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# The Medical Practitioner

## A Monthly Medical Journal

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# THE Medical Practitioner

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## THE ANNUAL REPORT AND STATISTICS OF THE GOVERNMENT GENERAL HOSPITAL, MADRAS.

### for the year 1929.

### The Cost of the Institution.

The salaries of medical officers come up to about Rs. 71,000 and this amount can be largely curtailed if only honarary appointments are made in place of paid officers and not as supernumeraries. There is only one hony. physician. Why no hony-surgeon is appointed is not known. There is no report of the hony-physician. The report of the fourth physician for whom the hony-physician was acting is found. The hony-physician appears to be an appendage to the fourth physician without any independent status and duties.

The pay of the nurses is double that of the Medical Officers. In an institution where 90% of the in-patient are Indians, the European nurses imported from outside India on whom are spent a very large proportion of the amount, are of practically little use to Indian patients. Indian Nurses male and female, may be appointed at a less cost in the place, of some of the European imported from outside.

### The Professional and Scientific Report.

The professional and scientific reports of the paid surgeons and physicians attached to the General Hospital, though interesting as far as they go, are meagre and sketchy. The reports of an institution like the General Hospital, Madras, the premier hospital in the Presidency, equipped with all modern and uptodate appliances at a great cost and manned by highly paid selected officers, should take the form of a Clinics like the Mayo Clinics and other such ones in Europe and America, if they are to be useful to the profession and for the advancement of medicine.

### The Superintendent.

The Superintendent of the General Hospital is also the first Surgeon of the Hospital. The Superintendent of a big institution like the General Hospital is expected to exercise supervision over the work done in the institution and hear complaints made against the working of the institution and deal with them impartially. If the Superintendent himself is in charge of wards, who should hear the complaints that might be made against his own professional work. This situation is rather anamolous and will not contribute to the efficient working of the institution. Similar anamoly exists in the Madras Medical College where the principal is also a Professor in the College. The two offices—Superintendent, General Hospital and the Principal, Medical College—may with advantage be combined and put in charge of a single full-timed officer as before. He should not be given any other duties and should be prohibited from private practice even as a consultant. He must be the Senior Officer in the service next in rank to the Surgeon-General, so that

he might get the latter office when vacancy occurs as was the case in the recent past. The practice of bringing an outsider as Surgeon-General with no experience in or knowledge of the province is not satisfactory. If on account of seniority in the All-India Indian Medical Service an outsider has to be brought in, he may be brought as Superintendent cum Principal and then promoted to the post of the Surgeon-General automatically instead of bringing a new Surgeon-General from outside. This arrangement will not only be cheaper and contribute to the efficient working of the General Hospital, Medical College and the Medical Department, but will eliminate favouritism and partiality etc., in the making of appointments and in the infliction of punishment in the Department.

### The Chit System.

The practice of the Medical Officers in the General Hospital giving chits to the patients for admission as in-patients in the Hospital is peculiar to the General Hospital, Madras and unheard of anywhere else. Even in hospitals maintained from endowments made by private agencies as in England and elsewhere, the tendency of the donors to recommending admission of patients into hospital for treatment is disapproved. That the paid officers in hospitals maintained at the cost of the Government should be permitted to admit their patients on chit system is to say the least most demoralising. At present, when the paid medical officers are allowed to run or have connection with nursing homes and dispensaries etc it is not likely that they would resort to the chit system as it would interfere with their private income. Between the two evils, the permitting of Government men to open or attach themselves to nursing homes etc and the chit system, the former may be preferred in the interest of patients who seek admission into the hospital, to the latter if it is not possible to put an end to both the evils.

### The Expert Chemist.

The appointment of an Expert Chemist recommended by the Superintendent for the manufacture of medicines etc, is unnecessary as there are many pharmaceutical and chemical firms well-equipped for the research and highly specialised for the manufacture of therapeutic products.

## THE 1931 CENSUS.

Arrangements have been made for the taking of the next decennial census in Madras in 1931 and Mr. Yeatts has been appointed Superintendent of the Census. Mr. Yeatts is a junior civilian of less than 10 years service and has evidently no wide administrative experience and acquaintance of the province and no knowledge in statistics. Personally we have nothing to say against Mr. Yeatts, but an officer selected to conduct the Census operation, should not only possess wide administrative experience, but a sound knowledge in statistics. Preferably an Indian, who is expected to be more intimately acquainted with the habits of the people and the country would have been better. The Senior Editor of this Journal wrote to the Chief Minister, the late Rajah of Panagal, in 1925 about the advisability of appointing to the census an officer with administrative experience and knowledge in statistics, preferably an officer of the Public Health Department. He wrote back to say that for the next Madras census an officer of the Public Health Department, then undergoing special study in Vital Statistics, would be appointed as Superintendent. But now it is found that a junior European Officer of the Civil Service has been appointed. There seems to be no policy underlying the principles of making special appointments and the views of a Minister are not upheld by his successors. Unfortunately since the inauguration of the decennial Census in Madras in the year 1822, no Indian has been appointed as Superintendent, and except Dr. Cornish, who was the Deputy Surgeon-General in





charge of Sanitation, all were junior civilians. The report of Dr. Cornish is even now considered to be one of the best Census reports and quoted largely in subsequent reports. That Indians are really competent to conduct census operations will be quite clear from the fact that in almost all Native States Indians are appointed, though European Officers were available in those States, and their reports were considered quite satisfactory and favourably commented upon by the Imperial Census Commissioners.

In this connection, the following quotation from one of the authorities in census in the United States of America, where the census work is best done, may be interesting.

"The accuracy of the entire census of population and agriculture depends upon the efficiency of Supervisors. Their temporary employment is the survival of the former custom of creating a temporary organization for each census. Some time I hope the practice will be abolished and the work done by the regular trained employees of the permanent Census Bureau. Such an arrangement will not only reduce the expense, but will greatly reduce the margin of error and advance the completion of the enumeration. To have this, the most important piece of census work done by temporary employees who have had no prior experience and also knew nothing of the census taking is to say the least very poor administration. The Director of census should have wide administrative experience and some knowledge in statistics."

If it is not practicable for financial reasons to employ a permanent Census Bureau, there can be no justification in selecting as Superintendent a junior officer with little or no administrative experience and knowledge of statistics.

The Imperial Census Commissioner Dr. Hutton may be a senior officer, but it is not known whether he has any knowledge of statistics. It does not appear from the report of the last census of the Government of India that Dr. Hutton has had experience of the last census. It has been the practice hitherto to appoint a Superintendent of the previous census, as the Census Commissioner, but this time this practice has not been followed. As the Government is not taking an economic survey of the country at least the opportunities of the decennial Census, may be taken advantage of for collecting correct information as regards the occupations of the people under the headings of nature and extent of holdings, the yield and value of products, particulars and value of manufactures, etc., as is done in United States of America, by eliminating if necessary some sections of the census as Infirmities, Language and Caste.

## THE DRUGS ENQUIRY COMMITTEE

In our February issue we commented upon the necessity of drug control in India and we are glad to learn that the Governor-General-in-Council has appointed a Committee consisting of:—

(1) Lt. Col. R. N. Chopra, Professor of Pharmacology, School of Tropical Medicine, Calcutta (Chairman). (2) The Rev. Father J. F. Caius, S.J, Pharmacologist at the Haffkine Institute, Bombay. (3) Mr. H. Cooper Ph. C.P.C.S. of Messrs. Smith Stanistreet & Co. Ltd., Calcutta, and (4) Moulvi Abdul Matin Chaudhury, M. L. A., to enquire into this matter, and on the strength of the report of this Committee the India Government is likely to enact special legislation for the control of pure drugs in this country.

The initiation for the appointment of this Committee started at the Council of State, where some time ago a resolution was passed urging the Government to take steps to control the indiscriminate use of medical drugs and to legislate for the standardisation of the preparation and for the sale of such drugs.

Elsewhere we have published a circular from the Secretary of the

Drugs Enquiry Committee which has been sent to such of those who, the Secretary thought, were likely to be interested in the subject-matter of the enquiry entrusted to this Committee, and this circular gives a clear idea of the purpose of the appointment of the Drugs Enquiry Committee and the terms of reference to this Committee made by the Government of India.

We very much regret that in this as in other matters, the Government or those concerned in the Enquiry Committee have not thought it fit to give enough publicity to the existence of such an enquiry committee amongst the non-official members of the medical profession in this province, who, forming as they do a much larger section in the medical profession, would have been as much or perhaps more interested to make this enquiry a success in case they were approached in time.

The Committee is expected to arrive in this city on the 17th inst. and hold their enquiry at the Madras Medical College. We offer our hearty welcome to the members of this Committee and trust that they will get enough material from those who have been summoned to appear before them to go on with their work, though, as we have already referred, this province had not sufficient intimation or publicity regarding the formation and the activities of this Committee. All the same, we wish them all success and hope they will make a good beginning in this premier city.

## EXPERT EVIDENCE.

We draw the attention of our readers to the abstract of the portion of the charge to the jury made by the Honourable Mr. Justice Reilly and appearing elsewhere in this issue in connection with a murder case tried by the learned Judge during the third Criminal Sessions in the month of August last. The accused in the case, a soldier by name Ralph Britton was charged with murdering Lance Corporal Davis on the night of May last in No. 2 Section bungalow of the Peking Barracks at Bangalore by shooting him with a revolver. The prosecution was very ably conducted by Mr. K. P. M. Menon, Bar-at-Law. Crown Prosecutor, while the accused was defended by Mr. Brooke Elliott, Bar-at-Law. The motive of the accused to shoot Davis was said to be that the accused had received 7 days confinement of Barracks on a charge laid against him by Davis for disobedience, which motive was considered by the defence not to be serious for any ill-feeling on the part of the accused against Davis and the Counsel for the defence pleaded that the accused was not guilty because he was of unsound mind at the time he did the act. Col. Berkley Hill, I. M. S., the Medical Superintendent of the European Mental Hospital, Ranchi, was summoned by the defence to give expert evidence as to the mental condition of the accused. About a week before the case came before the High Court, the Expert examined the accused twice at Bangalore, both examinations lasting altogether for 1½ hours. Col. Hill had a conversation with a distant cousin of the accused on the maternal side with the purpose of eliciting a history that there was some pre-disposition to insanity in the accused's family. There was also evidence in the case that the accused had 2 or 3 drinks of beer on the day of the murder. The expert's opinion was that the accused was on the border-land of Schizophrenia (a type of dementia praecox where there is lack of co-ordination between the receptive and affective functions of mentation) and that he had a shooting complex. He was further of opinion that the power of the self-control of the accused was "in the grip of, some victim of circumstances over which the accused had no control". The learned Judge did not agree with Col. Hill and in his charge to the jury has so lucidly and ably analysed the expert evidence that we thought that the profession, especially the experts in it, will be very much benefitted by going through the interesting and thought-provoking address



to the jury wherein the learned Judge had criticised the evidence of the expert in most dignified terms and thrown valuable hints that it was not enough in a Court of Law that the expert gave expression to his opinions and convictions, but that the law required that such opinions and convictions should be as far as possible corroborated by earlier statement of facts from others. Col. Hill would have done a great service to the accused if he had examined some of the comrades of the accused and got from them history corroborating the observations made by him from the personal talk with the accused. We trust that the analysis of the expert evidence as embodied by the learned Judge in his charge to the jury will be appreciated by our readers, especially experts amongst them, who, whatever be their official position, should not forget medico-legal responsibilities apart from the medical responsibilities, and cannot afford to forget the lessons taught in the medical jurisprudence, that to prove the innocence of a criminal of unsound mind, it is desirable to prove that such an accused did not know the nature of the act he was doing or even granting he knew what he was doing, that he did not know what he was doing was either wrong or contrary to law.

# Original Articles

## ENDOCRINOLOGY

BY

DR. M. S. KRISHNAMURTHY AYYAR, M.B.C.M.,

XIII

### The Ovaries

The Ovaries are the sex glands of the females and with the thyroid and pituitary glands they form the "Endocrine trinity of sex." The biochemical basis of femininity is much more important than either the psycological basis or that dependent upon the nervous system. The harmones transcend in importance all other factors in the regulation of the chemistry of the body and therefore of the chemistry of the reproductive organs. Hence derangement in the endocrine glands particularly the gonads, spell disturbed metabolism, altered nutrition and modified sex conditions. They are much more to do with remote non-sexual factors than is usually believed. It is certain that the ovaries are definitely concerned in the subtleties of cellular chemistry and have much to do with the maintenance of the calcium balance. A woman is woman precisely through her ovaries. There is no complete man nor is there a complete woman. Before puberty there is generally very little difference between boys and girls and after menopause the women more or less acquire the characteristic of men not only in bodily appearance such as the growth of hair etc., but also mentally and take up also politics as men. Thus the ovaries during their activity distuinguish women from men.

### Origin, Anatomy, Physiology and Pharmocology

The embryonic origin of the sex apparatus is undifferentiated. In man about the fifth week the previously undifferentiated genital trace develops into a primary sex organ of one or the other sex. The Wolffian and Mullerian ducts develop upto about the third month of embryonic life without giving rise to the special characteristic morphology of either sex. About this time differentiation takes place and there arise the special secondary sex organs of one or the other sex. The developing sex cells with their internal secretion influence in marked degree the further development of the organism. It may be added in order to understand some of the abnormalities of the constitution and psyche that irrespective of the course of this differentiation—i.e., whether male or female—there remains always some remnant of the opposite sex.

Thus in the female the Mullerian ducts develop into ovi-ducts uterus and vagina and the Wolffien duct largely disappears. However part of it persists as the par ovarium, the homologue of the epididymis in the male. Moreover in pseudo-hermaproditism both the Mullerian and Wolffien ducts may develop and give well developed secondary sex organs of both sexes in the same individual. The sex metamorphism reported now and again in newspapers is to a certain extent believable. There are two ovaries joined to the uterus by the two Fellopian tubes through which the ova from the ovaries pass to the uterus. At birth there are some 30,000 to 200,000 of follicles in ovaries and of these a good many atrophy during childhood, so that there are no more than about 30,000 left at puberty. Of these 30,000 only an elite 400 mature between the ages of 15 and 45. At the rate of maturation of one ovule alternately from the right and left ovary every 28 days the period of menstruation or the reproductive age in a woman is about 30 years i.e., from 15 to 45 years. The earlier the menstruation commences the sooner the menopause is reached. It is said that in Abysinia the childbearing period is over at the age of 20. The ovaries elaborate at least two harmones one the follicular or Allendoisy or Menoform and the other the luteal harmone. A third harmone is also said to be present by some and it is and supposed to control the nutrition of the uterus. The first two exercise fundamental and different effects on the process of menstruation. Another internal secreting effect is by the ovam itself or the trophoblast formed by its implantation on the uterine mucosa. Besides, these harmones the anterior pituitary supplies two harmones which act through the ovaries and the placenta supplies one harmone similar to that of the Menoform of the ovaries. The structural changes taking place in the uterine cycle as described by Marshall are as follows :—

1. The constructive stage:--During this stage the uterus undergoes growth, glandular development and hyperaemia i. e. increase in the blood vessels both in size and in number.
2. The destructive stage :—At the beginning of this stage the congested vessels in the uterine mucosa break down and the blood is freely extravisated in the tissue. The superficial epithelium is removed as a result of the extensive haemorrhage and varying amount of the underlined stroma tissue may be torn away and discharged into blood, and this constitutes the menstruation.
3. The stage of repair :—During this stage repair sets in. The epithelium is being renewed. At this stage the blood-vessels become reduced in number and size.
4. The stage of quiescense :—Probably in this stage in many individuals the uterus commences to undergo growth changes which are continued in the succeeding constructive stage i. e. the first stage

The purpose of the whole process is of course reproduction and the process begins with ovulation or discharge of ovam from the ovaries. Ovulation takes place about the middle of the mentstrual cycle i. e. on the 13th or 14th day of the 28th day cycle. At the time the uterine mucosa undergoes hypertrophic changes suitable for the reception of the ovum. These changes are gradual and begin immediately after the last menstruation. They correspond to the changes described against the constructive stage. Immediately after the extrusion of the ovum the Grafian follicle undergoes definite organisation with the formation of a new type of tissue, the corpus luteum and this gives rise to an internal secretion which plays an important and necessary part in the



subsequent changes. The influence of the internal secretion of the corpus luteum begins in the intermenstrual period and increases up to the next menstrual period when it degenerates. The follicular hormone called Foluculin, Estrin, Allen-Doisy or Menoform is present in the blood of women and there is a cyclic accumulation of it in the blood reaching a maximum just before menstruation. This hormone is estrus stimulating and exerts a necessary action on the endometrium supplementary to the hormone of the corpus luteum in inducing the changes of progestational proliferation. The luteal hormone inhibits and delays ovulation and estrus. The antagonism between the follicular and luteal harmones is doubted by some authorities and they consider that they are supplementary to one another. The function of the follicular hormone seems to be that of putting the uterus into proper physiological condition so that it can respond to the luteal hormone. The two hormones of the Anterior pituitary are called A and B hormones. The first stimulates maturation of the follicles and the ovulation and there is a large production of follicular hormone which accumulates in the body and exercises a sensitizing influence on the endometrium and a cornification of the cells of the vagina. The second acts on the Grafian follicle following ovulation and luteinizes that structure which then elaborates the luteal hormone. The luteal hormone represses further ovulation or maturation during the latter half of the 28th day cycle and further acts on the endometrium exerting an effect of development and preparation for the ovum.

**Menstruation** :—This is a sign of vagotonism and can be shown in the smooth muscles reaction in the intestines. The wave of stimulation begins two days before the onset and ends five to six days after. The stimulation is due to the accumulation of the calcium in the blood and tissues and it is cast off during the menstruation. The amount of calcium in the menstrual blood is said to be about thirty times that of the blood in the body.

The period of menstruation is attended by marked changes in the emotional and physical constitution of the woman. Concurrently with the well developed histological changes occur in the uterus itself and the hyperaemic wave affect not only the uterus, ovary and genetaria but in some degree the whole body, there is definite approach to the maximum of metabolic activity culminating at the beginning of memstruation and subsiding thereafter. Of the emotional symptoms the tendency to irritability, lack of self control, unreasoning attitude and the lack of poise are well-known and vary greatly in normal women. In states of abnormal psycology and defenite mental and nervous diseases the emotional symptoms are intensified. Menstruation represents the failure of conception and the uterus is said to weep for the failure. A complete menstrual cycle is as follows :—

1. Ovulation and subsequent development of the corpus luteum. This approximates 15 days, the corpus luteum exerts its effects in a sensitising uterine mucosa and repressing further ovulation.
2. Menstruation takes the place of a degenerative process of the endometrical mucosa as a result of failure of conception; concurrently corpus luteum degenerates. This process lasts from 1 to 3 days. The menstrual flow and degeneration of the corpus luteum take place concurrently but this does not mean that the corpus luteum is the direct cause of the menstruation.
3. The new ovum begins to develop follicular and ovum growth proceeds with the attendant or consequent hyperplasia of the uterine mucosa. This period lasts

for ten days and is followed by No. 1.

It is found in lower animals whose reproductive function is limited to seasonal periods that their physical and histological changes correspond very closely to those in the human female during and before menstruation. In primitive races there is resemblance to this condition. It is only the incidence of civilised clothing particulary of a diaphanous kind which preeminetly brings to notice the erogenous zones of the body, modes of living, morals and evolution of modesty that have led to the loss of this periodical sexual season.

Frank summarises the theoritical relation between the ovary and corpus luteum and menstruation as follows:

1. Full maturation of follicles causes the premenstrual changes.
2. Follicular rupture coincides with or follows closely the onset of the menstrual flow.
3. During the active growth of the corpus luteum (a) the uterine mucosa is sensitized, so as to be capable of receiving a fertilized ovum; (b) Follicle ripening is interfered with.
4. During pregnancy the corpus luteum persists; follecular ripening is therefore, interfered with and hence the menstrual cycle is postponed.





## AN ANALYSIS OF 25,388 OBSTETRIC CASES

BY
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My object in publishing the following statistics is to show the incidence of various presentations and complications obstetric or otherwise in Maternity Hospitals in India. 25,388 Obstetric cases recorded below cover a period of 16 years from 1914 to 1929. All these cases have been classified under five heads. (1) Natural (2) Difficult (3) Preter-natural (4) Complex and (5) Abortion. Each of these five groups are again divided and sub-divided depending upon normal and abnormal presentations and complications peculiar to pregnant women. Diseases complicating pregnancy and other general diseases constitutional or infectious have been shown under further sub-divisions and I hope the readers will find this tabulation less taxing so that one could at a glance grasp these several varieties without having to read about such classifications which if committed to writing in the usual way without having recourse to tabulation will be confusing and un-intelligible. The incidence of various presentations and positions differ in different clinics and the figures recorded in this institution compare favourably with some of the Continental clinics but the complications non-obstetric and obstetric are considerably more in our country. This rare increase under non-obstetrical complications is in a large measure due to the prevalance of epidemics and other tropical diseases which complicate pregnancy. The increase under obstetrical complications is due to want of efficient antenatal care and both are favoured by ignorance poverty indifference and social customs prevalent in our country. These complications devitalise the pregnant woman resulting in premature or still births or pave the way for obstetric emergencies which endanger the life of a woman or reduce her to a state of life long invalidism, thus increasing to a large extent the maternal morbidity and the foetal and maternal mortality in our country. To keep down the large incidence of these complications efficient antenatal work is very essential. It is hoped that the Statistics in the tabular form which appears here below will enable the general practitioner to see at a glance the common complications met with in tropical midwifery practice, the prevention of which is the real antenatal work in which every practitioner should interest himself so that the parturient woman committed to his care will have a natural delivery of a healthy baby. Of late a good deal has been heard about maternity centres etc., but there yet remains much more to be done in this direction. The general practitioner can no longer afford to keep aloof and in the practice of obstetrics he has a legitimate place. He cannot afford to exclude obstetrics from his daily work. In the course of his daily professional work the general practitioner comes across many an obstetric and other complications, proper recognition of these complications, efficient treatment and timely advice will prevent many catastrophies. Modern obstetrics demands the practice of preventive obstetrics thus the general practitioner has a great part to play in the scheme of antenatal work. Often times in mofussal areas where he is the only available qualified medical practitioner he will be called upon to attend complicated and difficult cases of labour. Those who have played their parts well in the scheme of antenatal work, will approach their cases with courage, infusing confidence in the suffering woman and bring about a speedy relief with satisfaction to all concerned. When the importance of antenatal work is recognised by the general practitioner he will set apart a portion of his time daily for this work. This will find him in the midst of a large and remunerative practice & furtherhelp in the reduction of maternal morbidity & foetal

and maternal mortality in our country.

The lines of treatment adopted for the various complications enumerated in the table will be the subject for future articles in this journal and I crave the indulgence of the reader to treat what appears in this issue on the subject as a mere introduction.

Analysis of 25388 Obstetric Cases recorded in the Raja Sir Ramaswamy Mudaliyar's Lying-in-Hospital, Madras for the period from 1914 to 1929, showing the incidence of various presentation and Obstetric and other complications:—

| Class | Division | Sub-division | No. | Total | Total to class. |
|---|---|---|---|---|---|
| I Natural | Natural | L. O. A. | 9937 | | |
| | | R. O. A. | 2600 | | |
| | | R. O. P. | 1012 | | |
| | | L. O. P. | 736 | 14385 | |
| | Variety | Face | 95 | | |
| | | Brow | 11 | 106 | 14491 |
| II Difficult | Tedious | Delivered by Natural powers after 24 hours | 777 | 777 | |
| | Laborious | Vertex | 1244 | | |
| | | Face | 16 | | |
| | | Brow | 14 | 1274 | 2051 |
| III Preternatural | Inverted | Breech | 564 | | |
| | | Foot | 46 | 610 | |
| | Transverse | Transverse | 133 | 133 | |
| | Compound | Head and hand | 88 | 88 | 831 |
| IV Complex | Plural birth | Triplets | 11 | | |
| | | Twins | 418 | 429 | |
| | Hæmorrhage | Accidental | 149 | | |
| | | Placenta Praevia | 159 | | |
| | | Post-partum | 336 | 644 | |
| | Toxemia of Pregnancy | Anæmia | 192 | | |
| | | Toxemia of pregnancy | 180 | | |
| | | Eclampsia Antepartum | 81 | | |
| | | „ Intrapartum | 192 | | |
| | | „ Postpartum | 91 | 736 | |
| | Retained Placenta. | Morbidly adherent or otherwise | 150 | 150 | |
| | Rupture Uterus | Complete rupture | 36 | 36 | |
| | Decent of Funis | Presentation & Prolapse Funis | 145 | 145 | |
| | Infectious Disease | Septic peritonitis | 2 | | |
| | | Malaria | 555 | | |
| | | Sapræmia | 386 | | |
| | | Dysentery | 261 | | |
| | | Syphilis | 217 | | |
| | | Gonorrhœa | 141 | | |
| | | Influenza | 132 | | |
| | | Septicæmia | 90 | | |
| | | Pneumonia | 36 | | |



| Class | Division | Sub-division | No. | Total | Total to class. |
|---|---|---|---|---|---|
| IV Complex *contd.* | Infectious Disease *contd.* | Tubercle Lungs | 26 | | |
| | | Filariasis | 24 | | |
| | | Small pox | 22 | | |
| | | Erysipelas | 12 | | |
| | | Pyæmia | 9 | | |
| | | Leprosy | 11 | | |
| | | Cholera | 6 | | |
| | | Kala-azar | 4 | | |
| | | Mumps | 3 | | |
| | | Enteric | 6 | | |
| | | Measles | 1 | | |
| | | Infective Granuloma | 1 | | |
| | | Scabies | 10 | 1955 | |
| | Urinary system | Albuminuria | 376 | | |
| | | Cystitis | 92 | | |
| | | Pyelitis | | | |
| | | Floating kidney | 2 | 478 | |
| | Respiratory system | Asthma | 38 | | |
| | | Bronchitis | 22 | | |
| | | Pulmonary embolism | 9 | | |
| | | Pleurisy | 3 | 72 | |
| | Anæmia | Ankylostomiasis | 502 | 502 | |
| | Circulatory system | Valvular disease heart | 47 | | |
| | | Varicose veins | 3 | 50 | |
| | Digestive system | Cirrhosis-liver | 3 | | |
| | | Diarrhœa | 59 | | |
| | | Intestinal Obstruction | 2 | | |
| | | Ventral hernia | 1 | | |
| | | Ascariasis | 1 | | |
| | | Pyorrhœa | 2 | 68 | |
| | Nervous system | Epilepsy | 9 | | |
| | | Insanity | 16 | | |
| | | Chorea | 1 | 26 | |
| | Skin | Disease of skin | 61 | 61 | |
| | Diseases of Thyroid | Goitre | 2 | 2 | |
| | Disease of breast | Abscess breast | 35 | 35 | |
| | New growth of Generative organs | Non-malignant | 12 | | |
| | | Malignant disease cervix | 1 | 13 | |
| | Disease of Decidua or Fœtus | Hydramnios | 86 | | |
| | | Macerated Fœtus | 436 | | |
| | | Hydrocephalus | 16 | | |
| | | Anencephalus | 20 | | |
| | | Microcephalus | 3 | | |
| | | Fœtal Ascites | 6 | 567 | |

| Class | Division | Sub-division | No. | Total | Total to class. |
|---|---|---|---|---|---|
| IV Complex *contd.* | Contracted Pelvis | Flat pelvis | 87 | | |
| | | Generally contracted | 107 | | |
| | | Generally contracted and flat | 39 | | |
| | | Funnel shaped pelvis | 3 | | |
| | | Dwarf pelvis | 1 | | |
| | | Obliquely contracted pelvis | 1 | | |
| | | Kypho-Scoliotic pelvis | 2 | 240 | |
| | Pre-mature Labour | Pre-mature Labour | 482 | 482 | |
| | Prolapse of Genital organs | Prolapse cervix | 39 | | |
| | | „ uterus | 4 | 43 | |
| | Injuries | General and Local | 3 | 3 | |
| | Tubal pregnancy | Ectopic gestation | 5 | 5 | 6742 |
| V Abortion | Abortion | Complete Abortion | 552 | | |
| | | Incomplete „ | 681 | | |
| | | Vesicular mole | 39 | | |
| | | Chorian Epithelioma | 1 | 1273 | 1273 |
| | | | GRAND | TOTAL... | 25388 |

| Year | | No. of Deliveries. |
|---|---|---|
| 1914 | ..... | 949 |
| 1915 | ..... | 937 |
| 1916 | ..... | 1297 |
| 1917 | ..... | 1341 |
| 1918 | ..... | 1175 |
| 1919 | ..... | 1348 |
| 1920 | ..... | 1596 |
| 1921 | ..... | 1524 |
| 1922 | ..... | 1775 |
| 1923 | ..... | 1747 |
| 1924 | ..... | 1847 |
| 1925 | ..... | 2047 |
| 1926 | ..... | 1601 |
| 1927 | ..... | 2082 |
| 1928 | ..... | 2104 |
| 1929 | ..... | 2018 |
| GRAND TOTAL ... | | 25,388 |

| Presentation | | | Frequency. |
|---|---|---|---|
| Vertex | ... | ... | 94·43 |
| Face | ... | ... | ·62 |
| Brow | ... | ... | ·08 |
| Pelvic | ... | ... | 4·00 |
| Transverse | ... | ... | ·87 |



| Class of Labour | | | Frequency. |
|---|---|---|---|
| Natural | ... | ... | 57·07 |
| Difficult tedious | ... | ... | 3·06 |
| Difficult laborious | ... | ... | 5·02 |
| Preternatural | ... | ... | 3·27 |
| Complex | ... | ... | 26·56 |
| Abortion | ... | ... | 5·02 |

| Obstetric Complication | | | Frequency. |
|---|---|---|---|
| Triplets | 1 in | 2308 | cases |
| Twins | 1 in | 61 | „ |
| Accidental Hæmorrhage | 1 in | 170 | „ |
| Placenta prævia | 1 in | 160 | „ |
| Post-partum hæmorrhage | 1 in | 76 | „ |
| Eclampsia | 1 in | 96 | „ |
| Retained Placenta | 1 in | 169 | „ |
| Rupture Uterus | 1 in | 705 | „ |
| Prolapse Funis | 1 in | 175 | „ |
| Abortion | 1 in | 21 | „ |
| Vesicular mole | 1 in | 651 | „ |
| Chorion Epithelioma | 1 in | 25,388 | „ |
| Ectopic Gestation | 1 in | 5077 | „ |
| Contracted pelvis | 1 in | 106 | „ |

# Abstracts

## THE KING EMPEROR *v.* RALPH BRITTON

*(Third Criminal Sessions, 1930.)*

### The Honourable Mr. Justice Reilly's Address to the Jury

*What appears here below is a portion of the charge to the Jury wherein the learned Judge analyses the evidence of the expert, Col. Berkley Hill, I. M. S. The other portion which deals with the facts of the case has been omitted being irrelevant for our purpose* (Ed).

As I have told you, if he is to have the benefit of that plea, he must make it out. He must satisfy you that at the moment he fired, he was of unsound mind, and of unsound mind to the extent I have mentioned, that is, so unsound in mind that he did not know the nature of the act he was doing or what he was doing, or, if he knew that, still he did not know that what he was doing was either wrong or contrary to law. If he cannot satisfy you about that, if his defence does not succeed to that extent, it is no defence at all.

You will remember that some defence witnesses were examined to show that, as the accused says, he drank a certain amount of beer that day. Private Rumble has told you that he saw the accused having two or three drinks of beer in the canteen about midday. Private Arnott says that he saw the accused have one drink of beer that day on that occasion. Private Beckett says that he saw the Accused have two drinks about midday; he was also with the accused in the evening, when the accused had his supper; on that occasion the accused had a hearty supper, having two helpings of the dish, and drank two bottles of beer. As has been explained to you, there is

no defence in this case that the accused was intoxicated when he shot Davis. No such defence could be set up in this case because, if he had been intoxicated, he would have intoxicated himself, on the evidence we have. But what is suggested is that, as he was unused to drinking beer, his natural self-control would have been lowered a bit by drinking so much beer. Well, gentlemen, you can judge whether a man who drank two or three or four bottles of beer between 12 and 1 in the day would be feeling any serious effect of that at 9-30 P. M. You can also judge whether a man who drank two bottles of beer with a fairly heavy supper between 8 and 8-30 would really be much affected by it at 9-30. There is no suggestion, or any evidence that any body saw the Accused in any way affected by drink, or that there was anything in his behaviour to indicate that. Another witness, Corporal Humble, has been called to show that the Accused was confined to barracks and that he reported himself properly at the Police room just after 9 O'Clock, after the lights had gone out. That means that he reported himself according to the evidence after he had received charge of those two revolvers.

Some evidence has been elicited about Accused's general character. Sergeant Grigg, Briggs, Buxton, Dagnall and Shirloy have all told you that the Accused was a cheerful, jolly fellow. One of them said that he was the life of the Company. Sergeant Grigg, Briggs and Shirley have said that he was very fond of playing the fool and ragging. Arnott, a defence witness, says the same. And in regard to that particular day, Humble, Arnott and Beckett all say that the accused was quite cheerful and jovial that day. Beckett had supper with him; he was very cheery then. Sergeant Mahoney, P. W. 5, has told you that he heard the Accused singing, as he came along at 8 O'Clock, and that he was attracted by the fact that he seemed to be happy and remarked upon it. Then there is evidence that that evening after he got back from his supper he was playing the jazz-drum quite happily. One witness has told you that, as the Accused himself says, he was very fond of reading Edgar Wallace's books. That is about his general character.

A cousin of the Accused, Arundale, was called to give evidence about his family history, the idea being to show if possible, that there was some predisposition to insanity in his family. You will remember that the cousin, who gave his evidence in a very open way, was able to say very little to prove anything of the sort. He said that some of his own sisters and he is the son of a sister of the Accused's mother and so is a maternal first cousin of the accused some of his own family are very impulsive, and that one of his sisters once hit a boy on the head with a bottle when he and some others obstructed her as she was going along a road. He also mentioned that the Accused's mother's sister's daughter's children, some of them had died of epilepsy. Now, if those children unfortunately had an hereditary taint in them, it may well have come from people entirely unconnected with the Accused. Their father had nothing to do with the Accused. Their grand-father had nothing to do with the Accused, that is their mother's father. On the contrary, the Accused is one of a large family, who, according to the evidence are all healthy. That piece of evidence about some children of his mother's sister's daughter carries you nowhere. The rest of the evidence given by Arundale for this purpose was that his maternal grandfather, who was also the Accused's maternal grandfather, was a very strict old man who routed out the members of his family at 4 or 5 in the morning and was fond of drink. Now, gentlemen, whether that evidence about members of the Accused's family and relations of the Accused is of any use in proving a tendency to insanity in the Accused or his family is a question





for you and not for me. But I may say that I have never heard of evidence so thin being produced for such a purpose.

And now, we come to the heart of the case, the Accused's defence that at the time he shot Davis he was of unsound mind. I have told you how far that defence must go before it is of any use. It must go to the extent of satisfying you that, when he fired that shot, he did not know what he was doing or did not know the nature of his act or, if he knew it, did not know that what he was doing was either wrong or did not know that it was contrary to law. It must go to that extent. Mr. Brooke Elliot at the opening of his speech for the defence asked, "Did it appear to you that the Accused was in full possession of his mental faculties when he shot Davis?" That is not the question before you. You are not asked to say whether the Accused was in full possession of his mental faculties or not. You have to decide whether you are satisfied that he did not know what he was doing or did not know that it was either wrong or contrary to law. You must keep your minds closely fixed on that question and not be diverted to other interesting questions which at the present moment do not concern you. We have been told what is a well-known fact, that physicians and lawyers look upon questions of criminal insanity from entirely *different* standpoints. You will remember that Col. Hill, who was called as an expert for the defence, told you that he was not concerned, in the least with the social aspects of crime; that was not his affair. And that is very reasonable. Physicians and specialists in insanity who call *themselves* alienists, study individual patients. Their business is to seek for the cause of insanity and, if possible, to cure that insanity. That is not the business of lawyers. Lawyers are concerned in these matters with general rules and laws for the protection of society. Degress of insanity or weaknesses are of much less interest to lawyers than they are to physicians—quite naturally. Individuals, as you know, may vary almost infinitely in that respect. But if you think over the matter, you will understand that, when the law provides for the defence of insanity, it must in the interests of society, confine that defence strictly. If the defence of insanity were made an easy matter, if any peculiarity of the mind, any weakness, any want of self-control, which might appear to a physician to be a sign of insanity, were admitted as a defence to a charge of crime, then a very easy road of escape would be open to the most wicked criminals. A very large proportion of the criminals in the jails of any country are not normal people. It does not follow from that fact, that they have not been properly and legally, convicted. I think you will see, if you think over the matter, that there is a good deal to be said in the interests of society for making the test of insanity as a defence, when a man admits his act but says "I was of unsound mind", a severe test. But after all we are not concerned with the policy of the law in this matter. You are not sitting here to make or mend the law, but to administer the law and by the law you are bound, as is every one of us. The law is that unsoundness of mind is no defence unless it goes to the length of making a man incapable of knowing the nature of his act or, should he know that, of knowing that it is either wrong or contrary to law; and that defence must not only be indicated or suggested but must be proved strictly. You must remember that very carefully in dealing with such a defence. We know men vary in their characters temperaments and degrees of sanity vary much; but you will see that the defence on which the Accused relies in this case has to be made out thoroughly. Excitability, eccentircity an unbalanced mind, nerves, they are no excuse. A delusion is no excuse. It would be no defence for me to say that I killed a man because under a delusion I honestly believed him to be my enemy. If he had been my enemy, I should have had no justification. Delusion by itself is no defence.

Succumbing to temptation or weakness of will is no defence. That is not the unsoundness which the law recognises as a defence. Loss of self-control, however complete, is no defence. The criminal law is directed very largely to make men keep their self-control. A morbid impulse is no excuse. An irresistible impulse—if man says that he has done something under an irresistible impulse—that is no excuse. Some men have fiercely strong sexual impulses, but would such an impulse be any defence to a charge of rape? None whatever. If a thief said that he had an irresistible impulse to steal a pearl necklace, would that be an excuse? None whatever. Nor is inflamed imagination any excuse. If a robber said "My imagination was inflamed by reading stories of highway robbery", would that be an excuse? None whatever. Mr. Brooke Elliott in his opening speech suggested that an ordinary man who heard of what the Accused had done might say in conversation that he must have been mad to do it. That is the sort of thing we might say when we heard of an atrocious or callous crime. But merely because the atrocity or callousness of a crime surprises us into such an exclamation, that does not show that the doer was of unsound mind within the meaning of the Indian Penal Code. If we were to infer from the atrocity or the callousness of a crime that the offender must be of unsound mind, then many of the most callous and atrocious crimes would go unpunished merely because they were callous or atrocious. You must come back to the one test which is laid down by the law, the test whether the man who does the act is at the time of doing it, by reason of his unsoundness of mind, incapable of knowing the nature of the act, what it is he is doing, or knowing that it is either wrong or contrary to law. That is the touchstone, by which you must try every argument. every piece of evidence for the defence.

There is one curious thing about the defence of insanity in this case, to which I must draw your attention though I do not wish to say anything unduly harsh about the Accused. This defence appears to have been put forward at a very late stage. As you know, what we are interested in, is the condition of the Accused's mind on 30th May when he fired the shot. We should expect, in such a case as this, ordinarily to have, if it were possible, medical evidence about the Accused's mind at that time or near that time. Now the Accused was not in any remote part of the country, where medical men were not available. He was at Bangalore, where there are many medical men. He was in charge of a medical man himself as a soldier, and while on remand, he must have been constantly under medical supervision and inspection. But we have not had a word of medical evidence about his mental condition at or about the time when this act was done. That is a very strange feature of the case. It is a fact, and you will no doubt make allowance for it, that the accused had no legal adviser until quite recently. But there is no doubt that the officers of the Accused's Corps were taking a proper interest in him, and he had a medical officer whose duty it was to look after him. But still the evidence which we should naturally expect and which would be of most help to us, is not here. Col. Hill yesterday did mention that a certain Dr. Naronha had been watching the Accused for a week. But Dr. Naronha has not been examined, and I presume he could say nothing in favour of the Accused on this point. Then you will see, apart from medical evidence no questions were asked of any of the Accused's comrades about any peculiarities in his conduct showing insanity or a tendency to insanity at or about the time of this event. What we have got, to support his plea in the way of medical evidence, is the evidence of Col. Hill, who first saw the Accused last Saturday nearly 2½ months after the date with which we are concerned; Col. Hill no doubt gave his best attention to the accused when he saw him last Saturday. But is it to be supposed



that this young man, who had been in prison with this dreadful charge over him for nearly 2½ months, was in his normal condition when Col. Hill first saw him? That is hardly likely. Well, I think it is unfortunate that there should be this gap in the information available to you about the Accused's condition. What may be fairly inferred is that at any rate none of the medical men who had to do with the Accused during that period had any idea that he was in any degree insane. If they had, it would have been a wicked thing not to have brought it to notice, and we have no reason to charge anyone with such wickedness.

Col. Hill has been examined for the defence as an expert witness to assist you in deciding whether the Accused was of unsound mind on the 30th May, when he shot Corporal Davis. Col. Hill is an undoubted expert on questions of insanity; and, as you remember, he gave his evidence here yesterday very fully, very clearly, very candidly. There was a peculiarity about it in the fact that instead of answering questions he gave us a lecture, a very interesting lecture upon insanity. He made, if you remember, something very much like a speech from the witness-box, a speech for the defence. That was a little irregular; but we all wanted to hear all that he could say in favour of the accused. You will remember that apart from his observations of the Accused's appearance, almost all his inferences were drawn from what the Accused himself had told him during two interviews, lasting altogether about 1½ hours, last Saturday. Col. Hill said that he noticed certain peculiarities about the Accused's appearance; he was a slim man; there was a certain lack of masculinity about his appearance; he had irregular teeth, and the lobes of his ears were rather unusual. These appearances he told us, are associated with a certain weakness of the mind, a certain form of insanity called schizophrenia, which Col. Hill suggests the Accused may be suffering from. So far for the Accused's appearance. In the course of his conversation with the Accused, he observed some other points, confirming his suspicion that the Accused had this peculiar ailment, schizophrenia—division of mind. For one thing the Accused in conversation did not display, when talking about the killing of Davis, as much regret as an ordinary man would have done. On the contrary he appeared more interested in other matters, and he expressed great disappointment that he could not go on playing on the jazz-band. He also stated that he apprehended loss of sleep but was not actually losing any sleep. Col. Hill has told you that on his second visit to the Accused last Saturday afternoon, he found his conversation undually flippant about this dreadful thing he had done. All these things he took as signs that the Accused might be suffering from schizophrenia. But on the other hand Col. Hill candidly told you that he observed a number of things which pointed to the Accused not having that disease or weakness. There was nothing peculiar in his manner, as would be expected in a person suffering from that disease. There was no moroseness in him, which would ordinarily be found in a schizophreniac. The Accused did not appear to have any feeling of persecution, though a feeling of persecution is a common symptom in persons suffering from that disease; indeed he recognised that what Davis had done in reporting him was quite just. He told Col. Hill that he had wanted to commit suicide but did not do it. That too Col. Hill regarded as an indication against the Accused suffering from schizophrenia. Col. Hill also told you that the jolly, jovial joking character which his own comrades gave the Accused, was against the theory of his having this disease or weakness. In support of the possibility that he had this disease, Col. Hill ascertained that the Accused was not attached very much to anybody and that he was not fond of games. And one point which Col. Hill obviously regar-

ded as of importance was that the Accused was attracted by stories of violence, especially shooting. Col. Hill suggested that the Accused has what he called a "shooting complex". By that I understand him to mean that the Accused's mind ran on shooting: shooting had a morbid fascination for him. Well, Col. Hill adopted the view that the Accused had that shooting complex. But you must observe that there is no evidence of it except what the Accused himself says; beyond his request to Shirley in the middle of the day on the 30th May to hand over to him the keys of the revolver boxes in order that he might get a revolver to shoot Davis, and that he himself says was only a joke. The Accused in the ordinary course of his duties must have been handling revolvers for years. There is no evidence from any of the men who have known him during that period that revolvers had any special fascination for him. Surely, if there was anything peculiar about his conduct in connection with shooting or with revolvers, some indication of it could have been ascertained from some of his comrades. There is the story, which he told Col. Hill, about a joking reference to shooting between him and Sergent Grigg, which Sergeant Grigg says has no foundation in fact. Col. Hill may be right in saying that the Accused had a shooting complex; but you will see that there is very little foundation in the evidence for it. It may be an acute diagnosis by a skilful man. About the affair generally, Col. Hill, you will remember, set before you a theory how it might have happened. He told you that, if the Accused was a schizophreniac—if he was so, then he had a slight grudge against Davis: his mind ran on shooting: his power of self-control might have been weakened on the 30th May by the drink he had taken by pure accident, and we all know it was an accident, two revolvers and ammunition came into his possession: shortly after they came into his possession the lights all went out, and he might then have felt driven to do this dreadful act. That is the theory which Col. Hill has put before you. But you will remember that, that theory is founded on the hypothesis that the Accused is a schizophreniac. If the Accused is not a schizophreniac, then the whole theory falls to the ground. Now Col. Hill himself is not certain whether the Accused is a schizophreniac or not. You will remember he said he regarded it as a border line case, by which I understand him to mean that the Accused may be a schizophreniac or he may not be. You will see that Col. Hill's theory how this event might have come about is founded on an uncertain hypothesis and supported by other uncertain hypotheses.

But that to my mind was not the strangest thing about Col. Hill's evidence. You know why Col. Hill was called here. You know what the Accused's defence is. The Accused's defence is that he was of unsound mind to the extent that he did not know what he was doing when he fired that shot or did not know that it was either wrong or contrary to law. Col. Hill knew that was his defence. He was asked at the opening of his examination-in-chief whether he knew the law on this subject and had studied it, and he said "yes." Now you will remember Col. Hill was in the witness-box for nearly an hour in his examination-in-chief. I waited, as other people waited, I dare say, to hear him give the evidence which was wanted by the defence to show that the Accused was of unsound mind within the meaning of the law. That evidence never came. No question was put to Col. Hill about that in his examination-in-chief. But a question was put in cross-examination, and you will remember what Col. Hill's answer was. Col. Hill said that he could not say that the Accused did not know that he was shooting Davis with a revolver: he conjectured that the Accused did know that he was shooting Davis with a revolver. I understand that to mean that in Col. Hill's expert opinion it is probable that the Accused did know that he was shooting Davis with that revolver. I do not think any other complexion can be put upon that evidence, and that is the evidence of the expert called for the defence. If an expert had been called for the prosecution, could he have said more?



But what does all this expert evidence come to? If you put on one side the technicalities and the technical terms, does it amount to much more than this—that the Accused is not a normal young man? Of that, I think it very likely, the prosecution evidence had already convinced you. Surely the whole story shows that he is not an entirely normal young man. The prosecution does not question that. We know from the evidence that he was cheery and joking during that day. He was playing the jazz-drum happily in the evening. And then, a very short time afterwards, he committed this dreadful act for no immediate reason and, if for a grudge, then for a slight grudge. That, is not the act of a normal man. It is not suggested to you that the Accused is an entirely normal young man. But is that enough for his defence? Clearly it is not enough according to the law. You are not sitting here at the present moment to consider whether the Accused is a normal young man or not. The question before you is whether his weakness of mind, whatever it is, went to the length required, whether he was so unsound in mind that at the time he shot Davis he did not know what he was doing or did not know that it was either wrong or contrary to law. The Accused seeks the sanctuary of that exception to the penal law. You cannot afford him its protection unless you are convinced that he comes within it. That is the real point in the case.

Now let us go back for a moment to the evidence. Let us leave theories for facts. Mr. Brooke Elliot very properly pointed out to you that in this case there is no evidence of much preparation for the act. There was no lying in wait for Davis, in the dark, at any specially convenient time, when the Accused could have done this deed and perhaps have escaped detection. That is quite true. There was no such preparation. Mr. Brooke Elliot asked—woulda sane man have done this deed in the circumstances in a lighted room in the presence of other people, instead of waiting for a more convenient opportunity? But you must remember that those revolvers came into the Accused's possession accidentally for a short time, and he had no reason to suppose that they would be left in his possession for more than a few minutes. It was while they were in his possession that he did this. And can we say that there was no preparation? Can you say that the revolver was not deliberately loaded? Can you say that there was no deliberation in going, not down the middle of the room, where anybody who saw him might have stopped him, but out through the verandah to the door by Davis' cot and there bursting in upon him? Then you must remember what the Accused said before he fired, what he said after he fired, his conduct immediately after he fired, what he said about wanting to go to the guard-room, what he said at the guard-room. Take these things one by one. The evidence is, and it is not seriously disputed, that just before he fired he said "Now I have got you, you bastard." Can you say that, when he said that he did not know what he was about to do? The evidence is, and it is admitted, that immediately after he fired he said "I have done it." Can you believe that he did not know what he had done? The evidence is that immediately after he had fired he quietly handed over his revolver butt-forwards to Briggs. Did he know then what he was doing or what he had done? After that he said that he wanted to go to the guard-room. Can you say that, when he said that, he did not know that what he had done was wrong. If he did not know the nature of his act, if he did not know that it was wrong or contrary to law, how was he concerned with the guard-room? At the guard-room he said "I would have shot myself

over there, if I had had the nerve." Does that show that he knew what he had done, or that he did not know? He said he would have committed suicide. Does that mean that he knew the nature of his act or that he did not know? Now you are concerned with the Accused's state of mind at the moment he fired. The evidence of of what he did and said just before and just after that act is the best evidence, the only evidence before you of great weight, from which you can draw your inference. As I have said, you are not concerned with the question whether the Accused was a normal young man on that occasion. That is not the question. The question before you is--has he satisfied you that, when he shot Davis, he did not know the nature of his act, did not know what he was doing, or, if he knew that he did not know that it was either wrong or contrary to law. Can you say in the face of the evidence—it is entirely for you to consider—that he has satified you on those points?

Mr. Brooke Elliot for the defence naturally appealed to your compassion. God forbid that any of us should put compassion out of our hearts. But from your minds at this moment it must be banished. You must give your verdict on the evidence in accordance with your oath, unswayed by any feeling of compassion. If you are satisfied that the Accused, when he fired that shot, did not know the nature of his act, did not know what he was doing, or knowing what he did, did not then know that it was either wrong or contrary to law, the verdict which you will have to bring in is that the Accused killed Davis but that he is not guilty on account of unsoundness of mind. If you are not satisfied that he has made out that defence, then the verdict that you must bring in is that he is guilty of murder. I will only add that, if upon any point in the case you feel any reasonable doubt, the benefit of your doubt on that point must be given to the Accused.

Please consider your verdict.

**Ralph Britton.** The Jury have unanimously found you guilty of the murder with which you have been charged. But they have strongly recommended you for mercy. You are convicted of the murder of Lance-Corporal Davis. But I take into consideration your youth, the evidence that you are not entirely normal in mental constitution, and the recommendation of the Jury, in your favour and I therefore do no not think it necessary to sentence you to death. The sentence of the court is that you do undergo penal servitude for life.

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## CONSULTATIONS

The following general rules for guidance of consultants are proposed by Dr. E. J. Jasper. of Astoria, Ore; in Northwest Med., Apr., 1930.

1. Consultation should be private. Friends or relatives should not be in the room. Some consultants like to display a bombastic or overdone technic.

2. Consultant should be given time and not be unexpectedly called into a case which might require deep study and deliberation.

3. Medicines should not be changed abruptly by reason of calling in a consultant.

4. If a surgeon is called, and an operation deemed advisable, the physician in charge should propose the operation. He may state, a little later, as the result of consultation, that an operation is deemed advisable.

5. After consultation is held, the information should remain confidential. If members of the family or friends question the consultant, he should answer by stating. "I have given Dr. Blank all the information. He is in charge and will explain matters to you,"

When the consultant and the physician in charge of the case cannot be at the bedside at the same time, these rules should apply:

1. The consultant should examine the patient.

2. He should write a brief sketch of his findings.

3. Write the diagnosis, or probable diagnosis, if this can be done.

4. Suggestion as to the treatment. References to further study.

5. Prognosis of the case.

6. In a hospital this can be written on the record sheet. In private practice the written slip should be given to the physician in charge.—(*Clinical Medicine and Surgery, August 1930.*)

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## Notes on treatment of Diseases

*N. B.*—These notes are intended to supplement the treatment given in ordinary text books and neither to be expected nor possible to be exhaustive.

**Bubo-Chancoroidal**:—A small incision is made and matter allowed to escape; Two days after an injection of Mercier's solution 1 to 1. 5 c.c. is made and the nozzle kept in the incision for a minute; every two days the injection is made and on the whole five injections are required. Mercier's solution consists of Iodoform 10 parts. Guaicol 10 parts. Eucalyptol 10 parts. Alcohol 95% 110 parts, Balsam of Peru 30 parts and Ether 100 parts.

**Burns and Scalds**:—The beneficial effects of Antiphlogistine was first found by accident and then confirmed by actual experience. It should be applied cold and thick over the part; no clothes should be put over it except a thin layer of gauze, but absorbant cotton wool in thick layers should be put over the first dressing. The dressing should not be removed as long as it sticks to the skin. It may be kept for five days or more.—(*M.T.T.*)

2. **Ambrine (A. F. D.)** forms a dressing which instantly alleviates pain, promotes rapid healing, forms a sure protection against infection, is easily removed without pain, hemorrhage or injury to the newly formed tissues. This is available in slabs or cakes and can be melted in a water bath and applied with a large sized camel hair mop.

3. Succus garlic filtered 20% in carron oil is an excellent dressing (*Practitioner.*)

4. Immediately after the accident hypodermic injection of morphine ¼ gr. and atropine 1/100th of a grain to be given and the body rolled in a blanket. If there are symptoms of shock apply externally heat and give hot water and whisky; injection of strychnine 1/20th of a grain or digitalin ½ gr. to be given if the circulation is weak. A very useful practice is to put the patient in a bath of normal warm saline and allow him to remain in it as long as the shock lasts; for local treatment picric acid solution of 1% in water or white galatine 7½ ounces, glycerine 1 ounce, phenol 1 ounce, water 16 ounces to be prepared and kept in air tight bottle and applied freely; internally pot. citras. 20 gr., sweet spts. of ether 20 gr., in one ounce of water.

5. **Burns**-1st degree:—When there is only erythema, acid carboloic 10 gr., in one ounce of vaseline or olive oil 10 drams, yolk of four eggs and carbolic acid 10 mms. to be applied locally.

**Burns**-2nd degree:—When there are vesicles and raw surface.—A dry dressing of equal parts of Bismuth sub-nitras, oxide of zinc and powdered starch to be dusted thickly over the part and bandaged over with cotton wool.

**Burns**-3rd degree:—When infection is suspected simply dust the surface with boric acid (*Practical Medicine.*)

5. Paraffin wax is the best dressing; it consists of resorcin 1 part, Eucalyptus oil 2 parts; olive oil 5 parts, soft paraffin 25 parts; hard paraffin 67 parts to be melted in water bath at 45 degrees centigrade and applied with a soft brush (*Modern Technique of treatment.*)

6. Tannic acid 2.5 of 5 per cent aqueous solution to be applied; on application the skin becomes of mahagony colour and then the dressing is to be removed after 24 hours and then the patient is treated with dry heated air (*J. A. M. A.*)

7. Iodex is an excellent remedy.

8. Sterilised cocoanut oil is the most handy and cheap remedy (*Indian Medical Gazette*).

9. Treatment with normal horse serum is the best even in cases where large area is affected; first a preliminary bath of warm physiological saline solution of sodium chloride is given and then the horse serum containing cresol should be sprayed with an atomizer twice a day to prevent drying and the wounded part protected with rubber tissue (*Medical Annual*)

10. A warm solution of tannic acid 2.5 to be sprayed with an atomizer over the burnt area (*Medical Annual.*)

**Bacillis coli infection** is very common in India among the infants. In the acute form it resembles typhoid fever, tubercular meningitis, kala azar malarial fever etc. The urine should be examined for acidity and pus cells. For treatment Pot. choloras 10 gr. with dextrose in powder 10 gr. to be given every two hours with water for 48 hours or until the urine becomes acid. If no effect is produced urotrpine gr. 2, and acid sod. phosphate gr. 6 to be given every four hours; if the stools are offensive salol 2 gr. to be given in powder; if there is distention of the abdomen dextrose may be left out; for collapse brandy is the best; if there be convulsions and high temperature Dover's powder and asperin each 1 to 2 grains to be given. In chronic cases Pot. Citras 10 to 20 gr. with lemon squash until the urine becomes alkaline (*Armitage*).

## Notes on Diagnosis, Therapeutics and other medical subjects.

The constituents of urine of Europeans and Bengalis by Lieut Col. McCay.

| *Constituents* | *Europeans* | *Bengalis.* |
|---|---|---|
| Quantity | 1440 c. c. | 1200 c. c. |
| Specific Gravity | 1020 | 1013 |
| Urea | 35 grams | 13 grams |
| Nitrogen total | 18 „ | 6 „ |
| Freezing point | –2·5° c. | –1·4° c. |
| Chlorine | 15 grams | 10 grams |
| Phosphates | 3·50 „ | 0·918 „ |
| Uric acid | 0·75 „ | 0·452 „ |
| Hippuric acid | 0·7 to 2·9 „ | ..... |
| Sulphates | 2·50 „ | 1·880 |
| Acidity | 30 to 40% | ..... |
| Total solids | 2·8 to 5·5% | ..... |
| Ammonia | 0·5 to 1 gram | ..... |
| Creatinine | 1 to 1·5 per 1000 | ..... |
| Relation of ammonia nitrogen to total nitrogen | 1 to 0·25 (4%) | ..... |
| P. H. | 6·0 | ..... |

7 grams of chlorine are equal to 15 grams of sodium chloride. The proportion of sodium chloride is 0·5 to 1% in the urine; Creatinine nitrogen is 3·6% of the total nitrogen or 20·25 milligram per kilogram weight of the person in 24 hours or 1 milligram in 100 c.c. of urine. Creatine is found in considerable amount in the urine of children, but only traces in adult. in women however, it appears during mensus and found to be 3 milligrams per 100 c.c. of urine,

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Just to find out whether the blood of the donor is compatible with that of the, patient—A few drops of the patient's blood is taken from the vein, and allowed to cloat in a capillary tube or Wrights capsules; the serum is then separated by a centrifuge; A large drop of serum is transferred to a slide by means of capillary tube with citrate of sodium; to it a drop of donor's blood is added and a cover slip is put on; if no agglutination is seen under the microscope at the end of five minutes the blood may be recorded as compatible (*Modern technique of treatment*).

* * * *

Addition of Pot, salts to the food causes increase excretion of sodium in the urine. Potassium and sodium relation in the diet is a factor in determining the percentage of injested calcium and phosphorus. Excesses of magnesium interfere with the utilisation of calcium. These examples of inter dependence of the different normal constituents of the diet to each other is of much importance as the absolute amounts (*Ed. Survey.*)

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**Milk, Green vegetables,** and certain fruits are rich in calcium. Milk, egg yolk, Cereal with embryo are rich in phosphorus; green vegetable and egg yock are rich in iron; green vegetable and codliver oil are rich in Iodine; spinach contains calcium and iron (*Leonard Williams*).



## INTESTINAL YEAST.

During recent years there has been much controversy concerning yeast therapy. Some physicians have obtained brilliant results with it; others have failed. The explanation for this apparent discrepancy is the fact that all yeast is not the same. In fact, ordinary preparations either contain dead organisms or are not viable at body temperatue; they are therefore, therapeutically inert, or, at best, uncertain in action. When yeast is indicated, the preparation employed must consist of living and viable cells capable of proliferating at the temperature of the human body. Proliferase possesses these requirements and is biologically adapted to the human subject. It is supplied in special ampoules, in which the cells remain alive and viable for more than two years.

"Internally, yeast has been employed chiefly in the treatment of digestive disturbances" write Solis-Cohen and Githens (*Pharmacotherapeutics, Materia Medica and Drug Action, 1928, p. 1204*).

"When swallowed, it grows actively in the stomach and bowel, producing acids, which hinder the growth of putrefactive bacteria. It is probably by such action that it exerts a favourable influence on intestinal indigestion and constipation as well as on acne, furunculosis and other mild infections of the skin, for which it is now used as a folk remedy. Yeast contains the water soluble vitamin B and the presence of this may in part account for its beneficial effects in malnutrition in children. It seems to increase the opsonic index for strepto—and staphylococci.....Yeast has been given for constipation."

Ordinary preparations of yeast are unsatisfactory for therapeutic purposes. In most instances particularly in the powder and tablet forms, the yeast cells are either dead or in active; consequently they are unable to combat the putrefactive bacteria in the intestines—the chief aim in employing yeast therapy.

Another fact that must be considered is the thermal degree at which the yeast cells grow best; i.e., their optimum temperature. It is well known that the organisms are extremely sensitive to a change of temperature. the variation of a few degrees being sufficient to cause an appreciable difference in their diastastic activity. The optimum temperature of the "higher" yeasts is 61° to 64° F.; of the "lower" yeasts, 36° to 41° F. It is evident that such cells, when placed at the temperature of the human body, cannot long survive and certainly do not continue to multiply. The various commercial and pharmaceutical forms of yeast having specific

faults which limit their therapeutic usefulness, the necessity for employing a living yeast with an optimum temperature isothermal with the human organism is apparent. A preparation of active, living yeast cells, proliferating at the temperature of the human body, is available in *Proliferase.*

By means of a special stabilising medium, it is possible to prolong the life of the organisms for several years. The medium employed is isotonic with the yeast cells so that they undergo neither endosmosis nor exosmosis. Specimens of Proliferase more than two years old are capable of producing active fermentation in glucose solutions. Proliferase has been adapted to the intestinal secretions and in every respect its biological characteristics are in perfect accordance with medical requirements. Each ampoule contains 131 to 140 million living and viable cells having an optimum temperature of 95°F. and therefore capable of proliferating in the body. Its contents are sufficient to ferment 2,000 gallons of saccharated liquid.

Proliferase substitutes itself in the intestines for the pathogenic flora particularly the putrefactive bacteria by active rivalry. It has a mild laxative effect. Rich in Vitamin B, it is also an important aid to nutrition and stimulates general metabolism.

**Indications.** Constipation and digestive disturbances--specially when associated with putrefactive intestinal flora. Anorexia, Malnutrition; all conditions associated with Vitamin B deficiency. A valuable accessory treatment during Convalescence, Also useful in infectious diarrhoeas of infants and adults and acne and furunculosis of intestinal origin.

**Dosage (oral administration only)** The contents of I ampoule in any non-alcoholic vehicle (plain, aerated or sweetened water or fruit juice), one hour before the midday meal. The liquid must be cool.

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## PURE MAGNESIUM HYPOSULPHITE FOR ANTI-SHOCK TREATMENT.

### Hyposulphite of Soda.

In 1920, A. Lumiere and J. Chevrotier in a communication to the Academie des Sciences, Paris, pointed out the property possessed by Hyposulphite of Soda of avoiding anaphylactic shock in animals sensibilised with normal sheep serum.

Earlier in the same year, Ravant, in an article published in the "Press Medicale" reported on the excellent results obtained in dermatology by the use of large doses of hyposulphite.

In August 1923. R. Mathieu, resident physician at the Pierre-Marie Hospital, Salpetriere, communicated to the "Societe Medicale des Hopitaux de Paris" the result of his research on the therapeutic use of hyposulphite of soda in acute oedema (of the Quincke type), epilepsy and chorea.

About the same time, Ravant and Rabeau published in the "Bulletin Medical" an observation on the disappearance of chronic erysipelas under the influence of hyposulphite of soda.

### Hyposulphite of Magnesium.

**(A). Physiological Action.**—More recently, Auguste Lumiere, re-studying the therapeutic properties of the hyposulphites, thought of using magnesium hyposulphite in place of the sodium salt, with the idea of combining the hyposulphite action with the analgesic action of the magnesium. The hyposulphite acts either by hindering the formation of humoral floculation, or by dissolving the already formed floculations. The analgesic action of the magnesium ion has been established by various workers and quite recently by the recent research of Professor Dilbet on the cytophylactic and anti-cancerous action of magnesium chloride.

In a memorandum to the Paris "Academie des Sciences" (23rd October (1928) and in a communication



to the Paris" Academie de Medicine" (4th December 1928) A. Lumiere showed that, injected beforehand, hyposulphite of soda protects guineapigs against anaphylactic shock caused by the injection of a baryta suspension, while the unprotected controls died immediately. Further that if the magnesium hyposulphite was injected into the animals suffering from shock the usual symptoms were rapidly suppressed.

**(B). Therapeutic Action:**

(*a*). **Anti-Shock Action.**—This anti-shock property has, from a therapeutic point of view, a very particular interest when one considers the considerable number of pathological conditions which are connected with the presents of floculation in the body fluids and tissues. Clinical trial has, in fact, shown that magnesium hyposulphite has a prophylactic and curative action in the diverse affections, respiratory, circulatory, secretory, motor or sensitive, which express the disturbances provoked in the functions of the organo vegetative life by the presence of floculation in the body fluid or tissues, such as tachycardia apnoea dyspnoea tachypnea, bradycardia arythmia, asystolia, congestion, haemorrhage, vomiting, diarrhœa, pruritus, shivering, convulsions, paramyoclonus multiplex, paralysis balance disturbances, Sphincter and pupillary disturbances reflex disturbances etc.

(*b*) **Anti-cancerous Action.**—Lastly for the same reason that Magnesium Chloride has been advocated for this by Fonsagrives in 1878, and by many others since then, the hyposulphite also has an even more important action on the neoplastic changes than other magnesium salts because of its additional action on the humoral state of the patient.

On this double claim—anti-shock treatment and anti-cancerous treatment. Magnesium Hyposulphite will occupy an important place in therapeuties.

Auguste Lumiere employs for therapeutic use, a pure Hyposulphite of Magnesium ($Mg.S.^{2}O^{3}$) to which he has given the name EMGE LUMIERE. It is put in the form of tablets and in solution in ampoules for injection:

(a) **Emge Lumiere Tablets.**—Each tablet contains 60 centigrams of the pure hyposulphite of magnesium with the addition of 20 centigrams of salicate of magnesium to counteract the laxative effect of the magnesium salt.

The usual dose is 2 to 4 tablets daily.

(b) **Emge Lumiere's Ampoules.** Each ampoule contains I0 c. c. of a 10% solution, that is 1 gram of pure hyposulphite of magnesium. The treatment consists, according to the gravity of the case, of either daily injections or 3 to 4 injections weekly.

The injections should be given into the gluteal muscles. They are painless, and are not followed by any local or general reaction.



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## News and comments.

The results of the elections to the local Legislative Council have been long announced. Just before the Council was dissolved, it was said that these elections will be fought on the Simon ticket. The Civil Disobedience Campaign run by the Congress leaders has made it possible for those who have been returned to win the seats on personal tickets, though many of them belonged to one political party or other. His Excellency finds it rather hard to diagnose who is what and consequently the formation of the new Ministry has been postponed.

As we are concerned only with the healing art, we are unconcerned who comes to power but are anxiously waiting for the announcement of the names of our ministers, especially the one who will be in charge of Public Health and Hospitals, so that "The Medical Practitioner" may accord him a hearty welcome and place before him the needs of Public Health Department, assuring him our hearty

co-operation in all his efforts in alleviating human sufferings.

Is it too much for us to suggest to His Excellency most respectfully that it will be most conducive in the interest of good and efficient administration that the portfolios of Public Health and Education should be entrusted to one and the same Minister and if he does not grudge, it will be ideal that this minister has the charge of the local bodies as well. as these subjects are correlative and there will be speedy disposal of files.

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Lt. Col. E. W. C. Bradfield, I. M. S., left Madras for home on long leave, some say preparatory to retirement, while others maintain preparatory to assume the charge of Assistant Directorship of Medical Services, to be converted eventually as Surgeon-General with the Government of any province, if not of Madras. Whatever he might be in future, Madras has really lost the services of one of the best surgeons. He was posted to civil duty in this province in various capacities from the Assistant Health Officer, Corporation of Madras in charge of Cholera duty, to First Surgeon and Superintendent, General Hospital, with the interim of war service during the Great German War, when he spent the most part of military duty as one of the officers-in-charge of hospital ship "Madras" and other smaller ships later. The military taint in his temperament which was manifest in the earlier days of his official life gradually took a pleasant turn as he came in touch more and more with the civil population in his capacity as a surgeon. He was the Superintendent, Government General Hospital for nearly five years and in this capacity has brought about many salutary reforms both in administrative details and in medical relief to the patients, but the fact that the Superientendents of General Hospital were allowed private practice and did also professional work in common with other medical officers, has been the cause for the want of that strict discipline of a very high order which was the characteristic in those good old days when the then Senior Medical Officer (now the Superintendent), though allowed consultation practice, did not care for it for the good name of the Hospital and spent all his time in supervision and not in professional work.

Col. Bradfield was really a very good master to serve under. He was very shrewd in choosing his pets, but if once he took anybody to his fold, he was extremely considerate in their welfare, it may be said, even to a fault. He cared more for merit than service and he had very little faith in seniority alone—a quality which was at times very much resented by those in public service, but conducive of very good results if viewed in the light of efficiency of a standard, of which Col. Bradfield was very fond. We wish Col. Bradfield a bon voyage and a speedy return transformed as something higher.

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One more Civil Surgeoncy has been created in the Government Hospital for Women & Children, Egmore, Madras.

While it is not our intention to question the merit and capacity of the officer chosen to this place who has been designated as Third Obstetrician and Gynecologist, we will be failing in our duty if we do not protest against the policy of the Government in creating new appointments in the field of medical relief when the Scheme of Honorary system has been introduced and when in this very hospital there has been an honorary medical practitioner doing work for some years. This practitioner is certainly senior in service as a medical man to the newly appointed Obstetrician and Gynecologist, and it can't be said that he would not have shouldered the responsibility of this new office in an honorary capacity.

The Government seems to reckon efficiency in Rupees, annas and pies, and not in service. Another new theory has been in vogue these few years that some medical men in provincial service who have returned with additional foreign qualifications (though at public cost) cannot serve in their old capacity as Assistant Surgeons and cannot do more efficient work both in bulk and quality unless they are transformed as Civil Surgeons. But glaringly this theory is not made applicable to some others who with the same foreign qualifications are even seniors but yet remain as Assistant Surgeons.



Seniority, qualifications and merit do not seem to count much in the matter of the creation of Civil Surgeoncies. There seems to be something else. We leave it to our readers to guess what it is.

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Constant changes and transfers of those employed in teaching institutions will be detrimental to their good working and certainly tell upon the training of a large number of students studying in these institutions. Yet such has been the lot of Rayapuram Medical School, especially at a time when the Government seem to inaugurate reforms in the medical education imparted in this school. As we do not hear of such transfers in the local Medical College, one will be justified in saying that the Rayapuram Medical School is being treated in a step-motherly spirit. There have been four Superintendents in this school in the course of one year not to mention of changes in the lecturers. While teaching experience seems to be the criterion in the choice of those in Medical Colleges, the lecturers in the Rayapuram Medical School commence the art of teaching in this school. Sometime ago, it was said that Assistant Professors from medical colleges will be invariably chosen as lecturers in those particular subjects in medical schools. But the principle at work for lecturers in Rayapuram Medical School seems to be quite different. It looks as if appointments exist for men and not men for appointments. An Assistant Port Health Officer is transferred as a Lecturer in Pharmacology and a teacher from the School takes the place of the former. These mutual transfers are convenient to those who require a change and rest, but certainly not conducive to the interests of Medical Education.

The Government who are in the know of things more than the public would also do well to remember that even in teaching institutions, such as Medical Schools, where there are variety of temptations, those that are in charge of such institutions should be chosen from amongst Officers who have a reputation not only in the profession, but who are also in a a position to guide the morals of the young men entrusted to their care and turn their youthful zeal in healthy channels. No care and attention is too much in choosing teachers who should be good in every way.

* * * *

We learn that it is in contemplation to open a few wards in the General Hospital, Madras for the treatment of Border Land cases in Mental diseases. The idea is splendid, for certainly much more could be done in the treatment of mental disorders if the patients come under the control of the mental specialists in the initial stages when the disease will certainly lend most to treatment. Unfortunately the early symptoms of mental disorders are usually overlooked, as many a time neither the physician nor the laity attach sufficient importance to slight changes of character and other signs and symptoms due to nervous fatigue, and in case they do, there are no institutions where such patients could be kept under observation and treatment. The present policy of the Government in the administration of medical relief has made it impossible for the members of the independent medical profession to take as much interest in the matter of medical relief to the masses as is the case in other civilised countries where, in addition to voluntary institutions for the treat-

ment of the poor, private enterprise has made it possible to start nursing homes even for mental cases in addition to such institutions for the treatment of other diseases, surgical or medical.

Whatever be the view of the Government or those who guide the Government in this respect, it will be never congenial to have wards for Border Land cases in the General Hospital in the present state of its administration, when one of the staff of the General Hospital is the Superintendent of the Hospital. This Officer is usually a Surgeon or Physician and cannot be said to know as much as a mental specialist, yet will have official control over him and consequently the work of the latter officer is likely to be hampered. In England and other countries, voluntary hospitals are administered by voluntary boards of management consisting of varieties of experience, the majority among whom being the laity and the secretary of the Board being a non-medical man. Consequently, the scope of development of any branch of medical science in hospitals does not depend upon the whim of one officer who in a sense may be said to be an official autocrat, and those who are in charge of any special work in the hospital are free to develop their lines in a way most conducive to healthy development.

Apart from what has been said above, there is yet another objection to locate these special wards within the compound of the General Hospital where there is hardly any room for the construction of additional buildings. The General Hospital as it exists today with the newly added sheds and buildings cannot be said to satisfy the test of an ideal modern hospital regarding its sanitation. To shove in any additional blocks within the compound of this hospital will be certainly injurious to the welfare of the existing inmates.

There is at present a vast area of waste land close by to the Mental Hospital, Madras, which, not being properly looked after, is in a most insanitary condition—a source of danger to the inmates of this hospital. It will serve double purpose if the Government acquire these lands and construct special wards unconnected with the mental hospital proper, but as an annexe to it with a separate gate and a separate Resident Medical Officer and staff, but under the direct control and supervision of the Superintendent of the Mental Hospital. Unlike the good old days when an Officer of the I.M.S. could hold any special appointment without special qualifications required for such work, we are fortunate in having a superintendent in the Mental Hospital who is specially qualified for the post assisted by a deputy worthy of the position he occupies. We are told that an Assistant Surgeon has recently returned from England after successfully undergoing training in border land cases. So the Superintendent of the Mental Hospital can with advantage both to the profession and the public run a pucca mental institution for border land and other cases as well and there can be no talk of stigma regarding admission of border land cases, as the building to accommodate these patients will be independent of the Mental Hospital. There will be room and easy facilities for development and research of this branch of medical science which is unfortunately being neglected both by the profession and by the public.

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Major Cruickshank, Chief Medical Officer of the M. & S. M. Railway delivered a lecture on 19th September 1930 at the Rotary Club, Madras, on "Industrial Medicine and Hygiene." We do not wish to reproduce this lecture as it appeared in full in all Madras dailies. With all existing facilities talked off by the lecturer regarding both curative and preventive aspects of Industrial medicine, we wish to inform Major Cruickshank and others interested in this subject that



the exercise of Industrial Medicine is not as popular as it ought to be amongst those for whom these facilities are said to be provided for, whether it be in M. & S. M. Ry., S. I. Ry. or any big industrial concern in this country.

The employees are made to feel that the doctors are emyloyed for guarding the interest of the employed specially in the matter of sick leave. It can never be conducive to the welfare of the employees to force them to be under the treatment of the doctors under the service of the employers. A patient in high or low position should be allowed to have a doctor in whom he has faith. The fact that large or small industrial concerns do not accept the medical certificates issued by qualified and registered medical practitioners implies that the employer expects that his employees should be under the treatment of their own doctors. This sort of restriction would have been all right during the pre-registration days when there was no check over the independent medical profession. This policy of not recognising the medical certificates from the members of the independent medical profession, especially for illness, has most baneful effects not only on the medical profession, but also on the administration of the employers. Monopolies and special privileges with any amount of check or supervision brings about corruption in the very administration where such monopolies exist. If there is corruption today in the profession in the matter of medical certificates, the blame is with the Government and industrial administrations, and we do not wish to be more plain than necessary regarding this matter.

The lecturer, Major Cruickshank, is now a member of the Madras Medical Council, where he got in by open competition. We trust that the aspect of industrial medicine referred to above will catch his eyes and he will bring about reforms in his department conducive to the interest of the employers as well as the employees, without condemning the members of the independent medical profession and give the medical profession a trial especially during the 5 years' tenure of his office as a member of the Medical Council, where if he minds he would be able to check the integrity and honesty not only of his subordinates in the Medical Department, but of the whole profession in general.

Will he try the healthy experiment and lead other industrial concerns, and at a future date when he has to lecture again, he could add one more achievement in the matter of Industrial Medicine and Hygiene. Trust begets trust and helps all concerned to get about in the spirit of fraternity which is more needed in the medical profession.

* * * *

If the Rural Medical Relief Scheme is made a test as to the fitness of our political leaders to be entrusted with the administration of this Province at least in the matter of medical relief, we are afraid the verdict will be against them. Everyone of whatever denomination cries hoarse either on public platforms or on the floor of the Legislative council or in local council of the district boards or municipalities that the salvation of our country depends upon the launching of an ideal village reconstruction scheme. Yet, a big item of the village reconstruction, the Rural Medical Relief Scheme, could not be worked by them with the same zeal with which they talk. Our readers might have noticed that ever since *The Medical Practitioner* came into existence, not a single month passed without the news of some grievance or other under which the Rural Medical Practititoners labour. We have been doing our part in bringing to the notice of all concerned in the running of this Scheme all such grievances and though the effect of our agitation has not been tangibly felt, we can assure the Rural Medical Practitioners that our comments about their legitimate grievances are having some good result.

The activities of the Presidents of Local Bodies, at least of some of them

do not seem to be restricted in tyrannising the unfortunate practitioners under their control. A few members of the independent medical profession have been bold enough to settle in villages without the help of any subsidy. Some of these are being indirectly troubled on account of subsidised Rural Dispensaries being started in the very same village where the people could command the services of qualiffed and registered medical practitioners. If it is the intention of these local bodies that the poor in these villages should get free medical relief, they, could as well pay some subsidy to the existing practitioner insted of bringing into the field another medical man who with the help of the subsidy, is likely to have unwholesome competition with his own professional brother. The ostensible cause seems to be to give free medical aid to the poor, but the real fact is alleged to be finding employment for some practitioner who is either a kith or kin of somebody in these local bodies or one who could be useful for purposes other than medical relief.

Want of organisation on the part of the independent medical profession has been the cause of all these ills and it is to be regretted that the Rural Medical Practitioners who are today more united than the other members of the profession and who have an organisation of their own, are not as active as they ought to be. United they will achieve more and are capable of showing a lead to their more fortunate brethren in the urban areas in the matter of working out of the honorary system of medical relief scheme.

We hope we will not be charged for betrayal of faith if on good authority we could assure the Rural Medical Practitioners that in Major-General Sprawson, the Surgeon-General with the Government of Madras, they have a sincere sympathiser, but unfortunately the Rural Medical Relief Scheme is worked in such a way that little or nothing could be done even by the Head of the Medical Administration. It is high time that the Government considers the advisibility of running this scheme under the control of District Councils, as in the case of Elementary Education, a suggestion mede in these columns more than once.

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## Correspondence Reports, Reviews etc.

### MAJOR A.M.V. HESTERLOW, DIRECTOR OF PUBLIC HEALTH.

#### An Appreciation.

(By an esteemed correspondent).

Major A.M.V. Hesterlow, the newly appointed Director of Public Health, comes from a family of doctors. He is the son of the late Dr. A. J. Hesterlow, M.D., who belonged to the Madras Medial Service. He was of a very charitable disposition and was held in high esteem both by the profession and the public. Major Hesterlow's uncle was a medical man. His sisters are all married to medical men one of the sisters being herself a Lady Doctor. It is hoped that the tradition will be carried on. While at school, Hesterlow wished to take to law as his future profession, but his father sent him to the Medical College and the disappointment was compensated by a then future promise that he would be sent to Edinburgh for the completion of the medical studies and as promised, after one year's course at the Madras Medical College, he was sent to Edinburgh. While at Edinburgh the young Hesterlow got more than average success, coming well within the first few from the top in practically all the classes, especially those demanding excellence in practical skill and knowledge of detail. The competition in these classes was keen, and there was in many of them an international spirit, but Hesterlow did his bit in keeping India in the honours lists during his term at the University, for he was successful in winning medals in Anatomy. Surgery, and Advanced Public Health, and First Class Honours in most of the other subjects. He began his course in Edinburgh in 1906



and obtained his degree in 1911. He then took up the study of Public Health more for the training in Bacteriology than for Public Health, and after the two years' training required for the B. Sc. degree in this branch, he received his degree in Public Health. In 1913 also he obtained the Diploma in Tropical Medicine and Hygiene. Immediately after obtaining his degree in Public Health, Dr. C. Hunter-Stewart the Professor of Public Health in the University appointed Hesterlow as his assistant; He was thus well launched out in his future line of work which was to be that of Pathologist and Public Health Bacteriologist. After he had been in this post for several months, the war broke out and he at once endeavoured to go out to the front, but was prevented at every turn by the authorities who had introduced service by categories, and Hesterlow unfortunately found himself in a category which stated that he was engaged in work from which he should not be taken, as the Institute was also engaged in doing the bacteriological work for the troops encamped around Edinburgh and on the East Coast, of which work Hesterlow was in charge. The young doctor was very anxious to do war service and the only way for him to get his heart's desire was to return to India and from there apply for war service and this he did in 1916. While his application for a temporary commission was going the round of the prescribed channels, he took up the post of Health Officer, Trichinopoly Municipality and later served in that capacity in Madura. Eventually he got a temporary commission in the Indian Medical Service. The major part of his military service was spent in Sanitary and Public Health work of one kind or another, and in 1924, he seized an opportunity that presented itself and entered the Civil Public Health Department in this province as an Assistant Director of Public Health. For more than two years he was in charge of the section of the office which deals with Fairs, Festivals and Epidemics; and when the teaching of Hygiene was reorganised, he was appointed Professor of Hygiene in the Madras Medical College.

From his student days at Edinburgh up to the date of his appointment as the Head of the Public Health Department, Major Hesterlow has had very good grinding and it is earnestly hoped that during his tenure of office he would not fail to emphasize the importance of prevention of diseases, and to insist on the fact that the study of prevention should be the basis of all the study of the clinical years in the medical course. This has not yet been accepted whole heartedly in practice, although in theory the prevention of disease is accepted as at least equal to its cure. So there is still much good educational work to be done, and the present occasion will be an opportunity to persevere with the good work from another angle, and if he has as much success in this higher flight as he had in the spade work, then we shall see a very definite advance in the outlook of Public Health on the part of those that teach and administer the Public Health Department.

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## TREATING SYPHILIS IN THE VILLAGES.

(BY A SPECIALIST)

Where villages and small towns do not possess a resident physician it is often very advisable to adopt a rapid method of treating syphilitics such as we find in the Benzo-Bismuth seven days' course. This consists of:—

1st. day 1 ampoule Benzo Bismuth.
4th day 1 ampoule Benzo Bismuth.
7th day 1 ampoule Benzo Bismuth.

While one such course, or even two such courses cannot in any case be expected to completely cure the disease and induce a permanently negative Wasserman reaction, it will yield most satisfactory results in subduing symptoms, and subduing the infection, reducing the proliferation of the parasites and lowering their vitality.

Benzo-Bismuth given as above achieves a greater curative effect than

a similar quantity of other material containing the same quantity of Bismuth Metal in an insoluble form, because the latter cannot provide a sufficient quanity of the metal diffused throughout the system at one time. The intensity of the action of the drug is due to the quantity of Bismuth Metal in circulation at a given time. When used as an antisyphilitic remedy, Bismuth is to be considered as a parasiticide and its power to kill parasites may be compared with the power of Carbolic acid to kill bacteria. A one per cent solution of Carbolic Acid in water might kill a certain culture of bacteria in say one hour, but the same quantity at ½ per cent might take five hours and the same quantity at one tenth per cent would take, certainly not ten hours, but perhaps a hundred or a thousand hours to achieve the same result or might fail though the action continued for a thousand years. The same applies to Bismuth therapy. If four millegrammes of soluble Bismuth Metal is circulating through all the tissues at one time the effect is thorough. It is not possible, by giving 20 or 30 centigrams of insoluble Bismuth, ever to reach 4 millegrams of metal circulating in the blood at a time, and, like the 1 in 1000 Carbolic the weaker Bismuth solutions may fail to kill. Four millegrams of Bismuth circulation for tow days can produce infinitely better results than half to one millegram circulating for a week or month. When you use insoluble Bismuth the excretion can proceed as fast as absorption. When you use Benzo-Bismuth you get definite curative effect over a definite period of time.

While an insufficient treatment by Arsenic can make matters worse by inducing arsenical resistance, and an insufficiont course of insoluble Bismuth can leave things not a bit better than they were, a short sharp course of Benzo Bismuth can do real lasting good. Where the patient is of sufficiently intelligent he can be trusted to come back for further treatment soon; the Seven Day Benzo-Bismuth course can be supplemented with Sulfarsenol injections given on the same days,

| | |
|---|---|
| 1st day | No. 2 |
| 4th day | No. 3 |
| 7th day | No. 5 |

Supplementary course can be repeated any time after one week of interval.

## Review

### THE LONGEVITY.

We extend our hearty welcome to this journal. Longevity in human beings is to a large extent determined by heredity, It is like one-day clock one week clock, fortnight clock etc. which go for the period noted without further winding. While it is possible to wind the clock, it is not so with the human beings. What is inheritable cannot be acquired; *it is germinal*. So what is possible to be done is to see that the fixed period inherited is not in any way curtailed by bad living and insanitary surroundings etc. The subject of longevity is being at present largely dealt with by medical men, non-medical men, scientists, psudescientists lay men and others. According to dentists pyorrhea is at the bottom of all diseases and if it is cured long life is assured, while according to surgeons the removal of the mischivious appendix tends to lengthen life. The endocrinologists assure long life by graftiag glands and the dietiticians advocate vitamins to prolong life and and a life lengthening vitamin "Bios" is even isolated from tea and other food stuffs. We hope that under the guidance of the enterprising Editor Dr. Acharya, the journal will be a success.





FROM

THE SECRETARY,

DRUGS ENQUIRY COMMITTEE.

Sir,

In pursuance of a resolution which was adopted by the Council of State urging the Government to take such steps as may be possible to control the indiscriminate use of medicinal drugs and to legislate for the standardisation of the preparation and for the sale of such drugs, the Government of India, after consulting, and with the approval of the local Governments, have appointed a Committee to explore and define the scope of the problem and to make recommendations as to the measures which should be taken.

2. The terms of reference to the Committee (vide Gazette of India notification No. 1637 dated the 11th. August, 1930) are as follows:

"(i) To enquire into the extent to which drugs and chemicals of impure quality or defective strength, particularly those recognised by the British Pharmacopœia, are imported, manufactured or sold in British India, and the necessity, in the public interest, of controlling such importation, manufacture and sale, and to make recommendations;

(ii) To report how far the recommendations made in (i) may be extended to known and approved medicinal preparations other than those referred to above, and to medicines made from indigenous drugs and chemicals; and.

(iii) To enquire into the necessity of legislation to restrict the profession of pharmacy to duly qualified persons, and to make recommendations."

3. The necessity of some measures of this description is obvious equally from the point of view of the manufacturer and dealer who wishes to carry on his business honestly, the medical man who expects results from the medicine he prescribes, and the consumer who is dependent upon both. It is well known that many unscrupulous people realising that to analyse and standardise medicinal preparations requires experienced men and expensive and elaborate laboratory equipment, take advantage of this knowledge to carry out extensive adulteration, use inferior drugs, and in the case where raw material is expensive, purposely reduce the quantity that should be used in order to sell it at a low price. This is not only carried out in India but some European firms export medicines specially manufactured for the eastern bazaars.

4. The Committee desire to have the views of all persons, associations or bodies interested in this question with respect to the points mentioned in the terms of reference. With a view to elucidate the different aspect of this problem they have drawn up a questionnaire, a copy of which is attached herewith. These questions have been drawn up with the sole object of eliciting information and it is hoped that a detailed reply will be sent to these, supported by arguments and statistics wherever possible. It is earnestly requested that the replies to the questionnaire may kindly be sent so as to reach the secretary before the 1st of October, 1930.

5. The Committee will also visit important centres in different provinces and will take evidence on the questions stated in the terms of reference and on the questionnaire which is being issued. I therefore wish to enquire if you are willing to appear before the Committee to give further information regarding your answers in case the Committee consider it necessary.

6. Replies to the questionnaire and all other communications may please be addressed to the Secretary, Drugs Enquiry Committee, School of Tropical Medicine, Calcutta.

Yours faithfully
C. GOVINDAN NAIR,
*Secretary,*
*Drugs Enquiry Committee.*



JL
Lm211, N30 MP N302.

*List of postings of Sub-Assistant Surgeons for the month of September 1930.*

| Name of Sub-Assistant Surgeon. | From | To |
|---|---|---|
| 1. Dr. K. Shiva Rao | Leave | R. D., Govt. Hd. Qrs. Hl., Mangalore. |
| 2. ,, R. Sundar Rajan | Leave | At the disposal of P.D B. Madura |
| 3. ,, S. Sankara Rao | R. D. Govt. Hl., Mangalore | R.D,. Govt. Hd. Qrs. Hl Chittoor |
| 4. ,, M. Venkobachar | Local Fund Dispensary, Pottangi, | Govt. Hd. Qrs. Hl., Chingleput. |
| 5. ,, T. P. Balaji Rao | Vizagapatam Agency, c/o D.M.O. South Arcot. | Govt. Hl. Negapatam. |
| 6. ,, D. V. Moses | Govt. Hd. Qrs. Hl., Negapatam. | Tk. Hd. Qrs L. F. Dy., Chintalapudi, W. Godavari Dt, |
| 7. ,, Md. Chirag Ali Sahib | Tk. Hd. Qrs. L. F. Dy., Chintadapudi, | Govt. Hd. Qrs. Hl., Cuddapah. |
| 8. ,, S. Krishnayya | Port & Marine Dy., Madras. | Govt. Ophthalmic Hl., Madras. |
| 9. ,, P. Ananda Rao | Newly entertained | At the disposal of Civil Surgeon, Vizagapatam Agency, Vizianagaram. |
| 10. ,, K. G. Ramabhadran | do. | do |
| 11. ,, Kunhikrishna Nayar | do. | L.F, Dy,. Thanakal, Anantapur Dt. |
| 12. ,, K. Gopalan Nambiar | R. D., Govt. Hd. Qrs. Hl., Cocanada, | Same Hospital spl. appointment. |
| 13. ,, J. Suryaprakasa Rao | Tk. Hd. Qrs. L, F. Hl., Bobbili, Vizag. Dt. | At the disposal of P.D.B. Kurnol. |
| 14. ,, M. A. Subramaniam Pillai | Leave | Tk. Hd. Qrs. L. F. Dy., Tirupattur (Ramnad Dt.) |
| 15. ,, Md. Ali Sahib | Leave | R. D.. Govt. Hd. Qrs. Hl., Coimbatore. |
| 16. ,, K. Sankaranarayana | Leave | Tk. Hd. Qrs. L. F. Dy.. Sattenapalle., Guntur Dt. |
| 17. ,, D. Suryanarayana | Tk. Hd. Qrs. L. F. Dy., Sattenpalle Guntur Dt., | At the disposal of P.D.B., Guntur. |
| 18. ,, P. Sivayya | L. F. Dy., Macherla Guntur Dt., | Govt.Dy. Harpanahalli Bellary Dt. |
| 19. ,, V. Muthusami Iyer | Tk. Hd. Qrs. L, F. Dy., Tirupattur, Ramnad Dt. | R. D. Govt. Hd. Qrs. Hl.. Palamcottah, Tinnevelly Dt. |
| 20. ,, S. Thiruvengadam | L, F. Dy., Dagrajapatnam Nellore Dt. | Tk. Hd. Qrs. L. F. Dy., Sullurpeta, Nellore Dt. |
| 21. ,, C. Venkatanarasimham | Tk. Hd. Qrs. L. F. Dy., Sullurpeta, Nellore Dt. | R. D., Govt. Hd, Qrs. Hl., Chingleput. |
| 22. ,, G. Ramanujaswami | R. D., Govt. Hd. Qrs. Hl., Vizagapatam. | Police Hl., Vizianagaram. |
| 23. ,, S. Venkatasami | Police Hospital, Vizianagaram. | R.D., Govt. Hd. Qrs. Hl. Cuddapah. |
| 24. ,, R. Krishnaswami Iyer | Leave | R. D., Govt. Hd. Qrs. Hl., Trichinopoly. |
| 25. ,, P. Suryanarayana | Leave | Govt. Hd. Qrs. Hl.. Guntur. |
| 26. ,, N. Sriramulu | Govt Hd. Qrs. Hl., Guntur | At the disposal of P. D. B. Cuddapah. |
| 27. ,, R. Krishna Iyer | L. F. Dy., Tanakal. Anantapur. | Tk. Hd. Qrs. L. F. Dy., Kalyana drug, Anantapur Dt. |
| 28. ,, T. V. Ramanathan | Tk. Hd. Qrs. L. F. Dy., Kalyanadrug, Anantapur Dt. | At the disposal of D.M.O., Ganjam for Agency duty. |
| 29. ,, V. Venkataramanujulu Naidu | Leave | Tk. Hd. Qrs., L.F.Dy., Arkonam. |
| 30. ,, B. K. Thathacharya | Tk. Hd. Qrs. L. F. Dy., Arkonam | Police Training School, Vellore. |
| 31. ,, G. Suryanarayana | Police Training School, Vellore. | R, D., Govt. Hd. Qrs. Hl. Vellore. |
| 32. ,, C. H. Venkateswar | Govt: Hl. Tellicherry. | R. D., Govt. Hd. Qrs. Hl., Calicut, Malabar Dt. |

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