, Member of the Family Fund, Ahmedabad, notifies that he would move the following in the ensuing Conference at Ahmedabad.

Resolution No. 1. This Conference resolves that the Family Fund be wound up and its assets be distributed according to rule in proportion to the payments made by the members of the Family Fund. The liquidators should be appointed either by the members of the Fund or by the Court to wind up the Family Fund forthwith.

Resolution No. 2. The expenses made by the Secretary and the Managing Committee changed into the Working Committee to shuffle the Family Fund without the concensus of opinion of all the members of the Family Fund. The opinion of the Actuary and the sanction of the Insurance Superintendent, New Delhi, were not necessary under the circumstances.

30th ALL-INDIA MEDICAL AND SANITARY EXHIBITION, AHMEDABAD

(Organised by the Reception Committee of the 30th Conference of the All-India Medical Licentiates' Association)

- The 30th All-India Medical and Sanitary Exhibition will be held at Ahmedabad during the third week of December 1940.
- Exact dates will be announced in due course.
- Since a large number of delegates and visitors from all parts of India are expected to attend the 30th Conference of the All-India Medical Licentiates' Association, this Exhibition would offer unique opportunities for medical and surgical manufacturing firms to exhibit their products, and explain them to the pick of the medical profession.
- Applications for booths, rates and other particulars should be addressed, as early as possible, to:—

Dr. Ratilal K. JHAVERI, L. C. P. S. (Bom.), L. M. (Rot.),
SECRETARY, 30TH ALL-INDIA MEDICAL AND SANITARY EXHIBITION,
SURYA BHUWAN, DARIYAPUR-CHAR RASTA, AHMEDABAD.

That this is so is evident from the summary of different treatments recounted by Napier¹. Mc Swiney advises dietary treatment with iron and arsenic by mouth or injection. Green-Armytage advises termination of pregnancy. Wills and Mehta claim satisfactory results from use of liver extracts. The former was the first to draw attention to the value of marmite. Mudaliar finds no response from the use of marmite but advocates liver extract and iron. Mitra is of the opinion that cure is never vouchsafed unless pregnancy terminates. Napier himself puts his faith in crude liver extract. Transfusion of blood has no place in the treatment of pregnancy anaemia as it is more likely to cause abortion than not. It is thus obvious that no standard treatment has yet been evolved, and perhaps could not be evolved till the aetiology of pregnancy anaemia is determined with at least approximate accuracy. The most rational line of treatment to be followed at present is to determine the haematological type of anaemia in every individual case, and prescribe liver extracts or iron or marmite according to indications. This by itself is bound to prove infructuous in not a little number of cases unless the environment of the patient and her dietary history are studied with care, and corrected if they are at fault. And since a larger number of cases occur among primiparae, it is obvious that everyone of them should be given a preventive treatment by way of a balanced diet, at least throughout the period of her pregnancy whether she is going to develop anaemia or not.

Treatment of Scorpion Sting

Scorpion stings are quite common in our country but death as a result thereof is rather unusual. Of the scorpions, the black variety is most dreaded, because its sting is most poisonous and occasionally fatal. The symptoms of shock, collapse and creeping pain along the course of the nerve affected suggest scorpion poisoning as of the nature of a neuro-toxin. Hassan and Mohammed of the Cairo University suggest that these effects are due to the stimulating action of the scorpion toxin on the autonomic nervous system². They have found that in rabbits and dogs the toxin produces temporary hypoglycemia, acceleration of the heart beat, relaxation of uterine muscles, increase of salivary secretion and lacrimation and diarrhoea. These they attribute to the stimulation of the parasympathetic system, and have led them to the

¹ Anaemia in Pregnancy in India, *Indian Med. Res.*, April 1940, p. 1009.
² *Lancet*, June 1, 1940, p. 1001.

Report of the P. H. Commissioner for 1939

An outstanding feature of health conditions in India in the year 1939 was a large decrease in the incidence of cholera, states the Public Health Commissioner in his Preliminary Report for the year 1939, which is published for the first time this year.

Publication of a preliminary report has been found necessary owing to unavoidable delay in preparing the full report, which contains a great deal of statistical and other material relating to the wide variety of health activities of the whole sub-continent of India.

The extent to which the incidence of cholera decreased may be judged from the figures for cholera deaths in the Punjab and Sind, in which provinces there were respectively 19 and 3 deaths in 1939 as against 5,760 and 343 in 1938. In other provinces, too, cholera prevailed in a relatively milder form.

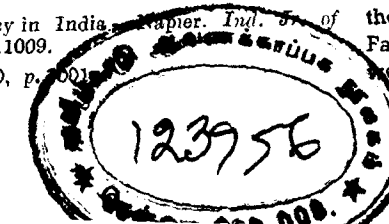
It is reported that the incidence of plague also decreased in 1939 and that in regard to small-pox, although the majority of the provinces reported epidemic prevalence of the disease, Bengal and Sind experienced only mild outbreaks.

ADVISORY HEALTH BOARD

In the field of public health administration, the most important event was the second meeting of

study of the action of paralytics of the sympathetic and parasympathetic nerves as a means of finding out a drug or drugs as antidote to scorpion toxin. After a series of experiments, they conclude that (1) atropine alone or ergotoxin alone may save rats injected with a lethal amount of scorpion toxin; (2) a combination of the two drugs is more effective than one alone; and (3) these drugs can be employed successfully in the treatment of scorpion sting in man. This is a welcome piece of research, and its utility to this land of scorpions is obvious. The authors suggest, however, that if the toxins are large the drugs may fail to paralyse the autonomous nervous system, but we believe with them that the scorpion seldom injects so much toxin in one sting. This is proved by the infinitesimal mortality due to scorpion poisoning. Therefore one may be justified in hoping that the application of the procedure recommended by Hassan and Mohammed will be verified by experience and experiments in our own country.

We are informed that Dr. Mathura Prasad Varma of the U. P. Subordinate Medical Service has been promoted to the Provincial Medical Service and conferred the honorary diploma of the Fellow of the State Medical Faculty. We congratulate Dr. M. P. Varma on this well-deserved distinction.—*Ed. I. M. J.*



the Central Advisory Board of Health in January 1939.

This Board, which consists of representatives of the Central and Provincial Governments and of certain Indian States, was inaugurated in June 1937 for the purpose of providing a forum for the discussion and formulation of public health policy. Within the short period of its existence it has already given proof of its usefulness.

The problems associated with the health of the mother and child are of supreme importance to every country and, in India, the high rates of child and maternal mortality place this branch of health work in the forefront of the national health programme. A special committee appointed by the Board reviewed the whole question and submitted a report, which has been approved by the Board and which should provide for many years a sound basis for the orderly development of maternity and child welfare work in this country.

COORDINATION OF ACTIVITIES

Another important question is that of coordinating the activities of the civil, military and railway health authorities in matters of common concern, in order to avoid unnecessary overlapping of effect. For this purpose the Board suggested the formation of local committees representing all three interests for the study of common health problems and for the formulation of suitable methods of solving these problems. Encouraging reports have been received regarding the development of such co-operation in many places.

The important part that festivals and large gatherings of pilgrims play in the spread of cholera is a subject of great concern to the health authorities. While an improvement of the sanitation of the villages and towns through which the pilgrims pass is the most effective means of prevention, its realisation must be slow in view of the cost involved.

In the circumstances, the most practical method of minimising the spread of cholera appears to be the provision of mass protection through anti-cholera inoculation. The possibilities of introducing a system of compulsory inoculation among pilgrims was investigated in 1939 by a special committee and their report will shortly be presented to the Board for its consideration.

ADULTERATION OF FOOD

Control of the purity of food supplies is an important function of health administrations and one of the means of achieving this end is by the enforcement of the food Adulteration Act. A committee was appointed by the Board to report on the question of food adulteration in India and this committee held two meetings in 1939.

The problem has three aspects: (a) standards of purity for different articles of food and the standardisation of the technique employed in food analysis, (b) food legislation, and (c) administration.

In regard to the first the present position in India is very unsatisfactory. For the same

article of food different provinces, in a number of cases, have different standards. This anomaly impedes the free flow of inter-provincial trade and causes considerable inconvenience to traders. The question of food standards has, therefore, been studied by the committee and its recommendations, which are calculated to relieve the existing complicated situation, will shortly be submitted to the Board for its consideration.

The modernisation of food legislation in India and the application of the provisions of such legislation by suitable administrative action are equally important aspects of the food adulteration problem.

Mention may also be made of other directions in which it has been sought to secure uniformity of policy between the different Governments in the improvement of health conditions. Common lines of policy have been recommended by the Board regarding the expansion of health services, coordination of effort between the Medical and Public Health Departments and the teaching of hygiene in medical schools and colleges.

Such subjects as nutrition and quinine policy have also been discussed by the Board.

"This brief review of some of the important subjects discussed and the recommendation made by the Board," says the Public Health Commissioner, "indicates that the wish expressed by His Excellency the Viceroy at the inaugural meeting of the Board in June 1937 is being increasingly fulfilled, namely, that the Board, in its capacity as an advisory body in organic union with the Central Government, will be capable of bringing to a common denomination the varied opinions of Governments throughout the subcontinent in matters pertaining to Public Health."

INCREASING INTEREST IN RURAL HEALTH

A welcome feature is an increased interest in the welfare of the rural population. The expansion of medical relief, the provision of safe water supplies, experiments to evolve a cheap system of night-soil conservancy and the provision of skilled attendance at childbirth are some of the directions in which provincial health authorities are earnestly endeavouring to make progress.

The Provincial Governments have increasingly interested themselves in improved agricultural practice and animal husbandry, the consolidation of agricultural holdings and the provision of better village communications and of other amenities designed to build up a corporate life in the rural areas. Instances are quoted from the Punjab and Bengal of local efforts by the people to provide themselves with a health service for preventive and curative medical relief on a co-operative basis.

"This is all to the good", the Public Health Commissioner points out, but it is useful to remember that "the experience of other countries, European and Oriental, indicates that little lasting effect can be produced in less than a generation", and he urges the need for Governments and social reformers to keep up the struggle for a sufficiently long period.

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FAMINE RELIEF IN THE PUNJAB

Hissar district, in the Punjab, was subject to wide-spread distress as the result of the failure of monsoon rains during two or three successive years. Prompt measures were adopted by the authorities to improve the diet of the people by the supply of germinated grain and of Indian gooseberry (Amla) for the treatment of scurvy and other food deficiency conditions which are developed among the people.

Provision for adequate medical aid was made on a sufficiently large scale and arrangements were also made for reducing the work allotted to the people. The effect of all these measures was to show a considerable reduction in the sickness and mortality rates of the population in 1939 compared with 1900, a year of famine stated to be comparable in severity with that of 1939. The death rate from all causes in 1939 was 57 per cent less than that for 1900. The success achieved may be attributed largely to environmental sanitation, purification of water supplies and to nearly 195,000 inoculations against cholera carried out during 1939 among the people.

DELHI URBAN HOUSING SCHEME

A development of considerable importance took place during the year in regard to urban housing conditions in the old city of Delhi.

The principle has been accepted by Government that assistance should be given to persons dispossessed by slum clearance schemes to enable them to obtain not only alternative accommodation but also accommodation of suitable standards from the hygienic point of view. The minimum rent for houses fit for human habitation was assessed by the Delhi Improvement Trust at Rs. 5/- per month and the lowest income which afford to pay this rent at Rs. 30/- per month. It has been accepted that a family with an income less than this amount cannot pay for a house fit for human habitation and that it, therefore, needs assistance for rehousing. Three types of houses have been proposed, one-roomed, two-roomed, and three-roomed. Not more than three adults (counting two children as one adult) are to be permitted to live in a single roomed house and not more than five adults in two-roomed houses, while larger families would be permitted to live only in three-roomed houses. Standard plans have been prepared for these types of houses, the approximate cost of which will be Rs. 450/-, Rs. 600/-, and Rs. 750/- according to class.

HIRE PURCHASE SYSTEM

The experiment proposed in Delhi is to make it possible for the poor class families to own their own houses on the hire purchase system. The average capacity for rent of the families to be dispossessed is estimated at Rs. 2-13-0 per month while a return of Rs. 5-3-6 per month is stated to be necessary to meet the total cost on a non-profit basis, including the charges for equated instalment payments over a period of 20 years. Any dispossessed family which can pay the rent of Rs. 3-8-0 per month will be admitted to the benefit of ownership through

the hire purchase system, the difference between this amount and the minimum rent for covering the cost of the scheme as indicated above, being met by grants from the proceeds of a special entertainment tax imposed by the Government.

MADRAS PUBLIC HEALTH ACT

In 1939 a notable advance in Madras Presidency was the enactment of a comprehensive Public Health Act. A feature of the Act is the strengthening of the hands of the Government, of the Director of Public Health and of the local health officer in order to enforce certain minimum standards of efficiency in the health administration of local bodies.

The Government have taken powers to compel local bodies to appoint health officers and to determine the scales of salary and conditions of service of these officers. The Director of Public Health has been given a statutory right to recommend for adoption by local authorities such measures as may be necessary for improving the public health administration in the local area or for safeguarding the public health in that area. Local authorities are required to carry out these recommendations subject to a right of appeal to the Government.

HEALTH OFFICERS' POWERS

The health officers have been given control over the health staff employed by local bodies and the Director of Public Health has been empowered to transfer the staff maintained by one local body to another, subject to such rules as may be prescribed by the Government. Health Officers have been granted executive powers in respect of the various health functions they have to perform within their areas of jurisdiction.

In respect of infectious disease, the Government have been given power to employ additional temporary staff in the event of an outbreak or of a threatened outbreak. Additional powers have also been provided under various heads of public health activity, such as maternity and child welfare, control of insanitary buildings and overcrowding, registration of lodging houses, town planning, supervision of fairs and festivals and control of food supplies.

In order to provide for the orderly development of public health administration in the province, the Act has made provision for a Statutory Board of Public Health with the Minister for Public Health as the Chairman and the Minister for Local Administration, the Surgeon General, the Director of Public Health, the Public Health Engineer, another officer nominated by the Government and three nominated members of the Legislature as members.

THE CAMPAIGN AGAINST MALARIA

That malaria is undoubtedly the most important public health problem in India is evidenced by the fact that many millions of cases occur every year and that, of the annual total of over 6,000,000 deaths, about 20 to 25 per cent are attributable to this cause.

The distribution of malaria is illustrated by a coloured map which accompanies the Public Health Commissioner's Preliminary Report for 1939. This map shows that, except for areas 5,000 feet above sea level and a few widely separated regions, namely, a portion of the Brahmaputra Valley in Assam, Eastern Bengal and two strips of territory on the east coast of Madras Presidency—the remaining parts of India are subject to outbreaks of malaria of varying intensities. According to the Report this wide distribution of disease and the liability of large tracts to periodical outbreaks of epidemics together contribute to make malaria the most important health problem in India.

SUCCESSFUL CONTROL MEASURES

The malaria problem in India may be classified under three heads,—urban, industrial and rural. In large cities, such as Bombay and Delhi, it has been shown that a considerable measure of success in the control of mosquito breeding and of the incidence of the diseases can be achieved by properly directed measures. As regards industrial malaria, control measures are being successfully carried out on many tea and coffee estates and rubber plantations and in mines, sugar factories, cotton mills and other industrial concerns in different parts of India, mainly through the activities of the Indian Branch of the Ross Institute.

Malaria control is also being carried out on railway systems, the Bengal-Nagpur and Eastern Bengal Railways employing special officers for the purpose. Among the anti-malarial measures adopted by the railway authorities, an important method is that of spraying employees' quarters with insecticides in order to kill adult mosquitoes.

STUDY IN VILLAGES

The problem of rural malaria, says the Public Health Commissioner, is the most difficult of a solution, because the village communities are widely scattered and are very poor. The general policy adopted by the provincial authorities is to attempt to provide an adequate supply of quinine and of cinchona febrifuge, to popularise the use of these drugs as far as possible by means of propaganda and teaching in the schools, and to provide for distribution by special staff, travelling dispensaries and other agencies in localities visited by regional epidemics.

The problem of controlling rural malaria requires intensive study and this has been undertaken in certain selected areas in the provinces of Assam, the United Provinces, Delhi, Bengal and Madras through grants financed partly by the Government of India (through the Indian Research Fund Association) and partly by the Provincial Governments concerned.

The experiments are being conducted over a period of five years and are designed to devise and test out methods of control under rural conditions, in order that they may subsequently be applied over more extended tracts of the country.

MORE LEPROSY IN TOWNS

A conservative estimate of the incidence of leprosy in India places the figure in the neighbour-

hood of 1,000,000 persons affected although the number of infectious cases may be only a quarter of this figure. While leprosy in India is essentially a rural problem, the commingling of the rural and urban populations that increased facilities for transport has rendered possible, has tended in recent years to produce a rise in the incidence of leprosy in towns.

The prevalence of the disease is highest along the eastern coast of the peninsula and in the western parts of Bengal. From this area the disease gradually diminishes in incidence to the north and west, until a fairly wide area of comparative freedom from leprosy is reached, comprising the northern half of Bombay Presidency, Gujerat, Rajputana, the western portion of the United Provinces, Punjab, the North West Frontier Province, Sind and Baluchistan.

Anti-leprosy work in India is shared by official and voluntary organisations. The principal voluntary organisations are the Indian Council of the British Empire Leprosy Relief Association with its provincial branches and the Mission to Lepers. There is considerable coordination of effort between the provincial health authorities and the provincial branches of the British Empire Leprosy Relief Association. Anti-leprosy work has included surveys to determine the extent of the incidence of leprosy and of the types of cases present in particular localities, the provision of treatment centres, training of medical officers in the diagnosis and treatment of the disease, and propaganda. Laboratory and field research into various problems have also formed an important part of the activities.

The Mission to Lepers is the largest organisation specialising in medical relief for lepers. It maintains a number of homes for lepers in different parts of the country and, while the larger have resident medical officers, the smaller institutions receive periodical visits from doctors who give treatment to suitable cases.

CAMPAIGN AGAINST TUBERCULOSIS

Although the organised campaign against tuberculosis in India received a great impetus in 1929 when it was decided to devote the King George Thanksgiving Fund of Rs 9,50,000 to anti-tuberculosis work, the necessity for a widening and intensification of the campaign against the disease was recognised by Her Excellency the Marchioness of Linlithgow soon after her arrival in India. As a result Her Excellency made an appeal on behalf of the King-Emperor for funds to place the anti-tuberculosis organisation in this country on sound and lasting basis.

The response was wide and generous and a sum of Rs.79,00,000 was collected. In February 1939, Her Excellency's objective was achieved by the formation of the Tuberculosis Association of India which incorporated the King George Thanksgiving (Anti-Tuberculosis) Fund. Of the total amount collected five per cent was retained by the Central Organisation, the remaining 95% being returned to the provinces. Provincial and State branches of the Association were established during the year.

FOREIGN MEDICAL NEWS

Our U. S. A. Letter

(From Our New York Correspondent)

SHORTAGE OF EUROPEAN DRUGS

The United States is in much better position with regard to drugs and medicinal chemicals than it was at the outbreak of the World War in 1914, but the market for botanical drugs has been disrupted for months by the present conflict. Germany, Hungary, Czechoslovakia, Yugoslavia, Poland and Russia supplied the bulk of these imported by the United States. If Italy is going to join Germany it will be virtually impossible to obtain any botanical drugs from Europe. These drugs include ergot, lavender flowers, orange peel, cascara, cantharides, camomile, malva flowers, buchu, henna, peppermint, gentian arnica flowers, senega, anise, juniper berries, poppy, fennel, and arabic, asafetida, myrrh and benzoin gums.

When Germany invaded Norway and the Scandinavian area became a theatre of war, the source of supply of 70% of the cod liver oil used in the United States was immediately cut off, according to Mr. Rodman's report to the American Pharmaceutical Association. The hostilities came at a bad time, for the cod liver oil industry, he said, as spring is the big cod fishing season and stocks of the oil in this country are at their low point of the year following heavy winter sales when vitamin products are in the greatest demand. The cod liver oil shortage resulting from war will, however, speed up research in the production of substitute fish liver oils and the manufacture of synthetic vitamins A and D. Iceland and Japan have been supplying 30% of U. S. cod liver oil import in recent years.

SULFANILAMIDE AND GONORRHOEA

Among 100 men with gonorrhoea, unsuccessfully treated with sulfanilamide, 95% were cured by sulfanilyl-sulfanilamide (disulon). The series published by Alexander, Baylor College of

The Central Association appointed as its Medical Commissioner Dr. C. Frimodt-Moller, whose wide experience of tuberculosis work in India, extending over the last thirty years, is well known.

The intention of the Association is that the Provincial and State Associations shall concentrate on the establishment and maintenance of clinics associated with home visiting and home treatment, as well as the establishment of sanatoria and after-care settlements in so far as funds permit, while the central organisation shall concentrate on assisting research, on the provision of technical advice to the branch organisations, on the general coordination of effort through the country and, in particular, the establishment of a central model clinic in Delhi.

(To be Continued)

Medicine Forbes and Holloman, included cases of anterior and posterior urethritis, prostatitis and seminal vesiculitis. Many patients had taken more than 260 gm. of sulfanilamide over a period of some months without cure. Disulon was administered in dosages of 5 gr. (0.3 gm.) four times a day for a period of 4 or 5 days. This schedule was followed by a five-day rest period, and the course repeated until a satisfactory result was obtained or until it appeared certain that the drug was not going to benefit the patient. An adequate total dosage of disulon in gonorrhoea should be 20 to 30 gm. (300 to 450 gr.) given in daily doses of 1.3 to 2 gm. (20 to 30 gr.). If there is no response, the drug should be discontinued to avoid undesirable toxic effects. Pelouze had said: "If sulfanilamide acts favourably upon gonorrhoea, the patient is almost or entirely symptom-free by the end of five days."

PROMISCUOUS USE OF BARBITURATES: HOSPITAL DATA

W. E. Hambourger, Cleveland, Department of Pharmacology, Western Reserve University School of Medicine, had been requested by the Council on Pharmacy and Chemistry of the American Medical Association to study the promiscuous use of barbiturates, particularly with reference to the dangerous use of these products by the public. In his analysis of Hospital Data, he gives the following figures and facts. During one decade, 13 hospitals with combined admissions of more than 1,250,000 received 643 cases of acute barbiturate poisoning. One out of every 1,900 admissions was due to acute barbiturate intoxication.

Barbiturates were responsible for 1/7 of the acute poisonings due to all drugs except alcohol and carbon monoxide. The fatality rate was 7.3 per cent. The lowest fatal dose for barbital reported by these hospitals was 30 grains (2 gm.); the medium dose in fatal cases was 90 grains (6 gm.). For phenobarbital the minimum fatal dose reported was 25 grains (1.7 gm.); the medium dose 142 grains (9.5 gm.). The wider margin of toxicity for phenobarbital is probably accidental.

Hypersusceptibility to therapeutic doses of a barbiturate was charged in 13 cases admitted to ten of the hospitals,—about one case for every 90,000 admissions. Addiction to barbiturates was the reason for admitting 85 patients out of the total of 1½ millions admitted for all causes, about one barbiturate addict in every 15,000 admissions. Barbiturates accounted for more than 10 per cent of all addiction cases, excluding chronic alcoholism, admitted to the thirteen hospitals. Two-thirds of the barbiturate addicts who gave information claimed that they became familiar with the drug through a physician. Nearly third of the addicts for whom the information was recorded developed craving when the barbiturate was withheld. None showed any serious withdrawal symptoms. No factual data could be obtained concerning the involvement of barbiturates in automobile accidents and criminal assaults, although from the nature of the action of these drugs this might be expected.

The evidence indicates that these drugs are responsible for many suicides, successful and attempted, as well as for many so-called "accidental" intoxications. As each new barbituric acid derivative becomes publicized, it soon becomes involved in cases of poisoning. Barbiturate addiction is fairly common.

BRONCHOSCOPY AND ASTHMA

In a report given by Francis M. Rackemann, Harvard Medical School, on the use of drugs in asthma, he mentions the influence of bronchoscopy on asthma. Bronchoscopy has been described as life saving in asthma, since by it a mass of sticky exudate can be sucked out of the bronchi. Since iodized oil is often injected at the time of bronchoscopy to study the bronchi by x-rays, it has been observed by several authors that the iodized oil itself has a good effect on the bronchial infection, and so here is another therapeutic approach to a difficult problem. Iodized poppy seed oil has been instilled into the trachea in doses as large as 20 cc. without difficulty, and often with good results, after suitable local anesthetizing treatment of the pharynx and throat with cocaine and procaine. Multiple instillations are reported in many instances.

Our Canadian Letter

(From Our Own Correspondent)

ACTINOMYCOSIS IN CANADA

H. S. Morton, Montreal, pointed out that because actinomycosis is rarely diagnosed, many cases are missed and an understanding of the disease lags far behind that of other chronic granulomas. Until a universally accepted bacteriologic classification is available clinicians will have to be content with the presence or absence of the ray fungus and call the disease actinomycosis. The appropriate drug or vaccine will have to be determined in each individual case. The many forms of treatment testify to the inefficiency of any one type of therapy. Of the drugs, potassium iodide in moderate to large doses, i. e., from 150 to 300 grains (9.7 to 19.5 gm.) daily, is still the best therapy, according to Morton. Sulfanilamide used in two cases showed definite improvement in one but there was no observable effect in the other. This corresponds with other reports, and the conflicting accounts may perhaps be explained by peculiarities of the strain as well as by the concomitant infection present. Surgical treatment is imperative in nearly all cases. When complete excision is possible it should be carried out; otherwise incision and drainage of all abscesses is indicated, combined with such other treatment as may seem best suited to the case.

HEPARIN AND THROMBOSIS

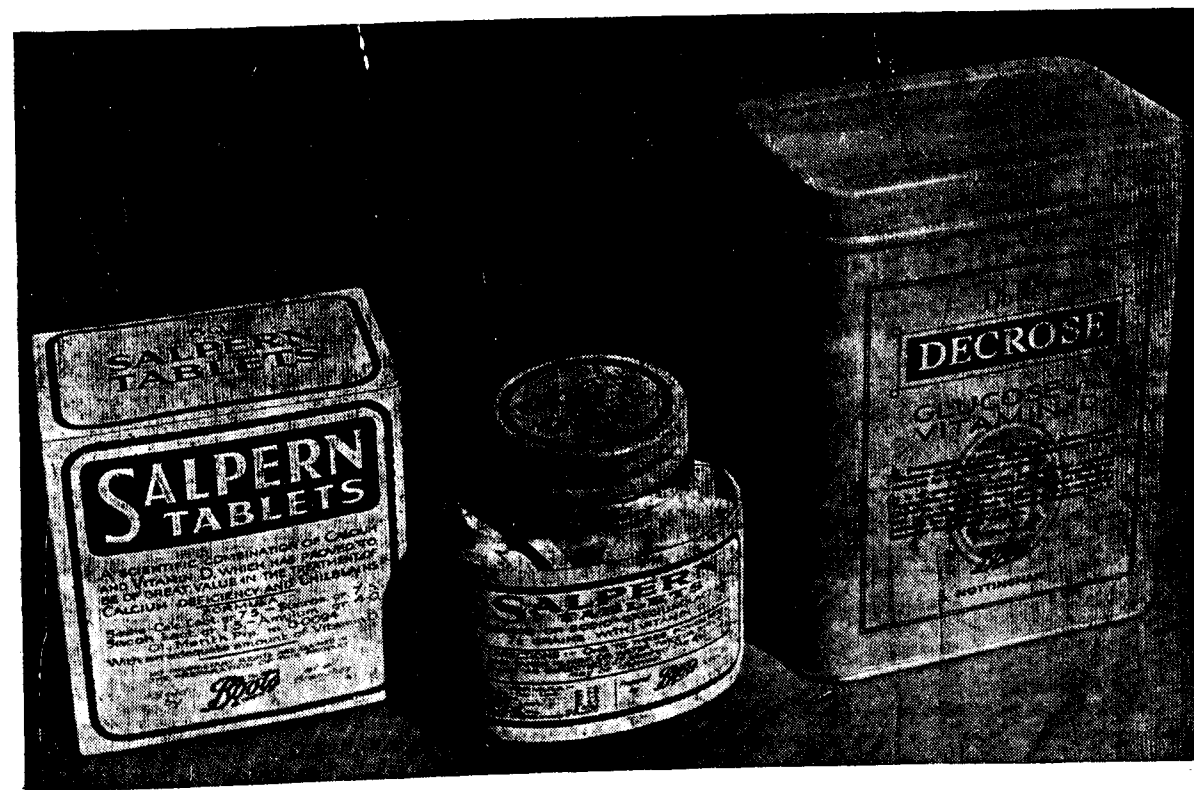
The isolation of relatively pure heparin has led to an extensive examination of the relationship of this anticoagulant to the problem of thrombosis,

particularly, by Best (insulin-noble prize winner) and his collaborators at Toronto. According to an editorial of the Journal of the American Medical Association it was demonstrated that heparin greatly inhibits the formation of thrombi produced in animals by mechanical or chemical trauma to the intima of large exposed veins. The ability to produce coronary thrombosis in dogs by means of sodium ricinoleate was also greatly diminished in heparinized animals, as compared to control dogs which did not receive heparin. These successful experiments have stimulated the use of pure heparin in clinical cases of thrombosis and remarkable results have been reported at the Toronto General Hospital and in Stockholm. (Heparin so far is not generally available for clinical use). Heparin has been employed post-operatively with a high degree of success; pulmonary embolism or thrombophlebitis was not observed in instances in which these complications might ordinarily be expected. Although it is somewhat difficult to evaluate postoperative treatment for the prevention of thrombosis, more direct evidence of the value of heparin may be obtained in the treatment of an existent thrombus. In recent preliminary publications, suggestions have been made for the use of intravenous heparin drip, in conjunction with sulfapyridine, in the treatment of subacute bacterial endocarditis. The prevention of embolus formation greatly diminishes the nidus for growth of bacteria and vegetations.

Experiences in heparin administration have been reported by Mc Clure and Lam. Eight patients with postoperative pulmonary embolism have been treated by general heparinization. All recovered, but one required a second course of heparin when a second infarction occurred five days after the first course was ended. Heparin was used with gratifying results in one case of embolectomy of the popliteal artery and one case of probable thrombosis of the posterior tibial artery. The purified heparin that is available at the present time is nontoxic when given intravenously. It is economically feasible to use heparin in the treatment of selected cases.

RESEARCH ON NUTRITIONAL VALUES

Tosdall, Toronto, and his collaborators compared the nutritional value of spinach as prepared for consumption with that available in canned tomatoes, with particular respect to the child's diet. Cooked spinach and canned tomatoes are approximately of equal value as a source of iron for both the prevention and the cure of nutritional anemia—in spite of the fact that the total iron content of cooked spinach is more than three times greater than that of canned tomatoes. Spinach, although it contains 0.19 per cent of calcium, —an amount which is twenty-times greater than that found in tomatoes,—actually tends to produce a negative calcium balance. On the other hand, the retention of the calcium in cooked tomatoes is excellent. The vitamin A content, according to the authors, of cooked spinach is approximately four-times as great as the vitamin A content of



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ISIS holding a Figure of
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INDIAN MEDICAL NEWS

(From Our Own Correspondent)

At the meeting of the Central Advisory Board of Health, which took place in Poona on July 22, 23, and 24, 1940, under the chairmanship of Sir Girja Shankar Bajpai, Member of the Viceroy's Executive Council in charge of Education, Health and Lands, a number of subjects were discussed and decisions taken which, if acted upon, are likely to have a far-reaching effect on the health of the people of India. The Board, consisting as it does of the representatives of the Central and Provincial Governments and of the Governments of certain Indian States, is in a position to formulate health policy on lines which should secure wide acceptance in the country. Without coordination of effort between the numerous health authorities in India many of the country's problems, such as for instance, control of infectious disease, cannot be solved successfully and the Central Advisory Board of Health, during the three years of its existence has already proved its value as an integrating force in the campaign for raising the level of health of the people.

At this year's meeting the reports of two special committees appointed by the Board at its previous meetings to investigate the possibility of introducing compulsory inoculation of pilgrims against cholera and to study the complex questions associated with the prevention of food adulteration in India occupied a large part of the proceedings of the Board.

INOCULATION OF PILGRIMS

The Board, in adopting the report of the special committee appointed to examine the possibility of introducing a system of compulsory inoculation of pilgrims against cholera, considered that public opinion in favour of anti-cholera inoculation had grown in recent years and that the question of introducing compulsory inoculation could now be considered by Provincial and State Governments without apprehension of any disturbing effects on the minds of the people. The Board recommended that Provincial Governments should select suitable centres in their areas and try out a scheme of indirect compulsory inoculation on lines successfully pursued by the Government of Bombay for the past four years in connection with the Pandharpur festival.

canned tomatoes. The vitamin B₁ content of cooked spinach is approximately one half that of cooked tomatoes. The vitamin C content of cooked spinach is less than one-fourth that of canned tomatoes. The vitamin D content of cooked spinach and of canned tomatoes is negligible. Sufficient prominence has not been given, as Tosdall and his collaborators point out in their report, to the nutritional value of canned tomatoes.

CENTRAL COMMITTEE FOR FOOD STANDARDS

The Committee on food adulteration had examined the problem from three aspects viz, (1) the technical, including food standards and technique of food analysis, (2) the legislative, and (3) the administrative aspect. The Committee has so far considered only the technical aspect of the problem and it is expected that its reports on the legislative and administrative aspects will be made available for the Board at its next meeting. The Committee emphasised the fact that the improvement of methods of food analysis and the prevention of food adulteration in India will have to be a continuous process and that the establishment of coordination between the provinces is a matter second to none in urgency. With this object in view the Board recommended the appointment of a standing committee to be called "The Central Committee for Food Standards" which would be in a position to advise the Central, Provincial and State Governments on all aspects of food adulteration. Pending the establishment of the Central Committee the Food Adulteration Committee itself recommended all-India standards for 17 articles of food, while in respect of a number of other articles, the standards for which are a matter of controversy, the Committee recommended that these should be investigated by the proposed Central Committee for Food Standards.

The existence of different food standards in neighbouring Provinces and States at present interferes with the free flow of trade. The Central Committee should be in a position to suggest standards acceptable to all the Governments concerned, thereby facilitating interprovincial trade and a uniform enforcement of food adulteration laws.

Another important function of the Central Committee would be the issue from time to time to public analysis of "instructions" incorporating the latest available information regarding methods of analysis. The standardisation of methods is as important as the unification of standards of food purity.

Among other important decisions taken at this year's meeting of the Board, the following are of general interest.

FREE LABORATORY SERVICE

The importance of laboratory examination for the diagnosis of many infectious diseases cannot be over-emphasised. For instance, in regard to typhoid fever, the recorded statistics of mortality represent only a small fraction of the actual events.

The diagnosis of typhoid fever cannot be done, in many cases, without laboratory aid. The provision of a free laboratory service to medical practitioners is essential for a successful campaign against this and many other infectious diseases. The value of such provision was demonstrated in Bombay during an epidemic of typhoid fever in 1938 when the Government of Bombay placed the

services of the Haffkine Institute at the disposal of the medical practitioners of the city. In consequence many more cases were reported than had been experienced in previous years and the Health authorities were able to locate with certainty the areas most affected and take effective measures against the spread of the disease.

The Board had before it a scheme for starting a provincial laboratory service which outlined a system of small district laboratories supported by regional laboratories for groups of districts and by a central laboratory for the province, which would coordinate the activities of the regional and district laboratories. The Board recommended this scheme for adoption by Provincial and State Governments, with such modifications as local conditions may require.

THE HEALTH OF SCHOOL CHILDREN

There are numerous problems associated with the health of school children, for instance, the inculcation of healthy habits, provision for periodical medical examination and correction of the defects discovered during such examination, and the supply of adequate nutrition. It is generally accepted nowadays that systematic attention to the health of the children is an essential preliminary to any really remunerative system of instructions, whether it be in hygiene or other subjects in the curriculum. Further, teaching is not likely to be a success if the general school environment does not conform to reasonable hygienic standards. Before a considered policy can be drawn up and commended to the authorities concerned, much information has still to be collected as to the requirements of, and the progress already achieved in, different parts of India and the possibility of remedying the defects disclosed at the least possible cost. The Board therefore recommended that a special committee including educational experts should be appointed to report on the teaching of hygiene in schools, primary as well as secondary, rural as well as urban, the medical inspection of school children and their treatment and, in the primary educational stage, also on their nutrition.

THE EFFECT OF BAD HOUSING AND OVER-CROWDING ON TUBERCULOSIS

There is abundant evidence available from countries where tuberculosis is prevalent, that unsatisfactory housing conditions and over-crowding tend to produce an increased incidence of the disease, while the transference of tubercular patients from unhealthy to healthy dwellings produces an improvement in their systems and the physical signs of the disease. The failure on the part of the local bodies in many parts of India, to enforce the byelaws relating to health matters has been a subject of constant reference in public health reports for a number of years. While rectification of the defects in an existing slum area may be difficult, there should be no excuse when, after costly slum clearance operations by Improvement Trusts and other bodies, the cleared areas are

permitted to be built over without due regard to the requirements of light, ventilation and sound hygienic considerations. The Board therefore strongly urged on all Provincial and State Governments the necessity, in the interests of public health, of strict enforcement of building byelaws.

POSSIBILITIES OF DRUG INDUSTRY IN INDIA

"The drug and pharmaceutical industry in India has developed considerably recently and in order to enable it to make further headway, simultaneous growth of heavy and fine chemical industries and industries connected with coal carbonisation and production of solvents etc., is essential. If the required basic materials and chemicals are readily available, it is possible to produce in India all the drug requirements of the country." This is the conclusion of the 'Medicinal Preparations' Sub-Committee of the Indian chemical Manufacturers' Association, Calcutta in their report recently submitted to the Government of India. It is stated that India possesses a wonderful range of vegetable *materia medica* and nearly three-fourths of the drugs mentioned in the British Pharmacopoeia grow in this country in a state of nature and the remaining one-fourth can be easily cultivated in some part of the country or other. In the appendices to the Report, the Sub-Committee have included two lists (1) Drugs belonging to the British pharmacopoeia which grow in India and (2) those included in the British pharmacopoeia Codex and Extra Pharmacopoeia which either grow spontaneously or can be easily grown. It is the opinion of Sub-Committee that if due attention is paid to the proper cultivation and utilisation of vegetable drugs, India would not only be completely self-supporting in this respect but would also be able to develop an export trade in crude vegetable drugs. The Sub-Committee refer to the position about the production of oils, including essential oils, fixed oils and liquid paraffin; Alkaloids including caffeine and its derivatives, emetine, morphine and codeine and their derivatives, strychnine, ephedrine, quinine, etc.; Glucosides including digitalis; Inorganic and organic drugs, inorganic and organic metallic compounds; Synthetic chemo-therapeutic products, organo-therapeutic products; coal-tar products; Biological products including sera, vaccines, bacteriophage etc.; Vitamin preparations, patent foods, etc.; Surgical dressings, disinfecting fluids and other miscellaneous requirements. The Sub-Committee have also appended lists of essential drugs and medicinal chemicals available in India, of drugs and medicinal chemicals of secondary importance available in India, of basic chemicals necessary for the manufacture of drugs and possibilities of their manufacture in India and Tables showing import of drugs, patent proprietary medicines and chemicals along with their industrial uses. The Sub-Committee invite the attention of the Government to the necessity of close co-operation between the drug manufacturing concerns and hospitals. At present the manufacturers in India find it difficult to make a clinical trial of their products in any hospital under the Govern-

ment and semi-Government bodies and it urges the State to render necessary help in this respect.

The Sub-Committee was presided over by Bt. Col. R. N. Chopra, Director, Biochemical Standardisation Laboratory, Calcutta.

RESEARCH COURSE IN MEDICINE

The University of Calcutta, it is understood, have a proposal under contemplation to introduce a course of post-graduate training in Medicine. For this purpose the Faculty of Medicine of the University recently set up an expert Committee consisting of Sir Upendra Nath Brahmachari, the Principal of the Calcutta Medical College and the Principal of the Carmichael Medical College, Belgachia, to go into the question and to report. The Committee has completed its labours and is understood to have submitted its report to the University authorities for consideration.

According to the Committee, the dearth of graduates holding higher University degrees in Medicine was due to the absence of facilities for practical training for the candidates for these degrees in the colleges. The University has been particularly requested to take steps to remedy this state of affairs.

As regards the scheme of Post-Graduate training in Medicine the Committee says that for its success financial help would be needed and it recommends that a sum of ten thousand rupees should be provided by the University as honorarium to the staff who would be appointed for undertaking the post-graduate teaching in Medicine.

The Committee finds that a scheme for post-graduate research in Medicine similar to what exists in the University in the departments of Arts and Science could only be formulated when provision for the appointment of Research Professors, Readers and Lecturers, etc. is made. If these persons have to be whole-time men then they must be highly paid officers of international reputation in research but until such men are available and a large sum of money provided for the purpose there is no advantage in formulating such a scheme.

In the meantime, however, says the Committee, a start may be made by securing co-operation between the University Medical Colleges and the medical research institutions so that a limited number of medical graduates may be allowed to conduct research under the auspices of the University and the guidance of the staff of these institutions.

MEDICINAL QUALITIES OF 'CHATIM' BARK—A SUBSTITUTE FOR QUININE

As a result of researches carried on by various leading Ayurvedic institutions in India, the bark of the *Chatim* tree (Latin *Alstonia Scholaris* Sanskrit *Sapataparni*) has been, it is claimed, found to be more efficacious than quinine in the matter of treatment of malaria. It contains an active bitter constituent called 'Ditain', which in equal doses, has the same medicinal effect on

Epitome of Indian Medical Literature

IND. MED. GAZ., JULY 1940

- (1) Some unusual toxic effects of sulphanilamide therapy—De & Kohar—385.
- (2) Treatment of opium addiction with lecithin and glucose—R. N. Chopra and G. S. Chopra—388.
- Radiological appearances of the heart and lungs in cases of hypertensive heart failure—Vakil—392.
- Non-epidemic typhus in Bangalore—Sharma—398.
- Common cold responsible for grave suspicion of rabies in the dog—Grewal and Nicholas—401.
- (3) Hormones in menstruation and pregnancy—Pillai—404.

(1) De and Kumar strike a note of warning against indiscriminate use of sulphanilamide group of drugs in every pyrexial condition. They give two case notes: one as case of typhoid, mistaken for antrum trouble, and given a course of prontosil. He developed an alarming cyanosis on the 7th day of the administration of the drug. Another was a case in which the attending physician suspected streptococcal septicemia superimposed on filariasis, and for which prontosil was given resulting in cyanosis with hæmaturia. The result in the first case is attributed to a preceding hæmolysis of cells which is not an uncommon phenomenon in acute fevers, and its probable augmentation after the administration of prontosil. The second is attributed to drug allergy.

(2) Chopra writes that on the basis of biochemical and biophysical investigation into the blood of opium addicts it has been possible to evaluate lecithin and glucose treatment in opium addiction. On the evening before treatment is started, the patient is given a dose of calomel (2—3 grs.) followed by a saline purgative the next morning. Opium is then suddenly and completely withdrawn and the patient watched for the development of withdrawal symptoms. This is not however necessary. The patient may straight away be given lecithin (ovo-lecithin, Merck) in form of pills 5 to 20 grs three times a day and continued usually for five days. If there is nausea it may be given in the form of a colloidal solution by injection. During the period of treatment the

malaria as quinine sulphate, without any disagreeable symptoms of the latter, such as deafness, sleeplessness, excitement. In the Manila Hospital, malaria cases were treated with the *Chatim* bark and the result has been, it is stated, so satisfactory that it may safely be predicted that it would completely replace quinine.

MANUFACTURE OF FISH OIL

A proposal for manufacturing Indian fish oil in the Presidency is being examined by the Madras Government. It is stated that there will be a great demand for this oil in the absence of imports of cod liver oil from the Continent. A preliminary survey already undertaken by the Fisheries Department has shown that there is enough raw material in the Presidency for the purpose.

patient is encouraged to take plenty of fluids and glucose by mouth as these greatly ameliorate the symptoms of withdrawal. The course of treatment varies from 7 to 12 days. It is eminently suitable for mass treatment and the author claims to have successfully treated 12,000 addicts in the recent anti-opium campaign in Assam.

(3) Pillai gives an excellent review of the physiology and pathology of menstruation and pregnancy. He discusses the oestrin, progesterone and oestrin-progesterone deprivation theories of menstruation. He also shows that to maintain pregnancy intact, high and constant levels of progesterone are essential, and that to prevent abnormal conditions during this period, the normal balance between the ovarian and anterior pituitary hormones has to be maintained. Abortion and sterility are also shown to be similar in the sense that aetiological endocrine factor behind both is defective progesterone production. Progesterone therapy, he writes, is the only possible method of treatment in abortion due to endocrine causes, but he is of opinion that better results are obtained by combining testosterone with progesterone.

JR. I. M. A., JULY 1940

This is an "Education Number", and gives an account of medical colleges and schools, research institutions and Medical Council of India and of the provinces. It starts with an editorial on "Medical Education in India" and puts in a strong plea to integrate the medical school education to that of the University college standard and to open post-graduate studies in the provincial universities. It also stresses the need to solve the problem of the ever-growing medical unemployment.

ANTISEPTIC, JULY 1940

The erythrocyte sedimentation test—Nigam and Khan—625.

Early detection of high blood pressure—Vakil—630.

Infantile biliary cirrhosis—Kini—632.

(4) Vitamin C in diabetes—Sharma—.

(4) Sharma points out that if a diabetic patient is fully saturated with vitamin C, such a case would require less units of insulin to keep the urine sugar free. And he therefore advocates a diet, very rich in vitamin C during the course of diabetic treatment.

JR. OF SOUTH INDIAN MED., JULY 1940

(5) Vitamin E and uterine bleeding—Menon—1.

The Honorary Medical Scheme—Satakopan—5.

(5) Menon gives a few case reports showing the good results of vitamin E administration in functional menorrhagia and dysmenorrhoea in young girls. But he warns that while a definite inflammatory or structural abnormality exists, this treatment is not of much use. A "building up" treatment with cod-liver oil, butter and eggs would control excessive periods. Vitamin E extracts (Glaxo's Viteolin; Crookes' Wheat-germ oil; and Merck's Evion) have all been found quite effective.

MEDICAL DIGEST, JULY 1940

This is a "Dental Centenary Number" and contains articles of interest and importance in connection with dental medicine and surgery in India. Souttan warns against the indiscriminate extraction of all dead teeth, unless it be that they are proved to be sources of focal infection. Shroff writes that like all good things betel chewing is very much abused nowadays. In small doses, it certainly works as a carminative but chewed frequently it clogs the wheel of digestion. Barucha discusses the place of actino-therapy in dentistry while Desai describes the use of nitrous oxide anesthesia in dentistry.

MED. BULLETIN, JULY 20, AND AUG. 3, 1940

Treatment of venereal sores—Vora—465.

(6) Spirochetal jaundice in Bombay—Manohar—470.

U. S. T. in respiratory infections in children—Venkateswar Rao—474.

Hypertension—Vakil—495.

Displacement of uterus—DeSa—503.

(6) Manohar studied a number of cases of acute febrile jaundice for determining the incidence of spirochetal jaundice. By animal inoculation 2 out of 8 clinical cases were found to be due to spirochetæ. By silver staining and animal inoculation with liver emulsion 5 out of 15 autopsy cases proved to be due to leptospiræ. Therefore, he concludes that spirochetal jaundice does occur in Bombay in a fairly large percentage of cases, grouped at present as catarrhal jaundice of uncertain origin.

Special Journals

JR. OF OBSTER. & GYNEC. SOCIETY OF NORTHERN INDIA, JUNE 1940

Presacral sympathectomy for the relief of dysmenorrhoea—Spackman—39.

Ectopia pregnancy—Marchant—48.

(7) The use of testosterone in gynecology—Shanti Devi—59.

Dysmenorrhoea—Sidhu—66.

(7) Shanti Devi puts in a plea for a discriminative use of Testosterone in the following gynecological conditions: (a) Metromenorrhagia (b) Myoma (c) Dysmenorrhoea (d) Hypersexuality of women (e) Climacteric (f) Mastalgia (g) After labour pains. She illustrates the clinical use by a few case notes, and concludes: (1) It brings the hypoplasia or atrophy of the mucous membrane by decreasing the blood volume of the endometrium. (2) Its effects are only temporary in metromenorrhagia. (3) In two cases of myoma the uterus became smaller by $\frac{1}{2}$ ". (4) In cases of mastalgia small doses were quite enough. (5) It was effective in cases of dysmenorrhoea. (6) The persistent after-pains of labour were treated successfully with 20—40 mg.

LEPROSY IN INDIA, JULY 1940

(8) Predisposing causes of leprosy—Editorial—73.

Leprosy in Kengtung, Burma—R. S. Baker—78.

Tuberculoid leprosy affecting the palpebral portion of the lacrimal gland—Cochrane and Sloan—83.

(8) The Editorial discusses the predisposing causes of leprosy. (a) Hutchinson's theory that

leprosy was connected with the eating of fish seems to have died a natural death although this idea is still common among the general public. (b) The old idea that a particular article of diet predisposes to leprosy has been largely replaced by the idea that an inadequate and ill-balanced diet acts in this way. A few diet surveys carried out so far afford no evidence on this point. (c) Syphilis and malaria as predisposing factors are too far-fetched and there has been no accurate evidence to support this view. "It appears to us," the editorial concludes, "that by far the most important predisposing causes of leprosy is inherent individual susceptibility and that with this factor present plus infection, leprosy will often develop in the absence of any other factor."

IND. JOUR. OF OPHTHALMOLOGY, JULY 1940

Theory of vision—Sathaye—97.

A case of acute retrobulbar neuritis—Guha—103.

Sulphanilamide and perforating wound of the sclera—Chibber—105.

(9) Spring catarrh—Oak—110.

Prevention of blindness—Bailliant—113.

(9) Dr. Ork after discussing the aetiology of spring catarrh recommend the following eye drops to relieve the symptoms:

Zinc sulph.	...	gr. 1
Acid boric	...	" 5
Acid acetic dilute	...	m. 20
Liq. adrenalin hydrochloride	...	" 20
Cocaine hydrochl.	...	gr. 5
Aqua dist.	...	dr. 4

He continues: autohemotherapy and milk injections have their value in curtailing the duration of the disease. Injections of an emulsion of a proteose derived from the urine have been tried by some surgeons with good results. Recently radium has been tried with some success in selected cases. Tarsectomy will give good results in the case of fully-grown papillæ where there are no corneal complications. In addition to anyone of the above treatment, enlarged tonsils and adenoids should be removed. Administration of calcium salts will be of additional advantage.

IND. JOUR. OF VENEREAL DISEASES, APL.-JUNE, 1940

(10) U. S. T. in male gonorrhoea—Gosh and Dey—55.

Differential diagnosis of cutaneous syphilides—Maniar—63.

Venereal diseases of the external genitalia—Wise and Wolf—66.

(10) Gosh and Dey review 17 cases of male gonorrhoea treated with Urea Sulphazide T., and conclude that it is yet impossible to assess the end results of chemotherapy of gonorrhoea with any certainty. It would therefore be unwise to expect a large number of cures, but on a critical study of the cases it seems that in male gonorrhoea U. S. T. offers a good percentage of cures and a low toxicity.

IND. JR. OF MED. RESEARCH, JULY, 1940

(Only a few articles of general interest are listed)

Availability of calcium and phosphorous in cereals—Giri—101.

(11) Studies on peptic ulcer in South India—Dogra—145.

Investigations into the epidemiology of epidemic dropsy—Mukherji and others—163.

(12) Inhibitory agents of uterine motility—Krishnan—241.

(11) Dogra summarises his observations as follows:

(a) Literature on peptic ulcer in South India has been reviewed showing divergence of opinions on various aspects of the disease and justification for the present investigation.

(b) From a clinical study of 258 proved cases of peptic ulcer at the Government General Hospital, Madras, it has been shown that gastric ulcer of lesser curvature of stomach is a rare disease and that so-called 'peptic ulcer' is mostly an ulcer of the anterior wall of the first part of the duodenum, a chronic lesion resulting in stenosis of the duodenum, associated in some cases with an ulcer in the pyloric antrum.

(c) Eighty-six per cent of cases investigated were at the advanced stage of the disease associated with varying degrees of duodenal or pyloric obstruction and corresponding signs and symptoms of emaciation, low blood pressure, varying periods of pain in relation to food, vomiting and visible gastric peristalsis. Radiological findings and biochemical analyses in such cases are described.

(d) A smaller number of early cases (14 per cent) has been described to show that there are no essential differences in the features of this disease in South India from those obtaining elsewhere.

(e) High familial incidence is shown. The evidence available is not considered sufficient to support a diathesis theory but it is explained that a common environmental factor as obtaining under the joint-family system which is an outstanding feature of South Indian life is possibly the cause of a very high familial incidence.

(f) Great discrepancy in the sex incidence of the disease is shown, the age group chiefly affected being the same in both sexes, namely, 30—39.

(g) The disease occurs amongst all religious groups but mostly affects the extremely poor and non-Brahmin Hindus. Amongst the Brahmins and the well-to-do it is extremely rare.

(h) The diet of the agriculturist and labouring class of people is described and it is stressed that the interval between meals, frugal as they are, is very long. Whereas smoking is a common habit, drinking of alcoholic beverages is not so common.

(12) Krishnan gives the following summary of his experiments on the drugs inducing uterine motility.

(a) Experiments were performed on guinea-pigs, cats, and rats, pregnant and non-pregnant, with a view to find out the possible agents in the body other than the corpus luteum hormone which have an inhibitory influence on uterine motility.

(b) The effects of antuitrin S, antuitrin, antuitrin G (P. D. & Co.), thyroxine, adrenalin,

ALL additions to the newer knowledge of nutrition emphasize the part played by diet in the maintenance of good health—in increasing resistance to infection and in promoting fitness.

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Abstracts from Foreign Literature

Tumorigenic Powers of Stilboestrol and Follicular Hormones: Alexander Lipschutz, M. D., and Luis Vargas, Jun., M. D., 'Lancet' 12: 541-543.

When equal quantities are compared, the tumorigenic action of stilboesterol is much greater than that of the natural hormones. The greater increase in weight of the guinea pig uterus with stilboesterol than with the free hormone suggests that the organism cannot inactivate stilboesterol with the same facility as it does the natural follicular hormones.

Uterine haemorrhage in the guinea pig treated with stilboesterol is more common than with the natural hormones but as common as with esterified hormones. This is considered to be a sign of greater toxicity of stilboesterol.

Action of Veritol on Blood-Pressure and Heart: Under Various Anaesthetics, G. Schoenewald, M. D., A. Schweitzer, M. D., and G. C. Steel, 'Lancet', 544-546.

Veritol, an isomer of ephedrine, raises the blood-pressure in acute hypotension and shock. Its exact mode of action is not yet properly understood: the rise in pressure lasts about twenty minutes longer with veritol than with adrenaline; the height of the rise seems to vary considerably.

The rise of the arterial blood-pressure after administration of veritol in cats under various anaesthetics varied in extent and duration. Under chloroform and cyclopropane anaesthesia the pressor action is nil or negligible. There is no direct relationship between the blood-pressure response and the dose or veritol of the depth of the anaesthesia. There was no difference in the results obtained in atropinised and nonatropinised animals. The second injection of the drug may produce a fall in blood-pressure.

insulin and vitamin E on uterine motility were studied in vivo and in vitro, after a series of injections into normal and ovariectomized guinea-pigs, and normal cats and rats, pregnant and non-pregnant.

(c) The results were negative except in the case of adrenaline which had an inhibitory effect on the pregnant as well as on the non-pregnant uterus of rat and guinea-pig. Antuitrin and antuitrin G (P. D. & Co.) were found to be excitatory. Insulin intensified the pituitrin reaction of the pregnant and the non-pregnant uterus of guinea-pig. Vitamin E had no direct influence on the uterine motility but promoted the growth of luteal tissue.

(d) Experimenting with certain chemical substances, it was found that thymol, acetone, ether and alcohol, all had inhibitory effects on uterine motility. Of these, thymol and acetone had the most profound influence. Bile acids were found to have a negligible effect.

Intravenous injections of veritol produced slight disturbances of cardiac rhythm in cats under ether and severe disturbances of cardiac function under pentothal, chloralose, cyclopropane or chloroform anaesthesia. The authors recommend caution in the clinical use of veritol.

A Further Case of Labyrinthectomy: Macleod Yearsley, F. R. C. S., 'Lancet', 558-548.

A case of troublesome vertigo and constant tinnitus of four years' duration in a woman, aged 54, was treated by curettage of the semicircular canals via the mastoid route. When last heard from, the patient had been free from vertigo for twelve months. The effect of the operation on tinnitus is not mentioned.

The Chemotherapy of *Cl. Welchii* Type A and *Cl. Septique* Infections in Mice: Dora Stephenson, and Helen E. Ross, 'Brit. M. J.', 471-475.

Sulphanilamide and sulphapyridine protected mice against the intraperitoneal injection of a small number of lethal doses of vegetative *Cl. welchii* type A organisms in sterile soil suspension. Antitoxic serum was also effective against a strain of high toxigenicity but failed against a strain of low toxigenicity. Serum treatment was better when the infectious material was injected intramuscularly. Sulphanilamide had little influence on *Cl. septique* infections. Sulphapyridine in large doses saved 50% of the animals. A single dose of antitoxic serum was at least as effective as sulphapyridine but the best results were obtained when sulphapyridine was combined with serum.

Neither sulphanilamide nor sulphapyridine have any influence on the course of infection produced by the two strains of *Cl. oedematis* tested.

Subcutaneous Implantation of Female and Male Hormone in Tablet in Women: Alfred A. Loeser, M. D., 'Brit. M. J.', 479-482.

Female and male hormone can be implanted in as large amounts as desired without injury. Implantation of oestradiol produced development of an infantile uterus allowing conception to take place in one of two cases. Implantation of testosterone tablets gave good results in the control of serious menorrhagia caused by fibroids in women near the menopause. It failed to influence existing recurrences of carcinoma of the breast. All patients treated with male sex hormone showed enlargement of the clitoris so long as the hormone was acting, increased sexual drive, temporary occurrence of lanugo on the face, deepening of the voice and a great feeling of well-being.

Sulphonamide Treatment of Bacterial and Trachomatous Conjunctivitis: A. F. MacCallan, 'Brit. M. J.', 482-483.

Remarkable results may be expected from sulphonamide therapy in cases of bacterial conjunctivitis and blepharitis. The good results which have been reported in the treatment of trachoma by these drugs are, in the author's opinion, due to the elimination of superimposed bacterial infections rather than to any specific effect on the virus of trachoma.

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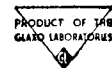
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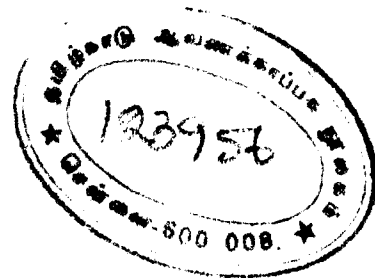
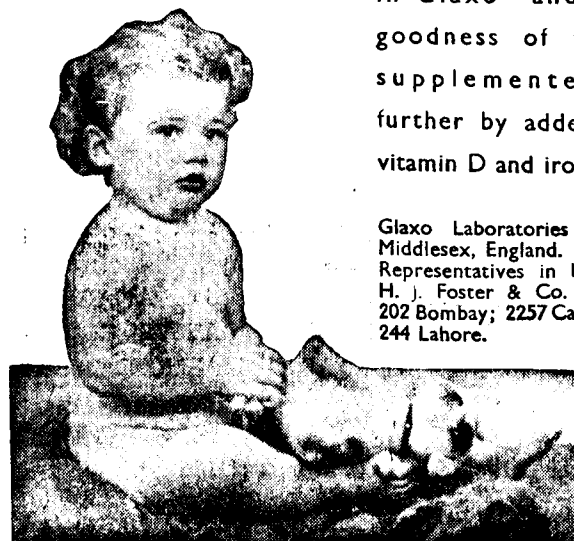
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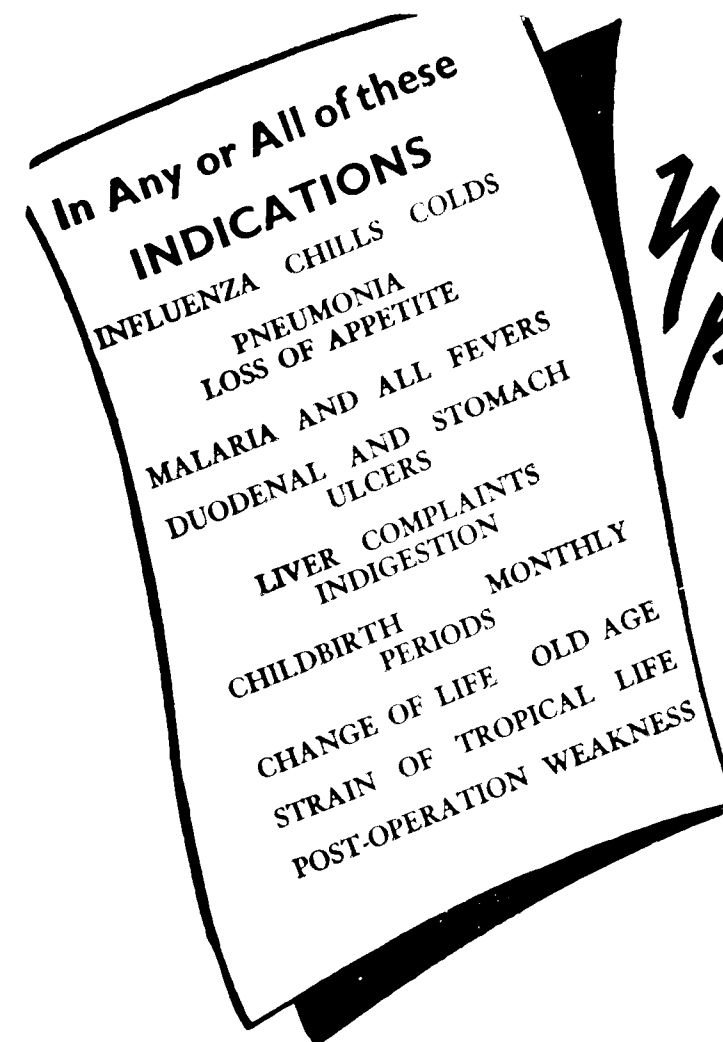
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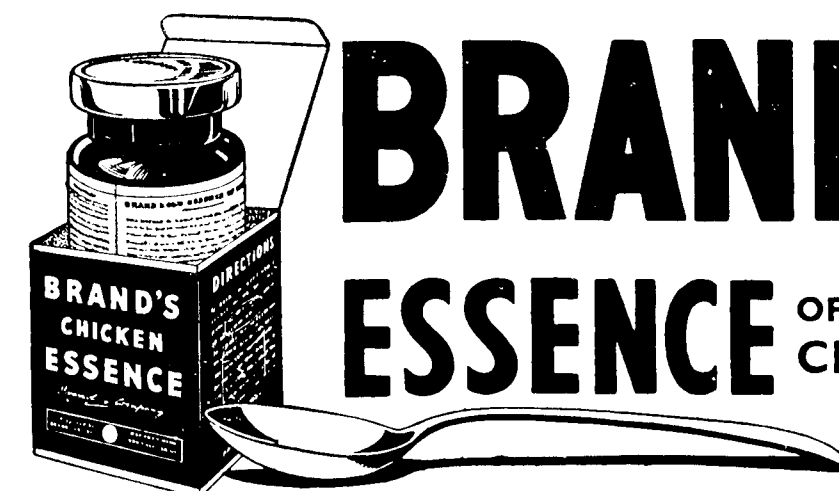


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