

# THE CADUCEUS

Vol. 3, No. 2.

May, 1924.

3 Issues Yearly.

## CONTENTS.

	<i>Page</i>
<b>ORIGINAL ARTICLES.</b>	
Some Complications met with in Cataract Extraction and the Utility of Law's Operation in dealing with Glaucoma before and after Cataract Extraction. G. M. Harston, M.D., D.O. (Oxon.) . . . . .	47
Two points in the Performance of Tracheotomy in Young Children. K. H. Digby, M.B., B.S., F.R.C.S. and M. K. Yue, M.B., B.S. . . . .	54
The Thymus Gland in the Chinese. J. L. Shellshear, D.S.O., M.B., CH. M. . . . .	58
<b>GENERAL ARTICLE.</b>	
Patient and Doctor. R. M. Gibson, M.D., C.M., F.R.C.S., (Edin.) . . . . .	68
Current Medical Literature . . . . .	74
<b>EDITORIAL.</b>	
Random Reflections . . . . .	87
The Hongkong Medical Conference . . . . .	90
The Medical Library . . . . .	91
<b>ANNOTATIONS.</b>	
Two Cases from the Medical Unit. (with Photographs)	92
News and Comments . . . . .	94
<b>Subscription Rates:—\$1.00 per copy, \$2.00 a year local and \$2.50 a year foreign. Remittances should be made payable to the Business Manager, "Caduceus."</b>	
<b>Advertisements:—Rates furnished upon request.</b>	

# LEWIS'S PUBLICATIONS

JUST PUBLISHED. SEVENTH EDITION. Thoroughly Revised. With 2 Plates and 90 other Illustrations. Demy 8vo. **20s.** net; postage 9d.

## HYGIENE AND PUBLIC HEALTH

By LOUIS C. PARKES, M.D., F.R.S., Lond. Univ., Consulting Sanitary Adviser to H.M. Office of Works, &c.; and HENRY K. KENWOOD, C.M.G., M.B., F.R.S., Edin., D.P.H., Lond., Chadwick Professor of Hygiene and Public Health, Lond. Univ., Medical Officer of Health, and Public Analyst for Stoke Newington, &c.—*Lewis's Practical Series*

With 266 Illustrations. Demy 8vo. **18s.** net; postage 9d.

## THE SURGICAL DISEASES OF CHILDREN

A Handbook for Students and Practitioners.

By FREDERICK C. PYBUS, M.S., F.R.C.S., Assistant Surgeon, Royal Victoria Infirmary, Newcastle-on-Tyne; Hunterian Professor, Royal College of Surgeons of England.—*Lewis's Practical Series*

"... the clearness of the writing and the soundness of the advice given is remarkably consistent throughout. The illustrations are excellent, the index adequate, and the book should prove of the greatest service to students and practitioners."—*The Lancet*

With 61 Illustrations. Demy 8vo. **21s.** net; postage 9d.

## PRACTICAL HANDBOOK ON DISEASES OF CHILDREN

For the use of Practitioners and Senior Students.

By BERNARD MYERS, C.M.G., M.D., Edin., M.R.C.P., Lond., Physician, Royal Waterloo Hospital for Children and Women; Physician to, and Lecturer on Diseases of Children at, The Children's Clinic, Marylebone Road, London, etc.—*Lewis's Practical Series*

"... wonderfully comprehensive, exceedingly bold and most up-to-date exposition."—*British Journal of Children's Disease*

SEVENTH EDITION. Revised and Enlarged. With Plate and 202 Illustrations, containing 675 Figures. Post 8vo. **21s.** net; post free, 21s. 9d.

## PRACTICAL BACTERIOLOGY, BLOOD WORK, AND ANIMAL PARASITOLOGY

Including Bacteriological Keys, Zoological Tables, and Explanatory Clinical Notes.

By E. R. STEET, A.B., Ph.D., Sc.D., M.D., Rear Admiral Medical Corps, and Surgeon-General U. S. Navy, etc.

ELEVENTH EDITION. Thoroughly Revised. Crown 8vo. **16s.** net; postage 9d.

## ELEMENTS OF PRACTICAL MEDICINE

By ALFRED H. CARTER, M.D., M.Sc., F.R.C.P., Lond., formerly Professor of Medicine University of Birmingham.

Edited by A. G. GIBSON, M.D., OXON., B.Sc., M.A., F.R.C.P., Lecturer in Morbid Anatomy, University of Oxford, etc.

"The book is well deserving of the wide circulation that it has obtained."—*Lancet*

FIFTH EDITION (Reprinted) With 29 Plates (mostly in colour), 33 Figures. Demy 8vo. **7s. 6d.** net; post free **8s. 2d.**

## LANDMARKS AND SURFACE MARKINGS OF THE HUMAN BODY

By L. BATHE RAWLING, M.B., B.C.(ANTAB.), F.R.C.S., ENG., Surgeon, Demonstrator of Operative Surgery, St. Bartholomew's Hospital; Examiner in Surgery at Cambridge University, etc.

"We can confidently recommend it to everyone as a handbook both for study and for reference."—*Edinburgh Medical Journal*

\*,\* Complete Catalogue free on application

LONDON: 136, Gower St., and 24, Gower Place, W.C.1.

## H. K. LEWIS & Co., Ltd.

MEDICAL PUBLISHERS AND BOOKSELLERS.

Complete Stock of Text-books and Recent Literature in all Branches of Medicine and Surgery.

Large Stock of SECOND-HAND Books always available at 140, GOWER STREET. Colonial Libraries, Colleges and similar institutions, and to residents in India, South Africa, Australia, etc. the publications of any publisher can be supplied direct by first mail.

136, Gower St., and 24, Gower Place, London, W.C. 1.

# THE CADUCEUS

JOURNAL OF THE HONGKONG UNIVERSITY  
MEDICAL SOCIETY.

Vol. 3.

May, 1924.

No. 2.

---

All medical papers and other scientific contributions intended for the Journal, and all books for review and magazines in exchange, should be addressed to the Editor, "Caduceus," Hongkong University, Hongkong.

Changes of address of members of the Society and all business communications should be sent to the Business Manager, "Caduceus," Hongkong University, Hongkong.

---

## **Some Complications met with in Cataract Extraction and the Utility of Law's Operation in Dealing with Glaucoma before and after Cataract Extraction\***

By

G. M. HARSTON, M.D., D.O., (OXON).

*Lecturer in Ophthalmology, University of Hongkong.*

---

I sincerely hope you will forgive me the length of the title to my paper. De Schweinitz, when giving the Bowman Lecture last year (1923) before the members of the Ophthalmological Society, headed his lecture "Concerning certain ocular aspects of pituitary body disease mainly exclusive of the usual central and peripheral hemianopic field defects."

So I am sinning in good company.

In hospital work in South China and I imagine also in North China we have many complications in the operation of cataract extraction. The majority of patients suffer or have suffered from Trachoma so that in many cases there is a sadly scarred cornea to see through. The width of the palpebral aperture is so narrowed from symblepharon following upon trachoma that the corneal incision is rendered extremely difficult unless a preliminary canthotomy is performed. The scarring of the cornea renders it very difficult to watch the relation of the iris to the edge of the knife. Presuming that the incision is a limbal one, and I always endeavour to make it so, any conjunctival flap that may be fashioned is apt to prove very fragile in nature. This leads to delay in healing. The cicatrised cornea is a further cause of delay; it is for this reason that I always endeavour to make my incision a limbal one.

---

\* Read before the Hongkong Branch of the British Medical Association on 6th February, 1924.

*Healing of Corneal Wound and Causes of Delay.*

When we make a wound in the cornea the retraction of the divided tissue is most marked at its anterior and posterior surfaces, so that when the lips of the wound come together again there is contact of the central layers of the substantia propria and wedge-shaped gaping spaces are left anteriorly and posteriorly. These two gaps are filled anteriorly by a plug of epithelium which extends into it from the two sides, and posteriorly by a fibrinous coagulum which is partly derived from the aqueous which is more albuminous when reformed and partly from serous exudate from the corneal tissue. Over this exudate the divided Descemet's membrane gradually extends. The cells of the cicatricial tissue are derived from the corneal corpuscles, they gradually eat away the anterior plug of epithelium and extend right down into the endothelium of Descemet's membrane.

When we make the incision in the limbus with a conjunctival flap there is the same formation of wedge shaped spaces but the epithelium does not grow down into the anterior wedge, it is replaced by the subepithelial vascular tissue of the conjunctival flap.

Any delay in the healing of a corneal flap leads to grooving of the line of the incision. Should the lips of a corneal wound fail to become sealed down by coagulum, the epithelium extends inwards more deeply than usual, it may even grow down through the whole length of the incision into the anterior chamber, forming an epithelial cyst which subsequently causes glaucoma. Treacher Collins was the first to demonstrate the presence of an epithelial lining in the anterior chamber of eyes operated on for cataract. The most effectual way to avoid this down-growth of epithelium is to make an oblique incision and a conjunctival flap, though sometimes we have a downgrowth of subepithelial conjunctival tissue vascularising a fibrous membrane of inflammatory origin filling the coloboma of the iris; this is more apt to happen when one or other pillar of the iris becomes entangled between the lips of the wound.

Delay in union of the posterior surface of the line of incision leads to haziness of the cornea and striate Keratitis.

*Post-operative Astigmatism.*

A prolapse of iris into the wound will also cause a cystoid or bulging scar; such a scar being lined with uveal tissue is apt to lead to sympathetic ophthalmitis later on. The amount of astigmatism after an extraction is always greater when there has been some inclusion of iris in the wound. In the case of a cystoid scar this has reached eleven dioptries, and even in an uncomplicated case eight dioptries of astigmatism has been recorded. Limbal incisions are said to produce a higher degree of post operative astigmatism than corneal incisions.

*Suppuration.*

Suppurative inflammation starting in the cornea is the most rapidly destructive complication met with after extraction with the exception of expulsive haemorrhage. The most frequent pyogenic organism met with is the pneumococcus, the staphylococcus Aureus being the next most frequent. Suppuration generally commences on the second or third day. The most effective agent in checking it is the Galvano cautery. I have found the most effective means of preventing suppuration is the use of wet pad of I in 5000. Perchloride of Mercury applied the night before operation, in India even stronger solutions are used; in any case the solution should be sufficiently strong to cause coagulation of mucus and the resulting entanglement of organisms, which can be washed away immediately before operation.

*Synechiaæ.*

Frequently after extraction we see one or two posterior synechiaæ without inflammatory reaction. It is probable that these are caused by chemiotactic substances generated from the damaged and degenerating cells of the capsule. For this reason it is as well to make the incision in the capsule when the capsulotome is used well away from any possible contact with the iris, and to realise the importance of the early use of atropin after extraction to keep the edge of the iris well away from any fragments of capsule which may have been pushed forward into the anterior chamber. I generally make use of capsule forceps in preference to the capsulotome as these remove nearly the whole of the anterior layer of the capsule which is lined with a cubical epithelium. The posterior layer has no cell lining. Any entanglement of capsule in the lips of the wound will lead to irido-cyclitis by aiding the spread of inflammation into the interior of the eye.

*Prolapse of Vitreous.*

Prolapsing vitreous has a similar effect, the vitreous being poor in protective bodies and therefore a favourable medium for the growth of micro-organisms.

*Late Infection Endogenous in Nature.*

Endogenous inflammation in the eye generally results in a proliferative uveitis, some say that sympathetic ophthalmitis is really an endogenous infection. if this is so we must expect to find an increase of the large mononuclear leucocytes in the blood.

*After Cataract.*

Retention of soft lens matter invariably leads to after cataract. Irrigation of the anterior chamber with normal saline is the most effective means of preventing this.

*Glaucoma. Pre-operative a cause of Cataract.*

I wish to deal with both preoperative and post operative glaucoma.

Glaucoma by interfering with the nourishment of the lens may be the actual cause of the cataract. Any attempt to extract a cataract in a glaucomatous eye is bound to meet with disaster. We must reduce the tension before we operate. I always make use of the Schiotz tonometer when I suspect glaucoma in a case of cataract; any record above 35mm *must* be dealt with by some operative procedure before extraction is undertaken. I am not in favour of iridectomy because it is apt to leave an entanglement of iris in the wound and thus complicate the subsequent extraction. Some authorities definitely state that iridectomy for glaucoma is not successful unless there is some inclusion of iris resulting in a cystoid scar. Each surgeon will perform the operation with which he is most familiar and with which he has had the most successful result, but as I have had considerable success lately with Law's operation (both before and after cataract operation) I have thought it as well to bring it to your notice. It causes the least disturbance to the eye of any operation that I know of. I read a paper on this operation before the C.M.M.A. at last year's meeting in Shanghai in the Section of Ophthalmology. I was met with the criticism that the operation is too difficult. My reply to this is—that is not difficult if you perform the operation carefully and if you know what you are attempting to do. I must utter a warning against attempting the operation on unsuitable cases. (The case which came here this evening, one of pure glaucoma not cataract, I shewed to professor Fuchs of Vienna who happened to be passing through the Colony six days after the operation: he was surprised at the absence of inflammatory reaction, and he personally confirmed the relief from tension).

Amongst modern operations for the relief of tension in the eye we have Lagrange's sclerectomy, Elliot's trephining which is also a sclerectomy combined with a button hole iridectomy, and Heine's cyclo-dialysis. Law's operation is not a sclerectomy, it is a double sclerotomy combined with a cyclo-dialysis. The eyeball is fixed in the usual manner and drawn downwards, a small bent keratome is then inserted through the conjunctiva and sclera at a point 5-6mm from the limbus. The blade of this knife which I now show you is carried through the sclera and then onwards between the sclera and the uveal tissue till the point of the knife appears in the anterior chamber, sometimes the fibres of the pectinate ligament can be seen caught on the blade of the knife and protruded by it into the anterior chamber. The keratome is then withdrawn but during the process of withdrawal the wound of entry is enlarged laterally till it is about 6mm in breadth; it is immaterial whether

the wound is enlarged towards the nasal or the temporal side. After withdrawal of the keratome a Herbert's bent knife is inserted on the flat first on one side of the wound and then on the other, after insertion the knife is turned with the cutting edge forwards, and with it the fibres of the scleral spur forming the annular ligament are divided, after which the knife is withdrawn without further injury to the sclera or conjunctiva. The exact amount of cutting to be done can only be judged by experience, a very little slight sawing movement is all that is necessary for one can feel the fibres give way under the knife, the fibres when divided at once retract and this retraction judging by results is sufficient to open up a filtration channel from the anterior chamber to the suprachoroidal space. By this means the function of the annular ligament, as a movable spur, is restored at one part of its circumference with the resultant unblocking of Professor Thomson's annular sulcus into which the iris fits when dilated and in which it becomes sealed down at the angle of the anterior chamber in absolute glaucoma. That the relief from tension is complete is shown by the following case:—

W.K.Y. Chinese Male. Aet. 51.

Glaucoma and cataract both eyes.

Tension R.E. before operation, 55mm.

Tension R.E. after operation, 15mm.

These tensions were taken while he was on the table immediately after operation.

Tension L.E. before operation, 60mm.

Tension L.E. after operation, 28mm.

His cataracts were subsequently extracted without complication. The reduction in tension was maintained and sufficient vision restored to enable him to get about in comfort.

This operation would seem to be peculiarly well adapted to those cases so often seen in China where the operation area is grossly obscured by the results of old trachoma and pannus, in which the conjunctiva is intimately bound down to the subjacent tissue and in which the trephine operation takes longer in its performance by reason of this and by the excessive haemorrhage that ensues. The operation can be performed in a few seconds and the disturbance of the parts is reduced to a minimum, so that it is an extremely useful operation when it is desired to perform a cataract extraction subsequently.

#### *Post-operative Glaucoma.*

Glaucoma is a troublesome complication when it exists in cases of cataract before operation but it is still more troublesome when it occurs after the extraction has been performed. After extraction it is apt to be fulminating in character with rapid and complete loss of sight.

I had two cases in private last year in which I met with this unfortunate experience. The first was in a very old lady, a Chinese, who had cataract in both eyes, and in each eye the cataract was of long standing and hypermature. In the first extraction glaucoma occurred two weeks after extraction and in the second eye four weeks after extraction in spite of the use of eserine and in spite of the extraction being perfectly successful. It did not occur to me in this case to make use of Law's operation but in the second case Law's operation would have been completely successful but for an unfortunate occurrence later on in the history of the case.

The patient was a male European over eighty years of age. I had performed a successful extraction in the left eye five years previously, though in this case I recollect he had a haemorrhage into the anterior chamber completely obscuring vision ten days after the extraction. This subsequently cleared up and good vision resulted. In the present case the right eye had a slightly hypermature cataract. I extracted this with difficulty having to use the vectis to extract the lens owing to the larger size of the nucleus. All went well till the third night after operation when he had a severe haemetemesis. This caused very severe vomiting and retching, the next morning I noticed that the tension was raised and eserine was instilled. By the evening in spite of eserine the tension was raised to 60mm. the pupil was widely dilated and a condition of absolute glaucoma existed. I then performed Law's operation with complete relief of tension and the evacuation of a quantity of blood-stained fluid from the suprachoroidal space. The tension remained down and he recovered sufficient vision to see objects near to with a suitable lens and read large print. He however begged for clearer vision, and as he had a certain amount of membrane in his pupillary area which was certain to become more dense as time went on I readmitted him to hospital for a needling. I needled him and again all went well till the third day when haemetemesis again occurred and glaucoma ensued, I again performed another Law operation and the tension was reduced. At this stage in spite of written instructions to put eserine in the eye, a nurse who was attending him, put in atropin, the result was disaster. But for this unfortunate incident I am firmly convinced this patient would have recovered his sight in that eye fully, and would have had the additional comfort of binocular vision. It is fortunate that he has sufficiently good sight in his left eye. I subsequently discovered that he had a haemetemesis the week before coming into hospital for his first operation, but had kept the knowledge of this to himself for fear that this might deter me from making the extraction.

I have now performed Law's operation on twelve cases, some with, some without cataract. With the exception of the



above recorded case, tension has been successfully relieved in all. This is a small number from which to draw conclusions but further experience will enable one to more fully determine the limits of success, meanwhile it is obvious that this operation cannot replace that of trephining in those cases where the iris is sealed down by plastic exudation against the cornea and the fibres of the pectinate ligament.

In such cases the point of the keratome will obviously impinge on the surface of the iris and then cut through the latter in its passage through to the anterior chamber a procedure which is only too likely to cause haemorrhage into the anterior chamber. The gap cut through the iris would inevitably become sealed down by plastic exudation, and the tension would rise again.

The operation has the following points in its favour:—

No conjunctival flap is made as in trephining, there is therefore no disturbance of the subconjunctival tissue.

The conjunctival wound unites in forty eight hours.

There is no wide gap left under the conjunctiva, so that the chances of subsequent sepsis are exceedingly remote, provided that all aseptic precautions have been taken at the time of operation.

No late infection, years afterwards is liable to occur.

In concluding this paper I cannot do better than recapitulate the points I laid down for consideration at the Shanghai meeting.

1. In any operation for glaucoma preference should be given to the method which causes least disturbance to the parts.
2. The operation of choice should be that which causes the least subsequent plastic exudation.
3. Entanglement of uveal tissue in the filtration channel should as far as possible be avoided.
4. The operation of iridectomy for acute congestive glaucoma cannot be relied upon for fulfilling this third consideration.
5. Late infection which has been reported after all operations for glaucoma can be avoided if the first, second and third considerations are taken into account.
6. Of the newer operations for glaucoma Elliot's and Law's operations more nearly fulfil the ideal requirements than any other operation.

## Two Points in the Performance of Tracheotomy in Young Children

BY

KENELM H. DIGBY, M.B., B.S., F.R.C.S.

*Professor of Surgery, University of Hongkong*

AND

M. K. YUE, M.B., B.S.

These two small points to be recorded have proved of use to us, and since an emergency tracheotomy for diphtheria in a child may have to be performed by any medical man irrespective of his surgical experience, anything which claims to render the operation easier is worth attention.

In a plump dyspnoeic child it is not always a simple matter to identify the cricoid cartilage. It is always quite easy however to measure with finger and thumb the distance between the bulging greater cornua of the hyoid bone, and to measure the same distance downwards from the body of the hyoid bone. Of twenty Chinese children examined in the mortuary we found that this distance (here measured more precisely by callipers) reached the lower border of the cricoid cartilage in 17 cases. In three cases the distance did not reach quite so far. (*see Table*).

Another much greater difficulty is to obtain satisfactory exposure and steadiness of the little soft trachea, which in the operation as ordinarily performed moves in the depths of a wound often full of blood, so as not to be always opened by a single, deliberate, correctly placed incision. This difficulty is avoided if the operation be performed with the following slight modifications.

An incision one and a quarter inches in length is made in the mid-line of the neck so that it commences a full quarter of an inch above the lower border of the cricoid cartilage (Figure 1).

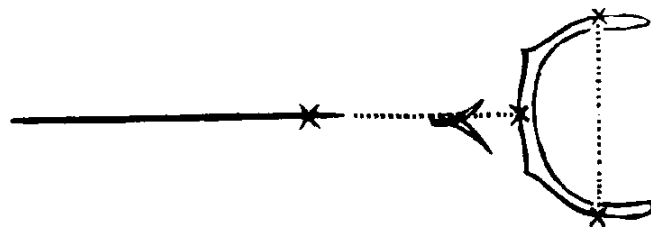
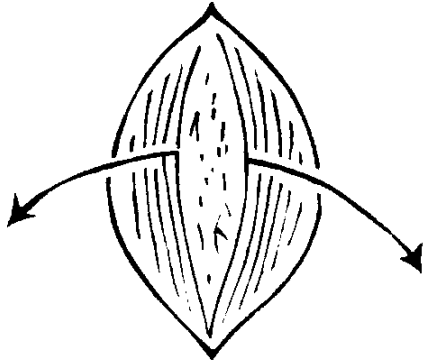


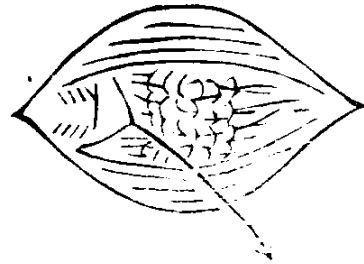
Figure 1

The deep fascia uniting the sterno-hyoid muscles is divided vertically (Figure 2).

The cricoid cartilage is exposed and the fascia attached to its lower border is incised transversely to expose the commencement of the trachea (Figure 3).

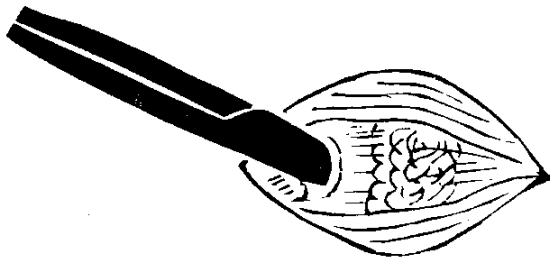


*Figure 2*

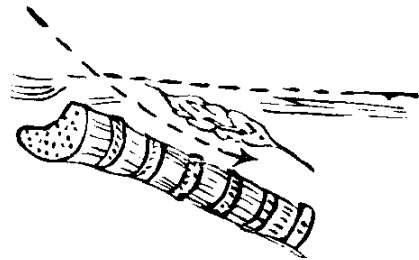


*Figure 3*

A single closed pair of pressure forceps is passed downwards and backwards close to the trachea and behind the isthmus of the thyreoid gland (Figures 4 and 4a). A very slight opening and shutting of the forceps may assist their passage

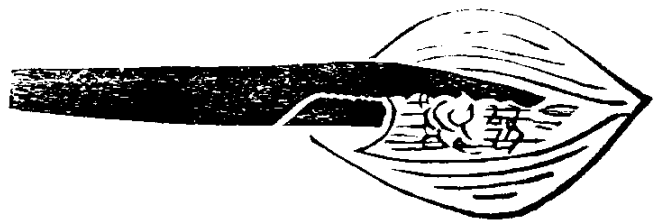


*Figure 4*

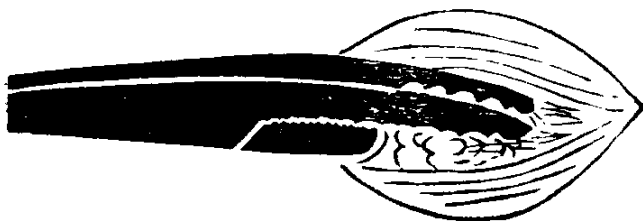


*Figure 4a*

The tissue thus raised is clamped close to the middle line first by one forceps (Figure 5) and then by a second one placed parallel (Figure 6).



*Figure 5*

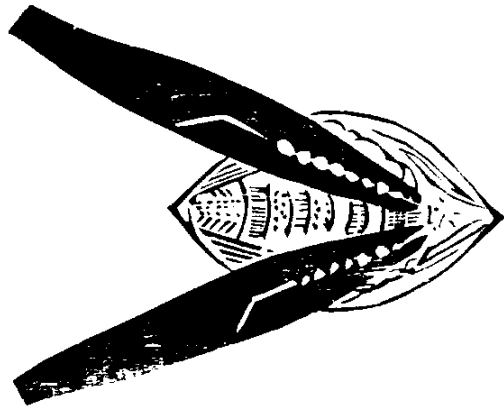


*Figure 6*

The fascia and thyroid isthmus between the forceps are then divided and the two pressure forceps are each rotated in a lateral direction through 90° and the handles are slightly depressed so as to raise the points. The rotation of the forceps usually peels the tissues from the trachea sufficiently to expose its anterior aspect, but a touch of the knife at either side will fully lay bare the front of the trachea. (Fig. 7.)

As the thyroid gland is intimately connected with the trachea and cricoid cartilage, this manoeuvre raises the trachea to the level of the skin, exposing the first four rings with the utmost clearness.

The vertical incision (through the second, third, and fourth rings) should not be made by the " guarded stab " but should be gently incised with the knife held penholder-fashion, the little finger of the right hand resting on the upper border of the manubrium. The stab is to be avoided because the trachea is flattened antero-posteriorly by thus being brought to the surface, and the posterior wall would be in danger (Figure 7a).



*Figure 7*



*Figure 7a*

No.	(Ages Unknown) Height of child	Fatness	Distance between bulging hyoid cornu	Same distance below body of hyoid in mid line
	<i>inches</i>		<i>inches</i>	
1	22½	medium	13/16	lower border of cricoid cartilage
2	27	thin	13/16	lower border of cricoid cartilage
3	21½	thin	29/32	lower border of cricoid cartilage
4	30	medium	14/16	<i>lower border of thyroid cartilage</i>
5	22	medium	12/16	lower border of cricoid cartilage
6	23	medium	23/32	lower border of cricoid cartilage
7	32½	thin	15/16	lower border of cricoid cartilage
8	22	thin	11/16	lower border of cricoid cartilage
9	22½	thin	10/16	lower border of cricoid cartilage
10	25	thin	9/16	lower border of cricoid cartilage
11	22	very thin	8/16	lower border of cricoid cartilage
12	25	fat	14/16	lower border of cricoid cartilage
13	23	fat	12/16	lower border of cricoid cartilage
14	23	thin	13/16	lower border of cricoid cartilage
15	23	fat	27/32	lower border of cricoid cartilage
16	24½	very thin	12/16	<i>upper border of cricoid cartilage</i>
17	22½	medium	11/16	lower border of cricoid cartilage
18	36	medium	12/16	<i>middle of cricoid cartilage</i>
19	26	medium	10/16	lower border of cricoid cartilage
20	23½	fat	12/16	lower border of cricoid cartilage

---

**\* The Thymus Gland in the Chinese.**

BY

J. L. SHELLSHEAR, D.S.O., M.B., CH.M.

The interest of the thymus gland is twofold. In the first place the stimulus given to preventive medicine in China by the Rockefeller Foundation has awakened the necessity for the study of medicine in China by the Chinese themselves. The teaching of anatomy and medicine makes use of textbooks which have been worked out by the study of the European. The standards of morphological structure are European. It seems more than probable to me that we shall find that those standards are not strictly applicable to the Chinese race. It may turn out that the age standards are different; that the dates of ossification of the bones are later; that the general blood pressure is lower. If on the accumulation of knowledge such conditions are found to prevail it is clear that modifications will have to be made, not only in the teaching of medicine, but also in its practical application.

In the second place the study of the thymus is interesting from the anthropological point of view. Races are distinguished by their more obvious characteristics, by the colour of the hair and its form, by the general appearance; the anthropologist distinguishes differences in the skeleton, particularly the skull. Elliot Smith in his work on evolution has clearly demonstrated that more important than the skeleton is the brain. He has given clear indications that the brain of the Egyptian is of a different type from the European. I have strong evidence of a similar character that the brain of the Chinese differs also from that of the European.

The work of Keith, Bolk, Stockard and others has drawn our attention to another group of organs—the endocrine or internal secretory organs. They suppose that racial differentiation is in some way brought about by the influence of the secretions of these organs. Sir Arthur Keith states that “the theory which best explains all the facts is to suppose that Mongolian features arise under a peculiar or altered action of the growth mechanisms centered in the thyroid gland.” The evidence can not be regarded as altogether satisfactory, for the arguments are based in great part on analogy.

The features of certain diseases are so like the distinguishing features of certain races that Sir Arthur Keith has been led to believe that the causes of the features in those cases must be identical. In acromegaly we get an increase of bone and muscle growth in certain places; the hands become large,

---

\* A paper read before the Hongkong and China Branch of the B.M.A. on April 2nd, 1924.

there may be a similar enlargement of the feet. But more important are the bony changes in the cranium and face. The cranium becomes increased in size and in particular in relation to the function of mastication—an increase in the prominence of the temporal ridges, marked prominence of the supraorbital ridges, etc. In the face we find marked enlargement of the lower jaw and the masticatory apparatus in general. If we now look at the features of a gorilla we find that many of the characters of the acromegalic are normal to the gorilla. It certainly appears that the possibility of any individual becoming gorilla-like is always present, but that some influence prevents it happening. Now an increased pituitary secretion over a prolonged period is the cause of acromegaly and without doubt the pituitary has an important influence on growth. It would appear that man has some mechanism which restrains this gland and therefore Keith suggests that the influence of endocrine glands is important in racial differentiation. The race most closely allied to the acromegalic is the neanderthal race. The similarity between certain diseases of the thyroid and the features peculiar to the Mongolian has further caused Sir Arthur Keith to postulate that the Chinese race is differentiated under a thyroid influence.

It would be more correct to say that the general appearance of any individual has been brought about by the combined influence of a great number of different factors, that his growth is capable of being influenced in particular by any or all of the ductless glands and that the final result is possibly due to alteration in either the combining values of these glands or on the time at which they begin to act. It can be postulated that the onset of maturity is brought about mainly under the influence of the internal secretion of the sex organs, and that man's supremacy is due to a later onset of maturity, than in other mammals; his whole life being retarded, as Bolk in particular has shown.

Now, have we any evidence that the influence of the sex glands can be delayed in its action? We have; for, if the thymus gland is removed, the onset of sexual maturity is hastened; and vice versa, if the sex glands are removed the thymus gland fails to involute as early as normally. We also know that there is a close association between the sex glands and the thyroid. So that not only on the evidence of experimental physiology but also on the evidence of pathology we have no doubt that the endocrine organs play a very important part in the growth processes of the body. The action of these internal secretions is so much a combined process that it becomes a great difficulty to determine whether any particular phenomenon is the direct result of a particular gland; or whether the stimulation or suppression of that gland may not remove some factors which permit the uncontrolled action of the others.

As an example, there is no doubt whatever that the physical signs of acromegaly are the direct result of a change in the pituitary gland. But are the signs produced by the actual pituitary hormone, or are they produced by the combined action of other glands modified in their proportions by the deranged pituitary? Again, certain growth processes are intimately associated with the thyroid gland. Are these due to the thyroid directly or are the oxidation processes of the body so disturbed that once again the combined factors of all the growth processes become deranged?

We have made use of experiment and pathological conditions to help us in the answer, but to my knowledge there is no work which can tell us whether there are actual morphological differences between different races of men in the endocrine system.

Bolk tells us that the sutures in the skull of man are later in joining up than they are in the anthropoid apes. He says that this must be due to the thymus. Such may be the case but have we any evidence that the thymus gland is in any way different whether in function or structure?

During my investigations on other matters at the mortuary I was impressed by the fact that the thymus gland of the Chinese, as examined at the mortuary of Hongkong, was considerably larger than any I had previously seen, in spite of late age. The close association which has been shown to exist between the Thymus and the Thyroid led me to think that perhaps by an investigation of the thymus I might be able to throw light on the hypothesis put forward by Keith that the Mongolian characters arise under a peculiar or altered action of the growth mechanisms centered in the thyroid gland.

The thymus gland is an organ which has a definite function to fulfil and whatever that function may be it ceases to act with the same fulness after the onset of puberty; unless that function is taken over by some other organ.

From an anthropological point of view its investigation in China is very important as it may act as a basis for work on time relationships in the body. These time relationships are different in different species of animals. The length of intra-uterine life in man is about nine months; in other mammals closely related it is shorter. Similarly we have a lengthened period of childhood, adolescence, adult life and senility. These time relations are definite anthropological characters and quite conceivably have a marked influence on the ultimate structure of the race. This is a preliminary communication to a fuller investigation of the whole time relations in the Chinese. If these time relations are different in the Chinese, then we must modify our medical teaching.



This paper can only be regarded as preliminary for another reason and that is that it may have to be modified on the advent of further information regarding the age. Unfortunately conditions are such that one can not ascertain the age with certainty. The official form gives the name, age and address, which are obtained from the relatives. Apart from the fact that many of the coolie class do not know their own ages, complications arise in not knowing whether the age given is according to Chinese or British reckoning. Every effort has been made, however to arrive at as close an approximation to the correct age as possible. Furthermore even if the ages given are not strictly accurate the findings are very significant. I have included with the description of the thymus the state of the hair development. At the present time an investigation is being made for the C.M.M.A. conference of the state of the sexual development and hair development at known ages in the living which should act as a useful check.

The examination of the thymus was both microscopic and macroscopic. The microscopic condition has been classified into five types by Hammar.

Type 1. Infantile, with abundant parenchyma and moderate connective tissue. (Birth to 10 years).

Type 2. Juvenile, with parenchyma and connective tissue both abundant. (11 to 15 years).

Type 3. Young Adult, parenchyma somewhat reduced, connective tissue abundant and the formation of fatty tissue going on. (16 to 20 years).

Type 4. Adult, with parenchyma more reduced, connective tissue more abundant and fatty tissue increasing in amount. (21 to 45).

Type 5. Adult, Mostly connective and fatty tissue with strands of parenchyma.

The macroscopic classification of the gland is more difficult. Hammar and others have taken the weight at different ages and found a gradual diminution in weight after the young adult stage. The weight is however difficult to use as a basis for comparison as to the amount of thymic tissue present. I have adopted an arbitrary classification, depending on the general size and bulkiness of the organ, into five groups and have compared the microscopical appearance as far as possible.

Group 1. Abnormally large. Length from 6 to 8 inches, breadth from 2 to 3 inches. Full and lobulated. (Fig 1).

Group 2. Large. Length from 5 to 6 inches, breadth from 2 to 3 inches, relatively bulky and lobulated.



Figure. 1

Figure 1.—The Thymus gland of a Chinese Male, age 23, No 24 of the series The protractor on the right is the ordinary military protractor 6" in length. The two superior lobes dissected out from under the thyroid gland are well shown.

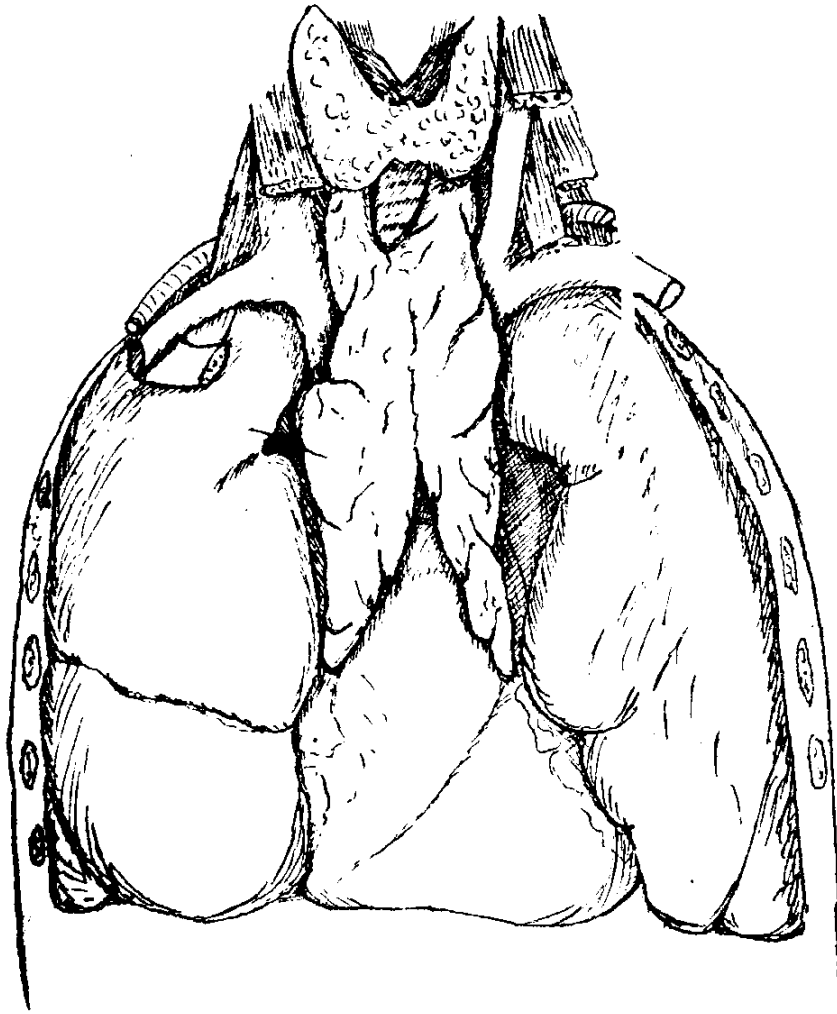


Figure 2

Figure 2.—A drawing of the same case as Figure 1. sketched at the time of post-mortem.

Group 3. Medium size. Length 4 to 5 inches and relatively bulky.

Group 4. Small obviously lobulated and thymic tissue of a reddish colour.

Group 5. Insignificant.

Obvious pathological conditions have been excluded.

In the European the thymus gland in the adult is mostly a thoracic structure. It is cervico-thoracic up to the third embryonic month, after which a fusion takes place with the pericardium; this fusion is said to cause an atrophic process to set in, in the cervical portion, the relation with the thyroid being maintained by strands of connective tissue. In the Chinese the condition is different; the cervical portion of the gland is always well marked and is represented by two well marked lobulated upper extremities which reach, and in some cases pass under, the thyroid gland. The microscopic examination shows that the regressive changes are later here than elsewhere. The gland should therefore be classified in the Chinese as cervico-thoracic.

I have drawn up a table to summarise the information so far gathered. It will be seen from this table that up to the age of twenty practically every gland is of large size. Figs 1 and 2 give a very good indication of the size of the glands placed in group 1 and regarded as abnormally large. The gland figured weighed 46 grammes after formalin fixation. It had a length of eight inches and a breadth of two and a half inches. There are in all eleven cases in the series classified in group 1, nine of which occur before the age of thirty, and two over that age at thirty-three and and forty-three. Nine of them were subjected to microscopical examination and found to belong to either type 1 or 2 of Hammar; thus it is clear that the large size is clearly associated with an abundance of thymic parenchyma. Glands which are included in group 2 are slightly smaller than the above, weigh from 35 to 40 grammes. It will be seen that glands of this size predominate up to the age of thirty; although many are found after this age and in the particular group of cases which I have examined, six are found between forty and fifty. The glands in group 3 would be regarded as large in the European and it will be seen that they begin to appear at the age of twenty-five; and that after thirty-five the gland begins to get smaller in size.

If we compare the size of the glands with their microscopic structure it will be seen that the large size is due to thymic tissue for the abundance of parenchyma is held until a later age than in the European. Hammar's ages corresponding to his types are not in agreement with the findings in the Chinese. The young adult condition, instead of changing at 20, runs on till about 25 years of age. After thirty regardless of the actual

size of the gland, all the specimens are of the adult type. From these tables we can therefore assert that the thymus gland is later in undergoing its involution changes than it is in the European.

We are now faced with the problem of determining whether the delay in thymus involution is a normal physiological, and therefore anthropological, condition in the Chinese. The problem is not yet capable of a satisfactory answer; nevertheless we can hypothesise, remembering that the function of an hypothesis is to build up further knowledge. It may fulfil its function and yet be found to be wrong; in which case it is replaced by a further hypothesis as a scaffolding for further advance. Taking firstly our known facts, the thymus is an organ which normally begins to undergo involution at puberty, it is in some way under the influence of both the sexual glands and the thyroid. Does the thymus give out a secretion which restrains the action of the sex glands, and therefore allow the sex glands to act by its involution? This would necessitate acceptance of the thymus within the group of endocrine organs, but it can by no means be considered as proved that the thymus gland gives off any internal secretion. Whatever its function however it may be regarded as an organ belonging to the period of growth and development and may therefore be taken as an index of maturity. One other question; does its persistence so influence the thyroid as to cause this gland to exercise those influences of which Keith speaks? We do not know. The whole question is enlightened by the work of Bolk of Amsterdam. He says "I have advanced a ground to prove that the developmental rate of man has been retarded, a retardation which, by the way, is stronger in the male than in the female sex. To this retardation-process he owes it, I would observe, that he is born "nudus et inermis" that, in contradistinction to the other mammals, it is only rather a long time after his birth that his consciousness of self awakes, followed by the longer infantile, puerile, and juvenile phases." The evidence of the thymus seems clearly to indicate that this retardation rate may be affected, not only as between man and the mammals but between the different races of man himself; and I would suggest that such differences in developmental rate are just as much anthropological characters for investigation as the size of the nose, etc. What evidence have we, besides the thymus gland, for making this hypothesis as far as the Chinese are concerned? I have included the state of the hair development in the table and it will be seen that the development of pubic hair can be considered to be retarded, and this may be regarded as the retardation of a secondary sexual character. From my present observations I am also of the opinion that the growth and development of the external organs of generation are later in reaching maturity.

We are thus faced with the question as to whether our method of making racial comparisons has been correct. We have not sufficiently examined into the question of the time relationship. The study of the skull is a study of an object in one unit of time; whereas the study of a race must include the whole period of its development. The problem of the anthropologist is very closely paralleled by that of the psychologist who attempts to analyse behaviour. Rivers tells us that "the most important distinction which has been made between instinct and intelligence is that the former is innate and the latter acquired." "But when we endeavour to use the theoretical difference as a guide in practice and research, we are met by several difficulties." The examination of behaviour from this standpoint is an examination of behaviour as a sequence of events rather than the examination of a single event in a unit of time. The advances in anthropology must be made along the same lines; for the race we must determine what are the characters which are innate in the race, and what are those qualities which have been acquired in the individual. The distinction between the acromegalic and neanderthal man is that the characters of the one are acquired, of the other innate. Whilst it may be that the pituitary gland is the causative agent in both cases, the problem which has to be answered in the case of Neanderthal is how the germ plasm becomes modified so that a pituitary influence becomes inherited. The condition in which the thymus gland is found in the Chinese must be regarded as innate unless we can show that each individual is subjected to environmental conditions causing its persistence to be acquired. The persistent thymus is an expression of retarded development and is only a part of the general retardation. Keith's hypothesis might possibly be modified by stating that, whereas the cause of the racial differentiation of the Chinese is not known, its results are expressed in a general retardation process which permits the hormones of the thyroid to exercise a fuller influence on the race. This of course assumes that the thymus retardation is an index of some altered condition of the thyroid; and of this there is some evidence. We may say of structure what John Hunter says of function "As every natural action of the body depends, for its perfection on a number of circumstances, we are led to conclude, that all the various combining actions are established while the body is in health, and well disposed; but this does not take place in diseased conditions, for disease, on the contrary, consists in the want of this very combination."

If we are to assume, therefore, an endocrine influence in racial differentiation, we must regard the thymus persistence as a part of the difference in the time relationship of the combining factors, not necessarily the cause. This difference of combining factors expresses itself in those slight differences

of features which go to distinguish races. The differences, not apparent at first on account of the great variety of minor differences in the race itself, become more apparent when viewed as a whole.

Is it possible for us to give any indication of why it is that the thymus gland is retained? I will try to give an indication of the possibility of an answer; the proof of which it should be possible to work out by a study of the Chinese customs. It is more than possible that selection has played a part in the racial differentiation of the Chinese. If selection is of such importance in determining the types of domesticated animals, it should play some part in the differentiation of man. The marriage customs of the Chinese are, I think, ancient and conservative. These customs have for their basis, that the selection of the contracting parties is parental. In the very nature of things the parental choice will be such that, other things being equal the contracting parties are as near to the ideals laid down by social convention as possible. The Chinese admire the placid type—the type which is expressionless, and not given to the outward display of fear, anger, and the emotions in general. The anthropological type might almost be regarded from European standards as a child-like type; the Chinese countenance with its hairlessness, smooth forehead, wide interocular distance, etc., is child-like. Taking the European as a standard they seem to have been retarded. And if so, according to the observations of Bolk, should be looked upon as very high in evolutionary advance. It is conceivable, then, that the choice would fall on those who gave the appearance of being late in arriving at maturity; and who might, therefore, have a persistence of the thymus as one of the expressions of that immaturity, perhaps even the cause thereof. If such is the case the presence of the persistent thymus is due to some change in the germ plasm transmitting influences which cause a retardation of that orderly sequence of events going to make up the adult characteristics of the race.

The possibility of the persistent thymus being of an acquired nature must not be overlooked. It has been suggested that the thymus has some function concerned with the production of immunity from disease. Hammar has avoided any cases which show evidence of disease in his work on the thymus of the European, knowing that it is subject to change in infectious conditions. Diseases of all kinds, and in particular infectious and parasitical diseases, are so common in China that it is next to impossible to obtain data from normal people; and it is possible that malaria and other conditions may have to be seriously considered. If we had data from other infected countries as to the state of the thymus a definite answer might be given to this aspect of the problem; at present it is not possible.

No.	SEX.	AGE	THYMUS		HAIR		METROPIA	DEATH
			GROUP	TYPE	PUBIC	BODY		
94	F	12	2	2	..	..	A	Pneumonia
1	M	15	2	..	..	..	A	....
2	M	15	1	2	..	..	A	Pneumonia
3	M	16	2	..	..	..	A	Fract Skull
4	M	16	2	..	..	..	..	....
99	M	16	2	2-3	Scanty	..	..	Pneumonia
5	M	17	2	..	..	..	A	Beri-beri
6	M	17	2	..	..	..	A	....
7	M	18	2	3	Scanty	..	A	Pneumonia
8	M	18	1	3	do.	..	A	Beri-beri
9	M	18	3	3	do.	..	A	....
10	M	19	1	3	do.	..	P	....
11	M	19	1	2	do.	..	P	....
97	M	19	2	3-4	do.	..	A	Br. Pneumonia
12	M	19	3	..	do.	..	A	....
89	M	19	2	3	do.	..	A	Meningitis
13	M	20	2	..	do.	..	A	Nephritis
14	M	20	2	2	do.	..	A	do.
15	M	20	2	2-3	do.	..	A	do.
16	M	21	2	2-3	do.	..	A	....
17	M	22	3	..	Mod.	..	A	....
18	M	22	2	..	Scanty	..	..	....
19	F	23	2	..	Mod.	..	A	Suicide
20	M	23	3	2-3	Scanty	..	A	Enteritis
21	M	23	3	3-4	do.	Scanty	A	Beri-beri
22	M	23	2	..	Mod.	..	A	....
23	M	23	3	4-5	do.	..	A	....
24	M	23	1	3	Scanty	..	A	....
101	F	23	2	3	..	..	..	Accident
25	M	24	1	3	Full	Mod.	A	Nephritis
26	M	24	4	5	do.	Full	A	Beri-beri
96	M	24	1	2-3	Mod.	Mod.	A	Dysentery
90	M	24	2-3	3	do.	..	A	Beri-beri
27	M	25	1	3	Scanty	..	A	....
28	F	25	4	..	do.	..	A	....
29	M	25	3	..	Mod.	..	A	....
30	M	25	2	..	Full	Full	A	....
31	M	25	2	..	Scanty	..	..	....
88	M	25	2	4	Full	Mod.	A	Meningitis
32	M	26	3	..	do.	do.	A	....
33	M	27	2	..	do.	Full	A	....
35	M	27	2	..	Mod.	Mod.	A	....
36	M	27	4	3-4	Scanty	Scanty	A	Accident
100x	M	27	1	3-4	Mod.	do.	..	....
37	M	28	2	2-3	Full	Full	..	....
38	M	30	2	4	Scanty	Scanty	P	Accident
39	M	30	3	..	do.	do.	A	....
40	M	30	3	..	do.	..	A	Rupt. Liver
41	M	30	3	..	Mod.	Mod.	A	Pneumonia
42	F	30	2	..	Scanty	..	A	....
43	M	30	2	4-5	Full	Scanty	A	Beri-beri
43a	M	31	2	..	Scanty	..	A	....
44	M	32	3	..	Full	Mod.	A	....
45	M	32	2	..	Scanty	..	..	....
46	M	32	3	3	Mod.	..	A	Beri-beri
47	F	32	3	..	Scanty	..	A	Post Part. sepsis
48	M	32	3	3	Full	Mod.	..	Malaria
49	M	33	1	..	do.	Full	A	....

N.B.—100 x. Thymus tissue on Diaphragm.



No.	SEX.	AGE	THYMUS		HAIR		METOPIA	DEATH
			GROUP	TYPE	PUBIC	BODY		
95	M	34	2-3	5	Full	Mod.	A	.....
50	M	35	3	3	do.	do.	A	.....
51	M	35	3	..	do.	do.	A	.....
56	F	35	3	..	Scanty	..	A	Pneumonia
52	M	36	4	..	do.	..	A	.....
53	M	36	3	4	do.	..	A	.....
54	M	36	4	..	Full	Full	P	.....
55	M	38	2	..	do.	do.	A	.....
57	M	38	3	..	Mod	Mod	A	.....
58	M	38	3	..	Full	Full	A	.....
59	M	38	5	..	do.	do.	A	.....
60	F	39	4-5	5	do.	..	P	Pneumonia
64	F	39	Absent	..	Scanty	..	A	.....
61	M	40	4	..	Full	Mod.	A	.....
62	F	40	5	5	..	..	..	.....
63	M	40	2	..	..	..	A	Typhoid
65	M	40	Absent	..	Scanty	Mod.	A	.....
66	M	40	5	..	do.	do.	A	.....
67	F	40	4	4	Full	do.	A	Malaria
68	M	40	Absent	..	do.	Full	A	Spleen 3 lbs. 1 oz.
69	M	41	2	..	Mod.	Mod	A	.....
70	M	41	4	..	..	..	A	.....
75	F	42	2	..	Scanty	..	A	.....
71	M	42	1	..	Full	Full	A	Accident
84	M	42	3	4	do.	do.	A	do.
72	M	45	2	..	..	..	..	.....
91	M	45	2-3	5	Mod.	Mod	A	Malaria
73	M	46	2	..	Scanty	do.	A	.....
74	M	47	2	..	Full	Full	A	.....
76	M	50	4	..	do.	do.	A	Pneumonia
77	M	50	Absent	..	do.	do.	..	do.
78	M	50	4	..	do.	Mod.	..	.....
79	M	52	5	..	do.	Full	A	.....
80	M	53	2	..	do.	do.	..	.....
81	M	54	5	..	do.	do.	..	.....
82	M	55	5	5	..	..	..	.....
93	F	57	4	5	Very	Scanty	A	.....
83	M	60	4	..	Mod.	Mod.	..	.....
85	F	60	3	..	..	..	P	.....
92	M	67	4-5	..	Full	Full	A	.....
86	M	68	5	..	do.	do.	A	Fract. skull
87	M	70	5	5	..	..	..	Leprosy

**Patient and Doctor**

By

R. M. GIBSON, M.D., C.M., F.R.C.S. (EDIN.)

---

It was suggested to me that I might address the Medical Society on some aspects of a doctor's life and I have chosen the title, "Patient and Doctor."

When acting as clinical clerks and dressers in hospital, attention has to be concentrated on the diagnosis and treatment of many cases, but in private practice the patient must be studied as an individual. Though psychology has in recent years become prominent as a special subject, the main principles have been applied by successful doctors for a long period. A patient may be heard to say: "I always prefer the old doctor, for though he may not know all the latest methods of treatment, he understands my constitution" — or to put it from the medical stand point, the patient has confidence that the doctor understands not only the disease he is called to treat but also the psychology of that person. Further, in hospital work your responsibility ends when the patient is discharged. But in private practice there is a closer relationship between patient and doctor and the aim is to treat the patient so that he will realise you are not simply a paid agent but a friend who will do the best that can be done for him. If a doctor can inspire this confidence, he will be successful in the best sense in that he is meeting a need in the lives of suffering humanity. As a foreword to the following remarks, it may be advisable to say that neither the cultivation of a good "bed side manner," as it is called, nor brilliant social talents can take the place of a sound knowledge of all the chief branches of medicine.

The mental attitude of the patient is usually abnormal. When all the organs of the body are working in harmony, there is a sense of well being which we call good health, but an attack of acute dyspepsia, though not in itself dangerous to life, casts a cloud of melancholy over the mind which makes the world appear gloomy. The patient having decided to consult a doctor, expects to be taken seriously and however trifling the condition may seem to you, go into the symptoms carefully and he will be satisfied so far; if fortunately you can assure him that his

dyspepsia is only a temporary derangement, his mental anxiety will be allayed. Your mixture will work wonders and the prescription will be passed on to friends who may or may not be suffering from a simple dyspepsia. I recall a case where the doctor was called to treat a case and he recommended that the lady should have lightly boiled eggs. "But Doctor, for a long time I have not been able to take an egg." "Well, you try an egg, as I direct you, take salt and pepper with it and I am sure you will enjoy it." And evidently, the pinch of pepper touched the spot and the patient never ceased extolling the acumen of Dr. S. Professor Wylie of Edinburgh had a method of treating hysterical cases suffering from aphonia. A stomach tube was hung at the bed side and orders were given that it should be passed every day until the patient spoke. The treatment was quite successful.

When the disease is really of a serious nature there is not the same tendency for doctor to omit methods of examination. This suggests the importance of concentrating the mind on each case and trying to form a true judgement on the facts obtained. Is this case really a simple case or one of a serious nature? Experience will do much to mature the faculty of judgement but if in doubt it is better that *you* should invite another doctor to see the patient in consultation than for the patient to be dissatisfied and call in another doctor. A doctor was attending a very serious case and was about to go on holiday leaving the case in the hands of a recently qualified assistant. The friends rightly protested that a man of experience should undertake the case. A little common sense on the part of the regular attendant would have shown him that he was not making adequate arrangements for this urgent case. A patient was obviously going down hill. The friends asked for a consultation but the consultant invited was not the best man for that pulmonary case. At last after avoidable delay a specialist, who really believed in open air treatment, was obtained. After examining the patient, he said:—"Would you like to be outside in the open air?" "There is nothing that would give me greater pleasure," replied the weary invalid. Soon she was under open-air treatment and today she is a strong healthy woman. Try to anticipate what is best for the patient. Don't wait for the friends to insist on another doctor being called.

The patient's mind is abnormally active and he is a keen critic. He listens to and remembers your words and notes all you do. "Dr. X just looked at me, felt my pulse said there was

nothing the matter with me." "Dr Y placed an instrument on my chest, and over my heart—looked at my teeth and throat and examined my abdomen. He took a great interest in me. I think he is very clever." As medical men we may know that Dr. Y is really not as sound a medical man as Dr. X, but patients can only judge by the thoroughness of the examination made. The patient and his friends listen to the words of the doctor and a doctor should be specially careful not to think aloud. I sometimes wonder what the friends thought when a doctor was asked in consultation *re* case of cancer of liver. As he examined the case, he kept saying aloud—"How funny, how funny," his favourite expression, but hardly appropriate to the circumstances.

"Well, how did you enjoy the bananas yesterday." "But Doctor, you said that I must not have bananas." "Ah, yes, quite right to obey my orders but you may now have one at every meal." "Are the powders I ordered finished?" The dispensary sent a bottle of mixture. Doctor, was there a mistake? Should I have been given powders?"

Carelessness in not remembering what directions have been given for dieting, or more alarming still, if the doctor has forgotten the exact details of the prescription ordered, tends to raise distrust in the patient's mind and he is inclined, (wrongly often), to put it down to lack of interest in the case. The patient's mental attitude magnifies things which may be of comparatively little importance in the treatment of his complaint. When repeating prescriptions do not alter the slightest detail without informing the patient—even an increase in the amount of the harmless aq. menth pip. may make a nervous patient discontinue the medicine because it is not exactly the same as formerly.

A little more difficult is the problem when asked to repeat a prescription which has "just suited" patient, after all trace is gone of the prescription—no bottle with number—and a year has elapsed. Try to cultivate memory for details, and if that is impossible, keep notes, for the patient expects you to know all that is of importance to *him*.

The doctor is expected to possess knowlege beyond the drugs of the B.P., which the student thinks is a large list. "I use Sloan's liniment for my rheumatism, is it good?" "Do you approve of Woodward's Gripe mixture for babies?" "I often take Carter's Little Liver pills, should I continue them?"

It is well not to show ignorance regarding such quack medicines and there is a book published on these remedies which should be consulted.

Even a dog has been sent to hospital for treatment of a fractured leg and while general principles could guide in setting the fracture the difficulty was to control the patient. An anaesthetic was administered with considerable caution as the anaesthetist was ignorant of the amount a dog could stand. Fortunately all went well and the bone united satisfactorily.

Have you ever been ill and waited for the doctor's visit or been anxious to know the doctor's opinion of the fever under which a dear friend is laid? The minutes seem like hours. It is therefore good to exercise a little imagination and put yourself in his place. Keep your appointments with the patient as is expected from every business man when he arranges to meet a client. "I shall call tomorrow at ten a.m.". The patient has had a poor night, (or thinks he has, which is the same thing) and the nurse and the friends have cheered him up by saying the doctor will soon be here. Instead of ten a.m. the doctor calls at four p.m. to find gloomy faces awaiting him. If you are not sure of keeping your appointment fix a later time which you will be able to keep. Sometimes it may be impossible through unforeseen circumstances, then two courses are open to you. If there seems no urgency send a message of inquiry, giving necessary instructions, or if urgent, send a doctor who will act for you. "The doctor told me to stay in bed until he came again but as he must have forgotten me, I got up after a week." The point is to strive to keep all appointments punctually and you will be astonished how seldom it is absolutely impossible to do so.

Why does the patient choose one doctor rather than another? That is a difficult question to answer. A doctor's experience weighs greatly and it will always be a grievance with a man who has recently graduated, perhaps with honours, that patients continue to go to an older man who cannot know as much as he does.

Generally the methodical investigation of every case—*not simply those of interest professionally*—inspires confidence, and on the other hand a doctor's manner, if rough, repels the more timid patients. Some doctors assume the roll of dictators and scold the patient for having neglected to come sooner. Surely that is uncalled for. Is the patient not already suffering for his sin of omission? Why add to his suffering by unkind words? He has *now* come for treatment.

A doctor friend has a large number of children brought to his clinic though not responsible for other members of the families. The explanation is that it has become known that he is very thorough in his examination of children.

In Scotland (and I understand in China) also, some doctors, mistakenly of course, get the name of "being too fond of the knife" and nervous patients sometimes select a doctor who is mightier with the stethoscope than the scalpel.

The patient trusts you to do your best for him. Does the doctor always justify the great trust placed in him? "Tis not in mortals to command success, but, we'll do more, Sempronius, we'll deserve it." An inspiring sentiment but there is a fallacy. Though mortals, we ought to "command success" or if we do not, it is our duty to find out why we have failed to "command success." "Doctor, you have done your best and no one could have done more." Poor consolation to the doctor who, when he thinks over the details of the case in his study, reflects:—"Yes I am glad they do not consider that I was at fault and no doubt I did my best. *But my best was not good enough.* Where and why did I fail? Now it is clear to me, I misinterpreted the meaning of that sign which was the keynote to the correct solution of the case."

If a consultation seems advisable face the question early and come to a decision. Many consultations which might have saved a patient's life at an early stage of an acute disease are futile when that stage has passed.

What the patient desires to know above all things is "Am I suffering from a serious disease or not?" A Chinese gentleman called in a European doctor simply to have that question answered. Being assured that there was no danger he said; "All right, I have some Chinese medicine which will soon make me well."

Errors are often made in prognosis and some are perhaps unavoidable, but many are due to unguarded statements. It is well sometimes in serious cases not to give a definite prognosis at a first visit. At a later visit, after careful consideration, a more accurate prognosis can often be given "Your tumour is of an innocent nature and will not give you any trouble. There is no need to have anything done for it." But was the tumour so very innocent as to warrant such a favourable prognosis? Who can tell with certainty by external examination if a tumour of the breast is innocent or

malignant? You are not doing your best unless you advise immediate removal and if microscopical examination of the growth proves it to be non-malignant so much the better for your patient; if malignant, so far as you are concerned no time has been lost. The knowledge of malignancy being present warrants a radical operation being performed.

That a doctor is chiefly engaged in treating medical cases is not sufficient reason for indifference towards an occasional surgical case. The patient understands that every doctor has passed an examination in Surgery and expects trustworthy advice as to his condition.

If we were always at our best how successful our work would be!

“This above all: to thine own self be true,  
And it must follow, as the night the day,  
Thou canst not then be false to any man.”

In general literature the doctor is sometimes praised and often satirised. Ian McLaren's "Dr. McLure" was a country doctor who seems to have been especially fortunate with his cases; but Dr. McLure is a type of medical man who allowed no difficulties to swerve him from his duty to a patient. Thackeray one of the keenest satirists, has an appreciative reference to the doctor in the following paragraph which occurs in "Pendennis":—

“It is not only for the sick man, it is for the sick man's friends that the doctor comes. His presence is often as good for them as for the patient, and they long for him yet more eagerly. How we hang upon his words and what a comfort we get from a smile or two, if he can vouchsafe that sunshine to lighten our darkness. Over the patient with fever the doctor stands as if he were Fate, the dispenser of Life and Death; he must let the patient off this time. One can fancy how awful the responsibility must be to a conscientious man; how cruel the feeling that it might have been possible to do better; how harrassing the sympathy with survivors, if the case is unfortunate, how immense the delight of victory.”

The standard of your service will be decided by your ideal, and, the words of a Harley Street Doctor to his son may appropriately close this address—“The mountain range is before you, choose your summit.”

---

**Current Medical Literature**

---

---

**SURGERY.**

---

*Aseptic Intestinal Anastomosis.* A good deal has been done in the last few years in the United States to work out an aseptic method of intestinal anastomosis.

Now comes a method devised by Fraser and Dott of Edinburgh (Brit. Journ. Surg. XI, 439—January, 1924.) The ends of bowel to be anastomosed are crushed and ligatured. Each ligature however, not only encircles the gut but also passes through the eye of the ligature-guillotine devised by the authors. The ends of intestine are then joined by two rows of stitches, submucous and subserous, the main ligature next being divided by the ligature guillotine which can finally be withdrawn without fear of soiling.

It appears to be the most satisfactory aseptic method yet devised, but apart from the danger of diaphragm formation admitted by the authors one would imagine that it would be difficult to ensure that the necessary submucous layer should be perforated without sometimes including the mucous membrane. If the latter be accidentally traversed, perfect asepsis is not attained; moreover as the knots are outside and drainage is towards the knots abscesses at the suture line would appear to be not improbable.

*Lymphaticostomy.* Costain of Toronto (Surg. Gyn. & Obst. XXXVII, 252, February, 1923) returns to his lymphaticostomy, this time advocating its use in intestinal obstruction. Edwards of Farbaroo, Wisconsin, in the same number advocates lymphaticostomy for puerperal sepsis. He records a not very convincing case of its value.

It will be remembered that last year (Surg. Gyn. & Obst. XXXVI, 365, March 1923) Costain described experiments in dogs in which he produced appendicitis by ligaturing the appendix and meso-appendix and found that the animal survived if lymphaticostomy was performed. The really curious thing about this communication was that no dog ever possessed an appendix. Perhaps the word appendix was used in mistake for caecum. In that article Costain described the technique of lymphaticostomy—(drainage of the thoracic duct)—in man by an incision along the lower part of the posterior border of the sterno-mastoid. The reviewer has tried his method on the cadaver and does not find the operation difficult. The operation may prove of value in severely toxic cases, but if practised by all and sundry the mortality of appendicitis is likely to increase.



*Abdominoscopy.* Steiner of Atlanta makes an opening into the peritoneal cavity with trocar and cannula under local anaesthesia, removes the trocar and slides in an abdominoscope—a modified cystoscope. The peritoneum is inflated with air and by changing the patient's posture the various parts of the abdominal cavity can be directly inspected and even palpated by the end the abdominoscope. This seems to be a great advance on the recently developed radiography of the abdomen after air inflation.

One would like further enlightenment on two points : how to avoid all risk of damage to the viscera when using the large trocar, and how to sterilise the instrument adequately, without injuring the inner telescopic tube.

*Intra Cardiac Surgery.* The January number of the Archives of Surgery is devoted entirely to the Transactions of the American Association for Thoracic Surgery at the 6th annual meeting. There are many interesting papers but one would choose Dr. Duff S. Allen's article on "Intracardiac Surgery." (Archives of Surgery VIII, 317), as of outstanding interest. The President, Dr. Lilienthal opened the subsequent discussion as follows : "This is a most extraordinary and romantic exposition. I am glad to think that I have lived to see this remarkable work and Archibald of Montreal compared it in importance with the discovery of insulin." These expressions do not appear extravagant to the reviewer who has had the privilege of seeing Dr. Allen's work.

Dr Allen "one day noticed that when a heart was immersed in a bloody fluid contained in a glass jar, wherever the heart came in contact with the glass, the details of the outside of the heart could be seen distinctly even though it was in an opaque bloody medium." On the basis of this observation he constructed his cardioscope, which he introduces simply and safely through the left auricular appendage. A clear view of different parts of the inside of the heart can be obtained and operations can be carried out at leisure within the heart under direct vision, without materially affecting the circulation. A condition of mitral stenosis can be produced in dogs and subsequently converted into one of regurgitation. The old dream of relieving mitral stenosis in man by a surgical operation is in a fair way to accomplishment. It has one believes actually been attempted by Cutler of Boston but not under direct vision.

K. H. D.

---

## MEDICINE

*The Quarterly Journal of Medicine No. 66, January, 1924.*

An article by Goodall and Alexander giving details of four cases of Chloremia associated with acute myelocythaemia,

suggests that all leukaemias may be due to a malignant overgrowth of leukoblastic tissue resulting from microbial infection. D. K. Adams *et al.* discuss the experimental transmission of Disseminated Sclerosis and describe a Spirochaete-like organism recovered from some of the infected animals. The treatment of cases of disseminated sclerosis by drugs of the salvarsan group has given very promising results.

Sir Archibald Garrod and Geoffrey Evans have an article on Arthropathia Psoriatica in which they suggest that psoriasis with arthritis is a definite clinical entity comparable with the arthritis and endocarditis of rheumatic fever.

Geoffrey Bourne adds two fresh cases of Cardiolysis to the list of 25 similar operations already recorded. The operation consists of "freeing the heart" in conditions of adherent pericardium and seems to be productive of excellent results.

---

*The Journal of Pharmacology and Experimental Therapeutics,*  
*January, 1924.*

Macht and Lubin in a Phyto-Pharmacological Study of Menstrual Toxin, prove conclusively that the blood serum, saliva, sweat, milk and other secretions of menstruating women contain a toxin with specific chemical and pharmacological reactions. The presence of this menotoxin is demonstrated by its inhibitory effect on the growth of seedlings, of yeast, etc, and by its blighting effect on cut flowers.

Sellards and Leiva in an article on the Experimental Therapy of Amoebic Dysentery describe the conditions necessary for infecting cats with *E. histolytica* and show that the infection can be successfully treated with Emetine and Quinine but not with Papaverine.

Macht and Hyndman in a study of the Chemical Structure of Bile Acids show that while Taurine and Glycine are practically non-toxic for animal and plant protoplasm, Cholalic Acid has a very depressant effect on the neuro-muscular system of rats and on the growth of seedlings.

*Archives of Internal Medicine, No. 2, February, 1924*

Clawson in an Analysis of 220 cases of Endocarditis coming to autopsy emphasizes the prevalence of Bacterial Endocarditis as an active heart lesion. Acute Rheumatic Endocarditis was found in only 4%, while Bacterial Endocarditis was found in 60% of his cases. The finding of *Streptococcus Viridans* in the blood indicates a sub-acute bacterial endocarditis; the presence of *streptococcus haemolyticus* or *staphylococcus* or *pneumococcus* generally indicates an acute bacterial endocarditis.

Weiss who has had considerable experience in the treatment of Mercuric Chloride poisoning points out that the danger lies in the pathological changes in the kidney. Cloudy swelling, nephritis, and uraemia give rise to severe acidosis. The rational treatment therefore is the exhibition of large quantities of Alkaline Salts by stomach tube, by mouth, per rectum and intra-venously. In a series of 135 cases treated by this method, there were only eight deaths.

Frissel and Hajek describe in detail the effects of Insulin in the severer forms of Diabetes.

Luten discusses at some length the clinical effects of Digitalis.

---

*The American Journal of Medical Sciences, March, 1924.*

Symmers concludes an interesting study of the pathological changes found in Hodgkin's Disease and shows that we must relinquish the conception that Hodgkin's Disease is most commonly shown by enlargement of the lymph nodes of the neck. In his series of cases the disease displayed itself chiefly as an enlargement of the abdominal or the abdominal and thoracic lymph nodes.

Wolferth and Miller give a review of 53 cases of Necrosis and Gangrene of the Urinary Bladder.

Kilduffe discusses the Kolmer Modification of the Wassermann Reaction after an experience of 2,000 tests.

Hachen gives his experiences in the treatment of Diabetes by Insulin and Dietetic management.

Lower and Watkins describe a case of Primary Carcinoma of the Bladder with metastasis in the Brain.

J. A.

---

#### PATHOLOGY AND BACTERIOLOGY

*The Morbid Anatomy and Histology of Anaphylaxis in the Dog*

*By*

*H. R. Dean and R. A. Webb*

*(Journ. Pathology and Bacteriology, 1924, XXVII, 51)*

Normal horse serum was used as antigen in all the experiments. Of the 33 animals experimented on, four died within 44 hours after the injection ; signs of shock were severe in 14 cases. moderate in all and slight or absent in four. At autopsy it was found that the most characteristic and constant changes occurred in the liver and gall bladder. In the liver the first change was dilatation of the sinusoids which was

confined to the central portion of the lobule associated with small haemorrhages around the intralobular vein. The liver cells were widely separated and in severe cases show degeneration such as disintegration and necrosis. Congestion and haemorrhage in the wall of the bladder were well marked and it was observed that the severity of the shock was directly proportional to the degree of congestion in the liver and of the gall bladder.

Changes in the other organs consisted of haemorrhage into the heart in 19 cases, and marked hyperdistension of the lungs in two cases.

The conclusions arrived at by the authors are that the immediate shock is due to fall of blood pressure, and that the subsequent collapse and coma are probably the result of interference with the circulation and oxygen supply to the vital centres in consequence of loss of effective blood in the liver.

---

*Precipitation in Diphtheria Toxin-antitoxin mixture*

*By G. Ramon*

*(Ann. de L'Inst. Pasteur, December, 1923, XXXVII, 1001)*

The author observed that by mixing diphtheria toxin with varying doses of antiserum, a flocculation occurs and that this reaction is specific. The test is performed by adding to a series of test tubes each containing 20 c.cm. of diphtheria toxin, decreasing amount of antiserum and allowing the mixture to stand for some time when in some of the tubes, an opacity appears which increases in intensity with time, until finally precipitation occurs. It was found that the mixture in the tube in which precipitation appeared first was entirely innocuous to guinea-pigs on inoculation representing as it was believed to be complete neutralisation of toxin and antiserum. Thus with an antiserum of known units per c. cm., it is possible to determine *in vitro* the strength of a preparation of the toxin, and the method, if it is proved to be accurate, will be a means of great economy of the guinea-pigs which would otherwise be necessary for standardisation of the toxin.

C. Y. W.

---

ANATOMY INCLUDING HISTOLOGY, EMBRYOLOGY & NEUROLOGY

*The Human Brain*

*Elliot Smith. Nature, March, 15th, 1924*

The author, in his discourse delivered at the Royal Institution, gives us a delightful description of the evolution of the brain. To Elliot Smith, more than to any other, we are

indebted for having freed the science of anthropology from the incubus of cranial measurement and for establishing it as a science which takes in all the organs as its weapons of research into man's history. But it is in the brain that man is so peculiarly distinguished from other animals. "The secret of man's most distinctive attribute is hidden in the texture of his brain, and perhaps will never be fully revealed." It is in virtue of the high development of the cerebral cortex—the neopallium—that he has been able to use to the full the afferent impulses derived from his sense organs ; to bring under its control such an amazing variety of coordinated muscular acts, involving the mechanical expression of man's intelligence.

"In the evolution of man the attainment of increasingly skilled movement involved the growth of mind."

He proceeds to give a brief account of the history of the controversies regarding the human mind commencing with Gall and showing how, although he allowed his speculations on phrenology to run away with him, it is to him that we owe the scientific foundation of our knowledge ; he it was, who destroyed the ancient speculations concerning vital spirits dwelling in the ventricles of the brain.

His history rightly ends with a reference to the work of Head and Rivers.

---

*Speech and Cerebral Localisation*

*Henry Head. Brain, November, 1923*

In this comprehensive article Dr. Head has given to science the results of years of patient and careful work. The work is the natural outcome of two very important circumstances, which can only be fully realised by a survey of his past work. Firstly, that the author has followed his investigations from the secure foundation of accurate and quantitative method, undoubtedly influenced by the example of such minds as Hughlings Jackson and Ferrier ; secondly, that Head made full use of the opportunities of the war to enlarge and confirm his previous work. Undoubtedly the use that he has made of the clinical material, offered in such abundance, has advanced our knowledge of cerebral localisation to a much greater extent than if the world's worst war had not taken place.

His great contribution in this article under review has been to make us regard the cerebral cortex as a higher hierarchy. "Speaking, reading and writing are highly developed actions, which have been acquired during the life of an individual. They are learnt with effort and constantly improved by practice. When they are disturbed by an organic lesion, the

orderly march of a series of events is interrupted ; the act of speech fails in one way or another, assuming different forms, just as man's gait varies according to whether he has injured his toe or his heel. The necessary processes can no longer be carried out perfectly ; but the particular form assumed by the disorder is the consequence of preventing in part the expression of certain highly developed functions and does not reveal the primitive elements out of which they were developed." He approaches the subject freed from the misconceptions of past teaching, that speech could be divided up into units. "Some observers adopted as units the acts of speaking, reading and writing ; other divided the phenomena into "motor" and "sensory," "emissive" and "receptive," whilst many were content with the purely descriptive terms of "apraxia" and "agnosia," which have no more explanatory value than the word "aphasia" itself."

He finally comes to the conclusion that "Acts of symbolic formulation and expression are built up on a level of integration superior to that of motion, and are of a higher order than sight or hearing. Consequently, the clinical manifestations cannot be classified as "motor," "visual" or "auditory" defects of speech.

The fact that "the form assumed by an aphasia may differ with the site of the lesion" is not to be explained on the ground that these sites are centres for component parts of speech ; but that "the structural injury interrupts in various ways the sequence of complex processes necessary for orderly speech, and so produces diverse clinical manifestations."

"When a complex mode of behaviour, such as use of language, is disturbed by structural disease, the loss of function is manifested in terms of the process itself and does not reveal the elements out of which it has been built up. Moreover the various mental activities interrupted during acts of symbolic formulation and expression, can frequently be exercised in a normal manner during some other form of behaviour. Thus the patient may have profound difficulty manipulating visual images at will for the purposes of verbal expression, although he can employ them with ease in other modes of thinking. It is not images as such that are disturbed, but images used in a certain manner directed towards a definite end."

The conceptions thus expounded by Head reveal to us a more logical method of regarding the whole of the mental processes ; we are led to a more phylogenetic outlook ; and in this regard his work on the cerebral cortex is a fitting conclusion to his previous work, in association with Rivers, on the analysis of sensation from the periphery to the higher centres.

*Factors Bearing on the Etiology of Femoral Hernia*

*J. Allison Panton. Journal of Anatomy. January, 1924*

In this very important contribution to the anatomy of the femoral region the author has carefully analysed the statements bearing on the subject of femoral hernia and has subjected them to the critical test of scientific observation. He shows that many of our ideas on the cause of the greater liability of the female sex to this form of hernia are based on incorrect statements. "The female *false* pelvis is either relatively narrower than the male, or else is equal to it: it is certainly not greater. Therefore the 'wider pelvis theory' is untrue." This is further supported by the fact that the female Poupart's ligament is relatively shorter than the male. Neither is Gimbernat's ligament responsible for the greater frequency of female femoral hernia.

"One is driven to the conclusion that the greater predisposition of the female sex to femoral hernia, is related to the lesser development of the ilio-psoas, which allows the femoral vessels to diverge more than in the male. and so creates a wider crural ring. Probably Poupart's ligament is weaker, and more prone to stretching in the female. This would account for widening of the inguino-pubic angle, and the antero-posterior increase of the crural ring."

"The development of Gimbernat's ligament may be a causative factor in both sexes."

Many other factors are discussed. This contribution from the Manchester School of Anatomy is a valuable addition to our knowledge of anatomy of this region.

The saccular theory of inguinal hernia propounded by Hamilton Russell receives striking confirmation in the case of femoral hernia.

*Nerve Endings in Muscle.*

*Kulschitsky. Journal of Anatomy. January 1924*

In 1921 Wilson summed up the position of our knowledge on the innervation of striated muscle. The evidence showed that this innervation was far less simple than had previously been thought. The evidence was in favour of a double innervation somatic and sympathetic. The work of the famous Russian histologist Kulschitsky has put this question beyond doubt by a clear demonstration of the two types of innervation. He describes two types of nerve terminations belonging to motor nerve fibres. "The difference between them, however, is so great, that involuntarily one is forced to think of the double innervation of these muscles from the side of the cerebrospinal nervous system (medullated fibres) and the sympathetic system (non-medullated fibres)."

One of the most interesting observations is the finding of nerve cells of the unipolar types along the course of the peripheral nerves. The question of the origin of the peripheral nervous system is still under dispute and the observations of Kulschitsky have, in this respect, a very important bearing on the question.

J. L. S.

---

PHYSIOLOGY—BIOCHEMISTRY AND PHARMACOLOGY

---

*Quarterly Journal of Physiology. Supplementary volume.*  
*December, 1923*

The volume under review did not reach the Medical Library till February 29th, and was therefore too late for review in the February issue of the Caduceus.

It is, however, of such importance that a delayed review of its contents should prove of some value.

It is entirely given up to an account of the XI International Physiological Congress held in Edinburgh, July 23-27, 1923.

These congresses are held biennially in different countries and it is proposed to hold the next meeting in the United States of America, at the invitation of the American Physiological Society. At Edinburgh there were 516 enrolled members, about half coming from Great Britain, the remainder from other nations, of which 20 were represented.

The opening sessions were given up to general addresses by Professor J. J. R. Macleod of Toronto on "Insulin" and by Professor Charles Richet on "Les Voies non Sensorielles de la Connaissance, et la Methode Experimental."

In a closing session professor I. P. Pavlov addressed the Congress on "The Identity of Inhibition—as a Constant Factor in the waking State—with Hypnosis and Sleep."

The remaining sessions were occupied by papers and demonstrations of which no less than 234 were contributed. The papers cover a very wide range, nearly every branch of physiology receiving attention from different contributors. It is only possible to pick out a few of the papers which are of a more general interest.

*Vitamins and Hormones*:—W. Cramer of London calls attention to the similar nature of vitamins and hormones with regard to their action in the body. He discusses the relation of vitamins and light to metabolism and appears to take the view that exposure to light rays can compensate for a short time for the absence of A-vitamin—there is no evidence however that under these conditions the animal body synthesises the



vitamin—rather that its metabolism reacts to a “light” stimulus in the same way as it reacts to vitamin.

A paper by Professor Cullis and her colleagues on the metabolism of women, embodying a large number of observations, is useful in view of the present lack of accurate knowledge on sexual variations. There is no evidence of a cyclical periodicity of metabolism associated with menstruation and no evidence of a metabolic inefficiency during the menstrual period. There does, however, appear to be a cyclical change in the mean temperature as shown by a premenstrual rise, a menstrual fall and a gradual rise during the post and intermenstrual period.

R. K. S. Lim, a son of Dr. Lim Boon Keng, who is acting as visiting professor of physiology at the P. U. M. C. has a further paper on gastro-intestinal functions, this time on the experimental production of jejunal ulcer.

The general conclusion of the matter appears to be that the normal hormone mechanism which regulates the pyloro-duodenal “reflex,” thus ensuring that the acid chyme is neutralised by the alkaline secretions poured into the duodenum, is an important factor in preventing “ulcer.”

Edridge Green returns to the fray and again attacks the rod and cone theory of vision. He appears to regard the rods merely as a sensitising mechanism for the cones, through their secretion of visual purple. The cones are the essential visuo-receptors for all visual sensations.

R. D. Gillespie of Glasgow shows that mental work is associated with a rise of blood pressure as great as that caused by muscular work.

P. T. Herring of St. Andrew's presents what is now known as the law of fluctuation. This follows on the “all or nothing law” which was demonstrated years ago for the heart. It is now regarded as true for all cell units—range of action in an organ depending on the number of units “stimulated,” there being no range of action for each unit.

The law of fluctuation states that the average activity of an organ depends on the fluctuating response of a constantly changing series of units, different parts of an organ responding in turn. It is only in emergency that the whole organ responds at one and the same time.

The dependence of growth in the Metazoa on cell division can probably be explained in terms of oxygen absorption; when a living unit reaches a certain size its oxygen absorption, which depends on its surface cannot keep pace with its metabolism which depends on its volume or mass and therefore it divides.

The law of fluctuation, however, gives the "millions" of cell a physiological purpose, as well.

A. V. Hill who recently with Meyerhof was awarded the Nobel prize for his work on the physico-chemical basis of muscular contraction, continues to bring forward further evidence of the correctness of his theory, which also receives confirmation from several independent papers presented at the Congress. According to this view there are two phases of muscular activity, an anaerobic in which no oxygen is absorbed and relatively little heat produced, followed by an aerobic in which heat is produced and set free. The first phase is associated with the liberation of lactic acid from glycogen or possibly some more complex precursor, the acid changing the properties of the colloid muscle proteins in such a way as to increase the tension of the muscle fibrils. The second phase is associated with the disappearance or replacement of the lactic acid and the oxidation of glucose. We are all familiar with the fact that we become hot after, rather than during exercise, especially where it is of short duration, such as running to keep a half past eight lecture; we can apparently do a good deal of work before we consume the fuel—we can bank on our reserves.

Julian Huxley of Oxford has a paper on the internal secretion of the thyroid in its effect on the growth changes of Amphibia. He comes to the conclusion that the internal secretion of this organ contains the same active principle in all animals, the different results obtained depending on the "peculiar" metabolism of the animal and the stage of its life history. This explains why sheep's thyroid is so efficacious in curing hypo-thyroidism in man.

Lipschutz of Dorpat, shows by his experiments on rats and mice that very small fragments of testicle are sufficient for complete masculinsation even as small as 1—2% of the normal testicular mass. It appears therefore that in endocrine organs the body carries a big reserve. This does not appear really to be an example of the "all or nothing law" as suggested, except in so far as that means, that there is no range of endocrine function—it suggests rather that if 1—2% of an organ can completely masculinise the animal, there must be considerable fluctuation in the activity of different parts when the whole mass is present.

It appears further that whereas testicular fragments show no endocrine hypertrophy, ovarian fragments always increase in size; this is however due to a much larger number of primary ova entering into follicular development and this without any diminution in the endocrine functions as shown by the development of the uterus.

Professor Macwilliam of Aberdeen has an interesting paper on the vascular changes during sleep. He points out that whereas in quiet normal sleep there is a lowering of blood pressure and therefore less work for the heart, in disturbed sleep with dreams there may be a great rise in blood pressure and pulse rate with increased strain on the heart sufficient to cause sudden death in old age and disease. The changes are as great or even greater than those accompanying muscular exercise and nervous excitement in the waking state, and owing to the short duration of dreams, the "strain" is generally very sudden. It is further interesting to note that dreams involving effort and action are most "dangerous."

S. A. Matthews of Chicago has reinvestigated the metabolism of Eck's fistula. He confirms the view that ammoniaemia due to lack of urea formation is an important cause of the disturbances following a meat diet but points out that gastric stasis and putrefaction also occur and are contributory causes.

Murlin of Rochester N. Y., and others have a paper which maintains that insulin is a "true" hormone and resists peptic digestion. This may lead later to a form of administration by the mouth which will remove one of the chief disadvantages of insulin therapeutics.

G. Pirquet of Vienna has an interesting paper on the relation of the 'Pulse Interval' that is the time of a complete cardiac cycle, to heart and general body measurements such as heart volume, sitting height, metabolism, etc. He suggests that pulse rates should be calculated not per minute but for a number of seconds equal to the sitting height in centimetres; in this way more comparable figures especially as regards children of different ages, are obtained.

This paper confirms the views already put forward by others on the relation between pulse rate and metabolism and therefore with the condition of the thyroid.

L. G. Rowntree of Rochester, Minnesota, has a very interesting paper on water intoxication; it does not appear to be a condition at all frequent in Hongkong, but it can be induced in animals by the administration every half hour of 50cc. per kilogram of body weight. Many symptoms are described, including convulsions not unlike those of strychnine poisoning. There is a 25% fall in the percentage of haemoglobin associated with a proportional fall in serum proteins and salts. Recovery is rapid on discontinuing the administration. The condition of the tissues is a matter for further investigation but at present the symptoms appear to be entirely due to the blood "dilution."

Richards and his colleagues of Philadelphia give the results of observations on the kidney. They have developed a very clever technique whereby they are able by means of a fine glass pipette to extract glomerular or capsular fluid from the frog's kidney. They show that this fluid may be more concentrated than the blood but is always less concentrated than normal urine. It always contains dyes like indigo carmine and phenol sulphone phthaleine, when injected. They point out that more work is necessary on the nature of glomerular filtration, but that their results appear to favour the filtration and tubular reabsorption theory of urinary secretion. They have also made observations on the condition of the glomerular capillaries under different conditions. They confirm Krogh's view of fluctuation and point out that the glomeruli collectively show a range of action from 10-100%; waste products and diuretics such as urea, caffeine and weak pituitrin increase the number of active glomeruli, whereas adrenalin and strong pituitrin have an opposite effect.

H. G. E.

#### GENERAL

*Health, Vol. 1, No. 1.* This quarterly magazine is published by the Council on Health Education in China. The Council has the joint support of the China Medical Missionary and the National Medical Associations. The aim of the magazine is apparently to record the activities of the Council and the lines along which it is proposing to tackle the public health problems in China. The first number does not indicate that it is going to be a scientific publication. As a general literature on public health, it serves the purpose well. The division into a Chinese and English section is certainly a wise proceeding. Dr. Wakefield, in his article entitled "The School Waits" has nothing good to say for the hygiene of a Chinese school. His contention that no healthy mind comes out of slovenly and filthy surroundings (hygienically) has an element of truth. In "Boring from within," the author tries to prove that hygiene plays an important part in the fall of a nation's civilisation. "The same factors which worked for the destruction of Greek (Malaria) and Egyptian (Hookworm) civilisations are at work undermining the Chinese civilisation." One can't help wondering if the conclusions are not too hastily drawn. The outlined programme on which the Health Council is working is very exhaustive. The various conferences organised show the earnestness of its past endeavours. The publication of this magazine will stimulate the people's interest in the Council and that alone will undoubtedly facilitate its work in future. We wish the publication every success and sincerely recommend it to those who are interested in Chinese Public Health work.

(ED.)

---

*15th Annual Report of the Medical Superintendent of the  
Peking Union Medical Hospital.*

This Annual Report gives us a concise and exhaustive account of the work that was carried out at the Peking Union Medical Hospital last year. In the report of the Medical Superintendent the general statistics are given. The notable feature is the outpatient department, the total visits to that department in 1923 were 77,301. With such a large outpatient attendance, good clinical material must be available for teaching and research. Under the subheading, House Officers, it is noted that it is extremely difficult to secure Chinese graduates for the posts. We may say that it has been a similar experience here. The American system of internship does to a great extent solve the problem. While it is out of place here to discuss the merits and demerits of hospital training after graduation, we certainly hope that some arrangement will be made for our graduates to go to Peking for further training, if they so desire. The reports of the various departments are full of interest but it would be too lengthy to go into them. The detailed tables at the end of the Report give us a glimpse of American exactness. One has only to look at the tables to get all the information.

(ED.)

---

**Editorial.**

---

RANDOM REFLECTIONS.

I was tempted at the outset to call this article "the Ideal Medical Student." The magnitude of the title obsessed me. The picture of an ideal medical student is truly hard to paint. 'Random Reflections' suggests a bewildered and irresponsible attitude of mind. One hopes that however random the reflections are, glimmers of truth may be seen—the contrast tends to sharpen the vision.

In attempting to lay bare a few common defects which all students show in some stage of their career, the more sensitive of us may be offended. To them I will quote the famous lines, "There are more things in heaven and earth than are dreamt of in our own philosophy."

Broadness of mind is a quality which is pitifully lacking in many of us. The famous Chinese philosopher's story of a frog in the bottom of a well, telling his visitor the sea-crab, of the large heaven that is above him and the spacious world that is around him is a fitting description of many medical students. A medical student after joining the course, begins to work with an

earnestness that characterises an Oriental. He reads Anatomy with a devotion that borders on insanity; he attempts to memorise Gray from the first word to the last; no other books interest him and no other opinion troubles him. One almost wonders if he is trying to find the meaning of Life in between the lines of Gray. To broaden our mental horizon, we must cultivate a sympathetic and tolerant mind. Not satisfied with a professional training alone and utilising our spare time to our best advantage, we must try to get an education, if not that of a scholar, at least that of a gentleman. Sir William Osler discussing what a medical student should read, said. "I have put down a list of ten books which you may make close friends. There are many others; studied carefully in your student days, these will help in the inner education of which I speak, 1. Old and New testament. 2. Shakespeare. 3. Montaigne 4. Plutarch's Lives. 5. Marcus Aurelius. 6. Epictetus. 7. *Religio Medici*. 8. *Don Quixote*. 9. Emerson. 10. Oliver Wendell Homes—*Breakfast Table Series*."

When we have cast aside our narrowness of mind with its inevitable self conceit, we are on the threshold of Learning. For it is impossible for a man to begin to learn when he has the foolishness to say that he does not care to know or a conceit that he already knows.

Medical students are often accused of being prematurely specialised. The principle of specialisation when applied to the medical profession has admittedly its force and purpose. It is essential for the community's welfare that some medical men should be set aside for special work in laboratories—dissecting, weighing, probing and injecting. But it is only excusable, when such research work is done *after* their education and not *as* their education. Let us take the case of a medical student who matriculates at the absurd age of 16; joins the medical course and is at once initiated into the mysteries of medical education; he spends the precious five years in learning nothing else but medicine; his ambition is realised when he graduates; he attaches himself in haste to a special department and after another precious five years publishes a thesis on the circulation of a toad's web. A few people read his work, the majority ignore it. He is a specialist, *par excellence*, but he is not cultured. He has run himself into a groove from which he will never extract himself. Our learned Professor of Medicine's rendering of Martin Luther's famous lines into

"Who loves not football, fun, and music

In later life will cure but few sick"

has its truth as well as its humour—

The Learning about Man himself is an education which will enable us to render the best possible service in our later lives of our one or ten professional talents. There are many means to that end; sport is one and social life in the University is another.

There are far too many Gehazis among us who serve for shekels, whose ears hear only the lowing of the oxen and the jingling of the guineas. It is disastrous to begin our student life with that ideal in front of us. The Chinese are said to be very materialistic and individualistic. Our parents send us to school with the pious hope that after graduation we may be able to add to the accumulated wealth of the Family. The worship of money, the West would have us believe, is an ingrained habit of the Chinese. One thing is certain, the West, too, worships money under the cloak of Capitalism and Industrial Progress. Such a mercenary outlook of mind is fatal to our profession. All values are only worth considering when such values are interpreted in terms of values of Human Life; so are our services of real value when such services are for the service of Humanity.

Chinese individualism tends to foster the spirit of indifference which shows itself in many of us. That spirit is antagonistic to the highest ideals of the medical profession. It is the nursery of a crippled personality. Our lives are too mutually interdependent for us to ignore the welfare of others. Medicine is a high calling and the best work of our profession is only done when men are willing to give up their lives to Science so that others after them, may live. As future members of a noble profession, let us develop a spirit which will not cast any slur on the physician's well deserved title of Friend of Man. Rather let us follow the unselfish footsteps of the great masters who have ennobled the Medical Guilds of to-day.

What personal ideals must we have? To quote once again Sir William Osler. "I have had three personal ideals. One to do the day's work well and not to bother about to-morrow. . . . The second ideal has been to act the Golden Rule, as far as in me lay, towards my professional brethren and towards the patients committed to my care. . . . And the third has been to cultivate such a measure of equanimity as would enable me to bear success with humility, the affection of my friends without pride, and to be ready when the day of sorrow and grief came to meet it with courage befitting a man. . . . What the future has in store for me I cannot tell—you cannot tell. Nor do I care much, so long as I carry with me, as I shall, the memory of the past you have given me. Nothing can take that away." Truly the past has been given us and we must learn its lessons; the present we have with us and we must live it well. The future has its root in the past and the

present. What we sow, we shall reap. The ambitions and imaginations of Youth are conducive to creative work. Our noble aspirations shall fire us with a zeal that is unquenchable, and perchance they shall have a part in the shaping of our future.

One last remark. Be loyal to our University—an unnecessary reminder you may say. It has often been said especially among the superficially educated foreign students in China that Hongkong University is not as good as such and such University. It is an injunction which only the feeble-minded can put forward and it is the worst form of pedantry which one meets in China. If we all will remember that we are the only vehicle through which the University can justify its existence, we are going a long way towards making this University the true "Lighthouse of the East."

#### THE HONGKONG MEDICAL CONFERENCE JANUARY, 1925

As announced in the February issue of the Caduceus it is proposed to place the sectional meetings of this Conference under the control of a joint chairmanship, each chairman also acting as secretary for the section on behalf of the association he represents.

Owing to the fact that the leave movements of certain members is still a little uncertain, it has not been possible up to date to fix definitely those responsible for the sections.

The following list is therefore provisional:—

SECTION.	C. M. M. A.	B. M. A.
<i>General Medicinc.</i>	Dr. W. W. CADBURY. Canton Christian College.	Prof. J. ANDERSON. Hongkong University.
<i>Therapeutics.</i>	Prof. B. E. READ. Peking Union Medical College.	Dr. C. W. MCKENNY. Govt. Civil Hospital H.K.
<i>Pathology.</i>	Prof. R. G. MILLS. Peking Union Medical College.	Dr. J. MORRISON. Union Building H'kong.
<i>General Surgery.</i>	Dr. OSCAR THOMSON. Canton Hospital.	Prof. K. H. DIGBY. Hongkong University.
<i>Ophthalmology.</i>	Prof. H. HOWARD. Peking Union Medical College.	Dr. G. M. HARSTON. Union Building H'kong.
<i>Ear, Nose and Throat.</i>	Dr. THACKER NEVILLE. Changsha.	Dr. S. S. STRAHAN. Alexandra Buildings H K.
<i>Radiology.</i>	Dr. J. L. HARVEY. Canton Hospital.	Dr. J. MACGOWN. Alexandra Buildings H.K.
<i>Obstetrics.</i>	Dr. J. WRIGHT. Canton Hospital.	Dr. C. FORSYTH. Alexandra Buildings H.K.
<i>Anatomy.</i>	Prof. D. BLACK. Peking Union Medical College.	Prof. J. L. SHELLSHEAR. Hongkong University.



<i>Physiology.</i>	Dr. P. S. EVANS (JR.) Shangtung Christian Uni- versity.	Prof. H. G. EARLE. Hongkong University.
<i>Hygiene and Public Health.</i>	Dr. F. OLDT. Canton Hospital.	Dr. J. B. ADDISON. P. C. M. O. Hongkong.
<i>Parasitology.</i>	Prof. E. C. FAUST. Peking Union Medical College.	Dr. E. P. MINETT. Government Bact. H'kong.
<i>Naval &amp; Military Medicine</i> }		{ Surg. Capt. BURNISTON, R.N. Naval Hospital H'kong. Lieut. Col. FITZGERALD, R.A.M.C. Military Hospital H'kong.

Members of either association desiring to contribute to any section should communicate with their chairmen or with Dr. Cadbury, C.M.M.A. (Canton), or Professor Shellshear, B.M.A. (Hong Kong), who are acting as general secretaries on behalf of the programme committee.

THE MEDICAL LIBRARY

When Dr. R. M. Pearce visited the University Medical School in 1921, in connection with the Rockefeller Benefaction he pointed out among other things that if the full value of the benefaction was to be realised, the Medical Library must be put upon a more satisfactory basis.

Previous to this it had already been the policy of the Faculty to spend the greater portion of the small annual grant available on the purchase of current medical journals and, by housing the library in the Medical Schools, to further the development of the medical library as a self contained unit. Owing to the difficulty of providing a separate staff in the form of a clerk and coolie, chiefly due to the fact that the same room is used as a museum, it has become impossible under the present conditions to make much progress in this respect.

It is hoped however in the near future by erecting a suitable partition in this room, dividing the library from the museum, to make the library a place for serious study instead of as at present a common room for use between classes and lectures.

Acting in response to a request from Professor Shellshear, Dr. Pearce recently advertised our needs in the matter of research reprints in the Journal of the American Medical Association; since then several of us have thankfully received literature from different sources. In this connection it should be mentioned that we are indebted to the Rockefeller Institute for free copies of their research transactions and to the Wister Institute of Anatomy for certain of their publications. The Journal of Metabolic Research is also sent free of charge by Dr. F. M. Allen.

The library should be one of the most important departments in any Faculty and in view of the tremendous amount of research being published it is imperative if the Medical Faculty is to hold its own, that it should possess a really good journal library, where people can study what is being done.

In the present issue of the Caduceus an attempt has been made by way of review to call attention to some of the more important papers and it is hoped to make this a feature of all subsequent issues.

---

### Annotations.

---

1. Case from Medical Unit. Encephalitis Lethargica.

C.S.Z., Female, Chinese, aet. 39 years, Earth-carrier.

Admitted to G.C.H., 11/2/24, complaining of tremor of the head, arms and legs of nearly 2 years' duration.

*Personal History.* She was married at the age of 22 and had 4 children, all of whom were healthy. Six years ago, following a confinement, patient was troubled with a white vaginal discharge and occasional attacks of headache and giddiness. She denies venereal disease.

*History of Present Illness.* Two years ago she had a severe headache in the temporal regions which persisted so long that she was admitted to the Kwong Wah Hospital for treatment. The headache became more severe and advanced to the frontal region. She had attacks of giddiness and fever and was confined to bed for about two weeks. Her vision was blurred and occasionally she saw two images. She had also intractable constipation. After a few weeks' rest the condition began to improve but three months later she noticed a persistent tremor of the head. Then the lower jaw seemed stiff and she had difficulty in opening her mouth. The tremor spread to the arms and legs and she again went to hospital where she had been confined for more or less for 1½ years.

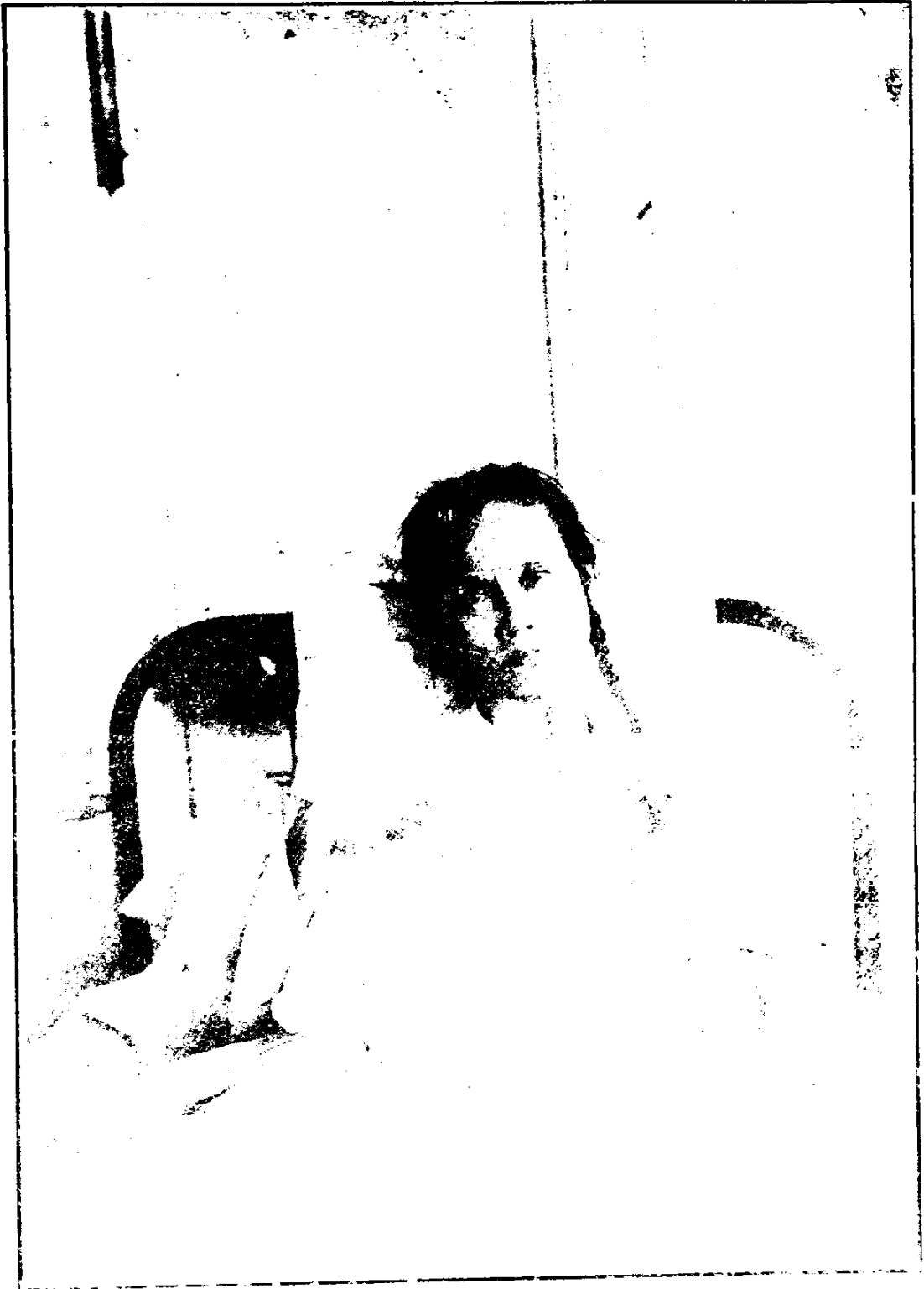
*Present Condition.* Patient has a staring mask-like facies and her head shakes involuntarily as long as she is awake. Tremors are also noticeable when she attempts to move hands or feet. The skin of the face is smooth, shining and hyperaemic. Temp. 98.2°F., pulse 69 per min., Respiration 19 per min.

Blood pressure:—Systolic 118mm., diastolic 92mm. Heart, lungs and alimentary system normal. Urine-acid in reaction, S.G. 1020. Trace of albumin present. No sugar.

Nervous System:—Knee jerk and ankle clonus absent. Romberg's Sign present. Muscles of arms and legs are atrophied and muscular strength is poor. Superficial sensation is



CASE I



CASE II

normal. Other sensations are delayed. In the arms and legs there is marked *Flexibilitas cerea*.

*Summary.* The insidious onset of the symptoms, the headache, the lethargy, the diplopia, the mask-like features, the stiffness of the neck, the constipation and the subsequent persistent involuntary movements all suggest an attack of *Encephalitis Lethargica*. Her present condition seems stationary and she will probably pass from hospital to hospital diagnosed as *Paralysis Agitans*.

2. Case from Medical Unit. *Amyotrophic Lateral Sclerosis*. J.T., Female, aet. 37 years. Hawker.

Admitted to G.C.H., 16/2/24, complaining of stiffness of the fingers with weakness and numbness of the upper and lower limbs of 15 months' duration.

*Personal History.* She was married 22 years ago and has had 7 healthy children. She denies venereal disease. Her only illness in the past was a severe attack of "fever" 19 years ago. After ten days of rigors and sweating she became delirious and was more or less unconscious for about 4 months. When she recovered, her hair was gone and she was a mere skeleton.

*History of Present Illness.* Fifteen months ago, patient noticed that during cold weather, her right hand and forearm were weak and numb. A few weeks later, this weakness and numbness became permanent and had spread to the right foot and leg. The left arm and the left leg gradually became affected and the muscles of the back became progressively weaker. Three months ago, the fingers became fixed in a flexed position.

*Present Condition.* Patient has a sallow and wasted appearance and is unable to stand or walk. She has the typical claw-hand with wasted thenar and hypothenar eminences, on both sides. The muscles of both arms are much atrophied and while flexion is fairly strong, extension is weak and slow. The lower limbs are also wasted, the flexor muscles are tense and rigid and the feet are slightly flexed. Temperature normal. Pulse 92 per min. Respiration, 18 per min. Blood pressure Systolic: 110mm. diastolic 80. Heart, lungs and alimentary system normal.

*Nervous System.* The knee jerk is much exaggerated on both sides, Babinski's Sign and ankle clonus are well marked. Patellar clonus is also present. Elbow and wrist jerks are easily elicited. The pupils are dilated but react to light and accommodation. Sensation. Cutaneous sensation is impaired on both upper and lower limbs. Pain sensation is exaggerated. Temperature sensation is delayed over the extensor aspects of the upper limbs and the flexor aspects of the lower limbs.

Wassermann test is negative.

Summary:—In this case atrophy and spasticity developed coincidentally. The gradual onset, the progressive atrophy of the muscles of the limbs, the typical *main en griffe* or claw-hand, the loss of power corresponding to the wasting, and the marked spasticity of the limbs without evidence of central nervous involvement all point to a condition of Amyotrophic Lateral Sclerosis comparable to the case reported in *The Caduceus* for May, 1923.

H. K. LUNG.

---

### New and Comments

---

#### *Tenth Annual Dinner*

The tenth annual dinner of the Hong Kong University Medical Society was held in the Hong Kong Hotel on April 25th., with Prof. K. H. Digby in the chair. The gathering was a representative one. The official guests of the evening were:—Vice-chancellor of the University, Mr. W. W. Hornell; Principal Civil Medical Officer, Dr. J. B. Addison; Presidents of the British Medical Association, Hong Kong Chinese Medical Association, and the local branch of the National Medical Association namely, Surgeon-Capt. H. S. Burniston, Dr. Arthur W. Woo and Prof. C. Y. Wang; Presidents and Secretaries of the Hong Kong University Engineering Society and of the Hong Kong University Arts Association, namely, Professors C. A. M. Smith and W. Brown, Messrs S. C. Lee and C. C. Tong; Mr. Dowbiggin and Mr. Ho Kwong. Indisposition prevented Mr. Ho Kwong from attending. There were about eighty members and friends of the Society present.

After the loyal toasts had been honoured, Prof. John Anderson rose to propose the toast of 'Our Guests.' Prof Anderson's fame as an after-dinner speaker reached us even before his arrival in the Colony, and we took pleasure in noting that he lived up to our expectations. His eloquent speech was pregnant with wit and humour. He began by stating that his object was to introduce the Medical Society to the guests and the guests to the Society. His narration of delightful incidents made the audience roar with merriment. After pointing out that one of the chief faults of the students is to take life too seriously, he gave us the following parody of Martin Luther's famous couplet.—

“ Who loves not football, fun, and music  
In later life will cure but few sick ”

He commended the praise-worthy action of Mr. J. E. Joseph, one of our guests, in converting the Peak Hospital into a nursing home at the critical period when the hospital was in danger of being closed. He associated with the toast the

name of Dr. Addison, the P.C.M.O. whom he hoped would always be sympathetic in regard to matters concerning the University.

Dr. Addison's reply to the toast was marked with the candour and sincerity characteristic of a sympathetic administrator. He said he had his first introduction to our Society, through the medium of the Caduceus. He complimented the University on possessing an excellent staff, and well-equipped clinics in the Government Civil Hospital. Finally his assurance that he would give us his help in every way possible, during his tenure of office, filled our hearts with joy because we knew that we could rely on him as a firm supporter of our cause.

The main toast of the evening, 'The Profession of Medicine' was then proposed by the Vice-chancellor of the University. Mr. Hornell is a figure too well known in rhetorical circles to need our comments. All we can say is that his auditors were charmed, electrified and impressed. He complimented the medical profession in not being too prematurely specialised. He also pointed out the sympathetic attitude of the government towards the medical profession which, with its noble aspirations, deserves whole-hearted support.

Surgeon-Capt. Burniston, president of the local branch of the British Medical Association replied on behalf of his association. He impressed us as a candid speaker, whose words have weight because of the long years of experience behind him. The British Medical Association, he pointed out, is a big organisation, which is always ready to take part in any movement for the relief of the suffering. During the course of his speech, he commented on the good work of Prof. Shellshear, for the British Medical Association.

Dr. Arthur W. Woo replied on behalf of the Hong Kong Chinese Medical Association. We nailed Dr. Woo down to five minutes because we were certain that his eloquence would carry him far beyond any specified time. However, he made full use of the time allotted to him, and showed us as well, that brevity is not only 'the soul of wit' but in it is vested the strength of a speech. On behalf of his Society he extended to us a cordial invitation to visit the Society's rooms at any time, so that a closer relationship may exist between the local practitioners and the University. The latest interest of his Society is in Chinese Therapeutics, the scientific value of which is still an open question only to be solved by careful research. He ended by exhorting us not only to perfect ourselves in the Western art of Medicine but also to cultivate the Western spirit of public service and self-sacrifice.

Prof. C. Y. Wang replied on behalf of the local branch of the National Medical Association. Prof. Wang's frank remarks always command our admiration because we are aware

that they come from one who has ploughed the deep ocean of thought. He said that the aspiration of the National Medical Association is to attain in China the lofty position of the British Medical Association in England. He extended to us the best wishes of his Society.

Mr. K. C. Yeo, the representative student then replied on behalf of the student body to the toast honoured by Mr. Hornell. He pointed out that our position in the profession of medicine is a unique one, because we have the honour of being members of an ancient profession without sharing its full responsibilities. "However, a unique position is not always a pleasant one. The student's worries begin when his sessional examination draws near. Then he realises the importance of the responsibilities thrust upon him, and the amount of knowledge that is essential to qualify him as a worthy member of a time-honoured profession. The Hong Kong University Medical Society is one of the many training camps where recruits from all parts of China and Malaya are receiving training and discipline which will mould them into warriors fully equipped to fight against the diseases which flesh is heir to." Hong Kong is a strategic centre. It is strategic not only politically, but also scientifically. The Rockefeller Foundation endowed the Hong Kong University with Chairs in Medicine, Surgery and Obstetrics, not primarily because it recognises the need of the University for these chairs, but because it realises that Hong Kong is the centre for the dissemination of medical science into China and the Far East."

Prof. K. H. Digby, the president of the Society then ably summed up all the previous speeches and by so doing put a finishing touch to the important toast of the evening. If appreciative applause is any index of the merit of a speech then Prof. Digby's brief summing up ranked among the best speeches of the evening.

At the President's suggestion, Prof. H. G. Earle, Chairman of the Society, was unanimously requested by the audience to speak. The impromptu speech of Prof. Earle deserved merit not only because it was well delivered but also because he voiced our views in what he said. He took the opportunity to appeal to the local practitioners to subscribe to the Caduceus, the only medical publication in South China. He also pointed out that we should make early preparations for the coming conference of the China Medical Missionary Association which is sending its members to Hong Kong at the invitation of the University and British Medical Association.

There were two musical interludes, supplied by Prof. Gonzales who entertained and amused the audience by his phono-fiddle and the musical saw. We are very grateful to him for his help in making the 'dinner' a success.



In conclusion we feel we must refer to the inaccurate report of the dinner that appeared in the local newspapers. They might at least have got the Chairman right and we would humbly suggest that in functions of this kind, where there is no official reporter present, it would be as well to communicate first with the Secretary of the Society.

*Attitude of Past and Present Students towards the Society.*

Since the beginning of the present session we have had only two papers, both delivered by our graduates--Dr. T. C. Wong and Dr. T. L. Cheah whose papers dealing respectively on 'Studies in Sterility' and 'A Practitioner on Board,' demand our appreciation not only because of the valuable information they contain, but also because they signify the keen interest they take in the welfare of the Society. It is not often that we have the privilege of hearing from our graduates after they have left the precincts of our Temple of Learning. Probably they are so much absorbed and occupied in their good work towards humanity, that they only have time to read about the activities of their Society. However, we wish to let them know that we shall always be eagerly waiting for their advice relating to things which they have learnt from the hard school of experience. We shall not only highly appreciate but also reward them for their efforts. The Dowbiggin prize is still open for the graduate who sends in the best paper during this session, and we trust that not a few of our graduates will compete for it.

In spite of inducements in the form of personal distinction and lucrative prizes, our undergraduates still refuse to present in a concrete form before the Society the vast amount of knowledge which they absorb both from the lecture room and from the heaps of medical books they digest either in the library or in the seclusion of their cubicles. It would be unfair on our part to accuse any of them of a Narcissian attitude towards his fellow-students. Perhaps they are too much harassed by their lecturers and by their daily work, or they are not bold enough to face the ordeal of being riddled with questions from a crowd of people who are not only bursting with questions but take keen delight in noting the discomfiting effect which their questionable questions produce on the shy lecturer. If assurance inspires courage and confidence, then we hasten to assure our timid undergraduates that their lecturers are not as strict and severe as they appear to be and that uneasiness in the pulpit is due to timidity which can only be overcome by trial and experience.

Undergraduates are the most difficult people to influence by persuasion. They have their own whims and fancies, particularly the lady undergraduates. Thus we find that meetings of the Society even with the inducement of refreshments,

before the reading of papers dealing with the most interesting subjects are usually poorly attended, while daily lectures delivered in the intolerable heat of these early summer days and dealing with the driest subjects imaginable always draw full attendance. However, we would like to exhort the members, particularly those of the first and second years, to attend as many meetings as possible. By holding themselves aloof from all functions of the Society, they not only fail to make full use of the privilege of their membership of a recognised and well-known association but they are also refusing the hand of fellowship, which other members extend to them.

Further though we have quite a large number of local doctors who are members of the Society, seldom do we have the pleasure of their company at our meetings. It may be that they are too busily engaged in their multifarious duties, or more probably the forgetful secretary fails to notify them individually. However, for the special benefit of members, non-resident in the University, we are having the programme for the autumn term printed and this will be forwarded to every member of the Society. We hope, by so doing, we shall have representative gatherings at our autumn meetings.

#### *Changes in the Government Civil Hospital.*

In our last issue we were rather prophetic in our remarks regarding the new X-ray plant in the Government Civil Hospital. The present issue, however, sees changes in the hospital, which are worth proclaiming to the four corners of the earth.

The operating theatre first occupies our attention. Here the lighting is so much improved that the surgeon and his assistants can operate in any position without being troubled by their own shadows. Such a device not only saves much annoyance and vexation, the brunt of which is borne by the student assistants but also helps to allay any fears the surgeon may have as to the result of an operation. Being one of the best operating theatres in the Colony, or perhaps *the* best, the equipment will not be complete without an observation stand for visitors and students. Thus we find occupying a prominent position in the theatre a 'white elephant' with legs so unstable that observers on the second tier have to risk their necks, especially during the excitement of a big operation. We can safely predict that in a very short time this 'white elephant' will cast off its present skin for one of a more protective colour, or add a wooden stump to one of its very feeble legs.

In the medical wards under Prof. Anderson, a laboratory, planned and equipped with as much care as would rival the University Pathology Laboratory is now waiting for the medical wardclerks to grace its interior. The proximity of the laboratory to the wards has all the advantages that we can think

of, chief among which are the facility and encouragement it gives to the students to examine clinical cases more closely particularly details relating to sputum, faeces, urine and blood.

The general outward appearance of the hospital has also changed. The already gloomy appearance has been changed to that of a still gloomier hue. Why this particular grey paint is chosen, we are at a loss to understand. Perhaps the belief that grey surroundings soothe a feverish mind has something to do with its choice. However we compliment the authorities in seeing their way to repair this ancient building before it finally crumbles to pieces. Every nook and corner is being overhauled, including the quarters of the House Physician and House Surgeon, who have to spend many restless nights in beds which 'moth and rust doth corrupt.' Further we feel we must seize this opportunity to offer a few suggestions regarding the unsightly granite wall with pieces of ingeniously fixed glass at the top, and the main entrance, guarded by a massive wooden door, reminiscent of mediaeval castles. We should be glad to see these two unsightly structures pulled down and a simpler and more modern entrance erected in their place. One of our senior students rightly remarks that the whole building at present has more the appearance of a place where dangerous enemies of society are caged, rather than that of a building where humanity manifesting pathological conditions, is nursed back to health and life.

This column being essentially a column of comments, we shall be failing in our duty if we do not express our opinions of things which need to be commented upon, however distasteful they may be. We are hoping that the motive force which created such a change in the external appearance of the Government Civil Hospital will also make as great an alteration in its internal affairs. The first thing that attracts the notice of any one who is associated with the University wards is the apparent looseness with which instructions are carried out in the surgical wards in 'B' block. The blame doubtless falls on the heads of the student dressers and wardclerks, and we admit that students have a curious habit of lapsing into periods of inactivity especially when they are annoyed; but can any human being help feeling annoyed when he has to wait for hours for his dressings, when he has to deal with hospital dressers and boys, who do not appreciate the meaning of asepsis, and are ignorant of the names of the lotions used, and when he has to rush everytime to the dispensary for reagents to test urine? As we go to press, we are pleased to note that the authorities have appreciated the fact that to be in charge of four wards, with an average of eighteen beds in each ward is a responsibility too great to be borne by a single sister.

One of the routine practices in this hospital is to prescribe Mist. Quinina to every patient who is suspected of malaria, as soon as he is admitted. It is not our intention to say anything against the treatment carried out in the hospital, but we would like to point out the difficulty of obtaining a good blood picture of cases which are dosed with Mist. 'Q.' Quinine undoubtedly is the specific for malaria, but in cases of doubtful diagnosis, it has the disadvantage of masking the blood picture to such an extent that it requires four or five days after cutting off the quinine treatment, before the parasites manifest themselves again in the blood stream and in a class where students are usually sceptical about such things, nothing short of convincing proofs will impress them.

We have not much to say regarding the nursing staff, but we should like to take this opportunity of expressing our gratitude for and appreciation of any assistance which through their kindness has been granted us. The following extract from 'The Life History of a Surgical Wardclerk,' a paper read before the Society by one of our senior students two years ago, will perhaps interest third year students, who intend taking up hospital appointments, soon after passing their 2nd. M.B. examination in May. "Of course there are members of the nursing staff. There are two sets of them, the nurses and the sisters, and a very real distinction exists. Do not, I pray, make the grave error of calling a nurse a sister within the hearing of the latter. The ancient writers attribute strange chemical powers to the dreadful gaze of a disturbed woman. If a hard cold stare can freeze a human being, I would have been turned into a crystal block long ago.

Months before this, when I heard of people talking about nurses or sisters, I used to picture to myself slim delicate pieces of femininity all in spotless white. I have no doubt that some of you are fancying the same. I fancied to myself that these ministering angels often smile to their patients and the patients' lives are worth while because they smile. I used to look forward to the time when I shall be allowed to work with them, to bask under the sweet sunshine of their splendour; then the grind of Anatomy and Physiology will not have been in vain. I had hoped that their gentleness will induce us uncouth students, to diligence and industry. Honestly, sir, I have dreamt all these dreams, entertained all these hopes. Perhaps the beautiful pictorial representations of nurses that you see in books and movies may have been responsible. But come, Ye budding disciples of Aesculapius, Ye misguided youths, come to the hospital and be disillusioned."

*Rockefeller Chair of Obstetrics.*

The endowment of this chair which we owe to the further munificence of the Rockefeller Foundation, fulfils the visions we had of placing the three most important clinical subjects namely, Medicine, Surgery, and Obstetrics in the hands of specialists, whose whole time belongs primarily to the University. The Medical Faculty of this University is so strengthened by the three Rockefeller Chairs, that any adverse winds, however furious, can hardly hope to shake its foundation. With the arrival of a Professor of Obstetrics and Gynaecology who is expected to come in September ( ? ) we shall have a teacher and research worker solely devoted to these fundamental subjects which are at present taught by a part-time lecturer. The clinical teaching of obstetrics and gynaecology needs extension. With the return of Dr. D. K. Samy as chief assistant in Obstetrics, we shall look forward to the organisation of a proper gynaecological unit. However, to avoid building our hopes on air, we shall wait for concrete developments on the clinical side before we discuss at length the great possibilities of the future.

*Personal.*

We congratulate Prof. and Mrs. Earle on the birth of a daughter, Catherine Rosemary Earle, on May 17th.

Prof. C. Y. Wang, our professor of Pathology, is going to England on leave on June 4th. We wish Prof. and Mrs. Wang bon voyage and a pleasant sojourn in England.

Prof. Anderson will be in charge of the department of Pathology during Prof. Wang's absence.

*Our Printers:—*

We note with regret that the present issue is the last for which we are able to engage the efficient services of our printers, Messrs. Kelly & Walsh, who are reducing their printing department in this Colony. We might have at times worried and blamed our printers for delay in the publication of past issues but we can truly say that our printers have not only shared with us our prosperity but have also stood by us at all times of trial and difficulty.

*Acknowledgements:—*

We beg to acknowledge with thanks the receipt of the following contemporaries:—

China Medical Journal. (Shanghai)

The Medico. (Singapore)

The 15th. Annual Report of the Peking Union  
Medical College. (Peking)

St. Mary's Hospital Gazette. (London)

Tropical Disease Bulletin. (London)

*Appointments. April to June, 1924**Under graduate*

Surgical Ward Clerks	-	-	-	Lung Hsing Kuei Teh Hui Seng Wong Augustus Din
Surgical Dressers	-	-	-	Tsoi Tsz Shek Wong Yan Kwong Yuen Wm.
Junior Medical Ward Clerks			-	Teo Kah Toh Tsang Fuk Cho
Senior Medical Ward Clerks			-	da Roza, C. F. X. Lee Boon Choe Tseung Fat Im Yeo Kok Cheang
Obstetric Clerk	-	-	-	Chow Wei
Pathology Clerk	-	-	-	Yip Keung Ki (April, May)
Anaesthetic Clerks	-	-	-	Li Tsoo Yiu (April, May) Shem Albert (May, June)

K. C. Y.

# THE CADUCEUS.

## HONGKONG UNIVERSITY MEDICAL SOCIETY

### RULES.

1. This Society shall be called the Hongkong University Medical Society.
2. A. The object of the Society shall be to hold meetings at which papers shall be read, or discussions held, on medical and general subjects: and to promote social intercourse among its members.  
B. The Society shall produce a journal to be called the "Caduceus" as a record of the proceedings of the Society, and for the publication of original articles in Medical Science.
3. All undergraduates, graduates and members of the teaching staff of the Medical Faculty of the Hongkong University shall be members of the above Society; and also such other persons as may be elected at a general meeting. Medical Practitioners registered in Hongkong shall be invited to join the Society as members.
4. A. There shall be a President, Vice-Presidents, a Chairman of Committee, an Honorary Secretary and five other members of the Committee, all of whom are to be elected annually by members of the Society at the first general meeting of the academic year. Vacancies occurring between such meetings may be filled by the Committee.  
B. The member of the staff and the student representative on the Union Council shall also be *ex-officio* members of the Committee.
5. A. The management of the Society shall be vested in the said Committee consisting of the Chairman and five other members, together with the Honorary Secretary, who shall be *ex-officio* member, of the Committee. Three members shall form a quorum.  
B. The Journal of the Society shall be controlled by the said Committee who shall appoint:—An Editor, an Assistant Editor and a Business Manager, who, together with the Chairman of the Committee shall form an Editorial Board.
6. The President or a Vice-President shall preside at general meetings or in their absence, a Chairman may be elected from among the members present.
7. Each member shall pay an annual subscription of \$4 which shall be payable at the commencement of the academic year. The Honorary Secretary shall also act as the Honorary Treasurer.
8. No alteration of these rules, nor any addition thereto shall be made except at a general meeting of which not less than seven days' notice shall be given.

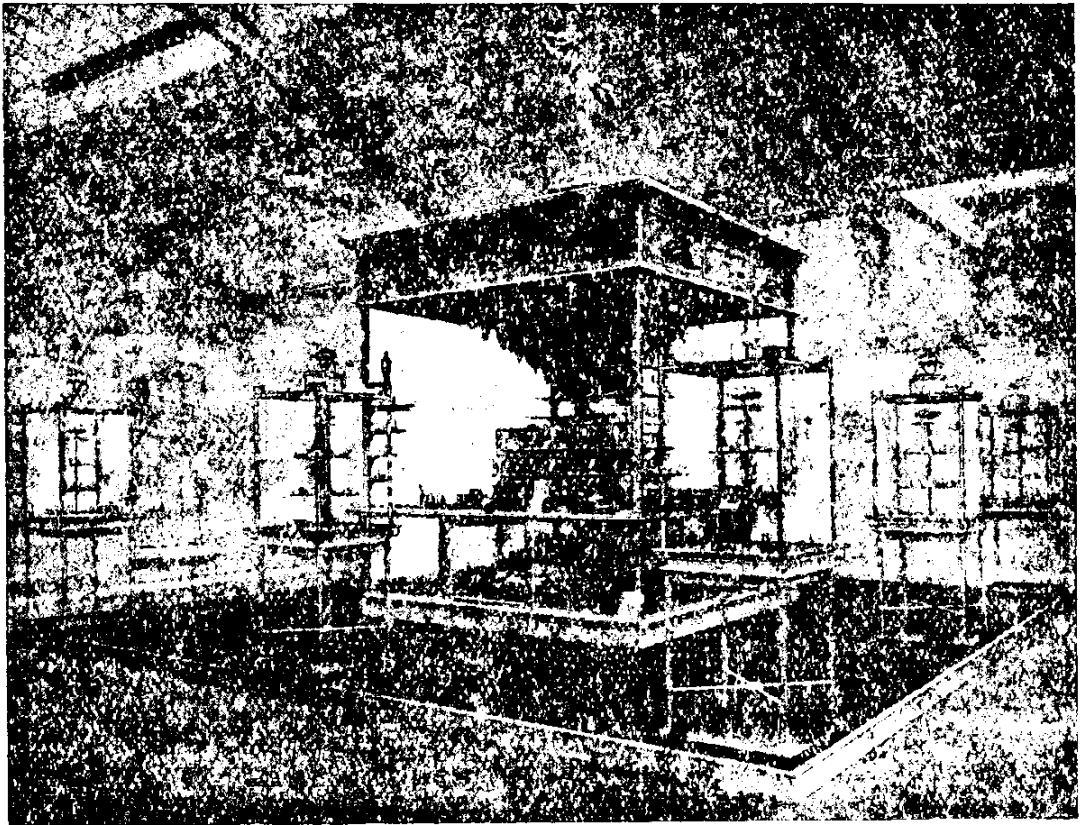
### OFFICERS OF THE MEDICAL SOCIETY, 1924

President .....	Prof. K. H. Digby.
Vice-Presidents.....	Dr. J. B. Addison. Dr. R. M. Gibson. Prof. H. G. Earle. Prof. J. Anderson. Dr. G. H. Thomas. Dr. M. K. Yue.
Chairman of Committee .....	Prof. H. G. Earle.
Hon. Secretary and Treasurer .....	K. C. Yeo.
1st year representative ...	G. T. Tan.
2nd year representative .....	C. K. Ong.
3rd year representative .....	T. Z. Bau.
4th year representative .....	H. K. Lung.
Final year representative .....	K. K. Yip.
Representative on the Union Council .....	Prof. H. G. Earle. K. T. Khoo.

### EDITORIAL BOARD.

Chairman .....	Prof. H. G. Earle.
Editor.....	Yeo Kok Cheang.
Business Manager .....	H. K. Lung.

**EXHIBITS OF  
BURROUGHS WELLCOME & CO**  
Chemical Section, Palace of Industry  
**BRITISH EMPIRE EXHIBITION**



**GENERAL EXHIBIT**

All four Exhibits are typical of the high standard attained by Burroughs Wellcome & Co. The Firm's pioneer position is demonstrated and its successful research work illustrated in the General Exhibit by such products as 'Wellcome' brand Fine Chemicals and Galenicals, 'Wellcome' brand Insulin, 'Kharsivan' and 'Neokharsivan,' and 'Tabloid' and 'Soloid' brand Products, etc.

Burroughs Wellcome & Co.'s other Exhibits comprise :—

**'KEPLER' MALT PRODUCTS EXHIBIT**

Showing stages in the production of 'Kepler' Malt Extract and its various combinations with Cod Liver Oil, etc.

**MATERIA MEDICA EXHIBIT**

Showing growing medicinal plants from the 'Wellcome' Materia Medica Farm, Dartford.

**PHOTOGRAPHIC EXHIBIT**

'Tabloid' Photographic Chemicals and results achieved therewith, the 'Wellcome' Photographic Exposure Calculator, Photographs illustrating Welfare Work, etc.

**OVER 270 COMPETITIVE HIGHEST AWARDS**  
for Scientific Excellence of products at the  
**GREAT EXHIBITIONS OF THE WORLD**