WEBER, F. PARKES, M.D., F.R.C.P. (and KNOP, F., M.D.). "Stenosis (Coarctation) of the Aortic Isthmus with Subcutaneous Pulsating Arteries in the Back." *Proceedings of the Royal Society of Medicine*, November, 1928.

——— and BARKER, FRANCIS J., M.D., ADAMS, F. SHIRLEY, M.D., and DICKSON, W. E. CARNEGIE, M.D., F.R.C.P. [Edin.]). "Splenomegalic Polycythæmia with High Blood-Pressure." *British Medical Journal*, December 22nd, 1928.

WHALE, H. LAWSON, M.D., F.R.C.S. "Tumour of Carotid Body." *Proceedings of the Royal Society of Medicine*, December, 1928.

WHARRY, H. MORTIMER, F.R.C.S. "The Tear-Reflex Test for Asthma of Nasal Origin." *British Medical Journal*, December 1st, 1928.

——— "An Unusual Case of Diphtheria." *British Medical Journal*, January 5th, 1929.

WHITE, C. F. ORR, M.R.C.S., L.R.C.P. "Electrotherapy in Non-Gonococcal Cervicitis." *British Medical Journal*, January 19th, 1929.

WHITTINGDALE, JOHN, M.A., M.B., F.R.C.S. "The Transmissibility of Pyorrhœa Alveolaris." *British Medical Journal*, February 2nd, 1929.

WILLIAMS, H. E. EVERARD, M.D. "The Acute Pelvis." *British Medical Journal*, December 1st, 1928.

WILLOUGHBY, W. M., M.D., B.Ch., D.P.H. "Food Protection," *Medical Officer*, December 29th, 1928.

ACKNOWLEDGMENTS.

The British Journal of Nursing—The British Journal of Venereal Diseases—Broadway—Charing Cross Hospital Gazette—Giornale della Reale Società Italiana d'Igiene—Guy's Hospital Gazette—Kenya and East Africa Medical Journal—The London Hospital Gazette—Long Island Medical Journal—The Middlesex Hospital Journal—New Troy—The Nursing Times—The Post-Graduate Medical Journal—Quarterly Journal of the Research Defence Society—The Queen's Medical Magazine—Revue de Médecine—The Student.

EXAMINATIONS, ETC.

Conjoint Examination Board.

Pre-Medical Examination, January, 1929.

Chemistry.—Bensley, W. E. C., Blamey, F. W., Edwards, R. G., Hamilton, G. J., Mason, T. O., Sansom, H. V.

Physics. Blamey, F. W., Edwards, R. G., Jenkins, J. R. R., Sansom, H. V., Smallhorn, T.

First Examination, January, 1929.

Part I. Anatomy.—Allen, E. L., Collingwood, S. G., Cutlack, A. R., George, C. A., Spaight, P. Q. M., Symonds, J. W. C., Vacher, A., White, F. C. H.

Part I. Physiology.—Allen, E. L., Chester-Williams, T. L., Collingwood, S. G., Davidson, R. T., Dodson, E. E., Evans, W. E. F., Hatton, P. L. S., Roache, H. J., Spaight, P. Q. M., Vacher, A.

Part II. Pharmacology and Materia Medica.—Crossley-Meates, B., Cusack, M. K., Knox, J. S., Weeks, A.

The following have completed the examination for the Diplomas of M.R.C.S., L.R.C.P.:

Barber, S. W., Bennett, R. C., Bradshaw, G. H., Cowin, P. J., Croft, D. F. L., Everett, A. D., Forrester-Wood, W. R., Francis, R. H., Gonin, M. W., Gordon, I., Gray, J. T. C., Jones, O. T., Oakley, W. G., Page, L. G. M., Preiskel, I., Rice, R. A. C., Riley, A. C., Robinson, V. C., Sabri, I. A., Stark, H., Sugden, E. C., Taylor, H., Thompson, V. C., White, R. P., Whiting, J. S., Wickramasinghe, S.A., Williams, A. G., Wood-Smith, F. G.

L.M.S.S.A.

The Diploma of the Society has been granted to the following: Bray, J. S. B., Freud, J., Weeks, A.

CHANGES OF ADDRESS.

ALLNUTT, Major E. B., R.A.M.C., Foxacre, Fleet, Hants.
ATKINSON, E. MILES, 9, Royal Crescent, Bath. (Tel. Bath 4946.)
JEUDWINE, Lt.-Col. W. W., I.M.S., Holyrood House, Newport, Isle of Wight.
LADELL, E. W. J., Elliott, Cape Province, South Africa.
LEITCH, J. N., Freetown, Sierra Leone, W. Africa.
TAYLOR, W. E. C., Crabb Hall, Tellisford, near Bath.
VERRALL, P. J., 36, Harley Street, W. 1. (Tel. Langham 3603.)
WILLOUGHBY, H. M., 25, Harmer Street, Gravesend, Kent.
WILLOUGHBY, W. M., Horsell Rise Cottage, Woking, Surrey. (Tel. Woking 623.)

APPOINTMENTS.

ALLNUTT, Major E. B., R.A.M.C., M.C., M.R.C.S., L.R.C.P., D.P.H., appointed Training Officer, Royal Army Medical Corps.
CHESTER-WILLIAMS, F. E., M.R.C.S., L.R.C.P., appointed Medical Officer in Charge of the Radium Therapy Department, Royal Infirmary, Bradford.
LEITCH, J. N., M.B., B.S.(Lond.), appointed Pathologist to the West African Medical Service, Sierra Leone.

BIRTH.

PECK.—On February 4th, 1929, at 27, Welbeck Street, W. 1, to Marie (*née* Tubby), wife of Dr. Eric F. Peck, 30, Ladbroke Gardens, W. 11, and late of Cyprus—a daughter.

MARRIAGES.

FAIRBAIRN—BELL.—On February 14th, 1929, at Kensington (by special licence), Donald C. Fairbairn, M.C., M.B., B.S., son of Mr. and Mrs. A. C. Fairbairn, to Marjorie, daughter of the late Robert Clifton Bell and Mrs. Bell, of 42, Edwardes Square, London, W. 8.

VERGETTE—STEPHENS.—On February 16th, 1929, at St. Bartholomew-the-Great, Edward Seward, son of Mr. and Mrs. E. B. Vergette, late of St. Helens, Claygate, Surrey, to Dorothy Olwen, daughter of the late Dr. Stephens and Mrs. Stephens, of 163A, Sutherland Avenue, W. 9.

SILVER WEDDING.

WEIR—SKEY.—On February 13th, 1904, in Penang, Hugh Heywood Weir, M.A., M.B., of Malvern, to Margaret Mary Denison Skey, of Weare, Somerset. Present address: 7, Ashworth Road, Maida Vale, W. 9.

DEATHS.

BLACKMORE.—On February 2nd, 1929, at Vale House, Salisbury, Humphrey Purnell Blackmore, M.D., aged 93.

GEORGE.—On January 31st, 1929, at Margate, Howard Trevelyan George, M.A.(Camb.), M.R.C.S., L.R.C.P., of 2, St. Andrew's Place, Cardiff, and 33, Ampthill Square, Hampstead, N.W.

ROBERTS.—On January 29th, 1929, suddenly, Charles Hubert Roberts, F.R.C.S., F.R.C.P., of 48, Harley Street, late Senior Physician, Samaritan Hospital, and Senior Obstetric Surgeon, Queen Charlotte's Hospital, London, in his 64th year.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for Review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C. 1.*

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, *The Journal Office, St. Bartholomew's Hospital, E.C.1. Telephone: City 0510.*

St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem."
—*Horace*, Book ii, Ode iii.

VOL. XXXVI.—No. 7.] APRIL 1ST, 1929. PRICE NINEPENCE.

CALENDAR.

Mon., April 1.—**Bank Holiday.**
Tues., ,, 2.—Prof. Fraser and Prof. Gask on duty.
Fri., ,, 5.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Tues., ,, 9.—Sir Percival Hartley and Mr. L. B. Rawling on duty.
Fri., ,, 12.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Tues., ,, 16.—Dr. Langdon Brown and Mr. Harold Wilson on duty.
Fri., ,, 19.—Prof. Fraser and Prof. Gask on duty.
Last day for receiving matter for the May issue of the Journal.
Tues., ,, 23.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Fri., ,, 26.—Sir Percival Hartley and Mr. L. B. Rawling on duty.
Tues., ,, 30.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.

EDITORIAL.

NATURE is not inclined to be consistent. Dramatic incidents are left unfinished; tense moments are unresolved, and peter out in a feeble lysis. We have had our Great Frost. Wolves turned a Polish school into an alfresco restaurant, and nearer home bucket-fires graced the frozen drainpipe on the Hospital walls. Yet nothing happened afterward worthy of being called a Great Thaw. Journalistic capitals lie unwanted in the compositor's box. The Fountain once more plays, but at any rate spring is coming.

It is the penalty of representing a compact community that no one writes to us about the first signs of spring in Hospital. Where fifty people see the first patient eating a rapidly congealing dinner in the Square, what kudos can "Interested" or "Nature-lover" gain by writing to inform us of it? To see the first geranium at the foot of the plane trees is the privilege of some inadvertent early riser on the Resident Staff, who will be too short-tempered about the whole incident to put any printable thoughts on record.

Still, something should be done about spring. Perhaps some scientist will write claiming to be the first man to show a measurable erythema gained by sun-gazing in the Square, and "Hardy" will counter, establishing a record time for sitting on the stone edge of the Fountain in March. More likely nobody will write at all. Everyone is too busy snatching whatever is therapeutically valuable in the gleams of sunshine, before some power that relegates the infra-red to the limbo where presumably the immodest violet (once, alas, spring's herald) now languishes.

* * *

We learn with mixed feelings that Prof. Le Gros Clark has been appointed to the University Chair of Anatomy tenable at St. Thomas's Hospital. Thus to lose our first Professor of Anatomy is a cause of sorrow, lessened only when we realize the fitness of his return to the Hospital where he began his career, and with which his family has been so long and so honourably connected. We tender him our heartiest congratulations.

* * *

In our January number we published an appeal for subscriptions for the Hard Courts at Winchmore Hill. The Students' Union has received a gift of £450 from the Governors of the Hospital, and £140 from the Visiting Staff. £130 are still wanted. Sir Charles Gordon-Watson has generously offered to give £50 if the students will raise £50 in the course of the coming month. We hope this appeal will aid the Union to hand over its £80 at the appointed time.

* * *

We congratulate the following on their appearance in the list of New Year's Honours:

C.B. (Civil Division): Sir Walter Fletcher, K.B.E., M.D., Secretary of the Medical Research Council.

C.B.E. (*Civil Division*): Lt.-Col. J. K. S. Fleming, O.B.E., Deputy Director General, I.M.S.

C.I.E.: Lt.-Col. H. H. Broome, I.M.S., Principal and Professor of Surgery, King Edward Medical College, Lahore.

* * *

ST. BARTHOLOMEW'S HOSPITAL WOMEN'S GUILD.

May we take this opportunity of drawing the attention of all our readers to an important Jumble Sale which we are holding on Thursday, May 2nd, in the Club-room of St. Bartholomew's the Great, Smithfield.

This is a special effort in aid of the Reconstruction Fund, and its success will largely depend upon the generous response that we receive to this appeal. We are open and thankful to receive anything which will bring us in from *2d.* to *£2 2s.*, and we feel confident that now, as ever, all friends of St. Bartholomew's will rise to the occasion.

Goods will be welcomed any time during April, addressed to Lady Andrewes, c/o Steward's Office, St. Bartholomew's Hospital, or if necessary could be collected by sending a postcard before the 19th of April to Lady Andrewes, at above address.

* * *

The following gentlemen have been nominated to House Appointments from May 1st, 1929:

Junior House Physicians—	
Dr. Morley Fletcher	A. M. Roberts.
Sir Percival Hartley	E. G. C. Darke.
Prof. F. R. Fraser	F. A. Richards.
Sir Thomas Horder	J. H. Attwood.
Dr. Langdon Brown	E. G. Recordon.
Junior House Surgeons—	
Sir Holburt Waring	J. C. F. L. Williamson.
Mr. L. Bathe Rawling	H. Taylor.
Prof. G. E. Gask	A. D. Everett.
Sir C. Gordon-Watson	F. Ward.
Mr. Harold Wilson	W. Buckley.
Intern Midwifery Assistant (Resident)	W. J. H. M. Beattie.
Intern Midwifery Assistant (Non-Resident)	M. L. Kreitmayer.
Extern Midwifery Assistant	A. Bennett.* / G. C. C. MacVicker.†
H.S. to Throat and Ear Departments	W. J. Wilkin.
H.S. to Ophthalmic Department	R. G. Anderson.
H.S. to Skin and Venereal Departments	J. S. Hensman.* / A. T. Pagan.†
H.S. to Orthopædic Department	C. F. Watts.
Senior Resident Anæsthetist	C. R. Jenkins.‡
Junior Resident Anæsthetists	G. P. Nixon. / V. C. Thompson.
Casualty House Physicians	W. G. Oakley.* / R. H. Francis.* / H. Stark.* / C. H. Dale.† / I. Gordon.† / R. D. Robinson.†
Casualty House Surgeons	W. A. Elliston.* / W. R. Forrester-Wood.†

* 3 months, May. † 3 months, August. ‡ 12 months.
All others for 6 months.

OBITUARY.

CLIVE RIVIERE, M.D., F.R.C.P.

CLIVE RIVIERE, whose death from pneumonia on March 6th adds a heavy item to the losses of this revengeful winter, was only 56. The son of a distinguished painter, Briton Riviere, R.A., he was himself artistic in his appreciations and distinguished also, both in character and intellect.

He made a good beginning at the Hospital by winning the Brackenbury Scholarship, and then, having qualified in 1898, joined the Junior Staff as House-Physician to Sir Lauder Brunton. It was perhaps to that prince of healers that Riviere owed some part of the therapeutic optimism which marked his outlook, and which is so precious a gift for one whose life is to be spent in ministering to the afflicted. After his house appointment he served as Casualty Physician, and applied himself to pathology, at first at St. Bartholomew's, and later as Pathologist at "Shadwell" (as the East London Hospital for Children is known affectionately to those who have served it). Here he came under the influence of another master of therapeutics in the person of Dr. Eustace Smith, the Senior Physician, and almost the patron saint of the hospital. With this appointment, followed shortly by election to the medical staff, he began an association with "Shadwell" which was to endure for upwards of twenty-five years.

He was Physician also to the City of London Hospital for Diseases of the Chest for many years, and until his death. Here it was that he developed his experience of thoracic affections, especially phthisis and the treatment of it by artificial pneumothorax. He was among the first to employ that method in this country, and made the subject his own; while his writings on this and allied topics connected with tuberculosis won him a high place in the favour of those best able to appraise them.

It was during his earlier days at Shadwell that I came to know him well and became aware of the many graces that enriched him. Even at this time he showed a leaning towards what was to prove the dominating professional interest of his maturer years, namely, the study of problems set within the chest. I recall his earnest efforts to master the limitations of his own percussion by controlled experiment in the post-mortem room (and I recall also, in passing, that his percussion was executed with a crispness and technical mastery that argued a keen ear for the niceties of tone). At this time, too, he entered zealously upon studies of the opsonic index, then newly introduced into clinical pathology, exhibiting in this and other ways the quick response to new ideas which was to have so happy an outcome in his successful championing of artificial pneumothorax.

His manner was open and unaffectedly friendly, and though a certain shyness made him appear by nature somewhat grave, his sense of fun was very near the surface, and suffused his lighter conversation with a subdued but ready gaiety. In all his relations he was courteous and kind and gentle, and he has the reward he would have valued. For the feeling sentences which have been written of him are witness to the spell he cast about him, and his memory rests secure in the affection of his friends.

W. P. S. B.

SOME CONTRASTS IN MEDICAL EDUCATION.

An Address delivered to the Abernethian Society on March 7th, 1929.

IN selecting for this address a subject that is concerned with medical education, I may be abusing your kindness in inviting me here to-night. I am conscious of the many times I have heard the remark—"I am tired of discussions on medical education." Those who have perforce to consider the problems of medical education have reason to be tired of it at times, for it is a subject that lends itself to endless differences of opinion—differences that can be settled only by experiment, and experiments in education cannot be undertaken lightly. On the other hand, it is a subject of universal interest to medical men, each of whom is certain—and justly so—that he could improve on the education he received. It is a subject that should be of interest to every citizen, for it is but a particular instance of education in general, and there is no problem of greater national importance. Every citizen, moreover, should be peculiarly interested in the education of medical men, for no one fails to need the skilled assistance of a medical man at some time, and when he is in need of this assistance the occasion is probably a critical one in his life. However, you are all medical men, so that each of you has opinions on the problems of medical education, even if you have never discussed them or never even formulated them.

Every force that is active—and surely medical education is active—whether it be good, bad or merely indifferent, and everything that is worth having is constantly changing, is going through the process of evolution. Life is so short that it is difficult for any one of us to appreciate the significance of the changes that we observe. To do so successfully it is necessary to follow the changes for some time back and observe the consequences of these changes; to construct mentally a curve of the past showing the process of evolution up to the present time. A close study of the history of medical education is one method of obtaining the necessary evidence, but that is a method that is laborious, dull and often misleading. More vivid light is shed on the process of change by observing the stages that have been reached in a number of schools in different countries—that is, by observing a number of experiments under different conditions. I have no doubt myself of the great value that the opportunities of observing the methods and problems of medical education in different schools and countries have been to me, and I shall try to give you to-night some contrasts in methods and problems that are to be noted in different schools that I have visited lately.

The practice of medicine commenced in prehistoric times and must be nearly as old as man, but medical education is a recent development. The medical man of old learned his profession as an apprentice. He might or might not be an educated man, but his apprenticeship was not necessarily a form of medical education, any more than a plumber's apprentice is educated by his apprenticeship to understand the principles of physics and chemistry, of hydrostatics and hydrodynamics that are applied in the art of plumbing. The apprentice might, however, receive a very good medical education, if his own previous training had been adequate and the physician from whom he learned the practice of medicine willing and able to educate him.

Education in this sense is a function of universities, and it is to the universities that we look for attempts at providing for and stimulating the education of medical men. The practice of medicine has progressed at varying rates before it reached its present state of development, its present state of rapid change, but it is only in the last hundred years that university education in medicine has approached medical practice in its efficiency, or has influenced its progress. The mediæval universities taught medical men, examined them and gave them degrees, but the doctor's degree was awarded after a training that was essentially theoretical, an exposition of the views of the older authorities. Practical training was ignored, anything that savoured of doing and observing was frowned upon and clinical training was left to the hospitals and their staffs, and these had no connection with the universities. If the physician, who was a product of a university, received a training from his university, though mainly in matters abstract and metaphysical, the surgeon who was practical and used his hands was ignored and was regarded as a very inferior creature.

Since medical education has followed behind medical practice in this way, it is of value to note the direction in which practical medicine has been leading. The blind obedience to authorities and the following of practices based on magic and theory without foundation in observation has gradually given way before the hard facts accumulated by clinical observers unhampered by the weight of tradition. Methods of treatment have been established by trial and error, some to stand the test of time, others to prove disappointing or harmful. This is called empiricism and is a great step forward, but the empiricist does not inquire why—does not clearly define the limitations of his discoveries. Medical practice has progressed beyond the empirical stage; there is on all sides a desire to find out why, to define the limitations, and to establish principles. All the help that can be obtained from the physical and biological sciences is necessary if the desire is to be gratified. From this point of view the practice of medicine is an applied science, or at least there is clearly a desire, an effort to make it an applied science. Unfortunately knowledge is still very scanty, and much practice is perforce still empirical, and some of it merely traditional or even mystical. The desire to make it a science is there, and the effort is frequently there; one necessity of medical education is therefore clear. A training in the biological sciences is essential for the education of a medical man who is to spend his life in practising an applied science based upon them.

If the universities were blind to the advances in medical practice, and negligent of their duties as leaders in medical education, there were independent teachers, usually physicians and surgeons of the hospitals, who gave practical demonstrations and lectures in anatomy, physiology, pharmacology and pathology. Of these there were some who observed facts, formed hypotheses and tested them by experiment—creating sciences instead of traditions. These sciences had attained considerable development before the universities recognized them and accepted practical training in them as part of the course for medical degrees, which they have done only in the last hundred years. Even in 1825, at Edinburgh, where anatomy developed earliest in this country, only a few members of the class actually dissected, the others received instruction by lectures and demonstrations. Practical work in physiology, the preclinical subject for which this country is most famous, has been included as part of the curriculum for less than fifty years. Practical work for students in pharmacology and in pathology are developments of this century.

It is generally conceded now that efficient medical education must include efficient training in the pre-clinical sciences—those sciences through which the practice of medicine becomes an applied science, and that efficient training in these sciences necessitates opportunities for practical work in observing facts, forming hypotheses and testing by experiment. There are two parties to such an education—the student and the teacher. The student must have been suitably prepared to make use of the course provided; the teacher must be capable of leading the student to observe accurately, and to see the significance of his observations and their limitations. That means that he must be observing and learning for himself in the subjects he is teaching; in the words of Michael Foster, the "teacher must have the means of leading his students along the only path by which the science can be entered upon—that by which each learner repeats for himself the fundamental observations on which the science is based" in a laboratory where "each post for teaching is no less a post for learning." In judging of an institution for medical education, therefore, the teaching staff of the departments and their capacities and facilities for learning, for active research work, must be taken into consideration.

If medical education has been slow to provide adequate training in the preclinical sciences on which the modern practice of medicine is more and more based, it is still more recently that the need for comparable facilities in the clinical departments has been realized, and efforts have been made to bring the educational standards of these departments up to those accepted for the pre-clinical subjects. It is useless and wasteful to give the student a sound training in the sciences and then to offer him a place in the practical work of a hospital unless the methods and knowledge gained in the study of the sciences are applied there also. The clinicians who guide him and direct his work must be capable of applying the methods of the sciences wherever possible in their hospital work, and must be adequately equipped with the necessary accommodation. Further, there is a big gap between facts and principles elucidated by work on laboratory animals, or on material derived from diseased persons, and the problems met with by the clinician in his endeavours to aid the individual human patient, and so there is need for much accurate work of observation, hypothesis and experiment, under the conditions of the ward and bedside. The principle that a teacher, to be fruitful and efficient, must always be himself learning, must always be investigating, applies just as much to the clinical subjects as to the pre-clinical; and so we find an increasing movement to apply the same standards of efficiency to the clinical departments in a medical school as are universally accepted as necessary for the preclinical—facilities for

practical work, guidance by teachers who are also investigators, and a minimal amount of lecturing and spoon-feeding.

To appreciate the stage of development that has been reached in medical education we can turn to the schools of this country for examples. Our medical schools are of two distinct types, distinctive because of their origins. The medical schools outside of London are schools of the universities. Education in the pre-clinical subjects is provided in university departments directed by professors who are selected from those eminent in the sciences concerned, no matter from what university they graduated, and staffed to a greater or less extent adequately by men who hope to find their career in these sciences. The principal limitation to the adequacy of these departments is a financial one, university education being always hampered in this respect. This is, to some extent at least, beneficial, for vigour seems to depend on the necessity for effort under adverse circumstances, if the circumstances are not too adverse. In each university one department or another stands out at different times as definitely more successful than the others—a success that depends on the individuals composing the staff, and most of all on the personality and capacity of the professor. On the whole the education provided in the pre-clinical departments of these university medical schools is satisfactory, but at present they are still suffering from the effects of the war. The classes are too big for the departmental staffs and for the laboratory accommodation, so that in the effort to bring the majority of the students to the level of instruction that will enable them to pass the professional examinations, there must be too much didactic teaching and too little opportunity for practical work and personal observation On the clinical side the situation is not so satisfactory. The clinical instruction is carried on in the wards of a municipal or a voluntary hospital that is not part of the university, and which is governed by a board of directors who must put other considerations than educational in the forefront of their policies. Some are even antagonistic to the aims of the university. The university is limited in the selection of its teachers to the staff of the hospital, and the positions on the staff of the hospital are unavoidably limited to the medical men of the immediate locality. Much of the teaching is formal, and many of the teachers, excellent practical clinicians though they be, quite incapable of maintaining the educational standards that the student reached in his pre-clinical subjects. This system produces sound, practical medical men, but does little to aid the practice of medicine in its march to the goal of applied science. Of course, individual teachers appear from time to time who, wholeheartedly devoted to medical education and the advancement of their subject, stimulate their school by their example, and there are students who, in spite of the defects of any system, acquire what is best out of their teachers and make their own opportunities.

The medical schools of London are not university medical schools except in name, but are hospital schools. The apprenticeship to a clinician developed into the clerkship or dressership, and around the work in the wards the educational system has developed. Lectures were given in first one and then in all the pre-clinical subjects, by members of the hospital staff interested in these sciences. The provision for practical work in these subjects, and the appointment of professors and lecturers whose careers lay in these subjects and not in clinical practice, are developments of very recent years. Some of the schools make no attempt to provide a training in all the pre-clinical sciences, and none can afford departments and staffs of full university standard in all of the subjects that the universities consider necessary. On the clinical side, however, the hospital schools of London provide a practical training that is second to none, even if we who are taking part in it now can find much that could be improved. The devotion of the hospital staff to their educational functions, and the appointment of the student to positions in the wards in which he is a part of the machinery for the care of patients, are two important factors in this system of training in the clinical subjects.

Before leaving the two types of school as they are seen in this country, it is of interest to note that the university type, as it has evolved in Germany, and to an even greater extent as I shall explain later in America, includes departments in the clinical subjects similar in staffing and equipment to the departments for the pre-clinical subjects, each with a university professor, numerous assistants and laboratory accommodation. At the other end of the scale there was until recently to be found in America a type of school that was a caricature of the hospital school. These schools were formed by the local practitioners of a town offering courses of lectures in the pre-clinical and clinical subjects without any accommodation for practical work, and demonstrations on cases in the local hospital without any facilities for the students to examine or study the cases for themselves. Fortunately these so-called proprietary schools have now ceased to exist, and the degree of the M.D. given by them after such a course of study is no longer obtainable.

F. R. FRASER.

(To be concluded.)

THE AURÆ OF EPILEPSY.

LOCAL epilepsy was, it is true, recognized and described by Bravais in 1827, but Hughlings Jackson was the first to associate it with focal disease of the brain. His observations threw the first light on the localization and organization of the cortical apparatus; and though he vainly tried to avoid it, his name has become associated with this form of epilepsy.

Hughlings Jackson, by careful observation and deduction, was able to show that a local fit progressed along physiological lines; further, he expounded that consideration of the aura gave a clue to the location of the unstable part of the brain responsible for the subsequent discharge of motor energy as evidenced by the convulsion. On account of this the various phenomena met with as auræ may be of value in the localization of cerebral dysfunction; but let it be understood that Jacksonian attacks are more frequently met with in so-called "idiopathic" epilepsy than in any other lesion of the central nervous system.

The auræ of epilepsy may be divided into five large groups: (1) Motor, (2) sensory, (3) visceral, (4) cephalic, (5) special sensory, (6) intellectual.

Motor.—The commencement of the attack may be by a motion in some part of one half of the body, most frequently in the arm, less frequently in the face or leg, occasionally in the tongue, and very rarely in the trunk. Commonly the first symptom is a spasm of a group of muscles subserving the same function; the spasm is then followed by a series of clonic movements varying in rapidity. The movements spread to other parts of the limb; and if they commence in the hand they ascend the arm, and may pass to the trunk or leg before consciousness is lost. The site of origin of such movements has been shown to be in the pre-central gyrus of the opposite cerebral hemisphere. Therefore the progression of symptoms is along the level of the motor cortex. For example, once the movement has spread from the hand to the shoulder, the trunk would next be involved; and again, owing to the approximation of the face motor area to that of the fingers, progression may pass direct from the hand to the face. It is rare to be able to watch this physiological progression, but one case comes to mind. A man while buttoning up his waistcoat with his left hand felt his hand go stiff; this was followed by twitching movements of the hand, which spread to the wrist, elbow, shoulder, left face and left leg. The movements lasted close on two minutes, during which period he was able to recount the feelings he experienced; unconsciousness did not supervene. At operation he was found to have a glioma coming to the surface in the right Rolandic cortex at the level of the hand area.

These movements, though co-ordinated in a sense, are crude, and in no way resemble any of the elaborate movements used in everyday life. It is rare, however, for an attack to be preceded by some co-ordinated movement of great complexity. Boötius has described a form of epilepsy in which the patient invariably starts running a few yards before he falls down in a fit, and to this form he has given the name "epilepsia cursiva." Gowers relates two cases—one patient who always turned round and retraced his steps before an attack, and the other who sprang up and jumped about the room for a few seconds before the convulsion element set in with unconsciousness. It is only too obvious that such highly co-ordinated movements must be dependent upon excitation or release of a level higher than the Rolandic area, and probably situated in front of the precentral gyrus.

Sensory.—As sensory auræ are entirely subjective and consequently lack the power to attract notice, they are apparently less common. It is now known not only from clinical observation, but also from experimental work, that the sensory cortex lies behind the fissure of Rolando. How far it extends towards the occipital pole is, as yet, not accurately defined; but there is little doubt that the anatomical arrangement of the sensory representation of the various parts of the body is analogous to that of the motor cortex, the lower limb being represented towards the apex of the hemisphere and the head in the region of the Sylvian fissure.

The sensations as described by the sufferer vary in character. It may be a "numbness," a "deadness" or a "loss of feelings"; in some a feeling of "pins and needles" is predominant. Rarely, if at all, does one come across sensations of heat or cold, for such sensations are represented at a lower level in the thalamus. As in the motor auræ, these sensations spread along definite physiological and anatomical lines; the "numbness" passes from the hand to the face, or it ascends the arms to the trunk and the leg. Frequently such sensations are unaccompanied by any loss of consciousness. But, as Holmes points out, the paræsthesiæ may be followed by an actual loss of sensation; he records the case in which, following the sensory aura, a complete loss to all forms of sensation was found in the segment involved. The point of interest lies in the absence of all forms of sensation, as destruction of the parietal cortex is not associated with loss of thermal perception. It is known, however, that following motor auræ a fleeting flaccid paralysis may result from the temporary exhaustion of the grey matter of the Rolandic cortex; it is possible, then, that the excitation of the parietal cortex may be followed by a temporary exhaustion of the grey matter of that area and of the subcortical centres situated in the thalamus.

Most commonly sensory auræ commence in the upper or lower limb and spread to the trunk or face. Rarely does such an attack have as its starting-point the face. The explanation of this is still obscure; but it is possible that the cortical sensory areas are less definitely defined than the cortical motor areas, in favour of which is the view that the pre-Rolandic cortex may subserve the sensory function of recognition of the position of the limbs in space. Also Sittig has pointed out that the paræsthesiæ do not always spread from part to part, as is supposedly represented in the parietal cortex.

Visceral.—The most frequent aura described by sufferers from epilepsy is a sensation referred to the abdominal viscera. It is a sensation at the epigastrium, usually vague, but sometimes actually painful. If it is pain it may remain in the region of the epigastrium, but on occasion it may be referred to one or other iliac fossa. A young female adult complained of frequent paroxysmal pain in the right iliac fossa, for which she was operated upon as a supposed case of intermittent appendicitis; the appendix was found to be perfectly healthy. Eventually the paroxysms of pain were quickly followed by unconsciousness and a convulsion; in short, her pain was an epileptiform aura. But this is uncommon, and the usual sensations are described as vague feelings of "turning over" or "blowing out." Frequently such sensations referred to the abdomen are followed by other sensory phenomena; the sensation ascends through the chest to the throat or the head, and on reaching the throat there is a sensation of choking which may be identical with the globus hystericus. Occasionally the warning is only that of choking. Gowers has suggested that these auræ, ascending to or felt in the throat, may be the expression of a disturbance of the central processes connected with the respiratory function of the pneumogastric nerve. Cardiac sensations are comparatively rare; but sometimes palpitations or vague discomfort referred to the cardiac region constitute the aura.

These visceral sensations are at present of no value in localizing organic disturbance of the brain. But Hughlings Jackson pointed out that all parts of the body and components thereof are represented in the nervous system; and it is possible that in the future such visceral sensations will be found to arise from definite areas within the brain as yet unrecognized. Such speculation is not unfeasible, for recent research has shown that the brain-tissue around the third ventricle has control over certain excretory functions.

Cephalic.—Sensations referred to the head are common; definite pain, usually indefinite in location, is rare; more frequent is a sense of "rushing of blood to the head" or a "vague heaviness," either being rapidly followed by a dimness or loss of sight. Rarely does giddiness or vertigo form a constituent part of an aura; but when it does it is associated with a rotation of the head and eyes to one side. In such instances the vertigo or giddiness is not a "true" aura, but the result of a movement probably initiated by excitation of one or other Rolandic cortex. These sensations are followed by a rapid loss of consciousness and prove of little or no localizing value, chiefly owing to the vagueness of their character.

Special sensory.—For convenience of description these may be subdivided into three groups—visual, gustatory and olfactory, and auditory.

Visual.—Gowers states that special sense auræ are very frequent and important; he adds that visual auræ are twice as frequent as all the other special sense auræ put together. The cortical visual centres lie in the region of the calcarine fissures, each hemisphere serving the opposite halves of the visual fields. This area of the cortex deals only with the crude sensations of vision, such as perception of light and colour. The more highly organized visual perceptions are dependent upon yet higher centres localized in front of the occipital cortex in the region of the isthmus of the temporal lobes. It is not uncommon to be told by an epileptic that immediately before losing consciousness he sees flashes of light. Careful interrogation will elicit the following facts: The flashes of light resemble stars or balls of light which are coloured blue, red or green; further, the flashes occur either to the right or left of central vision. Seldom do they appear in the area of central vision. Frequently the flashes of light occur in a hemianopic field of distribution, in which for the moment the subject is quite blind. The primary excitation in such cases is probably localized in the occipital lobe of the hemisphere opposite to the side on which the auræ are first perceived. The following case is an instance thereof: A middle-aged woman was admitted to hospital with obvious signs of increased intra-cranial pressure; she complained of coloured flashes of light lasting only a few seconds at a time in the left field of vision. At operation a large endothelioma was found growing from the falx cerebri into the right occipital lobe and practically obliterating the region of the calcarine fissure. More rarely is to be found the sudden loss of sight in one half of the field of vision; but following the aura of coloured lights, it is not uncommon to find a hemianopic loss of vision. This is explicable on the basis of temporary loss of function following upon excessive local excitation.

More complex visual auræ are comparatively uncommon. But the case of a man comes to memory to illustrate such visual phenomena. With symptoms of increased intra-cranial pressure this man had persistently been examined for localizing signs without reward. One day, from a position at the foot of his bed, it was noticed that he looked dazed, and that he turned his head in a series of jerky movements to the left. Asked why he did so he replied that he saw his sister at the foot of the bed, but that when he tried to look at her she moved to the left, and continued to move to the left whenever he attempted to fix her in his central vision. The actual image of his sister lasted only a few seconds and he was able immediately to describe his symptoms. A large cystic glioma was exposed in the region of the isthmus of the right temporal lobe. Analysing his symptoms, it is apparent that he saw in his left visual field a complex picture as distinguished from the crude sensations of light evidenced by coloured flashes. An image of such complexity must have originated from a higher level than the occipital cortex—namely, in the region where the glioma was found. It is uncommon to find such definite visual images; frequently indefinite shapes and objects arise from lesions in this locality. Such highly complex visual phenomena are rare in idiopathic epilepsy, but when they do occur they point to an aura of unstable cortex at the posterior end of one or other temporal lobe.

Gustatory and olfactory.—Such auræ are rare in epilepsy; their very rarity makes them of extreme interest. The olfactory sensations are usually unpleasant in character—an "indescribable" or "bad" smell, which lasts only a few seconds. Associated with this sensation are certain "reflex" movements of "scratching" or "rubbing the nose." The gustatory sensations are of extreme rarity, and consist of a "sour," "bitter" or "metallic" taste; flavours occasionally occur in association with gustatory sensations, but never in combination with olfactory sensations. This is of interest, as flavours are largely olfactory and not gustatory sensations.

Ferrier demonstrated experimentally that excitation of the uncinate gyrus in animals produced "reflex" movements. These movements were of chewing, of smacking the lips and sometimes of spitting, and suggested a primary gustatory or olfactory stimulus. Jackson records several cases of epilepsy in which such movements followed a crude sensation of taste or smell, and postulated that the focus of discharge was in the uncinate gyrus. It is now known that his hypothesis was correct, for lesions of the uncinate lobe are associated with olfactory phenomena. These frequently merge into another form of auræ classified under "intellectual aura."

Auditory.—An auditory warning is more common. There may be a sudden loss of hearing or some loud noise. Holmes refers to the case of a man whose attack was heralded by the ringing of a bell, the sound of which progressively increased in volume till unconsciousness set in; following these attacks there was no loss of hearing. Sounds are heard bilaterally, never in one ear. The representation of each ear in the cortex of both hemispheres would account for this, and for the absence of loss of hearing following the attack. In relation to this form of auræ are the cases of "reflex" epilepsy in which a sudden loud noise causes the patient to fall down unconscious; the mechanism of this "reflex" is closely associated with the connections of the auditory nuclei to those at the base of the brain.

Intellectual.—Hughlings Jackson directed special attention to a form of aura which he described as a "dreamy state" or an "intellectual aura"; he found that these states were frequently coupled with a crude sensation of smell or taste. Since then Kinnier Wilson has contributed a masterly work on the subject, in which he divides the "dreamy state" into four types; these are the "familiarity" type, the "unreality" type, the "panoramic" type, and the "abortive" type.

In the "familiarity" type the patient is conscious of passing through a series of incidents or circumstances which are quite familiar to him. He apparently recalls to consciousness some incident of which he feels quite cognizant though he cannot associate it with any preceding part of his life. Analysing such sensations it will at once appear that the reminiscence may be genuine; the patient may have actually had such a previous experience and lost it from conscious memory; or it may be the recalling of some incident through which he has not actually lived but of which he has read.

In the "unfamiliarity" type, the scenes, though real and life-like, are scenes unexperienced before. The reminiscence then must be illusory and not the result of the release of memories gained in consciousness. It is possible that they may be the recall of dream memories.

The "panoramic" type is closely associated to that of "familiarity," but as a rule is much more vivid. It is said and recorded that in the death throes by drowning one sees the whole of one's earlier life pass in front of "one's eye." This is the nature of the panoramic type. The patient will recall his childhood days, will see his nursery toys, even the pictures on the wall. In other words the memory of previous conscious states is brought vividly to the surface.

The "abortive" type is different. The patient will have difficulty in relating the incidents; he will express

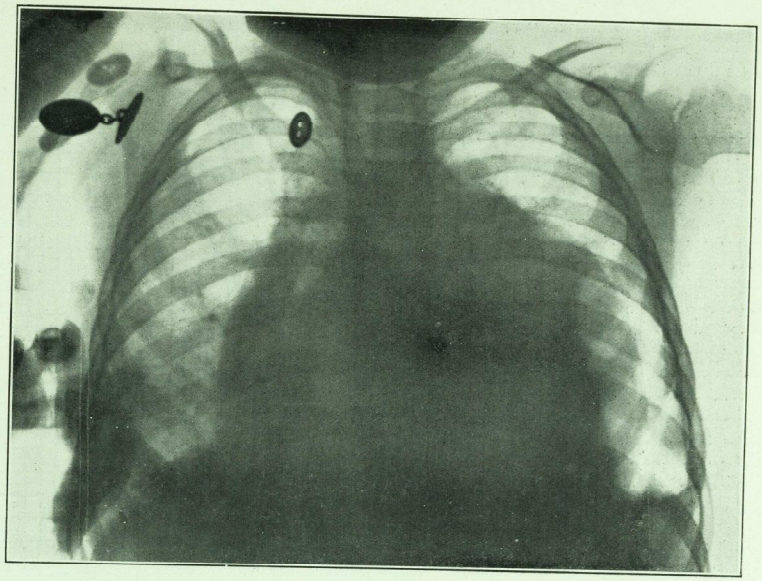

FIG. 1.

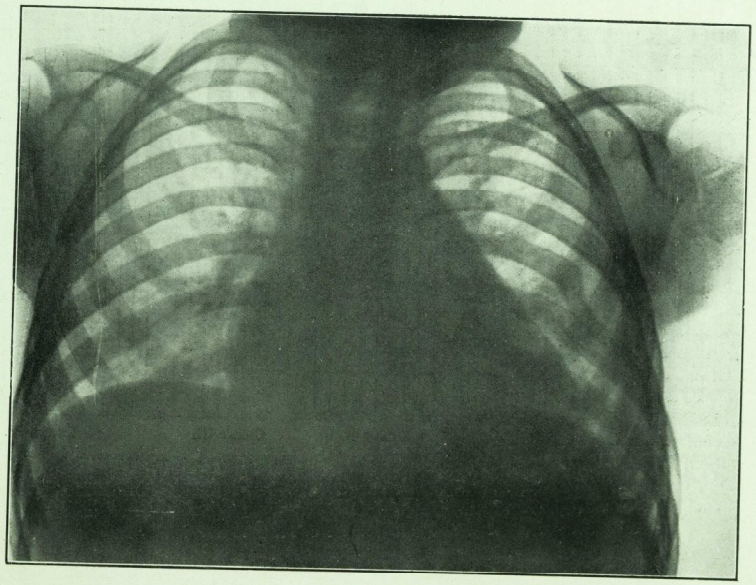

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FIG. 2.

BEATTIE: A CASE OF SUPPURATIVE PERICARDITIS.

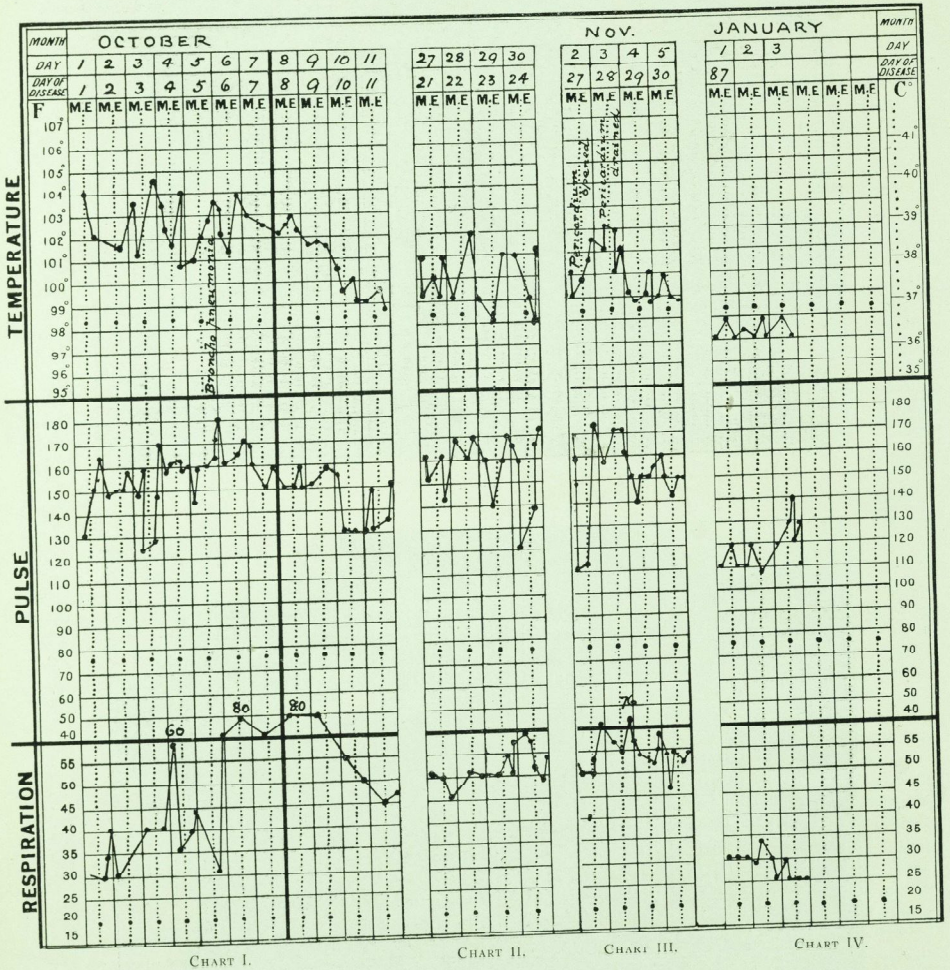


CHART I. CHART II. CHART III. CHART IV.

an inability to explain and at the same time a desire to relate his experience, yet he regrets that he cannot. It almost appears as if he were on the verge of seeing something which his memory fails to recall or which is preceded by unconsciousness. The feeling is more that of "some impending incident."

The explanation of such auræ is difficult; but that it is based on physiological principles rather than on psychological is more likely, for they occur in lesions such as a tumour or, as in Hughlings Jackson's case, an abscess situated in the uncinate region of the temporal lobe. This localization explains their frequent association with crude sensations of smell and taste. Jackson took up the attitude that such complicated mental states could not result from direct excitation, thus differing from other auræ; he suggested that they resulted "from an increased energizing of centres permitted by removal of control of higher centres." In other words, he considered it to be a release phenomenon. Holmes, while not considering the mechanism involved, suggests that, as such phenomena are initiated in the rhinencephalon, phylogenetically one of the oldest portions of the cerebral cortex, the uncinate gyrus may function as a storehouse of memories. Wilson, however, draws attention to the close connection by means of large commisural tracts between the uncinate region and the higher visual cortex, and theorizes that the "stimulus" started in the uncinate region travels along such tracts to the visual centres.

Epilepsy is frequently looked upon as an uninteresting symptom-complex. But surely a study of the auræ experienced by patients is of extreme interest if they are considered from the point of view of the function of the various cortical areas and their inter relationship. Further, many of the auræ bridge the gap between neurology and psychology, and bring psychology within the scope of an anatomical explanation; consequently, abnormal psychological events may be disturbances of normal physiological processes which are dependent upon definite anatomical centres and pathways.

In the preparation of this paper the works of Hughlings Jackson, Collier, Holmes and Wilson have been freely consulted and much appreciated. E. A. C.

TO A YOUNG HARLEY STREET SURGEON (*who sent me his photograph as a Christmas card*).

Shall —'s face his fortune find?
Does his likeness speak?
Will it bring his skill to mind
Or just his cheek?

D. V. H.

A CASE OF SUPPURATIVE PERICARDITIS, WITH RECOVERY.

THIS case is an interesting one as it demonstrates the extraordinary resistance displayed by a child against an acute bone infection followed by many serious complications.

The patient, a girl, æt. 4 years 10 months, was admitted to the Hospital on October 7th, 1928, complaining of having been wakened 12 hours previously by sudden agonizing pain in the left thigh.

On admission the child was obviously acutely toxic, with continuous delirium, a hectic flush, intermittent generalized spasmodic movements, and temperature 104° F., pulse 130, respirations 28. The left knee was held flexed, and the child shrieked with pain when the lower third of the left thigh was touched; the latter area was swollen and the skin reddened just above the internal condyle of the femur, but no definite lump was palpable. There was no effusion into the knee-joint. Heart and lungs showed nothing abnormal.

A diagnosis of acute osteo-myelitis of the femur was made and an operation immediately performed. Under general anæsthesia an incision was made over the internal aspect of the lower third of the left femur. On exposing the periosteum the latter was found to be raised from the bone by a collection of thin blood-stained pus, which was evacuated, a gutter was made in the diaphysis close to the epiphyseal line, and drainage-tubes were inserted. Unfortunately the pus was not examined bacteriologically, but there can be little doubt that the infecting organism was a staphylococcal one.

For four days after operation the patient's condition improved, until suddenly the respirations rose to 80 per minute and signs of broncho-pneumonia developed (see Chart I). By the twelfth day of the illness the temperature had fallen by lysis to normal, but the pulse-rate still remained at 150–160, the respirations having dropped to 45. Meanwhile the local condition in the left thigh was clearing up well. The general condition then improved considerably until the twenty-first day of the illness was reached, when the temperature chart began to show a definite change, the temperature becoming intermittent (97·4°–102°), the pulse showing proportionate variations and the respirations varying from 50–60 per minute (see Chart II).

On examination of the chest the following signs were found: Impairment of movement and dullness on percussion in the upper part of the front of the chest on the left side from the second intercostal space. A.C.D. not otherwise increased to the left or right; no præcordial bulge. The temperature chart, by its character, suggested suppuration, and this was confirmed by a

leucocyte count of 23,800 per c.mm. The local condition was quite satisfactory, and did not appear to account for this temperature and leucocytosis. At this time (twenty-sixth day of illness) the temperature was 102° F., pulse 156, respirations 60. A.C.D., second rib to ¾ in. to right of sternum to 1 in. outside mid-clavicular line. Apex-beat was not palpable; there was no præcordial bulge. On auscultation no heart-sounds were audible and no præcordial friction was heard. Dr. Graham saw the patient and diagnosed pericardial effusion—probably purulent; this was confirmed by X-ray examination (see Fig. 1).

X-ray report.—The heart shadow is enormously enlarged in all directions, especially upwards, and has assumed the typically rounded appearance associated with pericardial effusion. There is also some thickening of the pleura at the base of the left lung.

Operation.—(November 2nd—twenty-seventh day of illness). G. and O_2 anæsthesia. Without previous aspiration, a vertical incision was made below the costal margin, ¾ in. to the left of the mid-line separating the fibres of the left rectus muscle. The peritoneum was drawn downwards, the tissues between the sternal and costal origins of the diaphragm separated and the bulging pericardium incised. Immediately, about 12–14 oz. of slightly turbid fluid gushed out with considerable force. Digital examination of the pericardium was then carried out. The heart was felt beating strongly, and there were no pericardial adhesions found. As the fluid evacuated was only slightly turbid, it was not thought justifiable, owing to the risk of secondary infection, to drain the pericardium until the fluid had been examined for bacteria; the wound was accordingly closed.

Bacteriological report on fluid.—A slightly turbid fluid. Gram-stained films showed large numbers of polymorph leucocytes, but no organisms. Cultures on blood legumen agar a fair growth of *Staphylococcus pyogenes aureus*. On the strength of these findings it was decided to drain the pericardium.

Second operation.—(November 3rd.) Ethyl chloride anæsthesia. The wound was rapidly re-opened, 2 oz. of fluid evacuated from the pericardium, and a drainage-tube inserted just into the pericardium through the original incision.

After this the wound drained freely and within twenty-four hours the discharge was frank pus.

The patient's general condition gradually improved and the temperature fell to normal four days later, the A.C.D. diminishing rapidly.

November 6th (thirty-first day of illness): Red blood-cells, 4,860,000; white blood-cells, 15,400; hæmoglobin, 77%; colour index, 0·8. About this time, in the left axilla, an area of impaired percussion note appeared, with physical signs suggestive of a localized collection of fluid (see Chart III). This area, therefore, was aspirated in the eighth space in the post-axillary line and 3–4 c.c. of thick pus were withdrawn. (Cultures of the pus produced a pure growth of *Staphylococcus pyogenes aureus*).

In view of these findings, on November 8th 1½ in. of the eighth rib in the post-axillary line was resected under local anæsthesia, but no pus was found in the pleural cavity. The visceral layer of the pleura, however, was thickened and adherent to the parietal layer. A needle introduced for 1½ in. into the lung substance gave a negative result. A drainage-tube was inserted and the wound closed around it. After this operation the temperature gradually settled with occasional rises to 100° F., and the patient's general condition improved until November 20th (forty-fifth day of illness), when signs of heart failure became obvious—œdema of the legs, back and abdominal wall, etc., with the presence of ascites.

On November 28th the pericardium was re-explored through the old incision, but no effusion was found. At the same time aspiration of the peritoneum was performed and straw-coloured ascitic fluid was withdrawn. The second left intercostal space was also investigated (the possibility of empyema arising owing to the persistent dullness in this region), but no pus was found.

On November 30th paracentesis abdominis was carried out and 36 oz. of ascitic fluid removed. Following this the œdema rapidly disappeared and the general condition improved steadily, the temperature remaining about normal, pulse falling to 120, and the respirations to 30 (see Chart IV). The patient was up for the first time on January 1st, 1929 (eighty-seventh day of illness), and was discharged to a convalescent home on January 15th.

Clinical examination before discharge was as follows: A.B. fifth space in mid-clavicular line, unaltered by change in posture. A.C.D., third rib to right border of sternum to A.B. Heart-sounds were natural. The pleural, pericardial and thigh wounds were healed and there was no ascites.

An X-ray examination of the chest (see Fig. 2) was reported on as follows: A portion of the eighth left rib has been removed and has been re-formed. The heart shadow is still enlarged; the enlargement extends right up to the aorta; it has not, however, the typical globular appearance of a pericardial effusion, but is now pear-shaped. The width of the aorta suggests pericardial thickening or a little effusion.

I am indebted to Mr. Geoffrey Keynes for permission to publish this case.

W. J. H. M. BEATTIE.

ACUTE THYMIC ASTHMA.

IT may be of interest to record these three cases, as they all presented the same clinical picture.

CASE 1.—A boy, æt. 3, was quite well until 5 p.m. on November 14th, 1928, when it was noticed he was "off his feeds," became feverish and sweated.

At 5 p.m. on the next day the child had "a fit" and was brought to hospital in a "fit," and on account of its serious condition it was admitted at once.

On examination the child was found to be cyanosed, with marked spasm of the small muscles of the face and twitchings of both arms and lower limbs. There was inspiratory dyspnœa and the alæ nasi were working.

Temperature, 101° F.; pulse, 120; respirations, 35.

There was no head-retraction, no Kernig's sign, no faucial obstruction, no aural or nasal discharge.

The tongue was natural and the tonsils were also natural.

There was marked inspiratory recession in the lower chest and extensive capillary bronchitis, with no localized patches of dullness or bronchial breathing.

The liver was one and a half finger-breadths below the costal margin, and the spleen was just palpable.

The limbs were natural. No lymphatic nodes were palpable and no rash was seen.

The child was at once given a mustard-bath and this, for a time, controlled the spasm and the dyspnœa was relieved somewhat. Later continuous oxygen was given through a nasal tube, and the thick mucoid substance which collected in the mouth and pharynx was continually swabbed out. Atropine (gr. $\frac{1}{100}$) was given subcutaneously at this stage. Following this the spasm and twitchings disappeared and the chest signs cleared somewhat. The colour improved and the respiratory distress was not so great. During this stage potassium bromide was given *per rectum*.

However, about 9 p.m. the child became suddenly worse, the cyanosis deepening, and the child died at 9.30 p.m.

CASE 2.—November 16th, 1928, at 7 p.m. a boy, æt. 2½, was admitted to Hospital with a fit, with the history that it was quite well until 4 p.m. that day. While having its tea it suddenly went into a "fit."

On examination it was found to have the same physical signs as in Case 1. There was intense cyanosis, spasm of muscles and extensive capillary bronchitis.

The diagnosis in both cases at the time of death was that of an acute broncho-pneumonia.

Post-mortem findings were the same in each case.

There was a large thymus, 5 in. by 4 in. by ½ in., spreading up into the neck and lying over the trachea, causing pressure on the latter.

Macroscopically the thymus was firm, with marked small hæmorrhages.

Microscopically the specimen showed ordinary thymic tissue.

The lungs showed extensive bronchitis, but there was no localized area of consolidation. No other congenital abnormalities were observed.

CASE 3.—Girl, æt. 4, was quite well until 4.30 p.m. on January 14th, 1929, when she was seen to fall on her left side in a fit. The parents stated that her left hand was weak. Shortly afterwards the child had several more fits and was brought up to Hospital and at once admitted. The child was found to have urgent dyspnœa and acute capillary bronchitis. Atropine $\frac{1}{100}$ gr. and Curschman's solution ♏ iij were given, the dyspnœa being relieved and the signs in the chest cleared. An hour later the child had another fit, the dyspnœa and extensive bronchitic signs reappearing. The child died a few moments later.

In view of the previous two cases and the post-mortem findings in them, a tentative diagnosis of acute thymic asthma was made.

At post-mortem the thymus was enlarged (weight 20 grm.) and was compressing the trachea antero-posteriorly near its bifurcation to such an extent as barely to permit the entrance of the small scissor end. There was also diffuse lymphoid hyperplasia.

The interest in these cases lies in the definite clinical picture of a sudden onset with a fit followed by further fits and urgent dyspnœa with the signs of capillary bronchitis in association with enlargement of the thymus gland.

We are indebted to Dr. Morley Fletcher and Sir Percival Horton-Smith Hartley for permission to publish these cases.

H. O. WHITE.
A. CLARK.

DR. WILLIAM BEAUMONT AND HIS "PATENT DIGESTER."

SIR WILLIAM OSLER, in his Harveian Oration of 1906, maintained that we should endeavour to judge the great scientific discoveries of the past in the light of contemporary knowledge. The work of Dr. Beaumont on the physiology and pathology of the human stomach affords a good instance of this point. It is true that Dr. Beaumont's observations did not lead to any revolutionary discoveries, but he settled finally many of the controversial speculations upon digestion which were absorbing the energies of the physiologists a century ago, and founded the basis of our modern knowledge of functional gastric disorder.

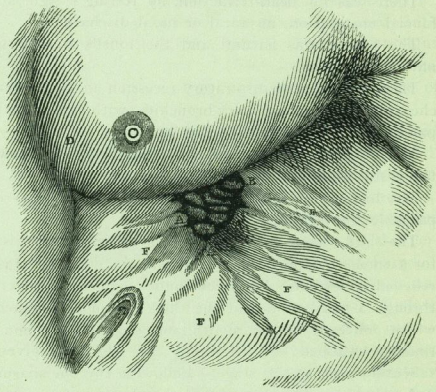
Moreover, much of the knowledge which has come to light since his day was in some measure anticipated by observations which he recorded carefully, but which he, in his capacity as a general practitioner, was unable to follow up and elucidate.

In 1822 Dr. Beaumont was surgeon to the American garrison stationed at Fort Mackinac, a trading post established on an island at the junction of the two great lakes, Lake Michigan and Lake Huron. From the fort the American Army policed the frontier and kept in check the Iroquois and the Hurons whenever they went on the war-path; to it came the "voyageurs" and hunters of the American Fur Company to sell their pelts and replenish their stores. On the morning of June 6th the trading store was thronged with hunters, when one of them accidentally let off his shotgun, and severely wounded a young French-Canadian, Alexis St. Martin, who received the whole charge of duckshot and wadding in his left side at so close a range that his clothing caught fire. Dr. Beaumont was sent for and arrived on the scene within three minutes. He found that a large mass of tissue had been blown away, "about the size of a man's hand . . . fracturing and carrying away the anterior half of the sixth rib, fracturing the fifth, lacerating the lower portion of the left lobe of the lungs, the diaphragm, and perforating the stomach." He resected the fractured fifth rib, dressed the wound with a "carbonated fermenting poultice" and left his patient in charge of Mr. Hubbard, the storekeeper, certain that he could not live through the night.

To his astonishment his patient lived, and in the course of the next month large masses of tissue sloughed away, including portions of the stomach and lung and the remainder of the fifth rib. An empyema formed, drained for three months, and was finally healed by union of the stomach-wall to the parietal pleura. St. Martin refused to have the opening into his stomach closed by operation, and its contents had to be retained by firm dressings. Towards the end of the year the lower costal cartilages on the left side and the ensiform cartilage were removed by operation, an abscess having formed at the lower end of the sternum. From this time the patient recovered so rapidly that the question arose of sending him to his home in Canada, 1500 miles away; but Dr. Beaumont considered the journey by canoe and pack-horse too arduous and took him into his own employment. In 1824, two years after the accident, the gastric mucous membrane at the upper border of the fistula prolapsed and formed a valve, closing the aperture from within so well that dressings were no longer needed. This woodcut, made by Mr. King for the first edition of Dr. Beaumont's book, shows the condition of the wound at this time.

In May, 1825, Dr. Beaumont contracted with his patient to allow him to carry out a series of experiments in the stomach at a salary of $150 a year. These experiments were continued with various interruptions until November, 1833, and are recorded fully in the *Experiments and Observations on the Gastric Juice*, published first in America in 1833, and later in the English edition at Edinburgh in 1838, which edition forms the basis of this article.

Dr. Beaumont's first experiments were concerned with the relative time taken by the gastric juice to digest various "materia alimentaria," as he somewhat pedantically called the 104 kinds of foodstuff served up to the hapless Alexis, tied in a muslin bag at the end of a



F IS THE PUCKERED SCAR OF THE ORIGINAL WOUND; *E* IS THE OPERATION SCAR MADE WHEN THE ABSCESS WAS OPENED AND THE COSTAL CARTILAGES WERE REMOVED; *B* INDICATES THE BASE OF THE VALVULAR FLAP OF MUCOUS MEMBRANE.

piece of string. The table of digestion which resulted from these experiments makes amusing reading, but is not of much practical value. More interesting are the facts recorded in this table that exercise sometimes reduced the time taken in digestion by as much as one hour; and that on several occasions, when Alexis, not unnaturally perhaps, became impatient with the investigator, the digestion of "recently salted pork" and "rare roasted beef" was considerably delayed.

A concurrent series of experiments on the action of gastric juice *in vitro* led him very near to the discovery of enzymes. He found that in the cold the juice had practically no action; that on a water-bath at body temperature digestion did occur comparable to that in Alexis' stomach, although it took rather longer to

complete, and further that this digestive action still followed after the juice had been kept in the cold for twenty-four hours. He also found that a dilute solution of hydrochloric acid of about equivalent strength to the acid in normal gastric juice had no such digestive action, compared with a control phial using pure gastric juice. This description to a modern mind obviously suggests enzyme action, but a century ago it was only possible to account for it in terms of pure chemical action. Such an explanation was beyond the powers of Dr. Beaumont, and there the question rested till the discovery of pepsin by Schwann in 1836. Nevertheless, this work finally ended a school of teaching existing at the time, which claimed that gastric juice was inert—an opinion stoutly upheld by a certain Montègre, who had developed the unpleasant accomplishment of vomiting at will, and from an analysis of the fluid so obtained concluded that what had previously been called gastric juice was merely swallowed saliva, and "possessed no peculiar powers of acting on alimentary matter." Montègre and his followers also denied the acidity of the gastric secretion. To settle this point Dr. Beaumont sent specimens of gastric juice for analysis to Prof. Dunglison, of the University of Virginia, and Prof. Silliman, of Yale, both of whom sent reports which agreed as to the main essentials, namely, that it contained free muriatic and acetic acids, together with phosphates and chlorides, salts of potash, soda, magnesia and lime, and "an animal matter soluble in cold water, but insoluble in hot"—presumably albumen. Prof. Silliman added that the specific gravity was 1005, and the reaction decidedly acid.

Dr. Beaumont also tested the action of saliva, and found that it had no digestive action upon beef or mutton, but noticeably assisted mastication. It is unfortunate that he did not try its action on starchy foods, for it was not until 1845 that ptyalin was isolated. With bile he was more fortunate. Von Haller in 1736 had noted that the principal action of bile was in the digestion of fats. Dr. Beaumont goes one step further in the following experiment: One drachm of olive oil was mixed with three drachms of gastric juice, but no digestion occurred after ten hours at body temperature. He therefore separated the mixture into two equal parts, and to the one part added two more drachms of pure gastric juice, to the other part two drachms of a mixture of gastric juice and bile. After a while he found that in the second part "the bile seemed principally to unite with the oil, breaking it down and reducing it to almost imperceptible globules," but did not actually digest it; whereas in the control phial there was no such change.

Following the teaching of Magendie, it was almost universally accepted at that time that gastric secretion was continuous; some even taught that hunger was caused by accumulated unused gastric juice. Dr. Beaumont, on the other hand, proved, by looking into St. Martin's fistula before breakfast, that in the resting stomach only sufficient was secreted to lubricate the walls. In one experiment, well worth quoting in full, he anticipated Pavlov: "Jan. 19th. At 9 o'clock a.m. coats of stomach perfectly clean and healthy. There was no free fluid in the gastric cavity until after the elastic tube was introduced, when it began slowly to distil from the end of the tube drop by drop, perfectly transparent and distinctly acid. I gave him a mouthful of bread to eat. No sooner had he swallowed it than the fluid commenced flowing more freely from the tube." He correctly concluded that the sense of taste stimulated the flow of secretion.

His accurate observations on the movements of the stomach, which were not equalled until the work of Cannon with X-rays, arose incidentally when for nearly ten months he regularly set out to record with a thermometer the variations of gastric temperature, hoping to find some connection with the weather, which he also carefully recorded. But while St. Martin's stomach resolutely clung to a temperature of about 100° F., it resented the presence of the thermometer and attempted to expel it through the pylorus, by waves of contraction passing downwards, lasting about half a minute and separated by periods of complete relaxation. So interested did the doctor become in these movements that on more than one occasion he gave up the whole morning to their observation, presumably to the detriment of his practice.

"That old fistulous Alexis" was by no means an ideal subject. On one occasion he interrupted the experiments by breaking his contract and running away. He was absent for four years, during which he married, became the father of two children, and was employed as a voyageur by the Hudson Bay Company. He also became inordinately fond of the pleasures of the table, and if his defections in this way irritated the doctor by spoiling his experiments, they allowed him to observe the effects of gastritis more accurately perhaps than has ever been done before or since. For instance, after a surfeit of oysters the "villous membrane of the stomach very much resembled the appearance of the tongue . . . furred with a thin yellowish coat, and inclined to dryness, with small aphthous patches in several places." Excess of mucus and less gastric juice was secreted. The cure for this condition was 6 gr. of blue pill, 6 gr. of calomel and four "aloetic pills," which, if it seems an heroic dose to those accustomed to "House physic," was nothing to Dr. Beaumont. He believed in "thorough catharsis," and on a similar

occasion gave St. Martin 30 gr. of calomel "*per fistulam*," removing all symptoms within three hours.

The picture of alcoholic gastritis affords a bigger warning to us. After "drinking ardent spirits for eight or ten days" his stomach became "unusually morbid, the erythematous patches more extensive, and spots more livid than usual, from the surface of which exuded small drops of grumous blood, the aphthous patches larger and more numerous, the mucous covering thicker than common, and the gastric secretions much more vitiated. The gastric fluids extracted this morning were mixed with a large proportion of thick ropy mucus, and considerable muco-purulent matter, slightly tinged with blood, resembling the discharge from the bowels in some cases of chronic dysentery." This account is so masterly that comment is superfluous.

The experiments came to an end in November, 1833, and St. Martin enlisted in the American Army. Many attempts were made to get him back for more experiments, and the Medical Society of London raised £300 for the purpose; but he had had enough. Right up to the time of his death, Dr. Beaumont corresponded with the Fur Company in the hope of regaining his "patent digester," as Alexis had been nicknamed; but even he failed. In spite of an increasing fondness for ardent spirits St. Martin lived to the age of 83, and when he died Sir William Osler made a determined attempt to obtain a post-mortem examination, hoping to preserve the famous stomach; but the relatives kept the body until it became so decomposed that the Curé refused its admission to church for the funeral. They then buried it eight feet deep to prevent exhumation.

Dr. Beaumont later became Professor of Surgery in the University of St. Louis, leaving the army in 1840. He bought a house in the heart of the country, now absorbed into the city of St. Louis, where he became deaf, so that when his daughter played the piano he used to listen by the hour by fixing his teeth firmly on the casing of the instrument. He died there in 1853, at the age of 68, a much respected citizen. As Dr. Myer has justly written, "All mankind has profited by virtue of his having lived."

BIBLIOGRAPHY.

BEAUMONT, WILLIAM, M.D.—*Experiments and Observations on the Gastric Juice and the Physiology of Digestion.* English edition, Edinburgh, 1838.

MYER, JESSE S.—*Life and Letters of Dr. William Beaumont*, 1912.

OSLER, Sir WILLIAM.—*The Alabama Student*, Oxford, 1908.

GARRISON, F. H.—*An Introduction to the History of Medicine*, Phila., 1922.

W. RADCLIFFE.

STUDENTS' UNION.

UNITED HOSPITALS HARE AND HOUNDS.

The Forty-third Inter-Hospital Race for the Kent-Hughes Cup was run at Hayes, Kent, on Wednesday, March 6th, over the 7½ miles course. St. Thomas's won; London were second, with 1 point behind.

W. J. Walter (St. Bartholomew's) ran a splendid race, to win fairly comfortably in a fast time—45 min. 27 sec. Our next two home were H. B. Lee, ninth, and C. E. D. Goodhart, twelfth.

J. R. Strong and J. Galwey were unfortunately prevented from running by ankle trouble.

The first ten were:

W. J. Walter	Bart.'s	45 min.	27 sec.
J. S. Horsley	London	46 ,,	2 ,,
J. F. Evans	,,	46 ,,	2 ,,
J. G. Billington	St. Thomas's	46 ,,	32 ,,
R. H. B. Snow	,,	46 ,,	37 ,,
P. A. Forsythe	,,	46 ,,	59 ,,
R. G. Macbeth	King's	47 ,,	40 ,,
E. J. Somerset	,,	47 ,,	52 ,,
H. B. Lee	Bart.'s	48 ,,	9 ,,
G. W. May	London	49 ,,	2 ,,
S. T. Fall	,,	49 ,,	2 ,,

The team scores were: St. Thomas's, 40; London, 41; Bart.'s, 63; King's, 66.

CORRESPONDENCE.

J. F. BULLAR.

To the Editor, 'St. Bartholomew's Hospital Journal.'

SIR,—May I be allowed to add a few reminiscences of our contemporary the late J. F. Bullar to Sir D'Arcy Power's obituary notice of him in the March number of your JOURNAL. I was one of Dr. Andrew's clinical clerks when Bullar was his house physician, and have a vivid remembrance of the incident of the cobbler, who, unless I am confusing him with another inhabitant of Little Britain, was a victim of severe tophaceous gout; and one point which impressed us strongly was the sympathy and assiduous personal care bestowed upon him by his whilom enemy during his stay in Mark Ward as the subject of an acute and fatal abdominal illness. Such kindness was characteristic of him who gave it.

Some of Bullar's pithy sayings stuck in our memories. Thus, when a clinical clerk asked him, "What is a fomes?" (I am afraid the word used was "fomite") the answer came, without hesitation, "Anything that conveys infection, from a postage stamp to a four wheeled cab."

He kept a hedgehog, as a pet, in the residents' quarters, and repute had it that it lived in his bath. This involved cockroach hunts at night, and the Dispensary was a rich covert. It was said that there occurred in the book which had to be signed by residents visiting the Dispensary at night such entries as the following: Name of patient—Timothy Hedg hog; Disease—starvation; drug required—*Blatta domestica*. If they are not to be found in the volume referred to they very well might be.

I am, Sir,
Yours, etc.,
ARCHIBALD E. GARROD.

Melton,
Suffolk.

To the Editor, 'St. Bartholomew's Hospital Journal.'

DEAR SIR,—In Sir D'Arcy Power's notice on Dr. J. F. Bullar he omits to say that after acting as Ophthalmic House-Surgeon he was Demonstrator of Anatomy for a time. When I was in "The Rooms" I started the collection of photographs of past demonstrators, getting them, as far as possible, autographed. Bullar sent his with a covering letter, but did not autograph it, and so I forged his signature on to the photograph, as will be seen in the Demonstrator's room.

Yours very truly,
R. FOSTER MOORE.

REVIEWS.

THE PRINCIPLES OF CLINICAL PATHOLOGY IN GENERAL PRACTICE. By GEOFFREY BOURNE, M.D., M.R.C.P., and KENNETH STONE, M.D., M.R.C.P. (Humphrey Milford, Oxford University Press, 1929.) Pp. xi + 392. Illustrated. Price 16s.

Rather more than a generation has elapsed since the study of clinical pathology started at St. Bartholomew's Hospital. For it is thirty-six years since the late Prof. Kanthack came here from Cambridge as Lecturer on Pathology and Pathologist to the Hospital. It proved the beginning of a new era. Looking back, it is extraordinary to recall what he was able to achieve with the very inadequate means at his disposal. All the work, whether teaching, routine investigation or research, was carried out in one room. Indeed, it was not until 1909 that the present Pathological Block was opened. Even this has now overflowed into the older School buildings, and in the process has swamped its original habitat.

It is fitting that this second generation should find expression in a new text-book of clinical pathology. When they arrived on the scene the subject had already established itself as an essential part of the equipment of a medical man. Their predecessors were handicapped by inadequate opportunities, and even by the scepticism of some of their teachers as to the value of laboratory methods in the diagnosis of disease. To-day the difficulty is quite otherwise. The mass of facts is so great that it is impossible for anyone to have first-hand experience of many of the methods on which he has to rely in part in coming to an opinion on a case. But as the authors of this book very justly observe, "No medical man should ask for a special investigation without knowing to what extent a positive, negative or an equivocal answer will react upon his clinical conception of the case."

We should, therefore, be prepared to welcome any book which had as its object the provision of such data as will assist the clinician to possess this knowledge. But in the present instance we can go much further than merely to welcome; we can cordially admire and recommend. The authors in their preface express their hope that they have held a balance between a text-book of clinical pathology and a text-book of medicine. Their aim has been to interpret the value of the pathological findings to the clinician, and in our opinion they have succeeded. Everyone, said Sir William Osler, drags after him some of the errors in which he was originally trained. Anyone whose training dates from the days when almost its only pathological basis was morbid anatomy must realize how his views are inevitably coloured thereby. Biopsy has extended and corrected necropsy. Pathological investigations are now no longer made when they are too late to help the individual patient, and merely with a view to guiding the physician should he be presented with a like problem again. The late Sir James Goodhart must have been in a mood that was unusually pessimistic for him when in 1912 he chose as the title for an address "The Passing of Morbid Anatomy." But perhaps it would be fairer to say that he showed therein that forwardly directed view which always characterized that admirable physician. Morbid anatomy deals with end-results. It is a valuable corrective against the building-up of airy hypotheses; its importance remains; it will never pass completely away, but it is not enough in itself as the basis of our pathological conceptions.

Here is the newer point of view well and concisely stated, for in less than four hundred pages we have a review of the principles of clinical pathology in practice, each section full enough to be interesting, and not a mere summary, while brief enough for the medical man to assimilate whose interests are not primarily pathological. The subject-matter is grouped under the headings of specific infections, diseases of the blood, of the cardio-vascular system, of the gastro-intestinal tract, of the respiratory and of the uro-genital system, metabolic and allergic diseases, with a useful appendix on the collection of pathological material. Naturally there cannot be, in the present state of our knowledge, universal agreement on all the topics treated of. We doubt, for instance, whether the general opinion of vaccines in pneumonia is so favourable as that which we gather the authors have formed. While deprecating the wide extension which has been given to the term "nephrosis," we must admit that the account given of it in this book is the clearest and most reasonable we have read. Altogether we consider the work has a wide field of usefulness before it; it is practical and lucid, without being unduly dogmatic. It reflects credit on the school from which it comes, and we cordially congratulate the authors upon it.

PRACTICAL CHIROPODY. By E. G. V. KUNTING, F.I.S.Ch. (London: Faber & Gwyer.) Pp. 196. Price 5s. net.

This is a most interesting and instructive little book. It deals with lesions of the feet, which, although termed "minor," are so very common, and are responsible for so much disability and loss of time in many occupations.

Text-books on medicine hurriedly pass over these minor foot affections, but medical men are often consulted on them. Sound advice combined with many personal touches will be found in this book. The author's forty years' experience introduces a wealth of detail in treatment, an especially useful chapter in this respect being the one on "pads and plasters."

The book also enters into the causation and pathology of the various lesions, and an attempt is made to base the treatment on strictly scientific lines.

RADIUM TREATMENT OF CANCER. By STANFORD CADE. (London: J. & A. Churchill, 1929.) Pp. 138. Illustrated. Price 15s. net.

This book gives quite a good survey of the present forms of radium treatment. Although it is especially good in those sections in which the author has extensive practical experience, it is less complete in others. The descriptions of the technique in all the sections, except those dealing with the tongue, mouth and neck, are too incomplete to be a real guide to a surgeon who is not familiar with it.

The book emphasizes the great possibilities of radium therapy, and presumably to support this contention includes a large number of case-records and coloured plates of treated cases. These are really more suitable for separate publication, and the space they occupy might well have been filled with technical matter and illustrative line drawings or diagrams.

While we can strongly recommend the book as by far the best published up to date, we feel that it leaves ample scope for another publication giving a better description of the effects of radium on tissues and more details of technique.

THE SCIENCE AND PRACTICE OF SURGERY. By W. H. C. ROMANIS, M.Ch., F.R.C.S., and PHILIP H. MITCHINER, M.S., F.R.C.S. Second edition. (London: J. & A. Churchill, 1929.) Two volumes. Pp. ix + 759; 937, 71. 674 illustrations. Price 14s. net each volume.

"The smaller the text-book the greater the lie" is an aphorism well enough appreciated by examiners and teachers of medicine. In this two-volume "Surgery" from St. Thomas's Hospital the authors have struck a balance of convenient mendacity, the usefulness of which may be judged from the fact that a new edition is called for after so short a time.

A conventional presentation of the subject is adopted; the matter is clear, concise and readable, and gives a definite picture of the conditions to be treated, their ætiology, their pathology, and the broad lines of treatment. Not least among the merits of the book are clear type and illustrations, which do in fact illustrate the text. The changes in this edition are chiefly additions to available methods of treatment—injection in varicose veins, bile in peritonitis, radium in malignant disease. The reader is referred to the full reviews of the first edition in the JOURNAL, 1927 (Vol. XXXIV, pp. 158 and 174).

A suggestion for future editions is the deletion of the textual cross-references, which, although doubtless prompted by years of teaching acquaintance with the "medical student," seem unnecessary in view of the full index printed in each volume, and only annoy the reasonable individual.

LONDON HOSPITAL LECTURES ON FORENSIC MEDICINE AND TOXICOLOGY. By the late F. J. SMITH. Third edition. Revised by GEORGE JONES, M.B., D.P.H. (London: H. K. Lewis & Co., 1929.) Pp. xix + 440. Price 10s. net.

The subject of this book is not one of the most popular with medical students. Time given to its assimilation is often time begrudged. Yet the examiners require a nodding acquaintance with its bolder details, and here is the barest minimum, taking a mere two hours to read—but written with what a human touch! This book may well form a pleasant introduction to those unpleasant experiences which all young doctors expect at the hands of their wary legal colleagues.

The late Dr. F. J. Smith must have been a delight to hear, and students of other hospitals than the London should be grateful to the editor, who, in bringing the book up to date, has preserved its value for another generation.

A CHALLENGE TO NEURASTHENIA. By D. M. ARMITAGE. (Williams & Norgate, Ltd., 1929.) Pp. 52. Price 2s. 6d. bound; 1s. paper back.

This booklet contains an account of the methods the late Dr. L. S. Barnes used to treat patients suffering from neurasthenia, described by one of his patients. The neurasthenic was reasoned with, and shown, by reasoned, logical explanation, in which the resources of scientific knowledge were drawn upon, that his symptoms were impossibilities—inventions of his diseased subconscious. The subconscious put distorted "pictures" into the place of "facts." The weapons of the subconscious, fear and bluff, were countered with arguments, until the patient had no rational basis at all for his beliefs. The method appears to have done very well in Dr. Barnes's hands, and a perusal of this booklet may give other practitioners a basis upon which to found their own systems.

Two criticisms must be mentioned. It is conceivable that this setting of the patient to fight and eradicate his own diseased subconscious might lead to a conception on the part of the patient (particularly if he was slightly psychasthenic) of possession by an evil thing. The results of such a belief would be difficult to tackle. Again, there is no final court of appeal to establish the truth and a physiological refutation of the possible real existence of a patient's organically baseless symptoms and fears. Interesting and sincere as this small thesis is, it is more a tribute to the personality of Dr. Barnes than to the universality of his theory of neurasthenia.

AN INDEX OF SYMPTOMATOLOGY. Edited by H. LETHEBY TIDY, M.A., M.D., in conjunction with twenty-five Special Contributors. (Bristol: Wright London: Simpkin Marshall & Co.) With 130 illustrations (some coloured). Pp. xii + 710. Price 42s. net.

The title, *An Index of Symptomatology*, implies a massive tome, which shall contain an account of the symptoms of all the troubles of the flesh, both medical and surgical.

The reputation of the editor, Dr. Letheby Tidy, which is largely based on his famous *Synopsis*, implies a "*multum in parvo*." Combine the two implications, and you have the book under consideration, but although the "*multum*" holds, the "*parvo*" is none too small.

There is much of the "Rook—see Crow," "Crow see Rook" about this work, as there must be in any complete index; but when once the desired article is found it is read with appreciation. Typically it is concise and useful, and fairly comprehensive.

The range of articles is wide, but they cover it. One would not expect otherwise in view of the writers.

There are many good and useful illustrations, but they are not so successful as the letterpress. The skiagrams are small; the dermatological photographs are large and frequent, and rather monotonous.

But of the substance of the book there is nothing but good to be said. It provides a quickly accessible store of elementary and general information, which any student or house physician or surgeon may turn to when he is in a hurry or in doubt. He will find his subject easily, and read and digest it more easily still.

The value of the book lies, not in its advanced opinions, but in its general completeness.

CHANGES OF ADDRESS.

BARON, C. F. J., 143, Blackstock Road, Finsbury Park, N. 4. (Tel. North 0621.)
BOUCAUD, J. E. A., 1, Queen's Park East, Port of Spain, Trinidad, British West Indies.
BURKE, Lt.-Col. G. T., I.M.S., King George's Medical College, Lucknow, United Provinces, India.
CHILTON, N., c/o Director of Medical and Sanitary Services, Dar es Salaam, British East Africa.
DAVIES, C. S., c/o The Director of Medical and Sanitary Services, Nairobi, Kenya Colony.
EVANS, P. T., Gordon House, 37, Welbeck Street, W. 1 (after April 1st).
HOGBEN, G. H., 6, Palace Gardens Terrace, W. 8. (Tel. Park 5533.)
PEARSON, L. V., 554, Musgrave Road, Durban, Natal, S. Africa.
STRUGNELL, Surg.-Comdr. L. F., R.N., R.N. Hospital, Malta.
WORBOYS, T. S., 57, Woodlands Road, Darlington.

APPOINTMENTS.

BOUCAUD, J. E. A., M.B., B.S.(Lond.), appointed Resident Surgeon to the Colonial Hospital, Port of Spain, Trinidad.
CHILTON, N., M.B., B.Ch.(Oxon.), appointed Medical Officer, East African Medical Service.
DAVIES, C. S., M.R.C.S., L.R.C.P., appointed Medical Officer, East African Medical Service.
FREEMAN, E. A., M.B., B.S.(Lond.), F.R.C.S., appointed Assistant Surgeon to Queen's Hospital for Children, Hackney Road, E.
WILLIAMS, H. C. MAURICE, M.R.C.S., L.R.C.P., D.P.H., appointed Deputy Medical Officer of Health for the County Borough, and Port of Southampton.

BIRTHS.

BLOUNT.—On March 16th, 1929, at 27, Welbeck Street, to Muriel Gladys, wife of Douglas Arthur Blount, M.B., of "Moreton House," Dunstable—a son.
DAY.—On March 10th, 1929, at Surrey Street Nursing Home, Norwich, to Gwendolin (*née* Dawbarn), wife of Dr. George H. Day, of Acle—a son.
EBERLIE.—On March 6th, 1929, at Flint Cottage, Luton, to Dr. and Mrs. W. F. Eberlie—a daughter.
HANCOCK. On March 8th, 1929, at 15, Holland Villas Road, to Estelle, wife of F. R. T. Hancock, of St. Paul's Cray Hill—the gift of a daughter (Penelope Estelle).
HORSFORD. On March 13th, 1929, at 24, Harley Street, W. 1, to Edith, wife of Cyril Horsford, M.D., F.R.C.S.—a son.
LANDAU.—On February 28th, 1929, at 64, Perak Road, Penang, to Marjorie (*née* Gubbay), wife of Dr. J. V. Landau—a son.
WELLS. On February 15th, 1929, to Joyce, wife of J. Pascoe Wells, M.B., Belvedere House, Danbury, Essex—a son.

DEATHS.

BULLAR.—On January 23rd, 1929, John Follett Bullar, F.R.C.S., of Hommet du Nord, Vale, Guernsey, aged 76.
COLLINGRIDGE.—In February, 1929, William Rex Collingridge, M.R.C.S., L.R.C.P., of Silverdale, Sutton-on-Sea, aged 47.
COOMBS.—On March 3rd, 1929, at Bedford, Rowland Hill Coombs, M.D., M.R.C.P., D.L., J.P., aged 84.
DE HAVILLAND HALL.—On January 27th, 1929, at 57, Waldegrave Park, Twickenham, of pneumonia, after a week's illness, Francis de Havilland Hall, M.D., aged 81.
EDDISON.—On January 27th, 1929, at Woodcroft, Cuckfield, Sussex, John Edwin Eddison, M.D., formerly of Adel, Leeds, aged 86.
EVILL.—On March 3rd, 1929, at 18, Warwick Gardens, Worthing, Dr. Frederick Claude Evill, of The Lodge, High Barnet.
HILL.—On February 27th, 1929, at Granta, Upper Bassett, Southampton, Alex Hill, M.A., M.D., F.R.C.S., F.R.C.P., O.I.P., some time of Cambridge, of Southampton, and lately Secretary of the Universities Bureau of the British Empire.
HUME.—On February 12th, 1929, at Vron, Bangor, N. Wales, Douglas Walter Hume, M.B., B.S.(Lond.), F.R.C.S.(Eng.), beloved husband of Dorothy Ann, and eldest son of the late Walter Augustus Hume, M.R.C.S., L.S.A., aged 47.
KENDALL.—On March 5th, 1929, at Chiddingfold, Nicholas Fletcher Kendall, M.R.C.S, L.R.C.P., aged 59.
MOLONY.—On February 20th, 1929, at Kerman, Persia, of enteric, E. F. Molony, M.R.C.S., L.R.C.P., Missionary, C.M.S., son of Lt.-Col. F. A. Molony, of 8, Selwyn Gardens, Cambridge.
RIVIERE.—On March 6th, 1929, at 19, Queen Anne Street, W. 1, of pneumonia, Clive Riviere, M.D., F.R.C.P., second son of the late Briton Riviere, R.A., aged 56.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for Review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C. 1.*

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, *The Journal Office, St. Bartholomew's Hospital, E.C.1. Telephone: City 0510.*

St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem."
—*Horace*, Book ii, Ode iii.

VOL. XXXVI. No. 8.] MAY 1ST, 1929. PRICE NINEPENCE.

CALENDAR.

Wed., May 1.—Surgery: Clinical Lecture by Sir Holburt Waring.
Cricket Match *v.* Wanderers' C.C. Home.
Fri., ,, 3.—Dr. Langdon Brown and Mr. Harold Wilson on duty.
Medicine: Clinical Lecture by Sir Thomas Horder.
Sat., ,, 4.—Cricket Match *v.* Southgate. Home.
Mon., ,, 6.—Special Subject: Clinical Lecture by Mr. Scott.
Tues., ,, 7.—Prof. Fraser and Prof. Gask on duty.
Wed., ,, 8.—Surgery: Clinical Lecture by Sir Holburt Waring.
View Day.
Fri., ,, 10.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Medicine: Clinical Lecture by Dr. Morley Fletcher.
Sat., ,, 11.—Cricket Match *v.* Hampstead. Home.
Mon., ,, 13.—Special Subject: Clinical Lecture by Dr. Cumberbatch.
Tues., ,, 14.—Sir Percival Hartley and Mr. L. B. Rawling on duty.
Wed., ,, 15.—Surgery: Clinical Lecture by Mr. Harold Wilson.
Cricket Match *v.* Stoics. Home.
Fri., ,, 17.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Medicine: Clinical Lecture by Sir Thomas Horder.
Sat., ,, 18.—Cricket Match *v.* Winchmore Hill. Home.
Sun., ,, 19.—Whit-Sunday.
Mon., ,, 20.—**Bank Holiday.**
Cricket Match *v.* Croydon. Home.
Tues., ,, 21.—Dr. Langdon Brown and Mr. Harold Wilson on duty.
Wed., ,, 22.—Surgery: Clinical Lecture by Sir Charles Gordon-Watson.
Annual Athletic Sports at Winchmore Hill.
Boat Races for the Inter-Hospital Cups on the course from Hammersmith Bridge to Putney Bridge.
Thurs., ,, 23.—Cricket Match *v.* M.C.C. Home.
Fri., ,, 24.—Prof. Fraser and Prof. Gask on duty.
Medicine: Clinical Lecture by Dr. Langdon Brown.
Sat., ,, 25.—Cricket Match *v.* Metropolitan Police. Home.
Mon., ,, 27.—Special Subject: Clinical Lecture by Mr. Just.
Tues., ,, 28.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Wed., ,, 29.—Surgery: Clinical Lecture by Sir Charles Gordon-Watson.
Cricket Cup Tie *v.* Middlesex Hospital.
Athletic Sports Match *v.* St. Thomas's Hospital.
Fri., ,, 31.—Sir Percival Hartley and Mr. L. B. Rawling on duty.
Medicine: Clinical Lecture by Dr. Morley Fletcher.

EDITORIAL.

ONE of the great figures in the life of the Hospital has left us. Sir Anthony Bowlby died on April 7th, after a short illness. A Memorial Service was held at the Church of St. Bartholomew the Great on April 10th. The King was represented, and there were present all those who had known him in his many capacities.

The present-day students will remember him chiefly as a regular visitor to Surgical Consultations, where he opened the discussion with those dry, concisely expressed opinions that never admitted an ambiguity. But there is a host which will mourn him for qualities monthly consultations could never show.

* * *

Mr. McAdam Eccles has for many years guided the affairs of the JOURNAL as Chairman of the Publication Committee. His retirement from the Chair takes place this month, and it is with great regret that we announce his departure. We hope in our next issue to do justice to the benefits he has conferred upon the JOURNAL in the past.

* * *

Museums are quiet places; nothing ever happens in them unless they are open to the public. And then it is only the puppets of romantic novelists who do startling things against a background of dead specimens. During the last month the Museum, apparently tired of being just passively rearranged, did something on its own. Of some specimens of wood in a case, one was found reduced to an ashen powder, its label slightly charred, and the neighbouring specimens bearing the marks of

its destruction. At first the sun was blamed: its rays must have been focused by a flaw in the glass door. A later authority declared that the substance was not ash; it was fungus. Then a sample was analysed; it contained no potassium, and therefore could never have been part of a living plant. Finally it was remembered that the wood came from Egypt. In the face of the alleged power of the gods of that country and of our ignorance of their exact habits, we hesitate to expose our spiritual nether garments to the risk of being bitten by a Jackal-headed Deity in the after life by making any profane suggestions. We are willing to waive materialism, and we leave it to our Rider Haggards to suggest sinister fates for those who meddle in the matter. "Combustion" did it. If it was spontaneous, we can only express gratified surprise that it should have happened in St. Bartholomew's Hospital.

* * *

At a meeting of the Council of the Royal College of Surgeons on April 11th, it was decided to invite Sir D'Arcy Power to accept the title of Honorary Librarian of the College in recognition of his distinguished position as a bibliographer, and of his work in re-editing Plarr's *Lives of the Fellows*. We would like to offer our heartiest congratulations to Sir D'Arcy Power on thus becoming the first Honorary Librarian, and to the College on its good fortune in securing his services.

* * *

PAST *v.* PRESENT CRICKET MATCH.

The Past *v.* Present match will take place on Saturday, June 8th. Will those who would care to play communicate with Dr. Geoffrey Bourne, 25, Harley Street, W. 1?

* * *

ST. BARTHOLOMEW'S HOSPITAL WOMEN'S GUILD.

We are very pleased to be able to make the following announcement, to which we wish to draw the attention of our readers:

The Terrell String Quartet (of which the Misses Bowlby are members) has very kindly promised to give us a concert in aid of the Special Reconstruction Fund of the Guild, at the Court House, Marylebone Lane, Oxford Street, on Wednesday, June 12th, at 8.15 p.m.

We feel that it is indeed good of them that in spite of their recent great sorrow they have decided not to disappoint us, but to give their concert as previously arranged.

We hope that many will show their appreciation by obtaining tickets, which will be on sale on View Day.

Our Annual View Day Meeting will be held this year in the Library owing to the Great Hall being in process of re-decoration.

We hope that as many of our members as possible will make a special effort to attend, as we have been very fortunate in securing the Lady Mayoress and Sir Charles Wakefield as our speakers.

A cordial invitation is issued to anyone interested.

The Meeting will commence this year at 4 p.m., so as to allow more time to visit the wards afterwards.

* * *

MEDIGUILDANCES.

A series of dances is being arranged in aid of the Royal Medical Benevolent Fund Guild at the British Medical Association's Hall in their new buildings in Tavistock Square. The second of the series organized by St. Bartholomew's Hospital will be held on Thursday, June 13th, 8.30 to 12.30. Tickets: Single, 6*s.*; double, 11*s.*—including light refreshments and soft drinks—and Bridge Tickets 6*s.* each may be obtained from Miss Dey, The Matron's House, St. Bartholomew's Hospital; Mr. Ivor Philps, St. Bartholomew's Hospital; Mrs. Douglas Harmer, 9, Park Crescent, W. 1; Miss Joy Horder, 141, Harley Street, W. 1.

* * *

Mrs. W. Lovell and Mrs. J. E. H. Roberts, who are in charge of the depot at "Bart.'s" on Alexandra Day, Wednesday, June 12th, will be glad to have the names of any ladies who are willing to sell roses in the district around the Hospital. Names and addresses to be sent to Mrs. J. E. H. Roberts, 18, Montagu Mansions, W. 1. The sum allotted to the Hospital from the Alexandra Rose Day Fund has been increased each year, and last time amounted to £1000. It is hoped that this year there will be again an increase in the amount collected by our depôt. This will only be possible if the number of sellers can be increased.

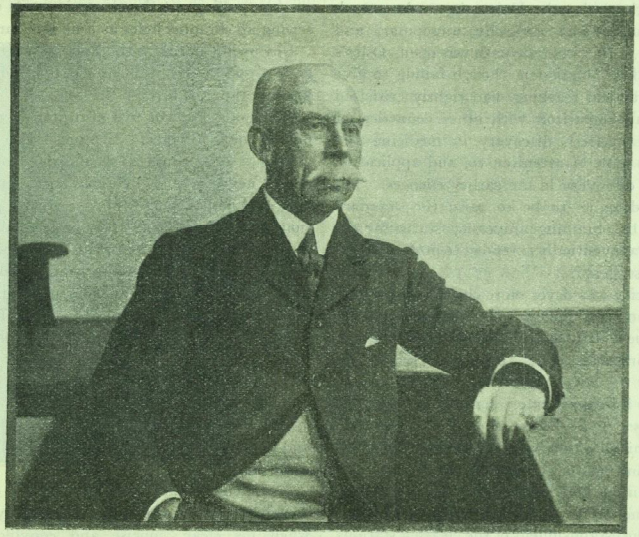
ACKNOWLEDGMENTS.

The Antiseptic—The British Journal of Nursing—Giornale della Reale Societa Italiana d'Igiene—Guy's Hospital Gazette—The Hospital Gazette—Kenya and East Africa Medical Journal—Leprosy Notes—The London Hospital Gazette—Long Island Medical Journal—The Magazine of the Royal Free Hospital—The Medical Journal of Australia—Medical Review—Middlesex Hospital Journal—New Troy—Nursing Times—The Post-Graduate Medical Journal—The Quarryman—Revue de Medecine—St. George's Hospital Gazette—St. Mary's Hospital Gazette—St. Thomas's Hospital Gazette—The Student—The Speculum—University College Hospital Magazine—The University of Toronto Medical Journal.

OBITUARIES.

SIR ANTHONY BOWLBY.

BOWLBY and I were associated in the School from 1882 to 1920. We were almost exactly of an age, but he was two years or so my senior in the School. He was Surgical Registrar when I was demonstrating anatomy, and made a great reputation by his teaching of surgical pathology in the Museum. When I was Medical Registrar he was already



Assistant Surgeon. About 1895 I was appointed on the Staff, and then as Joint Treasurer of the School began to be closely associated with him, and to take an active part in the School policy.

At that time we were in very low water. Our income, as the Dean will remember, was about a quarter of what it is now, and at the same time the preliminary and intermediate sciences were requiring extensions and improvements both in equipment and in personnel. It was an extremely difficult time. But a younger generation was rapidly coming on to the Staff, every one of whom was determined that the interests of the School must be considered before anything else. I cannot recall the details, and I am writing far from London, but I remember that we maintained two principles—first that the junior posts should be better paid, so that service in the School, though always remaining a ground for promotion, should not establish a claim that work had not been requited; and secondly, that members of the Staff should in every possible way improve the teaching of medicine and surgery regardless of labour and private interest.

Bowlby had carrried out this policy even in junior posts, and I remember with great pleasure the cordial sympathy and hearty co-operation which existed among those of us who were of that standing. I should like to mention Tooth especially. A more unselfish colleague than he could not exist. But we were all in the swim, and if the phrase "a band of brothers" could ever be justified in speaking of a hospital staff it was applicable to us younger men then. Most of us, apart from hospital work, were warm personal friends, which made everything easier.

The financial difficulty of providing for the better teaching of the sciences was greatly relieved by a Government grant, given, I think, through the Board of Education. It carried with it as a condition the

abolition of the old "share" system, and from that time the payment of teachers, both senior and junior, was made on a regular rate, according to the work done.

The next great question that arose was our connection with the University. About 1896, when the Cowper Commission sat, it had been proposed that the preliminary and intermediate sciences should be removed from the School and grouped in one, two or three centres under the University. This had been negatived, and rightly, for I am certain that a medical school loses enormously if it is divorced from the sciences on which pathology and practice rest. The Haldane Commission, about 1910, took a different line, and aimed at the control of the Schools by the University. An attack upon our autonomy was naturally unpopular, and doomed to failure. But a middle path was open. Osler's evidence before the Commission, though failing to give due weight to practical teaching, had rightly criticized the weakness, in comparison with other countries, of our contribution to fresh discovery in medicine and surgery, and the want of attention to, and application of, the results of discovery in the earlier sciences. The best way seemed to us to be to raise the standard of our teaching by obtaining university status for the teachers. This was eventually extended to professorships of medicine and surgery.

Bowlby's sagacity was never more clearly shown than in his adoption of this policy. He had no academic traditions, he knew little of the sciences, and he was throughout a practical man. But he realized the situation, he saw the advantage to the School, and he threw his weight into that scale. I never admired him more than in this.

It was while this question was still in debate that the war broke out, and he and I went out to France. We were both appointed to G.H.Q. and we shared rooms throughout the next four and a half years. Bowlby's great work was the establishment of the clearing stations. These were a formation conceived after the Boer War, and never yet put into practice. Their functions were not laid down precisely, but were left to develop as needed. The stationary condition of the war in France turned them on that front into large hospitals where surgery of the most daring kind was regularly practised. The tradition of the army till then was that wounded men must be at once transferred to the Base, and that there alone could major operations be performed. The dreadful injuries of the Great War upset this. Hundreds of men were brought in daily whose wounds were such that they must have died during transport. Their only chance was immediate operation. Already in the autumn of 1914 Bowlby had realized this, had impressed it on G.H.Q., had devised the equipment necessary for the installation of first-rate operating theatres, and was obtaining these one by one as they could be sent out. Later, this scheme was completed by the organization of the personnel. "Teams" comprising two surgeons, an anæsthetist and a sister were organized, which moved about as the fighting required. They never, of course, replaced the Base. That remained the centre where the great advances were made—the treatment of compound fractures of the thigh for instance, and the conditions, imperfectly understood before, of perforating wounds of the chest. But the immediate surgery at the front was the means of saving thousands of lives, and I shall never forget the impression I received on seeing a surgeon pulling out the successive coils of intestine, and sewing up shrapnel holes as if he was darning a stocking.

Of Bowlby's work at the Red Cross, Sir George Makins gave a good description in the *Times* of April 11th. I knew nothing of it.

Perhaps a word or two of a more personal kind may not be out of place. A more loyal and honourable colleague, a more unselfish and devoted servant of the School never existed. He had a great talent for friendship, and had, I should think, a greater personal connection with old students than any member of the Staff. He and I never differed that I remember in Hospital politics, and we passed four and a half years in close daily association in France in undisturbed friendship. I do not think that we once had a difference. A man of whom one can say that is very uncommon.

WILMOT HERRINGHAM.

I should like to be allowed the very special privilege and honour of adding my mite to the other appreciations of Sir Anthony.

I so well remember the first time I came in contact with him in 1887, at a surgical pathology demonstration, when his clear, concise and convincing method of teaching struck my expanding mind, and has ever been an example to me from which, I fear, I often fell far short.

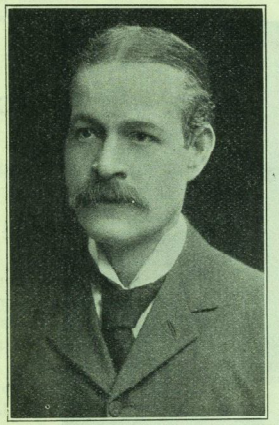
I owe my life to Bowlby, and with many another Bart.'s man whom he has helped with his surgical acumen and ability, would stand with those who are proud to have been his pupils and friends at the glorious old Hospital, with its long history and tradition of surgeons and surgical teaching. May his memory live long, entrenched in the proud affection of his *alma mater!*

W. MCADAM ECCLES.

ALPHONSO ELKIN CUMBERBATCH, M.B.(Lond.), F.R.C.S.(Eng.).

It is with the deepest regret that we have to record the death of our distinguished Consultant, Mr. A. E. Cumberbatch, who succumbed to an attack of pneumonia in his eighty-second year at Great Sarratt Hall, Herts, where he had been living in retirement since 1918.

He was educated at University College School, and obtained the senior scholarship when he joined St. Bartholomew's in 1866. After a brilliant career as a student, during which time he won the Foster Prize and the Kirkes Gold Medal, he became House Surgeon to the late Sir William Savory, having graduated as an M.B.Lond.



By kind permission of the Lancet.

in 1871. Later he passed the F.R.C.S. examination, and for a time was Resident Anæsthetist, until his appointment as Demonstrator of Anatomy in the Medical School. He quickly succeeded in making his lectures and demonstrations attractive to the students and earned a great reputation as a teacher of anatomy.

During this period he became interested in otology, and was given charge of the new Aural Department when it was inaugurated in 1882, in succession to Mr. John Langton, the general surgeon who had previously attended to the ear cases in the Hospital. He was one of the first ear specialists to be appointed in one of the general hospitals of the country and he devoted his time entirely to the treatment of the ear, leaving the nose and throat patients to Lauder Brunton, Butlin and Bowlby successively. For twenty-five years he carried out his work with the help of his friend and assistant, Mr. L. A. Lawrence, retiring in 1907. Although he took a keen interest and helped largely in arranging the details of the new Out-Patient Department, he handed over the charge of it to Mr. C. E. West as soon as it was completed. In 1914, after the outbreak of the war, he again took over a large part of the work, and continued to see out-patients until the Armistice.

Many generations of students derived much benefit from the teaching which they received in his Out-Patient Department in one of the boxes in the old Surgery adjoining Smithfield Market. In spite of poor accommodation he examined there large numbers of patients twice weekly and gave admirable demonstrations to his clerks. His in-patients were admitted to the general surgical wards, as at no time were there any special "Ear" beds or any house surgeon to the Ear Department. As an operator he had a deft hand with a remarkable delicacy of touch. Undoubtedly he did much to advance the surgery of the ear during a period when most of the aural operations were being performed by the general surgeons. Although not a voluminous writer he contributed valuable papers to the *St. Bartholomew's Hospital Reports* and to other periodicals, also contributions to various text-books, such as Walsham's *Surgery* and Heath's *Dictionary of Practical Surgery*. He was one of the founders of the original Otological Society of the United Kingdom, and for some years served as its President. Gifted with such a fine personality and with a knowledge of his speciality possessed by few others of his time, he naturally acquired an extensive private practice with people who had absolute confidence in his advice.

Cumberbatch had a memory of remarkable accuracy, and will be remembered by many of his successors who were fortunate enough to enjoy his friendship as a rare conversationalist. Anyone who had the good fortune to walk with him in the country was rewarded by hearing many interesting comments on nature, many a good story, and always some vigorous criticism of politicians in general, especially of the then Chancellor of the Exchequer. He had a considerable knowledge of literature, of music and of the arts. Thus he was an admirer of Chinese pottery, and possessed one of the finest collections of old china in the world. As a young man he was a keen sportsman, played a good game of lawn tennis, often with Sir Henry Butlin, was for his time an excellent skater, a sound shot and a good billiards player. His love for animals, especially for cats, which were always in his room, was proverbial. Later on he took up golf and had many theories on how it ought to be played. Although never a long hitter, he often managed to defeat his opponent by making an

unexpected approach shot or by his deadly putting with an ordinary driver. In his games, as with his work, he always displayed great ingenuity and was a great sportsman.

To many he was a true friend, always ready to advise, and a companion whose loss will be deeply regretted. Without doubt the Aural Department of the Hospital owes a deep debt to and will long remember its founder.

Mr. Cumberbatch was married in 1881 to Alice Lucy Moffatt, who rendered him much help in his practice and died after forty-one years of married life, leaving three daughters and one son, Mr. Hugh Cumberbatch.

W. D. H.

R. L. MACKENZIE WALLIS, M.A., M.D.

Dr. Robert Lauder Mackenzie Wallis, who died on April 1st, after a short illness, at the early age of 43, graduated B.A. from Downing College, Cambridge, taking a first class in the Natural Sciences Tripos. On leaving Cambridge he was appointed Lecturer in Chemical Physiology at University College, Cardiff. In the autumn of 1911 he came to work in the Laboratory of Chemical Pathology at St. Bartholomew's Hospital, and was appointed Demonstrator in Chemical Pathology in 1912. He succeeded Sir Archibald Garrod as Lecturer in Chemical Pathology in 1919, and in 1925 he was appointed Chemical Pathologist to the Hospital.

In the war he held a commission as Temporary Captain R.A.M.C., and was sent on service to India, where he served on the staff of the 34th General Welsh Hospital at Deolali. From Deolali he was seconded for special service in the Parel Laboratory, Bombay, and at the end of the war, though asked to continue his work for the Government of India, he elected to return to St. Bartholomew's.

Mackenzie Wallis was a tireless worker. No ordinary man could have done the routine laboratory work as he did, and yet find time to pursue research in a wide variety of directions, and always on original lines. But in addition to this he studied clinical medicine; he obtained the diplomas of L.M.S.S.A. in 1913, and in 1919 he graduated M.D.Camb., and was awarded the Horton-Smith Prize for his thesis.

In his laboratory work he will be chiefly remembered for his interest in diseases of the pancreas and in diabetes mellitus. His modification of Folin and Wu's method of blood-sugar estimation is now in routine use in many laboratories. He was the first to show that the glycosuria of pregnancy is of pituitary origin. His idea that sulphæmoglobinæmia is due to the presence in the blood of reduced hæmoglobin led to his discovery of the nitroso-bacillus. The variety of his knowledge and interest is shown by his papers on kidney disease in pregnancy, on metabolism in the insane, on protein hypersensitivity in the diagnosis and treatment of a special group of epileptics, and by numerous writings on the chemical pathology of gastro-intestinal disease.

His fertile brain was never at a loss for a helpful suggestion in the diagnosis of obscure disease, and many engaged in general practice know the value of his work and advice. He took chemical pathology to the bedside with a genius and versatility that will long be unequalled. And now that he has left us, his friends at the Hospital will always remember his readiness to help them, his courage in difficulties and his devotion to work. He leaves a widow and three children.

G. E.

SOME CONTRASTS IN MEDICAL EDUCATION.

An Address delivered to the Abernethian Society on March 7th, 1929.

(*Concluded from p.* 101.)

The schools of Australia are an interesting contrast among themselves, and each is perhaps typical of the city it is situated in—not of the city in the material sense, but of the people and of their activities and cultures. All are of the university type, similar to those of the provincial cities of this country. They have pre-clinical departments directed by professors of the university, staffed by men who look forward to careers in these sciences, and equipped with laboratories sufficient for satisfactory practical work by the students. Unfortunately financial considerations limit the staff to an irreducible minimum, so that teaching occupies too much of their time, and there is little left for the investigations that keep the departments alive and progressive. It is only in recent years that the Australian schools have been producing graduates of their own universities to occupy teaching posts in their pre-clinical departments, and many members of their staffs must still be drawn from the universities at home. This is possibly of value to the departments, bringing in new methods and ideas, but it also handicaps them, as they are not on quite the same level as the departments at home in their choice of staff, since candidates for appointments are not always prepared to accept posts of equal status and emoluments so far from home. This difficulty is gradually correcting itself, and whereas the Australian universities looked a few years ago to the home country to supply their staffs, local men are being appointed in increasing numbers.

Of the pre-clinical departments, those of anatomy stand out strikingly, and in one of the universities there is a department of anatomy that, in my opinion, compares favourably with the anatomy departments throughout the Empire in its activity and its achievements. Anatomy is not a subject of dull dissection and description there, but the staff is engaged in the correlation of structure and function by investigations of fundamental importance, and its influence on the whole medical school is already apparent. Histology is included in the departments of anatomy.

There are not separate departments in bacteriology, bio-chemistry and pharmacology, these subjects being included in the departments of pathology and physiology, but similar defects are to be found in many of the medical schools of this country. On the whole the pre-clinical education is satisfactory and compares well with that found in our provincial universities. The financial stringency is at present apparent, but as the country matures the nation will realize its obligations to university education.

The clinical education at the Australian universities suffers in the same way as at the provincial universities of this country from the difference of outlook of the hospital governing boards and of the universities. The hospitals are, so to speak, lent to the universities, and the educational arrangements and facilities are those that can be obtained with a minimum of bother and expense to the hospital. At one of the Australian universities three hospitals supply the medical school with clinical material for teaching in medicine and surgery. A student may take his courses at any of these and may move from one to another, but in practice this is seldom done, and a student usually obtains all his clinical experience at one of the three. In this way a spirit of rivalry is encouraged, and rivalry is good for progress and efficiency. Each hospital has a Dean, who supervises the studies of the students in the wards of his hospital. There are thus virtually three hospital schools offering education in the clinical subjects. At the same time the university controls the lectures, and the courses in obstetrics and the special subjects. Unfortunately the spirit of rivalry and jealousy between the hospitals extends to the university, which is ultimately responsible for the whole curriculum, and this lack of co-operation between the four bodies does not encourage progress and efficient education. At another of their universities, a hospital situated close to the university with a well-equipped department for clinical pathology is virtually a university hospital, and there is

close co-operation with the university faculty, but it is not sufficiently large for the clinical requirements of all the students, and a number of them do their ward work at a second hospital where the university influence is not so marked.

The clerks and dressers keep university terms as they do in the provincial schools of this country, and so cannot occupy the same responsible position in the work of the hospital as they do here in London. There is no provision for laboratory work in association with the ward work, but that is a fault that is common here also. In Melbourne two of the teaching hospitals have research institutes attached to them, and provided for by private endowments. Excellent work is done in them, and they make up to some extent for the deficiency in ward laboratories and provide opportunities for investigations by the young clinicians of the hospitals. Unfortunately they have no university status, and are of much less value than they could be if they were part of the official educational machinery. The number of resident appointments in the various hospitals utilized for teaching is sufficient at present to enable almost every graduate to obtain such an appointment. These appointments provide a rotation through at least medicine, surgery and a special department in the course of a year, and so give good opportunities for a general experience. They have one serious drawback, however. A resident is never with one ward or firm for more than four months, so that there is little opportunity for him to really settle down as part of a team or to become of such value to his chief as he would if the association was of longer duration. This, I am sure, prevents the work rising above that necessary for taking care of the patients, and prevents the observations and records reaching the level requisite for original investigations in clinical problems. A house-physician, or house-surgeon, can be a very important factor in the investigations of his chief. These resident appointments are allotted as the result of special examinations for the purpose.

When the graduate has completed his house appointments he usually proceeds at once to practise. This is largely because the country needs them, and they can make a living at once. It is unfortunate, as few of the young graduates work in the pre-clinical departments—a form of training that would be of inestimable benefit to the school, not only by strengthening the future clinical teachers, but also by aiding the overworked staffs of the pre-clinical departments.

It would be difficult to find a group of more efficient practical clinicians than the teachers in the clinical departments of the Australian schools. They are well read, they keep in touch with all that is going on in other parts of the world by means of literature and by periodic visits to Europe or America, and set an example of practice of a high order. They are, with certain striking exceptions, rather too busy to devote to teaching that large proportion of their time and of their thoughts and energies that we have learnt to expect of our chiefs.

In general, the medical education of the Australian universities provides an efficient sound training in thoroughly up-to-date practice, but so far it has not produced so much advancement and progress as might be expected from the high level of capacity and attainments of the teaching staffs. The community is still a young one, and time will soon rectify the deficiency.

Of the three principal medical schools, that of Adelaide is the smallest. Perhaps because of this there is a close contact between the student and his seniors. There is a tradition of high general educational attainments in the university and the city, which is seen also in the medical school, and the educational standard is culturally and professionally high, even if financial considerations prevent the technical equipment being of the level expected in modern scientific departments of university standing. The University of Sydney is situated in the largest city of the Commonwealth, and its medical school offers a good efficient education of a strictly utilitarian type. It has received a generous endowment for cancer research, and has recently decided upon the appointment of full-time professors in medicine and surgery. At Melbourne the atmosphere is something between that of cultured Adelaide and utilitarian Sydney—a mean, but not altogether a comfortable mean, for the medical school is striving after a high academic standard in medical science that it cannot at present afford, but which it knows it must soon provide, while maintaining a good all-round practical training, necessary because of the vast primitive country that its graduates must serve. In the last few months the University of Melbourne has decided to appoint a full-time professor of obstetrics.

The medical schools of America present so great a variety of standards in educational value that it is impossible to speak of them collectively. They vary from the worst in the world to something nearly the best. There is little profit in discussing what is merely bad, and I propose briefly to describe some of the features of the good ones. These are important, for they embody the best that money can supply to-day, even though we recognize that money cannot supply all that is to be desired.

In the good schools of the United States it is possible to recognize the influence of German university development. The pre-clinical subjects are dealt with in departments designed for the teaching and development of sciences. The equipment and laboratory accommodation is lavish. The student performs experiments for himself to a much greater extent than anywhere in the world, he is encouraged to think for himself, the development of present knowledge in some few selected problems is presented to him in full detail so that he sees for himself how knowledge grows, and he receives lectures in large groups to as small an extent as is compatible with the time limits set by the curriculum. The teaching staff is large, the professor being provided with numerous assistants of all grades—a necessary provision for teaching in small groups—and each member of the staff has a considerable portion of his time free for investigations. Unfortunately the American genius for organization robs the teaching of much of its apparent freedom, of much of its educational value. There are too many demonstrators, so that the student seldom has the opportunity of muddling along and out for himself—an experience that is worth many hours of successful guidance through perfectly organized and equipped experimental procedures. The atmosphere of investigation that is found in these departments with their large staffs of professional scientists is of great potential educational value, but too often the student's time is so accurately mapped out and organized that he has no time to benefit from the best of all features of these American pre-clinical departments—the intimate contact with original workers. The student body of those better American schools is a selected one, and does not present the wide variations of intellectual capacity that are found in our more democratic institutions, but even so I think the bulk of the students pass on from their pre-clinical years in a state of intellectual indigestion. They know a great deal about many things, but they have not got a wide conception of the biological problems that the pre-clinical years are designed to provide. A few men always are receiving inspiration and acquiring enthusiasms, and this makes up, and perhaps more than makes up for the defects—defects that are less serious than those to be found in the pre-clinical years of most medical schools. On the whole, then, these schools provide a pre-clinical education of high standard, and provide opportunities for stimulating and encouraging the better students to an attitude of inquiry and investigation. These schools number a dozen or so; from the others—good though many of them are—we can learn little more, for they are all of the same university type in their pre-clinical departments, and aim at the standard, set by their more richly endowed sister institutions.

The clinical departments of these better medical schools are organized as university departments. In such subjects as medicine and surgery you find a professor in charge with numerous assistants—at one school these numbered 40—some full-time, some part-time, and adequate laboratory accommodation. The students' work is confined to the university term. They act as clerks and dressers for rather shorter periods than in this country, and have fewer cases allotted to each, but their notes are supervised to a much greater extent, and they carry out more laboratory investigations themselves. There are no systematic lectures, but clinical lectures, clinical pathological conferences and informal teaching in small groups are designed to cover most of the ground. Each student is encouraged to look up the literature, and to write short essays or commentaries on subjects incidental to the ward work. In all its phases work is more closely supervised than in this country, and they gain a more extensive knowledge of the investigations that have led to present knowledge, and that are being carried on at present to advance knowledge. This is largely due to the number of young workers attached to the departments, each of whom is expert in and working in some limited field. Their teachers are therefore largely somewhat inexperienced as clinicians, and in this I think lies the main defect of their system. Good education in such subjects as medicine and surgery requires good practice as its foundation, and the example of first-class clinicians handling patients and their problems cannot be dispensed with. I do not mean that there are no first-class clinicians attached to these clinical departments, but I believe their students come in contact with many clinical teachers who are not chosen primarily because of their clinical experience and pre-eminence.

To a large extent the deficiencies of the undergraduate training are rectified by the appointment of every graduate as an intern to his teaching hospital or to some other hospital recognized by the university. The intern works in several departments in turn, and the better ones become "residents," the total period of service lasting at least one year and often two years or more. At the better teaching hospitals, a resident and four or five interns are usually allotted to a group of 50 beds. The work of the interns need never be hurried, and they have time to investigate their cases as fully as possible in the wards and laboratories. The interns must, of course, take much of the responsibility from the student, but the system of education cannot be judged fairly without regarding the internship as an integral part of it. The less well-endowed schools, with their less elaborate organization, less numerous staff and laboratory facilities give an education that is more suited to the average student, but there can be only approval for a scheme that offers the best possible education to the better men. It is no spirit of disapproval with what

has been accomplished that I say they would do better still with more numerous experienced and able clinicians on their teaching staffs.

The Canadian universities at Toronto and Montreal are organized on much the same lines, but are not so wealthy. With fewer salaried assistants in the clinical departments, they make more use of the practising clinicians for teaching. As educational institutions for turning out a medical man well trained to work out the problems presented by every sick person and sufficiently instructed to serve the public, they are, I think, more economically efficient from a national point of view than those very expensive American schools. Further, in Toronto and Montreal there are ample opportunities for the better men to develop and to devote themselves to investigation.

The education in our own London hospital medical schools has developed around the ward work of the clerk and dresser. The ward appointments are the foundation, and the pre-clinical departments which have been added were until recently mere adjuncts of the clinical school. They have gradually been improved and provided with staffs, the members of which are making careers in their subjects, but they are not yet all of university standard, though this defect is steadily disappearing. The clinical teaching, on the other hand, is in many ways the best in the world. You have as teachers the most experienced and skilful clinicians, and the clerks and dressers bear responsible parts in the ward work. They study with examples of the best practical work constantly around them. They are free to teach themselves as students are nowhere else. They are less hampered by supervision than is the case in America, and although this develops the good man satisfactorily, I think the less good would be the better for closer supervision and more guidance. The man well trained in the pre clinical subjects, however, finds too little scope for the application of the methods of study and investigation that the sciences have taught him. This is partly because of financial difficulties, but largely because if you have the most experienced clinical talent to guide your work you cannot also have the men with time and opportunities to keep up with the ever-moving pre-clinical sciences. The recent experiment of forming professorial units in the various London hospitals is an attempt to provide small departments of university type to act as a link between the pre-clinical sciences and the clinical departments, and to provide an opportunity for clinical medicine to utilize the methods and the laboratory facilities of the sciences in the closest association with ward work, without altering the essential nature of London's clinical teaching —teaching by successful and experienced practising clinicians. Another possible fault in our system is that there are too few house appointments in the teaching hospitals to enable more than a minority of the graduates to obtain the advantage of what is the most valuable appointment the school has to offer.

I have said nothing so far about Oxford and Cambridge. These universities give the best training in the pre-clinical sciences for the man who can make use of them. They give time and opportunities for the student to live with his science, and to come in close contact with great men in all branches of learning. A pre-clinical education at one of these universities and a clinical education at a London hospital is a combination that offers, I believe, opportunities for the better man as good as can be found anywhere in the world to-day.

If I have said little so far about the life of the student in these various schools, I have not been unmindful of the importance of this aspect. In Australia and America the vacations are long. In London there are practically none, once the clinical years are reached. In Australia there is a wonderful climate, and there is the most wonderful country with wonderful plant-life and bird-life within easy reach. Football, cricket, tennis, golf, bathing, fishing, race-meetings, and indeed every form of game and of sport are easily obtained. In America they are obtainable, but usually so expensive that the medical student has little chance to enjoy them. In term time the nose of the American student is close, too close, I think, to the grindstone. In London the vacations may be negligible, but the opportunities for exercise, for hobbies of all kinds and for relaxations are present throughout the year. Throughout the day also there is time for discussions, time for friendships. If other schools also have unions and student societies, none can boast of such a Square as we have, and nowhere in the world is there anything to compare with a seat on a summer day on the edge of the Fountain.

I have refrained from making direct comparisons, for this would be unjustifiable without a more intimate and a longer knowledge of each medical school. In pointing to a few contrasts, I have endeavoured to show how we can learn from the study of other schools the lines along which we can best develop our own. What is best must always be a matter of careful consideration, for experiments in education must never be lightly undertaken, for they are terribly expensive in men and in time. You might well ask why I should speak to you of matters over which you have no control, but medical education is not a question of the present; it is an ever-present problem, and the future of our School will soon be in your hands.

F. R. FRASER.

MORE MEDICAL NOTES.

By Sir THOMAS HORDER.

ON INFLUENZA.

(1) There is as yet no exact criterion in the diagnosis of influenza. The nearest approach to an exact criterion is a certain clinical picture, more easily recognizable and more reliable during an epidemic than at other times. The picture varies during different epidemics, and we do not yet know if this is because influenza is a group of different infections or because the nature of the secondary infection varies in different epidemics. In the absence of an epidemic it is only the sporadic cases that are unusually severe that can at present be diagnosed with certainty.

(2) Like most acute infections, influenza has malignant, mild and abortive forms in addition to the "ordinary" form. There is very little doubt that some attacks of the disease, and by no means always mild ones, are apyrexial.

(3) If the pyrexia in influenza persists for more than seven days it is highly probable that a focal (inflammatory) lesion is present. In the great majority of cases the lesion is in the respiratory tract. Conversely, a pyrexial patient who presents no signs of a focal lesion after seven days is probably not suffering from influenza. Consider then (especially) paratyphoid and typhoid fevers.

(4) The most characteristic pulmonary lesion in influenza is a bronchiolitis. The physical signs of this lesion, and therefore the physical signs most characteristic of influenza, are weak breath-sounds and copious small *râles*.

(5) The pulmonary physical signs in influenza often seem quite inadequate to explain the degree of illness of the patient and (or) the persistence of the pyrexia. They may seem inadequate because their extent is small, or because they are the signs of "congestion" only—fallacious reasons, and born very largely of a mistaken effort at comparing the pulmonary lesions in influenzal infection with those of pneumococcal infection.

(6) There is probably no pleuro-pulmonary lesion which may not result from influenza with secondary infection—bronchitis, pneumonia, pleurisy, empyema, abscess of lung and gangrene.

(7) When consolidation (hepatization) of the lung occurs as the result of pneumococcal infection in influenza its course is rarely that seen in penumonia. Crisis is not to be expected, or, if it occurs, it is likely to be delayed. Resolution, too, is often late and also slow. Again, recrudescences of lobar consolidation are frequently seen in the subjects of influenza, and relapses, which are distinctly unusual in pneumonia, are not at all uncommon in the former disease.

(8) The sputa may have diagnostic value in influenza: (i) Copious, pink, frothy sputa in an acute pyrexial illness with marked respiratory symptoms and signs; and (ii) green sputa, the colour being due to altered blood.

(9) The most helpful therapeutic agent available so far in severe influenza is fresh air. To secure this, day and night, is of the utmost importance. The bed should be placed near the centre of the room. Curtains, blinds, screens and all excessive furniture should be discarded. Air and warmth are both desirable in the room, but if either must be sacrificed, it should be warmth.

(10) The control of pyrexia in influenza follows the rule of fevers in general: it should be effected by aero- and hydro-therapy, not by drugs. The management of the bed-clothes is very important, and is seldom understood. The patient's "feelings" are often misleading: the higher the temperature, the more rapidly does he lose heat from the skin; the more rapidly he loses heat, the more "chilly" he feels and the more bed clothes he demands. Left to himself, therefore, he tends to render ineffective the natural means by which his fever is controlled. The sole criterion as to the amount of bed-clothes to allow is the temperature of the patient at the moment, not his sensations.

EPILEPSY: THE ATTACK.

EPILEPTIFORM attacks have been universally studied since the age of Hippocrates; but the essence of their nature remains as little determined now as when Lucretius penned the following account of a convulsive seizure:

> "Oft, too, some wretch, before our startled sight,
> Struck as with lightning, by some keen disease
> Drops sudden: By the dread attack o'erpowered
> He foams, he groans, he trembles and he faints;
> Now rigid, now convulsed his labouring lungs
> Heave quick, and quivers each exhausted limb."

Gradually knowledge has been collected by constant and accurate clinical observations, so that now types of attacks with various outward manifestations are recognized. For descriptive purposes—and for these only, as the attack is purely an expression of disturbed physiology and not a disease in itself—they may be grouped as followed: (1) *Grand mal*, (2) *petit mal*, (3)

pyknolepsy, (4) narcolepsy, (5) inhibitory epilepsy or cataplexy, (6) myoclonic epilepsy, (7) co-ordinated epilepsy, (8) tonic epilepsy, (9) epilepsy partialis continuans, (10) reflex epilepsy, (11) local epilepsy. Only by aligning all the facts is it possible to come to a conclusion as to the probable nature of the neural mechanisms in epilepsy.

Grand mal.—In these attacks there is a loss of consciousness and severe muscular spasm. The attack may be conveniently divided into several stages. Firstly, a sensation or a local spasm, known as the aura, heralds the onset of the attack, and may in some cases permit the sufferer time to lie down or to remove himself from danger. This is rapidly followed by the second stage, in which unconsciousness sets in and the patient falls suddenly to the ground. Almost immediately—sometimes even before the second stage—there is the generalized tonic spasm of muscles which characterizes the third stage. The sudden spasm of the muscles of the thoracic cavity forces air through previously spasmodically contracted vocal cords and causes the "epileptic cry"; this, however, is a comparatively rare symptom of the attack. The eyes may or may not be open; and the pupils dilate as cyanosis progresses. The posture of the limbs varies; usually the arms are slightly abducted at the shoulder, the elbow and wrist are flexed while the fingers are clenched over the thumb. The legs are extended, seldom flexed until the later stages of the attack. But bizarre attitudes may be adopted during this stage. In some cases the violence of the spasm is very great and the shoulder may be dislocated. At first the face pales, then flushes and ultimately becomes livid, on account of the fixation of the respiratory muscles. The cyanosis rapidly increases, but lessens after a few seconds, when the onset of clonic movements denotes the fourth or clonic stage. Careful palpation of the muscles will reveal that following the tonic spasm a few weak vibratory tremors take place in the muscles, which vibrations gradually increase until there are slight visible remissions; as these become deeper the muscular contractions become more shock-like, until the head, arms, trunk and legs are jerked with great violence. Frequently the most severe clonic spasm is the last. During this period air is sucked in and expelled, churning up the saliva and causing the frothing at the mouth, and the tongue is bitten through the clonic movements of the jaw. Gradually the lividity passes off, the spasms become less frequent but not less severe, until they end and the patient lies senseless and prostrate, in a condition of coma: this may be termed the fifth stage. Imperceptibly the coma passes into a deep sleep lasting two or three hours, from which the patient arouses with no recollection of the previous sequence of events. In a few cases, however, there is a further stage, the sixth, which is of the greatest medico-legal importance. This is characterized by a return of an ability to perform the most complicated acts; though during these acts the patient may appear conscious and normal, they are acts performed outside the consciousness of the patient himself. For instance, a gentleman who had a mild attack in Edinburgh "woke up" in a street of Glasgow, having bought a return railway ticket and travelled by train to Glasgow. But post-epileptic automatisms may not be so harmless, and more than one epileptic has reached the court of law on a murder charge for a foul deed perpetrated during a post-epileptic state.

It is of importance to remember this condition and, further, that it may not only last minutes, but hours, and in a few instances even days. During the attack, probably in the tonic or clonic stage, the bladder and rectum may be emptied. Gowers was of the opinion that this was not due merely to the state of the bladder or rectum or to the loss of consciousness, but was the result of some peculiarity in the convulsion, since it occurs invariably in some patients and never in others. The duration of the attack varies, but it is rare for the tonic and clonic stages to last more than a few minutes, though the following coma and sleep may be of several hours' duration. It would appear reasonable to mention at this point that a patient may pass from one attack into another with no intervening stage of consciousness—the *status epilepticus*, which is fraught with considerable danger to life unless treated with promptitude and fortitude. Extreme measures may be necessary to cause a cessation of attacks before death ends them.

Petit mal.—This type of attack is characterized by a momentary loss of consciousness. The individual will suddenly stop in his occupation, look vacant for a moment and then go on with what he was doing; he may even finish a sentence which he has commenced, and be aware of having had an attack only through finding that he has dropped something which he held in his hands, or that he is the object of anxious observation. The face may pale and then flush. Occasionally a slight spasm may be associated, such as a nod of the head or a jerk of the limbs. Usually the patient is dull for a little time after the attack and he may perform some complicated action, such as running into the corner of the room—an occurrence reported by Wilson in one case. Many a so-called hysterical attack is really an automatism following a *petit mal* attack of so brief duration as to elude observation. It is of interest to note that progressive mental degeneration is more commonly associated with attacks of *petit mal* than with attacks of *grand mal*.

Pyknolepsy.—In 1906 Friedmann and in 1907 Heilbronner gave the first descriptions of this condition. Since then many papers have appeared on the subject, and in this country Adie has written an excellent article. According to Friedmann there is only one symptom, namely the inhibition of the higher psychical processes lasting from five to ten seconds. The power of speech and of voluntary movement is in abeyance, but automatic movements are retained. The child sits or stands with the limbs relaxed, staring vacantly in front of him; the eye-balls may roll upwards, the lids may flicker, but there are no convulsive movements, and consciousness is never entirely lost. Recovery is immediate and complete. In other words, the attack is indistinguishable from "*petit mal*." But there are characteristics that make this condition distinctive. The frequency of the attacks is great—from six to several hundreds in the day; mental deterioration does not set in, and the child learns his lessons, remains affectionate and mentally alert—this is in contra-distinction to "*petit mal*." Again, the attacks commence suddenly in healthy children between the ages of four and ten years, and end as abruptly after a few days, weeks or years, leaving the child perfectly healthy. These attacks are quite uninfluenced by the recognized therapeutic measures, such as bromide and luminal. The whole condition is one of importance not only for diagnostic purposes but for prognostic.

Narcolepsy.—A more interesting and intriguing syndrome could hardly be found in the domains of neurology. Let one cite a case as an instance. A man in perfect health was profoundly amused at an incident; without warning he slid to the ground and fell asleep for fifteen minutes. In this case there are two points of extreme interest—the emotional afferent stimulus and the consequent sleep. It is by no means a new condition, for both Gowers and Jackson allude to attacks of sleep in association with epilepsy; but recently it has become more common, and excellent monographs have appeared by Adie, Wilson and others. Adie suggests that it is a disease by itself; such a tenet is difficult to uphold, as many cases of narcolepsy develop epilepsy or are associated with it. In short, it appears to be a variant of epilepsy and is best considered as such. The association with emotion raises the possibility of such attacks originating at the level of the thalamus the supposed level of emotional sensations. Such speculation is not devoid of probability, for it is well recognized that tumours involving the third ventricle have as a prominent symptom marked drowsiness. Though rare, narcolepsy raises problems regarding the association of emotion with motor inhibitory centres, for though apparently asleep, more than one narcoleptic patient has asserted that he is aware of happenings around him.

Inhibitory epilepsy or. cataplexy. Ordinarily the syndrome of epilepsy is considered to be essentially kinetic or hyperkinetic; though true in many cases it is not universally so. And the question arises as to the possibility of immobility forming the prominent feature of an attack. Both Jackson and Gowers interested themselves in such conditions, and Gowers was of the opinion that discharges in epilepsy may inhibit movement. A girl with an abscess in the pole of the right temporo-sphenoidal lobe experienced sudden gustatory sensations, which were immediately followed by a complete paralysis of the left face, arm and leg, lasting from ten to twenty minutes; observation failed to reveal any tonic or clonic spasms. The patient remained conscious throughout. The close relation of this form of epilepsy to narcolepsy and catalepsy is self-evident. It almost appears as if the paralysis consequent to a hyperkinetic attack as described by Todd has arisen without the actual convulsion. Jackson speculated "that there may be discharge spreading slowly in a motor cortex of the middle level, excessive enough to cause slight after-exhaustion of some of its elements, although one not strong enough to overcome the resistance of lowest motor centres and thereby to produce actual convulsions." Such a theory would explain inhibitory epilepsy.

Myoclonic epilepsy.—Patients subject to attacks will voluntarily state that they have the "jumps"; these take the shape of irregular twitchings of a limb, involving various muscle groups. While combing the hair in the morning the comb will suddenly fly out of the hand across the room. The breakfast cup will tumble across the table. It is never associated with a loss of consciousness. Though this occurs most frequently in patients suffering from major epilepsy, it also occurs as an isolated symptom in an epileptic subject. In children it is more common, and is said to be in some cases of familial character, as described by Unverricht under the name of "myoclonus epilepsy." Wilson lays stress on this symptom as being of early diagnostic value in doubtful cases of epilepsy. The movements in this type are possibly originated at the middle level of the motor system, but they have also been stated to be of spinal origin.

Co-ordinated epilepsy.—Attention has been drawn to the confusional state following epileptic attacks, during which various automatisms may be performed outside the consciousness of the patient. Such automatisms may initiate the attack. Wilson describes the case of a boy with a left frontal abscess who waved his right arm in circles as if turning the handle of a barrel-organ. The "epilepsia cursiva" of Bootius is of the same nature. A recognition of this type of epilepsy is of

utmost value, for such movement must originate at the highest level of the neural axis. The difficulty of distinguishing between a hysterical attack and such a true epileptic attack becomes great.

Tonic epilepsy. These attacks are characterized by tonic contractions only, to the entire exclusion of clonic spasms. The posture adopted in many such fits—the flexion of the arms and extension of the legs—has suggested that the physiological localization is in the posture-effecting mechanism of the mid-brain.

Implication of the cerebellum has been mentioned in explanation of such attacks; but the excellent description given by Purves-Stewart suggests the attitudes adopted in a decerebrate animal with or without the cerebellum, so that cerebellar origin is unlikely. In favour of this is the statement by Holmes that he has not seen a tonic fit in a lesion of the cerebellum alone, but only when the region of the fourth ventricle was implicated.

Epilepsy partialis continuans.—This condition is essentially different from myoclonic epilepsy in that the twitching movements are constant though irregular in time. Commonly the twitching movements are localized to one limb, as in a case of this nature where the movements, limited to the left hand and fingers, had been present for five years. This patient also suffered from *grand mal* attacks. The twitching movements resemble those seen in a local motor fit, and in no way resemble any tremor or choreiform movement. In other words, they are movements that resemble those associated with disturbances of the second neural level of Jackson, the pyramidal cortex. Yet at operation in one such case as reported by Wilson no abnormality of the cortex could be detected.

The condition is undoubtedly rare, but was recognized in 1894 by Koshewnikow, since when cases have been reported by Orlowski, Spiller and others.

Reflex epilepsy.—Attacks may result from some external stimulus. For instance, a man subject to attacks finds that if he catch his left toe against the kerb in the street or the step of a stair, he immediately has an attack of the "*grand mal*" type. This is a rare clinical observation among those subject to attacks. Again, Oppenheimer, and later Holmes, have described cases of so-called acoustico-motor epilepsy: a sudden loud noise, such as the dramatic firing of a revolver behind the patient, causes him to fall to the ground in a convulsive seizure. Other types could be cited from the literature, but it is sufficient to remember that attacks may be precipitated by some external sensory or afferent stimulus.

Local epliepsy.—A description of such attacks would necessitate a description of the various auræ of epilepsy. The aura, whatever its nature, be it either sensory or motor, may constitute the whole attack; and as the aura is an expression of physiological disturbance at a definite anatomical level, such attacks are classified under the term of "local epilepsy."

Criticism may be levelled at such schematization of various epileptic attacks, on the grounds that several types of attack may be encountered in one patient. But it is of help in deciding treatment, in giving a prognosis, and lastly in the understanding of neural mechanisms involved in epilepsy. At present we are not concerned with treatment and prognosis.

Several theories are offered as working hypotheses to explain the neural mechanisms in such attacks.

First is the irritation theory. This is based largely on experimental work, which has shown that electrical stimulation of the Rolandic cortex and its neighbourhood produced local and generalized convulsions. However, it is as yet undecided whether electrical stimulation of the cortex causes excitation or inhibition of the cells; in favour of the latter, Vogt's work can be mentioned, wherein he showed that electrical stimulation of the cortex caused marked chromatolysis in the nerve-cells. But apart from such experimental difficulties there are obvious grounds, as Gowers suggested, for believing that a fit may be due to focal irritation, from which a discharge spreads with increasing force to the motor area. Such an hypothesis is well upheld by clinical evidence; the aura of a *grand mal* attack is the focus of the discharge, which spreads to the motor cortex, excites it and gives rise to the convulsive seizure. But does this sufficiently explain such forms as pyknolepsy, inhibitory epilepsy or narcolepsy?

These other forms immediately suggest other possibilities, and in 1873 Hughlings Jackson expounded his release theory. Martin has more recently summarized this point of view. Briefly, it is suggested that the highest cortical centres normally control lower centres by inhibition; thus an attack is an expression of decontrol or progressive loss of inhibition spread over various physiological levels. The tonic stage is loss of cortical control and release of mid-brain mechanisms; the clonic stage is loss of cortical control and of mid-brain control with release of spinal mechanisms, the clonic movements being likened to the walking reflexes of a "spinal animal." If such an explanation be correct, then rapid loss of control by higher centres should produce a convulsion during the induction period of surgical anæsthesia; practically speaking it never occurs, and certainly only with the greatest rarity in epileptic subjects. Again, in a cataplectic attack the plantar reflex may be extensor, yet throughout the attack the patient may remain conscious—in other words, the higher centres are not inhibited.

This leads one to a third possible theory, namely, the short-circuit theory; here, instead of the higher centres being involved, the "stimulus" which causes the attacks may pass along paths and jump to other paths at a lower level and never reach the highest level. In favour of such a theory are the facts that children whose highest centres are still practically undeveloped, and the feeble-minded, whose cortices are poorly developed, are more prone to convulsions than are normal adults. As yet it has not been satisfactorily proved that in the absence of a physiological block, stimuli will seek expression along other pathways, and further it is known that neural pathways carry specialized stimuli, which are rarely, if ever, interchangeable.

Lastly there is the explosive theory; it differs essentially from the others because for its understanding it is necessary to consider the nervous system as a whole and not as a system of pathways. Such a theory has been suggested, because it is difficult to conceive of a stimulus proceeding in such an orderly fashion as Hughlings Jackson would wish, and yet causing such a dramatic sudden unconsciousness and fall as is frequently seen; also, the motor expressions of a fit are frequently of the greatest disorder. Though not identical, the fit may resemble an anaphylactic reaction to which the nervous system as a whole responds.

It is obvious that no one mechanism will explain all attacks, and it is therefore probable that there is a combination of the mechanisms enumerated. The first three mechanisms have received much support from experimental physiological and anatomical research; but investigation of the chemistry of the body as a whole and of individual cells offers now a most fruitful field for elucidating the cause of an attack.

What, then, is epilepsy? By many it is considered a disease, but owing to its close association with many pathological states of the body as a whole, and of the central nervous system itself, at most it can only be counted a symptom-complex. The lack of, or rather the inability to find, organic lesions does not in itself warrant classifying it as a disease; rather is it a manifest admission of the poverty of present-day methods of examination of disordered functions. And to the establishment of such methods the sciences of biochemistry, electrology, etc., should be made more frequently available. But though such investigations may have to be carried out in a laboratory, careful clinical observation along with balanced and critical reasoning may prove of inestimable value; and on account of this every patient having attacks should be a fund of information, and should never be branded "just an epileptic."

The works of Hughlings Jackson, Gowers, Turner, Collier, Holmes, Wilson, Lennox and Cobb and others have been freely consulted, and much appreciated in the preparation of this article. E. A. C.

PHASES IN THE POETRY OF VACCINATION.

(a) *Anglo-Saxon:*

LULLABY.

Lollai, lollai, litil child!
Whi wepistou so sore?
Mumy hi ame roodie wilde
At thon gloomfizzed Doctoure.
Im screeged m'armwid a needil;
Hit smairts an roodles deare.
Never wid pe lemmeebil *
While ee alives were.
Lollai, lollai, litil child,
Child, lolai, lullow!
Into poxrid world
Incommen so ertow.†

* Permit me to languish.
† Art thou.

(b) *Elizabethan:*

MARKS OF BLISS.

The joyous pocks floating on ivor'd arms,
Or legs an gentil ladies gowns require,
Discharge their crustie pustooles mid alarmes
Of faces fever'd under raishes dire.
The lymphat from yon vaccinial cow
At the deare murmurs of her calf did fall,
Now fires thy blood to healthy thee endow,
Thou pretty toddler eke not fit to crawl,
Thy gentle skynnie keep from poxes small!

(c) *Wordsworthian:*

THE SOLITARY TAKER.

Will no one tell me whence those rings?
Perhaps the rosy western glow
Of Phœbus' kisses? serpent stings
That bit thee long ago?
Or is it some less noble fate,
Some epidemic spied too late
That's made the girl be vaccinate,
Lest sad Tuscania's spotted crew
Should bring the pox to me and you?

(d) *Browningesque:*

THE VACCINATOR'S FUNERAL.

James once was proud to vaccinate a nurse;
Then thinking better
Filled he the bank account, the private purse,
Appointments by letter.
Vaccinated he the hairy arm of man,
Skins tough as leather;
Sharpened up scalpel or bought a new trepan
Four pocks together.
Soon growing *too* bold tried a Duchess (Park Lane),
Rarer, more tender;
Self-gathered for an outbreak, purple pain
Chafed by suspender.
Left he the common herd, pushed to the top,
Crowded with culture;
Died then a common death after the drop;
Seek we sepulture.
Let us begin to rattle up the hearse,
Singing together,
Who changed from nurse to purse—from good to worse—
Now ends his tether.

(e) *Of the Decadent Nineties: "Studies in Strange Sins."*

DANSE DES PLAIES.

Her body quivers, she
Quivers; she turns and turns
On herself furiously,
A fiery itching burns
Her leg inordinately;
Desire within her burns
To scratch those lymphy stings.
She on herself returns,
Across her bed she flings.
Oh, sponge, canst cool those stings?
Her desires drown the night
With pruritic appetite.

F. C. R.

THEODOR BILLROTH (1829—1894).

TO the list of instincts compiled by the psychologist and the theologian, Sidney Lee has added the instinct of commemoration. A cynical generation whose liver has grown large with the keeping of centenaries has come to look upon these but as resuscitation chambers in which famous men are privileged for a few sweet moments to recover from the coma begotten of the Opium of Time.

What shall be said of Theodor Billroth, the centenary of whose birth was celebrated last month in his native town by the banks of the Blue Danube? Shall not he be remembered as the Master Surgeon who, by breaking down the barriers between medicine and surgery, has made surgery an indispensable branch of therapeutics?

In 1872 he performed the first resection of the œsophagus, in 1873 the first complete excision of the larynx, and in 1881 the first successful resection of the pylorus. In the early days of his career Billroth was known as a daring surgeon, who operated on what he himself described as hopeless cases. With increasing experience of operable and inoperable cases he became more and more conservative. His operative technique was as sure as it was swift. He lectured while he operated; indeed it was said of him that he introduced an operation into his lecture like an illustration into a book. His operations, performed with the delicate touch of the artist, did, indeed, illustrate his lectures, original in substance, clear and simple in delivery. The intestinal operations of the "Father of Visceral Surgery" Naunyn described as autopsies *in vivo*. Each operation was begun as though the case were typical, but the operator, ever ready to take upon himself infinite responsibility, changed the text-book operation to suit the individual case. Nothing ever ruffled his equanimity. Billroth lectured and operated in the morning, saw patients and worked in his laboratory in the afternoon, in the evening found complete relaxation at the theatre or the opera, or in the large circle of his friends, and devoted the greater part of the night to literary work and to his correspondence. Like the late Lord Haldane, he required but little sleep. How a singularly busy man could find time for reading, studying and writing can only be explained by his ability—natural or acquired, who can say?—to take up any subject at any moment and concentrate upon it to the exclusion of all other thoughts. His capacity for relaxation was as great as his gift of concentration.

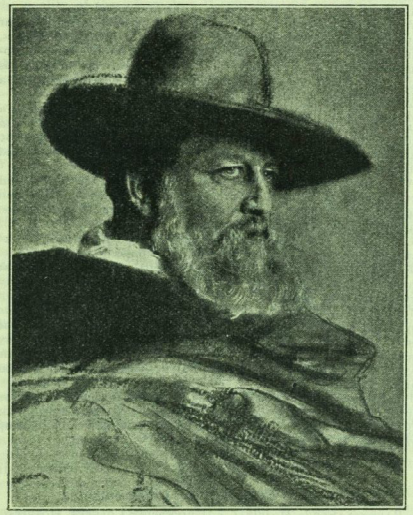
Of his written contributions to surgery the following serve as samples:

His *Lectures on Surgical Pathology and Therapeutics* (1863) can still be read with pleasure for their grace of literary form; eight editions appeared during their author's lifetime. The work has been translated into nearly every modern language.

The Surgical Clinic of Vienna (1879) is unique in the literature, marking as it does the beginning of the era of statistical surgery. It was Billroth who originated the modern "follow-up" system.

The Medical Sciences in the German Universities: A Study in the History of Civilization (1879; translation by W. H. Welch, 1924) is perhaps the most characteristic product of Billroth's pen. The virile style, the epigrammatic wit, the attractive breadth of vision are here combined with a pleasing historical sense.

Billroth enjoyed life to the full and entertained lavishly. When, however, he felt the grasshopper as a burden, he put his house in order and in the nearness of his last necessity spent his days in quiet contemplation of the sun and the mountains, alone with his thoughts.



Th. Billroth

Music was the solace of his life, though as a composer he did not take himself too seriously and often murdered his darlings.

He was a strikingly handsome man, with twinkling blue eyes, the stoop of the scholar, the voice of the musician, and the language of the orator. The gospel of his life was effort. To have striven, have made an effort, to have been true to certain ideals—this alone is worth the struggle. How Osler's words put the halo of the saint around the frame of human frailty!

Billroth's work has been piously carried on in his spirit by his disciples—Mikulicz, Czerny, Gersuny (who wrote his life), Eiselsberg: who can name them all? It is through them that the school continues; through them the master is still among us. *Scribantur haec in generatione altera.*

It is better for mankind to suffer from an overdose of the vitamins of centenaries than for its benefactors to suffer from the deficiency disease of oblivion.

W. R. B.

The portrait is reproduced by kind permission of the publisher, Julius Springer, Vienna.

ABERNETHIAN SOCIETY.

A MEETING of the Society was held on Thursday, March 7th, at 8.30 p.m., Mr. Burrows in the Chair.

Prof. FRASER gave an address entitled "Contrasts in Medical Education." A full report of the address is concluded elsewhere in the May number of the JOURNAL.

A vote of thanks to the Professor, proposed by Dr. GEORGE GRAHAM and seconded by Mr. BAXTER, was carried with acclamation.

STUDENTS' UNION.

RUGBY FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* LONDON HOSPITAL.

Hospital Cup Semi-final.

On Tuesday, March 12th, at Richmond, we met London Hospital, whom we beat in the final last season.

On this occasion the selected sides were both almost identically the same as in the previous meeting, but at the last moment we were deprived of the services of our captain, R. N. Williams, and of H. E. Edwards, both having succumbed to influenza.

The game was fought out in typical Hospital Cup-tie fashion, and there was no scoring in the first half. We were further handicapped when J. T. Rowe dislocated his shoulder after ten minutes' play. A. W. L. Row, who had nobly come into the pack at a moment's notice, went to full-back and Grace moved up to his old position on the right wing.

The second half was a repetition of the first, relentless tackling preventing either side from making much progress, until a quarter of an hour from the end, when after a bad mistake by one of our forwards, followed by a quick heel from the loose by the London and a dash and a feint to pass by G. V. Stephenson, the latter just managed to cross in the corner as he was brought down. Bart.'s then played the best football of the match, our seven forwards getting the ball in the scrums and holding an advantage in the loose, and with J. T. C. Taylor playing in his best form, it seemed as though we were going to pull the match out of the fire, but our centres were somewhat off form and were closely marked by their opposite numbers. Two minutes from the end the ball bounced awkwardly for Row, and Rae following up scored between the posts for Stanley to convert.

As was the case last season, G. V. Stephenson was unable to move far on his own, but he scored the all-important try, and his kicking was of great use to his side.

Our forwards played well, although they missed Williams's leadership, and in spite of being one short most of the game, managed to give the backs more than a fair share of the ball. The latter did their best to open up the game, but the close marking of the London backs kept us in check. Row played well at full-back and never failed to find touch.

Result: London Hospital, 1 goal 1 try (8 pts.); St. Bartholomew's, *nil*.

Team.—A. H. Grace (*back*); J. T. Rowe, T. E. Burrows, C. B. Prowse, J. D. Powell (*three-quarters*); F. J. Beilby, J. T. C. Taylor (*halves*); C. R. Jenkins, H. O. Robertson, V. C. Thompson, W. M. Capper, J. M. Jackson, J. R. R. Jenkins, A. W. L. Row, A. Barber (*forwards*).

Although we have lost the Cup, our "A" team has regained possession of the Junior Cup, the results being:

1st Round: Beat U.C.H. "A" 7—0.
2nd Round: Beat London "A."
Semi-final: Beat St. Thomas's "A."
Final: Beat Guy's "A" (holders), 2—1.

On March 16th the Hospital defeated the London Scottish at Winchmore Hill by 3 goals (1 penalty) and 2 tries (19 pts.) to 2 penalty goals (6 pts.).

On March 23rd, at Winchmore Hill, Mosley were beaten by 4 tries (12 pts.) to 2 goals (10 pts.), the winning try being scored by Powell in the last minute of the game.

On March 30th we journeyed to Bath for our last match, where, playing under mid-summer-like conditions, we were leading by 3 tries to 1 when Beilby was carried off the field. Playing seven forwards, we were unable to get the ball after this, and we were eventually beaten by 20 pts. to 14.

ASSOCIATION FOOTBALL CLUB.

ST BARTHOLOMEW'S HOSPITAL *v.* U.C.H.

This semi-final of the Hospitals Cup was played on February 25th at St. Thomas's Ground, Chiswick.

Bart.'s set the pace and attacked first. The forwards seemed excited and were rather unsteady, causing one or two chances to be missed. They made amends later, when Gibb scored with a hot shot. Within a few minutes, however, U.C.H. had equalized in a scramble around our goal. Just before half-time Hunt succeeded in hooking the ball into the net, thus giving us the lead.

After the interval the game ran very much in our favour, Sykes and Burgess adding goals as a result of good team-work.

The whole team did well, the defence being particularly steady.

Result: St. Bart.'s, 4; U.C.H., 1.

Team.—W. A. Mailer (*goal*); R. McGladery, G. R. Morgan (*backs*); A. W. Langford, C. A. Keane, J. R. Crumbie (*halves*); A. M. Gibb, I. E. Phelps (capt.), W. J. Burgess, W. Hunt, R. A. Sykes (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* MIDDLESEX HOSPITAL.

United Hospitals Association Cup Final.

On Wednesday, March 6th, we contested the final with Middlesex Hospital at Wembley Stadium.

After our bright performance against U.C.H. in the semi-final we were confident of success, but realized Middlesex must be a good side, as they beat Guy's 3—1 in the other semi-final.

The game started at a tremendous pace, and after an unsuccessful attack by our opponents we pressed for ten minutes, being very unlucky not to take the lead. The first goal was scored for us by Burgess, who managed to get the ball past the Middlesex goalkeeper from a difficult angle.

For a time we enjoyed most of the play, and it was only the brilliant work of the opposing backs and goalkeeper which prevented a further score.

Middlesex, however, were not to be outdone, and after some bewildering movements brought the scores level. Soon afterwards, in an endeavour to head the ball away, Langford put through his own goal. Before half-time Hunt scored for us with a good shot, and we crossed over with the score "two all."

For the greater part of the second half Bart.'s were usually attacking, but could not score, while with two magnificent efforts Clyde, ably supported by a forceful attack, obtained two goals for Middlesex.

Middlesex Hospital thus won the trophy for the first time in their history.

On the whole they deserved it, for they took all the chances which came their way. Had we been half so opportune we must have won easily.

Team.—J. H. Watkin (*goal*); R. McGladery, G. R. Morgan (*backs*); A. W. Langford, C. A. Keane, J. R. Crumbie (*halves*); A. M. Gibb, I. E. Phelps (capt.), W. J. Burgess, W. Hunt, R. A. Sykes (*forwards*).

JUNIOR CUP FINAL.

The second team beat Guy's, the holders, by 8—3 and U.C.H. by 6—0 before meeting St. Thomas's in the final. The game was marred by an unfortunate accident to Caplan, who injured his knee after five minutes. Until the interval the game was very fast and exciting, both teams trying hard for a lead. Bart.'s obtained the upper hand, however, and led by 4 goals to 2.

Afterwards our opponents were completely overplayed. Splendid combination by our forwards, backed up by an excellent defence, enabled Bart.'s to win by 11 goals to 3. Especially prominent were Hiscock and Brookman in defence, and Gilbert and Shackman in attack.

Team.—J. B. Johnson (*goal*); L. A. Hiscock, R. L. Wenger (*backs*); F. E. Wheeler, C. H. Brookman, J. Hughes (*halves*); A. Caplan (capt.) A. R. Boney, R. G. Gilbert, D. Shackman, E. G. Darke (*forwards*).

BOXING CLUB.

On Tuesday, March 26th, at the N.S.C., Bart.'s won the Hospital Boxing Cup for the third time. The Hospital was well represented at the ringside, two-shilling and gallery seats.

German measles and "flu" removed three of our team at the last minute. We were lucky to get the services of E. G. C. Darke, who, on three days' notice, and in spite of his duties as Casualty H.P., managed to work off 6 lb. and make the light-weight limit.

J. French, displaying unsuspected ferocity in one so mild in appearance, knocked out his man in the first round of the semi-finals of the flyweights. Only the referee's interference saved his opponent in the finals from a similar fate also in the first round.

We had no entries in the bantam and featherweights, as both our representatives, Jackson and Telfer, were victims of German measles.

In the light weights E. G. Darke, substituting for W. H. D. Trubshaw, displayed great coolness and skill. Effectively keeping his opponents at arms' length in both his fights, he boxed his way to a well-deserved win in this weight.

G. F. Petty in the welter weights was unlucky to meet as good a man as Matthews of Middlesex in the first round. Matthews is a really good man and hits hard with both hands. Petty took a lot of punishment, but was unable to land a really effective punch, and lost a very game fight on points.

A. T. Blair, in the middle-weight finals, fought the fastest and prettiest fight of the evening with Fowler, of Thomas's. Both men displayed speed and skill above the usual standard at these shows. Blair won fairly handsomely on points.

In the finals of the light-heavyweights G. C. Knight met an experienced and clever boxer in Hodges, of Thomas's.

Knight, attacking vigorously from the start, piled up points, but connecting with a lucky one on his jaw was knocked out half way through the first round.

In the heavy weights P. J. Richards brought off his third successive win in the Hospitals boxing. With the aid of a useful straight he won the semi-final easily on points. In the final, giving away nearly a stone, and appearing very tired in the last two rounds, he gave us some moments of anxiety, but eventually won on a good margin of points.

Final results: Bart.'s first, 4 wins, 1 runner up and 1 entry, 19 points; St. Thomas's second with 15 points; London third with 9 points. Bart.'s, Guy's and St. Thomas's have now won the Cup three times, and London have had it once.

HOCKEY.

Final Inter-Hospital Hockey Championship.

ST. BARTHOLOMEW'S HOSPITAL *v.* UNIVERSITY COLLEGE HOSPITAL.

March 21st, at Richmond. There was quite a large and enthusiastic crowd, which unfortunately witnessed U.C.H. win by 1 goal to *nil*.

In the first half play was slightly in our favour—in fact only brilliant saving by their goalkeeper and on one occasion by their left back prevented us from opening the score. Their forwards were fast and clever, and always looked dangerous near the circle. At half-time there was no score.

After the change of ends U.C.H. were pressing heavily. Our forwards fell away somewhat against a safe and steady defence. Their forwards were combining better and Hodgkinson was called upon to clear with lusty boot. Five minutes from the end their outside right sent in a rasper, which found the far corner of the goal. Although we attacked for the remaining time we failed to score.

U.C.H. deserved to win, and we think it is the first time they have won the Cup. They were certainly the better balanced side.

The team has had an excellent season, having played 25 matches, won 19, drawn 3, lost 3.

This result has been brought about by the keenness shown by the members and their regularity in turning out. Let us wish them better luck next season.

Team.—H. L. Hodgkinson (*goal*); F. C. H. White, P. M. Wright (*backs*); M. Fordham, W. F. Church, K. W. D. Hartley (*halves*); E. J. Neill, F. H. McCay, C. Hay Shunker, J. W. C. Symonds, A. G. Williams (*forwards*).

REVIEWS.

DISEASES OF CHILDREN. Edited by GARROD, BATTEN and THURSFIELD. Second edition, edited by HUGH THURSFIELD, D.M., F.R.C.P., and DONALD PATERSON, M.B., M.R.C.P. (London: Edward Arnold, 1929.) Pp. 1106. 207 illustrations. Price 45*s.* net.

A cat may look at a king. Similarly, one may review a book which represents the accumulated experience of some forty experts. Whether, in either case, the resulting observations have any value is another matter. Here is a book on the diseases of children to which those of the English school who are best qualified have contributed, writing on matters in which they are especially interested. It conveys very completely the English opinion and teaching on the subject. Beyond this, it is unnecessary to say much about the quality of the information it contains, and comment may be confined to the other attributes which one looks for in a book.

A second edition of "Garrod, Batten and Thursfield" was to be anticipated with some misgivings. The original book had a certain charm and style which, one felt, would be lost in the revising. A sentence in the introduction to this edition was reassuring: "It is hard to re-clothe in other language a subject once satisfactorily treated, without losing freshness." One's fears were completely dispelled by reading the book itself. There are twenty-three new contributors. Every section has been brought up to date. Some have been added to, others partly, and some wholly, re-written. Yet the qualities which were so attractive in the older book have somehow been retained. The general arrangement of the work is the same. A chapter on diseases of the eye has been added. It would be interesting to know what arguments led to the section on the feeding of infants and children being elevated—or degraded—from the prolegomena to the chapters. One regrets that a section on the physiology of infancy was not added to the new edition to deal more particularly with those matters in which an infant differs from an adult, the early blood changes, the special nutritional requirements for growth and so forth. The questions are to a large extent discussed in one place and another in the appropriate chapters, but if they were grouped together under one heading, a more complete picture of the mechanisms peculiar to babyhood would be given. Apart from this, the book covers the ground very thoroughly. The material is presented in a concise way, without too much dallying with rival opinions and hypotheses. Consequently the tedium which attends the close examination of every point of view is obviated. In spite of its many contributors, the book escapes a drawback which is shared by so many of those of composite authorship, namely, reiteration. There is no overlapping or covering the same ground twice. The sequence of the argument runs almost as if it proceeded from a single pen. For this achievement the editors cannot be too highly congratulated.

There are other qualities which contribute to one's comfort in reading a book. The print is good and the margins sufficiently wide. The matter of margins is of greater importance than would appear at first sight. If they are narrow and the book be opened towards its middle part, the lines of print disappear down into a deep ravine, which can be explored only by breaking the back of the book. Many people prefer to leave such a volume unread. Considering its scope, this book is extraordinarily concise. There are, in fact, a hundred pages fewer in this edition than in the last. It is possible that this shortening is more apparent than real, because the make-up of the book seems to have been altered slightly. The illustrations have been changed and added to, and interest considerably enhanced thereby. Reproductions of skiagrams are sometimes referred to by that title and sometimes are called radiograms. During the last few years an additional and quite different meaning has become attached to the term "radiogram"; it would seem better to abandon it in its medical significance. The pettiness of such criticisms may be taken as a measure of the general excellence of the book.

Among the books on diseases of children which are appearing in increasing numbers this work holds a place entirely its own. The first edition maintained its supremacy for fifteen years. Its successor is worthy of it.

LECTURES TO NURSES. By MARGARET S. RIDDELL, A.R.R.C., S.R.N. Third edition, enlarged. (Faber & Gwyer, 1928.) Pp. 518. Illustrated. Price 6*s.* net.

Nurses are expected to know so much apart from their nursing proper, and are given so little opportunity for really learning additional subjects like anatomy and physiology, that it must be a difficult task to write a book for them.

This book, already in its third edition, can safely be recommended. The authoress was certificated at St. Bartholomew's Hospital, and has had much experience.

The parts on nursing are admirable, and the nurse who knows—and practises—the advice given will be good indeed.

We may be forgiven for making a few criticisms. No mention is made of counting the apex-beat with the stethoscope while a second observer counts the pulse, for the purpose of knowing the number of feeble heart-beats which do not reach the wrist. This useful information can readily be obtained by any nurse.

With regard to the preparation of patients for operation, we would like to add a note that there are many surgeons who do not give castor oil as a routine. Indeed, to some patients the discomfort caused by this drug is far greater than that of the operation.

The modern treatment of diabetes is not "to starve the patient for three to five days!" Adrenalin should be mentioned in the treatment of hypoglycæmia when sugar cannot be swallowed.

But these are small points in an otherwise excellent book.

ELEMENTS OF SURGICAL DIAGNOSIS. By ERIC PEARCE GOULD, F.R.C.S. Seventh edition. (Cassell & Co., 1928.) Pp. 730. Price 12*s.* 6*d.* net.

This at first looks a small volume until one realizes that there are over 700 pages, and that a very great amount of excellent practical information is packed into it.

Ordinary surgical text-books take diseases as the headings and put the signs and symptoms on to them; this book works in the opposite direction and takes different signs and symptoms as the headings, and then follows through to the different diseases. This is extremely useful for the student and for the practitioner when dealing with a difficult or rare condition.

Cholecystography and the use of lipiodol in diagnosis are fully described in this edition. The skiagrams are good on the whole, though a few are hardly up to standard. Most of the old terms have been eradicated, but such terms as "onychia maligna" and "sloughing phagedænic chancre" are confusing rather than useful. This book, as always throughout its many editions, occupies a position quite alone in its sound practical arrangement and with its wealth of useful information both for the student and for the qualified man.

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN.

ABERNETHY, D. A., B.M., B.Ch.(Oxon.), F.R.C.S.(Edin.). "Torsion and Strangulation of a Hydatid of Morgagni." *British Medical Journal*, January 26th, 1929.

BARRIS, J., M.D., F.R.C.P., F.R.C.S. and SHAW, WILFRED, F.R.C.S. "Rhabdomyosarcoma of the Ovary." *Proceedings of the Royal Society of Medicine*, January, 1929.

CHRISTOPHERSON, J. B., C.B.E., M.D., F.R.C.P. "A National Outlook on Tropical Medicine." Presidential Address to Section of Tropical Diseases and Parasitology of the Royal Society of Medicine." *Proceedings of the Royal Society of Medicine*, December, 1928.

CLARK, W. E. LE GROS, D.Sc., F.R.C.S. "The Thalamus of Tupaia Minor." *Journal of Anatomy*, January, 1929.

COCHRANE, R. G., M.D., M.R.C.P., D.T.M.&H. "Treatment in Leprosy." *Leprosy Notes*, January, 1929.

CORSI, H., F.R.C.S. "Punctate Melanodermia." *Proceedings of the Royal Society of Medicine*, December, 1928.

COYTE, RALPH, M.B., B.S., F.R.C.S. (L. R. BROSTER, D.M., M.Ch. [Oxon.], and R. C.). "Torsion of the Appendix of the Testis (Hydatid of Morgagni)." *British Medical Journal*, January 26th, 1929.

DAVIES, J. H. TWISTON, M.B. "Lymphangioma Circumscriptum." *Proceedings of the Royal Society of Medicine*, January, 1929.

——— "Chronic Circinate Eruption." *Proceedings of the Royal Society of Medicine*, January, 1929.

EVANS, GEOFFREY, M.D., F.R.C.P. "Essential Constipation." *Clinical Journal*, February 20th, 1929.

FREMANTLE, F. E., O.B.E., M.P., M.D., F.R.C.P., F.R.C.S., D.P.H. "The Authority of Parliament in Relation to Epidemic Disease." *Medical Officer*, February 2nd and 9th, 1929.

GASK, GEORGE E., C.M.G., D.S.O., F.R.C.S. "Radium in the Treatment of Malignant Disease." *British Medical Journal*, February 9th, 1929.

GORDON-WATSON, Sir CHARLES, K.B.E., C.M.G., F.R.C.S. "Specimen of Carcinoma of Ascending Colon with Great Dilatation of Cæcum: Removed by Resection of the Distal Half of the Colon after Preliminary Short Circuit." *Proceedings of the Royal Society of Medicine*, December, 1928.

GRAHAM, GEORGE, M.A., M.D., F.R.C.P. "The Interpretation of Blood-Sugar Estimations." *Lancet*, January 26th, 1929.

HALDIN-DAVIS, H., M.D., F.R.C.S. "Four Cases of Lupus Erythematosus Treated with Gold Preparations." *Proceedings of the Royal Society of Medicine*, December, 1928.

——— "Lichen Plano-pilaris." *Proceedings of the Royal Society of Medicine*, December, 1928.

EXAMINATIONS, ETC.

University of Cambridge.

The following degrees have been conferred:

M.B.—Holmes, E. G., Recordon, E. G.

B.Chir.—Maclay, W. S., Palmer, E. A. E., Sinclair, M. R.

M.B., B.Chir.—Barendt, G. H., James, E. T., Lloyd, W. J., Mellor, A. W. C., Pimblett, G. W., Preece, T. M., Slinger, L. A. P., Underwood, W. E.

University of London.

Second Examination for Medical Degrees, March, 1929.

Part I.—Ashton, D. R., Davies, D. O., Davies, H. H., Dipple, P. E., Gale, H. E. D., Harris, R. V., McOwan, B. M., Norsworthy, L. R., Shackman, R., Sutton, R. J. C., Telfer, W. P. McK., Thomson, D. M., Ware, C. E. M., Weddell, A. G. McD.

Part II.—Blumovitch, H., Bryer, M., Churchill, M. H., Dexter, L., Freeman, L., Gilbert, R. G., Hayward, S. T., Keele, K. D., Knight, G. C., Knox, R., Scowen, E. F., Strong, J. R., West, J. H., Williams, H. M., Winslow, V. F. F.

Conjoint Examination Board.

Pre Medical Examination, April, 1929.

Chemistry and Physics.—Crott, F., Dias, N. J., de Freitas, A. J. S.

Chemistry.—Horton, H. E. N., Jenkins, J. R. R., Noordin, R. M., Smallhorn, T.

First Examination, April, 1929.

Part I. Anatomy and Physiology.—Brookman, G. H., Hole, E. K., Jackson, J. M., Roberts, P. G., Savage, O. A., Thomas, J. C. S.

Anatomy.—Dodson, E. E., Orpwood, R. M. M. C., Oxley, W. P. M., Powell, J. D., Woods, T. G. R.

Physiology.—Cutlack, A. R., Symonds, J. W. C.

Part II. Materia Medica and Pharmacology.—Bamford, J. B., Davies, T., Edelsten, G. G. M., Heathcote, A. A., Mandelstam, M., Rowe, J. T., Spaight, P. Q. M., Thomas, J. C. S., Williams, R. N. H.

CHANGES OF ADDRESS.

BATTERHAM, Capt. D. J., R.A.M.C., Keyberry House, Forde Park, Newton Abbot.

EVANS, F. T., Gordon House, 37, Welbeck Street, W. 1. (Tel. Welbeck 2846.)

GILLON, G. GORE, "Waihola," Oakdale, Poole, Dorset.

HALL, P., 100, Gloucester Place, Portman Square, W. 1. (Tel. Welbeck 3373.)

LADELL, E. W. J., Elliot, Cape Province, South Africa.

MIDELTON, W. J., 12, Charminster Road, Bournemouth.

RAWKINS, M. D., Kingswood, Cross Deep, Twickenham. (Tel. Popesgrove 2527.)

CHANGES OF TELEPHONE NUMBER.

DONALDSON, M. (Tel. Langham 3648.)

GILLIES, H. D. (Tel. Welbeck 2211.)

ROXBURGH, A. C. (Tel. Welbeck 6818 and 6819.)

APPOINTMENT.

DALE, W. CHALMERS, M.B., B.S.(Lond.), appointed Medical Officer to the Government Training College, Ibadan, Nigeria.

BIRTHS.

DRIVER.—On April 18th, 1929, at Tregea House, Penzance, to Phyllis (*née* Pettit), wife of George P. Driver, M.R.C.S., L.R.C.P.—a daughter.

GOUGH.—On March 19th, 1929, at Highfield, Northwich, Cheshire, to Kathleen, wife of E. P. Gough, B.A., M.R.C.S., L.R.C.P.—a son (John Noël).

GRIFFITHS.—On April 1st, 1929, at Farfield House, Kidderminster, to Audrey (*née* Mennell), wife of P. Digby Griffiths, M.B.(Cantab.)—a second daughter.

HAYES.—On April 15th, 1929, at The Hermitage, Potters Bar, to Hilda (*née* Broughton), wife of Dr. W. E. Hayes—a son.

HOLDEN TINCKER.—On April 17th, 1929, at Painswick, Glos., to Kathleen (*née* Bates), wife of Surg.-Lieut. R. W. Holden Tincker, R.N.V.R.—a daughter.

HUBBLE.—On March 23rd, 1929, at Derby, to Joan, wife of Douglas Hubble, M.B., B.S., of 105, Kedleston Road, Derby—a daughter.

MAITLAND.—On April 12th, 1929, at Golders Green, to Joyce (*née* Knight), wife of Charles Titterton Maitland—a daughter.

PAYNE.—On April 16th, 1929, to Isabella Margaret (*née* Abbott), wife of Reginald T. Payne, F.R.C.S., of Abbey Court, St. John's Wood—a son.

MARRIAGES.

BUCHLER—WISELMAN.—On April 14th, 1929, at St. John's Wood Synagogue, by the Rev. Price and Rev. Prince, Dr. Eric Buchler, second son of Prof. Dr. A. Buchler, to Clara Wiselman, of Ebbw Vale, Wales.

LEHMANN—ELFORD.—On April 4th, 1929, at Christ Church, Radlett, by Rev. T. F. Yule, uncle of the bride, assisted by Rev. G. Gurney Richards, Dr. Harold Paul Lehmann, of Wickham Market, Suffolk, elder son of Mr. and Mrs. S. P. Lehmann, of Woodford Green, to Margaret Mary Elford, younger daughter of Mr. and Mrs. S. Elford, of Radlett.

MOSSE—THEW.—On January 24th, 1929, at St. Mary's Church, Hunstanton, Bardwell Ebden Tenison Mosse, younger son of Mr. and Mrs. Tenison Mosse, of Bristol, to Joan Alice, only daughter of Mr. and Mrs. Frank Sherwood Thew, of King's Lynn.

DEATHS.

BOWLBY.—On April 7th, 1929, at Stoney Cross, near Lyndhurst, Sir Anthony Alfred Bowlby, Bart., D.C.L., K.C.B., K.C.M.G., K.C.V.O., F.R.C.S., only surviving son of the late Thomas William Bowlby, aged 73.

CUMBERBATCH.—On March 23rd, 1929, at Great Sarratt Hall, near Rickmansworth, from pneumonia, Alphonso Elkin Cumberbatch, M.B., F.R.C.S., aged 81.

GRANVILLE.—On March 23rd, 1929, at 34, Halsey Street, Chelsea, Alexander Granville Pasha, C.M.G., C.B.E.

LEE.—On April 27th, 1929, died instantly in an accident, Edward Sidney Thomas Lee, elder son of Dr. and Mrs. W. E. Lee, 17, Princes Avenue, Muswell Hill, N. 10.

VAISEY.—On April 2nd, 1929, at Combe Down, Bath, Thomas Frederick Vaisey, M.R.C.S.E., L.R.C.P., late of Winslow, Bucks.

WALLIS.—On April 1st, 1929, at a nursing home in Hove, Robert Lauder Mackenzie Wallis, M.D., of 106, Harley Street, W. 1, aged 43.

WHITE.—On March 29th, 1929, Edward Augustine White, M.B., B.S., M.R.C.S., L.R.C.P.(Lond.), only son of Dr. T. E. White, Catford, S.E., aged 25.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for Review should be forwarded, accompanied by the name of the sender, to the Editor. ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C. 1.*

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, *The Journal Office, St. Bartholomew's Hospital, E.C.1. Telephone: City 0510.*

St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem."
—*Horace*, Book ii, Ode iii.

VOL. XXXVI.—No. 9.] JUNE 1ST, 1929. PRICE NINEPENCE.

CALENDAR.

Sat., June 1.—Cricket Match *v.* Herts Wanderers. Away.
Tennis Match *v.* Trinity College, Cambridge. Away.
Mon., „ 3.—Special Subject: Clinical Lecture by Mr. Elmslie.
Tues., „ 4.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Wed., „ 5.—Surgery: Clinical Lecture by Mr. Harold Wilson.
Thurs., „ 6.—Swimming Match *v.* Old Stortfordians. Away.
Fri., „ 7. Dr. Langdon Brown and Mr. Harold Wilson on duty.
Medicine: Clinical Lecture by Sir Percival Hartley.
Sat., „ 8.—Cricket Match *v.* "Past." Home.
Tennis Match *v.* University College, Oxford Away.
Mon., „ 10.—Special Subject: Clinical Lecture by Mr. Just.
Swimming Match *v.* Beckenham H. Away.
Tues., „ 11.—Prof. Fraser and Prof. Gask on duty.
Wed., „ 12.—Surgery: Clinical Lecture by Mr. L. B. Rawling.
Thurs., „ 13.—**Abernethian Society: Summer Sessional Address at 8.30 p.m. Prof. Grey Turner.**
Fri., „ 14.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Medicine: Clinical Lecture by Dr. Langdon Brown.
Sat., „ 15.—Tennis Match *v.* "Past." Home.
Mon., „ 17.—Special Subject: Clinical Lecture by Mr. Elmslie.
Swimming Match *v.* King's College Hospital. Away.
Tues., „ 18.—Sir Percival Hartley and Mr. L. B. Rawling on duty.
Wed., „ 19.—Surgery: Clinical Lecture by Mr. L. B. Rawling.
Last day for receiving matter for the July issue of the Journal.
Fri., „ 21.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Medicine: Clinical Lecture by Sir Percival Hartley.
Swimming Match *v.* Old Owens. Home.
Sat., „ 22.—Cricket Match *v.* Honor Oak. Away.
Tennis Match *v.* Bank of England. Home.
Mon., „ 24.—Special subject: Clinical Lecture by Mr. Rose.
Tues., „ 25.—Dr. Langdon Brown and Mr. Harold Wilson on duty.
Swimming Match *v.* Barry S.C. Away.
Wed., „ 26.—Athletics *v.* Westminster Bank.
Fri., „ 28.—Prof. Fraser and Prof. Gask on duty.
Sat., „ 29.—Cricket Match *v.* Streatham. Home.
Tennis Match *v.* Royal Artillery, Woolwich. Away.

EDITORIAL.

THE General Election will come upon us before we go to press, and will be over before the date of our publication. We are thus barred from prognostication, and from a comment upon the result, even had we been qualified to discuss the matter fully in its nicer medical aspects. But at least an Important Historical Event has not passed without mention.

* * *

Mr. McADAM ECCLES.

There have been times in the early history of the JOURNAL when its finances were strained, its circulation poor, and its contributors few. Periods of depression, hardly to be called crises in their slow onset and slower decline, nevertheless call for as determined action as any emergency; and as much wisdom is needed.

Over twenty years ago the JOURNAL was passing through lean years. The hard work and devotion of Mr. McAdam Eccles and others then connected with the Journal led into comparative, and finally settled it in absolute prosperity.

Advertisements, ever important in the finances of a paper, were sought for and found; old St. Bartholomew's men were persuaded to contribute articles; and a multitude of minor problems arising in the life of a growing paper were settled.

Against the shifting foreground of editors Mr. Eccles sat as Chairman of the Publication Committee, punctually and unfailingly attending every meeting. He has watched them pass, some brilliant, all keen, and has helped them all, stimulating the timid, and ballasting the too enthusiastic. His suggestions were always helpful, and showed an acute perception of changes that

the progress of the outer world demanded of a Hospital journal.

He was a store-house of knowledge concerning its history, but he never allowed his sense of its traditions to curb its growth and adaptation. His ideas were as young as the circumstances that prompted them.

There is perhaps a faint obituary tinge to this tribute to the retiring Chairman of the Publication Committee, and an impression confirmed by the association of a photograph with the third page of the Journal. But no one is more alive than Mr. Eccles. His retirement follows his retirement from the Honorary Staff of the Hospital.

The JOURNAL owes an immense debt to him for his long service as Chairman, and hopes to enjoy his continued though perhaps remoter friendship.

* * *

We extend a hearty welcome to Prof. Grey Turner, Professor of Surgery at the University of Durham, who is to direct the Surgical Professorial Unit for a fortnight during the coming month.

* * *

The Home Secretary has appointed Dr. Morley Fletcher to be a member of the Advisory Committee on the Administration of the Cruelty to Animals Act, 1876.

* * *

COMBUSTION AGAIN.

We raised the question of the supernatural last month, reporting the apparently spontaneous combustion of a piece of wood in the Museum. We have received a criticism of our comment:

In the Editorial of the JOURNAL for May, 1929, dealing with the mystery of the specimen of Egyptian wood which was in the Hospital Museum, appeared the statement: "It contained no potassium and could therefore never have been part of a living plant."

Though potassium salts are more or less necessary for plant life and growth, the following facts may be of interest:

It is known in Australia that plant ash is useless as a fertilizer when compared with plant ash in Europe. The reason is a deficiency of potassium in the soil and a corresponding deficiency of it in the ash both of native and of introduced flora. Inquiry establishes that this deficiency is about one-tenth the European content. Does Egypt also, perhaps, suffer from this deficiency?

Potassium is required for the transformation of chlorophyll into starch, and is present in green leaves and in sap of plants.

It has been shown that injury to a plant will cause recession of sap from the part affected; moreover, the plant will guard against loss of potassium especially.

There is a variation of the potassium content between the wood and the bark of a tree. In the lime tree the bark contains only 30% as much potassium as the wood, in the elm 10%. And in both these cases the total potassium content of the ash (wood and bark combined) is high even for European trees, reaching a figure of nearly 2%, as against the more usual 0·5% or less.

Potassium and sodium, which are closely allied chemically, have been found to replace each other either wholly or in part. A plant can, apparently, *live* without potassium.

The younger the plant, the greater the percentage of soda, as compared with potassium, found in its ash.

Finally, vegetation near the sea-shore contains more sodium and less potassium than that growing inland.

Considering these possibilities, surely the absence of potassium on analysis of a portion of the wood specimen is too inconclusive evidence upon which to raise the wood into the realms of the supernatural.

R.G.O.

In self-defence we must point out that we were reporting *oratio obliqua*, and that our conclusions were timid and unscientific because of our ignorance of the occurrence. We are indebted to R.G.O. for placing the matter on a healthy and less morbid plane.

* * *

The finding of old documents—a case-book of Paget's and some letters from the days of Abernethy—has inspired our authors to prose (which we publish elsewhere), and ourselves to thoughts of times past. This is the antiquarian's heyday, for the vendors of antiquity a golden age. Medical scholars there have always been among us, men who have fixed their gaze more constantly upon the ancient writings than upon the vaunted progress of their art. Philistines, too, proud of to-day, have ever bidden us let dead books decay in silence. And always the amateur, ready with his leisure, readier with his purse, has travelled the middle way.

Now more than ever the middle way is thronged, and as prices soar, books grow scarcer, more library dust flies, the cry comes, "Of what avail? Is he who is versed in its history, the better practitioner of his art?" To such a question each man has his own answer.

There is another question, which does require an answer. If the history of medicine has a place in the education of the student, could not a fuller use be made of the records that we possess? These historical relics that are now left scattered to moulder in dark cupboards, and to be unearthed only for the proud display of centenaries, could be gathered together in one room, displayed in orderly fashion, so that the pictures, the books and the instruments that tell the story of St. Bartholomew's part in the growth of medical truth should be a lesson and an inspiration to the growing generations.

* * *

Smoking Concert.

Only once since the War has the old custom of having a Mid-Summer Smoking Concert, given under the auspices of the Amateur Dramatic Club, been adhered to. This year it is to be revived.

From 8 p.m. until *Time, Gentlemen, please,* many talented artists will give a smoking concert at the Ludgate Hill Restaurant.

The date is June 11th and the tickets are moderately priced one shilling and sixpence. The A.D.C. is reported to be preparing something topical; ladies will not be admitted.

Anyone who feels the urge of the stage will be welcomed by the committee if he desires to perform.

* * *

The Dinner of the Ninth Decennial Contemporary Club will take place at Verrey's Restaurant, Regent Street, W. 1, on Wednesday, July 3rd, at 7.30 p.m. Dr. Henry Burroughes will take the Chair.

Mr. E. T. C. Spooner has been elected to a Commonwealth Scholarship. Many congratulations!

* * *

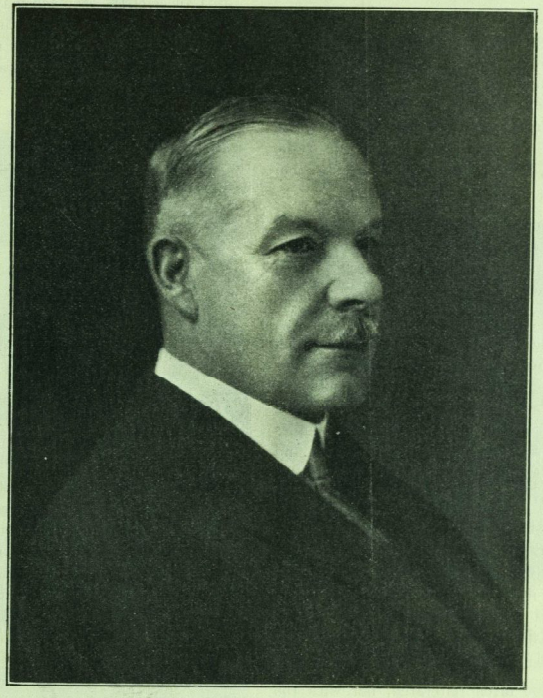


Photo by Swaine.

MR. MCADAM ECCLES.

ACKNOWLEDGMENTS.

The British Journal of Nursing—Charing Cross Hospital Gazette—L'Echo médicale du Nord—The Epsomian—Giornale della Reale Società Italiana d'Igiene—Guy's Hospital Gazette—Guy's Hospital Reports—The Kenya and East Africa Medical Journal—King's College Hospital Gazette—The London Hospital Gazette—Long Island Medical Journal—Medical Review—New Troy—The Nursing Times—The Post-Graduate Medical Journal—The Queen's Medical Magazine—Révue de Médecine—St. George's Hospital Gazette—St. Mary's Hospital Gazette—St. Thomas's Hospital Gazette—The Student—Sydney University Medical Journal—University College Hospital Nurses' League Magazine—The University of Toronto Medical Journal.

MORE MEDICAL NOTES.

By Sir THOMAS HORDER.

ON MALIGNANT DISEASE.

(1) Pyrexia in malignant disease is, in most cases, an expression of secondary (pyogenic) infection. But by no means always so. Rapidly growing neoplasms are sometimes accompanied by an essential pyrexia. The organs most often affected are the liver and the lung. In the latter instance the pyrexia may be quite high and may show the quotidian intermittent type. In this case, however, retained secretions in the bronchi cannot be excluded as a contributory cause.

(2) In the two instances of neoplastic pyrexia already quoted there may be a leucocytosis so high that suppuration is strongly suspected and yet may be proved to be absent. The leucocytes may rise to 50,000 or even to a still higher figure.

(3) A possible cause of pyrexia in non-infected neoplasms is the absorption of products of tumour disintegration. This process is allied to the condition of necrobiosis occasionally seen in some benign growths, where, again, pyrexia may be present. Two examples in actual practice are uterine fibro-myomata and hyper-nephromata. As a rare complication of this condition may be noted amyloid disease.

(4) One of the most striking examples of secondary infection in malignant disease, leading to pyrexia, is sometimes seen in ulcerated carcinoma of the colon. The pyrexia may be quite high and rigors may occur. The picture presented by such a condition, associated with a tumour in the flank, may be deceptive in that it may simulate "closed" renal suppuration.

(5) It cannot be too often reiterated, nor with too much emphasis, that cancer of the stomach arises much more frequently in patients who have not been the subjects of chronic dyspepsia than in those who have thus suffered.

(6) The same is true of cancer of the colon; this disease is much more common in patients who have been free from constipation, colonic stasis and "colitis" than in those who have been troubled by these things.

(7) The school which teaches the contrary doctrine does so in order to maintain a thesis, and in despite of facts.

(8) The importance of this matter lies in the urgent necessity of detecting cancer in these organs at the earliest possible stage. The patient to suspect is not so much the chronic dyspeptic, whether gastric or colonic, but the patient who, having arrived at the age of forty or over, begins for the first time to be troubled by indigestion or flatulence or constipation.

(9) Cancer of the stomach may occur, and may reach an advanced stage, without pain or vomiting; indeed, without any symptoms directly referable to the affected organ. The disease should always be suspected in any patient in whom there is progressive loss of weight and strength without obvious cause.

(10) Metastases in odd situations, and remote from the site of the primary growth, may arise in connection with carcinoma of almost any organ. But when the site is not apparent, suspect the suprarenal gland or the prostate.

MEDICAL WORK IN CENTRAL CHINA: EARLY IMPRESSIONS.

IN passing on a word-picture of a lesser-known field of medical practice, there are two periods in a doctor's life when he may possibly speak with advantage. One is when his first impressions are still fresh, and the differences between home and foreign practice are still acutely realized. The other is when, with the ripened experience of years, he collects his statistics and settles down to a serious work.

After two years of medical practice in China—a period punctuated by a revolution which forced us all to leave our hospitals, by five months in the "foreign" community in Shanghai, and by a running encounter with that invention of the devil, the Chinese language—I feel that now or never can I write of first impressions while they are still fresh.

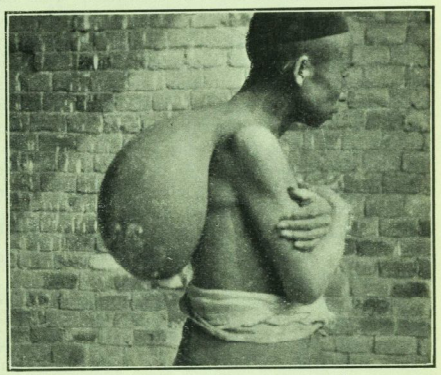
One of the first great shocks one receives on starting work is due to the very different relation of patient to doctor that holds out here. The rural Chinese view of the Western doctor is a mixture of two very different factors. On the one hand, he has a pathetic faith in Western surgery—a faith that makes a man who has completely lost both eye-balls walk a hundred miles to ask the foreign doctor to cure his eyes. On the other hand, though the foreign doctor is clever, he is nevertheless only a doctor, a man of no social standing, to be treated as one would treat the local vendor of extract of scorpions, the purveyor of candles, or any other swindling tradesman. One is expected to "guarantee" cures and to state exactly how long an illness will last.

A case of typhoid fever in the third week is brought to hospital, and you are asked to guarantee him well in a week or they will take him away again.

One must never allow a patient to die in hospital. Now even in Mission hospitals patients sometimes get worse instead of better (a fact which home supporters will never believe) and threaten to die. One often is faced with the question whether a patient is to be taken home to die or allowed a few more days' grace. Imagine being faced with this problem at the bed-side of a case

of lobar pneumonia on the seventh day of the disease. To allow him to be moved is a professional crime, and he will pretty certainly die on the thirty-mile journey home. To keep him will mean running the risk of a death in hospital and an unpleasant row. That he should die may not appear very terrible to his friends; that he should die in hospital is a dreadful catastrophe. This fear of death in hospital arises, as do so many of their deeply rooted ideas that distress a hospital superintendent, from a mixture of superstitious dread and economic stress. If the patient dies in hospital, or, in fact, anywhere away from home, his ghost will be a wandering, worrying nuisance of a ghost. Also, to transport a dead body home for burial (and it *must* go home) is so very expensive, that it will mean the financial ruin of the household.

Whilst the rural Chinese have a great opinion of Western surgery, they tend to despise Western medicine. Our "half an ounce three times a day until further notice" seems too insipid after the massive single doses of the Chinese physician. In my first year out here my summer shirts were made by a very good tailor, who had been deaf and dumb since the age of four, when a single dose of Chinese medicine rid him at one swoop of his convulsions and of his powers of speech and



hearing. I have seen a case of complete and permanent blindness which followed a single dose of Chinese medicine. Ophthalmoscopic examination showed complete optic atrophy. One of my colleagues had operated on a patient for removal of an ovarian cyst. A few days after the operation there was a return of vomiting, acetonuria and steadily increasing coma. The doctor explained the gravity of the condition and its comparative hopelessness. "Could you not give her some 'open the intelligence' medicine?" said the mother. The doctor explained that we unfortunately had no such drug. "Would you mind if we took her home and got a Chinese doctor to give her some medicine?" The doctor saw no hope for the patient and said they might take her home. Two days later the patient walked into the consulting-room, quite well, having taken *one dose* of Chinese "open the intelligence" medicine.

A magic word with Chinese patients is Ta Chen

(stick in a needle). From remote times this practice of pushing needles into specific parts of the body has been as much the stock-in-trade of the Chinese physician as was bleeding with the European doctor a century ago. Have you a carbuncle on your neck or a swelling of the inguinal glands? Then the periphery of the mass is punctured by a dozen jabs with a needle. Have you a tuberculous arthritis of the ankle-joint? Then a needle (and if you are rich, a *golden* needle) is thrust deep into the part from several directions. One has never seen any good results from this treatment, and the evil results are so numerous and distressing, as to make "results of needling" a heading in the list of diseases in the hospital reports. This long-established idea opens up the way for several Western methods of treatment which otherwise might be distasteful. Thus the Chinese are enthusiastic over vaccination, the only sad aspect of this being that the local quacks also vaccinate, and tell the mothers that the patient is protected, not only against smallpox, but against measles, chickenpox and a variety of other diseases. There is great keenness for injections for the treatment of syphilis, and one has difficult times trying to convince patients that arseno-benzoles do not cure gonorrhœa and buboes. Next to Hatamen cigarettes, the most advertised commodity in China is "606." In every Chinese city hordes of quacks advertise that they will give injections of "606" and "914." Also they will sell you "606" pills and "606" ointment.

Mission hospital work is mainly surgical. More markedly than at home, diseases come to you in batches, mainly because a successful operation gives the hospital a local reputation for the treatment of that condition. At the moment we here have an unenviable reputation for treatment of *fistula-in-ano*, and in the male surgical ward, out of 20 patients, 25% have been operated on for this condition.

Almost any surgical ward, visited at any time, will contain one or two cases of gun-shot wounds. While working at Hankow, just after the Communist *régime*, we had two wards of open fractures of the femur. For many years China has been cursed, not only with rival militarists, but with bands of armed robbers. It is almost a weekly occurrence to have a farmer brought in from some lonely hamlet with a shattered humerus or a general peritonitis from an abdominal wound, resulting from the bullet of a bandit's gun, fired at the farmer while he was striving to protect his cow or his store of rice from being stolen.

As a welcome change from the monotonous strings of varicose ulcers, balanitis, scabies and malaria, a morning's out-patients may bring a really exciting tumour. The accompanying photographs show two such pleasant surprises. One, which I assisted a Chinese colleague to remove, was a cartilaginous new growth arising from the alveolar margin of the left side of the maxilla. The patient was much more comfortable after the operation, but not much more beautiful. The other photograph is not an illustration for *The Pilgrim's Progress*, but a patient with his lipoma. After carrying this gradually increasing burden for twelve years, he decided to part company with it. He is now back at work. The operation was not too formidable, and the tumour is now, after the manner of Clementine, fertilizing our private bamboo grove. It had the appearance of a skin bag partially filled with water and it weighed 44 pounds.

Another gentleman whom we caught at Hankow had an enormous lipoma arising from the posterior fold of the left axilla. The tumour was the size and shape of a soccer ball. The patient could not bring his left arm down to the side, and as he walked, rather proudly, around the compound on a warm June evening the day before his operation, he reminded one of an English farm yokel with the local football club's ball tucked into his armpit, stalking out to the village green for a kick-about, followed by an expectant and admiring crowd of small boys.

Of malignant disease in the male one sees very little except carcinoma of the penis, which is, statistically at least, twelve times as common in China as in the United States, and probably much more. Maxwell, in his *Diseases of China*, gives an interesting comparison of the frequency of cancer in China and the United States. The U.S.A. percentages are based on over three thousand deaths in Chicago in 1924. The China percentages are based on 1133 cancer cases in Chinese hospitals:

	U.S.A.	China.
Breast . . .	8·37%	18·19%
Penis . . .	·22%	14·04%
Stomach . . .	24·49%	4·32%
Uterus . . .	10·93%	12·36%

Acute abdominal conditions seem much rarer than at home. A doctor after twenty years in this district says that he has never seen a case of acute appendicitis, and only two cases of localized peritonitis, which might have started as appendicular lesions. Acute perforations and hæmatemesis seem rare, and although haust. gent. c. rheo will soon be as popular in some parts of the Yangtse Valley as it is in Hoxton, convincing symptoms of gastric ulceration are rarely heard. In this connection it is interesting to note the diet of the rural Chinese. Two enormous meals of boiled rice are taken each day, eaten piping hot and shovelled down with very little mastication. The rice is supplemented with vegetables and seasoning materials. Very rarely is any meat eaten at all, except on high days and holidays—then the meat is invariably pork. A little fish is used where it is cheap. The Chinese seem never to drink at all, except when paying calls (and then they only play with a tea basin) and when the weather is very hot. It is often quite impossible to persuade a patient to take milk or any of the milky foods. Rice gruel is as near as one can get to a milk diet. Throughout the winter months our nurses never drink anything but rice gruel, unless they are entertaining or being entertained. On the road, hot water, slightly coloured by a few tea-leaves, is the routine drink, and is taken every few miles by the coolies.

Venereal disease presents rather a different problem out here. The two commonest lesions are inguinal bubo, and a very destructive ulceration of the glans penis unlike anything I have seen in England or read of in any text-books. Gonorrhœal urethritis is common enough, but never seems very severe, and stricture seems rare.

Blinding cases of gonorrhœal conjunctivitis are distressingly common. Some of the coast hospitals have estimated that among their out-patients about 30% give positive blood-tests for syphilis (Kahn). One factor in the venereal problem out here which does not hold at home is that the sophisticated town-dweller regards his wife as the producer of his children and reckons to get his sexual pleasure elsewhere.

Among the cases seen at a morning's out-patients the majority of those who require an abdominal examination will have palpable spleens. The larger number, but those with the minor degrees of enlargement, will be due to malaria; a smaller number, including the cases of extreme enlargement, will be due to schistosomiasis. Of cases of this latter disease we see a distressing number, mainly children and young adults. The spleen sometimes reaches right across to the right iliac fossa. Not often does a week pass without a feeble, prematurely old man hobbling, gasping, into the consulting-room, preceded by his enormous abdomen. One might as well palpate a hay-stack to find a needle in its centre as palpate such an abdomen. He is admitted, and after two or three buckets of fluid have been drained from his peritoneal cavity, one can examine and perhaps make a diagnosis. In patients under thirty there is usually a large spleen and a large liver, and examination of the fæces may show ova of *Schistosoma Japonica*. In those over thirty the spleen and liver are usually not palpable, and the liver-dullness is reduced. These do not show *S. Japonica* in the fæces, and the condition would appear to be due to cirrhotic changes in the liver, in which connection it is interesting to note that the rural Chinese hardly ever take any form of alcohol. This class of case is most depressing. Tapping relieves them only for a few days, and they seem to go downhill faster after tapping than before.

Suicides are common all over China, and in this part the method of choice is almost invariably by swallowing opium. The rescue is exciting while it lasts, if a little messy—but it always seems a little hard to get cursed afterwards by a patient with whom one has had success for being so inconsiderate as to bring her back to life when it was so nice and dreamy just to die.

Ophthalmic work takes a large place in our activities. Trachoma is so prevalent as to be almost universal among the poorer classes. Few cases come for treatment in the early stages—it seems to them too trivial and too much part of one of the inevitable little trials of life to worry about. Only in school work and among one's student nurses does one get a chance to catch it early. An American school doctor out here told me that he thought it mattered little what local measures were taken, the keynote to the treatment being "Setting up exercises." I afterwards discovered that "setting-up exercises" is American for "physical jerks." When the trachomatous process has so deformed the upper lids that all the lashes are sweeping the cornea, then patients come for treatment and there is ample scope for ingenuity in plastic surgery. Of errors of refraction, by far the most common is myopia. In examining 90 boys in a High School, I found one who wanted correction for mild hypermetropia and 23 who needed glasses for pure myopia or myopic astigmatism. A very common eye disease is pterygium. These succulent growths frequently invade the pupillary area of the cornea and not infrequently cause complete blindness. I watched one slowly advancing on to the cornea of my language teacher, and finally persuaded him to allow me to remove it. The result so pleased him that he brought me pterygiums from the highways and hedges and compelled me to remove them. Of the country labouring classes it is probably safe to say that 30% have some degree of corneal opacity.

If there is one disease that seems to me to make the whole world kin it is the chronic varicose ulcer. To look round the dressing-room at the Hill Memorial Hospital, Teian, is very like looking round a female dressing-box at Bart.'s. There sit the old ladies, as voluble as their Smithfield cousins, displaying the sinuous edges of their ulcers, as constant in their returning visits, as confident that some day the ulcer will heal, as determined that they will not have in-patient treatment (the only treatment that will do them any real good), and showing results as meagre for our varied and vigorous therapy.

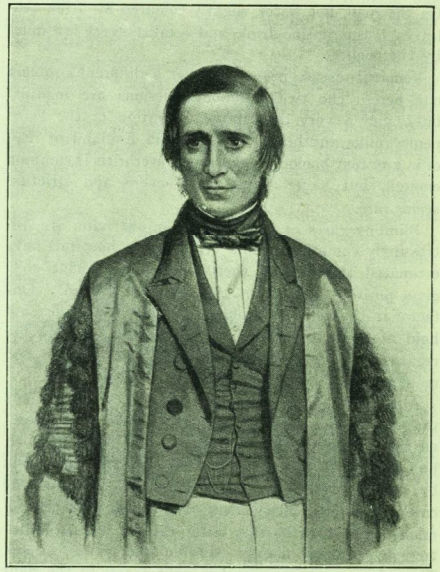
RALPH DOLTON.

SIR JAMES PAGET AND THE HOSPITAL MUSEUM.

A VISITOR to the Museum, exhausted by the weary climb of innumerable stairs, and pausing for breath, may well look up to the patron saints of this Valhalla of spoils snatched from the dead, the dying, the living, and those who have never been born. The bust of John Hunter tells him that he is here inhaling the purest air of the Hunterian School. But the placid features of Sir James Paget, one of the Hospital's most famous sons, he will view with mixed feelings. How appropriate, his first thought will be, for these two men thus to be looking at one another across the stage upon which is enacted the progress of their art—the pioneer of surgical pathology in this country, and his most distinguished disciple, of whom it was said that he developed surgical pathology along truly Hunterian lines! And yet was not Stephen Paget fond of referring to it as this "frightful" bust, and whose pineal gland is so calcareous that he will not identify himself with this homely expression? Who has not succumbed to the magical influence radiating from the still, white marble of Boehm's noble bust on the staircase of the Royal College of Surgeons, and who has not been appalled by the poor cast in the Hospital Museum? Generations may come and go, curators may change, and specimens crumble to dust, but the "frightful" bust of Sir James Paget, sphinx-like, will smile at change and will mock at the passage of time. *Vanitas, vanitas, vanitatum vanitas.*

There has lately been unearthed from among the treasures lurking in the dark bosom of the Hospital a MSS. casebook of specimens in the Museum, with clinical records, in the handwriting of Edward Stanley, James Paget and others. The author, having devoted delightful hours of his leisure to its study, has come to the conclusion that its contents are not such as would warrant publication. The description of the cases is graphic, it is true, and often elegant, but in the scientific literature of the day reference to a post-mortem liver as "being in that state which is so frequent in persons accustomed to the use of ardent spirits" is liable to irritate the reader. Those were the days when the microscope was not yet in general use, when staining methods were unknown, and bacteriology was undreamt of, so that the pathology of the clinical cases is rarely followed up. A new generation has new problems, and time refuses to stand still. But the quiet figure of James Paget steps forth from the worn pages of the book, which is grey with the dust of a hundred years.

Let us follow him as our guide on a tour through the Museum. He pauses on the ground floor opposite specimen A 409, which he presented in 1876, and which shows sections of the tibia, the calvaria, and the patella from one of his original cases of osteitis deformans. "When I described the disease in a communication to the Royal Medico-Chirurgical Society in 1876, I tentatively called it osteitis deformans after its most striking



PAGET IN 1849.

character. A better name, I said, may be given when more is known of it." He is fascinated to hear that in the fifty years that have elapsed little has been added to his original description; that the cause and the cure have not yet been worked out, and that the disease is still known among us as osteitis deformans, or Paget's disease of bone. Specimen A 410 shows a section of the femur from the same case.

Our guide pauses next before A 379, the skeleton of a negro of unusual stature. His right leg had been amputated by Earle through the lower third of the thigh on account of syphilitic ulceration and periostitis, but he had died soon after the operation. "I articulated his skeleton in 1840, and fitted him with the amputated leg. I was then curator of the Museum, having succeeded Baynton in 1837. I held the office for six years at a salary of £40 per annum. My time was employed in putting up new specimens, repairing and cataloguing the old ones, and preparing demonstration specimens for lectures. I have never regretted the time I spent as curator; it taught me the value of accurate observation and how to write terse English. It was in those days that my interest in pathology was born, so that in my career as a surgeon I was ever stimulated to study the science as well as to practise the art of surgery. In 1842 I was invited to prepare the pathological catalogue of the Museum of the College of Surgeons, a task which took me seven years."

He next draws our attention to A 360, sections of a syphilitic tibia from a boy of 18, which figure in his famous Lectures on Surgical Pathology.

A 684 and 685 show tumours of the brain and skull-cap of a farmer's boy, aged 15, said to be caused by repeated blows on the head. Described by Paget about 1850 as endotheliomata of the skull, they are now called meningeomata according to the classification worked out by Harvey Cushing.

We then pause before H 268, a section of a lung containing large masses of a cartilaginous new growth, secondary to a tumour of the testis. "I described this in 1855 as a 'malignant enchondroma.' What do you call it now?" We turn to the catalogue—"redescribed in 1897 by Dr. A. A. Kanthack, chondro-carcinoma (malignant teratoma)." At E 87 our guide looks intently, trying to recollect the history: "This case I described fully in the *Medico-Chirurgical Transactions* in 1844. A girl of twenty who had lived in the miseries of poverty and prostitution was admitted for gonorrhœa in a state of extreme debility. She suffered from violent palpitations of the heart, and a loud bellows sound could be heard at the base, accompanying the first sound. No history of rheumatic or any other affection of the heart could be obtained. She died exhausted with pulmonary apoplexy. The heart at autopsy showed but two pulmonary valve-cusps, both covered with vegetations." The catalogue amplifies his remarks, speaking of malignant endocarditis of the pulmonary valve and infective endarteritis of the pulmonary artery. The gonococcus causes malignant endocarditis more often than has been supposed. Specimens A 98, 99, 100, etc., interest our guide greatly. Are they not described as "Paget's quiet necrosis"? "I first used this term in an article in the third volume of the Clinical Society's *Transactions* to describe a kind of bone necrosis in which the usual phenomena of inflammation and fever are absent; but I was unable to explain the condition. I found no distinctive signs of the disease; I merely tried to teach the profession to bear it in mind in any obscure case of swelling on a bone." After that we climb to the top gallery to look at the specimens showing Paget's disease of the nipple. "I believe my description of this disease in the *Hospital Reports* of 1874 is the shortest classical contribution ever made to surgery. My original paper dealt entirely with the clinical aspects of the condition. I wonder if its pathology has been worked out in the meantime." He is pleased to hear about the work of Sampson Handley, and amused at the controversy to which it has given rise. He wants to show us a water-colour sketch made by Thomas Godart in 1884 of a patient, whom he had sent to the Hospital with this disease, but the Heraclean task of searching through the collected drawings proves too much.

Before we part he tells us of a dream of his youth, dim now, but never wholly forgotten. In his soft, clear, and musical voice he pictures to us a little corner of the Museum, with a cabinet of exquisite workmanship—a centre of peculiar interest. In it, behind glass, are displayed his historical specimens, fully described, religiously preserved, and piously cared for. His instruments are here; his writings; the original papers in which he described the disease processes of which examples are here figured on the shelves. A fine row of books, large and small, bound in crushed levant and lettered in gold. On the neighbouring wall are his photographs and portraits, the Spy cartoon, his diplomas, his autograph. Vishnu land, what Avatar! And as we leave the Museum, his lips move as it were in silent prayer: "Bart.'s, keep my memory green."

W. R. BETT.

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AN UNUSUAL CASE OF PNEUMOCOCCAL MENINGITIS.

G W—, a girl, æt. 16, was admitted to St. Bartholomew's Hospital on March 12th, unconscious.

One week ago the patient had a rash, which was diagnosed as rubella. From this she recovered, and seemed to be quite well until the day before admission, when, at 11 a.m., she had a severe headache, then vomited and went to bed. By 6 p.m. she was unconscious and delirious. Her respirations were rapid, her pupils dilated. She was not incontinent.

Six years before she had had an aural discharge following a pneumonia.

On admission at 4 p.m. on March 12th she was unconscious; she lay with mouth open and eyes partly closed and rotated to the left. She resented any

movement. There was no obvious head-retraction, or Kernig's sign or photophobia.

There were no abnormal physical signs in chest or abdomen beyond a marked "*tache cérébrale*." Knee-jerks and ankle-jerks were present; plantar responses were flexor. All limb movements were free and easily performed. Temperature 99° F., rising to 102°; pulse-rate 85, respiration-rate 22.

At 10 p.m. the right optic disc showed slight papill-œdema; the white blood-cells numbered 27,600 per cubic millimetre.

About 30 c.c. of turbid cerebro-spinal fluid, under very great pressure, were withdrawn.

20 c.c. of anti-meningococcal serum were given intra-thecally at the same operation, on chance. Later, an examination of the cerebro-spinal fluid showed that it contained 9200 cells, nearly all polymorphonuclear, per c.mm., and a certain number of capsulated diplococci, resembling pneumococci, which grew very profusely on blood legumen agar.

On the next day the patient was still unconscious; head-retraction and Kernig's sign became very marked.

On the third day she began to improve; she was conscious and could speak and write a little, but she was completely deaf. The conjugate deviation of the eyes to the left now gave place to a coarse nystagmus to the right. From this day on she continued to get better.

By the twelfth day she was apyrexial, and had no signs or symptoms beyond stiff neck, nystagmus and deafness.

On the thirteenth day the cerebro-spinal fluid failed to grow any organisms, and its pressure, which had at first been well over 350 mm. of cerebro-spinal fluid, had fallen to 190 mm.

Lumbar puncture was performed daily for the first thirteen days and again on the fifteenth; no specific treatment was used.

At the time of writing, one month after the onset of the disease, the patient is up and quite well, except that she has an almost complete ear deafness and a slight bilateral nystagmus.

It has been considered worth while to publish this case because of the rarity of recovery in pneumococcal meningitis, and because of the absence of signs of supratentorial spread.

No original focus of infection was found at any time.

I am indebted to Dr. Langdon Brown for permission to publish this case.

E. T. C. SPOONER.

TWO LETTERS TO MR. CHARLES MAYO, SURGEON, OF WINCHESTER (1811).

BELOW are published copies of two letters, the originals of which were found by chance among some old notes and *débris* in the Ophthalmic Department.

They were written in 1811 by two students of this Hospital to Charles Mayo, to congratulate him on his appointment to a surgeoncy at the Winchester County Hospital.

St. B. H. Thursday Evening.

To Mr. Charles Mayo,
Surgeon,
Winchester.

DEAR DOCTOR,—I hope you will excuse the length of time I have suffered elapse before I answered your first letter in wh. you announced to this Medical Hemisphere yr promising career of Glory and Prosperity. Permit me to congratulate you, on the probability wh. awaits you. of attaining to a Sphere wh. I trust will be as lucrative to you, as yr Talents will be beneficial to the Objects of yr Care.

I must say your daring is noble, and to a meaner capacity and a less aspiring mind I might add fearful, but the prize is great, and therefore it becomes you as you have done, to stake high. I hope your efforts may be crowned with Success.

Local News of course will be acceptable. I will therefore endeavour to rake a few Events from their Ashes, and send them for yr notice. May they prove interesting!

Mr. Vincent made his *début* last Saturday Week as a *Lythotomizer*, and after 21 cuts he got into the Staff and in process of time into the Bladder by means of a Gorget. The Stone followed after hand papibus aquis, *i. e.* he did not hurry himself. The Subject was a very favorable one, a lad about 12 yrs old. Old Blicke sd Yes! he cd not hurt such a Boy as that if he had tried yes! Emboldened by his Success in this Operation Vincent has been slicing a man's lip away to-day and removing what they call a Cancer. Ramsden has also been doing a Bloody deed, but it must be without a Name as I do not know what it was not being present. One more Operation and I have done for the present, but tho' last, be assured it is not least in the Bloody list, but rather preserved to the present period to close my Cases with éclat.

Last night that ever was, my friend Webb trephined (*you read right I mean trephined*) a man for Compression. All that mortal Wisdom or human Art cd devize to rescue the victim from the Gripe of Death was essayed, but his evil Genius presided and the fatal Destroyer triumphed. To-day he was examined and five oz. of Blood were found effused under the Dura Mater and in the Basis Cranii, Some of his ribs were broken and 12 oz. of Blood were effused into the Cavity of the Thorax. Ramsden stormed at W's iniquitous Usurpation, and threatened to board him as an Old Offender in the like Aggressions.

By the by, have you seen the L[ondon] M[edical] R[eview] of Ramsden's Book, it is very neat, tho' rather highly seasoned, he was very wrath with them and was sure they cd never have read his Book to have so grossly misrepresented it, and like a fond parent with all its "*faults he loves it still.*"

Webb desires to be remembered to you and hopes he has executed your commission to his Satisfaction, but if he has time (wh. by the by is very well put in as Operations drop in thick upon him) he will write to you.

Believe me Yrs sincerely
R W BROWN

3 Chapel St. (Bedford Row),
Charles Mayo. Esqr. London,
Surgeon *October 7th.* 1811.
Winchester.

DEAR MAYO—The contemplation of the magestic grandeur of a troubled ocean, and the placid serenity of a Summer's skye, associates in my mind the battles you have fought, and the victory you have gained, since St. Bartholomew's Hospital mourned your loss—altho I cannot rank among the first who have congratulated you, upon your memorable appointment, to a Surgeoncy of Winchester Hospital; yet I assure you that my congratulations are accompanied with the best wishes for your future success of a sincere friend.

The labours of my studies here are fast approaching to their termination. I have for some time looked foreward to that day, when I shall assume the character of the private practitioner, as the most formidable of one's existance. Brown and myself left the aparts. very reluctantly Tuesday Morng. last; Brown who has suffered much of late from ill health, left London for the I of Wight the same day. I am living with our friend Baker at present to complete six months attendance at the Eye Infirmary. I intend towards the latter end of this month to return to Bath, when I shall be ever happy to enjoy your correspondance.

The winter campaign you know commences on the first of Oct. Abernethy's class is not so full as last season, and I believe the greater number of them are veterans; the raw recruits, who, have entered the field of battle are but few. Dr. Hue entered "*two green horns*" after his first Lecture. "Hinc illa lacryma rerum." I am very glad to hear his numbers have increased very considerably since—the practice of our great Hospital altho' always highly interesting, has presented nothing particularly so of late. A short time since we *pretty easily* reduced a dislocation of the thigh bone; the subject *was a Hercules of a most* tremendous size. The Surgeons have quarrelled of late. Sir James Earle and Mr. Harvey waged war against Sir Charles for embezzling the *publick money*. Old Blicke kept all the money of the Hospital pupils of last year. Old B. says, I have cut all connection with the Hospital. Yes? Yes?

I believe a reconcilliation has since taken place.

In conclusion, I hope you will excuse the present with promises for a better the next time I write.

Yours sincerely
JOHN WEBB

Charles Mayo was born on December 29th, 1788, the third son of the Rev. James Mayo, M.A., Headmaster of Queen Elizabeth's Free Grammar School at Wimborne. At the age of fifteen he was apprenticed to a Mr. Brown, a City apothecary who kept a shop at the corner of Raven Row, Bethnal Green, just on the east side of Bishopsgate Street.

At the age of eighteen he became a student of St. Bartholomew's and dresser to Sir Charles Blicke the "old Blicke" of these letters, at that time second surgeon to the Hospital. In 1811 he was elected Surgeon to the County Hospital at Winchester, where he attained considerable repute as a surgeon and lithotomist. In 1818 he removed one of the largest stones on record; it weighed over 14 ounces. He was elected Mayor of Winchester in 1851. He died at home at St. Peter's Street, Winchester, on November 27th, 1876.

In manner he resembled the great Abernethy, whom he is supposed to have copied. He was blunt, outspoken and testy to the greatest degree, and when made angry, as he often was, he relieved himself and amused his hearers by a stream of half humorous vituperative epithets of the quaintest and most varied description.

Of the fate of John Webb, whose exploit with the trephine signifies more surgical zeal or at least a greater allowance of freedom than is usual with students at the present day, nothing is known.

Richard Willson Brown, his friend, qualified in 1811 as M.R.C.S., and so far recovered from his ill-health as to practise surgery in Bath, where he was appointed Surgeon to the Royal United Hospital, and where he

continued on the Medical Register as late as 1854. He contributed articles on "Hernia" and on "Carcinoma of the Thyroid Gland" to the *Lancet* and the Medico-Chirurgical *Transactions*. In 1843 he was nominated F.R.C.S., being among the first three hundred members to receive that distinction.

All three, Mayo, Webb and Brown, had been active members of the Hospital Medical and Philosophical Society,* then meeting weekly under the inspiring chairmanship of John Abernethy. Between them they contributed many papers, but unfortunately Webb, who was Secretary for the year 1810–11, is so reticent of details, giving often only the titles of the papers, that what Mayo said of "Erysipelas," Brown of "Respiration and Animal Heat" and the nature of Webb's "Singular Case of Sudden Death" must remain matters of conjecture.

Sir Charles Blicke, the type of a successful surgeon, is remembered chiefly as the pupil of Pott and the master of Abernethy. The letters portray well his habit of saying Yes! Yes! and add some scandalous evidence in support of Abernethy's verdict that his master was fonder of money-making than of science.

"Ramsden's book" is his *Practical Observations on the Sclerocoele and other morbid enlargements of the Testicle . . . to which are added, four cases of operations for aneurysm* (London: Wilkie and Robinson, 1811). The author had ample cause for pique with his reviewer, who dismissed the bulk of the work, an ingenious pre-Neisserian attempt to correlate disease of the testicle with a latent morbid process in the posterior urethra, in the following scornful words†: "The first part of this book will not take up much time in reviewing, for we are confident that it will be regarded by everyone who has taken the trouble of reading and endeavouring to comprehend it merely as a vehicle, and a very mawkish one it is, to convey the cases of aneurism. . . . To attempt to illustrate a well known practice by theories which defy comprehension, is not adding strength to the cause of science; and to relate cases" of testicular swelling cured by the passage of bougies "which prove nothing but the uncommon success of an individual, is only deluding the profession with the expectation of similar results." The review serves to remind us that even in those bold surgical times Ramsden was the first to carry out the operation of ligaturing the third part of the subclavian artery for axillary aneurysm. Ramsden had been appointed Assistant Surgeon in 1791; he died at an early age in 1813. The lives of Sir James Earle, Senior Surgeon, Pott's son-in-law and biographer, of Mr. (afterwards Sir Ludford) Harvey, of Mr. John Painter Vincent, and of Dr. Clement Hue, the first regularly appointed Lecturer in Medicine, are recorded in Sir Norman Moore's *History of the Hospital*, and in the *Dictionary of National Biography*.

Our thanks are due to Mr. Foster Moore for his help and to Sir D'Arcy Power for his account of Charles Mayo, which is abstracted from the forthcoming *Lives of the Fellows of the Royal College of Surgeons*. The letters will be presented to the Hospital.

H. B. STALLARD.
A. W. FRANKLIN.

* *Vide* Minute Book, 1807–1815, in the possession of the Abernethian Society.

† *London Medical Review*, 1811, vol. iv, p. 246.

ABERNETHIAN SOCIETY.

THE Annual General Meeting of the above Society was held in the Abernethian Committee Room on May 23rd, 1929. Mr. E. I. C. Spooner in the Chair.

The Secretary's annual report and financial statement were read and adopted.

The following officers were elected for the year 1929–30:

Presidents: Mr. H. P. Hutchinson and Mr. A. P. M. Page.
Vice-Presidents: Mr. J. H. Attwood and Mr. K. W. D. Hartley.
Hon. Secretaries: Mr. A. W. Franklin and Mr. K. D. Keele.
Extra Committee Men: Mr. R. E. M. Fawcett and Mr. Jameson Evans.

No further business was brought forward, and the meeting was adjourned.

STUDENTS' UNION.

CRICKET CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* U.C.S. OLD BOYS.

Played at Winchmore Hill on Saturday, April 27th. The Hospital batted first and after putting on 52 for the first wicket, were all out for 141. Owing to some fine bowling by H. L. Hodgkinson, who took 7 wickets for 47 runs, our opponents were all out for 91.

ST. BARTHOLOMEW'S HOSPITAL *v.* THE WANDERERS.

Played at Winchmore Hill, Wednesday, May 1st. The Hospital batted first and fared very badly, being all out for 79.

Our opponents scored the necessary runs for the loss of 5 wickets and thus won fairly easily.

ST. BARTHOLOMEW'S HOSPITAL *v.* SOUTHGATE.

Played at Winchmore Hill on Saturday, May 4th. The Hospital again batted first, but except for a very sound 55 by K. W. Mackie, our batting was disappointing, and we were all out for 126.

Southgate at one time looked like winning easily, but with the score at 125 for 6 wickets, C. L. Hay-Shunker did the hat-trick, and their last man came in with 2 runs to win. They just got the necessary runs, being all out for 129. Hay-Shunker took 8 wickets for 48 runs.

ST. BARTHOLOMEW'S HOSPITAL *v.* HAMPSTEAD C.C.

Played at Winchmore Hill on Saturday, May 11th. Hampstead batted first, and were all out for 75 runs. H. L. Hodgkinson bowling finely and taking 9 wickets for 23 runs.

The Hospital obtained the runs for the loss of only 1 wicket, and thus registered their second victory of the season.

The final score was 121 for 7 wickets, A. R. Boney playing a good knock of 76.

ST. BARTHOLOMEW'S HOSPITAL *v.* THE STOICS.

Played at Winchmore Hill on Wednesday, May 15th. This game resulted in a victory for our opponents, who, batting first on a wet wicket, scored 159, H. L. Hodgkinson taking 5 wickets for 44. The Hospital batted very badly and were all out for 67.

ST. BARTHOLOMEW'S HOSPITAL *v.* WINCHMORE HILL.

Played on Saturday, May 18th. The Hospital batted first and again did not do themselves justice, being all out for 83. Winchmore Hill, who scored 37 for the first wicket, afterwards collapsed against the fine bowling by C. L. Hay-Shunker, and only won by 2 wickets. C. L. Hay-Shunker took 8 wickets for 43 runs.

ST. BARTHOLOMEW'S HOSPITAL *v.* CROYDON.

Played at Winchmore Hill on Monday, May 20th. This game resulted in a good win for the Hospital, who, batting first, scored 151, D. M. Dean making 51 not out.

Our opponents could only make 122, Hay-Shunker again bowling well, and taking 7 wickets for 31 runs.

DEBATING SOCIETY.

THE Annual General Meeting of the St. Bartholomew's Hospital Debating Society was held in the Committee Room of the Abernethian Room on Monday, May 13th, 1929, at 4 p.m.

Sir Thomas Horder, Bart., was in the Chair.

The minutes of the last Annual General Meeting were read, confirmed and signed.

The following officers were elected for the ensuring year:

President: Sir Thomas Horder, Bart.
Vice-Presidents: Dr. E. R. Cullinan, Mr. R. W. Raven.
Secretaries: Mr. J. W. Matheson, Mr. G. O. Morgan.
Committee: Mr. J. W. O. Freeth, Mr. A. W. Franklin, Mr. Crossley Holland, Mr. P. Robinson (co-opted).

Dr. E. R. CULLINAN then expressed the opinion that if, during the coming year, the Society did not hold at least three meetings with an aggregate attendance of at least 100, the Society should cease to exist.

Other members spoke showing sympathy with the opinion of Dr. Cullinan, and pointing out that more energy and enthusiasm would have to be shown than in the last few years.

MR. CROSSLEY HOLLAND then volunteered to guarantee to obtain outside speakers for a debate in the winter session.

The Secretaries guaranteed to arrange another debate.

DR. CULLINAN and MR. CROSSLEY HOLLAND promised to obtain distinguished visitors, the former a Liberal, the latter a Conservative, to a political debate to be held on Friday, May 24th, 1929.

The meeting was then adjourned.

UNITED HOSPITALS BOAT RACE.

The races were rowed under the usual vile conditions for these events, over a course from Hammersmith Bridge to the 'Varsity Stone in the case of the VIII's, and from the Mile Post in the case of the IV's. There was a spring tide and a strong wind against it, making the conditions rather rough.

Three launches followed the races, our President, Mr. Rawling, being in the umpire's launch.

There were four VIII's, London, Thomas's, Guy's, Bart.'s, in that order from the Middlesex station.

There was delay at the start owing to non-appearance of one of the stake-boats, then London escaped with their stake-boat in tow, and finally a tug with barge attached threaded its way through the waiting VIII's, just to add to the chaos.

Order having been restored, the umpire, Mr. Beresford, sen., of Thames R.C., got the boats away to a good start. Guy's had a slight advantage after about 10 strokes with Thomas's and Bart.'s close on them.

Then London and Thomas's struck some very bad water and fell back, London being partially swamped.

About this time—Harrod's—Bart.'s had a slight lead and were striking a slow and powerful stroke for so light a crew. Thomas's rallied under their stroke, spurted and drew ahead, and Bart.'s, unfortunately, decided to take a rest cure.

As London dropped gradually astern, Guy's and Thomas's both went ahead. Two tugs having provided an excellent obstacle race, calmer water was reached near Beverley Brook.

Refreshed by the rest cure, Bart.'s now began to work once more and rowed splendidly to the finish, but could catch neither Thomas's, the winners, nor Guy's.

Bart.'s have acquired length, but must learn to work hard all over the course, and not be content with merely a hard spurt at the end before finishing comparatively fresh.

Thomas's, with a good crew and an experienced stroke, won a good race from Guy's by 1¼ lengths, with Bart.'s about three quarters of a length behind.

In the clinker fours Guy's just won a magnificent race from Thomas's by a quarter of a length, with London third.

Bart.'s IV had their daily disaster and did not do themselves justice. In the light IV's Thomas's beat Bart.'s easily, a mixture of styles not being aided by a boat which would have been the envy of Heath Robinson.

Thomas's were a splendid IV, selected from a good VIII. It is to be hoped that in future years Bart.'s men will be present at the Dinner which is held after the race.

Bart.'s Rowing Club have much for which to thank Mr. Thackthwaite, their secretary, as he was tireless in his efforts to get the VIII and the IV's together.

VIII: H. F. Stephens (*bow*), D. K. Jardine (2), A. B. Waters (3), H. H. A. Thackthwaite (4), P. M. Oxley (5), G. Wynne-Thomas (6), R. G. Orr (7), J. H. West (*stroke*), R. H. Knox (*cox*).

Coxswainless IV: R. C. Orr (*bow*), H. H. A. Thackthwaite (2), P. M. Oxley (3), G. Wynne-Thomas (*stroke*).

Clinker IV: Squire (*bow*), A. Vacher (2), C. R. Hamand (3), R. Bennet (*stroke*), A. Gibb (*cox*).

REVIEWS.

RECENT ADVANCES IN NEUROLOGY. By W. RUSSELL BRAIN and E. B. STRAUSS. (J. & A. Churchill.) Pp. 412. Illus. 38. Price. 12*s.* 6*d.*

Here is a very full account both of the literature and of the author's practical experience in the rapidly advancing field of neurology, and it certainly does not err on the side of omitting any new development. As in several of this series a somewhat sanguine temperament is displayed, though the present authors, it must be said, are very careful in citing authorities and weighing evidence, so that there is a minimum of dogmatic statement. We do not, however, feel that justice has been done to the quite prevalent attitude that lipiodol in spinal block is purely a confirmative measure, very liable to mislead, and one which is apt to make the subsequent surgical approach more difficult, because of the supervening localized meningitis, which is by no means uncommon. Similarly ventriculography for cerebral tumour has been discarded as superfluous and dangerous by at least one well-known hospital. The authors here, however, reinforce their position by Grant's figures of 392 cases. Whereas he quotes a direct mortality of over 8% from the operation, in view of the otherwise hopeless prognosis of unlocalized cerebral neoplasm and in consideration of the fact that in 24% the tumour was localized by ventriculography when neurological examination failed, and in 11% the "tumour was susceptible of operative removal," the procedure is considered justifiable. It is, however, felt widely that in skilled hands localization by physical examination is becoming sufficiently certain to reverse these figures.

It is also the reviewer's opinion that it is as yet too confident a statement to say that "these observations of Weed and others (on the effects of hypertonic salt solutions) have put into the hands of the clinician a mode of *controlling the intra-cranial blood-pressure* (italics our own). From a physiological standpoint it must be considered problematical whether sufficient fluid is retained for long enough *per os* or intravenously to produce the required lasting effect. 50% of any salt solution injected intravenously into a dog has been observed to leave the blood-vessels in the first 15 minutes, and most of the rest soon follows in the lymph and urine. Benefits ascribed to the use of this method in cerebral tumour, in head injuries (acute stage) and in Trotter's "persistent cerebral contusion" require carefully controlled observation, though a trial should always be given. The use of rectal mag. sulph. would appear to be most rational, if sufficient

concentration can be obtained without irritating the mucous membrane.

For the rest of the book we have nothing but praise. Tumour, posture, sleep, "diseases" of recent description are all most fully and interestingly discussed, and it is indeed noteworthy that the last three chapters are devoted to treatment.

Most certainly this is among the most useful and interesting of the series and should increase co-operation between general practitioner and specialist, which in this branch of medicine is so badly needed.

CLINICAL OBSERVATIONS ON INFANT FEEDING AND NUTRITION. By HOWARD B. GLADSTONE, M.D.(Edin.). (Heinemann.) Pp. 118. Price 7s. 6d. net.

In the same series as the much-used *Infant Nutrition* by Tallerman and Hamilton, this rather more intimate account of certain aspects may be referred to in conjunction with it. The former discusses principles and gives a balanced and complete account of the more simple problems; the present volume is a series of clinical observations, and, being well indexed, does succeed in answering most of the questions which arise. The two are nowhere in striking disagreement, which is the more remarkable, as Dr. Gladstone believes in saying what he thinks. Perhaps the book will be most used because of its excellent and thorough account of the various available patent and artificial foods with their indications. The section on "Some Common Errors in Infant Management" is amusing, containing passages like "A restless infant is often *jogged* on its mother's knee till it stops crying, probably from mild concussion." It also lays down the law in the matter of constipation, but we believe the author to be right in his attack on castor oil, if not in his condemnation of suppositories.

These being personal observations, there is little reference to other work, but we are glad to see Dennett's simplified feeding is commended, especially when other systems have failed.

SURGICAL PATHOLOGY. By C. P. G. WAKELEY, F.R.C.S., and ST. J. D. BUXTON, F.R.C.S. (Bristol: John Wright & Sons, 1929.) Pp. 904. Illustrations 392. Price 45s. net.

Although there are many works on pathology, a good modern book on surgical pathology representative of the present English teaching has for some time been wanting, and the book under review fills this position as well as it is possible for one book to do so.

The major part of the book deals with special pathology, and only the first 160 pages are devoted to general pathology; this, we think, is a good point. The chapters, on the whole, are short, so that almost every organ in the body has one or more devoted to it.

There is nothing very new in the book and most of the views put forward are conservative, which for a text-book is as it should be. Such controversial subjects as the origin of hypernephromata, the nature of testicular and salivary gland tumours, the cause of Paget's disease of the nipple, the cause of prostatic hypertrophy, etc., are dealt with according to the recent literature on these subjects; but in most cases there is not much help for the undergraduate who is struggling after a simple understanding of these problems for the first time. However, the authors are to be congratulated on the book as a whole; it is well balanced as regards space allotted to different subjects; it is very readable, and the illustrations, many of which are from the *British Journal of Surgery*, are well chosen and excellently reproduced, as is to be expected in any book published by John Wright & Sons.

While the book is good throughout, the chapters on injuries to joints and epiphyses as well as the several chapters on deformities are especially good.

We feel very strongly that the value of this book would be enormously increased if at the end of each chapter there was a short list of references to recent literature on the subject dealt with in the chapter. We imagine that this book, which is a large one, will be used, not by the average student who is "cramming" for his final examinations, but by the keener undergraduates who give more time to reading, and by post-graduates who are working for higher examinations in surgery. For these, brief accounts of conflicting theories regarding the pathology of many diseases is not sufficient, and they require a book where references are given to monographs and special articles which describe such diseases more fully. We earnestly hope that in the second edition of this otherwise excellent text-book the authors will add short lists of references throughout the book.

SURGICAL ANATOMY. By GRANT MASSIE, M.D., M.S., F.R.C.I. (London: J. & A. Churchill.) Price 15s.

To the student preparing for his final examination a book of this nature is essential to recall to his memory anatomical details which have been forgotten during his clinical training.

In this volume will be found a full and clear account of applied anatomy in all its branches, including a description of such operations as demand an accurate knowledge of the subject, and also of those branches of embryology which have a direct bearing on developmental abnormality and pathology.

The text is amplified by many excellent diagrams and illustrations of dissections, so essential when the reader has not convenient access to actual specimens.

Among the good points may be noted an excellent description of the spaces of the palm, as classified by Kanavel, and of the subphrenic spaces after Barnard. There is also a very full account of the abnormalities of the cystic duct liable to be met with in practice. A few small omissions may be noted. Thus, no mention is made of the operation of "median" trachcotomy; in the description of the axilla no mention is made of the axillary arches. But these are minor points in a book which can be confidently recommended to the senior student and the post-graduate.

The old terminology is followed, B.N.A. being also given for the benefit of those accustomed to the new.

DISEASES OF THE BLOOD. By A. PINEY, M.D., M.R.C.P. (London: J. & A. Churchill, 1928.) Price 12s. 6d. net.

This volume is an acceptable addition to Messrs. Churchill's Empire Series. The blood diseases are treated from their pathological and their clinical point of view, and an attempts is made to fit particular diseases into some sort of scheme. Hæmatology is in a notoriously controversial state, and beyond complicated and numerous clinical pictures, little can be gained from the study of the average text-book to aid a reader in forming some conception of the hæmatopoietic organs and their diseases as a whole.

At present any attempt to provide a general foundation must depend partly upon conjectures and upon research which has not been fully verified. Dr. Piney has at the outset declared his intention to work upon some system, however vague and controversial its foundations. With this in mind the fitting of each series of diseases into the scheme becomes extraordinarily interesting. Dr. Piney, as in his recent *Advances in Hæmatology*, takes the reticulo-endothelial system as the basis of hæmatopoiesis.

The physiology, morbid anatomy and pathology of each type of blood disease is treated simply, with no attempt to deal with rarer symptoms and complications. Treatment other than symptomatic is indicated.

There are three excellent appendices on hæmatological technique, blood transfusion and blood grouping, and upon the use of X-rays in blood diseases. The glossary of terms will be found useful.

SURGICAL RADIOLOGY. By A. P. BERTWHISTLE, M.B., Ch.B., F.R.C.S.(Edin.). (London: J. & A. Churchill, 1929.) Pp. 135. Price 8s. 6d. net.

The author's intention has been to meet the demand for a book on the interpretation of radiograms, and has regarded the subject from the clinical point of view throughout.

He has set out to lay stress on the early signs of disease, as he holds that the greatest value of radiological investigation is in the confirmation of the early, unobtrusive signs, which are of such importance if an operation is to hold out its fullest prospect of success.

Mr. Bertwhistle has succeeded in compressing a great deal of sound information into a small volume. He has obviously taken great pains to exclude all except essentials, and his pruning has been drastic, especially in the chapter on fractures and dislocations, where he has assumed that the appearances are easy enough for anyone to picture for himself.

The chief criticism to be made is that like most small books it is too condensed to make easy reading, and is hardly complete enough to be used as a book of reference; but now that the medical curriculum is so crowded, brevity cannot be considered a serious fault. It is a book that should be read by all preparing for an examination in surgery, as well as by those who have left such troubles behind them, as it gives a good account of the surgical conditions in which radiology in its present state can be of help to the clinician, and helps him to judge for himself the value of the X-ray evidence in these conditions.

The arrangement of the book is good, it is well printed, the reproductions of films are clear, and a satisfactory index is provided.

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN.

ADAMSON, H. G., M.D., F.R.C.P. "Diseases of the Skin," Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

ARMSTRONG, R. R., M.D., M.R.C.P., and BURT-WHITE, HAROLD, M.D., F.R.C.S., "The Problem of Puerperal Sepsis: the Bacteriology of the Puerperium." *British Medical Journal*, March 30th, 1929.

BATTEN, LINDSEY W., M.B., M.R.C.P. "A Case of Agranulocytic Angina." *Lancet*, March 2nd, 1929.

BURROWS, HAROLD, C.B.E., M.B., F.R.C.S., "Air-tight Suction Drainage of the Chest." *Lancet*, March 16th, 1929.

BURT-WHITE, HAROLD, M.D., F.R.C.S. *See* ARMSTRONG and BURT-WHITE.

CARSON, H. W., F.R.C.S. "Pitfalls in the Right Side of the Abdomen." *Lancet*, April 13th, 1929.

CAUTLEY, EDMUND, M.D., F.R.C.P. (and PATERSON, D., M.B., M.R.C.P.). "The Feeding of Infants and Children." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

——— (and BARRINGTON-WARD, L. E., F.R.C.S.). "Congenital Defects of the Alimentary Tract." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

CHANDLER, F. G., M.A., M.D., F.R.C.P., F.R.C.S., and WOOD, W. BURTON, M.A., M.D., M.R.C.P. *Lipiodol in the Diagnosis of Thoracic Disease*. London, 1928, Oxford University Press.

CHOPRA, R. N., M.A., M.D., I.M.S. (and GHOSH, N. N., and RATNAGIRTSWARAN, A. N.). "Some Medicinal Plants Growing in the Himalayas." *Indian Journal of Medical Research*, January, 1929.

——— (and DIKSHIT, B. B., and PILLAI, K. V.). "The Comparative Action of Ephedrine and Pseudo-Ephedrine from Indian Varieties of Ephedra on the Heart." *Indian Journal of Medical Research*, January, 1929.

CLARK, W. E. LE GROS, D.Sc., F.R.C.S. "The Thalamus of Tupaia Minor." *Journal of Anatomy*, January, 1929.

COCKAYNE, E. A., D.M., F.R.C.P. "Diseases of the Ductless Glands." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

——— "Obesity, Gout, Diabetes Insipidus." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

CONNOR, Sir FRANK P., D.S.O., F.R.C.S., D.T.M.&H. *Surgery in the Tropics*. London, 1929, J. & A. Churchill.

EVANS, GEOFFREY, M.D., F.R.C.P., and SPENCE, A. W., M.R.C.P. "Phenyl-Cinchoninic Acid in the Treatment of Gout." *Lancet*, April 6th, 1929.

FISHER, A. G. TIMBRELL, M.C., F.R.C.S. "Chronic (Non-Tuberculous) Arthritis." *Lancet*, January 19th, 1929.

FLETCHER, H. MORLEY, M.D., F.R.C.P. "Diseases of the Liver, Pancreas and Peritoneum." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

GARROD, Sir ARCHIBALD E., K.C.M.G., D.M., LL.D., F.R.S., F.R.C.P. "Inborn Errors of Metabolism." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

——— "Obesity, Gout, Diabetes Insipidus." Garrod, Batten Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

GASK, GEORGE E., C.M.G., D.S.O., F.R.C.S. "Radium in the Treatment of Malignant Disease." *Clinical Journal*, April 3rd, 1929.

GILLIES, H. D., C.B.E., F.R.C.S. "Cleft Palate." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

——— "Hare Lip." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

GORDON-WATSON, Sir CHARLES, K.B.E., C.M.G., F.R.C.S. "Some Aids to Excision of the Rectum." *Lancet*, March 9th, 1929.

——— "The Treatment of Cancer of the Rectum with Radium." *British Medical Journal*, April 13th, 1929.

GREY, H. MARTIN, M.R.C.S., L.R.C.P. "A Normal Ventriculogram (with Special Plate)." *British Medical Journal*, January 5th, 1929.

HAMER, Sir WILLIAM H., M.D., F.R.C.P., D.P.H. *Epidemiology Old and New*. London, 1928, Kegan Paul & Co.

HARRISON, G. A., B.A., M.D. "Diabetes Mellitus." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

HECKFORD, FRANK, M.R.C.S., L.R.C.P. *See* MOORE and HECKFORD.

HEWER, C. LANGTON, M.B., B.S., M.R.C.S., L.R.C.P. "The Preservation of Anæsthetic Ether." *Lancet*, April 13th, 1929.

HISCOCKS, HENRY F., M.B., B.S. "Adenoma of the Liver with Malignant Changes Associated with Infantilism." *British Medical Journal*, March 23rd, 1929.

HOLDEN, G. H. R., M.D. (and LE MARQUAND, H. S., M.D., M.R.C.P.). "Cerebral Hæmorrhage in a Healthy Child due to Trauma, with Recovery." *Lancet*, February 2nd, 1929.

JAGO, W. J., M.R.C.S., L.R.C.P. "Hackman: Priest and Murderer." *Kenya and East African Medical Journal*, December, 1928.

JONES, W. HOWARD, M.B., B.S. "Methods of Tracheal Insufflation and Intubation Inhalation of Anæsthetics." *Lancet*, February 16th, 1929.

LEVY, A. H., M.D., F.R.C.S. "Injury of Lens causing Alteration of Refraction." *Proceedings of the Royal Society of Medicine*, January, 1929.

LLOYD, ERIC, I., M.B., B.Ch., F.R.C.S. (McLEAN, DOUGLAS and E. I. L.). "Some Aspects of Immunity in Theory and Practice." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

MCCURRICH, H. J., M.S., M.B., F.R.C.S. "The Treatment of the Sick Poor of this Country and the Preservation of the Health of the Poor in this Country." (Rogers Prize Essay, 1926). London, 1928, Oxford University Press.

MACKIE, F. P., O.B.E., M.Sc., M.D., F.R.C.P. "The Microscopical Changes occurring in Organs after Death." *Indian Journal Medical Research*, January, 1929.

——— (and FAIRLEY, N. H.). "The Morbid Anatomy of Sprue." *Indian Journal of Medical Research*, January, 1929.

——— (FAIRLEY, N. F., F.P.M., and BILLIMORIA, H. S.). "Anæmia in Sprue: An Analysis of 67 Cases." *Indian Journal of Medical Research*, January, 1929.

MANSELL, R. A., M.B.E., R.A.M.C. "An Experiment in the Prophylaxis of Malaria." *Journal of the Royal Army Medical Corps*, February, 1929.

MOORE, R. FOSTER, O.B.E., M.A., B.Ch., F.R.C.S., and HECKFORD, FRANK, M.R.C.S., L.R.C.P. "Delayed Corneal Ulceration from Mustard Gas." *British Medical Journal*, March 16th, 1929.

MORLOCK, H. V., M.C., M.D., M.R.C.P. (A. J. SCOTT PINCHIN, M.R.C.P., and H. V. M.). "Malignant Endocarditis of the Tricuspid Valve." *Lancet*, February 2nd, 1929.

MYERS, BERNARD, C.M.G., M.D., M.R.C.P. "The Nervous Child in our Midst." *Practitioner*, February, 1929.

——— "Oral Administration of Pituitary Gland." *British Medical Journal*, March 2nd, 1929.

NEWMAN, Sir GEORGE, K.C.B., M.D., F.R.C.P. *Citizenship and the Survival of Civilization*. London, 1929, Oxford University Press.

NOON, CHARLES, F.R.C.S. "Amputations." *Clinical Journal*, February 13th and 20th, 1929.

OKELL, C. C., M.C., M.B., B.Ch. (R. A. O'BRIEN, C. C. O., and H. J. PARISH). "Titration of Scarlet Fever Antitoxin." *British Journal of Experimental Pathology*, February, 1929.

PAVEY-SMITH, A. B., M.C., M.B., F.R.C.S. "Tonsillectomy in Chronic Arthritis." *Lancet*, January 26th, 1929.

PEARCE, C. M., M.B., F.R.C.S. *See* RAMSAY and PEARCE.

PYBUS, F. C., M.S., F.R.C.S. "The Company of Barber Surgeons and Tallow Chandlers of Newcastle-on-Tyne." *Proceedings of the Royal Society of Medicine*, January, 1929.

RAMSAY, JEFFREY, M.D., M.R.C.P., and PEARCE, C. M., M.B., F.R.C.S. "Tonsil Puncture: A New Method of Investigation." *British Medical Journal*, March 23rd, 1929.

RIDOUT, C. A. S., M.S. "Complete Occlusion of Posterior Choanæ." *Proceedings of the Royal Society of Medicine*, December, 1928.

——— "Aphonia and Hoarseness." *British Medical Journal*, March 2nd, 1929.

RIVAZ, P. M., M.B., D.P.H. "Some Common Problems in Naval Hygiene." *Proceedings of the Royal Society of Medicine*, January, 1929.

ROBINSON, C. A., M.B., D.M.R.E. "Treatment of Pelvic Inflammation by Diathermy." *Proceedings of the Royal Society of Medicine*, January, 1929.

ROLLESTON, Sir HUMPHRY, Bart., K.C.B., M.D., D.C.L., LL.D., Hon D.Sc.(Oxon.), F.R.C.P. *Aspects of Age, Life and Disease*. London, 1928, Kegan Paul, Trench, Trübner & Co.

——— The Huxley Lecture on the Nature of Disease. *British Medical Journal*, February 16th, 1929.

——— (and MCNEE, J. W., F.R.C.P.). *Diseases of the Liver, Gall-Bladder and Bile-ducts*, 3rd edit., London, 1929, Macmillan & Co.

SHAW, WILFRED, F.R.C.S. *See* Barris and Shaw (in May No.).
SHAW, WILFRED, M.A., M.B., B.Ch.(Cantab.), F.R.C.S. "Irregular Uterine Hæmorrhage." *Journal Obstetrics and Gynæcology*, British Empire, Spring No., 1929.
SIMPSON, R. H., M.D., M.R.C.P., D.P.H. and STONE, KENNETH, M.D. "Asthma in Children." *British Medical Journal*, February 16th, 1929.
SOUTHAM, A. H., M.D., M.Ch.(Oxon.), F.R.C.S. (and MUMFORD, P. B., M.D., M.R.C.P.). "Epithelioma of the Skin in a Female Cotton Operative." *British Medical Journal*, February 2nd, 1929.
SPENCE, ALLAN W., M.A., M.R.C.P., M.B., B.Ch. *See* EVANS and SPENCE.
STONE, KENNETH, M.D., M.R.C.P. *See* SIMPSON and STONE.
STUART-LOW, W., F.R.C.S. *The Care of the Nose, Throat and Ear* 2nd edit. London, 1929, Bailliere, Tindall & Cox.
THURSFIELD, HUGH, D.M., F.R.C.P. (and PATERSON, DONALD, M.B., M.R.C.P.). Editors of *Diseases of Children*. First edited by Sir Archibald Garrod, F. E. Batten and Hugh Thursfield. Second edition. London, 1929, Edward Arnold & Co.
——— "Diseases of the Mouth." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.
——— "Diseases of the Hæmopoietic and Lymphatic Systems." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.
THURSTON, L. V., Lieut.-Col., D.S.O., R.A.M.C. "A Criticism and some Comments and Memories of Front Line Evacuation. The Great War, 1914–1918." *Journal of the Royal Army Medical Corps*, April, 1929.
VERNEY, E. B., F.R.C.P. Goulstonian Lectures on Polyuria: I. "Polyuria associated with Pituitary Dysfunction." *Lancet*, March 16th, 1929. II. "Experimental Reduction of Renal Tissue." *Ibid.*, March 30th, 1929. III. "Polyuria in Chronic Nephritis." *Ibid.*, April 13th, 1929.

EXAMINATIONS, ETC.

University of Cambridge.

The following degrees have been conferred:
M.D.—Smith, W.
M.B., B.Chir.—Francis, C. A., Milner, J. G.
M.B.—Palmer, E. A. E.

Royal College of Physicians.

The following have been elected *Fellows*:
Bourne, G., Lovatt Evans, C. A., Roxburgh, A. C., Waterhouse, R.
The following have been elected *Members*:
Allott, E. N., Clegg, H. A., Doyle, G. V. F., Eason, G. A., Roles, F. C., Sharp, B. B., Varrier-Jones, P. C., Woodrow, C. E.

Conjoint Examination Board.

The following have completed the examination for the Diplomas of *M.R.C.S., L.R.C.P.*:
Beddard, J. R. J., Boyd, A. M., Bray, J. S. B., Colville, J. R., Crumbie, J. R., Edwards, F. A. T., George, T. C. R., Giblin, T., Gibson, B. H., Hanson, P. N., Hartley, K. W. D., Heath, W., Holden, C. E., Hutchinson, H. P., Knight, H. V., Neill, E. J., Nicholson, J. C., Parsons, C. T. E., Philps, A. S., Price, R. K., Reynolds, J. B. A., Sanderson, C. J., Sharples, E. M., Todd, C. R., Walter, W. J., Watkin, J. H., Wright, B.

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FORD, J. N. C., 1, The Goffs, Eastbourne. (Tel. Eastbourne 2487.)
KAYNE, G. G., The North Wales Sanatorium, near Denbigh, N. Wales.
LINDER, G. C., Department of Pathology, The University, Cape Town, South Africa.
LYSTER, R. A., 33, Methuen Road, Bournemouth.
MAXWELL, J. P., c/o Mrs. Stourton W. P. Steen, 67, Milton Road, Cambridge.
WOOD, W. BURTON, 1, Park Square West, Portland Place, N.W. 1. (Tel. Welbeck 3341.)

APPOINTMENTS.

BURNE, T. W. H., M.B., B.S.(Lond.), appointed Senior Surgeon, Federated Malay States.
MORGAN, C. C., L.M.S.S.A., appointed Medical Officer and Public Vaccinator for the City District of the Chester Board of Guardians.

BIRTHS.

ANDREWS.—On April 30th, 1929, at 41, Harley Street, W. 1, to Helen and John Alban Andrews, M.C., F.R.C.S.—a daughter.
COBBE.—On April 25th, 1929, at Westminster Hospital, to Dr. and Mrs. T. J. Cobbe—a daughter.
FLETCHER.—On April 28th, 1929, at 98, Harley Street, W. 1, to Christina, wife of Herbert Morley Fletcher, M.D., F.R.C.P.—a daughter.
HARKNESS.—On April 25th, 1929, at 27, Welbeck Street, W., to Sheila Mary (*née* McMillan) and Robert Coltart Harkness, F.R.C.S., of Bermondsey Hospital, S.E.—a daughter.
HEYWOOD-WADDINGTON.—On April 24th, 1929, at 7, St. Catherine's Road, Littlehampton, to Dr. and Mrs. Heywood-Waddington—a son.
HORDER.—On April 20th, 1929, at Ben-Lui, Boyne Park, Tunbridge Wells, to Jessie, wife of Cecil A. Horder, M.B., F.R.C.S.—a son.
NEVE.—On May 1st, 1929, at India House, Addiscombe, to Elsie (*née* Pedley), wife of Clement T. Neve, F.R.C.S.—a daughter.
PARKES.—On April 18th, 1929, to Dr. and Mrs. A. E. Parkes, of Mayfield, Longton—a son.
WALKER.—On May 7th, 1929, to E. M. and K. M. Walker, of 3, Boundary Road, St. John's Wood—a son.

MARRIAGES.

THROWER—POLLARD.—On April 24th, 1929, at All Souls', Langham Place, William Rayner Thrower, M.B., B.S.(Lond.), M.R.C.P. (Lond.), to Violet Beatrice Pollard.
WAKE—CAPPS.—On April 17th, 1929, at Hampstead Parish Church, Hubert Austin, only son of the late Rev. J. H. Ware and Mrs. Ware, to Phyllis Marion, only daughter of the late Fleet-Surgeon F. A. Capps, R.N., and Mrs. Capps, of 139a, King Henry's Road, N.W. 3.

DEATHS.

BAILEY.—On April 25th, 1929, at Geneva, William Henry Bailey, M.D., Barrister-at-Law, late of Featherstone Hall, Southall, Middlesex.
COURTNEY NEDWILL.—On April 30th, 1929, at Christchurch, New Zealand, Dr. Courtney Nedwill, husband of Constance Courtney Nedwill (*née* Peache).
DOUGLAS.—On March 22nd, 1929, at Lonsdale, 57, Goldington Road, Bedford, Reginald Inglis Douglas, M.R.C.S.(Eng.), L.R.C.P. (Lond.), M.B., B.S.(Durh.), D.P.H., R.C.S.(Eng.), aged 49.
RODDIS.—On May 12th, 1929, at The Holm, Hunstanton, Thomas Ernest Earl Roddis, M.B., C.M., late of Snettisham, King's Lynn, aged 55.
SIDEBOTHAM.—On May 9th, 1929, at his residence, Erlesdene, Bowdon, Cheshire, Edward John Sidebotham, M.A., M.B., aged 68 years.
THACKER.—On May 4th, 1929, at Nice, Cecil Robert Allen Thacker, M.A., M.D., late Fellow of Sydney Sussex College, Cambridge, aged 39 years.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for Review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C. 1.*

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St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem."
—*Horace*, Book ii, Ode iii.

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CALENDAR.

Mon., July 1.—Special Subject: Clinical Lecture by Mr. Elmslie.
Tues., ,, 2.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Wed., ,, 3.—Tennis Match *v.* Royal Naval College. Home.
Fri., ,, 5.—Sir Percival Hartley and Mr. L. B. Rawling on duty.
Swimming Match *v.* Old Paulines. Home.
Sat., ,, 6.—Cricket Match *v.* Chorley Wood. Away.
Tues., ,, 9.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Wed., ,, 10.—Cricket Match *v.* St. Anne's. Away.
Fri., ,, 12.—Dr. Langdon Brown and Mr. Harold Wilson on duty.
Swimming Match *v.* Old Citizens. Home.
Sat., ,, 13.—Cricket Match *v.* Hornsey. Home.
Tennis Match *v.* Royal Artillery. Home.
Tues., ,, 16.—Prof. Fraser and Prof. Gask on duty.
Wed., ,, 17.—Tennis Match *v.* Royal Naval College. Away.
Swimming Match *v.* Old Citizens. Away.
Fri., ,, 19.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Last day for receiving matter for the August issue of the Journal.
Sat., ,, 20.—Cricket Match *v.* R.A.F. (Halton). Home.
Tues., ,, 23. Sir Percival Hartley and Mr. L. B. Rawling on duty.
Fri., ,, 26.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Tues., ,, 30.—Dr. Langdon Brown and Mr. Harold Wilson on duty.

EDITORIAL.

IT is with regret that we hear of the coming retirement of Dr. Hugh Thursfield from the Honorary Staff of the Hospital. We can only hope that his retirement from the wards will be the only severance with Hospital life that he will make.

* * *

The Birthday Honours have brought added glory to two of St. Bartholomew's men. We congratulate Sir Humphry Rolleston, Bart., upon becoming a Grand Commander of the Victorian Order.

* * *

To Dr. Robert Bridges, O.M., we offer our congratulations. His activities in the Hospital belong to days alien to the memory of most of us, but his article in the Hospital *Reports* for 1878 upon the Casualty Department may be read with pleasure and profit. The statistical analysis of the cost of H.M.S. *c* M.S. and Haust Ferri cum Quassia antedated the fuller researches of the London Hospital by many years. The picture of the difficulties of a casualty physician in those days is, to us pampered moderns, appalling. The prose is irreproachable.

* * *

The Council of the Royal College of Surgeons has awarded the Lister Medal for 1930, for distinguished contributions to surgical science, to Dr. Harvey Cushing. We offer him our congratulations, and hope that he will pay a visit to this Hospital, of which he is a Perpetual Student, when he comes to London to give his promised address "upon some date in 1930."

* * *

It is a pity that the men responsible for the more unpleasant episodes which took place at Caxton Hall the other week should be categorically designated as medical students. They may equally well be placed in categories unequivocally implying unthinking and ungentlemanly behaviour. As it is, they impose their own peculiar bad odour upon a class of which they are not typical examples.

Anti-vivisectionists are not likely to become convinced of the value of research work entailing the use of animals, if they treasure unpleasant and unrepresentative impressions of the research worker in embryo. Nothing strengthens the convictions of a sentimentalist more than prejudicial opposition.

We are asked to announce that a Post-Graduate Course in Radium Therapy will be held in the Hospital from Monday, September 30th, to Thursday, October 3rd, inclusive. The class will be limited to about thirty men, and preference will be given to those who are likely to work with radium. Particulars may be had from the Dean of the Medical College.

* * *

The United Hospitals Swimming Gala will be held at the Bath Club on Tuesday, July 2nd, at 7.45 p.m., when the St. Bartholomew's *v.* Guy's Water Polo Final will be played.

OBITUARIES.

SIR WILLIAM FAIRBANK.

SIR WILLIAM FAIRBANK, K.C.V.O., Hon. Surgeon to His Majesty's Household at Windsor Castle, died on June 9th at Moulsey House, Windsor, in his 79th year.

He was educated at the Forest School, Walthamstow, and entered St. Bartholomew's Hospital in 1868, becoming dresser to Sir James Paget. Here he early showed proficiency in the art of dissection and was chosen a prosector at the Royal College of Surgeons of England. He obtained the licence of the Society of Apothecaries in 1872, and in the following year he was admitted a member of the Royal College of Surgeons of England.

In 1880 he was appointed Surgeon Apothecary to the Royal Household in the place left by the death of his elder brother. He soon became as much a *persona grata* as his brother, and he served the Royal Family faithfully for three generations, being created M.V.O. in 1911, and promoted C.V.O. in 1921, and K.C.V.O. in 1924. He was also made O.B.E. in 1918. Active in professional work, Sir William served for many years as Surgeon to the old Windsor Royal Infirmary, and at the time of his death was Hon. Consulting Surgeon to its successor, King Edward VII Hospital.

Dr. Fairbank was a member of the delegation of British mayors who visited the devastated regions of France, and after the "adoption" of Hardecourt-aux-Bois, on the Somme, by Windsor, he personally collected funds for the reconstruction of the village. Since that date he had visited the village annually, and his constructive interest and private benefactions, made chiefly for the restocking of orchards and gardens, so won the esteem and gratitude of the inhabitants that they renamed their village square and main street after him.

Sir William initiated and for long controlled the St. John Ambulance Brigade of the borough, and for 39 years gave "first aid" lectures in Windsor and Slough. He was made a Knight of Grace of the Order of St. John in 1897. He was Librarian, Chairman, and President in various years of the Royal Albert Institute, Windsor, an institute largely concerned with the education and recreation of the townspeople. He was a member of the Berkshire County Council and of the Windsor Borough Council, a county and borough magistrate, Chairman of the Commissioners of Inland Revenue for Windsor and Maidenhead, and Governor of the Royal Holloway College. In all these and other positions he deserved well of the community, and is an outstanding instance of the services which educated men can render in civic life. The amount of personal trouble and interest he took in the service of his fellow-citizens was quite exceptional, but for the last four years ill-health had gradually compelled the relinquishment of active participation in one branch of service after another.

SIR CHARLES HARDING.

Sir Charles O'Brien Harding died at Eastbourne on June 7th at the age of 70.

He was educated at Epsom College, and studied medicine at the Sussex County Hospital and at St. Bartholomew's Hospital. He captained the Rugby football team of this Hospital in the years 1882–3.

After starting a practice in Eastbourne, he served continuously on the town council until the beginning of this year. He was mayor of Eastbourne from 1915 to 1919, and for his services in the war period he received his knighthood in 1920.

He was indefatigable in his work as chairman of the local Princess Alice Hospital, and was a firm friend of the Queen Alexandra Cottage Homes. He was known, too, for his activities as a magistrate, as a fine speaker, and a citizen of Eastbourne, whose mayor has said of him: "We have had many fine men in Eastbourne, but never a finer, nobler, Christian English gentleman."

CECIL ROBERT ALLEN THACKER, M.D.(CAMB).

The death of Dr. Thacker at the early age of 39 will be regretted by a large number of Cambridge men and by many who came in contact with him during the war. His brief career was full of promise. At Downing College, Cambridge, he obtained a first class in both parts of the Natural Science Tripos in 1911 and 1912, taking physiology in the second part. From Cambridge he went to St. Bartholomew's Hospital with the senior entrance scholarship, and further distinguished himself by winning the Kirkes Gold Medal, the Brackenbury Scholarship, the Matthews Duncan Prize, and the Skynner Prize. In 1914 he graduated as M.B. at Cambridge, and took the M.D. degree in 1920.

His early preference toward physiology was spoilt by the war, and his attention turned to neurology. Through his work on the Medical Boards he became interested in modern psychology and particularly in psycho-analysis, in the practice of which his innate good sense and wide sympathies made him an admirable assessor of the difficult cases which came before him.

In 1918 he was elected to a Fellowship at Sidney Sussex College, where for some years he held the Taylor Lectureship. While his time was mostly taken up in supervising medical students, psycho-analysis became more and more his dominant interest. Unfortunately, just as he was preparing to devote himself to practice in what was undoubtedly his true *métier*, he was stricken down by a serious illness, which made him practically bed-ridden for several years until his death. After a long struggle he was compelled to leave England for the kindlier climate of the Riviera. Those who knew him well will always recall his charming personality, his unselfishness and loyalty, and above all the sublime courage with which he endured a distressing and unusually protracted illness.

NEW PAINS FOR OLD.

IN several clinical lectures recently I have tried to lay down certain general principles as to the ætiology of psychoneuroses. To-day I want to try to provide a rational explanation of the numerous pains of which the psychoneurotic so often complains.

Whereas nerves of discriminative sensibility have special end-organs, afferent nerves which only convey sensations of pain end in free arborizations, but if stimulation is increased in strength any sensory nerve can convey painful sensations. The specialized end-organ at the same time increases accessibility to one specific stimulus while diminishing it to all others. The sensation of pain is more difficult to evoke than the others—it has a higher threshold—but when this is reached it produces a sudden and explosive reaction. The end-organ, on the other hand, permits of that quiet sensory atmosphere in which alone deliberation and discrimination are possible (Trotter).

Painful sensations reach and are recorded in the optic thalamus. The cerebral cortex can exercise a varying degree of attention to the impressions received through the optic thalamus. When the discriminative fibres of the epicritic system are out of action we know that the impulses transmitted by the protopathic fibres produce an exaggerated sensation of pain. In other words, our cerebral cortex normally damps down our painful impressions by not paying attention to them. An extreme example of this is seen in the lack of pain following the infliction of a wound during the excitement of battle when the attention of the cortex is directed elsewhere. On the other hand, fatigue and insomnia may greatly increase the sensitiveness to pain. Trotter maintains that everyone in the course of a day experiences quite severe pain in some part or other of the body, but forgets it. It is one of the most blessed things about the human mind that normally it forgets past pain so quickly. But in the type of case I am going to consider, for reasons which I shall give, an entirely undue amount of attention is given to sensory impressions, and the threshold is so far lowered that ordinary sensations amount to pain.

A distinguished physician of the last generation, a very human and humorous individual, and devout withal, suffered from a series of ischio-rectal abscesses. I remember that he said he wished it had pleased the Almighty to afflict him in some place he might have talked about. He belonged to the last generation; to-day much more intimate anatomical and physiological details are subjects of conversation in mixed society; but there is still something that most people prefer to keep secret, and that is their emotional, instinctive selves. When hurt there, however, they would like to be able to make a bid for sympathy. It is much simpler to appeal for that sympathy, whether from others or from themselves, on the ground of some physical rather than some mental pain.

Then comes the magician, offering new lamps for old—instead of the cold, clear light of reason he offers the will-o'-the-wisp of phantasy—new pains for old—and pains, thank God, which can be talked about, pains which may afford some measure of escape from a distressing environment. To recognize such substituted pains for what they are will call for much care and diagnostic skill. To take a simple instance in the first place. A woman who has brought up several children has had all her energies fully absorbed for a number of years. Child-bearing absorbs much that would otherwise go in other directions. (Two able women have independently testified to me as to the great difficulty they experienced in sustained directed thinking when they were pregnant.) In course of time the family grows up and she finds herself without any invested capital of mental interests. Then she has an illness; the family comes rushing back to the bedside; once again the household revolves about her. The lesson is learned

and advantage is taken of it, and she proceeds, in the illuminating phrase, to "enjoy ill-health."

The doctor's position is difficult: if he were to divulge his opinion he would be regarded as a hard-hearted brute who doesn't know his business. Of course gradually one other person comes to recognize the true state of affairs—the husband. But he doesn't tell, not even to the doctor, unless he is very tactfully cross-examined—and sometimes not even then. His wife may criticize him lavishly at afternoon tea-tables, but if he criticizes her at his club you may conclude he was very drunk indeed. There is a lot of quiet heroism in unsuspected places.

I am not implying that the fault is always on one side. I remember an interesting case of heroism in a woman which exactly illustrates my point. The patient was a young woman who had had an unhappy childhood; her parents quarrelled incessantly; her mother was drunken and vicious. She then had a happy time as a school-mistress, for this satisfied her evidently strong maternal instincts. She married a man much older than herself, chiefly from motives of pity. She had a great shock on finding that he was determined not to have children. He would not even allow her to have a dog. She began to suffer from severe abdominal pains.

I came to the conclusion that she was deliberately constipating herself because the resulting physical pains distracted her mind from mental pain. I taxed her with this, and having gained her confidence she told me the facts I have mentioned and admitted the point. She got very much better, and free from pain, but unfortunately became obsessed with the advantages of self-starvation. She became easier in mind, but much weaker in body. I saw her again after an interval of two years and was shocked by the change in her, but she was now quite bright and apparently happy. Asceticism had provided her with a way of escape from mental woes. She adopted the Salisbury treatment, and took the most meticulous care in cleansing the meat from every trace of fat or connective tissue. Her small meal required about two hours to prepare and even longer to eat. I strongly suspect these self-starvers and purifiers to be haunted by an obsession of sin, though in this case it may have been prompted by a desire for vicarious sacrifice.

These new self-inflicted pains may be a protective mechanism, as in the case of a girl in the early twenties who took to her bed for a couple of years on account of abdominal pains for which no one could find a cause, and which she would not have investigated by modern methods. Then her father died and left her sufficient money to be independent. She rose from her bed, quarrelled with her mother, set up a house of her own and was quite well.

Another example of protective pains is the following: A young married woman was sent to see me because of a story of extraordinary pains in all sorts of places. Like many another she was the subject of cancerphobia. She was anxious to go into a nursing home for observation and treatment, but discharged herself within twenty-four hours, leaving an address to which I could send a note of fees, which needless to say I never received. The mechanism here was fairly obvious. Her husband had obtained a post in India, and she hated the life there. She complained of her health so much that at last, in sheer desperation, he told her to come home and not to return until she was cured. As she does not want to return there is very little probability of her being cured. The more doctors she consults the more she can impress her husband with her efforts to be cured, and the fewer of those doctors she pays the longer this process can last.

Another case of cancerphobia in a patient of a higher level of intelligence was in a man of about 50, with nervous dyspepsia. He had lost his wife, to whom he was devoted, from cerebral hæmorrhage after an air raid. He was left with four small children, and a widow with one child of her own offered to look after them if he would marry her. He did so and life became almost impossible. He had to fight for his children's rights against the favouritism she extended to her child. During the food-rationing in the later stages of the war he found this child was being surreptitiously fed at the expense of his. He had no escape, for his work was done at home. He had no mitigation by getting away to business for the greater part of the day. He had an invalid mother dependent on him and he had to go on working whether he felt ill or not. Gradually he came to think that only death could bring him any relief, and then the though came—but it might be death by cancer; that would be a horrible way out. And so the phobia grew and his misery increased.

Indecision may be an important factor in producing substitute pains, as in a girl of 21, who was engaged to be married. As she was an only child a conflict arose in her mind between a disinclination to leave the security of home life and a natural impulse to assume more adult responsibilities. This concentrated her mind very much upon her own health, because unsatisfactory health enabled her to hold the balance between these two factors in the conflict. I told her and her doctor that I believed that as long as she remained in this state of indecision her health would suffer, and I urged that she should go ahead with her arrangements to get married. She did so and got quite well. That was nearly two years ago; but recently she has relapsed, again on account of indecision. Her husband wants a child, and she is fearful of taking on such a responsibility. So

again bad health is invoked, and again I have urged her to decide in favour of completing her adult existence.

Recently I saw a girl whose health had seriously failed; no objective cause could be found for this beyond a slight swelling of the thyroid, without any real evidence of hyperthyroidism. On inquiry I found that she had been teaching in a school where her cousin was the wife of the headmaster. She liked the life; threw herself into it with enthusiasm, and gave out a lot of energy. She had made good, and then her cousin's attitude towards her changed—no rival was to be permitted near the throne—and she was subjected to a series of pinpricks. While having to do the social things that might be looked for in a relation at other times she was kept rigidly at arms' length as a member of the staff. She felt this very much, and it was a disillusionment to her enthusiastic nature to find herself punished for her successful devotion to her work. Her thyroid began to swell at this time. It is rather significant that her thyroid had been noted to swell on a former occasion, when she had some little disagreement with her father about the work she was to undertake. There had also been somewhat of a disappointment because one of the under-masters became engaged to someone else. Her experience of the outside world after the protection of home life had been too hard and disillusioning; it had thrust her in on herself and she needed time for readjustment.

A woman in the forties had attacks of hyperchlorhydria and abdominal pain, for which I could find no objective cause. A test-meal had been done, but the result was not to hand when I saw her. She was anxious for an X-ray examination to exclude peptic ulcer or appendicitis; this was done with an entirely negative result. I sent the report of this to her doctor, who replied, "Last night I learned from the husband that their married life was unhappy—with no children after many years of marriage. There were squabbles and recriminations. I think one need not look farther than this for the cause of the wife's dyspepsia." And with that I quite agree.

The case of Mrs. Browning is historic. As Elizabeth Barrett her father had imposed an almost Oriental seclusion upon her, for he was determined she should not marry—an attitude towards daughters more common in fathers than is generally supposed. She became an invalid and took to her bed until Robert Browning ran away with her, after which she became quite well.

To question a patient in the presence of another member of the family is worse than useless. For instance, it is usually impossible for a girl to reveal her feelings before her mother. In these matters there can be useful co-operation between the general practitioner and the consultant. The former knows the environment and sees both sides in a family difficulty, while patients find it easier to tell their secrets to the latter as he is a stranger whom they need not see again. A married woman with children once told me that the real source of her ill-health was a woman friend who was always imploring her to leave home and share her "well of loneliness." I remarked that she had never told her doctor this; she admitted it, and asked how I knew. I pointed out that she had given me her address as No. 12 in a certain road and that her doctor had written to me from No. 10 in the same road. Some things are too difficult to tell a neighbour, even if he is a doctor.

A doctor seeing a case for the first time may occasionally use shock tactics with success. A friend of mine, a general practitioner, was called to see a young lady in a flat. He was shown into the sitting-room, and noted that while there were no photographs of young men there were many of women, particularly one of a masculine type. When he was ushered into the bedroom he noted a cabinet photograph of the same masculine woman by the bed-side. He was told a long and rambling story of pains, for which careful physical examination revealed no cause. He then said, "Do you want me to tell you what I think is the cause of your trouble?" "Yes, that is why I sent for you," was the reply. "But some are not strong enough to bear the truth," he went on. "You really want me to tell it to you?" "Yes." "Well," he said, dramatically pointing to the photograph, "*that* is the cause." The patient rose up in her bed—"How *dare* you?" she said, "how dare you insult me like that?"

My friend said, "I am very sorry. You asked me to tell you what I thought was the matter, and I did so. I can quite understand that having dropped such an appalling brick you will prefer not to see me again." He rose to go, but before he reached the door the patient called out, "Stop; it's quite true; how did you guess it?"

Is the human race, as it becomes more sensitized, doomed to suffer more and more from these "substitute pains"? It might be thought that there is little or no chance for improvement, since the emotional factor in man is not only the most primitive, but the most unchanging. But such a pessimistic conclusion is far from justified. For the first time in the history of man we have two powerful forces making for improvement: (1) An increasing number of investigators remorselessly applying biological methods to the understanding of man's mental processes, and (2) an increasing number in the younger generation who are not content to adopt accepted standards without demur, but who are keenly intent on discovering the truth about themselves and

their reactions to their environment. In the general conflagration of the war more rubbish was burned up than has yet been realized in some quarters. The questioning of conventional ideas goes on unceasingly; many of them have been weighed and found wanting. That there is a crudity and harshness in the attitude of the younger generation is a fact which is frequently lamented by their seniors, but in so far as this is the almost inevitable outcome of a sincere determination to discover the truth, it is merely the rough side of a real advance.

True, the motto of the ancient Greek philosophers was "Know thyself," but, as can be seen from the fact that this text was frequently inscribed beneath a grinning skeleton, it often became degraded to a mere "Memento mori"—the attitude of asking why a man should boast himself if he is so soon to die. The newer application of the saying is to learn to know oneself so as to make the most of life—to know how to live rather than how to die. The old psychology took the highest types of mental activity that could be discovered, explored these by introspection as far as possible, and built up a system on the basis that man is a reasonable being. We have come to realize that he is nothing of the sort. He is merely in process of becoming reasonable. By the pursuit of a more objective method than introspection we are realizing that a little reason mounts guard perilously and indecisively over a whole mass of emotions and instincts inherited from a far distant past, much as the cerebral cortex exercises a fluctuating degree of control over the mass of grey matter beneath it. It is only by frank recognition of such facts that the reasonable self can increase its control over the unreasoning self.

For the first time, then, human relationships are being studied objectively, and the results of that investigation are proving disconcerting, because the tearing aside of veils is showing that things are other than we have supposed. But that is a temporary phase, before re-adjustments have had time to be made. In the past many men found it a painful idea that after all the earth was not the centre of the universe and the sun did not move round it. Does that fact worry anyone to-day? On the contrary, has not its acceptance both simplified and expanded our conception of the universe? Last century many men were greatly distressed at the idea that man was not a special creation, but was evolved from lower forms. Does it distress us to-day? On the contrary, the evolutionary conception reveals a far greater and more wonderful world than our grandfathers had any idea of. Now it is not man's position in the universe or in the animal kingdom that is being questioned—it is the nature of man himself. For a time this will be painful to a good many; the giving-up of preconceived ideas is often painful, but the result of frank acceptance will be release from many obsessions of fear; the bogey boldly faced is seen for the turnip lantern and white sheet that it is. There will be less sheltering behind disabilities created by imaginary pains when we realize that the source of the pain is within ourselves, and that it originates in a conflict between the instinctive and the reasoning self. As long as people lie to their reasoning selves they are bound to suffer.

It is clear from many of the cases that I have related that there was a genuine cause for painful feeling; merely explaining how the emotional cause is producing bad health does not do away with the disagreeable emotion. But it brings it more under the control of the reasoning self—it does away with the terror of the unknown, and the patient is able to face the situation with a calmer courage. W. LANGDON BROWN.

MORE MEDICAL NOTES.

By Sir THOMAS HORDER, Bt.

ON ALCOHOL.

(1) The acquired causes of the alcohol habit are mainly psychological; the drab and monotonous life of the poor, the ennui of the rich, *misère*, and success achieved too early.

(2) Those alcoholic beverages which tend most to the production of gout and goutiness, such as beer and port, owe this effect, not to the alcohol they contain, but to other substances. If a gouty patient has not damaged his powers of assimilation and elimination he can usually find a substitute which does not produce this effect; but when this damage has taken place complete abstention is Hobson's choice.

(3) Anomalies of temperature in a patient suffering from a pyrexial illness are not seldom explained by his addiction to excess in alcoholic drinks. (It has been shown that alcohol administered to animals abolishes temporarily the power of heat regulation in the body.) Morphia is capable of producing the same effect.

(4) In those who are accustomed to alcoholic beverages, taking them at the end of the day tends to promote sleep; in those who are unaccustomed to them it tends to insomnia.

(5) Spirit-drinking is a potent cause of inflammation of the whole alimentary tract, not of the stomach only. Gingivitis, with pyorrhœa, in young men otherwise healthy, is an example. Another example is colitis in the subject of an old dysentery. A third is proctitis in a patient with hæmorrhoids.

(6) Symptoms of duodenal dyspepsia (hunger-pain, etc.) are not infrequently, in susceptible persons, the result of taking alcoholic drinks in relative excess. When this is so the discomfort is often relieved by resort to the cause—an experience which is one of the explanations of the "apéritif" habit.

(7) Alcoholics tend to bleed more often than non-alcoholics, and more profusely. The common example of this is hæmatemesis, which may occur in alcoholics without peptic ulceration and without any signs of portal pressure. But alcohol is a factor in many cases of hæmoptysis also, whether the associated structural defect be due to pulmonary tuberculosis, to chronic dilatation of the heart with infarction, or to emphysema. And of hæmaturia the same comment may be made, given the presence of granular kidney. If hyperpiesis, itself sometimes a result of chronic alcoholism, be an additional association of any of these states, the tendency to hæmorrhage is still greater.

(8) In the odour of a patient's breath it is important to distinguish between the sweetish smell yielded by the esters of a recent alcoholic drink and the heavy, fœtid smell associated with the chronic gastritis of the habitual drinker; the latter odour is commonly, but mistakenly, thought to be due to "stale alcohol."

(9) In private practice the prognosis in alcoholic cirrhosis of the liver is by no means so bad as is the case in hospital patients. The reasons for this are probably as follows: Patients suffering from the disease come under observation earlier, they drink purer forms of alcoholic liquors, and there are stronger inducements to abstain or to drink less freely.

(10) Not upon how meagre a diet a patient can live, but upon what sort of a diet he can live most efficiently, should be the physician's guiding principle in ordering a patient's regimen. Neglect of this rule sometimes leads to anomalies to which either patient or doctor may be blinded by sentiment.

(11) When a patient strongly objects "on principle" to take any alcoholic stimulant, it is better not to advise it. But this applies to other therapeutic agents also.

(12) In the choice of alcoholic beverages, when one is ordered by the physician, habit and the individual factor should be allowed considerable weight.

(13) In the cure of alcoholism, as of most habits, the question whether the thing should be given up gradually or suddenly must be determined by a study of the individual case. Yet a few general hints are possible: (i) If the main indication is physical the gradual method is probably essential; if psychological, it is not necessarily so. (ii) The sudden method nearly always demands for its success that the practitioner undertaking the case be available at any moment; in other words, the patient must be under close observation the whole time. (iii) In coming to a decision a frank talk with the patient is a *sine qua non*. (iv) In any case of doubt the gradual method is probably the safer.

(14) In estimating the difficulties that underlie an effort to cure a chronic alcoholic, it is probably near the truth to say that the doctor's confidence in the patient's ability to abstain should be in inverse ratio to the patient's confidence in himself.

RAHERE LODGE.

THE Installation Meeting of the Rahere Lodge No. 2546 was held in the Great Hall at St. Bartholomew's Hospital on Tuesday, June 18th, 1929, W. Bro. H. D. Gillies, the I.P.M., being in the Chair. The initiation ceremony was first held and was conducted by W. Bro. H. E. G. Boyle, L.R.P.M., the charge being given by W. Bro. Reginald M. Vick, P.M.; subsequently, W. Bro. Edward P. Furber, C.B.E., B.P.G., J.W. (Surrey) was installed as W.M. for the ensuing year by W. Bro. Girling Ball, J.G.D., P.M. The following officers were appointed and invested:

E. P. Furber	W.M.
H. W. Henshaw	I.P.M.
T. H. Just	S.W.
Howard Jones	J.W.
R. B. Dand	Chaplain.
Ernest Clarke	Treasurer.
W. Girling Ball	Secretary.
H. E. G. Boyle	D.C.
Reginald M. Vick	A.D.C.
G. H. Rossdale	S.D.
John Cumming	J.D.
E. Laming Evans	Almoner.
Ll. G. Smith	Organist.
Gerald Stathers	Asst. Secretary.
F. Coleman	I.G.
E. Whitehead Reid	Senior Steward.
H. E. Griffiths, H. R. Buttery	Stewards.
A. H. Coughtrey	Tyler.
E. W. Hallett	Asst. Tyler.

There were present 118 officers, past masters, brethren and visitors, who subsequently dined at Gatti's Restaurant, 13, King William Street, Strand.

THE LONELY FURROW.

WE live in an age of mass production. We are assaulted with statistics and battered with figures whose magnitude bludgeons our intellects into submission. This is true alike of cars and cancer, paper money and patent medicine. Our conclusions are driven by mere weight of numbers.

Bloggs, Silas Q. (*Journ. N.C. Soph. Soc.*, 1929, i, p. 4003) has described "Congenital Synostosis of Ethmoid and Lacrimal Bones" with the authority and finality that "two thousand proved cases" must surely confer. Lincoln, Sir Henry J., apologetically brings forward his "small series" of fifty examples of "Jejunal Ulcer associated with Convergent Strabismus" (*Gleanings from a Surgeon's Log Book*, Priority Press, London, 1929). Who can withstand such onslaughts? Few indeed in public, and yet, in private, the still small voice of reason whispers that Newton saw one apple fall, that Watt had a solitary kettle, and that one bath and one compound fracture would have satisfied Archimedes and Lord Lister.

We seek knowledge, but forget its foundations. We struggle at last to a true sense of values only to find that our little heap of experience is the stuff to build with. You cannot have a flair for diagnosis until you are too wise to want it.

Our greatest teacher is death, and his gifts to life are what we call "complete cases"; such are whetstones to knowledge and touchstones of wisdom. America boasts Niagara Falls and the Woolworth Building, but the weekly staff-meeting of the Mayo Clinic can teach us more. Here the living take from the dead the last few precious grains of knowledge and try to find the way of success in every failure.

A certain physician is "an inveterate note-taker" and that is how to store experience. His case-sheets are his treasure, but they perish with him.

Mass production and big numbers serve their turn, but the looming bulk of them fills the horizon, and casts a shadow on the lonely furrow at the edge of the hill where no Fordson tractor has ever passed. Our five cases of sprained ankle may set us in the path of wisdom, where we shall look, perhaps in vain, for Silas and Sir Henry.

ERIC I. LLOYD.

HOW PATIENTS CHOOSE THEIR CONSULTANTS.

OLD LADY FROM SOMERSET: I was not satisfied with my doctor's advice, so my brother's wife asked a doctor in Cheshire who was the best person to go to. He does not know you himself.

GAMMA.

WITHIN THE NEW SURGICAL BLOCK.

(*With the usual apologies.*)

TAX not the Hospital with vain expense,
With ill matched aims the architect who planned
(Albeit labouring for a chosen band
Of white-robed surgeons only) this new wing
And splendid home of "Therapeutics' King"
(As some believe). 'Tis meet Listerian arts
Should have a temple fit for them at Bart.'s,
Where surgeons work whose eagerness will bring
More progress still. Soon now beneath that roof
The newest theatres with their labs. and wards
Will be, to which in ever greater hordes
Shall come the sufferers, those who, loth to die,
Seek aid from men whose skill is certain proof
That they were born for immortality.

L. I. M. C.

A CASE OF TRAUMATIC DISSECTING ANEURYSM.

MALE, æt. 47, was brought up to hospital, having been knocked down and run over by a water-waggon.

Condition on admission.—Temperature 97° F., pulse 90, respirations 35.

He was unconscious and cyanosed. His breathing was very laboured.

The pupils were equal and reacted to light and accommodation.

There was a vertical laceration 1 in. long and ½ in. in front of the right ear. The wound did not go down to bone, but there was blood in the external auditory meatus.

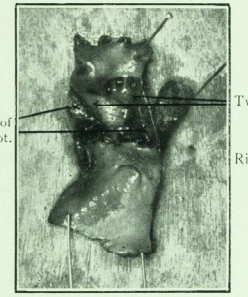
The whole of the upper part of the right side of the chest was crushed and surgical emphysema was present all over the right side.

The area of cardiac dullness and heart-sounds were normal, as were the radial pulse on the left side, but no pulsation at all could be detected in the radial artery, the brachial artery nor the axillary artery on the right side. Pulsation was present, however, in the right common carotid artery.

There was no evidence of fluid in the right side of the chest.

The abdomen was distended and somewhat rigid in the upper part, but movement was good and no evidence of shifting dullness in the flanks was obtained.

He was admitted to Surgery Ward and put on to continuous nasal oxygen. Morphia was administered freely. No other physical signs developed either in the chest or abdomen. The temperature remained steady, but the pulse-rate rose steadily to 150 and breathing became more and more laboured, the patient dying early next morning.



Innominate artery.

Autopsy.—The interesting feature of this examination was the right subclavian artery. The exterior of the vessel appeared to be normal, there was no evidence of rupture or injury to the tunica adventitia, but the artery was found to be filled with a thrombus. On opening the first part of the artery it was found that a transverse rupture of the intima and media had occurred all the way round its circumference. Two flaps of these coats had been turned upwards, *i.e.* in the direction of the blood-flow. These flaps lay across the interior of the vessel, acting as valves and obstructing its lumen. The raw area of adventitia so exposed was covered with blood-clot.

Other post-mortem findings were:

(1) Multiple comminuted fractures of ribs 1 to 9 right side, and backward dislocation of right clavicle at sterno-clavicular joint.

(2) Extensive old adhesions in both pleuræ and a little free blood in such of right pleural cavity as had not been obliterated by these adhesions. No hæmothorax. Laceration of outer surface of lower lobe of right lung admitting one finger.

(3) No laceration of any abdominal viscus.

(4) Fractured base of skull and small lacerations of brain.

Apparently this interesting condition found in the right subclavian artery was caused by the pressure of the fragments of the fractured first ribs, which, whilst leaving the tunica adventitia intact, had by some means brought about the split between it and the two inner coats to form the flaps described above.

I am indebted to Mr. Harold Wilson for his kind permission to report the notes of this case. My thanks are also due to Miss Vaughan for her care and work in photographing the specimen.

W. BUCKLEY.

§

THE USE OF LIPIODOL IN CASES OF STERILITY IN WOMEN.

ALTHOUGH this communication deals briefly with the use of lipiodol, it is of interest to review the historical evolution of the technique. As long ago as 1914 Rubin endeavoured to test the patency of the Fallopian tubes by injecting a solution of collargol into the uterus and subsequently taking X-ray photographs. He was forced, however, to abandon this method owing to the unpleasant reaction which took place in the pelvic peritoneum.

In 1923 Kennedy published a paper describing a method in which he employed a 20% solution of sodium bromide; in his case the cause of failure was the insufficient density of the shadows produced. In 1925 Forsdike read his first paper and published hysterograms before the Gynæcological Section of the Royal Society of Medicine, having been stimulated to use lipiodol for injection following the introduction of this substance for the localization of spinal tumours by Sichard, of Paris.

The substance lipiodol is a 40% solution of iodine in red poppy-seed oil, and before discussing its use it is essential to consider its action on the mucosa of the uterus and Fallopian tubes, as well as on the peritoneum. The evidence is conclusive, based, as it is, on investigations on women and cats as experimental animals. Forsdike has introduced abundant amounts of lipiodol into the uteri and peritoneal cavities of cats, which were killed 3 to 6 weeks later. Not a single case showed evidence of peritoneal irritation, nor did the endometrium appear abnormal. The operation findings in women who have had lipiodol injections is, perhaps, more to the point, there being a number of cases in which the abdomen has been opened within a few days of injection, and although lipiodol was still present in the pelvis there was no accompanying inflammatory reaction. It is thus obvious that the remedy is not harmful.

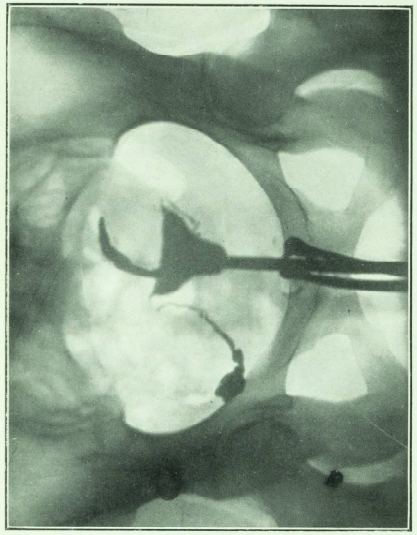


FIG. 2.

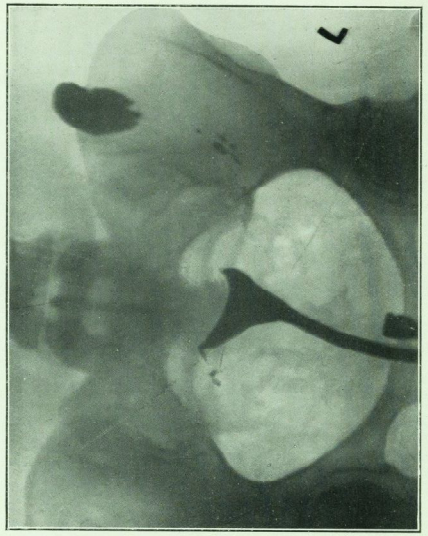


FIG. 4.

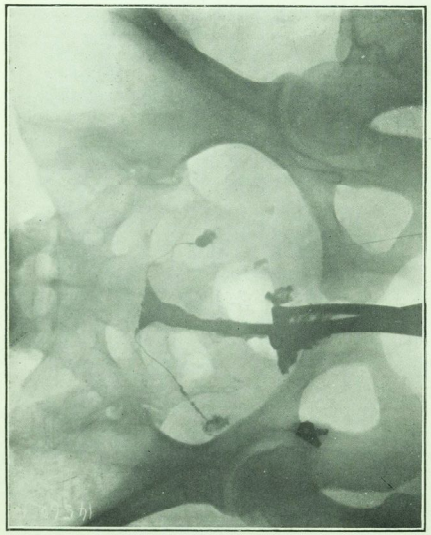


FIG. 1.

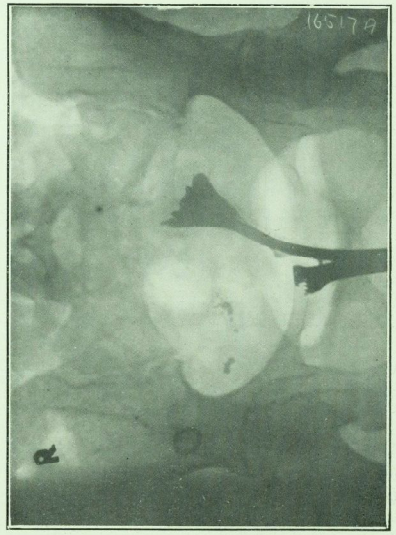


FIG. 3.

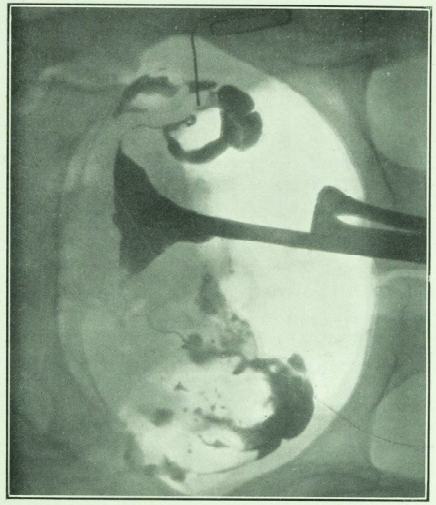
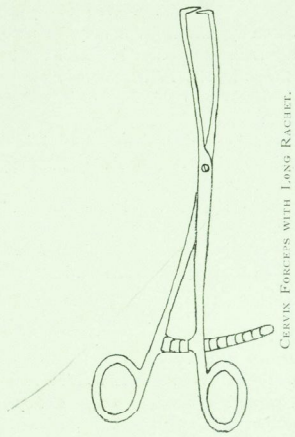


FIG. 6.



CERVIX FORCEPS WITH LONG RACHET.

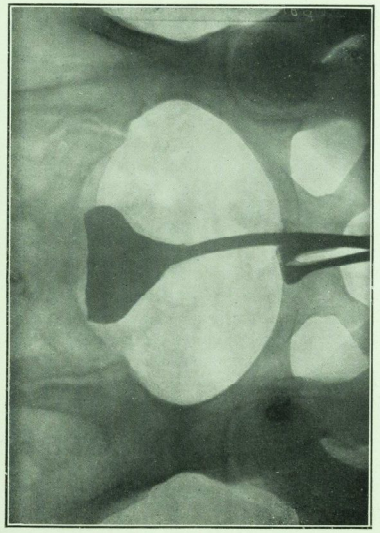


FIG. 5.

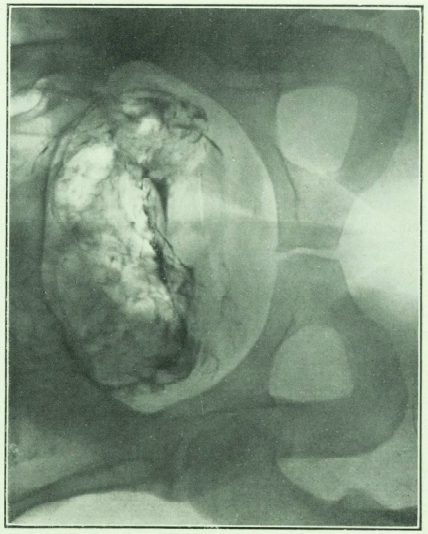


FIG. 7.

The indications for the use of lipiodol in sterility fall into two groups: Firstly, those cases in which occlusion of the Fallopian tubes is suspected and one wishes to locate the obstruction with a view to operative interference. Secondly, the lipiodol may be used as a therapeutic agent in those cases in which the tubes are patent, but the patient has failed to become pregnant. Certain contra-indications to this form of investigation must be respected:

(1) The presence of active pelvic infection, whether in the cervix, uterus or Fallopian tubes.

(2) Definite adnexal swellings.

(3) Any serious general disease, particularly heart lesions.

The time chosen for injection is somewhere about the middle of the menstrual cycle. The patient is best prepared during the week before the test; this consists in getting the lower bowel empty so as to facilitate a good X-ray photo, and the use of glycerine vaginal plugs each night to soften the cervix.

Technique.—A special uterine cannula with a terminal or subterminal orifice is connected to a 20 c.c. syringe and both connections made firm with ligatures. Then the whole system is filled with lipiodol, including the syringe up to the 10 c.c. mark. In the majority of cases no anæsthetic is required and the patient is placed in the lithotomy position; the vulva and vagina are prepared with ordinary operative precautions. A suitable size of Sims' speculum is introduced into the vagina and the cervix seized with volsella forceps. A uterine sound is now passed and in some cases it may be necessary to use the first two Hegar's dilators. The uterine cannula is introduced and the cervix made to grip the cannula firmly by the use of special cervical forceps. The vagina is lightly plugged, the speculum removed and the patient transferred to the X-ray room. The general rule is to screen the patient in the dorsal position, but in some cases of retro-displaced uteri an oblique view is required. The lipiodol is injected slowly, 10 c.c. being an average volume, but in cases of obstructed tubes smaller amounts may produce pain. X-ray photos are now taken and the apparatus removed. A subsequent photograph, 24 to 48 hours later, is taken to determine if the lipiodol be definitely present on each side of the pelvis. Slight uterine hæmorrhage may occur for 2 or 3 days following the injection. In some cases the fate of the lipiodol has been carefully observed, and it becomes apparent that it is absorbed from the peritoneum in 7 to 10 days, although it may persist in a closed tube for several months.

At this stage the X-ray appearances may be described briefly. There are a few fallacies to be considered. It is true that in certain cases of retroflexed uteri the Fallopian tubes cannot be made to fill, but in other cases, should they fail to fill, one is right to assume that they are occluded. A most valuable finding is the actual site of the obstruction, because this governs the possibility of operative treatment. If the tube be blocked near the uterus, then operation is known to be a hopeless procedure, but if the abdominal ostium be closed, then the possibility of operation may be considered. The course of the Fallopian tubes, abnormalities, such as polyps and uterine fibroids are also well seen. Seven illustrative cases have been selected, and their X-ray appearances are reproduced; a short description of each follows:

(1) Normal nulliparous type of uterus, with both Fallopian tubes filled and the lipiodol beginning to escape into the peritoneal cavity.

(2) In this case the uterus was retro-flexed; the left Fallopian tube was curled up behind the uterus and blocked at its abdominal extremity; the right Fallopian tube was normal.

(3) The left Fallopian tube was blocked and the right normal.

(4) This patient had a large hydrosalpinx on the left side, while the right tube was blocked $1\frac{1}{4}$ in. from the uterine end (confirmed at subsequent operation).

(5) Parous type of uterus with both Fallopian tubes blocked at the uterine end.

(6) Normal uterus and Fallopian tubes with the lipiodol partially in the peritoneal cavity.

(7) Lipiodol diffused through the pelvis 24 hours after injection.

The therapeutic action of lipiodol is worthy of mention, as a definite number of patients became pregnant after its use. Forsdike examined by this method a series of 67 women, and in 41 the Fallopian tubes were patent. Of these 41, 14, *i. e.* 34%, subsequently became pregnant. Eleven of these had previously had dilatation of the cervix or insufflation, or both, performed without success. Thus the effect cannot be fairly attributed to the mere dilatation of the cervix. Incidentally all these women had been sterile for some years, the shortest time being two and the longest ten years. It would appear that the results from this type of investigation are sufficiently good to merit a much larger scope of inquiry.

I wish to express my gratitude to Dr. Donaldson for permission to utilize some of his cases, to Dr. Finzi for the excellent X-ray photos, and to Dr. Barris for permission to explore *per* abdomen the fourth case described, while under his care in the Hospital.

H. BURT-WHITE.

THE DISCOVERY AND EVOLUTION OF THE STETHOSCOPE.*

BEFORE telling the story of the stethoscope, which is a fascinating one, a few words should be devoted to its inventor. Laennec was born at Quimper, a small town in Brittany, in 1781. His father was a lawyer who delegated the upbringing of his son to his brother, a doctor practising at Nantes. From him he had his early education, which seems to have been a wide one, especially as regards languages and the Classics. While still a student he had, as most students of the time had, to join the armies of the Republic as a regimental surgeon. After a time he left the army and returned to civil practice. He took the degree of M.D. in 1804, reading a thesis on the doctrine of Hippocrates. After this for some years his life was mainly devoted to Morbid Anatomy, on which he lectured in Paris. In 1816 he was appointed physician to the Necker Hospital, and the same year invented the stethoscope. Within two years of that he had written his famous book, *Traité de l'auscultation médiate*, which ran to five editions —a remarkable thing for any book at that time; the last two editions were translated into English. In 1818 the French Academy of Sciences received his observations "with respect but without enthusiasm." At first his book was distrusted and his stethoscope was treated as a toy. Laennec was a delicate man, "small of stature and of very slender frame; his countenance was not pleasing, nay some will have it that it was somewhat repulsive; he had a keen scrutinizing look." After the publication of his book his health compelled him to retire temporarily to his native town, and in subsequent years he had several times to repeat this. In 1823 he was appointed Professor of Internal Medicine in Paris, and Physician to the Charité Hospital. At the bedside it is reported that he spoke in Latin in order that his following from foreign lands might understand him. He was not a popular physician, and never had a large practice. He died in his native town in 1826 from pulmonary tuberculosis, from which he had suffered for some years. Thus he died from a disease he had himself done more than any other to elucidate. He was then only 45. He believed that he had contracted the disease from a slight wound on his left forefinger made by a saw when examining some tuberculous bones. This is said to have occurred twenty years before the publication of his book. His widow was awarded a pension of 3000 francs.

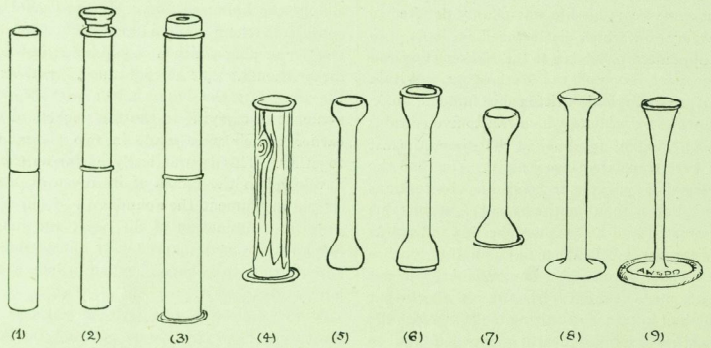
Like so many great discoveries, that of the stethoscope came from a very simple beginning. In 1816 Laennec was called to see a buxom young woman who had heart disease. In order to hear something of the heart, which could not be examined by direct or non-mediate auscultation, he thought he might succeed by making use of a physical property of sound—conduction through some solid object. Accordingly he rolled up "a quire of paper" tightly, applied one end to the chest and his ear to the other. To his surprise he heard better than he had ever done before. Besides being the origin of the stethoscope, the roll of paper is the origin of the hole in the subsequent models, which at first were only imitations in wood and other materials of the roll of paper. Laennec experimented with various kinds of wood, metal, glass and other materials, but found that a light but compact wood was the best. The original model was 13 in. long, $1\frac{1}{2}$ in. in diameter, and the central channel was $\frac{3}{4}$ in. in bore. The chest-piece was simply the hollowed end. He tried solid models, but considered them not so good. He used, however, a stopper or plug which he could insert in the chest-piece, for he thought that he could hear the heart better with the plug but the lungs better without it. For convenience of carrying in the tail pockets of the coat the earlier models were made in two pieces, which fitted together. This is practically as far as the instrument developed in the hands of its inventor, and with this simple instrument the foundation of our knowledge of physical examination of the heart and lungs was laid, for Laennec in a marvellously short time had raised auscultation to a level beyond which a century has barely advanced it.

A stethoscope of this pattern is to be seen in the Museum; it is $11\frac{3}{4}$ in. long, with a $\frac{1}{4}$ in. bore (Fig. 1). It was presented to the Museum by the late Sir George Burrows, who wrote of it: "I am happy to send you a venerable relic of the earliest study of auscultation at St. Bartholomew's Hospital. The old wooden cylinder is a facsimile of that used in the Laennec wards at Paris. It was the property, originally, of Dr. Bond, the Regius Professor of Physic at Cambridge, who, with myself, was Dr. Latham's clerk at St. Bartholomew's Hospital in 1827–28. We were two of the first to study auscultation in the wards there. With progressive improvements in the form of the stethoscope this old wooden tube was left unused on the table of the ward. The nurses appropriated it to their own use to stir up the linen in their washtubs, from which inglorious service I rescued it, and preserved it as a memento of my earliest studies in auscultation." Another version of the story is that it was used to assist in wringing out fomentations, but in any case it had fallen sadly from its original purpose.

Another early model in the Museum is said to have belonged also to Dr. Bond in 1827 (Fig. 2). It shows two

*A paper read on May 31st, 1929, to the Osler Club.

alternative chest-pieces, of which one is fitted within the other in the same way as Laennec's plug had been attached. Modifications in the form of ivory, bone or horn chest- or ear-pieces were soon made to serve particular purposes or fancy. A well-preserved specimen was presented by Mr. Leonard Mark (Fig. 3), who writes: "This stethoscope belonged to Dr. Patrick Black, who told me that he had brought it from Paris, where he studied for some time after graduating at Oxford in 1836. He used to say that it was one of Laennec's stethoscopes, such as the students were then using in Paris." He writes further: "At the time Dr. Black was in Paris medical men were beginning to find that they could hear the chest sounds as well with one half of the stethoscope as with the whole (which measured 13 inches), and would carry one half only." Another



rather curious instrument (Fig. 4), intermediate in length between the whole and one half of the original Laennec model and made in one piece, seems to be made from a piece of rough elder wood, to which a bone ear-piece and a ring of bone around the chest-piece have been fitted. It belonged to an old practitioner who was said to have been present at the battle of Trafalgar, and died at over 100 years of age.

The next stage in the evolution was brought about in a curious way. In his description of two stethoscopes (Figs. 5 and 6), originally the property of Dr. Black, and presented by Mr. Leonard Mark, the latter writes: "I remember Dr. Black telling me that the students, while waiting for the visiting staff, used to amuse themselves by scraping their stethoscopes with their pen-knives, thus making them lighter and more elegant in form. The stethoscopes thus acquired the thin stems of the present patterns."

This seems a very reasonable story, but the introduction of the slender stem has been attributed to Piorry, and the trumpet-shaped chest-piece was introduced by Dr. C. J. B. Williams, who studied under Laennec.

It is said that Sir Charles Scudamore went to study Laennec's methods, but could not hear as he was told he should. Laennec found that he had an unusually large tragus, and he hollowed out the ear-piece to accommodate it, after which he was able to hear properly.

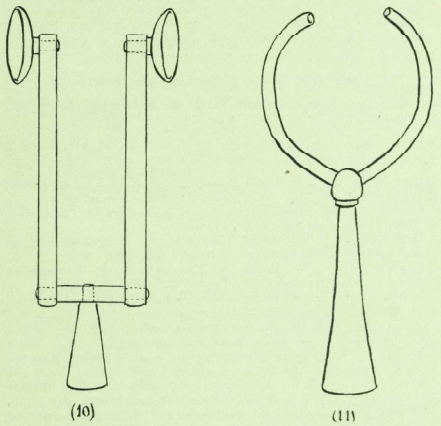
Further developments in the wooden stethoscope are comparatively unimportant, such as making the stem detachable from the now rather expanded ear-piece for the sake of portability. When the stethoscope was found to be a handy instrument for eliciting tendon reflexes a band of rubber was put round the ear-piece, and I have met students who did not realize that the instrument they were using as a knee jerk hammer was in truth a stethoscope.

Two more stethoscopes in their final form are worthy of note. One (Fig. 9) with a rubber band round the ear-piece belonged to Sir George Burrows, and was presented to the Museum by Sir Dyce Duckworth, to whom it was given by Mr. Alfred Willett; the other was made in 1855 from the wood of one of the last of the oak posts which surrounded Smithfield Cattle Market, and was also given by Sir Dyce Duckworth.

The story of the binaural stethoscope is in a way less interesting yet the instrument celebrates its centenary this year. In the *Lancet*, August 22nd, 1829, is a description, unfortunately without illustration, by Dr. N. Comins, of Edinburgh, of a jointed wooden stethoscope which he designed to enable two persons to listen to a particular sound simultaneously (Fig. 10). The

instrument appears to have consisted of jointed wooden tubes, each with a concave wooden ear-piece, which could be rotated in two holes in a short tube set at right angles to the chest-piece. Thus it was used with the ear-pieces turned outwards to enable two to listen. Next the two ear-pieces were turned inwards for the two ears of the same person, and the binaural stethoscope was invented. This stethoscope does not seem to have become at all general, although its inventor claimed that "it can be used in the highest ranks of life without offending fastidious delicacy."

Dr. Theodore Williams, writing in the *British Medical Journal* (1907, ii, p. 6), claimed that his father invented a flexible binaural stethoscope in 1829, the same year that



saw Comins's stethoscope. Williams's stethoscope is illustrated (Fig. 11), and consisted of a long chest-piece made of mahogany screwed into a central portion from which a flexible tube of lead passed to each ear; there were no ear-pieces, the tube being moulded to fit the ear. These are the earliest records of binaural stethoscopes, and employed the only two principles possible until the invention of rubber tubing.

Sir Samuel Wilks in the *Lancet*, November 22nd, 1882, p. 882, said that the first flexible stethoscope was invented by Dr. Golding Bird at Guy's Hospital in 1843, though he mentioned Comins's instrument, and admitted that someone, he did not seem to know who, claimed priority at the Westminster Hospital. Dr. Golding Bird had rheumatism, and was in consequence disinclined to move out of his chair when examining his patients, and so designed a stethoscope for his own comfort.

Trousseau said that every physician was expected to examine the chest by auscultation, and spoke of a physician who was deaf, but nevertheless used his stethoscope to keep up appearances. "Il ausculte toujours, il endende jamais."

Further changes in the stethoscope, have occurred in modern times. The numbers of different patterns of chest-piece, different bores of tube, different methods of connecting the two ear-tubes, by spring, by hinge and so on, and the phonendoscope chest-piece are all well known and in common use.

In conclusion it must be said that although most people associate the name of Laennec with the stethoscope, in the same way that the name of Harvey immediately suggests "circulation of the blood," his real work for medical science lay in a different direction, his stethoscope being for him the means to an end. What Laennec did was to correlate in a manner until then impossible the findings of morbid anatomy with the physical signs of clinical examination. His stethoscope enabled him to examine and explore the chest with far greater precision than before, but his real work lay in the interpretation of what he heard. The strides he made in the few years over which his researches lasted place him not only among the pioneers of medicine, but in the ranks of genius. How far his labours would have advanced medicine, had he been spared to pursue them, must remain a matter for conjecture.

T. H. G. SHORE.

STUDENTS' UNION.

DEBATING SOCIETY.

An Ordinary Meeting of the Debating Society was held in the Medical and Surgical Theatre at 5.30 p.m. on May 24th.

Dr. E. R. Cullinan was in the chair.

The motion before the House was—"That in the opinion of this House the Liberal Party serves no useful function."

Mr. CROSSLEY HOLLAND, who took the place of Sir Philip Proctor at very short notice, in proposing the motion, pointed out that he was opposing the Liberal party and not Liberalism. The Liberal party was the remnant of a once great party that had outlived its usefulness. They could only hope for sufficient representation to hold the balance between Conservatives and Labour. Government of this type was not in the public interest. The Liberals should join, some the Conservative party, others the Labour party, and so bring back two-party government, which worked very well. The Liberal party could not conquer unemployment, which was an economic question, not a political question. After the General Election the Liberal party would be dead.

Dr. COOKE TAYLOR, Liberal candidate for Dulwich, opposing the motion, said that it was a pleasure for him to address a highly educated body of men such as he saw before him. He declared that no fault had been found in the Liberal unemployment scheme though it had been published three months ago. The work the Liberals proposed to do was absolutely necessary for our economic development. For instance, England was very far behind other countries in telephone development. This would be remedied. The money for all this scheme would be found by raising a loan on the Road Fund, which would be paid off completely in thirty years. The Liberal party was united and led by Mr. Lloyd George, who had done so well in the war.

The motion was then thrown open to debate.

Mr. COHEN, opposing the motion, denounced the foreign policy of the Government, which was leading straight to war.

Mr. HENTSCHELL, opposing the motion, read a letter from an American friend who declared that America was getting very suspicious of England. This, stated the speaker, was due to the appallingly bad foreign policy of the Government, which would be bettered by the Liberal party.

Mr MATHESON, supporting the motion, declared that the Liberal party did definite harm. It was led by Mr. Lloyd George, in whom no one could place any confidence, including Sir John Simon, Mr. Runciman and Viscount Grey. The Liberal unemployment scheme would cost far more than £200,000,000, and would not cure unemployment. Despite the General Strike there was less unemployment now than in 1924, when the government took office.

Mr. FREETH, opposing the motion, disagreed with most of what was said by the previous speaker and accused the Government of causing the General Strike.

Mr. WALTER, opposing the motion, said that as long as the Liberal party stood for peace, it served a useful function.

Mr. DARKE opposed the motion because he did not want to see vested interests, such as were behind the Conservative party, ruling the country.

Mr. CROSSLEY HOLLAND and DR. COOKE TAYLOR then made brief replies for their respective sides.

A vote was then taken by show of hands. For the motion, 6; against the motion, 15. The motion was thus lost by 9 votes.

It is a pity that, with the general election of May 30th to look forward to, more "highly educated" men did not turn up to hear Dr. Cooke Taylor and to express their opinions.

I. W. N.
G. O. M.

RIFLE CLUB.

With six old Colours still with us at the Hospital this year we were hopeful of retaining the Inter-Hospital Armitage Cup by a comfortable margin. However, the higher calls of Hospital appointments have made inevitable the somewhat spasmodic appearances of two valuable members of the team. Their successors, though new to aperture-sight shooting, have done reasonably well so far, although one of them has been let down by his rifle, which is now happily cured of an internal disorder, which soon yielded to surgical treatment.

So strong has been the opposition of the London Hospital that after three shoots we have barely a "working majority," as we are leading by only eleven points, with one more round to be shot off, although our total score to date is two points better than last year's at the corresponding phase of the contest. (In 1928 we won by eighty-one points.)

The first stage, shot on Derby Day, gave us a lead of one point from the London. Conditions were unpleasant—continuous rain descending on us for three hours.

In the second round we put up almost a record score, largely due to a magnificent effort by F. H. Morrell—a captain's shoot of 100 out of 105. Our lead was now five points.

On June 19th we had delightfully fine weather, but the wily mirage lay in wait for the unwary at the 200 yards' distance, and nearly the whole team had their scores badly lacerated. Nevertheless, T. H. N. Whitehurst, who has been shooting consistently well this season, defied the heat and put on a "possible" at 500 yards. We managed to increase our lead to eleven points, the scores of each hospital being about thirty points lower than the preceding weeks, the heat and mirage being responsible for many "dropped shots." We are hopeful of getting home next week by a short head.

Each shoot we have lost valuable points owing to shots being put on wrong targets; this unfortunate habit naturally somewhat cramps our scoring style.

Full details of the scores will be given in the August number of the JOURNAL. At the time of going to press the position is: St. Bart.'s, 1650; London, 1639; Guy's, 1573.

ANNUAL SPORTS.

THE Annual Sports were held in perfect weather at Winchmore Hill on Wednesday, May 22nd. The prizes were presented by Mrs. Just. D. Goodhart's 23 seconds for the 220 and J. R. Hill's 10⅜ for the 100 were both excellent performances.

RESULTS.

100 Yards: 1, J. R. Hill; 2, J. H. Pierre. Time, 10½ sec.
220 Yards: 1, D. Goodhart; 2, J. R. Hill. Time, 23 sec.
440 Yards: 1, W. D. Coltart, 2, J. H. Pierre; 3, A. W. Langford. Time, 54⅜ sec.
Half Mile Handicap: 1, D. Goodhart (scratch); 2, A. Papert (50 yds.); 3, J. D. Powell (50 yds.). Time, 2 min. 5 sec.
1 Mile: 1, J. R. Strong; 2, W. J. Walter; 3, W. D. Coltart. Time, 4 min. 52 sec.
120 Yards Hurdles: 1, C. B. Prowse; 2, H. W. Rodgers; 3, H. Williamson. Time, 17⅓ sec.
3 Miles: 1, W. J. Walter; 2, H. B. Lee; 3, J. R. Galway. Time, 16 min. 25 sec.
120 Yards Handicap: 1, D. P. McCoy; 2, H. Williamson (3 yds.); 3, J. T. Rowe (3 yds.). Time, 12½ sec.
Children's Race: 1, Pamela Coltart; 2, Master Churchill.
Long Jump: 1, J. H. Pierre; 2, C. B. Prowse; 3, J. Hughes. Distance, 19 ft. 7 in.
High Jump: 1, C. B. Prowse; 2, J. Hughes; 3, J. R. Hill. Height, 5 ft. 4½ in.
Weight: 1, H. Lloyd; 2, J. H. Pierre; 3, J. T. Rowe.
Hammer: 1, J. D. Powell; 2, P. J. Richards. 49 ft. 11½ in.
Inter-Firm Tug-of-War: Sir Charles Gordon Watson's Firm.
Inter-Club Relay: 1, Rugger 3rd; 2, Boxing.

ATHLETIC MATCH *v.* ST. THOMAS'S HOSPITAL.

Held at the Battersea Park Track on Wednesday, May 29th. St. Thomas's won by 47 points to 34

RESULTS.

Half Mile: 1, C. E. D. H. Goodhart (Bart.'s); 2, A. Papert (Bart.'s); 3, C. H. Bliss (St. Thomas's). Time, 2 min. 1⅘ sec.
100 Yards: 1, W. Hunt (Bart.'s); 2, N. A. Vernon (St. Thomas's); 3, J. H. Pierre (Bart.'s). Time, 10⅖ sec.
High Jump: 1, L. T. Bond (St. Thomas's); 2, C. B. Prowse (Bart.'s); 3, A. T. Marrable (St. Thomas's). Height, 5 ft. 4 in.
440 Yards: 1, C. W. Maisey (St. Thomas's); 2, A. W. Langford (Bart.'s); 3, H. Broadway (St. Thomas's). Time, 54⅘ sec.
Hurdles: 1, J. F. E. Bloss (St. Thomas's); 2, C. B. Prowse (Bart.'s); 3, H. W. Rodgers (Bart.'s). Time, 16⅘ sec.
220 Yards: 1, C. W. Maisey (St. Thomas's); 2, N. A. Vernon (St. Thomas's); 3, W. Hunt (Bart.'s). Time, 24 sec.
Weight: 1, A. J. Martin (St. Thomas's); 2, J. H. Pierre (Bart.'s); 3, C. W. Maisey (St. Thomas's). Distance, 33 ft. 10½ in.
Long Jump: 1, A. T. Marrable (St. Thomas's); 2, J. L. Parker (St. Thomas's); 3, J. F. E. Bloss (St. Thomas's). Distance, 20 ft. 0¼ in.
Mile: 1, H. B. Sandiford (St. Thomas's); 2, J. R. Strong (Bart.'s); 3, H. B. Lee (Bart.'s); 4, J. F. Varley (Bart.'s). Time, 4 min. 43⅘ sec.
Relay: Bart.'s (J. H. Pierre, C. A. Keane, A. W. Langford, D. Goodhart). Time, 3 min. 58⅕ sec.
Tug-of-War: St. Thomas's won by 2 pulls to none.

INTER-HOSPITAL SPORTS.

Guy's again won the Inter-Hospital Sports at Stamford Bridge on Monday, July 10th. For some time Bart.'s were leading, but Thomas's gradually drew level; later Guy's took the lead, winning all the field events.

The record in the High Jump was broken by C. R. G. Druce (Guy's), who jumped 5 ft. 10½ in. In the 120 yards hurdles J. F. E. Bloss (St. Thomas's) equalled the record of 16⅘ sec.

H. B. Stallard and C. E. D. H. Goodhart ran away from the field in the half mile, and J. R. Hill won the 100 quite comfortably. As usual, we won the relay, the time being just ⅘ of a second outside the record.

RESULTS.

100 Yards: 1, J. R. Hill (Bart.'s); 2, W. Hertzog (Guy's); 3, D. Turner (King's); 4, W. W. Craner (London). Won by 1 yard; time, 10⅘ sec.

220 Yards: 1, D. Turner (King's); 2, W. W. Craner (London); 3, C. W. Harrison (Guy's); 4, C. W. Maisey (St. Thomas's). Won by 1 yard; time, 23⅕ sec.
440 Yards: 1, W. W. Craner (London); 2, C. E. D. H. Goodhart (Bart.'s); 3, C. W. Harrison (Guy's); 4, C. W. Maisey (St. Thomas's). Won by 4 yards; time, 51⅘ sec.
Half Mile: 1, H. B. Stallard (Bart.'s); 2, C. E. D. H. Goodhart (Bart.'s); 3, C. W. Claydon (King's); 4, J. V. Sutton (King's). Won by 3 yards; time 1 min. 59⅗ sec.
Mile: 1, H. B. Sandiford (St. Thomas's); 2, J. V. Sutton (King's); 3, J. R. Strong (Bart.'s); 4, W. J. Walter (Bart.'s). Won by 25 yards; time, 4 min. 37⅗ sec.
3 Miles: 1, H. B. Sandiford (St. Thomas's); 2, R. A. P. Hogbin (Guy's); 3, J. V. Sutton (King's); 4, H. T. Croudace (Guy's). Won easily; time, 15 min. 46 sec.
120 Yards Hurdles: 1, J. F. E. Bloss (St. Thomas's); 2, H. W. Rodgers (Bart.'s); 3, S. D. Maclean (Guy's); 4, C. B. Prowse (Bart.'s). Won by 5 yards; time 16⅘ sec.—equals record.
Weight: 1, W. Hertzog (Guy's); 2, A. T. Martin (St. Thomas's); 3, J. H. Pierre (Bart.'s); 4, A. P. Coltzer (London). Distance, 36 ft. 10½ in.
High Jump: 1, C. R. G. Druce (Guy's); 2, A. R. R. le Fleming (St. Thomas's); 3, C. B. Prowse (Bart.'s); 4, L. T. Bond (St. Thomas's). Height, 5 ft. 10½ in. Record.
Long Jump: 1, W. Hertzog (Guy's); 2, J. L. Parker (St. Thomas's); 3, C. W. Harrison (Guy's); 4, J. H. Pierre (Bart.'s). Distance, 21 ft. 5½ in.
Hammer: 1, W. Hertzog (Guy's) and T. Nobel (London) dead-heated; 3, C. W. Maisey (St. Thomas's); 4, G. A. Dingemanns (Guy's). Distance, 64 ft. 3⅘ in.
Tug-of-War: Final, London beat St. Thomas's 2–0.
Mile Relay (220, 220, 440, 880): Bart.'s won by 25 yards in 3 min. 45 sec. Guy's were second. Bart.'s Team: J. R. Hill, W. Hunt, W. D. Coltart, H. B. Stallard.
Final points: Guy's, 38; St. Thomas's, 34; Bart.'s, 31; London, 21; King's, 16.

SWIMMING CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD PAULINES.

Played at St. Paul's School on Wednesday, May 22nd.

The polo match was preceded by swimming events, namely: Two lengths, won by R. J. C. Sutton, the Old Paulines winning second and third places; one length, won by C. K. Vartan, the next two places going to our opponents as before; and the team race of six, won by the Old Paulines by 3 yards.

The Hospital defended the deep end in the first half, the team lacking J. H. West in the forward line, and opened the attack by a shot from Sutton, which went into the goal-keeper's arms. A few minutes later the Old Paulines opened the scoring with a shot from their left forward, who got away from the centre of the bath. The score was soon equalized by Sutton with a fine shot from some distance out. The Hospital gained possession each time and play remained mostly in our opponents' half, who, however, scored again owing to slack marking in the back division. Vartan equalized just on half-time, following some splendid work on his own.

In the second half we had it all our own way; Sutton was shooting excellently and added four more to our total without our opponents replying, although there was one anxious moment when Edwards was left to manage two men on his own within our 2-yard line. Vartan played a sound game at half. The score thus finished 6–2 in our favour.

The team as a whole showed improved form in this game, and the new arrangement of the defence, with Vartan at half and Edwards and Fisher as backs, shows some promise, although both backs must mark even tighter.

Team.—J. C. F. Ll. Williamson; J. F. Fisher, F. A. Edwards; C. K. Vartan; G. S. R. Little, R. J. C. Sutton (capt.). H. T. Halper.

Result.—Swimming and Polo: St. Bart.'s Hospital, 15 points; Old Paulines, 15 points.

ST. BARTHOLOMEW'S HOSPITAL "A" *v.* KING'S COLLEGE HOSPITAL.

Played at Pitfield Street on Friday, May 24th.

The result of this match was made the more pleasing by the fact that King's had, owing to an error in arrangements, turned out a first team. Losing the toss we defended the shallow end first. From the start the forwards attacked well, West in a new *rôle* as centre forward being particularly hard working. After a short time the Hospital secured a lead through Vartan. The play was of an even character, through most of the first half, and before the change of ends King's had equalized.

In the second half our opponents employed shock tactics, which, due rather to their lack of skill in attack than our soundness in defence, were effectively repulsed. Our forwards, too, were waiting to receive the opportunities which were not long in coming. West and Chivers scored for the Hospital, and later Vartan added another. Williamson in goal played a sound game, while Angel and Little at back were apparently sufficiently obstructive to prevent goals being scored, and it must be added that the defence had their share in the game.

Team.—J. C. F. Ll. Williamson; R. E. Angel, G. S. R. Little; C. K. Vartan; H. T. Halper, J. H. West, J. A. Chivers.

Result. St. Bart.'s Hospital, 4; King's College Hospital, 2.

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD OWENS.

Played at Caledonian Road Baths on Monday, May 27th.

Again the Hospital were without a full team, Davies and Little deputizing for Edwards and Williamson respectively. The Hospital won the toss and defended the deep end. Within the first 20 seconds Sutton had scored, but this seemed to rouse our opponents, who scored several times in quick succession; of these latter some were undoubtedly due to slack marking by the defence, but others equally undoubtedly were due to bad luck. Little performed well, but their shooting was extraordinarily accurate. Vartan added another for us, and play remained fairly even, but at the change-over the Hospital were 2 goals to their opponents 6.

The change of ends, however, gave us more than sufficient advantage to regain all we had lost. Accurate shooting and good combination between Sutton and Vartan had raised the score to 6–5 before our opponents scored their seventh and final goal. From then on our score was rapidly added to, and although several close shaves were experienced, the defences were successful in maintaining our goal intact. Sutton was unlucky with several shots, but made many excellent ones, and only superb play by their goalkeeper prevented the score from mounting much higher. Vartan played a sterling all-round game at half. Davies, a newcomer to the team, played a very sound game, but made the mistake of concentrating on the goal rather than on his colleagues.

Altogether this game, although a little ragged owing to the slackness of the referee, was the fastest and most enjoyable we have experienced this season, and we look forward to our home match with these opponents. It was gratifying to note that the team lasted a 12-minute half with credit.

Team.—G. S. R. Little; J. F. Fisher, Ll. L. Davies; C. K. Vartan; H. T. Halper, R. J. C. Sutton (capt.), J. H. West.

Result.—St. Bart.'s Hospital, 8; Old Owens, 7.

ST. BARTHOLOMEW'S HOSPITAL *v.* PLAISTOW UNITED II.

Played at Plaistow on Friday, May 31st.

This was also a most enjoyable game. Playing against the second team of a club that has won the Southern Counties Water Polo for the last two years, the Hospital put up a very creditable fight, and the play was pretty even all through.

The Hospital won the toss and defended the deep end. Plaistow opened the scoring, and for some minutes after play was even before Vartan equalized; immediately after this our opponents scored twice more in quick succession. The whistle went for half-time with the score at 1–3, and Vartan in undisputed possession 4 yards from their line.

The advantage of the change-over was neutralized by our opponents' superiority in training; Sutton, too, was not on the top of his shooting form, and repeatedly hit the bar and posts. Their backs took advantage of their speed to break away several times and come down on their own to score, but only 3 more were added during the second half. Sutton added one more half-way through, bringing the final score to 6—2.

Stimulated by a stronger rival team, Bart.'s on the whole were on the top of their form. A few more games of this sort would do us all the good in the world.

Team.—J. C. F. Ll. Williamson; J. F. Fisher, F. A. Edwards; C. K. Vartan; H. T. Halper, R. J. C. Sutton (capt.), J. H. West.

Result.—St. Bart.'s Hospital, 2; Plaistow II, 6.

1ST ROUND INTER-HOSPITAL CUP.

ST. BARTHOLOMEW'S HOSPITAL *v.* UNIVERSITY COLLEGE HOSPITAL.

Played at Pitfield Street on Friday, June 7th.

As the score shows, this game demands little description. The Hospital lost the toss and defended the shallow end, and took the lead right from the start. Six goals were scored in the first half—Sutton, Vartan and Edwards each contributing two—without their opponents replying. Our backs lay well up the bath, so that practically all players of both sides were in the deep end, and they never had even a chance of scoring. Towards the end of the first half one of their forwards had to leave the bath with cramp, and Halper was told off to retire in order to equalize the numbers.

In the second half their crippled member returned and played in goal; during this half there was a little more play in our half, but the general trend of affairs remained the same. The only goal to our opponents' credit was scored by Fisher, when a very short back flip to Williamson from the former was lost in a simultaneous splash, and trickled through Williamson's fingers before he properly saw it. Four more goals were added in this half, and our forwards had plenty of practice in passing and shooting, both of which were good.

The result of this match compares favourably with that of the same match last year, when we won by 6–2. The team showed good combination, and shooting was more accurate than hitherto.

Team.—J. C. F. Ll. Williamson; J. F. Fisher, F. A. Edwards; C. K. Vartan; H. T. Halper, R. J. C. Sutton (capt.), J. H. West.

Result.—St. Bart.'s Hospital, 10; University College Hospital, 1

SEMI-FINAL INTER-HOSPITAL CUP.

ST. BARTHOLOMEW'S HOSPITAL *v.* LONDON HOSPITAL.

Played at Pitfield Street on Saturday, June 22nd.

This match again was not of much interest. The Hospital won the toss and defended the deep end. Sutton scored within half a minute of the start, and after this play was more even for a few minutes; West then put in a nice shot in the corner. Further goals were added by Sutton and Halper before the change-over.

Defending the deep end the Hospital had it even more their own way. Sutton obtained the ball every time, and could have scored many more times himself, but preferred to give practice to our other forwards. Our better training manifested itself towards the end of this half, and only once—due to faulty passing by our backs—did they look like scoring. Little, deputizing for Williamson in goal, had not much to do, but performed his few duties creditably with the handicap of a stiff neck (contracted in Gee Street).

Sutton was on top form, and enjoyed himself hugely in the deep end in waving the ball round his head before gently pushing it into the corner of the net, thus mesmerizing their luckless goalkeeper into a state of helpless inactivity. Vartan maintained the improved form he has shown throughout the season, while West and Halper were shooting well—particularly the former. Edwards and Fisher at back had little to do, but were at least successful in enticing their opposite numbers well up the bath.

Team.—G. S. R. Little; F. A. Edwards, J. F. Fisher; C. K. Vartan; J. H. West, R. J. C. Sutton (capt.), H. T. Halper.

Result.—St. Bart.'s Hospital, 8; London Hospital, 0.

We now meet Guy's in the final at the Bath Club on July 1st, and we have undoubtedly a better chance of winning than ever before. Needless to say, we hope for a record number of supporters at the Gala to lend us that moral encouragement which is so welcome on such an occasion.

J. F.

ACKNOWLEDGMENTS.

Cambridge University Medical Society Magazine—*L'Écho médicale du Nord Giornale della Reale Società Italia d'Hygiene*—*Grant Medical College Magazine*—*Guy's Hospital Gazette*—*The Hospital Gazette*—*The Kenya and East Africa Medical Journal*—*The London Hospital Gazette*—*Long Island Medical Journal*—*The Medical Review*—*Middlesex Hospital Journal*—*The Nursing Times*—*The Post-Graduate Medical Journal Revista del Instituto Medico "Sucre"*—*The Royal Dental Hospital Magazine*—*The Student*—*University College Hospital Magazine The University of Toronto Medical Journal.*

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN.

ABERNETHY, D. A., B.M., B.Ch.(Oxon.), F.R.C.S.(Ed.). "A Case of Primary Double Epithelioma." *British Journal of Surgery*, April, 1929.

BATTERHAM, Capt. DOUGLAS J., M.B., F.R.C.S., R.A.M.C. "Injuries of the Semilunar Cartilages." *Journal of Royal Army Medical Corps*, May, 1929.

BERTWISTLE, A. P., M.B., Ch.B., F.R.C.S.(Ed.). *Surgical Radiology*. London: J. & A. Churchill, 1929.

——— "Dental Sepsis and Gleet." *Clinical Journal*, June 5th, 1929.

——— "X-Rays in the Diagnosis of Chronic Appendicitis." *British Medical Journal*, June 15th, 1929.

BROWN, W. LANGDON, M.D., F.R.C.P. "Some Modern Aspects of Nephritis." A British Medical Association Lecture. *British Medical Journal*, May 4th, 1929.

CHRISTOPHERSON, J. B., C.B.E., M.D., F.R.C.P. "Radioscopical Diagnosis of Filariasis." *British Medical Journal*, May 4th, 1929.

DALE, H. H., C.B.E., M.D., F.R.C.P., F.R.S. Croonian Lectures on "Some Chemical Factors in the Control of the Circulation." Lecture I: "Vasomotor Hormones," *Lancet*, June 8th, 1929. Lecture II: "Local Vasodilator Reactions Histamine," *Lancet*, June 15th, 1929. Lecture III: "Local Vasodilator Reactions—Histamine" (cont.), "Acetyl Choline," *Lancet*, June 22nd, 1929.

DONALDSON, MALCOLM, F.R.C.S. "Technique of Intra-abdominal Insertion of Radium for Carcinoma of the Cervix." *British Medical Journal*, May 11th, 1929.

HALL, Prof. ARTHUR J., M.A., M.D., D.Sc., F.R.C.P. "A Lecture on Three Cases of Spontaneous Subarachnoid Hæmorrhage," *British Medical Journal*, June 8th, 1929.

HANNAN, JOHN H., M.A., M.D., B.Ch.(Cantab.). "Early Graves's Disease," *British Medical Journal*, May 11th, 1929.

HARRIS, H. ELWIN (jun.), M.R.C.S. "Appendicitis caused by Bilharzia." *British Medical Journal*, May 4th, 1929.

HARTRIDGE, H., M.A., M.D., Sc.D., F.R.S. Editor of 6th edition of Bainbridge and Menzies' *Essentials of Physiology*. London: Longmans, Green & Co., 1929.

HORDER, Sir THOMAS, Bart., K.C.V.O., M.D., F.R.C.P. "Cerebral Symptoms following Vaccination; Recovery." *Lancet*, June 22nd, 1929.

HUDSON, BERNARD, M.D., M.R.C.P. (and MAURER, G., M.D.). "Thoracoscopy and Cauterization." *British Medical Journal*, May 11th, 1929.

JAMESON, R. W., M.R.C.S., D.P.H. "The Smallpox and Vaccination Problem." *Medical Officer*, April 27th, 1929.

KEYNES, GEOFFREY, M.A., M.D., F.R.C.S. "The Evolution of the Surgery of the Breast." *Cambridge University Medical Society Magazine*, Easter Term, 1929.

MAINGOT, RODNEY, F.R.C.S. "Fibroma of the Urinary Bladder." *British Medical Journal*, May 11th, 1929.

MEYRICK, THOMAS T., M.A., M.Ch., F.R.C.S. "A Case of Purulent Pericarditis following Acute Osteomyelitis." *Archives of Disease in Childhood*, April, 1929.

MYERS, CHARLES S., C.B.E., M.D., Sc.D., F.R.S. Editor of *Industrial Psychology by Many Authors*. London: Thornton, Butterworth & Co., 1929.

OKELL, C. C., *M.C.*, M.B., B.Ch., M.R.C.P., D.P.H. (BLAKE, ADELAIDE V. and C. C. O.). "Seasonal Variation in the Susceptibility of Mice to Dysentery (Shiga) Toxin." *British Journal Experimental Pathology*, April, 1929.

POWER, Sir D'ARCY, *K.B.E.*, F.R.C.S. "A Memorial Group of the Harvey Family." *Annals of Medical History*, March, 1929.

——— "Epoch-making Books in British Surgery. VIII: Cheselden's Anatomy." *British Journal of Surgery*, April, 1929.

ROBINSON, C. A., B.A., M.B., D.M.R.E. "Treatment of Pelvic Inflammation by Diathermy." *British Medical Journal*, June 15th, 1929.

ROCHE, ALEX. E., M.A., M.D., M.Ch.(Cantab.), F.R.C.S. "Tuberculous Epididymitis in an Inverted Testicle." *Clinical Journal*, March 27th, 1929.

——— "Excision of an Arterial Angioma (Cirsoid Aneurysm)." *Clinical Journal*. June 5th. 1929.

ROLLESTON, Sir HUMPHRY, Bart., K.C.B., M.D., Hon, D.Sc.(Oxon.), D.C.L., LL.D., F.R.C.P. "Industrial Diseases and their Prevention." *Medical Press and Circular*, April 17th and 24th, 1929.

ROSS, J. PATERSON, F.R.C.S. "Notes on the Barbers' Hall in London." *Cushing Birthday Volume*, April 8th, 1929.

ROXBURGH, A. C., M.D., M.R.C.P. "Treatment of Psoriasis by Light." *British Journal of Actinotherapy*, 1928.

——— "Skin Diseases due to Physical Causes." *Clinical Journal*, March 20th, 1929.

——— "Pitfalls in Dermatology." *Post-Graduate Medical Journal*, May, 1929.

——— "Etiology of Alopecia Areata." *Medical Press and Circular*, May 8th, 1929.

SHORE, L. R., M.A., M.B., M.R.C.P., D.P.H. "The Lymphatic Drainage of the Human Heart." *Journal of Anatomy*, April, 1929.

UNDERWOOD, W. E., M.B., B.Ch. "Spontaneous Rupture of the Spleen." *British Medical Journal*, June 22nd, 1929.

WARD, ROY, M.B., B.S. "Inoperable Carcinoma of the Breast Treated with Radium." *British Medical Journal*, February 9th, 1929.

WATKYN-THOMAS, F. W., F.R.C.S. (and MCKENZIE, DAN). "The Bacteriology of Spreading Osteomyelitis of the Skull." *Journal of Laryngology and Otology*, April, 1929.

WEBER, F. PARKES. "Hypersplenism and Hyposplenism and Splenectomy." *British Medical Journal*, April 27th, 1929.

——— "Simple Achromic Nævus, of Blotchy Distribution, on the Front of the Chest." *Proceedings of the Royal Society of Medicine*, December, 1928.

WELCH, T. B., M.B., D.T.M.&H. "Leprosy Work in the West Indies." *Leprosy Notes*, No. 2, July, 1928.

WHARRY, H. MORTIMER, F.R.C.S. "The Anatomical Method of Opening Quinsy." *British Medical Journal*, April 27th, 1929.

WILLOUGHBY, HUGH, M.R.C.S., L.R.C.P., D.T.M.&H. (PHILIP MANSON-BAHR, D.S.O., M.D., F.R.C.P., and H. W.). "A Critical Study of Undulant Fever from a Series of Six Cases in the Hospital for Tropical Diseases, London." *British Medical Journal*, April 6th, 1929.

WOOD, W. BURTON, M.A., M.D., M.R.C.P. *See* CHANDLER and WOOD. (June No.)

REVIEWS.

GYNÆCOLOGY FOR NURSES AND GYNÆCOLOGICAL NURSING. By COMYNS BERKELEY, M.A., M.C., M.D.(Cantab.), F.R.C.P. (Lond.), M.R.C.S.(Eng.) 5th Edition. Pp. 426. The Scientific Press: Faber & Gwyer, Ltd. Price 8s.

The fifth edition of this popular book has been revised and several useful additions appear, namely, information concerning X-ray therapy, the application of radium, the technique of novarsenobillon administration and blood transfusion. The book is characterized by lucid descriptions and extreme practicability. The success of any operation depends largely on nursing details—the correct preparation of the patient and operating theatre, and above all post-operative care. All these points, so often neglected, are dealt with in a very adequate manner. Without doubt this book is of great value, not only to those engaged in, but also to those teaching gynæcological nursing.

A HANDBOOK OF MIDWIFERY. By COMYNS BERKELEY, M.A., M.C., M.D.(Cantab.), F.R.C.P.(Lond.), M.R.C.S.(Eng.). 7th edition. Pp. 556. London: Cassell & Co., Ltd. Price 8s.

The seventh edition of this book is enlarged and revised, special attention having been paid to the sections dealing with ante-partum hæmorrhage, post-partum fever and the care of the child. This edition marks a change from previous editions in that the chapter on physiology and the questions and answers founded on the C.M.B. rules have been deleted and appear with certain additions in a separate form, under the title of Physiology for Pupil Midwives. There are many points in favour of this division, but it seems that the two parts as one book would have been very valuable and any slight inconvenience in size would have been amply compensated by the value of the production. We have no hesitation in recommending this book as a worthy successor to previous editions. Throughout the book the hand of the experienced teacher is seen, and there is no doubt that this work will continue to be the most popular among pupil midwives.

PHYSIOLOGY FOR PUPIL MIDWIVES. By COMYNS BERKELEY, M.A., M.C., M.D.(Cantab.), F.R.C.P.(Lond.), M.R.C.S.(Eng.). Pp. 80. Price 1s. 6d.

This small book consists of a revised edition of what formerly constituted the chapters on physiology, together with a collection of questions and answers based on the C.M.B. Rules in the author's *Handbook of Midwifery*. To this has been added a section dealing with powers, rights and responsibilities of the midwife.

ELEMENTARY MEDICINE IN TERMS OF PHYSIOLOGY. An Introduction to Clinical Work. By D. W. CARMALT JONES, M.A., M.D.(Oxon.) F.R.C.S.(Lond.), Professor of Systematic Medicine, University of Otago, N.Z., etc. (London: H. K. Lewis & Co., Ltd., 1929.) 364 pp. Price 12s. 6d.

The title of this book is a good one, and at first it promises to fulfil a widely felt need. All medical students could with advantage read a book of this scope. The first three chapters are well done, but as we proceed we note that the latter half of the title becomes more and more lost to view, and magnificent opportunities of illustrating physiological principles are allowed to pass by. The book also contains a few statements which might have been better expressed, such as on p. 87, "If the blood stagnates in the (lung) capillaries as in heart failure with dilatation, oxygen is imperfectly absorbed." Numerous observations on the arterial blood have shown that in heart failure (*e. g.* in mitral stenosis) O_2 is taken up perfectly well from the lungs, so that the arterial blood is saturated more than normally, except where a marked degree of pulmonary œdema occurs.

We consider that the book would have been more successful if less ground had been covered, and some principles explained in greater detail.

EXAMINATIONS, ETC.

University of Cambridge.

The following degrees have been conferred:

M.B., B.Chir.—Armstrong, J. R., Lees, J. M.

Diploma in Medical Radiology and Electrology.

Part II.—Wroth, C.

University of London.

Third (M.B., B.S.) Examination for Medical Degrees, May, 1929.

Honours.—Russell, S. F. (*d*), Selbourne, H. A. H. (*a*).

(*a*) Distinction in Medicine.

(*d*) Distinction in Surgery.

Pass.—Donelan, C. J., Evans, C. N., Gordon, I., Preiskel, I., Robertson, I. M., Robinson, R. D., Sharples, E. M., Shaw, D., Sinclair, C. G., Smith, E. J. J., Wickramasinghe, S. A., Yip, T. C.

Supplementary Pass List.

Group I.—Cruden, W. V., King, J. F. L., Pagan, A. T., Sugden, K. G., Tait, C. B. V.
Group II.—Boyd, A. M., Robson, J. A.

Royal College of Surgeons.

The Diploma of *Fellow* has been conferred on the following:

Ainsworth-Davis, J. C., Billcliff, H. S., Burrows, H. J., Cramsie, J. H., Kenney, R. W., Lazarus, A. M., Nelson, H. P.
E. G. Muir also passed the examination, but has not yet complied with the Regulations.

The following candidates were successful at the examination held for the *Primary Fellowship* in June, 1929:

Kindersley, C. E., Partridge, G. T.

Royal College of Physicians and Surgeons.

Diplomas in *Public Health* have been granted to the following: Lynn, G. R., Starkey, H. S. C., Stewart, G. G.

The Diploma in *Tropical Medicine* and *Hygiene* has been conferred on the following:
Chilton, N., Cook, N. E., Nealor, W. S., Russell, S. F.

L.M.S.S.A.

The Diploma of the Society has been granted to F. W. Crossley-Holland.

CHANGES OF ADDRESS.

ANDERSON, R. S., 1, Ribblesdale Road, Hornsey, N. 8.
BRAIMBRIDGE, C. V., European Hospital, Nairobi, Kenya.
CRONK, H. L., The Castle, Winchester, Hants.
DAVIES, J. H. T., 46, Brunswick Square, Hove.
FAULDER, T. J., 37, Devonshire Place, W. 1. (Tel. Welbeck 7479.)
GAISFORD, W. F., The Children's Hospital, 500, South Kingshighway, St. Louis, U.S.A.
HANCOCK, F. T., Corner Croft, Coombe Warren, Kingston Hill.
MAPLES, E. E., Deloraine, Jersey.

APPOINTMENTS.

BURKE, Lt.-Col. G. T., M.D.(Lond.), M.R.C.P., I.M.S., appointed Professor of Medicine, King George's Medical College, Lucknow University.
DAVIES, J. Ll., M.B., B.Ch.(Camb.), F.R.C.S., appointed Consulting Urological Surgeon to the Mansfield and District Hospital.
MALEY, M. L., M.B., B.S.(Lond.), appointed Honorary Out-Patient Surgeon at the Victoria Hospital, Southend-on-Sea.
SODEN, W. N., M.D.(Lond.), appointed Medical Superintendent to Bellahouston Hospital, Glasgow.
WILLOUGHBY, H., M.R.C.S., L.R.C.P., D.T.M.&H., appointed Assistant Medical Officer and Medical Inspector of Aliens in the Port of London; appointed Clinical Assistant at the Hospital for Tropical Diseases, Endsleigh Gardens, W.C. 1.

BIRTHS.

EDMOND.—On May 29th, 1929, at 24, The Crescent, Shrewsbury, the wife of William Edmond, F.R.C.S., of a daughter.
PEARSON.—On May 26th, 1929, to Dr. and Mrs. Pearson, Holmfield, Reigate—a son.
PRIDHAM.—On June 7th, 1929, at Hillfield, Broadway, Weymouth, to Margaret, wife of Dr. J. A. Pridham—a daughter.
ROSE.—On June 11th, 1929, at Lansdowne House, Romsey, to Mabel, wife of Edward Snow Rose, M.R.C.S.—a son.
SPACKMAN.—On June 4th, 1929, at 47, Coventry Road, Market Harborough, to Kathleen (*née* Crisp), wife of Dr. E. D. Spackman—a son.
WELLS.—On May 25th, 1929, at 16, Bruton Street, W. 1, to Rhona, wife of Dr. Arthur Quinton Wells—a son.
WROTH.—On June 2nd, 1929, at Alndyke, Horley, Surrey, Violet (*née* Jenour), wife of Charles Wroth—a son.

MARRIAGES.

MALEY—LIVINGSTON.—On June 5th, 1929, at the Parish Church, Newcastle, Co. Down, by the father of the bridegroom, Malcolm Maley, M.B.(Lond.), only son of Rev. E. A. and Mrs. Maley, of Thundersley, Essex, to Mary Livingston, M.B.(Dub.), eldest daughter of Mr. and Mrs. William Livingston, of Lurgan, Co. Armagh.
PIDCOCK—GRIFFITH.—On June 1st, 1929, at Charing, Kent, Bertram Henzell Pidcock, F.R.C.S., of Winchester, to Margaret, daughter of Mr. Noel Griffith (of the Middle Temple) and Mrs. Griffith, of Burnt House Farm, Charing.

DEATHS.

FAIRBANK.—On June 9th, 1929, at Moulsey House, Windsor, Sir William Fairbank, K.C.V.O., O.B.E., Knight of Grace of the Order of St. John of Jerusalem, for 45 years Surgeon and afterwards Honorary Surgeon to the Royal Household at Windsor Castle, aged 78.
GIMSON.—On May 21st, 1929, at Springfield House, Chelmsford, William Douglas Gimson, M.R.C.S., L.R.C.P., aged 64.
HARDING.—On June 7th, 1929, at West House, Eastbourne, Sir Charles O'Brien Harding, J.P., aged 70.
KENNEDY.—On May 13th, 1929, at Alassio, William Willoughby Kennedy, M.A.(Glas.), M.B.(Lond.), D.P.H.(Camb.), M.D.(Lond.), State Medicine, aged 66.
PIERCE GROVE.—On May 3rd, 1929, at Hong Kong, Frederick Pierce Grove, M.D., D.P.H., aged 55.
SUNDERLAND.—On May 24th, 1929, Robert Archibald Slater Sunderland, M.R.C.S., L.R.C.P., of Southend-on-Sea.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C. 1.*

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

All Communications, financial or otherwise, relative to Advertisements ONLY should be addressed to ADVERTISEMENT MANAGER, *The Journal Office, St. Bartholomew's Hospital, E.C.1. Telephone: City 0510.*

St. Bartholomew's Hospital JOURNAL.

"Æquam memento rebus in arduis
Servare mentem"
—*Horace*, Book ii, Ode iii.

VOL. XXXVI.—NO. 11.] AUGUST 1ST, 1929. PRICE NINEPENCE.

CALENDAR.

Fri., Aug. 2.—Prof. Fraser and Prof. Gask on duty.
Mon., „ 5.—Bank Holiday.
Tues., „ 6.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Fri., „ 9.—Sir Percival Hartley and Mr. L. B. Rawling on duty.
Tues., „ 13.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Fri., „ 16.—Dr. Langdon Brown and Mr. Harold Wilson on duty.
Sat., „ 17. Tennis Match *v.* Winchmore Hill Home
Sun., „ 18.—Tennis Match *v.* Bank of England Away.
Mon., „ 19.—**Last day for receiving matter for the September issue of the Journal.**
Tues., „ 20.—Prof. Fraser and Prof. Gask on duty.
Fri., „ 23.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Tues., „ 27.—Sir Percival Hartley and Mr. L. B. Rawling on duty.
Fri., „ 30.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.

EDITORIAL.

FOR thirty-six years the JOURNAL has greeted the world with an outer garment of the same pattern. Never a thing of beauty, except perhaps in the brain of its designer, it has served the dual purpose of protecting the contents, and of whetting the reader's appetite for the joys within. And now the critics have begun their miserable task of unsettling our fixed convictions, so that we are forced to look at the thing again. What we have praised as simplicity must now be called plainness; when we boasted that the design struck the right note of informality, we should have deplored its lack of dignity. Thus horribly has old Use-and-Wont deceived us. Filled with misgiving we put the matter in the hands of our readers.

The points on which we ask for criticism—and may it be constructive, suggestive criticism—are firstly whether the cover design should be altered, whether there should be a coloured cover, and whether it should be on stiff paper; secondly, whether a smaller, more convenient size (height and depth) of the JOURNAL should be adopted.

The present paper and the high standard of our matter we propose to leave unchanged.

* * *

Dr. Hugh Thursfield has retired from the active staff of the Hospital.

Several circumstances have combined to suggest that such an event would be for him a distant one. The laws of chance have decreed that his promotion to the office of full Physician should have been comparatively recent; the hand of time has weighed lightly upon his shoulders and upon his mind, so that the fresh charm and kindness of his personality have made him a friend to those divided from him by years. It is to be hoped that his departure from the active staff will not produce too great a severance.

He is to be congratulated on two achievements that mark his departure, the first being one with which his name is long likely to be associated. He has helped into being the plans for a complete children's department, with its definite staff, organization and wards. He has seen into a new edition a text-book of children's diseases second to none in value. It may be perhaps some slight consolation, in any retirement, to feel that it has been made while the powers of achievement still remain undimmed in lustre.

He may be sure that his juniors at Bart.'s, perhaps especially his protégés from Oxford, wish him "au revoir" with regret and with affection.

* * *

We extend a hearty welcome to Prof. H. H. Woollard, M.D., B.S.(Melbourne), who has been appointed to the University Chair of Anatomy tenable at St. Bartholomew's.

* * *

We are not acquainted with the method by which the acting chiefs of the Surgical Unit are selected, but it is certain that there could have been no happier choice than that of Prof. Grey Turner, who was at Bart.'s from June 10th to June 22nd. Perhaps his most striking characteristics are his energy and a breadth of interest in surgery, which carries him through the whole length of surgical history and through the whole gamut of surgical experience. For everything from the age of flint knives to the age of radium, from the radical cure of a hernia to the Talma-Morison operation, he shows the same serious and critical enthusiasm. His operative technique is impressive, not for any dramatic quality, but for the quiet orderliness which suffers no hitch in the theatre, nor, we learn, in the ward afterwards. The one complaint we have to make is that he has a greater knowledge of the history of the Hospital than most of us possess, a knowledge, moreover, which he was able to use with great effect on his teaching rounds.

We take this opportunity of welcoming Prof. Grey Turner as a Perpetual Student of St. Bartholomew's.

* * *

The victory of the Hospital water polo team must not be left unsung. By defeating Guy's in the final of the inter-hospital competition after a triumphal progress through the earlier heats, they not only introduce the cup to Bart.'s, but take it from Guy's for the first time in history. We couple with our congratulations the hope that the Cup will long remain in its new home.

* * *

ST. BARTHOLOMEW'S HOSPITAL WOMEN'S GUILD.

We are greatly indebted to the Terrell String Quartette—of which two of the Misses Bowlby are members—for a delightful concert which they gave for our funds at the Court House, Marylebone Lane, on June 4th, at 8.15. The Hall was quite filled by a large and enthusiastic audience, for whom a delightful evening's music was provided. The artistes are not only to be greatly congratulated on the very finished performance which they gave, but also upon the selection of the various items, both from an artistic and a musical point of view. We would specially like to take this opportunity of recording our gratitude to both organizers and performers of the Terrell String Quartette, and of thanking them at the same time very much for a most acceptable gift of £38 2*s*. which they sent to our funds as the result of their concert.

Again, for the third year, we have great pleasure in announcing the very successful result of our Provision Stall held at the Hospital Garden Fête on June 13th, 14th and 15th. This year it was most efficiently and capably organized by one of the members of our Executive Committee, Mrs. Price, and to her and her many helpers we owe a great debt of gratitude for the energy with which they carried it through. They are especially to be congratulated as, in spite of the indifferent weather on the second day, which must have deterred many possible purchasers from attending, a most encouraging total of £140 was realized.

MORE MEDICAL NOTES.

By Sir THOMAS HORDER, Bt.

ON SOME DRUGS.

(1) Medicines are given in routine fashion "three times a day" mainly for convenience and in relation to the chief meals. In all acute diseases, and when patients are gravely ill, this instruction is inappropriate. The "sign" should then be "every four (or two or six, etc.) hours." For example, a patient suffering from pneumonia needs his medicines, not less, but perhaps more, by night than by day.

(2) The young doctor is perhaps too free with stimulants, and the old doctor is perhaps too free with sedatives, in treating elderly patients.

(3) In prescribing for a neurasthenic patient, if in doubt whether to choose a stimulant or a sedative, choose a sedative.

(4) For most new laxatives the claims are made that they "assist Nature," and that they "are not really drugs." Gradually they make unholy, yet very helpful, alliances with the pharmacopœia of unrighteousness. The new claims made for the hybrid preparations are greater than before, because it is conveniently forgotten to shed any of the old ones.

(5) In obscure pyrexia certain drugs are sometimes of diagnostic value: quinine in malaria, salicylates in acute rheumatism, emetine in amœbic dysentery, alkalis in bacilluria, arsenic in rat-bite fever, and santonin in *Ascaris lumbricoides*.

(6) To give "double the dose" of sodium bicarbonate with sodium salicylate in the treatment of rheumatic fever, though its assigned purpose is the prevention of gastric irritation and constipation, is probably a survival of the older method of treating this disease by large doses of alkalis.

(7) The use of sodium bicarbonate in acid dyspepsia is often disallowed on theoretical grounds, because it leads to the production of carbon dioxide gas. "My doctor won't let me take bicarbonate of soda, though it is the only thing that does me good." Why deny the patient the satisfaction of "bringing up the wind"?

(8) Ordering "stimulant expectorants," such as ammonium carbonate, in the early days of pneumonia and of acute bronchitis, displays an odd lack of thought. For there is, as yet, no secretion present, and to increase the vascularity of the bronchial mucosa serves no useful purpose. What does result, however, is that the painful and purposeless cough becomes still more so.

(9) Whatever theoretical indications against the use of the drug may seem to be present, no patient suffering from failing heart should be denied the possible help to be given by digitalis.

(10) If no benefit follows the use of digitalis in failing heart, the drug should never be discontinued until it is certain that the dose has been increased to an amount which is just below the level of toxic effects.

(11) We are told that strychnine does not help a failing heart. Let us say, then, that it helps a failing pulse.

(12) When strychnine is prescribed as a tonic it is well to omit the evening dose, as this sometimes tends to prevent sleep. The same remark applies to nux vomica, which is a frequent cause of restless nights.

ON SOME FRACTURES OF THE TIBIA AND FIBULA: WITH NOTES OF FIVE CASES.

THE subject of fractures is one which usually only appeals with interest to a minority. A study of fractures of the leg, however, based on the records of five consecutive cases, which in variety cover all the best-known types of fracture of the tibia and fibula, is probably a matter of more general interest. Moreover, as the histories have been followed throughout almost the whole period of convalescence, a critical survey of methods of treatment and their immediate results is possible. In none of these cases, however, is the injury sufficiently remote to assess the presence or the amount of any permanent disability.

The cases fall roughly into three groups:

A. Fracture of the upper end.
B. Fractures of the shaft.
C. Fracture-dislocations of the ankle-joint.

All X-rays are reproduced as simplified line drawings traced directly from the negatives, except those of Case 5, which are drawn from lantern-slides.

A. *Fracture of the Upper End of the Tibia and Fibula.*

CASE 1:

O. J—, æt. 57; dairy shop keeper.

16.iii.29: Fell down-stairs with leg doubled up under him. After the accident felt great pain in the leg and could not use it.

On examination.—Local condition: Whole of upper third of leg swollen and œdematous; deformity of upper part of leg with abnormal motility, eliciting crepitus.

General condition: Slight shock; alcoholic aroma; oral sepsis ++. Leg placed in Neville's splint, with side-pieces for the night pending X-ray.

17.iii.29: X-ray (Case 1, A and B): Extensive oblique fracture of upper third of tibia involving the tuberosity. Fracture of fibula at (*a*) upper end, (*b*) lower third. There was now very considerable œdema of almost the whole length, extensive fracture blisters, and it was therefore decided to sling the limb in a Thomas's knee-splint, and apply continuous traction. Under anæsthesia the limb was placed in the splint and a Pearson caliper applied to the malleoli. Fixed traction was employed. X-ray (Case 1, C) showed that the caliper had been applied too low and the inner point allowed to penetrate too far into the cancellous bone. The correct points for application of the caliper are indicated by the arrows, *i.e.* ½ in. above the malleoli.

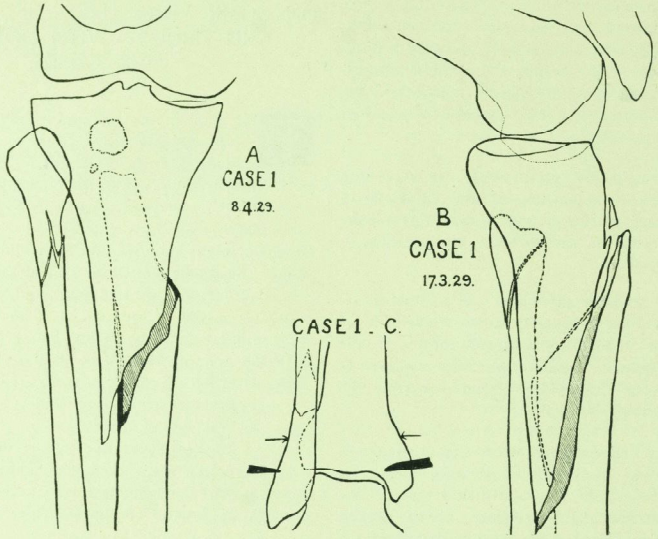
20–23.iii.29: Delirium tremens. Recovered with appropriate homœopathic treatment.

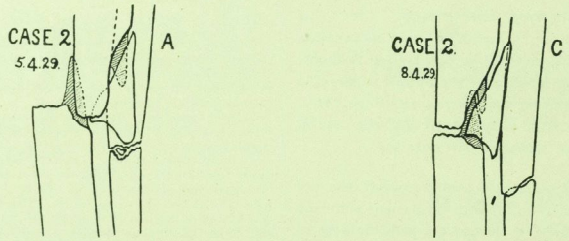
8.iv.29 (three weeks from injury): Splint and caliper removed. X-ray showed position not to have altered and signs of callus formation, although clinically there was very little evidence of union. A full plaster was applied from mid-thigh to toes with windows for the caliper wounds. Left hospital 14.iv.29 (four weeks from injury).

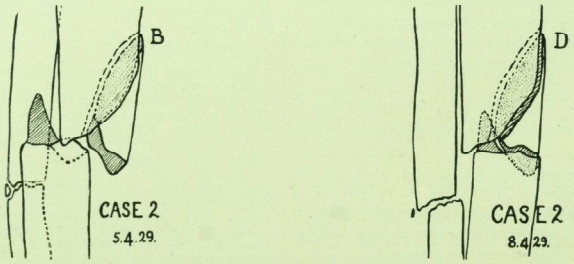
29.v.29 (ten weeks): Plaster removed; firm union; light plaster from mid-thigh to mid-calf.

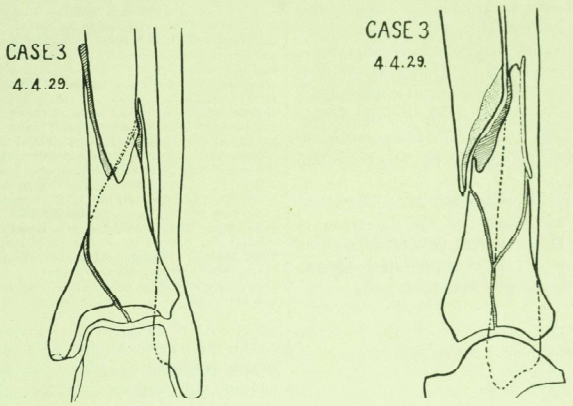
12.vi.29: Plaster removed. Good union clinically. Knee flexion through 60°; considerable œdema of ankle and leg. Dorsiflexion of ankle nearly full; plantar flexion half way. Massage begun. Walking begun with valgus wedge.

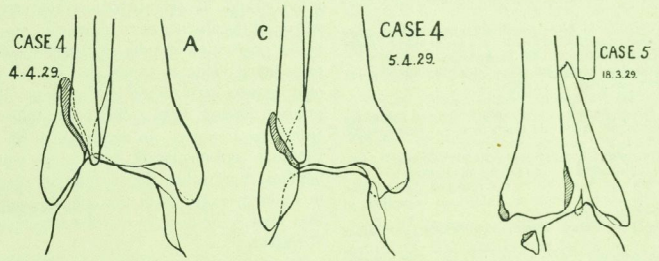
9.vii.29 (sixteen weeks after injury): Less œdema of leg, still some at ankle. Knee flexion to 90°. Some pain in knee at night. Walks easily with occasional support from a single stick.

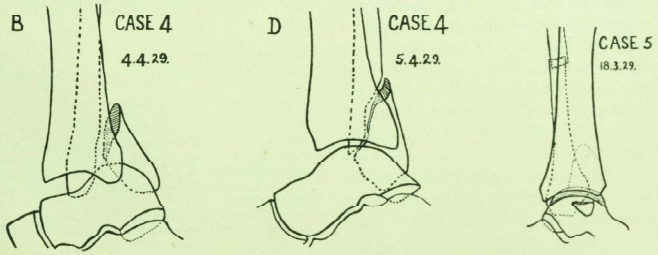

A
CASE 1
8.4.29.
B
CASE 1
17.3.29.
CASE 1 . C.


CASE 2
5.4.29.
A
CASE 2.
8.4.29.
C


B
CASE 2
5.4.29.
D
CASE 2
8.4.29.


CASE 3
4.4.29.
CASE 3
4.4.29.


CASE 4
4.4.29.
A
C
CASE 4
5.4.29.
CASE 5
18.3.29.


B
CASE 4
4.4.29.
D
CASE 4
5.4.29.
CASE 5
18.3.29.

This fracture is of an unusual type, especially in that it involved the tuberosity of the tibia. In spite of this the patient has got moderately good function of the knee-joint. A full plaster was kept on until twelve weeks after the injury because (*a*) damage to the bone was considerable, (*b*) very little consolidation was evident when the plaster was first applied, and (*c*) the patient was of heavy build, and his more than occasional unsteadiness (of bacchanalian origin) had to be taken into account.

Caliper extension on a Thomas splint was quite successful in maintaining the position of the fragments, in spite of the fact that in the stage of delirium the traction cord carried away, and one point of the caliper became entirely detached from the fibula for some hours.

B. *Fractures of the Shaft of Tibia and Fibula.*

CASE 2.—Transverse fracture.

R. C—, æt. 41 ; fitter's mate.

5.iv.29 : While helping to shift a 15-cwt. flat iron casting set edgeways, it became unbalanced and fell sideways, striking patient in middle of left leg. Unable to use leg after accident.

On examination.—Local condition : Bruising and swelling of middle two-thirds of leg—not severe ; obvious deformity, and the ends of the fragments of tibia could be readily felt beneath the skin ; lower fragment displaced inwards. General condition good ; slight oral sepsis.

5.iv.29 : X-ray (Case 2, A and B) : Comminuted transverse fracture of tibia and fibula about junction of middle and lower thirds ; lower fragment of tibia displaced inwards and backwards.

6.iv.29 : Manipulated under anæsthesia, and leg placed in Neville's splint and side-pieces and slung in a cradle.

8.iv.29 : X-ray (Case 2, C and D). Position good.

27.iv.29 (three weeks after injury) : Splint removed ; bruising subsided ; full plaster case from mid-thigh to toes. Left hospital 29.iv.29 (three and a half weeks from accident).

21.v.29 : X-ray. Slight angulation of tibial fragments ; concavity forwards ; no displacement ; no lateral angulation.

12.vi.29 (ten weeks from injury) : Plaster removed ; good union clinically. Practically no movement at ankle-joint ; swelling of ankle. Delbet's ambulatory plaster applied.

26.vi.29 : Walking in Delbet, which is comfortable, but rather loose.

17.vii.29 : Delbet removed ; firm union ; no pain ; slight valgus. To wear valgus wedge.

It is unfortunate that a shift in position should have taken place between the time of reduction and when an X-ray was taken (while in plaster) six weeks later.

It is probable that this took place while patient was on the Neville's splint or at the time of application of the plaster. In spite of this, however, and also the fact that the transverse type of fracture is often very slow in healing, he has got good union. By means of the Delbet plaster he is able to walk about, taking weight through the fracture ; but this apparatus effectively checks any tendency for bending to occur at the site of fracture, and is much more economical than a moulded leather splint, which is sometimes employed for the same purpose.

CASE 3.—Oblique fracture of the tibial shaft.

A. J—, æt. 52 ; secretary, C.L.B.

3.iv.29 : While working at the top of a step-ladder patient fell, wedging his right leg between two of the steps ; he felt his leg "go" and heard bones grating on one another. Did not attempt use of leg.

On examination.—Local condition : Swelling and œdema of lower third of right leg ; no deformity ; pain on any attempt at movement. General condition : *Nil ad rem.*

4.iv.29 : X-ray (Case 3). Spiral fracture of tibia extending into ankle-joint ; slight angulation, concavity forwards. Fibula intact.

Manipulation to attempt to correct angulation, and application of full plaster from mid-thigh to toes—no anæsthesia.

6.iv.29 : X-ray. No material change in position.

8.iv.29 : Left hospital (five days after injury).

15.v.29 : X-ray (through plaster) : Not much evidence of callus.

30.v.29 : Heavy fall in plaster. X-ray : Position unaltered.

20.vi.29 : (eleven weeks after injury) : Plaster removed. Union firm ; swelling of leg and ankle, and only slight movement at ankle. No further splinting ; massage begun.

17.vii.29 : Walking comfortably ; no pain ; going to take charge of a boys' camp.

This is a typical example of the spiral type of fracture, usually produced by indirect violence. In this case, in addition, the fracture extended sufficiently to involve the ankle-joint. Displacement was slight, the condition of the skin good, so there was no bar to the application of an immediate plaster, which has given quite a good result. The extensive fissures give large areas for the production of callus, so that consolidation is fairly rapid, in contrast to the transverse type (Case 2), where, in the absence of comminution, the area involved in the production of callus is the least possible. Moreover, young callus in an oblique fracture is, on account of its greater mass, better able to resist all, except compression, strains than callus of a similar type in the transverse fracture. In a transverse fracture it is not the mere transmission of weight that tends to produce bending, but rather the activity of the muscles (*e. g.* in walking) acting from the opposite ends of the bone that tend to produce or increase angulation at the site of fracture.

There is no intention here of discussing operative treatment, but in cases of this oblique type, if there is any considerable degree of angulation or separation of the fragments, an operation for securing the correct apposition by mechanical means, *e. g.* Parham's bands, would probably yield the earliest and most successful result.

C. *Fracture Dislocation of the Ankle-joint.*

CASE 4.—Pott's fracture.

J. Y—, æt. 57 ; builder's labourer.

4.iv.29 : While wheeling a barrow was struck from behind by a car, his right leg being twisted behind him as he was knocked down.

On examination.—Local condition : Much swelling and deformity of right ankle, which was displaced backwards and outwards, and slightly everted.

General condition : Shocked ; oral sepsis + ; lacerated wound 4 in. long on inner side of lower third of right thigh.

4.iv.29 : X-ray (Case 4, A and B). Fracture of lower end of fibula ; tarsus dislocated backwards and outwards, with tilting outwards of astragalus ; internal malleolus intact.

4.iv.29 : Under anæsthesia : (*a*) Wound in thigh excised and sutured ; (*b*) deformity of ankle corrected. Neville's splint and side-pieces applied for, *re* X-ray.

5.iv.29 : X-ray (Case 4, C and D). Backward displacement and outward tilting of astragalus completely reduced ; outward displacement of astragalus nearly so.

6.iv.29 : Further manipulation under anæsthesia to attempt to complete reduction of outward displacement of astragalus. Plates applied from below knee to toes with foot inverted. Further X-ray showed no appreciable alteration after this manipulation. Patient was kept in hospital till 29.iv.29 for treatment of laceration—plaster remaining unaltered.

15.v.29 (six weeks after injury) : Plaster removed ; moderate swelling around ankle. Ankle dorsiflexion to 90°, 15° free movement. To walk with crutches and a valgus wedge. Massage begun 29.v.29 (eight weeks after injury).

12.vi.29 : Walking comfortably ; movements of ankle good. Dorsiflexion to 80°.

10.vii.29 (fourteen weeks after injury) : Movements good ; no pain ; walks unaided ; going to start work.

This case differs only from the classical Pott's fracture in that the internal lateral ligament was torn instead of the more usual fracture through the internal malleolus. The good result obtained is no doubt due in large measure to the completeness of correction of the posterior dislocation and the lateral tilting. If the weight-bearing mechanism (*i. e.* inferior surface of tibia and superior surface of astragalus) is correctly aligned in the sagittal plane the fibula and internal malleolus and ligaments can consolidate well on either side, as no strain is thrown upon them. If, however, there is an appreciable degree of lateral displacement and for tilting of the astragalus, then weight-bearing throws an undue strain on the internal malleolus and internal lateral ligament, causing these structures to be impeded and stretched in their process of repair, with consequent pain on the inner side of the ankle and valgus deformity, to which pes planus and general disorganization of the mechanism of the foot must be the inevitable sequels.

CASE 5.—Dupuytren's fracture.

G. I—, æt. 39 ; newsagent's carman.

18.iii.29 : While helping to load a van the horse slipped and fell, so that the shaft of the van fell on to and crushed patient's right foot. Unable to walk after accident on account of great pain.

On examination.—Local condition : Considerable deformity above ankle-joint with displacement of foot outwards and eversion. Considerable swelling in region of internal malleolus. Two small abrasions above site of bony injury on outer side of leg.

General condition : *Nil ad rem.*

Admitted slung in Thomas splint pending X-ray.

18.iii.29 : X-ray (Case 5). Fracture of internal malleolus and vertical fracture through tibia on outer side. Fracture of lower third of fibula with dislocation outwards and upwards of astragalus between tibia and fibula, and eversion of the tarsus.

19.iii.29 : Under general anæsthesia foot was manipulated into a position of slight inversion and retained by the application of two plaster slabs to outer and posterior aspects of foot and leg, and bound in position by bandages.

20.iii.29 : X-ray. Outward displacement of astragalus completely corrected ; vertical fracture of tibia barely visible ; internal malleolus still slightly displaced outwards.

7.iv.29 : Plaster slabs replaced by plaster from mid-thigh to toes, split laterally ; anterior portion removed daily to allow slight voluntary dorsiflexion of ankle and toes. Left hospital 10.iv.29 (three weeks after injury).

24.iv.29 (five weeks after injury) : Massage to leg and movements of knee and ankle begun. No weight-bearing ; foot swollen ; range of movement very small ; pain over internal malleolus.

1.v.29 : Plaster cut down to below knee.

8.v.29 : Weight-bearing begun ; split plaster gradually left off. About 15° of movement in ankle joint.

22.v.29 (nine weeks after injury) : Walking with a valgus wedge begun ; dorsiflexion much limited by pain ; ankle was manipulated under gas on 6.vi.29, a good range of movement being obtained with breaking of some adhesions.

28.vi.29 : Less pain ; movements of ankle increasing.

17.vii.29 (seventeen weeks after injury) : Fair range of movement in ankle ; can walk unaided, but lacks confidence ; ankle a good shape ; still a little pain. Going to convalescent home.

Convalescence in this case has been somewhat protracted, but the injury was a severe one and caused very considerable disorganization of the ankle-joint. However, all of the cases here quoted have required about twelve weeks for complete restoration of function, so this case has not been unduly slow. In this connection it may be pointed out that the complete return of function in fractures of the tibia and fibula usually takes longer to come about than is commonly stated in text-books, though it is true that the patients can walk, but with a stick and with considerable lameness, a month earlier than this.

In connection with this case it is interesting to recall Dupuytren's own description of the fracture, which appeared in his *Leçons Orales*, a volume of which was published by the Sydenham Society in 1847, and from which the following quotation is taken.

Speaking of "Species and Varieties of, and Complications and Casualties attending, Fracture of the Fibula," he says :

"*Case XVI.*—Fracture of the fibula and rupture of ligaments with dislocation of the foot outwards and upwards.

"C. N. Guilleman, a joiner, aged 54, of sanguine temperament, was coming half drunk out of a pot house, for the purpose of making water, when, reeling along in a hurried manner, he came to an inclined and slippery piece of ground, where he fell, his right leg being extended outwards from the body, the weight of which it had to sustain with the superadded momentum of the fall. Being unable to walk he was immediately conveyed to the Hotel Dieu. This occurred in the winter of 1816.

"When admitted, the presence of the usual signs of fractured fibula were readily detected ; but what most attracted attention was the shortness of the leg, together with the almost doubled interval comprised between the malleoli, and the prolongation of the tibia downwards to a level with the sole of the foot ; the astragalus and outer malleolus, with the whole foot, were drawn up on the outer side of the tibia, two inches above their normal

position. All these signs left no doubt that the ligaments connecting the tibia and fibula were torn through, and that the foot was dislocated outwards and upwards, carrying with it the outer malleolus."

General Conclusions.

All authorities are agreed that the first step in the treatment of a fracture should be the effective reposition of the fragments, so that, when union occurs, the mechanism of the affected bones and joints may be as little as possible altered.

The ultimate functional result is largely measurable in terms of the success or otherwise of immediate anatomical correction of the injury.

In all the cases described reduction of the fracture was carried out with a considerable degree of accuracy, so that the results are very satisfactory—though by no means perfect.

The next problem, namely, that of retaining the fragments in their corrected positions, is one on which many varying opinions have been expressed, and for the solution of which many different means have been devised. There are certain types of fracture (such as Case 1) and also open fractures, for which a Thomas splint combined with some form of traction undoubtedly provides the best method of treatment.

In simple fractures of the shaft and in fracture dislocations of the ankle-joint, however, one of two plans of treatment is usually advocated.

The first plan is to immobilize the limb on some well-known type of fixation splint, *e.g.* Neville, Dupuytren, Macintyre, etc., for two to three weeks while the process of union is initiated, and then to apply a split plaster in which the patient walks with the aid of crutches until union is sufficiently strong to allow of weight-bearing.

Massage and in some cases movements are begun at this stage or even earlier.

Alternatively, the retentive splint is kept on longer, and this is followed by a period during which the limb lies at rest in bed unsplinted until it is thought to be able gradually to take the strain of the body-weight.

Under the second *régime* a complete, a split, or a bivalve plaster is applied immediately after reduction, and the patient is able, almost at once, to get about on crutches. At the end of six to ten weeks a full plaster is removed and physical treatment begun, either with or without some form of ambulatory splint. If a split plaster is employed at the outset, physical treatment can be begun earlier.

The plan of using a fixation splint rather than a full plaster at the outset is said to permit of earlier physical treatment, and swelling and stiffness of the leg and ankle are thus reduced or avoided. Thus, at a later stage, the period when the patient is walking about but still under physical treatment is shortened. Against this method must be placed the fact that this form of splintage is not so secure in maintaining the fragments in position as when a plaster is employed. There is always the danger of backward angulation occurring when the leg is placed on a back splint, such as Neville's, and, indeed, when it is slung in a Thomas. Massage in the early stage of repair, however gentle, may also cause a similar alteration of position simply from removal of too much of the retentive apparatus.

Against the method of the immediate plaster, it is argued that the injured part is not so readily inspected, decrease of swelling may cause the plaster to be loose in a few days and require replacement, and, with a full plaster, physical treatment cannot be carried out and a considerable degree of œdema may persist for many weeks.

In favour of this method it may be stated that (*a*) the patient need not be confined to bed for more than a few days, (*b*) the fragments are held more securely in position, (*c*) when the time comes for removal of the plaster, the swelling and stiffness, although they have been present for some time, are just as readily dispersed with massage, etc., as at an earlier stage in treatment—and with the reassuring knowledge that such massage is not likely to affect the position of union, which is then considerably consolidated. This last argument does not, of course, apply if a split plaster is employed.

In hospital practice the economic factors (*a*) of reducing the period of in-patient treatment to a minimum, and (*b*) the necessity of getting the patient to an ambulatory stage of treatment when he may once more be a wage-earner, often play a large part in influencing the plan of treatment. Whether these factors should be regarded as of major importance is an entirely different problem.

Apart from economic factors, however, there remains the question of the "ideal" treatment. This will, of course, depend primarily on the nature of the practice. If, however, it is decided that the case is not one which calls for treatment by continuous traction, then it would seem that the best method is to effect reduction as soon as possible and to fix the limb immediately in a plaster case divided laterally on both sides. An X-ray is then taken to determine whether the reduction has been effectively carried out. If this is satisfactory, gentle massage may be started almost at once without removing the limb from the posterior half of the plaster. The patient may at this stage walk with crutches without bearing weight on the foot. At a later stage weight may be borne with the aid of some such supporting apparatus as a Delbet plaster or a moulded leather splint.

Moreover, in the early physical treatment weight may be borne proportionately sooner, as the strength of the muscles has been maintained and they are better able to control the limb.

The various forms of back- and side-splints advocated for use in fractures of this type do not seem to possess any advantages over the divided plaster; they are definitely less efficient in maintaining the position of the fragments and are not made individually for each case.

In the modern treatment of simple fractures of the tibia and fibula and fractures involving the ankle-joint, an early reduction and fixation in some form of plaster splint, followed later by a similar apparatus allowing gradually increased weight-bearing, would seem to give the best results, not only from the point of view of obtaining good functional use of the limb, but also from the economic point of view of both patient and his medical advisers.

My thanks are due to Prof. Gask for his kind permission to publish these cases, and to Mr. J. P. Hosford, under whose direction the treatment of these cases has been carried out, for much helpful advice and criticism.

C. F. WATTS.

RUPTURE OF THE QUADRICEPS EXTENSOR FEMORIS MUSCLE.

RUPTURE of the quadriceps extensor femoris muscles may be (1) unilateral—(*a*) partial, (*b*) complete; (2) bilateral—(*a*) partial; (*b*) complete.

Unilateral rupture is not uncommon; bilateral rupture is rare. We have been able to find two recorded cases of bilateral rupture. Sigurd Frey (1) cites the following: Male, æt. 60, who jumped from a stage 140 metres high during a dancing festival. He could not stand after this, was unable to walk and experienced sharp pains in both lower extremities. He was treated by bandaging the knee-joints. Eventually he presented himself at the surgical clinic in Königsberg. He was found to have marked muscle atrophy of both thighs. The upper surfaces of both patellæ were easily palpable. There was abnormal mobility of patellæ and active extension of knee-joints was impossible. The left knee-joint could be flexed 100° and the right knee-joint 110°. The patient could stand with extremely flexed knee-joints. Walking was difficult.

X-ray examination showed marked atrophy of femora, tibiæ and patellæ. In the lateral view of the left knee-joint 8 cm. above the upper border of the patella, two small structureless shadows were seen. In a similar view of the right knee-joint, 1 cm. above the upper border of the patella, a similar shadow was seen in the tendon of the quadriceps extensor femoris.

Electrical reactions of the quadriceps extensor femoris muscles, right and left, were normal.

Albrecht (2) records the case of a man who was hit on the head and stunned. He fell backwards, with point of maximum flexion of body at the knee joints, rupturing both quadriceps extensor femoris muscles.

Ætiology.—Rupture of the quadriceps extensor femoris muscles may be due to (1) direct violence, (2) indirect violence.

Delbet (3) records an illustration of the former method in which a blow on a man's knee resulted in hæmarthrosis with infiltration of blood in the periarticular tissues and rupture of the quadriceps muscles.

The majority of cases of ruptured quadriceps are due to indirect violence, producing forcible flexion of the knee-joint. The force is in operation for a short time, and it is an interesting question why this jerky force causes rupture of the tendon of the quadriceps and not a fracture of the patella. Is there a predisposing cause present?

Both of the cases we record were healthy men with apparently good musculature, who had enjoyed good health all their lives.

Important predisposing causes are—

(1) *Atrophy of muscles:* (*a*) Senile atrophy; (*b*) atrophy from disease; (*c*) toxic and starvation atrophy; (*d*) neuropathic atrophy.

(2) *Inflammation of muscles:* (*a*) Fibrositis; (*b*) tuberculosis; (*c*) tertiary syphilis; (*d*) actinomycosis.

(3) *Trichiniasis.*

(4) *Osteo-arthritis.*

Frankenthal (4) calls attention to diabetes and the uric acid diathesis as important ætiological factors.

In Case No. 1 well-marked osteo-arthritic changes were present in both knee joints. Unfortunately microscopic examination of the muscles involved was not carried out in our cases. If this were done we might learn some important facts in connection with rupture of muscles.

Symptoms.—Symptoms of shock may be present. There is pain situated over the site of rupture. Patient is unable to extend his leg at the knee-joint to stand or to walk.

Signs.—Signs of shock may be present.

Effusion into the knee-joint may be of a serous or hæmorrhagic character. There may be sanguine crepitations in the periarticular tissues, as in Delbet's case.

A transverse furrow immediately above the upper border of the patella is present. There is abnormal lateral mobility of the patella. Active extension of the knee-joint is impossible in complete rupture. Active flexion of the knee-joint may be limited.

X-ray signs. Chronic inflammatory changes may be present in the knee-joint, as in Case I. Frey calls attention to shadows present in the region of the quadriceps extensor muscles, which were apparently areas of calcification in the muscles. Axhausen (5) also records the presence of circular shadows at the lower end of the tendon of the quadriceps.

In Frey's case, the injury being remote, there was marked atrophy of the femur and tibia, and the patella was displaced externally.

Treatment.—In the two cases recorded the lower extremities were immobilized for three and four days respectively on Neville's splint with side-pieces, with continuous pressure applied to the knee-joints.

Operation: Arthrotomy of knee-joint with evacuation of effusion and suture of divided ends of quadriceps muscles with silk. Three to four weeks later, massage for muscles of thigh and leg, and gentle passive movements at the knee-joints.

CASE I.—A. J—, male, æt. 66, solicitor's clerk, admitted 14.v.29, complaining of injury to legs.

History of present condition.—14.v.29: Whilst descending stairs carrying heavy legal documents, his feet slipped and both knee-joints were forcibly flexed. Pain was felt above both patellæ. He was unable to assume the erect posture.

Past history.—Always experienced good health except for bronchitis in the winter.

Family history.—Healthy family.

Condition on examination.—Heavy, well-covered man. Suffering from shock.

Eyes normal. *Tongue* clean and moist. *Teeth:* Three stumps present. *Fauces and tonsils* normal. *Heart* normal. *Lungs:* Emphysema and chronic bronchitis present. *Abdomen:* Irreducible umbilical hernia present; otherwise normal. *Upper extremities* normal.

Lower extremities: Right.—Right knee-joint swollen. Transverse furrow 3 in. long and ¾ in. deep, immediately above the superior border of the patella. Abnormal mobility of the patella in the lateral plane. Inability to extend the knee-joint actively.

Left.—Left knee-joint swollen. Transverse furrow 3 in. long and ¾ in. deep immediately above the superior border of the patella. Abnormal mobility of the patella in the lateral plane. Inability to extend the knee-joint actively.

Urine.—No abnormal constituents.

X-ray examination.—Knee-joints, right and left: "There are considerable osteo-arthritic changes present in both knee-joints. No evidence of fracture of patellæ."

Diagnosis.—(1) Rupture of quadriceps extensor femoris muscles right, transverse, immediately above the superior border of right patella.

(2) Rupture of quadriceps extensor femoris muscles, left, transverse, immediately above the superior border of left patella.

(3) Osteo-arthritis knee-joint right, chronic.

(4) Osteo-arthritis knee-joint left, chronic.

Complications.—(*a*) Hæmarthrosis knee-joint, right; (*b*) hæmarthrosis knee-joint, left.

Operation.—17.v.29: By Sir Holburt J. Waring, under ethyl chloride-ether anæsthesia.

(1) Arthrotomy of knee-joint, right, through the antero-mesial approach; evacuation of blood-stained fluid from within the knee-joint. Solution of continuity of the quadriceps extensor femoris muscles present immediately above the superior border of the patella. This involved the aponeurosis and beneath this, muscle-fibres. The ends of the muscles were approximated and held in position by interrupted sutures of No. 2 silk. Parietal wound closed without drainage.

(2) Arthrotomy of knee-joint, left, through the antero-mesial approach; evacuation of blood-stained fluid from within the knee-joint. There was a solution of continuity in the quadriceps extensor muscles immediately above the upper border of the patella; this involved the aponeurosis, and beneath this, muscle-fibres. Identical procedure carried out as on the right side.

The lower extremities were immobilized on Neville's splint with side-pieces, both knee-joints being in position of full extension.

After-treatment.—The wounds healed by first intention.

3.vi.29: Massage for muscles of thighs and legs commenced with gentle passive movements of both knee-joints.

6.vi.29: Patient discharged with both lower extremities in Croft's splints. Flexion at left knee-joint = 15°. Flexion at right knee-joint = 10°. Extension in both knee-joints full. To continue treatment at home.

CASE 2.—A. C—, æt. 53, of no occupation, admitted 2.iii.29, complaining of injury to right leg.

History of present condition.—2.iii.29: Patient assaulted in the street. He was thrown to the ground, forcible flexion occurring at the right knee-joint. It was stated that the right knee-joint was dislocated, this being reduced by a policeman. Patient unable to walk on right lower extremity.

Past history.—He has always experienced good health.

Family history.—Healthy family.

Condition on examination.—Healthy man. *Eyes* normal. *Tongue* clean and moist. *Fauces* normal. *Heart* normal. *Lungs* normal. *Abdomen* normal.

Lower extremities: Left.—Normal.

Right.—Knee-joint swollen. Transverse furrow immediately above the superior border of the patella; this extended from the inner margin of the vastus internus muscle to a point immediately above the outer margin of the patella. Active extension of the knee-joint limited. Lateral mobility of the femur on the tibia present to the extent of 10°.

X-ray examination.—Right knee-joint: the articular surfaces of the femur, tibia and patella are normal. There is no fracture of the patella.

Diagnosis.—(1) Rupture of quadriceps extensor femoris muscles right, transverse, incomplete, immediately above the superior border of the patella.

(2) Rupture of internal lateral ligament of knee-joint, right.

(3) Rupture of external lateral ligament of knee-joint, right.

Complications.—Hæmarthrosis, knee-joint, right.

Operation.—8.iii.29: By Sir Holburt J. Waring, under nitrous oxide-oxygen-ether anæsthesia. Arthrotomy of knee-joint, right, through the antero-mesial approach, evacuation of blood-stained fluid. Solution of continuity of the quadriceps extensor femoris muscles found immediately above superior border of the patella extending from its inner aspect to a point immediately above the lateral border of the patella. The ends of the aponeurosis and muscle were approximated and sutured with interrupted sutures of No. 3 silk. Closure of parietal wound without drainage.

Right lower extremity immobilized on Neville's splint, with side-pieces.

After-treatment.—The wound healed by first intention.

19.iii.29: Croft's splint applied from middle of right thigh to the ankle.

13.iv.29: Massage for muscles of right lower extremity commenced. Passive movements begun at right knee-joint.

25.iv.29: Croft's splint removed. Extension of right knee-joint full; flexion of right knee-joint, 160°.

I am indebted to Sir Holburt J. Waring for his kind permission to publish the notes of the two cases.

REFERENCES.

(1) FREY, SIGURD.—*Deutsche Zeitschr. f. Chir.*, No. 9, pp. 284–286.

(2) ALBRECHT.—"Beidersertiger Abriss de Quadrizepsschine," *Wien. klin. Wochens.*, 1906, No. 22.

(3) DELBET.—*Journ. des Practiciens*, 1924, xxxviii, pp. 180–3.

(4) FRANKENTHAL.—*Münch. med. Wochens.*, 1928, lxxv, No. 1, pp. 563–5.

(5) AXHAUSEN.—*Deutsche Zeitschr. f. Chir.*, Bd. lxxxii.

R. W. RAVEN.

MNEMONICS IN RHYME.

SOME POISONS.

A. PRUSSIC ACID.

"Symptoms come on immediately. The individual may utter a piercing cry, feels giddy and falls down insensible.

"If death be delayed for a few minutes . . . the symptoms are . . . pallor, . . . dilated pupils, laboured and irregular breathing, small and infrequent pulse; . . . there may be convulsions or tetanic spasms." (Robertson.)

The name of prussic acid
To my remembrance calls
The man who gives a gasp or sigh,
Then down insensate falls.

If death be not immediate,
The symptoms to discuss
Are pallor, laboured breathing,
Weak pulse and "tetanus."

B. DIGITALIS.

"Symptoms: nausea, vomiting, purging and abdominal pains . . . headache, giddiness and loss of sight . . . pulse weak, slow and irregular. Death from syncope. Treatment: Emetics, tannin, hypodermic aconitine."

Digitalis in excess,
Pulse is weak and slow,
Belly-ache and tenderness,
Vomiting. B.O.

Aching head and giddiness,
Sudden loss of sight,
Death occurs from syncope;
Treatment: Aconite.

C. PHOSPHORUS.

". . . Earliest signs are garlicky taste in the mouth, and pain in the throat and stomach. Vomited matter . . . luminous in the dark. Great prostration, diarrhœa with bloody stools . . . Usually . . . remissions for several days, then jaundice . . . hæmorrhages from mucous membranes and under the skin; later coma and convulsions. P.M.: Fatty degeneration of liver, kidneys, etc. . . ."

If you eat yellow phosphorus—several hours from it
You have pains in the stomach and luminous vomit.
A bloody colitis occurs at the end,
And you sail from the world on a bed-pan, my friend!

More often, however, for several days,
The symptoms abate and you go on your ways.
A deepening jaundice now heralds the worst,
With multiple bleedings, prostration and thirst.
Till death comes from coma; its cause? Acidosis.
(The liver and kidneys show fatty necrosis.)

D. OPIUM.

". . . The main differential diagnosis is pontine hæmorrhage."

Now opium, if taken in excess,
Causes excitement first, then drowsiness,
Inaptitude for exercise, then sleep,
Then pin-point pupils with a coma deep—
(The sort of thing an unsuspecting bloke
Might label as an "apoplectic stroke").
With opium, the temperature is low,
In apoplexy it soars up, you know!

F. H. K. G.

THINGS WE THINK.

FROM the art of political propaganda and the art of Epstein let us descend, centring that perseverance residual from our battles with the Philistines on the Art of Being a Patient. The primal difficulty is this of keeping the mind alert—there is so much to think about and so little to think about it that in the comparative quiet of the day we are too inclined to sleep, and only at night, when, without, the quasi-articulate scream of business changes to a deeper, fainter tone, and within, Gargantua sidles round upsetting tin baths, can our thoughts dwell, like Hesiod's, on cosmogony and horticulture.

Marcus Aurelius Antoninus is said to have set down the less meditated of his thoughts in the intervals of public occasions. The possibility that frequent repetition of the same scenes in time invariably suggested the same thoughts perhaps explains why he repeats himself; not that this matters—a great thought has just as little effect said ten times as said once. I propose to say mine once.

Let us take a lesson on keeping the mind alert from men who (though never read) are by the consent of all called great. It is the simple things that interest and employ them. Does not Plato commence the Republic by attempting to define justice? Who can say? We have not read him. Begin then, Sisters of the Sacred well. . . . Begin, and somewhat loudly sweep the string. There is a rosette stamped on a corbel over my head. What can a maker's sign breed, seated in a mind for three weeks? It only shows that our mark put on the material universe may very easily reach posterity without the individuality we wish to preserve becoming any less obscure. The genius may sign his name to his work, or the fool may transcribe it and sign the copy with his own; it does not matter. Posterity will read it just as infrequently, understand it just as inadequately, judge it just as readily, learn from it just as little, and honour the empty name (probably the wrong one) just as foolishly. The wise man would not bother to append his name, or to write for any satisfaction other than his own applause—what would it matter in such a world? Nor could it stave off the ultimate universal stasis forecast by the second law of thermodynamics.

Night has come—now I can think clearly, every wandering of the mind from real to ideal restored by the intensely sane human apparatus around, speaking for itself. I am not in an electrician's laboratory, though lights glitter all about me. I might have dropped amid the glow-worms of *A Midsummer Night's Dream*, but that the screech from the far end of the ward is more piercing than an owl's, and less musical. Why do floorboards creak so? If we knew their idiom they might speak as articulately as we. Till we can prove they can't we must remain in Socratic doubt. The noise of cupboards and screens reminds me more of Dante than of forests.

After so restful a day, who wants to doze at night? Who, indeed, can? We are on duty, praise the gods, and as the door swings open with a gust of pleasant air, the boards give tongue all round with the speed of preparation. Voices murmur—were I less gladly wakeful I might dream I was at the opera, or (but for the lack of coughing) at the Queen's Hall. I suppose it is the vibration of the thousand bated breaths that makes the plaster with which our halls are so grandly adorned shell off at the beginning of a programme, to fall down the throats of so many of the audience, irritating those few unused to calcareous medicines.

It does not do to brood; it's so startling when the stretcher crashes against the door-post; though after the third time it's less worrying, and the other four one scarcely hears. And so morning steals out with silent foot, and the rattle of meat-vans, with tumult of birds in the eaves and the wheels (very like them, but for the sevenths and elevenths) of the breakfast trolley. Is that rain or frying bacon . . . ? I sleep. Someone pulls my hair and I awake and eat.

I lose count of nights and days.

Senna, least revolting of the devil's brews . . . mild in the mazard, but venomous in the gizzard. I regret not having tasted the tea with milk and sugar. The tincture I recommend you to try before prescribing it, lest you lose patients.

They invite me to sew pillows. Mountains high I am surrounded with unsewn pillows, oozing their unspeakable interiors upon me. Nor have I a genii nor a team of ants to accomplish all in a night. I struggle; I appeal to the gods; sewing with string is unscientific. If only these needles had eyes large enough for anyone but a philosopher to get a camel through! In an evening I complete all.

Not everyone has this curious habit of sleeping in the daytime. My neighbour, who is deaf, snores at night like a Wolf's bottle, bubblingly. But I ponder deeper things. The vague murmurs of inward distress speak, like Claudius's cannon, more or less indirectly to the heavens.

In the next ward a patient yells for help and the police. I, who rarely dream, dream to-night I am a murderer. I have been arrested; I know I shall be convicted; I analyze my chances of escaping death. The analysis does not frighten me; only the doubt of escape makes my bowels sink.

Dawn again shakes out her hair over the eyes of the night:

> "Faint stars whose terrible and pale remove
> Links icy fingers round the watcher's heart—
> These the dread vigillers of deathless night."

Again the doves coo in the immemorial elms, and instead of bees the rumblings of strange contests tremble through the morning air. Never more will I drink the blackish draught called among men HSCo, and unmentionable among the gods, whether or not.

> "It fits thee not to be
> So cunning in thine own calamity."

As in England the Wars of the Roses faltered and died away, so these intestine broils cease in thirty-six hours or so, and other wonders at last possess my soul. If we believe, with Bertrand Russell, that life is just an excrescence in a universal cycle, why should we not die at once, for is there not in life more pain than pleasure? When under the anæsthetic my blood has ceased thundering in my ears I am more peaceful than when I am asleep. Why should life all labour be? Who can choose between peace and labour? Peace is too insidious for rejection.

We had need be good losers, we mortals. Even the immortals, who keep at least themselves when they lose all besides, may find that little worthless. For us that lose all, is it not indeed pleasant to think that in a hundred years (very probably) or in two hundred years (despite the hopes of Bernard Shaw, for certain) our molecules in death, even as those through life before them, will be, some in that late rock formation, some in the volcanic dust that bears those sunsets, some in an elephant's trunk, maybe, and some in the round-cells of that sarcoma?

Now night follows day, day night, as rapidly as in a time machine, and memory grows vague, even the remembrance of this nurse who is like a Greek epigram—so much in so little space. I had one word more, but a storm leaned out from his throne of thunder and dimmed it in the lightning of an aphorism—one whose sentiment is of the most misleading that I know, because it suggests that beyond human knowledge dwells infinity:

> "It is a heart, my beloved,
> Where are its shores and its bottom?" *

S.

* Composed just after the successes of May, 1929.

ABERNETHIAN SOCIETY.

On Thursday, June 13th, Prof. Grey Turner gave the Summer Sessional Address on "Well-known Names in Surgery." The address can be best described as an exhibition of the portraits of notable surgeons illustrated by a running commentary.

The lecturer first introduced Sir John Eric Erichsen, of University College Hospital, for whom surgery was more than mere matter for the knife. The lack of anæsthetics used to be one of the main difficulties that confronted the surgeon. Syme, for example, had to perform his famous operation on a professor at his own university without an anæsthetic. Another difficulty was that of procuring bodies for the study of anatomy, in which connection Robert Knox shared in the unpopular notoriety of Burke and Hare:

> "Burke's the murderer,
> Hare's the thief,
> And Knox is the man
> Who buys the beef."

Many stories have collected round the personality of Prof. Francis Caird, who combined a wide experience and great teaching power with an unsystematic temperament and a bad memory. At names such as John Hunter, Prof. Turner, overwhelmed by what he might say, said very little. He showed a picture of Hunter's letter to Jenner, in which Hunter replied to a question on the physiology of the hedgehog with the words, "Don't think; why not try the experiment?" The original of the letter has been purchased by Prof. Turner, and is to go to the Royal College of Surgeons.

Lister and Watson Cheyne, Treves, Astley-Cooper and his famous operation on a royal wen, John Hilton, who first stressed the importance of rest in treatment, Walsham, Lockwood, Rickman Godlee, biographer of Lister, Christopher Heath—so the pageant continued.

A pause before the memory of Victor Horsley, who, not completely satisfied with science and surgery, sought parliamentary fame. Yet he was a beautiful experimenter, whose operations on monkeys had impressed Prof. Turner as some of the finest surgery that he had ever witnessed. A moving account of his death from paratyphoid in Mesopotamia closed the English portion of the address.

A rapid tour of the Continent introduced us to Von Eiselsberg, Wertheim, Lorenz, Czerny—each with a telling comment to accompany his portrait.

Lennander, a Swedish surgeon, is a splendid example of devotion to work. A sufferer all his life from aortic regurgitation, he could only do his morning's work by spending the rest of the day in bed.

Kocher, with over seven thousand goitre operations, and Rovsing, who made a new œsophagus for a child from the skin of the chest-wall, both essentially practitioners, formed an interesting contrast with Ehrlich, whose life was spent in a laboratory six feet by eight, the walls of which were covered with jars of white mice, the floor with books and *débris*, the desk with a little writing space between more piles of books. Bassini, Bastianelli, Putti, Nélaton, who extracted a bullet from Garibaldi, and two pictures remained.

Last but one Ambroise Paré, who gave expression to the spirit of surgery with the words, "I dress the wound, God cures the patient." And last of all, Abernethy.

Mr. J. E. H. ROBERTS, proposing a vote of thanks, made amusing references to the dual personality of Prof. Grey Turner, which found expression in his name. The vote was seconded by Mr. A. C. BELL, and was carried unanimously.

STUDENTS' UNION.

CRICKET CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* M.C.C.

Played at Winchmore Hill on May 23rd. In this game the Hospital made their best showing of the season against a strong side. Batting first they ran up a total of 257 before declaring with 9 wickets down. A. R. Boney batted very well in making 68, while C. L. Hay-Shunker hit well to make 55 not out. The M.C.C. never looked like getting the runs, and had made 173 for 9 wickets when stumps were drawn. H. L. Hodgkinson took 4 wickets for 46.

ST. BARTHOLOMEW'S HOSPITAL *v.* METROPOLITAN POLICE.

Played at Thames Ditton on May 25th. In this game the Hospital again batted first, but made a sorry display, being all out for 94. W. M. Capper made 35, and was the only one who seemed able to do anything on a rather bumpy wicket.

Our opponents ran up the big score of 236, and were able to do almost what they liked with the bowling.

ST. BARTHOLOMEW'S HOSPITAL *v.* MIDDLESEX HOSPITAL.

1st Round, Cup.

Played at Winchmore Hill on May 28th. Our opponents batted first, and although they had 100 runs on the board for 3 wickets, were all out eventually for 166. H. L. Hodgkinson again bowled very well, and took 6 wickets for 35 runs.

The Hospital started very badly, losing their first 2 wickets for 8 runs, but K. W. Mackie and F. E. Wheeler then made a brilliant stand, and knocked off the runs without being separated; K. W. Mackie scored 77, while F. E. Wheeler made 70.

ST. BARTHOLOMEW'S HOSPITAL *v.* LONDON HOSPITAL.

2nd Round, Cup.

Played at Winchmore Hill on June 19th. This game resulted in a fairly easy win for London, who succeeded in causing a collapse in our first innings, and getting us out for 100. W. M. Capper 34 and G. E. Soden 21 were the only men who played up to form. London, however, could only get 142, as C. L. Hay-Shunker kept a very fine length, and ended up with an analysis of 8 wickets for 43. In the hope of forcing a win on the second innings we went in again, and scored 119 for 9 wickets in just over an hour before declaring. A. R. Boney hit very well in making 48. Our bowling, however, was not deadly enough, and London got the necessary 78 runs for the loss of only 3 wickets.

ST. BARTHOLOMEW'S HOSPITAL *v.* HERTS WANDERERS.

Played at Micklefield Hall on June 1st. This game ended in an easy victory for our opponents; our batting was bad and we could only make 120, and our opponents scored the necessary runs easily and eventually got well over 200.

PAST *v.* PRESENT.

Played at Winchmore Hill on June 8th. A very enjoyable game resulted in a victory for the Present by 39 runs. The Present batted first, and A. R. Boney and W. M. Capper put on 114 runs before the first wicket fell, and the side eventually made 207 for 7 wickets declared; W. M. Capper played a fine innings and was unlucky in only being 9 runs short of his hundred. N. E. Cook, for the Past, bowled very well, and took 6 wickets for 51 runs.

The Past, in reply, made an excellent start with N. E. Cook and R. Maingot, and put 96 on the board before Cook left. After this, with the exception of Maingot, who made a magnificent century, there was very little opposition against some excellent bowling by C. L. Hay-Shunker, who took 7 wickets for 56 runs.

ST. BARTHOLOMEW'S HOSPITAL *v.* HONOR OAK.

Played at Honor Oak on June 22nd. This game ended in a draw in favour of our opponents. At one time it looked as if we were going to dismiss our opponents for a comparatively small score, as 6 wickets went down for only 100 runs. A fine partnership then took place, and Honor Oak finally declared at 202 for 7 wickets.

The Hospital started badly, and lost 2 wickets for 7 runs, but A. R. Boney made a very good 50, and C. L. Hay-Shunker had made 40 not out when the game was left drawn with the score at 149 for 8 wickets.

A. R. B.

ST. BARTHOLOMEW'S HOSPITAL *v.* STREATHAM.

Played at Winchmore Hill on June 29th. This game resulted in a fairly easy victory for Streatham. The Hospital started well and scored 67 before the first wicket fell; after this a collapse set in, and the side were all out for 135. W. M. Capper played a very good innings of 61. Our opponents obtained the runs for the loss of only 4 wickets.

ST. BARTHOLOMEW'S HOSPITAL *v.* CHORLEY WOOD.

Played at Chorley on July 6th. This game ended in a tame draw. Chorley Wood batted first, and between stoppages for rain scored 195 for 7 before declaring, leaving the Hospital only one and a half hours to get the runs. This was well-nigh impossible, and the final score was 98 for 4 wickets. W. M. Capper again did well in scoring 49.

ST. BARTHOLOMEW'S HOSPITAL *v.* ST. ANN'S.

Played at Virginia Water on July 10th. A very close game ended in a victory for the Hospital, who batted first and scored 208; nearly everyone made runs, the top scorers being C. L. Hay-Shunker 43 and G. E. Loden 40. Our opponents did not quite succeed in getting the runs, and were all out for 194. C. L. Hay-Shunker took 7 wickets for 83.

ST. BARTHOLOMEW'S HOSPITAL *v.* R.A.F., HALTON.

The last match, July 20th, ended in an easy victory for the Hospital, who scored 251, and dismissed their opponents for 137. A. R. Boney and F. E. Wheeler batted very well and put on nearly 100 runs for the second wicket. H. L. Hodgkinson took 6 wickets for 58.

SUMMARY.

The results for the season 1929 were as follows: Matches won, 7; lost, 9; drawn, 3.

Under the inspiring leadership of H. L. Hodgkinson the team always seemed as if they might have done even better than they did. The chief weakness lay in the batting, which was liable to sudden and inexplicable collapses. A. R. Boney, W. M. Capper, G. E. Soden and C. L. Hay-Shunker made quite a number of runs, and F. E. Wheeler played two very good innings, but runs on several occasions were not forthcoming when they were most needed. K. W. Mackie, when he was able to turn out, greatly strengthened the batting, and made a good many runs, and it is a great loss to the Club that he will be unable to help us any more. H. L. Hodgkinson and C. L. Hay-Shunker bore the brunt of the bowling, and on occasions bowled extraordinarily well; our change bowlers unfortunately were rather weak.

On the whole we may look on 1929 as quite a satisfactory season, and have every reason to expect even better results in 1930.

HOCKEY CLUB.

ANNUAL GENERAL MEETING.

The Annual General Meeting of the Hockey Club was held on July 9th, 1929, with Dr. Morley Fletcher in the chair.

Dr. Morley Fletcher declined re-election as President on account of his retirement from the active staff.

Dr. Gow was elected President, MR. JUST and Dr. GEOFFREY EVANS Vice-Presidents.

Captain, 1st XI: P. M. WRIGHT.
Hon. Sec., 1st XI: H. L. HODGKINSON.
Captain, 2nd XI: A. D. ILIFF.
Hon. Sec., 2nd XI: H. D. GALE.
Captain, 3rd XI: T. O. MASON.
Hon. Sec., 3rd XI: R. F. CLARKE.
Committee: W. F. CHURCH and R. S. FORDHAM.
Match Secretary: P. M. WRIGHT.

A vote of thanks was proposed to Dr. Morley Fletcher for the keen interest he has shown in the activities of the Club during his long term of office.

The following were awarded Hockey Honours for the season 1928–29: W. F. Church, K. W. D. Hartley, M. S. Fordham, F. C. H. White, A. G. Williams, R. H. Francis, E. J. Neill, J. W. C. Symonds, F. H. McCay, P. M. Wright, H. L. Hodgkinson.

H. L. H.

CORRESPONDENCE.

To the Editor, 'St. Bartholomew's Hospital Journal.'

DEAR SIR,—I have just read "Medical Notes on Influenza" by Sir Thomas Horder, in your May number.

It is clear and instructive, but when he comes to treatment I cannot agree with him that drugs are to be cut out altogether. We have had a good deal of experience here with that malady, both epidemic and sporadic; eventually I arrived at a combination of aspirin and phenalgin, and when pain and restlessness are present a small quantity of heroin is added. On my suggestion Oppenheimer made up bi-palatinoids containing aspirin and phenalgin aa gr. iiss, heroin gr. $\frac{1}{24}$. Made up in that way the combination does not deteriorate.

In the great majority of cases two palatinoids every 4 hours will beat an attack of 'flu in 24 hours. It sets up violent perspiration. The sooner the treatment is started the better. It is also an excellent remedy for acute attacks of gout.

You need not necessarily publish these remarks, but give the treatment a trial.

Possibly you might like to know how to beat measles in 2 days; if so let me know. I spent a fortnight in bed at Bart.'s in 1883, and had cough and disability for two weeks longer—now I think nothing of it.

Yours sincerely,

Johannesburg; *June*, 1929. G. E. MURRAY.

ACKNOWLEDGMENTS.

British Journal of Nursing—British Journal of Venereal Diseases—L'Echo Médicale du Nord—Giornale della Reale Società Italiana d'Igiene—Guy's Hospital Gazette—The Hospital Gazette—The Kenya and East Africa Medical Journal—King's College Hospital Gazette—Leprosy Notes—Long Island Medical Journal—The Magazine of the London Royal Free Hospital School of Medicine for Women—The Medical Review—The Nursing Times—Post-Graduate Medical Journal—Revue de Médecine—St. Mary's Hospital Gazette—St. Thomas's Hospital Gazette—The Speculum.

REVIEWS.

ON NEPHRITIS. By A. CECIL ALPORT, M.D. With an Introduction by Prof. LANGMEAD. (London: William Heinemann, Ltd., 1929.) Pp. xiii + 175. Price 7*s.* 6*d.*

The author of this book is to be congratulated on having compressed a very considerable amount of information into a small space, and on having produced a readable survey of a difficult subject. We are glad to see that he takes his stand against the too frequent tendency of the clinician to desert the bedside for the laboratory—a tendency which is liable to produce a poor clinician and a still worse laboratory worker.

Such books must, of necessity, include a statement of the views, on numerous matters, of those who have laboured in obscure corners of the field. For the protection of those of us who dwell in the half-lights of knowledge it is of great value to have the considered opinion on these views of such a "general specialist on the subject"—to apply a term recently used in our hearing by a layman—as the author of this book would, we imagine, not be averse to being considered. He has given his opinions, but we suggest that in the next edition he should give more—particularly in regard to his experience with the various chemical methods mentioned. Meanwhile we are grateful for his warning that although the treatment of acute nephritis with large doses of alkalis may give scope for a display of vicarious heroism by the expert, who must battle on, undaunted by the menace of tetany, œdema and death, it is not to be recommended for general practice.

The book is concluded by a selection of useful prescriptions, charts of the salt concentration test, and an extensive list of references. In this list we notice one publication which is, apparently, in the Magyar tongue. Although the inclusion of such an item speaks highly of Dr. Alport's linguistic attainments, it seems unlikely that the work in question will receive that universal attention to which, on its merits, it is doubtless entitled.

HEART DISEASE IN CHILDHOOD. By H. B. RUSSELL, M.D., M.R.C.P. and C. K. J. HAMILTON, B.M., M.R.C.P. (London: Constable & Co., 1929.) Pp. 104. Price 7*s.* 6*d.*

This book is a useful and worthy addition to the series of Modern Medical Monographs, which is edited by Dr. Hugh MacLean.

During the last few years a great deal of attention has been paid to the crippling effects of rheumatic heart disease in children. In order that disablement may be reduced as far as our present knowledge will permit, it is essential that medical men, and general practitioners in particular, should have a clear conception of the matter. The authors of this small volume have condensed the modern teaching on the subject and present it in a short, concise, yet thoroughly interesting and readable manner. The section dealing with the development of mitral stenosis and the chapter on the treatment of the rheumatic child are particularly clear and helpful.

While the major portion of this book naturally deals with rheumatism and its effect on the heart, it also contains good chapters on cardiac irregularities, congenital heart disease, and the electrocardiograph.

SOME PRINCIPLES OF MINOR SURGERY. By ZACHARY COPE, M.S., M.D., F.R.C.S. (Humphrey Milford, Oxford University Press, 1929.) Pp. 159. Price 10*s.* 6*d.*

Under this modest title the author has collected eight thoughtful and thought-provoking studies in minor surgery. Infections of the hand, common sprains, ambulatory fractures, acute retention of urine—such diverse subjects come under review. Yet through the woven pattern of the book there runs a common thread: think, be precise in observation, be reasonable in treatment. The lesson of such principles can never be learned too well; their application requires emphasis not so much in major surgery where the surgeon is called upon to grapple with a worthy problem, as in those minor ailments, which arouse little sympathy and less interest. "Small showers last long, but sudden storms are short": a patient may lose more time and be more incommoded with a "septic hand" than with an acute appendix.

The first essay, on the use and abuse of antiseptics, puts in a few clear sentences illustrated by some quotations from Lister the present position between aseptic and antiseptic surgery. It can be particularly recommended to those whose critical faculties emerge slightly dazed from the routine of a first six months of surgery, and for whom what is important has become confounded with much that is not.

Mr. Cope is already a medical best-seller. This is another of his books for which it is safe to prophesy a wide public.

HANDBOOK OF ANÆSTHETICS. By J. STUART ROSS, M.B., F.R.C.S., and H. P. FAIRLIE, M.D. Third edition. (Edinburgh: E. & S. Livingstone, 1929.) Price 8*s.* 6*d.*

In the latest edition the authors continue their original plan of dealing chiefly with the practical side of the subject. The theoretical side is not neglected, but stated in a readable and interesting manner.

The chapters on the "Causes and Treatment of Asphyxia" and "Accidents and Sequelæ" are both practical and good, whilst that on the "Choice of Anæsthetic" is most useful, dealing, as it does, with the subject from the point of view of the patient's condition and the requirements of the surgeon.

Nitrous oxide and oxygen anæsthesia is dealt with in detail, but only two standard machines are described—Boyle's and McKesson's—in place of the many types in the last edition.

The chapter on the use of ether includes a clear and concise description of a kind of induction by the open method which should be a boon to all those starting to give anæsthetics in general practice with the proverbial two bottles and a mask.

The advantages and disadvantages of chloroform are stated clearly, and include a few words of warning from Prof. Leonard Hill to would-be users of this drug.

A brief chapter on endotracheal anæsthesia together with chapters on ethylene, spinal and local anæsthesia bring the work up to date.

A practical book on an essentially practical subject.

CATALOGUE OF LEWIS'S MEDICAL AND SCIENTIFIC CIRCULATING LIBRARY. Part I: Authors and Titles. Part II: Classified Index of subjects, with Names of Authors who have written upon them. Revised to the end of 1927. (H. K. Lewis & Co., Ltd., 1928.) Pp. 576. Price 15*s.* net. To subscribers, 7*s.* 6*d.* net.

"I do not know any reading more easy, more fascinating, more delightful than that of a catalogue," said the immortal bibliophile Sylvestre Bonnard. Though not a catalogue of rare manuscripts, but a simple list of medical and scientific works, the daily bread of professional learning, this book has its fascination and, what will be more fully appreciated, its practical value. Is there anything you want to know? Here are all authors, from Aaron (C. D.) to Zumbusch (L. v.), and all subjects from Abattoir to Zoology (Marine).

Everyone knows Lewis's, and nearly everyone belongs. The student, young in years and by nature impecunious, may find there the books from which to sip the divine nectar of learning, and for a sum paltry in comparison with the benefits he gains. The busy practitioner, anxious to profit by the latest doctrine, may send hurriedly for the Library's aid. This catalogue will be of great use to subscribers. Its preparation must have meant much labour, and is a further proof of that desire to be helpful which has characterized Lewis's eighty years of service to the medical profession.

RECENT BOOKS AND PAPERS BY ST. BARTHOLOMEW'S MEN.

BARRIS, J. D., M.B., F.R.C.S. "Induction of Labour for Disproportion." *Journal Obstetrics and Gynæcology British Empire*, Summer No., 1929.

BERTWISTLE, A. P., M.B., Ch.B., F.R.C.S.(Edin.). "Fracture of the Patella." *Lancet*, June 20th, 1929.

CHESTER-WILLIAMS, F. E., M.R.C.S. "New Inventions: Radium Forceps." *Lancet*, June 29th, 1929.

DAVIES, IVOR J., M.D., F.R.C.P. "Brucella Abortus Infection in Man." *British Medical Journal*, July 6th, 1929.

DUNDAS-GRANT, Sir JAMES, K.B.E., M.D., "The Nasal Factor in the Treatment of Asthma." *Practitioner*, July, 1929.

FLETCHER, Sir WALTER, K.B.E., F.R.S., M.D., F.R.C.P. "Thoughts on University College." An Address delivered to the Assembly of Faculties of the College on July 4th. *Lancet*, July 13th, 1929.

MORLOCK, H. V., M.C., M.D., M.R.C.P. "Development of Pulmonary Tuberculosis." *Lancet*, July 13th, 1929.

PARAMORE, R. H., M.D., F.R.C.S. "Eclampsia and its Renal Lesion." *Journal Obstetrics and Gynæcology British Empire*, Summer No., 1929.

PATERSON, HERBERT J., C.B.E., M.Ch., M.D., F.R.C.S. *Indigestion: Its Differential Diagnosis and Treatment.* London: H. K. Lewis & Co., 1929.

PICTON, LIONEL JAS., O.B.E., M.B., B.Ch. "On the Origins and Treatment of Dyspepsia." *British Medical Journal*, June 29th, 1929.

ROLLESTON, Sir HUMPHRY, Bart., G.C.V.O., K.C.B., M.D., D.C.L., Hon. D.Sc.(Oxon.), LL.D., F.R.C.P. "Medical Clubs and Societies." MacAlister Lecture. *British Medical Journal*, June 29th, 1929.

"Introduction to Special Asthma Number." *Practitioner*, July, 1929.

SHARP, B. BUCKLEY, M.D., B.S., M.R.C.P. (D. NABARRO, M.D., F.R.C.P. and B.B.S.). "Vulvo-Vaginitis." Garrod, Batten, Thursfield and Paterson's *Diseases of Children*, 2nd edit., 1929.

SPARKS, J. V., D.M.R.E., M.R.C.S., "The Difficulties of Comparative Radiography of the Chest." *British Journal of Radiology*, July, 1929.

WEBER, F. PARKES, M.D., F.R.C.P. "Symphysis of the Spleen with the Liver: Spontaneous Rupture of the Right Ventricle and Syphilitic Aortitis." *British Medical Journal*, July 6th, 1929.

EXAMINATIONS, ETC.

University of Cambridge.

First Examination for Medical and Surgical Degrees, Easter Term, 1929.

Part I. Chemistry.—Chopra, I. C., Green, W. O., Jeremy, W. H. R.

Part II. Mechanics.—Brennan, E. B., Chopra, I. C., Evans, J., Gibson, R. G., Green, W. O., Hutt, C. W., Knight, W. C.

Part III. Physics.—Chopra, I. C., Hepworth, A. J., Hunt, R. S., Jeremy, W. H. R., Warren, W.

Part IV. Elementary Biology.—Chopra, I. C., Green. W. O., Jeremy, W. H. R., Warren, W.

Second Examination for Medical and Surgical Degrees, Easter Term, 1929.

Part II. Human Anatomy and Physiology.—Fulton, I. N., Jones, J. D. M., Lown, J. F., Powell, J. D., Scott, J. L. S., Summerhill, J. H. E., Wenger, R. A. L.

Third Examination for Medical and Surgical Degrees, Easter Term, 1929.

Part I. Surgery, Midwifery and Gynæcology.—Bradshaw, G. H., Hutchinson, H. P., MacVicker, G. C. C., Sugden, E. C., Winterton, W. R.

Part II. Principles and Practice of Physic, Pathology and Pharmacology.—McCay, F. H., Oakley, W. G., Varley, J. F., Wood, F. W. J.

CHANGES OF ADDRESS.

ACRES, G. C. JOHNSTON, Leasholme, Waldegrave Road, Twickenham.

BELLERBY, O. H., Queen Charlotte's Maternity Hospital, 3, Cosway Street, W. 1.

CLARK, FRANCIS, "Rylstone," Hunton Bridge, King's Langley, Herts.

EVANS, E. S., 8, Havelock Road, Southampton.

HISCOCKS, H. F., 18, Royal Terrace, Southend on Sea, Essex. (Tel. Southend-on-Sea 2014.)

NOBLE, J. A., Peter's Point, 34, Charminster Avenue, Bournemouth.

ROXBURGH, G. P., 57, Marine Avenue, Hove, Sussex.

APPOINTMENTS.

GILDING, H. P., B.M.(Oxon.), appointed Lecturer and Demonstrator of Physiology at University College, W.C. 1.

ROBERTS, J. F. H., M.B., B.S.(Lond.), F.R.C.S., appointed Consulting Surgeon to the Sanatoria of the Metropolitan Asylums Board.

BIRTHS.

BROCKMAN.—On July 15th, 1929, at 24, Kenwood Park Road, Sheffield, to Estelle, wife of R. St. Leger Brockman, F.R.C.S.—a daughter.

CROSS.—On June 30th, 1929, at Villa Alberte, Roquebrune, Cap Martin, to Joy (*née* Kennerley-Rumford), wife of Major C. H. Cross—a son.

DOYLE.—On June 6th, 1929, at The Square, Fakenham, Norfolk, to Gladys Theodora, wife of Dr. J. L. Cyril Doyle—a daughter.

FRANKLIN.—On July 15th, 1929, at 25, Banbury Road, Oxford, to Ethel, wife of Dr. K. J. Franklin—a daughter (Elizabeth Angela).

GRIFFITH.—On July 4th, 1929, at Roydon, Torquay, to Harold Kinder and Helena Griffith—a son.

KITCAT.—On July 16th, 1929, to Mary (*née* Sellors), wife of Dr. C. de Winton Kitcat, St. Leonards-on-Sea—a son.

RICHARDSON.—On July 15th, 1929, at 45, Morrab Road, Penzance, to Marjorie (*née* Pettit), wife of G. B. Richardson, F.R.C.S.—a daughter.

THOMSON.—On June 28th, 1929, at Lavington, Barnet, Herts, to Doris, wife of Dr. N. Gray Thomson—the gift of a daughter.

MARRIAGES.

BRADLEY—THOMPSON.—On July 16th, 1929, at St. Germain's Church, Edgbaston, Edwin John Bradley, M.C., M.D.(Camb.), F.R.C.S.(Ed.), son of Mr. and Mrs. Edwin Bradley, of Dover, to Norah Dorothy, daughter of the late Mr. H. H. Thompson and Mrs. Thompson, of Edgbaston.

CORFE—MUNNS.—On July 6th, 1929, at All Saints' Church, Kingston-on-Thames, Frederick Robert, eldest son of Mr. and Mrs. A. Frederick Corfe, of "Wayside," Maidstone, Kent, to Dorothy Isabel, only daughter of Mr. and Mrs. H. R. Munns, "The Pantiles," Uxbridge Road, Kingston-on-Thames.

GONIN—LAW.—On July 12th, 1929, at St. Columba's (Church of Scotland), by the Rev. Archibald Fleming, D.D., assisted by the Rev. Henry Atkinson, Mervyn Willett, only son of Mr. and Mrs. Willett Gonin, of Haywards Heath, to Ohna Marguerite, only daughter of Mr. and Mrs. David Law, of 16, North Hill, Highgate, N.

GOW—RANNIE.—On July 1st, 1929, at the Church of St. Bartholomew the Great, by Prebendary W. Budgen (uncle of the bridegroom), assisted by Canon E. S. Savage, Alexander Edward Gow to Aileen Gordon Rannie.

WOOD—WETENHALL.—On July 13th, 1929, at All Saints' Church, West Dulwich, by the Rev. G. S. Day, M.A., assisted by the Rev. A. Gordon Ward, M.A., Ronald Walter, only son of Walter J. Wood and the late Mrs. Wood, of Wembley Park, to Alice Joyce, younger daughter of Mrs. Wetenhall and the late J. H. Wetenhall, of 3, Alleyn Park, Dulwich.

DEATHS.

KEITH.—On June 8th, 1929, at Rockford, Illinois, Darwin Mills Keith, M.R.C.S., L.R.C.P., aged 62.

MOXHAM.—On June 27th, 1929, at Aldborough, Marcus Camplin Moxham, M.R.C.S., L.R.C.P., L.S.A.

PARKER.—On July 15th, 1929, at Thames View Cottage, Flackwell Heath, Bucks, George Dines Parker, M.R.C.S., L.R.C.P., M.B. (Lond.), aged 64.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, *St. Bartholomew's Hospital, E.C. 1.*

The Annual Subscription to the Journal is 7s. 6d., including postage. Subscriptions should be sent to the MANAGER, Mr. G. J. WILLANS, M.B.E., B.A., *at the Hospital.*

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St. Bartholomew's Hospital Journal.

"Æquam memento rebus in arduis
Servare mentem."
—*Horace*, Book II, Ode iii.

VOL. XXXVI.—No. 12.] SEPTEMBER 1ST, 1929. PRICE NINEPENCE.

CALENDAR.

Tues., Sept. 3.—Dr. Langdon Brown and Mr. Harold Wilson on duty.
Fri., ,, 6.—Prof. Fraser and Prof. Gask on duty.
Tues., ,, 10.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Fri., ,, 13.—Sir Percival Hartley and Mr. L. B. Rawling on duty.
Tues., ,, 17.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Thurs., ,, 19.—**Last day for receiving matter for the October issue of the Journal.**
Fri., ,, 20.—Dr. Langdon Brown and Mr. Harold Wilson on duty.
Tues., ,, 24. Prof. Fraser and Prof. Gask on duty.
Fri., ,, 27.—Dr. Morley Fletcher and Sir Holburt Waring on duty.
Sat., ,, 28.—Rugby Match *v.* Old Paulines. Home.
Hockey Match *v.* Guy's. Away.
Tues., Oct. 1.—**Old Students' Dinner, 7.30 p.m.**

EDITORIAL.

THE post-graduate course on radium treatment and technique, which has been arranged by the Medical College, begins on Monday, September 30th. That the class filled so quickly that many applicants had to be refused is not surprising. Students in the last few years have been able to follow the quiet but certain extension of radium therapy, and the recent increase in public interest finds them with more or less knowledge on the subject. The great majority know the work only by articles and books, in which the author's bias is always, with reason or without, suspected. They have had little chance to form their own opinions at first hand of its value and, what is no less important, of its limitations. That the course comes at a time when the use of radium promises to be less scientifically discriminating, and when expert knowledge is all the more necessary, adds further credit to the Hospital, which can be justly proud of its part in the forging of this new weapon.

* * *

The proposal that a change of cover and of format might be desirable for the JOURNAL has met with little encouragement. One lone and melancholy voice has been raised in its favour; for the rest the letters which we publish elsewhere reflect what seems to be the general verdict. The incident has revealed the reassuring fact that our appearance, far from pleasing only on sufferance, is actually popular.

The matter ought not, we feel, to close, until it has had time to reach the abomasum. For the serious work of chewing the cud of reflection upon it has scarcely yet begun. In any case since this issue closes a volume, nothing can reasonably be done until October, 1930. During the year, until that date, we shall hold the matter open to debate and ourselves open to suggestions.

* * *

Our congratulations to Dr. Geoffrey Evans, who has been appointed a Physician with charge of Out-Patients, and to Dr. R. Hilton, who has been elected to succeed him as Assistant Director of the Medical Professorial Unit.

* * *

We announce with regret that ill-health has brought about the retirement from the Surgery of William Tutton, who has served the Hospital for thirty eight years.

* * *

The St. Bartholomew's Old Students' Dinner will be held in the Great Hall at 7.30 p.m. on Tuesday, October 1st. Sir Frederick Andrewes will take the Chair. The

price of the dinner is 26*s.* inclusive of wine, and payable at the dinner only.—C. GORDON-WATSON, R. M. VICK, *Hon. Secretaries.*

* * *

The formation of a "St. Bartholomew's Hospital Sailing Club" is a sign of the growing interest taken by medical students in the art and craft of sailing. What special privileges will be granted to its members beyond those already conferred by the parent United Hospitals' Club we are not in a position to say; a glimpse at the list of officers suggests that any lack in this direction will be speedily remedied. We wish the club a long and successful life.

* * *

The Warden requests us to state that the closing date for applications for House Appointments in November is 12 noon, Saturday, September 14, 1929.

PULMONARY TUBERCULOSIS AND DIABETES MELLITUS.

INCIDENCE.

PULMONARY tuberculosis is a not uncommon complication of the more severe forms of diabetes mellitus. The proportions given by various authors of its incidence vary within fairly wide limits. The following figures are quoted by Dorendorf (1928, p. 485): Griesinger—of 250 diabetics 42% had pulmonary tuberculosis and the mortality was 39%; Frerichs gives 50%, and Williamson 50% with deaths from phthisis in 15%; Magnus-Lewy found pulmonary tuberculosis in 29%; Naunyns records 25 (= 17%) with phthisis, and called attention to the difference in numbers in hospital as compared with private practice. Dorendorf, in confirming this, says, "Tuberculosis will have a heavier incidence among the lower classes with generally unpropitious modes of existence. . . . Von Noorden found (1917) 5·5% in private practice and 15·11% at his clinic."

CLINICAL INTER-RELATION.

The two diseases are obviously well designed to combine in the speedy destruction of the affected individual. The necessary inability of the diabetic to digest intaken fats and to utilize his stored fat deprives the tuberculous of the one essential of his diet, and in the old days, as Dorendorf picturesquely puts it, "Dazu kam in den Vor-Insulin-zeit die Ernährungschurigkeit." Active phthisis in a diabetic whose metabolism cannot be put right through diet urgently demands copious insulin treatment. No ill-effects from the exhibition of insulin in phthisis have ever been recorded.

There is, in addition, a peculiar fact which further complicates the matter. In Dorendorf's sense, "the frequently long latent period, the long time without or with very insignificant symptoms of tubercle in the diabetic is very striking and has been much stressed." In consequence "the doctor is often called in on account of the cause of the infection leading to a diminished tolerance of the patient, and not on account of symptoms pointing to a pulmonary tuberculous process"—a much observed fact which, indeed, is the *raison d'être* of this note.

The explanation he gives is that pulmonary tuberculosis in diabetes often appears as a *Frühinfiltrat* in the Simon-Redeker sense (Redeker, 1924, 1925), and since this type of onset of phthisis has recently come into considerable prominence both on the continent (Lydtin, 1926, p. 273; Braeuning, 1928, p. 1; Kayer-Petersen, 1919, p. 1261; Rist and Amenille, 1922, p. 14, and others) and in England (Landreth and Morlock, 1928, p. 101; Morlock, 1929), a short account of its main peculiarities in this connection may be apposite. This form of infiltration in the early stages gives either no indication at all or only very slight indications of local trouble; since whether it invades the infra-clavicular region, the middle zone or the base of the lung, it lies at first always in the central part of the lung surrounded by healthy lung-tissue. For this reason auscultation and percussion, even of the most scrupulous character, must be liable to error and to false interpretation, and hence radiography first and foremost establishes the nature of the condition by very characteristic changes.

The characters of the Frühinfiltrat of Redeker have lately been fully discussed with an account of 9 cases by Morlock (1929, p. 60), who calls attention to its definite pathological entity and to the acuteness of its onset in patients of strikingly good condition (these cases thus differing from those with acute broncho-pneumonic phthisis of text-book fame). In all his cases, however, there were physical signs in the infra-clavicular region or in the axilla; and it is my opinion that if carefully looked for, some alteration in air-entry or expiration or some difference in percussion-note may be found in all cases at no very advanced stage. It is noteworthy that *râles*, representing, as Wingfield points out, an attempt at repair, are often conspicuously absent; hence the frequent mistakes made in diagnosis. Morbid anatomists have long maintained that the incidence of phthisis in diabetes is not on the apex but on some other part of the lung.

There is, however, another side to the question. In some cases there is perhaps a latent focus, which lies dormant for a long time; in severe diabetes the nutritional disturbance leads to a marked elimination of resistance to infection; hence the frequent incidence of

tuberculous re-infection, whether shown internally or externally, and with it of a rapid, more unfavourable course. Caseation and softening favour such a rapid progress the more severe the nutritional disturbance is. Provided the metabolic trouble is counteracted through insulin, so the pulmonary process does not spread, but becomes resolved or healed with fibrosis. Dorendorf takes care to mention the fact that in milder diabetes not infrequently old fibrotic processes are found, and lesions of advanced phthisis are seen to arise under observation, the preliminary infections having been of a high grade and yet having been controlled for years; and he quotes Lubarsch as supporting strongly the contention that tuberculous lesions in the lungs not infrequently are latent and non-progressive in mild diabetes. Max Rosenberg's case (1925), illustrates this point, for his patient was a woman, æt. 55, who had the classical diabetes with boils and pruritus vulvæ for twenty years, yet on admission at the end of that time showed a recent "broncho-pneumonic exudation" secondary to a chronic fibro-caseous lesion of the upper half of the left lung. Finally the great excess of tuberculous lesions found in sections of lung taken from diabetics over the death incidence of diabetics from phthisis points to the fact that pulmonary tuberculosis in diabetes does not always run a rapid course. In accordance with Fishberg's broad summary given to the Section of Tuberculosis at the recent Annual Meeting of the B.M.A. at Manchester (Fishberg, 1929), it would appear that with diabetes as without it, apical tubercle may get well with little or no treatment and the sub-apical types invariably require to be strenuously taken in hand. Energetic measures to help interrupt the vicious circle are, therefore, well worth while in diabetes.

Most authors appear to agree that there is a high proportion of cases with T.B. + sputum among diabetics with phthisis. Further, the rarity of pleurisy and (by Durendorf) the rarity of hæmoptysis has been cited. In all of the six diabetics with phthisis that I have personally observed there was no difficulty in obtaining a positive sputum, none of them had hæmoptysis at any time, and only one of Dorendorf's and one of Taub's (1927) had this symptom, so that the remarkable account given by Geer (1922) is worth quoting. His patient had such severe recurrent hæmoptysis that a left-sided artificial pneumothorax had to be induced as an emergency, the hæmoptysis subsiding after the third refill. Strangely enough the symptoms of diabetes (thirst, glycosuria and a smell of acetone in the breath) did not appear until five months after the onset of the pulmonary tuberculosis—a unique sequence of events in the literature: "Refills were discontinued six months later and his lung re-expanded with no re-appearance of symptoms until four months after, when he suddenly began to have copious hæmorrhage. Although the lung had come out to the chest-wall it was possible to introduce 1300 c.c. of air, which stopped the bleeding promptly. He has pursued an uneventful course since." This account, which forms an interesting illustration (by contrast) of the rapid advance in thoroughness of treatment during the last few years, is marred chiefly by an absence of reference to blood-sugar examinations, which would have established the diagnosis and have given a direct control of the results of treatment.

In sum, the diagnosis of pulmonary tuberculosis in diabetes depends less than ordinarily upon the symptomatology, far more so upon sputum examination (which should be the routine in anyone with lowered sugar tolerance in whom sputum is obtainable; and as in all early phthisis the diagnosis can only be clinched by X-rays.

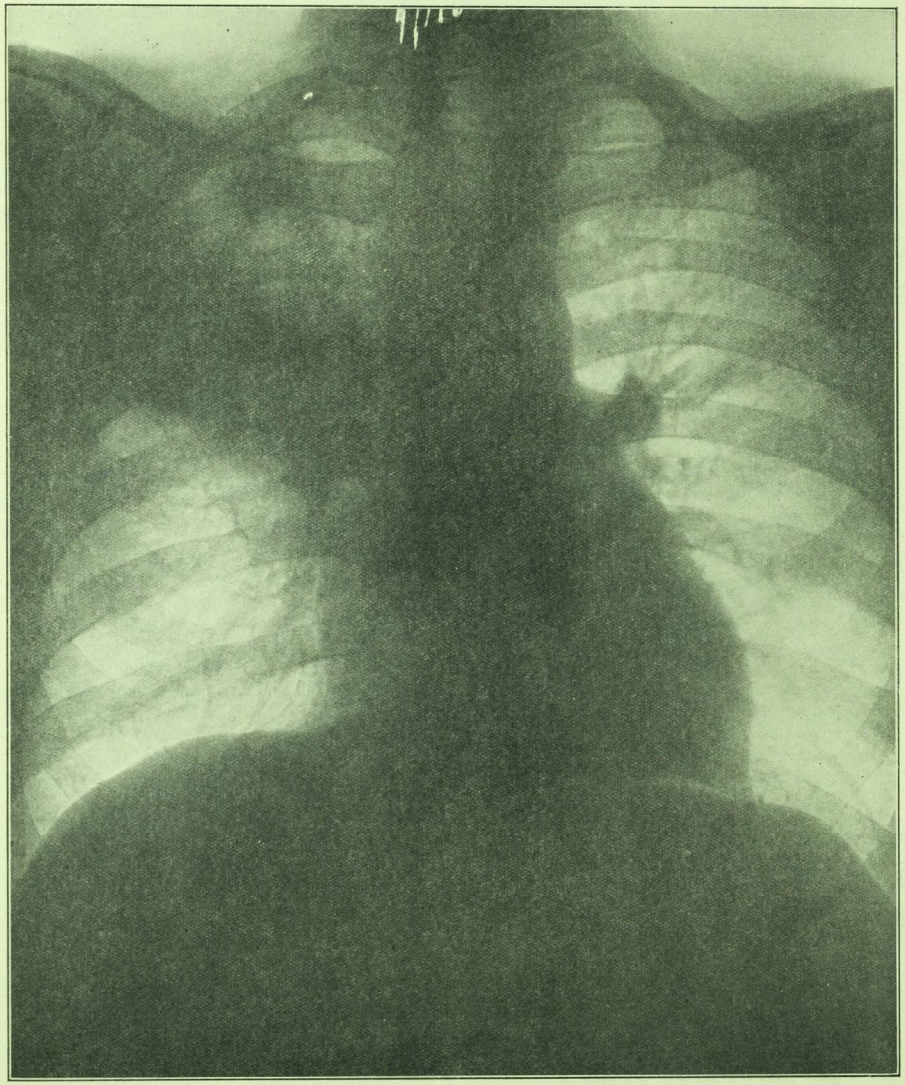
A CASE IN POINT.

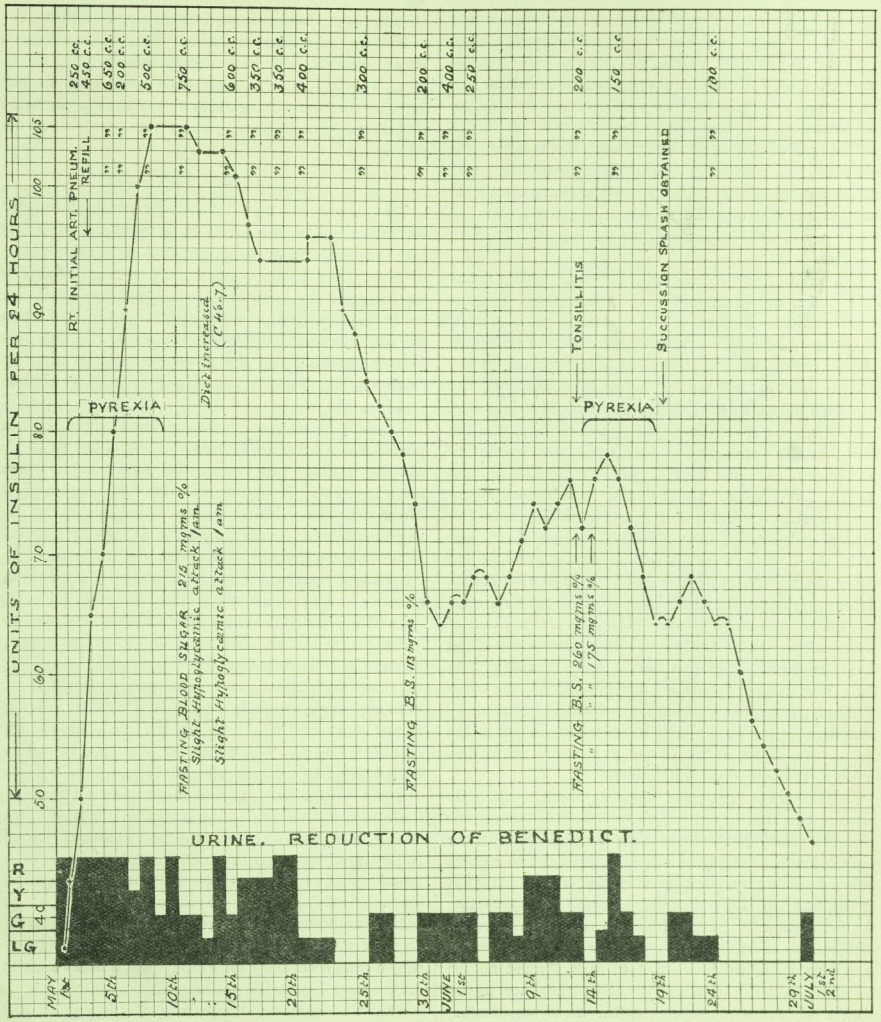
The following case is chosen from among several as illustrating some of the theory above discussed, and also because the patient was intelligent enough to discuss his symptoms logically and carry out much to his own treatment.

An R.A.F. officer, æt. 30, began, in 1926, to suffer from thirst and polyuria. His father and sister being diabetic he knew the symptoms, found a large amount of sugar in his urine, and was invalided out of the Air Force for his pains. He was gradually stabilized on diets at various hospitals until in April, 1927, he underwent an emergency operation for volvulus (apparently caused by an enlarged lymphatic gland), together with appendicectomy and a post-operative broncho-pneumonia. On recovery he was started on insulin by a specialist and did well with 8 units twice a day.

During October, 1927, he appeared very thin and had several attacks of diarrhœa, after one of which his blood-sugar (taken at night) was 310 mgrm. per 100 c.c. He had not for some time been taking insulin and was usually glycosuric. On 12 units *b.d.* and 45 grm. of carbohydrate he gained 17 lb. in five months and was able to run a business of his own.

About March, 1928, he began to feel languid and run-down—"as if I were passing sugar," as he expressed it. The insulin had to be increased. He found his temperature raised at night to 99°–101° and reduced to subnormal in the morning. Night-sweats were troublesome, and about this time there started a dry cough and pain in the right chest. The sputum was never more than a table-spoonful a day and was muco-purulent in character. A fortnight later he saw a chest specialist, who found tubercle bacilli in the sputum and had an X-ray of his




UNITS OF INSULIN PER 24 HOURS
250 c.c.
430 c.c.
650 c.c.
200 c.c.
500 c.c.
750 c.c.
600 c.c.
350 c.c.
350 c.c.
400 c.c.
300 c.c.
200 c.c.
400 c.c.
250 c.c.
200 c.c.
150 c.c.
100 c.c.
RT. INITIAL ART. PNEUM.
REFILL
PYREXIA
Diet increased (1st 46.7)
FASTING BLOOD SUGAR 215 mgms %
Slight Hyperglycæmic attack 1am.
Slight Hyperglycæmic attack 1am.
FASTING B.S. 113 mgms %
TONSILLITIS
PYREXIA
SUCCUSSION SPLASH OBTAINED
FASTING B.S. 260 mgms %
" " 175 mgms %
URINE. REDUCTION OF BENEDICT.
R
Y
G
LG
MAY 1st
5th
10th
15th
20th
25th
30th
JUNE 1st
9th
14th
19th
24th
29th
JULY 1st 2nd

chest (p. 188). This showed on the right side extensive infiltration of the type I have discussed, that is, probably akin to Redeker's "Fruhinfiltrat," and certainly belonging to the severe subclavicular group of Fishberg. Since the left side was clear, he was admitted to this Hospital on April 30th, 1928, for an artificial pneumothorax.

Case note.—A past history of dysentery in Mesopotamia and of a right-sided pneumonia as a child, but nothing pointing to previous tuberculous trouble, was elicited. His mother had phthisis in 1910, was cured and is now alive and well. No other contact tubercle has been reported. The father and sister mentioned above were the only members of the family with diabetes.

Examination showed a rather thin man with a malar flush and a dry skin, and a frequent cough without expectoration. There was no cyanosis, dyspnœa or clubbing. The trachea was slightly drawn to the right. The heart was enlarged to the left (apex beat 4 in. from mid-line, just outside nipple line in fifth space), and the aortic sounds were distinctly louder than the pulmonary, indicating some retraction of the upper middle part of the right lung. The pulse was rather rapid (100), regular, of low tension and fair volume, the blood-pressure being 100/70. In addition to flattening, diminished movement, increased vocal fremitus and impaired percussion note over the right infra-clavicular region, front and back, there were increased audibility and prolongation of the expiratory sound, and regularly obtained showers of coarse crepitations at the height of inspiration, after cough over the same area. There was also a patch of bronchial breathing and whispered pectoriloquy about the third right costal cartilage. It is interesting that there was neither narrowing nor blurring of the edges of Kronig's isthmus—a finding which is stressed by Wingfield (1929, p. 109) and others as important in the apical type of lesion, and which is probably of far less value in the sub-clavicular variety.

I stress these particular physical findings, not only because they are in agreement with recent descriptions of such cases, but also because they show that the process had probably been active for at least two months before discovery, and because they indicate some attempt at healing in this diabetic patient, so supporting the contention of Lubarsch above set forth. For, in addition to the flattening, "râles over an infiltrated area," as Wingfield (*ibid.*, p. 110) says, "must not be taken as evidence of active disease; they are nearly always due to simple catarrh in the areas surrounding the lesion, and this catarrh is just as likely, and the râles just as persistent, around a healed fibrous or calcified nodule as around an active granuloma. In fact the appearance of the post-tussic showers mentioned above may be welcomed as evidence of healing and non-activity." This last sentence contains an observation too often forgotten in clinical demonstrations.

Nothing else was noted on physical examination except that the urine had a specific gravity of 1032, was clear, very pale and strongly acid; reduced Benedict's solution to a deep orange colour, and showed an immediately positive Rothera. There was no albumen and no deposit.

Progress and Treatment.

The patient was kept flat in bed on "absolute rest," and given a diet containing 40 grm. carbohydrate, 96 grm. protein, and 211 grm. fat, making a calorie value of 2448. The insulin, started at 43 units a day, had to be increased to 102 units before his glycosuria was controlled (see chart). It was given at 9 a.m. and 6 p.m. the respective doses being determined by the degree of Benedict reduction in the specimens 6 hours after the corresponding doses, on the plan introduced by Graham (1926, p. 164).

On the day after admission an initial right artificial pneumothorax was performed without difficulty in the anterior axillary line, where the percussion note was most resonant. The pressures were: −6–2, 250 c.c., −2. There was no evidence of thickened pleura in the neighbourhood. Refills were given at varying intervals (*vide* chart) determined by the pressures, the temperature chart and the physical signs; but it was early evident that adhesions were preventing the upper lobe from collapsing—another proof of healing and of a degree of chronicity.

An X-ray on May 26th (p. 189) showed only slight increase of collapse above, but full collapse below. By this time the patient was feeling much better and had been apyrexial for nearly a week, the urine was by now almost constantly sugar-free, and the fasting blood-sugar had come down to 113 mgrm. per 100 c.c. In spite of a diet raised to 2782 calories, there had been a loss of 1 lb. in weight since admission—a common tendency during the initial stages of an artificial pneumothorax.

This, then, was likely to be the most satisfactory result to be hoped for; one in which the tuberculous disease process might be held to be quiescent, and the β cells (optimistically) rested. To have expected that the patient would be able to carry on his business or weather an intercurrent infection in his own home would have shown a high capacity for Faith. But a lucky accident intervened: he started a serous effusion.

That these effusions occur frequently in any artificial pneumo-thorax clinic is common knowledge. Various authors give their incidence as 50–70%. This variation is probably referable to the fact that "very small transitory effusions often occur which are overlooked unless very frequent screening is resorted to. My own experience is that very few cases . . . go through the two or three years' treatment without an effusion at one time or another, unless the amount of disease in the lung is very small" (Young, 1928, p. 54). The causes of these effusions are variously suggested as—

(*a*) Tuberculous involvement of the pleura (Wingfield, p. 303).

(*b*) A spontaneous pneumothorax occurring on the top of an artificial one—Hutchinson (1926) quoted by Wingfield as a probable explanation in some cases, and *v. infra.*

(*c*) Trauma to the pleura during refills by too rapid introduction of air, too high pressures and the like (Pissavy, 1926).

(*d*) Physical exercise during treatment; improbable since in Wingfield and Wilson's (1924) series "about 50% of those who developed fluid did so before they started any exercise at all." The present case resembles these.

In this instance an attack of tonsillitis with pus in some visible follicles on the adjacent pharyngeal wall seems to have been an additional factor, if only by lowering the man's general resistance sufficiently to admit of a tuberculous infiltration of the pleura, (the effusion being a sterile lymphocytic one). No tubercle bacilli were found, as is so often the case where special methods of concentration are not used; Wingfield, however, maintains that even in the non-purulent effusions tubercle bacilli could probably always be found if searched for carefully enough.

The frequently benign influence exerted by an effusion in an unsuccessful artificial pneumothorax is commonly recognized. Wingfield (*ibid.*, pp. 308 *et seq.*), after an analysis of a large number of figures, concludes that "the occurrence of a pleural effusion, though a nuisance and a temporary set-back, need not in any way call for a bad prognosis. Indeed, experience tells us that a case will often not make steady progress until after the development of an effusion."

The sudden change in this patient's condition was foreshadowed by unmistakable evidence on the diabetic side, which is well shown in the chart, the rise of insulin requirement being due to the tonsillitis and not to the effusion, the first physical and X-ray evidence of which were carefully watched for, and did not appear until a week after the initial rise in temperature. This confirms Dorendorf's opinion that it is nearly always this which draws attention to a commencing phthisis, regular urine testing giving the first clue to the situation. Displacement of the heart, absent breath- and voice-sounds over the whole lung, a coin sound in the axilla and an audible (though not a palpable) succussion splash were among the more obvious physical signs.

From this time the patient never looked back; the chart shows the rapid fall in his insulin requirement. Seen at frequent intervals he carried on his business successfully, and remained sugar-free on 24 units a day and 60 grm. of carbohydrate. Unfortunately at the beginning of this month, while rather overdoing his holiday he started another effusion (this time a purulent one, full of tubercle bacilli, and probably the result of one of Hutchinson's spontaneous pneumothoraces), and the outlook is now proportionately unfavourable. On this occasion when there was no initial coccal infection there was little lowering of sugar tolerance, which is only beginning to become apparent now that there is evidence of an early hilum spread on the sound side. Pleural effusion during artificial pneumothorax does not appear to affect the metabolism to anything like the same degree as an initial effusion, a septic infection, or an intra-pulmonary spread.

The literature on artificial pneumothorax in diabetes is so scanty that this superficial note may be justified; I can only find ten papers in three languages, and most of these are short accounts of simple cases. I may conclude by summarizing the matter best in Young's words (1928, p. 38): "Diabetes used to be considered a contra-indication to a pneumothorax. I think this is a mistake. In these cases, if unilateral, especially since the introduction of insulin, I think that a pneumothorax is indicated. Cases of phthisis with diabetes pursue an atypical course, and tend to have a large amount of disease in one lung before the other becomes involved. It is interesting to note that the successful induction of a pneumothorax usually causes a drop in the amount of insulin required, just as does the removal of a focus of sepsis."

I am indebted to Dr. George Graham and to Dr. F. H. Young for permission to publish an account of this case.

References.

Braeuning, H.—*Zeit. f. Tuberk.*, 1928, li, p. 1.

Dorendorf, H.—"Diabetiker-Phthise und Pneumothorax," *Med. Klin.*, 1928, xxiv, pp. 485–488.

Fishberg, Maurice. "Infraclavicular Tuberculous Infiltrations," *Amer. Rev. of Tuberculosis*, 1928, xvii, p. 3; "Remarks on Apical and Subapical Tuberculosis," *Brit. Med. Journ.*, August 27th, 1929, p. 331.

Geer, E. K.—"Artificial Pneumothorax for Pulmonary Tuberculosis with co-existing Diabetes of Unusual Onset," *Amer. Rev. Tuber.*, 1922–3, vi, pp. 399–400.

Graham, George.—*The Pathology and Treatment of Diabetes Mellitus*, 2nd Edition, 1926, Oxford University Press, p. 164.

Hutchinson.—*Tubercle*, June, 1926.

JAUNEY AND NEWELL.—"Treatment of Diabetes Complicated by Pulmonary Tuberculosis," *Journ. Amer. Med. Assoc.*, 1920, p. 75.

KAYER-PETERSEN, J. E.—*Münch. med. Woch.*, 1919, xlix, p. 1261.

LANDRETH, J. F., and MORLOCK, H. V.—*Tubercle*, 1928, xi, p. 101.

LYDTIN, K.—*Zeit. f. Tuberk.*, 1926, xiv, p. 273.

MORLOCK, H. V.—*Tubercle*, 1929, xi, p. 267.

Idem.—"Development of Pulmonary Tuberculosis, with Special Reference to 'Early Infiltration,'" *Lancet*, 1929, ii, p. 60.

v. NOORDEN.—*Die Zuckerkrankheit*, 1927.

PISSAVY, JACQUES.—"Les Pleurésies Séro-fibrineuses du Pneumothorax Artificiel," *L'Expansion Scientifique Française*, Paris, 1926.

REDECKER, F.—*Beit. z. Klin. d. Tuberk.*, 1924, lix, p. 591.

Idem.—*Ibid.*, 1925, lxiii, p. 574.

RIST, E., and AMENILLE, P.—*Paris Méd.*, 1922, xii, p. 14.

ROSENBERG, MAX. "Über Pneumothorax-behandlung bei schwereim Diabetes," *Med. Klin.*, 1925, xxi, pp. 733–734.

TAUB, SAMUEL J.—"Artificial Pneumothorax in Treatment of Pulmonary Tuberculosis, Complicated with Diabetes Mellitus," *Med. Clin. N. Amer.*, 1927, xi, p. 33.

WINGFIELD, R. C.—*Text-book of Pulmonary Tuberculosis*, Constable, 1929.

WINGFIELD AND WILSON, G. S.—*Lancet*, July 26th, 1924.

YOUNG, F. H.—"Artificial Pneumothorax: Use and Control in Ambulant Cases of Pulmonary Tuberculosis," *St. Bartholomew's Hospital Reports*, 1928.

F. C. ROLES.

A CASE OF BRUCELLA ABORTUS INFECTION IN MAN.

IT has been known since 1924 that the bacillus of Bang, which was discovered by Prof. Bang of Copenhagen in 1897, was capable of producing in man a disease indistinguishable clinically from Malta fever. The bacterium is now called *Brucella abortus*, after Surgeon-Major Bruce, who isolated the specific organism of Malta fever in 1887 and called it *Micrococcus melitensis*. It is now known as *Brucella melitensis*. Both Malta fever and Bang's disease are characterized by prolonged fever, profuse sweats, joint pains, enlargement of spleen and liver, leucopenia and anæmia. The character of the fever is undulating, hence the name "undulant fever," which is applied indiscriminately both to Malta fever and Bang's disease. Both diseases come from milk, in the case of Malta fever from goats' milk and in the other from cows' milk. In cattle Bang's bacillus produces an epidemic abortion, which is very infectious, very common, and a source of great loss to farmers. In Gloucestershire, the veterinary surgeons tell me, epidemic abortion is extremely rife, and defies all the care and precautions taken against it.

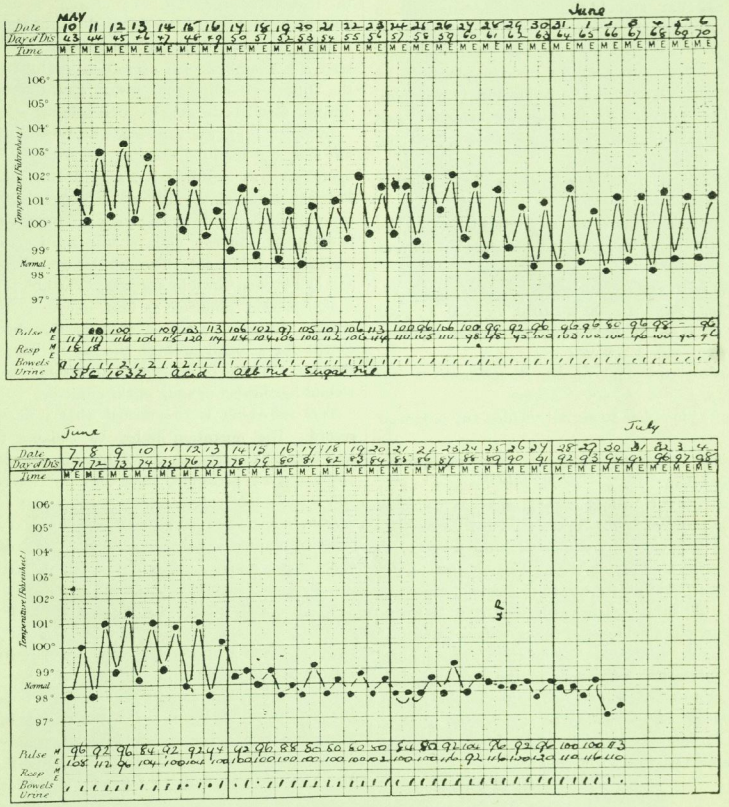
The opinion has been held for many years that abortion in women is produced by drinking milk from cows that have expelled their fœtuses prematurely. In 1917 an American published a series of 12 cases in which circumstantial evidence pointed to abortions in women having been due to drinking infected milk. It is interesting to note that the organism which gives goats that disease of the udders which causes Malta fever in man has the effect on the goats of causing abortion, so that both *Brucella melitensis* and *Brucella abortus* are abortion-producing bacteria.

Since 1924 numbers of cases of Bang's disease in men have been reported and, if one looks up the references in a library, such as the Radcliffe section of the Bodleian, the number of cases and articles are surprising, especially when it is realized how little is known of the disease even now. When my case occurred at least six medical men of much higher attainments than myself had never heard of it when I asked them for their opinion.

The manifestations of *Brucella abortus* in cattle are, in the female, abortion and its sequelæ, and in the male, occasionally tissue necrosis in the generative organs. The human manifestations are abortions in the female, together with an illness, and in the male, a prolonged fever with the symptoms mentioned above. The infection is easily mistaken in its early stages for typhoid or tuberculosis.

In the case that came under my notice in April, 1929, there are several points which make it interesting. The first that strikes one is that perhaps the last person one would suspect of having this milk-borne disease would be our local dispensing chemist, who drinks practically no milk, never goes near a cow, and sees nothing of any farm hands except across the counter. He is 50 years of age and has never been abroad. He gets influenza often, and he began to feel ill at the end of March, 1929, with chilliness and achings in his limbs, just as he always has with influenza. He went to bed and I treated him as a case of influenza, taking his temperature every morning when I visited him. To my surprise his temperature was always 100° to 102° long after an ordinary influenza temperature would have subsided, in spite of his having no physical signs. He had a slight cough, and he looked so thin and weedy that I got the tuberculosis medical officer to examine him, and at the same time I sent his blood to Dr. E. N. Davey, the Pathologist at Gloucester Infirmary, as a possible typhoid. He was reported apparently free from tuberculosis, and the report on the blood came back as negative to typhoid and para-typhoid, but positive to the *Brucella abortus*. Dr. Davey is particularly interested in *Bacillus abortus* and in his work on the subject with Dr. Gardner, the Oxford Pathologist, he tests all blood specimens for agglutination with this organism.

The patient came into the Fairford Cottage Hospital in May. He had been ill for five weeks before admission with a continuous pyrexia without physical signs, a feature of the illness being drenching sweats at night—so drenching that we had to have a special nurse to change his night things two or three times every night. Beyond this sign and the fever there was nothing to be made out on examining him. There was nothing abnormal in the urine; no enlargement of spleen or liver; no arthritic signs or symptoms; nothing abnormal in chest or throat. There was no diarrhœa and no sickness, and he took food well. Once he was in Hospital he began to pick



up and put on weight, in spite of the fever, which went on for fourteen weeks, and the rapid pulse, which never fell below 100. Now that he has been afebrile for some time his pulse is still over 100, though I cannot find anything wrong with his heart. The chart shows the undulating character of the fever well.

As to treatment, I could find very few references to it except urotropine gr. x *t.d.s.* We tried large doses of quinine without effect. Dr. Gardner was making a vaccine, but by that time he was so much better. At last the patient himself said he would like to try salol, and from that moment his temperature dropped—*post hoc* almost certainly, but salol would be worth trying in another case.

Dr. Davey's report dated May 23rd says—The following are the findings so far:

1. The brother's serum shows no agglutination. (The brother had influenza too, and we wondered if he had Bang's disease also.)

2. Patient's serum agglutinates *B. abortus* 1 : 25, 1 : 50, 1 : 125, 1 : 250, 1 : 500, 1 : 1000, 1 : 2500, 1 : 5000 dilutions. (*N.B.*—This is the highest dilution reported in any previous case I believe.)

3. Patient's serum agglutinates *B. melitensis* 1 : 25, 1 : 50, 1 : 125, 1 : 250, 1 : 500 dilutions.

4. Patient's blood has so far not yielded any organism in culture.

5. Patient's leucocyte count is 5000 per c.mm., polymorphonuclears 42%, small lymphocytes 45%, large hyalines 8%, myelocytes 5%, showing a leucopenia with a relative lymphocytosis. These facts, says Dr. Davey, clinch the diagnosis beyond yea or nay.

Since my case there has been a case reported in the *British Medical Journal*, the eighth in England they say. This makes the ninth. The point is that it is worth looking for in puzzling cases of fever without physical signs. If anyone wishes to read up the subject he will find many interesting references in the Bodleian, but the best account is a report of a symposium on the subject in the *Journal of the American Veterinary Medical Association* for March, 1929, from which I have borrowed most of the first part of this account.

H. E. BLOXSOME.
E. N. DAVEY.

[It may be added as a postscript that on August 20th, five months after the onset, the blood picture is the same. The serum does not agglutinate the *Brucella abortus* in so high a dilution. Tachycardia and general weakness are still present. These facts point to the infection being still present, though waning. As in Malta fever, the infection may take two years to disappear. Meanwhile the patient is still taking salol.]

A CASE OF CHRONIC EMPYEMA.

THE patient was a Welsh guardsman, and is now æt. 48. He was wounded in September, 1915, the bullet entering his neck at the level of the thyroid cartilage, just to the right of the mid-line, and coming out by the inferior angle of the right scapula. At the time there was a severe hæmoptysis; two days later a hæmothorax was aspirated, and one week after the injury an empyema, which had developed, was drained through the original exit wound.

In April, 1917, the empyema cavity was still heavily infected, and required dressing twice daily. A Wilm's operation was performed (by a doctor since dead). Portions of the ninth and tenth ribs were removed posteriorly as far back as the angle. Through a separate incision the anterior ends of the third to sixth ribs were removed in front. The anterior wound suppurated, and had broken down by the end of the first fortnight.

The present condition is best shown by the photographs. There is a tunnel through the chest, which, except for a small area at the top, is lined with epithelium. There is no bronchial fistula; in fact the wound has healed in spite of the surgeon!

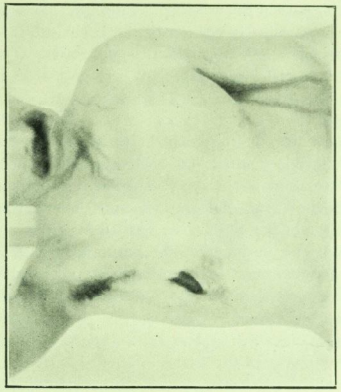
This end-result is so unusual that it is worthy of record. The operation failed to collapse the chest-wall because the seventh and eighth ribs were left intact, and also it was performed while the empyema cavity was still heavily infected.

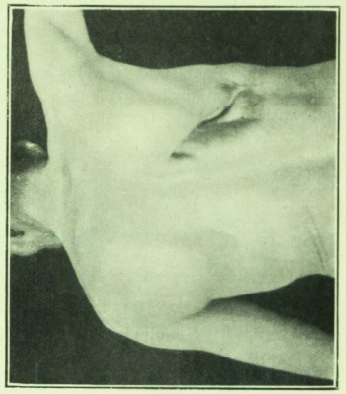
Wilm's operation is no longer employed in the treatment of chronic empyema cavities. The treatment of these very chronic cases, often of ten to fifteen years' duration, may be briefly described as follows:

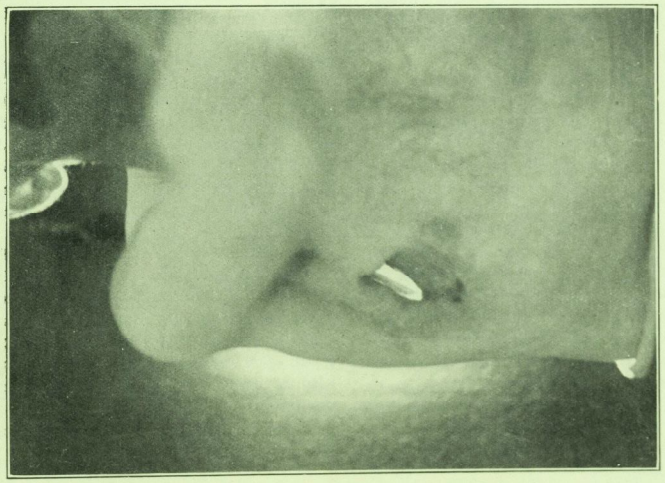
(1) The cavity must be made as clean as possible by thorough drainage, by removal of any foreign bodies or necrosed pieces of rib, and by the use of Carrel's tubes with hypochlorite solution.

(2) As the pleura lining these cavities is sometimes about ½ in. thick, expansion of the lung is impossible. There are two alternatives: (*a*) *Decortication*, or the removal of the thick fibrous deposit covering the visceral pleura to allow the lung to expand; (*b*) *thoracoplasty*, or removal of ribs to enable the chest-wall to collapse. Decortication has not been found successful in these long-standing empyemata caused by gunshot wounds, and thoracoplasty as described below is usually employed.

By a J-shaped paravertebral incision the skin and underlying muscles are turned out as one flap, and the ribs overlying the cavity and for some distance beyond are removed by subperiosteal resection. The chest-wall flap (*i.e.* periosteum, intercostal muscles and parietal pleura) is now mobilized by opening up the cavity round







ANTERIOR VIEW WITH LIGHT SHINING THROUGH THE TUNNEL.

the margins, so that the flap is only attached at the upper end, and finally the cavity is curetted. If the chest-wall flap can be kept in contact with the underlying visceral pleura the cavity will be obliterated, but the flap is too rigid to flop in, and must be pushed in by a pad and web straps applied on the outside of the skin. If a chink of the original cavity remains, it will slowly fill up with pus and expand. Relapses and disappointments are frequent, requiring patience on both sides, but undoubtedly the ultimate results justify the operation.

I wish to express my thanks to Mr. J. E. H. Roberts for permission to publish this case.

H. P. NELSON.

PNEUMOCOCCAL MENINGITIS FOLLOWING A PERFORATING WOUND OF THE ORBIT.

A—, æt. 1 year, was brought to the Hospital on Saturday, June 1st, with this history:

The child, with his sister, æt. 5, had been left at home by his parents. On their return they found that the baby had picked up a steel knitting-needle, and toddled round the room with it. The sister ran after the baby, and the latter stumbled and fell; the needle entered the left orbit, and the sister pulled the needle out. The parents estimated that it had entered about 2 in.

When the child was seen at the Hospital he was shocked. There was a puncture wound of the left upper eyelid; the left eyeball looked normal. Previous to the accident the child had been perfectly healthy. He spent a restless night, screaming periodically.

June 2nd, noon, there was stiffness of the neck, with head-retraction, and Kernig's sign was present. There were no signs in the chest of pneumonia, and no discharge from the ears.

At 8 p.m. lumbar puncture was performed. The cerebro-spinal fluid was not under pressure. It was very turbid. A Gram film showed pus cells in large numbers and a few Gram-positive lanceolate diplococci. The fluid was sown at once on blood-agar. The pneumococcus was grown in pure culture.

The child was treated by repeated lumbar puncture, and intrathecal and intraperitoneal injection of anti-pneumococcal serum.

June 5th the child died.

At the post-mortem it was found that the perforating wound of the left orbit was surrounded by slight œdema. The wound passed above the eyeball, which was uninjured, through the left orbital plate, and into the anterior part of the left corpus callosum. In this region there was slight laceration of the brain substance, but no evidence of much local suppuration. Over the surface of the brain, especially over the frontal lobes, there was greenish pus. There was no disease of other viscera.

The case is perhaps worth recording on account of the following points: The meningitis developed within fourteen hours of the accident. The pneumococcus was obtained in pure culture; it must have been either already on the needle, or carried in from the skin, because the needle did not pass through any sinus. The actual injury to the brain-substance was small; the damage lay in the infection of the cerebro-spinal fluid.

I am indebted to Mr. L. Bathe Rawling for permission to report this case.

W. JEAFFRESON LLOYD.

STILL SIMPLER PEOPLE.

THE SPECIAL PATIENT.

(With apologies to Mr. Archibald Marshall.)

WHEN Mr. Dewy found that he was having quite a lot of bad pains in his stomach because he was a bachelor and his housekeeper was a wicked woman who gave him bad food because she wanted to save housekeeping money to start a tea-shop, he went to hospital and said to a man look here, are you a doctor? well, you look too young, but anyway I've got bad pains in my tummy after food and yesterday I was very sick and brought up a lot of blood.

Well, the doctor didn't like being called young and he saw that Mr. Dewy had got nice clothes on, so he said well, you must go into a nursing home, it is most important.

Then Mr. Dewy said I want to come into hospital because you get better treatment and it is cheaper than going into a nursing home and I'm not rich though I am comfortably off. But the doctor said I haven't got a bed so Mr. Dewy said ah ha, my brother was estate agent to a lord who gave a lot of money to the hospital so you will have to take me in specially. And the doctor said oh bother under his breath and took Mr. Dewy into hospital because he didn't want to make him angry in case he was sick again.

Well Mr. Dewy was very pleased to be looked after, but the doctor made him lie flat on his back and have only egg and milk to drink, and he didn't like it, so he said oh damn the diet, give me a nice chop, because he was used to speaking to his housekeeper like that when the pain in his stomach made him bad-tempered, which was very often, and he thought he could bully nurses too, but he was mistaken. And the head nurse said to him I have seen lots of cases like you and I have had no nonsense from them and I'll have no nonsense from you. And Mr. Dewy was so angry that he cried because he couldn't do anything about it, and the other ill people in the hospital said he was a cry-baby, and nobody pitied him at all.

Well there was a nice girl called Mary Jiffle who was learning to be a nurse because she didn't like home life and Mr. Jiffle had said I won't have any daughter of mine earning her living, so you'd better try nursing but I shouldn't think you'll be much good you're too pampered. So she started being a nurse and she was quite sorry for herself after a month but she thought I won't go back, I won't, I won't, and when she saw Mr. Dewy crying she thought he was homesick like she was, but he was only sick of egg and milk. So when she had to wash Mr. Dewy she said I am sorry for you, are you homesick, I am, and Mr. Dewy forgot to be angry and said that's the first kind word I've had here, my dear and he patted her hand. And she didn't mind because Mr. Dewy was nearly as old as Mr. Jiffle.

Well after that she always washed Mr. Dewy and told him how she wanted to go back home and make cakes and things for Mrs. Jiffle's at homes, and Mr. Dewy said oh can you cook? my housekeeper can't and that is why I am here and I am very tired of lying down. So Nurse Jiffle said well, you sit up a bit while I wash you, and he sat up and said well, that's a relief.

Then the doctor came in and saw Mr. Dewy sitting up and he said good heavens woman what are you doing, do you know that you might make him sick again and he would die? And he got very hot and angry, and told Nurse Jiffle to put Mr. Dewy down again, and she was only a pro, which is a name for a young nurse who doesn't know much, and how dare she do it?

Well Mary Jiffle cried, and Mr. Dewy felt quite noble so he sat up again and said leave the girl alone, I like being sat up, so there, and if you ask me these girls know more than you do. So the doctor said well I didn't ask you, and mind your own business, and he told Mary she mustn't wash Mr. Dewy any more.

Well, Mr. Dewy said rude things about the hospital and the doctor to the other ill people and he nearly got sent away and Mary was crying all day and hating the doctor.

So the doctor said what is your name? Jiffle? well Nurse Jiffle I am sorry, don't be cut up about it, but don't do it again. And Mary stopped hating the doctor, who had nice brown eyes and white teeth and said well Mr. Dewy is rather rude. And the doctor rather liked her because she was pretty, and he often talked to her after that.

Then Mr. Dewy's housekeeper wrote a letter to say she was going to start a tea-shop with the money she'd saved, and it was in Bloomsbury because she was a lady. So Mr. Dewy thought he'd like to marry Mary Jiffle because she could cook and he was lonely, so he said will you be my wife and she said no, you are too bad tempered and rude to people.

So he began to say nice things about people and he said I like that doctor, he knows his own mind, and he really has made my tummy better, and Mary said yes, isn't he marvellous.

Then Mr. Dewy thought well I think she's in love with him so I'll stop having silly ideas and get a good cook instead. And he told the doctor about Mary and the doctor went very red and said do you think so? hooray, I will ask her, because I have been in love with her ever since I made her cry.

So he did, and she said yes, I am sick of washing beds and faces, and carrying things, especially as Mr. Dewy is better and wants a lot of things on his special tray, and Daddy will buy you a practice.

So they were married and Mr. Dewy gave Mary a set of imitation tortoiseshell hairbrushes with M on the backs in silver, and he gave the doctor a thing to look down people's eyes with because that was what he wanted more than anything else.

M.

INDISCRETIONS OF THE APPENDIX.

"Remember therefore from whence thou art fallen and repent, or else I will come unto thee quickly and will remove thy candlestick out of his place except thou repent."

IF the vermiform appendix be regarded as a diverticulum of the cæcum, what better example could be found to justify the playful definition of a diverticulum as "a little wayside house of ill-fame"?

So antiquated and mischievous a structure may be expected to have a whimsical history. At the outset of our genealogical pilgrimage it is not strange to find that the first reference in the literature is a negative one; for Mondino dei Luzzi or Mundinus (1270–1326), whom Osler calls the first modern student of anatomy, though he gives a clear account of the cæcum, dismisses its satellite in silence. Yet it seems unreasonable to

deduce that the latter could for so long have escaped observation. The sin of first describing it was committed by Jacopo Berengario da Carpi, the fourth centenary of whose death will, in the illuminating phrase, be celebrated in November. The appendix is portrayed for the first time by Johannes Dryander in his illustrated edition of Mondino's *Anatomy* (*Anatomia Mundini*, Marpurgi, 1541). Added interest is lent to this drawing by the unkind supposition that it is an early, unacknowledged sketch by Vesalius. Two years later the Reformer of Anatomy clearly figures the vermiform process in the fifth book of the *Fabrica*, though strangely enough there is no account of this structure in the text. How fascinating and how idle to attempt to explain this discrepancy. If anatomists have been slow in realizing the structural individuality of the appendix, their physiological brethren are, even to-day, at least in their moments of leisure, debating the functions of this organ. Though never accused of being the seat of the soul like the pineal gland, nor yet like the pancreas denounced as the source of all mortal ill, for centuries the appendix has baffled the scientific imagination. The year 1739 saw the publication in Leyden of Lieberkühn's little work of twenty-two pages, *De Valvula Coli et Usu Processus Vermicularis*. Branded since as a vestigial organ and thus "put in its place," the appendix has not always suffered such ignominy gladly. This fact no one appreciates more grimly than the surgeon.

To those trained to look upon anatomy and physiology as the parents of pathology and surgery it is not surprising that diseases of the appendix have been slow of recognition. A warm-blooded generation accustomed to perform successful operations for appendicitis in mid-Atlantic may be a trifle chilled by the step-motherly treatment dealt out to this disease in text-books of surgery one hundred years ago. Book after book we take down from our shelves—the majority as dead to-day as their authors. Here and there a name has survived. Some surgeon, maybe, has linked his name with a tool of his craft, and, clinging to this eponym as to a lifebelt, has kept afloat on the stream of Time. Will there come a time when the memory of a Murphy will be imprisoned in a button and of a Treves in a bloodless fold? Will those be the days of Revelation, when the harvest of the earth is ripe, when surgery has become a dream of the past, a fairy tale, on which an incredulous generation feasts its fancies; when the recognized instruments of our trade are religiously preserved in museums neatly labelled, useless, dead? But if one forceps be described as the invention of a surgeon who all his life strove to abolish surgery, that man will not have lived in vain. In the hunt for cases of appendicitis in the early literature Robert Liston's *Elements of Surgery* (ed. 2, 1840) catches the eye. Written by one ever modern in ideas and forthright in their application, surely this work will contain some reference to the appendix and its woes. Here, again, silence.

While the peritoneum in the dead body had been familiar to anatomists for centuries, to the surgeon the living peritoneum continued to remain forbidden territory, suited only to the onslaughts of the academic mind. Rather more than one hundred years ago peritonitis remained a favourite subject for Paris M.D. theses. What Kelly calls the aggressive surgery of the appendix is a posthumous child of the Listerian Revolution.

In 1835 Velpeau declared painless operation to be a chimera, impossible of attainment. On October 16th, 1846, a Boston dentist administered ether as an anæsthetic to a volunteer patient—and the horizon of surgery rapidly expanded. Surgical rashness grew wings and soared beyond the clouds, only to be wrecked in the typhoon of sepsis. Those were the pathetic pre-Listerian days when surgery was a dangerous gamble, when so-called "rescue-operations" were only performed if the life of the patient was in dire jeopardy, and even then with remorse and trembling. Lister successfully removed the parasitic twin of uncertainty that made the surgeon's life a misery. He transformed a surgery of Despair into a surgery of Hope, and gave the greatest impetus of all to the evolution of experimental surgery. At the touch of his magic wand, cerebral, thoracic and abdominal surgery opened up like beautiful flowers. At the time not many of the new methods which he introduced directly affected the surgery of the abdomen. He himself dissuaded Keith from applying the antiseptic system to ovariotomy, which to-day is perhaps the most perfect example of the place of abdominal surgery in Listerism. The surgery of the abdomen appeared in the aftermath rather than in the primary harvest of Lister's work (Trotter).

Though the soil was ripe now for the operative attack on the diseased appendix, the question of diagnosis was not always beyond dispute. Less than fifty years ago surgeons were lost in the maze of "peri-typhlitis"—a term which to-day jars the critical ear, but which in those days literally covered a multitude of sins. Reginald H. Fitz, of Boston (1843–1913), was the first to impress upon the profession that it was their duty "to be mindful that, for all practical purposes, typhlitis, perityphlitis, perityphlitic tumour and perityphlitic abscess mean inflammation of the vermiform appendix; that the chief danger of this affection is perforation, that perforation in the great majority of cases produces a circumscribed, suppurative peritonitis, tending to become generalized; that in the light of our present knowledge, the surgical treatment of this lesion offers the best chances for the life and future health of the patient, and that the progress of the disease needs to be watched with knife in hand."* The modern clinical entity "appendicitis" was born. While Treves, developing the surgery of the appendix at the London Hospital, was in favour of delaying operation until the inflammatory attack had passed, surgeons like Barnard advocated immediate operation, especially in the young.

In 1889 Charles McBurney (†1913) read before the New York Surgical Society his celebrated paper on "Early Operative Interference in Cases of Diseases of the Vermiform Appendix,"† in which he emphasized what is now universally known as McBurney's point: "The seat of greatest pain, determined by the pressure of one finger, has been very exactly between an inch and a half and two inches from the anterior spinous process of the ilium on a straight line drawn from that process to the umbilicus."

If the diagnosis and treatment of appendicitis have come to be within the reach of every surgeon, the causation in many cases remains a matter for speculation. One day, perhaps, the introduction of a "right-iliac-inferiority-complex" conception into the domain of surgery will help to elucidate cases which, while filling the surgeon's pocket with capital, leave his mind devoid of interest.

In the book of surgery the history of the appendix may be divided into two great epochs—before and after Lister. And so this essay may appropriately be brought to a conclusion with the most striking of all Listerian doxologies, the pathetic notes‡ of a pre-Listerian case of appendicitis which occurred in this Hospital:

"The subject of this case was a hairdresser aged twenty-eight, who had repeatedly suffered from dyspepsia. On the evening of March 14th, 1837, he was suddenly seized with severe pain in the lower part of the abdomen towards the right side, whilst out on business, and, feeling faint at the time, he took a glass of wine at the instance of a friend, but without relief. On the following morning, he sent for Mr. Hughes of Holborn, had a dozen of leeches applied, and took some aperients which acted well. He had on the 16th less pain and tenderness, but took effervescent medicines for the relief of slight sickness. Pain and tenderness being worse on the 17th, I (H. Bateman) was requested to see him in the evening. His pulse was then 76, neither hard jerking nor particularly small. He had nausea and occasionally severe pain in the bowels. On pressing firmly between the umbilicus and Poupart's ligament on the right side, he complained of tenderness.

"Countenance anxious; bowels had been well moved; tongue thickly coated and of a dirty brown colour; skin dry; urine scanty and reddish. Magnesia, tincture of henbane *quartis horis*, calomel and opium at bedtime.

"On the 18th, more pain and tenderness. Bleeding to twelve oz. produced faintness. Blister to the abdomen. On the 19th pain and tenderness diminished; bowels confined; abdomen becoming tympanitic. Turpentine injections, chamomile poultices, castor oil and calomel with opium.

"On the 20th, tympany, pain, and tenderness increased; injection retained; vomiting two or three times in the day.

"On the 21st, tympany much increased, tenderness and pain less, bowels still confined, countenance more anxious; hot bath; castor oil. Was seen by Dr. Spurgin. Again bled to twelve oz., but without relief. Calomel with opium continued *quartis horis*.

"22nd: Tympany excessive, œsophagus tube passed up rectum without any relief; frequently complains of pain, but tenderness very moderate; much jactitation.

"On the 23rd: Passed a very restless night; had bath again at his own request, and died at 11 a.m.

"Examination 25 hours after death: Body very spare, countenance shrunk, fluids passing from mouth and nostrils. Abdomen excessively tense, voluminous and sonorous, except at the sides where there is an obscure feeling of fluctuation. On opening the peritoneal cavity, the intestines were instantly thrust through the aperture . . . the termination of the ileum with the cæcum and its appendix were fixed by firm but still recent adhesions in the pelvis to the right side of the rectum. The interior of the former bowel presented several ulcerated patches confined to the mucous membrane, and about the size of a shilling. The appendix cæci was unusually long, its upper ⅔ths appeared healthy; the middle portion was perforated in two places and sphacelating, the lower half was nearly healthy. On raising it out of the pelvis a gall-stone (*sic*!) the size and shape of an almond dropped through the larger perforation. The interior of the cæcum presented ulcerated patches similar to those found in the ileum. . . ."

To whose mind does not this story call up the poignant fate of the virgin daughter of Egypt? "In vain shalt thou use many medicines: for thou shalt not be cured."

W. R. BETT.

* *N. York M. J.*, 1888, xlvii, 308.

† *N. York M. J.*, 1889, l, 676, 693.

‡ Extracted from Case-book No. 1, constantly referred to in the Museum Catalogue, but only recently unearthed (Case No. 120).

The writer of these notes, Henry Bateman, F.R.C.S. (1806–80), entered this Hospital in October, 1825, where he dissected with Richard Owen, a fellow student, and attended Abernethy's lectures. He was appointed Librarian of the Medical School, an office then given to deserving students. In the epidemic year of 1832 he became surgeon to the Cholera Hospital, Islington, where, having made his last will and testament, he performed post-mortems on all cases that died under his care. In private practice he saw patients gratuitously before most men had had their breakfast. A zealous disciple of Swedenborg, it was said of him that the only occasions on which he ever dined out were the College of Surgeons' dinners every second year.

[Information extracted from his obituary notice, *Lancet*, 1880, ii, 874, and from Plarr's forthcoming *Lives of the Fellows of the Royal College of Surgeons*.]

BIBLIOTHECA OSLERIANA.*

A NOTE ON OSLER'S PRIMA.

'Tis not a melancholy *Utinam* of my own, but the desires of better heads, that there were a general Synod . . . for the benefit of learning, to reduce it as it lay at first, in a few and solid Authors. (*Religio Medici.*)

ENCYCLOPÆDISTS of all times have done the work of such a Synod as Sir Thomas Browne conceived. To gather all learning into a few chosen pieces is a worthy labour; but many a Thesaurus, a Syntagma, a Bibliotheca, long unread,

* *Bibliotheca Osleriana* A catalogue of books illustrating the history of medicine and science, collected, arranged, and annotated by Sir William Osler, Bt. and bequeathed to McGill University Oxford: Clarendon Press, 1929.

stands a forlorn and dusty witness of its difficulty. The catalogue of the books left by Sir William Osler to McGill, which bears this motto, more fruitfully reflects its counsel.

In this volume of fittingly noble size, where each page invites the eye to linger, it is back to the first of the eight sections, to that called Bibliotheca Prima, that the reader constantly returns, seeking to extract its fullest meaning. Dr. Samuel Gee advised his students "above all things to choose out books of genius." Some books are to look at, some to read, and some to treasure; yet which is diamond, which paste, makes hard choosing. "Faced with a bewildering variety and ever-increasing literature," the student loses himself or turns from the book-shelves in dismay, scarce knowing even by their titles the works by which his science has grown.

As much a teacher as he was a man, Osler saw the danger and proposed the cure.* "The idea is to have in a comparatively small number of works the essential literature grouped about the men of the first rank, arranged in chronological order." The catalogue of the titles of these essential books, and of the writings which have grown up around their authors, with deft bio- and bibliographical notes is baldly the Bibliotheca prima.

Now that it is published, given a pass into one of the medical libraries, the student needs no Synod. Measured by the yard-stick of utility, the catalogue achieves this much greatness; by a more cunning instrument it proves to be itself a book of genius. More than a *catalogue raisonné*, it is a man's vision of the history of his craft.

The history of medicine is a country difficult to enter; its ways are dark and treacherous, and doubly difficult to leave—a land more terrible than Pluto's underworld. Some travellers content themselves with reading in the log-books of others, and having pondered on the virtuous pages of Garrison's *History* and the Catalogue of the Surgeon General's Library, pass muster as historians. Such prosper more than many bolder spirits; it is easier to praise than to read, and worthier to praise right than to read wrong.

Working historians, the real explorers, are of three kinds—the scientific, the romantic, and the philosophical. The first is the least dangerous, wearing his guarantee upon his brow; the second is the most popular, and much evil is wrought in his name; the third is the rarest.

The scientific historian is the bibliographer, the genealogist, the compiler of indices. His alphabet is dates of birth and publication, title-pages, heraldic bearings, imprints, his language is discoverable fact; and none knows better how easily error creeps into writing, be it carved on imperishable marble. The romantic historian builds up "facts" into a tale, differing from fiction mainly in the author's motive. His kind of history is most widely read, and his is the blame that the real value of his subject lies often buried beneath a mass of sentiment. If the scientific historian may be said to speak of dial and hands and springs, and the romantic historian of clocks, their use, their beauty and their kinds, then the philosophical historian speaks of Time itself. His critical intelligence directs the work of history. Without his guidance the pen of sentiment runs riot, and the scientist vainly chases dates down the dark alley of the centuries. With impersonal judgment he gives for his generation to the generations of the past the due meed of praise and blame. His touch gives life to dates, dead books and half-forgotten personalities, and to history a meaning in medicine's daily work.

Osler was not lightly dipped, but grained in history; instinctively he made it a part of his philosophy of lifel Recognizing its science as the basis, he was ever helpfu. to scientific workers, joining their ranks himself in his "Incunabula Medica." His biographical essays are masterpieces of romantic writing. In "The Evolution of Modern Medicine" he is in the main philosopher. The greatness of the Prima lies, like the greatness of all historical writing, in a blending of all three *rôles*. In its pages all languages, all races, all times from "The Beginnings" to Röntgen closing the nineteenth century join together to tell the epic story of the growth of medicine. Scientific as to detail, lightened with romantic touches, it is the plan of the philosopher which makes the Prima whole and great.

This comment on a part of the *Bibliotheca Osleriana* serves to announce its arrival in the Hospital Library, and is in no sense a review of the book.

It has been said that the catalogue of his library earns for Osler a place in his own Prima. The verdict rests with the historians of the future. A. F.

* Illustrations of an attempt to collect a Bibliotheca prima in science and in medicine, Classical Association, Oxford Meeting, 1919.

STUDENTS' UNION.

ABERNETHIAN SOCIETY.

The secretaries wish to apologize for an error in the report of the Summer Sessional Address, which was published in the August issue. The vote of thanks to Prof. Grey Turner was not seconded by Mr. A. C. Bell, as mistakenly stated, but by Mr. W. Jeaffreson Lloyd.

RUGBY FOOTBALL CLUB.

THE Annual General Meeting of the Rugby Club was held on Wednesday, March 27th, 1929, with Mr. Girling Ball in the Chair. The officers for the following season (1929–30) were elected as follows:

President: Dr. J. Barris.
Vice-Presidents: Mr. W. Girling Ball, Mr. H. E. G. Boyle, Mr. R. M. Vick, Dr. Wilfred Shaw.
Captain: C. R. Jenkins.
Vice-Captain: J. T. C. Taylor.
Hon. Treasurer: V. C. Thompson.
Hon. Fixture Secretary: H. D. Robertson.
Hon. Team Secretary: J. M. Jackson.
Committee: C. B. Prowse and W. M. Capper.
Captain "A" XV: J. S. Knox.
Hon. Secretary "A" XV: C. W. John.
Hon. Secretary Extra "A" XV: J. R. Martin.
Hon. Secretary "B" XV: L. B. Furber.
Hon. Secretary "C" XV: J. H. Ellis.
Hon. Secretary Extra "C" XV: J. R. Galway.

The following were awarded honours for the season (1928–29):

R. N. Williams, C. R. Jenkins, A. H. Grace, H. D. Robertson, V. C. Thompson, C. B. Prowse, J. D. Powell, T. E. Burrows, J. T. Rowe, F. J. Beilby, J. T. C. Taylor, W. M. Capper, H. G. Edwards, J. M. Jackson and J. R. Jenkins.

We look forward to the coming season with great hopes, both in club matches and in the Hospital Cup, as we have all our last year's team available.

A very attractive fixture list has been arranged, and the "home" and "away" matches more evenly distributed than last year.

Out first trial match will be held on Wednesday, September 11th, and there will be subsequent trial matches on September 18th and 21st.

The 1st XV fixture list is given below:

Sept.	28.	Old Paulines	Home.
Oct.	5.	Old Millhillians	,,
,,	12.	Richmond	Away.
,,	19.	Bristol	,,
,,	23.	Cambridge University.	Home.
,,	26.	Coventry	,,
Nov.	2.	Moseley.	Away.
,,	9.	Northampton.	Home.
,,	16.	London Irish	,,
,,	23.	London Welsh	,,
,,	30.	Devonport Services	Away.
Dec.	2.	R.N.E. Keyham	,,
,,	7.	Bath	,,
,,	11.	R.M.A. (Woolwich)	Home.
,,	14.	Moseley	,,
Jan.	4.	Harlequins	,,
,,	11.	Old Haileyburians.	,,
,,	18.	Gloucester	Away.
,,	25.	Pontypool.	Home.
Feb.	1.	Devonport Services.	,,
,,	8.	Old Leysians	Away.
,,	15.	O.M.Ts.	,,
,,	22.	Old Blues	,,
March	1.	Rosslyn Park	Home.
,,	8.	Old Paulines	Away.
,,	15.	London Scottish	Home.
,,	22.	Bedford	Away.
,,	29.	Plymouth Albion	,,
,,	31.	Redruth	,,

ST. BARTHOLOMEW'S HOSPITAL SAILING CLUB.

A MEETING was held of the Bart.'s members of the United Hospitals Sailing Club on August 7th, 1929. C. F. Watts was asked to take the Chair.

It was suggested that as there were 37 members of the Hospital who were interested in sailing and cruising, a Bart.'s club should be formed, to establish a connecting link between those members of the United Hospitals Sailing Club who are at Bart.'s. It was also thought that the formation of such a club and the invitation of members of the Visiting Staff to become Flag-Officers would be a good movement to further the interests of sailing men in the Hospital Moreover, the Sailing Club would thus be brought into line with the other clubs at present affiliated to the Students' Union.

C. R. JENKINS then proposed that a club should be formed. The proposal was seconded by F. H. WARD, and was carried unanimously.

Mr. Dudley Stone, Dr. Harris and Dr. Cullinan, having signified their willingness to become Flag-Officers, were then elected Commodore, Vice-Commodore and Rear-Commodore respectively.

Hon. B'sun: C. F. Watts.
Hon. Secretary: J. Hopton.

C. F. WATTS then said that the objects, aims and rules of the Club were to be the same as those of the United Hospitals Club, as set forth in that Club's rule-book. The meeting was then declared closed.

J. HOPTON,
Hon. Sec.

RIFLE CLUB.

As announced in the July number, we were leading by 11 points in the Armitage Cup at the end of the third stage. On the final day the team scored four points per man more than the London Hospital, and won the cup by 36 points.

Scores:

1. St. Bartholomew's	June 5.	June 12.	June 19.	June 26
F. H. Morrell (capt.)	94	100	91	91
F. T. J. Hobday	97	96	94	98
T. H. N. Whitehurst	95	93	95	93
B. C. Nicholson	93	93	90	91
H. J. Burrows	..	93	..	92
W. A. Elliston	..	..	90	..
J. M. Macdonald	86	89	78	..
K. F. Stephens	83	..	..	88
	548	564	538	553

Total . . 2203

2. London, 2167.
3. Guy's, 1934.

At the United Hospitals Prize Meeting on June 26th, it was appropriate that F. T. J. Hobday—this year's captain of the U.H.R.C.—should win the first Aggregate Cup, with 131 out of 140. His range totals of 33, 33, 33 and 32 are typical of his extraordinary consistency. He also won the 200 yards Cup. The only other Bart.'s prize-winner was J. M. Macdonald, who dropped only 1 point at 600 yards when shooting as reserve. It has been our hard fate this year that the reserve invariably did better than the sixth man in the team, no matter how they were changed about. Had this not been so, our total score in the Armitage would have been a record one.

On July 16th, during the N.R.A. Meeting in the United Hospitals Challenge Cup, we were beaten by the London Hospital by 2 points, in exact reversal of last year's result.

Conditions were against high scoring: the temperature was 89° in the shade (but shade there is none on the ranges), and the wind was a variable "fish-tail." The team had a severe off-day.

At 300 yards we were afflicted by a plague of "magpies," and were 2 points behind the London when we went back to the 500 yards firing-point. There we improved considerably, but the picture was spoilt by Nicholson, who failed to score a single bull; his recovery at 600 yards was unfortunately too late. After a bad start, it proved just too much of an uphill fight for us to win. For the London, W. V. Howells, 94, and J. G. Warren, 93, shot well on a difficult day.

Scores:

1. London, 439.				
2. St. Bartholomew's:	300	500	600	Totals.
F. T. J. Hobday	29	31	31	91
F. H. Morrell	28	32	29	89
T. H. N. Whitehurst	27	30	30	87
B. C. Nicholson	28	26	32	86
H. J. Burrows	24	30	30	84
				437

3. St. George's, 400
4. Guy's—Only three men.

Congratulations to F. T. J. Hobday on being in the King's Hundred for the third year in succession. B. C. N.

SWIMMING.

UNITED HOSPITALS SWIMMING GALA, 1929.

Held at the Bath Club on July 2nd. The bath was even more crowded than last year, Bart.'s having a record number of supporters among both Staff and students. The Inter-Hospital Swimming Championship was won yet again by Guy's. Each of the three races, 50, 100 and 200 yards, was competed for by two Bart.'s and two Guy's men; the 50 yards went to Sutton, the 2nd and 3rd places being captured by Guy's, and the 100 yards had a similar result, Bart.'s taking 1st and 4th places, so that after these two races we were two points ahead of our opponents. The 200 yards was the race which turned the balance, as by winning this we should have tied; Vartan, however, was unlucky to lose to Malone after an excellent race, so that we only obtained 2nd and 4th places, the points now being Guy's 17, Bart.'s 16. In the team race Bart.'s made a bad start, but Guy's—with several fast newcomers—pulled well ahead and finally got home 5 yards ahead: Sutton pulled up well on the last length and wrested 2nd place from London by about $\frac{2}{5}$ sec. The points thus lost were amply sufficient to give Guy's the championship.

The polo match, in which we played Guy's in the final for the Cup, was perhaps the *pièce de résistance* of the evening. Since the inception of the Championship in 1920 it has gone each year to Guy's, and although we were optimistic, it seemed almost too much to hope that such an amazing sequence might be broken at last.

We gained the advantage this year by winning the toss and defending the deep end; Sutton gave instructions that everyone was to mark as closely as they knew how, during the first half at least, and the team did all that was expected of them.

The first half was by far the more tense of the two—for the team at least, who knew how important it was to keep out our opponents at the dangerous end. Guy's pressed hard during the first few minutes and gave the impression of being the stronger side; but thanks to magnificent work by Sutton, who, though closely followed by de Gruehy, kept their goalkeeper busy with a rapid succession of shots, aided by Vartan, who most successfully "sat on" Malone, our most dangerous opponent, our forwards and backs, who stuck like limpets to their opposite numbers and gave them no chance of getting away, and Williamson, who made several excellent saves, our goal-line was maintained intact.

There were a few anxious moments when Halper was ordered out for moving after the whistle; Guy's gathered themselves together, figuratively rolled up their shirt-sleeves, and pounced upon our back division; there was some close play on our 2-yard line and Williamson pushed several over the bar for corners, but eventually we were awarded a foul and Fisher cleared to Sutton, who scored within the next few minutes, our numbers being thus restored to normal.

After this failure to score even with one man over Guy's seemed to lose heart, for the rest of this half we attacked rather than defended, and the score reached 3–0 at the change-over.

It was obvious that with the advantage of ends we now had them beaten. Sutton, playing the game of his life for us, obtained the ball every time, and shooting much better than in the first half, sent several shots into the corner. Vartan kept Malone well up the bath and the latter only once had a chance of scoring. Our forwards "sat on" their backs and gave them no opportunity of clearing; while on the few occasions that their forwards received a pass our backs smothered them with the utmost promptitude. Vartan added one during this half, while West scored twice with short shots into the corner; Halper, too, played an excellent game, and Edwards managed Jones, his opposite number, with success.

Enthusiasm was high when it was seen that we could not fail to win, and raucous but concerted and deafening support from the "touch-line" added much to the effect. The game finished without our line having been crossed.

Results.—Swimming: Guy's 27 points, St. Bart.'s 22 points.
Polo: St. Bart.'s 8, Guy's 0.

Teams.—Swimming: J. F. Fisher, J. H. West, F. A. Edwards, C. Sudgen, C. K. Vartan, R. J. C. Sutton.
Polo: J. C. F. Ll. Williamson, F. A. Edwards, J. F. Fisher; C. K. Vartan; H. J. Halper, R. J. C. Sutton (capt.), J. H. West.

To those of us who have watched the Swimming Club in its upward climb during the last four years this result is particularly gratifying. Three years ago we were knocked out in the first round of the water polo, two years ago we reached the 2nd round, last year we reached the final, and this year we have accomplished the impossible and beaten a team that has never succumbed to a Hospital side before.

J. F.

CORRESPONDENCE.

MORE MEDICAL NOTES.

We published in our August issue a letter from Dr. G. E. Murray, of Johannesburg, in which he says of Sir Thomas Horder's "More Medical Notes on Influenza": "It is clear and instructive, but when he comes to treatment I cannot agree with him that drugs are to be cut out altogether." We have referred the letter to the author, who writes:

"The only sentence bearing upon treatment reads as follows: 'The most helpful therapeutic agent available so far in severe influenza is fresh air.' This sentence scarcely warrants the construction that 'drugs are to be cut out altogether.' Moreover, the sentence was written in connection with the respiratory type of the disease, towards which all 'severe' cases tend."

We should certainly like to know from Dr. Murray "how to beat measles in 2 days."—ED.

THE NEW FORMAT.

To the Editor, 'St. Bartholomew's Hospital Journal.'

DEAR SIR,—I see in the current issue of the JOURNAL that you invite opinions from your readers as to the suitability or otherwise of the present "cover."

I wish to give a conservative vote in favour of leaving things as they are. Old custom and habit have familiarized your readers with the present outward appearance of the JOURNAL, and old associations mean a great deal to the more hoary-headed of your subscribers.

Now the face of the old Hospital is to be changed out of all recognition, let us at least leave unchanged one relic of our own times—the old familiar cover.

The colours of the Hospital are still black and white—let us avoid all glaring colour schemes.

Thicker paper would mean more expense and higher postage, and, after all, the JOURNAL cover compares very favourably with those of the *Lancet* and the *British Medical Journal*—quite respectable contemporaries.

Faithfully yours,
S. TREVOR DAVIES.

Tottenham;
August 15th, 1929.

To the Editor, 'St. Bartholomew's Hospital Journal.'

DEAR SIR,—As an old Bart.'s man I should like to respond to your request for criticisms, suggestions, etc., *re* the JOURNAL, and I trust that your misgivings may not be justified.

Firstly, with regard to the cover. Why coloured? Surely the good, plain black and white could not be bettered. They are the Bart.'s colours even though some wag has suggested that they symbolize "Kill or cure."

There is, however, one suggestion about the cover that merits consideration. There is no part of Bart.'s more beloved to the old Bart.'s man than the Square and the Fountain. The good old spot where many idle moments were whiled away in the shade of the trees, strolling round awaiting the arrival of our Chief, or collecting "tips" for our "viva" at Queen's Square, is a very happy memory. Why not, therefore, have a picture of the Square or the Fountain on the cover of the JOURNAL?

With regard to a smaller and more convenient size, this would have been a great advantage in my Bart.'s days, because it would be easier to read during lectures without being spotted, but having left Bart.'s I cannot complain of the size of the JOURNAL at all.

One other thing. I must just say how helpful Sir Thomas Horder's "Medical Notes" have been. If they do not help the examinee, they are of very great help to the practitioner, particularly as they are written in that trite and almost epigrammatic way which sticks in the memory. Could not some surgeon be found who would give us a few "Surgical Notes" of a similar nature?

Yours faithfully,
J. C. CYRIL DOYLE.

Fakenham, Norfolk;
August 14th, 1929.

To the Editor, 'St. Bartholomew's Hospital Journal.'

DEAR SIR,

"Live joyfully with the wife whom thou lovest all the days of the life of thy vanity."

A cover, after all, can be much over-rated. In the pale and tranquil face which for years has smiled at us like an image of Buddha there is much virtue and consolation left. You will agree that every paper has a right to look conceited only until it has become successful. Your paper, with its simplicity, which you now call plainness, some of us have come to look upon as the aristocrat among the professional journals. In its present thin cover the JOURNAL can with impunity be folded to any convenient size, and thus carried in the smallest pocket. Further, to some the vagaries through the years of the advertisements are of such interest that they bind up the journals with their covers. A stiff cover would clearly protest against such practices.

The present size of the JOURNAL is ideal for the matter which it contains, for reading, and for our shelves. If you leave the JOURNAL alone, you will find that it will display a gallant indifference to time.

Even if one knows that one's bones are full of the sins of one's youth, one can at least seek comfort in the promise that they shall lie down with one in the dust.

Yours, etc.,
W. R. DELL.

St. Bartholomew's Hospital, E.C. 1;
August 18th, 1929.

To the Editor, 'St. Bartholomew's Hospital Journal.'

DEAR SIR,—Your veiled editorial reference to "the critics" suggests that it may be you yourself in a mood of holiday introspection (or should it be called extro-) who have become self-conscious about your cover and your format, unless it be that you are only out to start a fight. For the criticisms which you say have upset you are light-headed enough.

None the less there *are* some serious points in favour of a change of format. The large size and the thinness of the JOURNAL combine to make it a good victim for postal pressure, so that it is a creased and furrowed object when removed from its wrapper. Should an author require reprints of his article, the two-column page has to be entirely reset at considerable expense. A smaller page, which would take a single column, would have a better appearance, and would not need re-setting.

But enough! A profession which in the name of protection of the public has consistently opposed useful change cannot be expected itself to change, and in this matter of one of its foremost publications I suspect that conservatism, as ever, will win the day.

Yours, etc.,
R. B.

London, S.W.;
August 12th, 1929.

REVIEWS.

RECENT ADVANCES IN PSYCHIATRY. By HENRY DEVINE, O.B.E., M.D., B.S., F.R.C.P. (London: J. & A. Churchill, 1929.) Pp. 340. Price 12*s.* 6*d.*

There is perhaps no branch of medicine more a subject of controversy than psychiatry. The avenues of approach are from widely divergent angles, the results of research often negligible when applied to practice, and paradoxes baffle the investigator and obscure the view. To correlate the different methods of attack, to value their results, and to show in what way psychiatry has advanced is a very difficult task. No one can pick the main stream from the peaty runnels of a northern river's source, and the study of psychiatry has not yet left the hillside. Each school has its place, each theory its niche, and only time can assign the leading part.

The arrangement of the subject-matter of the book is reasonable and summaries are given at the end of each part. Treatment is adequately discussed, and in some sections, notably those on the treatment of toxic exhaustive psychoses and the malarial treatment of general paralysis, there is considerable detail. The need for mental sanatoria in the treatment of early behaviour psychoses is discussed, and a closer relation between the general hospital and the mental hospital is advocated. Prognosis, always dangerous ground in dealing with the psychotic, is approached with reasonable optimism and commendable caution.

The author is to be congratulated on presenting a readable and just appreciation of the work of so many schools of thought, and, if the reader is dissatisfied at the lack of a definite creed, let him betake himself to that same northern river's source and appreciate the difficulties for himself.

HANDBOOK OF SURGICAL DIAGNOSIS. By CLEMENT E. SHATTOCK, M.D., M.S., F.R.C.S. (Edinburgh: E. & S. Livingstone.) Pp. 678. Price 15*s.* net.

This book will be welcomed not only by the many past and present students who have been taught by Mr. Shattock at his own Hospital, but also by those who have attended his delightful and entertaining demonstrations at the Royal College of Surgeons. Although it is not a large book, there is an enormous amount of sound practical surgery packed into it in a most simple and readable form.

There are two ways in which the differential diagnosis of any condition may be discussed. First, the different clinical conditions which are to be distinguished are described in turn, giving the signs and symptoms of each, and second, the various characters and physical signs of the swelling to be diagnosed are analysed and discussed until the different possible diagnoses are reached. The author in this book does the wisest thing possible, and for most diseases gives both methods of approaching a diagnosis.

In addition to diagnosis the student can learn a very useful amount of morbid anatomy; while the most experienced and popular teachers of surgery will find many new and excellent ways of classifying diseases and teaching differential diagnosis. The views put forward and the terms used are mostly up to date, though the names "myeloma" and "subperiosteal sarcoma" are adhered to. The illustrations are a considerable number of reproductions of skiagrams which are, with about half a dozen exceptions, very good. We should, however, like to know why a myxoma of the femur is included.

This is without doubt the best and most useful book on surgical diagnosis we have seen, and will assuredly be used very widely by candidates for both pass and higher examinations, as well as being a most useful "stand-by" for practitioners in difficult surgical cases

BAINBRIDGE AND MENZIES' ESSENTIALS OF PHYSIOLOGY. 6th edit. Edited and revised by H. HARTRIDGE, F.R.S. (London: Longmans, Green & Co. 1929). Pp. xii + 497 and index. Price 14*s.* net.

This book was first published in 1914 and achieved an immediate success, because it managed to combine clarity with brevity. It has always been associated with this Hospital, the fifth edition being edited and revised by Prof. Lovatt Evans. This edition will certainly enhance the reputation of the book. Several chapters have been rewritten, of which we would single out for special praise those on the central nervous system and the special senses. The new diagrams of the tracts are wholly admirable. A few minor points of criticism occur to us. One of the two figures of the same blood gas apparatus (Figs. 77 and 95) might be changed for another apparatus which most students now use. In view of the importance of the coronary arteries in medicine, the nerve supply of these vessels might be mentioned. The new index, which is now admirably clear, might be a little fuller (see under vagus, secretin, etc.).

But these are small points, which in no way detract from our congratulations to the new editor. Every student should have this book, and should continue to use it in connection with the cases he has to study during his clerkship, and after.

ACKNOWLEDGMENTS.

The British Journal of Nursing—The Broadway—Charing Cross Hospital Gazette—L'Echo Médical du Nord—Giornale della Reale Società Italiana d'Igiene—Guy's Hospital Gazette—The Hospital Gazette—The Kenya and East African Medical Journal—The London Hospital Gazette—Long Island Medical Journal—The Medical Review—The Middlesex Hospital Journal—The Nursing Times—The Post-Graduate Medical Journal—The Quarterly Journal of the Research Defence Society—The Queen's Medical Magazine—Revue de Médecine—St. Mary's Hospital Gazette—University College Hospital Magazine.

EXAMINATIONS, ETC.

University of Oxford.

The following degrees have been conferred:
D.M.—Bach, F. J., Dalrymple Champneys, W.
B.M.—Melly, A. J. M., Nicholson, J. C., Walter, W. J.

Final Examination for the B.M., B.Ch., June, 1929.

Pathology.—Brunvate, W. D. T., Duncan, C. M., Newton, R. D.
Forensic Medicine and Public Health.—Melly, A. J. M.
Medicine, Surgery and Midwifery.—Nicholson, J. C., Walter, W. J.

University of Cambridge.

The following degrees have been conferred:
M.B., B.Chir.—McCay, F. H., Windle, R. W., Woodrow, C. E.
M.B.—Kittel, P. B.
B.Chir.—Wood, F. W. J.

University of London.

M.D. Examination, July, 1929.

Branch I, Medicine.—Knight, R. H., West, R. G. R.

First Examination for Medical Degrees, July, 1929.

Passed.—Bintcliff, E. W., Carpenter, R., Clarke, R. F., Danino, E. A., Edward, D. G. ff., Hopkins, J. J. V., Jackson, B. F., Jones, F. A., Kelnar, I., Kingdon, J. R., Latter, K. A., McGladdery, R., Osen, H. F., Rees, J. H., Sheehan, D. J., Soden, G. E. T., Stephens, K. F.

Second Examination for Medical Degrees, July, 1929.

Part I. Passed.—Carpenter, R. H., Chivers, J. A., Cooke, A. Hunt., Ellis, G. H., Godfrey, T. N. H., Hoare, E. L., Hugh, H. C., Jackson, B. F., Kelnar, I., Kirkwood, R. M., Reavell, D. C., Smith, M. C. L., Woodham, C. W. B.

Part II. Passed.—Blackburne, J. R., Bowen, L., Capper, W. M., Corea, F. E., Crabb, D. R., Cuthbert, T. M., Davies, W. H. D., Dawson, D. J., Francis, A. E., Greenberg, A., Hayes, D. S., Iliff, A. D., Jardine, D. K., Kravchick, W., Lee, H. B., Lloyd, M. A., Macfarlane, R. G., Magnus, H. A., Martin, J. R. H., Race, R. R., Roberts, L. O., Rosenfeld, P., Trueman, R. S.

Conjoint Examination Board.

Pre-Medical Examination, July, 1929.

Chemistry.—Buckland, L. H., Burstal, E. W., Butters, A. G., Cereseto, H. G., Fernandas, H. P., de Wytt, W. H. H. J.
Physics.—Buckland, L. H., Burstal, E. W., Butters, A. G., Cereseto, H. G., Fernandas, H. P., Noordin, R.M., de Wytt, W. H. H. J

First and Second Examination, July, 1929.

Part I. Anatomy.—Brownlees, T. J. K., Evans, W. E. F., Halperin, J., Saunders, S. B. H.
Physiology. Halperin, J., Orpwood, R. M. M. C., Saunders, S. B. H., Vaughan, H. B. D., Woods, T. G. R.
Part II. Pharmacology and Materia Medica.—Morgan, C. J., White, F. C. H., Woods, T. G. R.

Final Examination.

The following have completed the examination for the diplomas of *M.R.C.S., L.R.C.P.*:
Bett, W. R., Dalzell, P., Edwards, L. M., Evans, I. Q., Franklin, A. W., Gasson, S., Harris, A. G. J., Harris, R. L. H., Hawking, F., Jones, D. S., McMenemey, W. H., Mehta, S. J., Prowse, C. B., Radcliffe, W., Rait-Smith, B., Richards, P. J., Robson, J. A., Rogerson, H. L., Scott, J. M., Williams, J. O.

Royal College of Physicians.

The following have been elected *Members* of the Royal College of Physicians: Eyton-Jones, F. M. M., Hartsilver, J., Robertson, D. A.

Royal College of Physicians and Surgeons.

Diplomas in *Public Health* have been granted to the following: Briggs, W. A., Mozumder, S.

Diplomas in *Tropical Medicine and Hygiene* have been granted to the following: Fraser-Smith, A. E., Sabri, I. A., Stuart, R.

CHANGES OF ADDRESS.

BACON, E., "Beckford," 191, Bitterne Road, Southampton. (Tel. 5770.)
BARNSLEY, Major R. E., R.A.M.C., R.A.M.C. Mess, Grosvenor Road, S.W. 1.
CUNNINGTON, W. A., 13, The Chase, Clapham Common, S.W. 4.
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MILNER, J. G., 106, Harley Street, W. 1. (Tel. Welbeck 3525.)
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POLLARD, E. B., Surg.-Lt., R.N., Royal Naval Hospital, Portland, Dorset.
ROBERTS, Surg.-Cmdr. W. E., R.A.N., Quondong, Cranbrook Road, Rose Bay, Sydney, New South Wales.
SIALLARD, H. B., 106, Harley Street, W. 1. (Tel. Welbeck 3525.)
STURTON, C., 269, Green Lanes, N. 4. (Tel. North 0338.)
WOOD, R. W., 140, Southwood Road, New Eltham, S.E. 9.

APPOINTMENTS.

BACH, FRANCIS, M.D.(Oxon.), has been elected to a Chadwick Travelling Scholarship in Preventative Medicine.
BREWER, H. F., M.D.(Cantab.), appointed Pathologist to the Miller General Hospital, S.E.
ROBERTS, Surg.-Cmdr. W. E., R.A.N., appointed to H.M.A.S. "Penguin" and for Naval Establishments and for Naval Wing, Prince of Wales Hospital (in charge), Randwick, Sydney.
SIALLARD, H. B., M.B., B.Chir.(Cantab.), F.R.C.S., appointed Pathologist and Curator to the Moorfields Eye Hospital.

BIRTHS.

BATTEN.—On July 27th, 1929, at a nursing home, Hampstead, to Mary, wife of Lindsey W. Batten, M.B., M.R.C.P.—a son.
ROWELL.—On August 7th, 1929, at 10, Chapel Street, Belgrave Square, the wife of G. L. F. Rowell, F.R.C.S., L.R.C.P.—a son (stillborn).

MARRIAGES.

BELLAMY—MCGREGOR.—On July 30th, 1929, at the Church of St. Bartholomew the Great, W. A. Bellamy, M.R.C.S., L.R.C.P., only son of Mr. and Mrs. Bellamy, of Ealing, to Elsie, youngest daughter of the late Mr. C. M. McGregor and Mrs. McGregor, of Plumstead.
HOUFTON—LUTHEN.—On August 1st, 1929, at the Church of St. Bartholomew the Great, Herbert Ernest Houfton, M.R.C.S., L.R.C.P., to Jessica Florence Luthen.
POLLARD—POLLARD.—On July 20th, 1929, at St. Matthew's Church, Netley Marsh, Surg.-Lieut. E. B. Pollard, R.N., elder son of the late Inspector-General E. R. H. Pollard, R.N., and of Mrs. Pollard, of Bedford House, Cirencester, to Honor Lilice Wake, only child of the late Lieut.-Col. W. C. Pollard, Indian Army, and of Mrs. Pollard, of the White House, Woodlands, Hants.

DEATH.

ROBINSON.—On July 17th, 1929, at Buenos Aires, of syncope, Christian Cathcart Robinson, Surg. R.M.S. "Demerara," late Colonial Medical Service.

NOTICE.

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