POWER: *The Foundations of Medical History.*
PURVES STEWART: *The Diagnosis of Nervous Diseases.* Seventh edition.
ROLLESTON: *The Cambridge Medical School.*
ROSE and CARLESS: *Manual of Surgery.* Thirteenth edition. (Additional copy.)
SHATTOCK: *Handbook of Surgical Diagnosis.*
SHORT: *An Index of Prognosis and End-results of Treatment.* Fourth edition.
SMITH, SYDNEY: *Forensic Medicine.* Third edition.
SPENCER and CADE: *Butlin's Diseases of the Tongue.* Third edition.
STEVENS: *Diseases of Women.* New and revised edition.
TEN TEACHERS: *Midwifery.* Fourth edition.
THOMSON and MILES: *Manual of Surgery.* Eighth edition.
TODD and SANFORD: *Clinical Diagnosis by Laboratory Methods.* Seventh edition.
WOOD JONES and PORTEUS: *The Matrix of the Mind.*
WINNICOTT: *Clinical Notes on Disorders of Children.*
——— *Clinical Interpretation of Aids to Diagnosis.* Vol. ii.
WRIGHT, SAMSON: *Applied Physiology.* Fourth edition.

Collected Papers of the Mayo Clinic and the Mayo Foundation. Vol. XXII. 1930.
Index Catalogue of the Library of the Surgeon-General's Office. Third series. Vol. 9.
The Medical Annual, 1931.

ACKNOWLEDGMENTS.

The Nursing Times—The British Journal of Nursing—The Speculum—The Student—The Hospital—The Clinical Journal—The Kenya and East African Medical Journal—Bulletins et Mémoires de la Societé de Médecine de Paris—L'Écho Médical du Nord—Revue Belge des Sciences Médicales—Bulletin de l'Hôpital Saint-Michel—The Caduceus—Medical Times and Long Island Medical Journal—Guy's Hospital Gazette—Charing Cross Hospital Gazette—St. George's Hospital Gazette—The Middlesex Hospital Journal—The London Hospital Gazette.

EXAMINATIONS, ETC.

University of Cambridge.

The following Degree has been conferred:

B.Chir.—Hughes, J., Tracey, J. B.

Royal College of Physicians.

The following have been admitted *Members:*

Franklin, A. W., Landor, J. V., Whyte, A. D. S.

Royal Colleges of Physicians and Surgeons.

The following Diplomas have been conferred:

D.P.H.—Simmonds, F. A. H.
D.L.O.—Siddiqi, M. A. H.
D.P.M. Pentreath, E. U. H.

Conjoint Examination Board.

The following have completed the Examination for the Diplomas of **M.R.C.S., L.R.C.P.,** and have had the Diplomas conferred on them:

Bamford, H. C., Beal, J. H. B., Beilby, F. J., Blumovitch, H., Bowen, L., Green, L. E., Hayes, D. S., Hayward, S. T., Holdsworth, W., Jones, F. W. E., Keele, K. D., Roberts, P. G., Scott, J. L. S., Thomas, J. C. S., du Toit, G. C. T.

L.M.S.S.A.

The Diploma of the Society has been conferred on Sturgess, G. W.

CHANGES OF ADDRESS.

HENSMAN, J. S., 2, Buckingham Street, Buckingham Gate, S.W.1. (Tel. Victoria 0812.)
LEVY, A. H., 149, Harley Street, W. 1. (Tel. Welbeck 4444.)
MCCURRICH, H. J., 19, Palmeira Avenue, Hove, Sussex.
MOORE, C. F., 88, Harley Street, W. 1. (Tel. Langham 1874.)

APPOINTMENT.

HENSMAN, J. S., B.Ch.(Cantab.), M.R.C.S., L.R.C.P., appointed Honorary Anæsthetist to the Queen's Hospital for Children, Hackney.

BIRTHS.

BELL.—On February 2nd, 1932, at Sevenoaks, to Ruth (*née* Grandage) wife of William Duncan Bell—a daughter.

BLACKABY.—On January 5th, 1932, at Zomba, Nyasaland, to Beatrice Mary, wife of Dr. E. J. Blackaby—a son.

BRIGGS.—On February 6th, 1932, to Constance (*née* Clarke), wife of Dr. W. A. Briggs, 6, Minster Yard, Lincoln—a son.

MCCURRICH.—On February 23rd, 1932, at 19, Palmeira Avenue, Hove, to Bettine (*née* Ellis), the wife of H. J. McCurrich, M.S., F.R.C.S.—a son (stillborn).

ROWELL.—On February 4th, 1932, to Marie, wife of Dr. Leslie Rowell, of 10, Chapel Street, Belgrave Square, S.W.—a daughter.

WILLCOCKS.—On February 21st, 1932, at Springfield, Chelmsford to Hope, wife of Dr. Robert W. Willcocks—a daughter.

MARRIAGE.

LANGHORNE—JESSOP.—On December 18th, 1931, at St. Botolph's, Boston, Douglas Alfred Langhorne, of Creekside, Bosham, Chichester, to Yvonne Valetta Jessop, younger daughter of the late Mr. and Mrs. Sidney Jessop, of Hathersage.

DEATHS.

ANDREWES.—On February 24th, 1932, at Windy Gap, Merton Lane, Highgate, Sir Frederick William Andrewes, M.D., F.R.S., aged 72.

STIRLING-HAMILTON.—On February 4th, 1932, at Horsham, John Stirling-Hamilton, M.B.E., M.B., B.C.(Cantab.), of Grove Lodge, Ingatestone, Essex, younger son of the late Gen. Sir William Stirling-Hamilton, Bart., R.A.

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: National 4444.*

St. Bartholomew's Hospital Journal.

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

VOL. XXXIX.—No. 7.] APRIL 1ST, 1932. PRICE NINEPENCE.

CALENDAR.

Fri., April 1.—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Sat., ,, 2.—Rugby match *v.* Pontypool. Away.
Tues., ,, 5.—Dr. Gow and Mr. Girling Ball on duty.
Fri., ,, 8.—Prof. Fraser and Prof. Gask on duty.
Sat., ,, 9.—Rugby match *v.* Plymouth Albion. Away.
Mon., ,, 11.—Rugby match *v.* Redruth. Away.
Tues., ,, 12.—Sir Percival Hartley and Mr. L. Bathe Rawling on duty.
Rugby match *v.* St. Ives. Away.
Thurs., ,, 14.—**Abernethian Society: Summer Sessional Address by Prof. Hugh Cabot, at 8.30 p.m.**
Fri., ,, 15.—Sir Thomas Horder and Sir Charles Gordon-Watson on duty.
Tues., ,, 19.—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Last date for receiving matter for the May issue of the Journal.
Fri., ,, 22.—Dr. Gow and Mr. Girling Ball on duty.
Mon., ,, 25.—Special subjects: Clinical Lecture by Mr. Bedford Russell.
Tues., ,, 26.—Prof. Fraser and Prof. Gask on duty.
Wed., ,, 27.—Surgery: Clinical Lecture by Mr. Girling Ball.
Fri., ,, 29.—Sir Percival Hartley and Mr. L. Bathe Rawling on duty.
Sat., ,, 30.—Cricket match *v.* Southgate. Home.

EDITORIAL.

THE much-vexed Out-patient question in the voluntary hospitals of London is again coming into prominence. Several months ago a committee was appointed under the auspices of King Edward's Hospital Fund to inquire into the matter, and we understand that a similar effort is being made on the part of the Hospital Saving Association, with their "Out-patient Committee, 1932."

Our contributor, who writes "On Chronics" in this issue, deals with the question of the suitability of the patients who present themselves for treatment. Everyone who works in the Surgery or in the Out-patient Departments will heartily endorse his sentiments. It seems that if these haphazard conditions are allowed to continue, it will become more and more difficult to give prompt attention to those out-patients who really need it, and whose time is valuable to them. Overcrowding must lead to delay. There is no doubt that we treat many Out-patients who, on medical grounds, do not require our services. These patients cannot be regarded as a serious financial loss, assuming that they pay their sixpence at the "gate," since medicines of the "penny-a-pint" variety are just as effective, or ineffective, as the more expensive drugs. Their presence is a serious drain on the House Physician's energy, and their large numbers swamp those whose claims to attention are genuine and urgent.

It is becoming increasingly clear that we should aim at restricting the use of the Out-patient Departments as much as possible to emergencies and to those requiring consultants' opinions or special treatment. General practitioners should receive their patients back again when the opinion has been given or the treatment completed. We shall look forward with interest to the reports of these committees.

* * *

We learn that Prof. Hugh Cabot has confirmed his promise to speak to the Abernethian Society on Thursday, April 14th, at 8.30 p.m. The title of his address will be "Hunting with a Movie Camera in Northern British Columbia." Some interesting films of animals will be shown, chiefly moose, seen while hunting with a camera rather than with a rifle. Prof. Cabot will lecture on "The Present Position of Prostatic Surgery" to the Medical College on Monday, April 18th, at 12.45 p.m., and will also give a lecture on "Nephrostomy in Theory and Practice" at the Section of Urology, Royal Society of Medicine, on Thursday, April 21st.

ST. BARTHOLOMEW'S HOSPITAL WOMEN'S GUILD.

We are asked to draw the attention of readers to the Fair which is to be held at the same time as the Jumble Sale on May 23rd, 24th and 25th, in President Ward, opposite Sandhurst Ward, where the sale is to be held. There will be a Tombola, a Canteen where refreshments can be obtained, a Produce Stall, a Fancy Stall, Games at which to try your skill, such as Darts, Bull Board, Corinthian Bagatelle, and many others. Valuable prizes will be given. Admission will be free, but there will be ample opportunities to spend money when inside. The Women's Guild are hoping for a large contingent of Bart.'s men and nurses with their friends and relations.

* * *

POST-GRADUATE COURSE.

A Post-Graduate Course will be held on Friday, June 24th, and Saturday, June 25th, 1932. The course will include the following:

(1) "Recent Advances in Endocrinology," Dr. Langdon Brown.

(2) "Treatment of Septicæmia and Allied Conditions," Sir Thomas Horder.

(3) "Treatment of Epilepsy," Dr. Hinds Howell.

(4) "Treatment and Control of Diabetes," Dr. G. Graham.

(5) "Demonstration of Skin Conditions which could be treated by Light Therapy," Dr. Roxburgh.

(6) "Medical and Surgical Treatment of Gastric Ulcer," Prof. Fraser and Mr. Hume.

(7) "Treatment of Antrum and Sinus Infections," Mr. Capps.

(8) "Fractures of the Hand and Wrist," Mr. Higgs.

(9) "The Value of Certain New Sera and Vaccines," Dr. Garrod.

(10) "Bronchoscopy," Mr. Nelson.

A detailed programme will be sent out with the May number of the JOURNAL.

* * *

TENTH DECENNIAL CLUB.

The Annual Dinner of the Tenth Decennial Club will be held on Friday, May 6th, 1932, at the Mayfair Hotel (Berkeley Street entrance). Mr. Reginald M. Vick will be in the Chair. The usual notices will be sent out shortly.

* * *

We regret to announce the death, on March 16th last, of Sir William Robert Smith, at the age of 82, a distinguished Bart.'s man, and also a barrister of the Middle Temple. He was Emeritus Professor of Forensic Medicine at King's College, Sheriff of London 1918–19, sometime Mayor of Holborn, and only a month before his death was nominated by the Court of Common Council to serve as its representative on the House Committee at St. Bartholomew's Hospital. Sir William Smith's work on school hygiene and in the provision of special schools for feeble-minded children is well known.

* * *

The following gentlemen have been nominated to House Appointments from May 1st, 1932:

Junior House Physicians—	
Sir Percival Hartley	Fraser, A. C.
Prof. F. R. Fraser	Harris, C. H. S.
Sir Thomas Horder, Bart.	Marshall, R. M.
Dr. Hinds Howell	Lane, C. R. T.
Dr. A. E. Gow	Buckland, H. S.
Junior House Surgeons—	
Mr. L. Bathe Rawling	Dell, W. D.
Prof. G. E. Gask	Briggs, G. D. S.
Sir C. Gordon Watson	Blair, A. T.
Mr. Harold Wilson	Beal, J. H. B.
Mr. Girling Ball	McCavin, D.
Intern Midwifery Assistant (Resident)	Vartan, C. K.
Intern Midwifery Assistant (Non-Resident)	Baxter, W. S.
Extern Midwifery Assistant	Taylor, J. T. C.* / Beilby, F. J.†
H.S. to Throat and Ear Department	Knight, G. C.
H.S. to Ophthalmic Department	Dean, D. M.
H.S. to Skin and Venereal Departments (Non-Resident)	Cusack, M. L.* / Great Rex, J. B.†
H.S. to Orthopædic Department	Coltart, W. D.
H.P. to Children's Department	Wynne Thomas, G.
Senior Resident Anæsthetist	Rait-Smith, R.‡
Junior Resident Anæsthetists	Scott, J. Duff. / Sykes, R. A.
Non-Resident Anæsthetist	Green, H. F.
Casualty House Physicians	Green, L. E.* / Langford, A. W.* / Tracey, J. B.* / Burrows, T. E.† / Keele, K. D.†
Casualty House Surgeons	Jenkyn Thomas, J. E.* / Langston, H. H.†

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

EXAMINATION HOWLERS.

II.

LEAVING NOTHING TO CHANCE.

Q.: "Anthrax (Woolsorters' disease) . . . and its preventive treatment."

A.: "All infected animals must be burnt or buried alive; and the woolsorter must be boiled."

OBITUARY.

SIR FREDERICK ANDREWES.

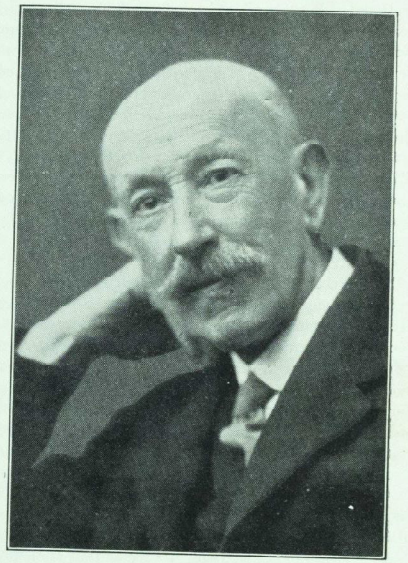
FIFTY years have passed since Sir Frederick Andrewes entered as a student at our Hospital, and throughout those years his has been a prominent figure in the life of the place; first as a student of outstanding promise, popular with all, and afterwards as a teacher of medicine, and later of pathology to generations of Bart.'s students, and a valued friend of many colleagues. His duties as Pathologist and Sanitary Officer brought him into close contact with all the various departments of the Hospital, and his genial presence was always welcome whether in the lecture room, laboratory or wards, and not least at the round table in the luncheon room. Even in the years that followed his retirement from the Professorship of Pathology his was still a familiar figure in the Hospital, for he carried on his research work in the department of which he had so long been the head, until compelled by ill-health to lay it aside.

Frederick William Andrewes, who was born on March 31st, 1859, was the eldest of four sons of C. J. Andrewes, J.P., and sometime Mayor of Reading, and of his second wife, born Charlotte Parsons. He was educated at Oakley House School, Reading, where he had as schoolfellows several men who attained to distinction, including Owen Seaman, E. B. Poulton, W. F. R. Weldon and Seth Smith. There he received a classical training, the effects of which were reflected in his wide outlook and his admirable literary style.

In 1879 he obtained a scholarship, at that time called a Junior Studentship at Christ Church, Oxford. Even in those early days his unusual ability was patent to his teachers and to his fellow-undergraduates alike. Amongst his teachers were Rolleston and Hatchett Jackson. In 1881 he was placed in the first class in the Honour School of Natural Science, taking biology as his subject, and had the distinction of being alone in the first class. In 1883 he obtained the Burdett Coutts University Scholarship in Geology, and was elected to the Sheppard Fellowship at Pembroke College, the holder of which has either to be called to the bar, or to proceed to the D.M. degree.

Meanwhile he had gained the Open Entrance Scholarship at this Hospital. He was a President of the Abernethian Society and, having qualified as M.R.C.S. in 1887 and taken the B.M. of Oxford, he became House Physician to Dr. James Andrew. The latter, who had taken a classical degree at Oxford and had been a Fellow of Wadham College, was a very sound physician of the old school and a good teacher. He and his House Physician must have had many interests in common. Andrewes next followed the example of several men from our Hospital and spent some time in Vienna, where good opportunities were afforded of obtaining practical knowledge of the use of the ophthalmoscope, otoscope, and especially of the laryngoscope, then only beginning to come into use in this country.

On his return he embarked upon the career of a consulting physician. He was Casualty Physician at



St. Bartholomew's, became Assistant Physician and Pathologist to the Royal Free Hospital, and his feet were firmly planted upon the ladder, then much crowded by other aspirants, to places on the Staff of this Hospital. None of his contemporaries doubted that he would attain his aim, and his friends predicted for him a distinguished medical career. Indeed he remained through life an excellent clinical observer, never lost his interest in things clinical, and exercised a most beneficial influence in maintaining the bonds between the laboratory and the ward. It is characteristic of him that he retained this touch with clinical medicine to the last, and that he converted the occasion of an attack of aphasia into a valuable contribution to clinical literature.

He became a Member of the Royal College of Physicians in 1889, and in 1895 was elected a Fellow of that College.

During these years he had become interested in the comparatively new, but rapidly advancing science of bacteriology, and had a practical training in that subject under Dr. Klein in his laboratory at the College of State Medicine.

When, in 1897, A. A. Kanthack, who had started in this Hospital the first laboratory of clinical pathology established in any London medical school, became Professor of Pathology at Cambridge, Andrewes seemed clearly indicated as the most suitable successor here, and decided to abandon clinical medicine and to devote himself to pathology. The decision can have been no easy one, for there is no reason to think that the life of a physician was otherwise than congenial to him, and in those days the outlook for one who devoted himself to pathological science was less promising than nowadays as a means of earning a competence. Moreover, Kanthack, a man with hormonic qualities, whose promise of a brilliant career was cut short by his early death, was not one whom it was easy to succeed.

When, in April, 1897, Sir Frederick Andrewes succeeded to the post of Lecturer on Pathology and Pathologist to the Hospital, Dr. J. H. Drysdale was already Demonstrator, and his services and personality were of the greatest value in bringing the services of the Pathological Laboratory into general use by the wards. The story of the evolution of pathology at St. Bartholomew's has never been described completely, but valuable contributions have been made by Sir F. S. Eve in an account of the Museum in vol. xvi of the *Reports*, and by Sir Frederick Andrewes himself in vol. xxxii (1898), and also in a recent address to the Abernethian Society published in this Journal, vol. xxxv, Nos. 7 and 8, April and May, 1928. It seems that for many years pathology meant morbid anatomy pure and simple. Although the Museum was actually founded so long ago as 1726, the great work and influence of Paget was no doubt largely responsible for the fact that as regards the general study and teaching of morbid anatomy, this Hospital was in the van of progress during the last thirty years of the nineteenth century. From the standpoint of its naked-eye aspects Sir Frederick did not believe that morbid anatomy was more attentively or better studied in 1898 than twenty or thirty years before—perhaps even less so. He goes on to say: "The pathologist of other days could, for example, recognize his tubercle by eye and touch alone; he cultivated those powers to the utmost, and was not often wrong, but to-day (1898) he can supplement them by histological study and the demonstration of the tubercle bacillus, or even by inoculation experiments. His conclusions may attain practical certainty; instead of one crude mode of diagnosis he has several. It has been feared by some that naked-eye pathology may thus come to be undervalued; but I do not think this is the case at St. Bartholomew's. It is true that in the teaching of it and in the permanent specimens which illustrate it in our Museum very important progress has been made."

He then proceeds to trace the development of microscopical pathology in the Hospital from the time of Paget, through that of Morrant Baker, Eve, Norman Moore and Bowlby. Gradually the methods and results improved. Bacteriology was growing up; Dr. Klein, the Hospital Lecturer on Physiology, took it up, and his book, *Micro-organisms and Disease*, was the first book on bacteriology to be published in any language. In 1893, Kanthack, who had worked under Virchow and Koch, was appointed Lecturer on Pathology—a whole-time appointment. Kanthack inaugurated clinical pathology as a voluntary service, and this was recognized in 1895 by the Governors, who appointed him to be the first Pathologist to the Hospital. In April, 1897, when Andrewes succeeded him he found the Department well organized and in good working order. A Demonstrator of Pathology and two Assistant Demonstrators were appointed, and the paper concludes with a review of the work of the Department. The training of students in pathological methods was regarded by him as of no less importance than the work for the patients in the wards, and the principle that all the pathological investigations that could readily be done on the spot should be done in the wards by the clerks or dressers was also stressed.

These principles, laid down by Sir Frederick in 1898, were kept in mind by him throughout the following thirty years that he presided over the Pathological Department, and exercised the chief influence on the direction of its growth. To-day, while morbid anatomy and histology are cultivated as fully as before, bacteriology, hæmatology and chemical pathology are receiving more attention than thirty years ago, and, as becomes a building erected by the Governors "for the elucidation of problems in the nature and treatment of disease" (as the inscription on the Foundation Stone of the Pathological Block records), far more research work is going on than in 1898. That the Department has reached its high state of usefulness both to the Hospital and School, and also to medical science in general, is due chiefly to the wise direction of Sir Frederick Andrewes, and to those who assisted him in the various stages of its development.

In 1912 the Lecturership in Pathology was raised by the University of London to the dignity of a Professorship.

Sir Frederick was one of the ablest lecturers in the country, and whatever the subject, was uniformly successful. He was a born narrator, who marshalled his facts with a natural charm and simplicity, and with the ease and precision of a master, and he possessed the rare gift of a delicate sense of humour. However dull the subject and gloomy the audience, those who knew him well would be on the look-out for that almost imperceptible twinkle in his eye that presaged a sally, and they were seldom disappointed. This humour found vent in his "Romance of the Streptococci," an anonymous and delightful parody of his own Dobell Lectures at the Royal College of Physicians. The sense of humour was with him to the end, for it is reported that during his visit to the States last year, a Middle-West American child, on hearing that he was a knight, expressed disappointment that he was not equipped with sword and armour. He remarked that he had left them at home on the piano—a reply that might have done credit to his old schoolfellow, who became not only a knight, but editor of *Punch* as well.

Sir Frederick Andrewes was continuously engaged in research work throughout the whole of his career subsequent to qualification. He made some valuable contributions to knowledge.

His study of the histological changes occurring in lymphadenoma was presented to the Pathological Society of London in 1902, and has served in this country ever since as a sound and accurate description of the chief features distinguishing that condition microscopically. His study of arterial degeneration, published by the Local Government Board as a special report in 1912, was likewise a contribution of great value. His work as Sanitary Officer to the Hospital for over thirty years gave him a wide experience of epidemics, and his reports of some of these, in the special book on which they are recorded for the information of the Governors, are a mine of information. He was one of the earliest to grasp the value of bacteriology for the control of infectious disease, and at one time he devoted special attention to disinfection. His little book on *Disinfection and Sterilization* is a model of clarity, and full of practical information; he was one of the first to draw attention (with Dr. K. J. P. Orton) to the high disinfectant value of hypochlorous acid. He also carried out a number of experiments on the bacteriology of the air of sewers, and showed that under certain conditions droplets of sewage can be detected in the air of sewers—a point that had been minimized, or even denied before his work and that of Horrocks on the same subject. He was among the earliest to employ systematic swabbing for the purpose of detecting diphtheria carriers and for the control of epidemics. He also, in collaboration with Sir Thomas Horder, made a special study of streptococci, and classified them into three groups at a time when much confusion prevailed with regard to them. He returned to the streptococci later, and was studying the streptococcus group by serological methods at the time of his final illness.

Sir Frederick did valuable work also in his serological study of organisms of the dysentery and salmonella groups, and in other branches of bacteriology. For his services to research he was elected a Fellow of the Royal Society in 1915, and later became a member of the Council of the Society.

He contributed numerous articles to the medical press, and wrote the article on the "General Pathology of New Growths" and the "General Pathology of Peritonitis" in the second edition of Clifford Allbutt's *System of Medicine*. He also collaborated with Sir Anthony Bowlby in his well-known book on Surgical Pathology.

At the Royal College of Physicians, besides the Dobell Lectures in 1906, he gave the Croonian Lectures in 1910, and was Harveian Orator in 1920. He served on numerous committees appointed by Government departments and other public bodies, and was a member of the Medical Research Council. For his services to the War Office and the Medical Research Council during the war he was awarded the O.B.E., and received the honour of knighthood. In 1924 the University of Durham conferred on him the honorary degree of D.C.L.

Andrewes's interests were far wider than the subjects of his life's work. They extended to all branches of science and to all living things. For many years he was an active collector of butterflies and moths. When he left Welbeck Street and went to live in Highgate, he started a rock garden which became one of his chief delights. When he moved house the rockery moved with him to his new garden. From year to year he acquired new treasures, some brought back by himself or friends from mountain holidays, and others by exchange with other collectors. He enjoyed a holiday amongst the mountains, and as late as in 1927 he climbed the great gable in the Lake District. North Wales was one of his favourite holiday resorts.

In his latter years he was much interested in architecture and in visiting cathedrals and churches, and after a visit to Holland, some ten years ago, as an exchange lecturer, he acquired a keen interest in Dutch art. Music, and especially sacred music, was a source of much enjoyment to him from his undergraduate days onward.

A man with so many interests could never find life tedious, even when cut off from his wonted activities by failing health. The illness which eventually proved fatal was borne with that fortitude and good humour which endeared him to all who knew him best, and gained for him the esteem and goodwill of all who crossed his path in life.

His last contribution to medical literature, which appeared in this JOURNAL in October last, was a description of his own experiences during a period of aphasia, written in his own characteristic style, and entitled to rank as a classic of clinical medicine.

He married Phyllis Mary, daughter of Mr. John Hamer, J.P., and leaves a son and daughter. His son, Dr. C. H. Andrewes, is well known to Bart.'s men, and is a member of the Scientific Staff of the National Institute for Medical Research.

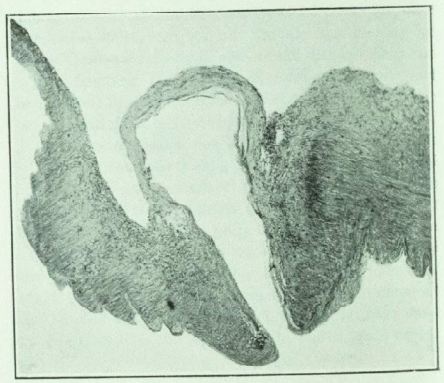
SOME NOTES ON CEREBRAL ANEURYSMS.

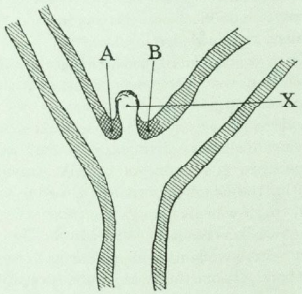
ALTHOUGH aneurysms of the cerebral arteries were first described by Biumi (1) in 1765, it is only comparatively recently that we are becoming more familiar with the various manifestations to which they may give rise. So much is the popularity of this diagnosis growing that there is now some danger of its being made in cases in which, at the best, it must be highly speculative. On the other hand, in some instances it can be made with certainty.

Like any other aneurysm, one which affects a cerebral artery is due to weakening of the arterial wall. There are a number of possible causes of such weakening, and these may be divided into two main groups: (1) congenital; (2) acquired.

In connection with the second group one recognizes the following immediate causes: (*a*) Trauma; (*b*) inflammation, either from within the artery or from without; (*c*) granulomatous infiltration; (*d*) degenerative changes in the arterial wall; (*e*) lack of mechanical support, probably combined with one of the preceding causes.

So far as cerebral aneurysms are concerned, congenital weakness of the arterial wall is one of the most common causes. Aneurysms due to this factor are found at the bifurcation of a vessel, or where a lateral branch leaves the artery. Many such aneurysms or potential aneurysms are microscopic in size. Dr. Greenfield, at the National Hospital, Queen Square, has shown that the muscular coat may be very much thinned at the point of bifurcation, and in some instances interrupted altogether, the gap being filled by connective tissue. He has very kindly allowed me to reproduce the accompanying micro-photograph of such an aneurysm, which illustrates the point I am making very well.





EXPLANATORY DIAGRAM OF MICRO-PHOTOGRAPH. X, ANEURYSM FORMING AT BIFURCATION OF ARTERY. NOTE INTERRUPTION OF MUSCULAR COAT AT A AND B.

With regard to acquired causes, trauma is a rare factor in the production of cerebral aneurysm. An extremely instructive case of traumatic aneurysm of the internal carotid artery in its intracranial portion has been recorded by J. L. Birley (2). It is interesting to us in this Hospital to note that Sir William Church (3) first drew attention to embolic aneurysm of cerebral arteries in the course of ulcerative endocarditis so long ago as 1870, when he published an account of six cases in the *Hospital Reports*.

Syphilis, so common a cause of aneurysm elsewhere, particularly in the aorta, is not generally regarded as a common cause of cerebral aneurysm, but when operative it usually affects the basilar artery. Arterial degeneration, with a high blood-pressure, is the cause of a certain number of cases.

Cerebral aneurysms are situated almost entirely on the vessels at the base of the brain. They are very rare on any intra-cerebral branch. I have seen a minute aneurysm which projected into the descending horn of the lateral ventricle through its outer wall. It had ruptured some days previously, and had produced the physical signs of ventricular hæmorrhage. The frequency with which the various branches of the circle of Willis are effected varies in different series of recorded cases, but probably the middle cerebral, anterior cerebral and basilar arteries are more liable to become the seat of aneurysm formation than are the other basal arteries.

Many cerebral aneurysms are quite minute—a fact which explains the difficulty often experienced in finding a ruptured aneurysm in some cases of subarachnoid hæmorrhage. Commonly the size of a pea or a hazel-nut, much larger aneurysms are sometimes met with. In 44 cases recorded by Fearnsides (4) the largest was 30 mm. in diameter—*i. e.* rather more than 1 in. Aneurysms occasionally attain a large size. The largest that I have been able to trace is mentioned by Beadles (7), and is said to have measured 2 in. by 2⅜ in.

The sex incidence of intracranial aneurysms varies in different series reported, and probably is very similar in the two sexes. The age at which symptoms occur is also very variable, being met with in children, though this is rare, and also in quite old people.

In most cases it is impossible to say for how long an aneurysm has existed. Many of them never give rise to symptoms at all, or at any rate none that can be definitely assigned to an aneurysm. In others there may be signs and symptoms pointing to a cerebral tumour for some years before death, whilst in a large number the presence of an aneurysm is only suspected when a subarachnoid hæmorrhage occurs.

A case is reported by Souques (5) of an unfortunate individual who had presented symptoms of cerebral tumour for fifty-five years before committing suicide at the age of 65, but, as Max Schmidt remarks in his article on intra-cranial aneurysms, "This is rather an exceptional case."

In another instance recorded by Schmidt himself symptoms had existed for thirty-two years.

SYMPTOMATOLOGY.

The consideration of this question falls into two periods: first the period preceding leakage or rupture of the aneurysm; and secondly the symptoms presented as the result of leakage or rupture.

During what may be described as the quiescent period of its existence an aneurysm may give rise to no symptoms whatever. Some, but relatively few, have given rise to symptoms of increased intracranial pressure, thus simulating cerebral tumours. In other cases the symptoms complained of are such as might be produced in other ways, and the possibility of a cerebral aneurysm being present may not even be considered.

In a case of malignant endocarditis which suddenly developed complete blindness in one eye, Mr. Foster Moore (6) made the diagnosis of rupture of the optic nerve due to an embolic aneurysm, the truth of which was confirmed at autopsy some few weeks later. Without in any way detracting from this brilliant diagnosis, one may fairly say that the diagnosis of aneurysm is perhaps easiest in those cases, such as the one referred to, where septic emboli are to be expected. Variability in the intensity of symptoms might suggest the possibility of an aneurysm. I have had under my care in Hope Ward quite recently a man, æt. 50, who had complained of pain behind his right eye for some weeks. A month before admission he had developed diplopia, and soon after there was obvious paresis of the third cranial nerve. He had no other physical signs. The Wassermann reaction was negative in blood and cerebro-spinal fluid; X-ray examination was negative. His systolic blood-pressure was 230 mm. Hg. During his stay in hospital with no other treatment than rest, these symptoms passed off. It seems possible, though the diagnosis must be purely speculative, that this man may have an aneurysm, perhaps of the internal carotid in its path through the cavernous sinus. Should such an aneurysm leak, the result is very striking, for there develops the remarkable picture of pulsating exophthalmos.

I think that some cases of paroxysmal unilateral headache, which are more than likely to be regarded as migraine, may in fact be due to aneurysm. A particular variety, known as "migraine ophthalmoplegique" by the French, in which some degree of oculomotor palsy accompanies the hemicrania, is in some cases, I feel sure, due to aneurysm. Vertiginous attacks and epileptiform attacks may be sometimes manifestations of aneurysm.

One of the physical signs which you are told to expect in cases of intracranial aneurysm—namely a bruit within the skull—is practically never to be heard with a true aneurysm (7). It is usually present in the case of an arterio-venous aneurysm, and such a bruit was

clearly audible in Birley's case of traumatic aneurysm of the internal carotid in the cavernous sinus.

Where the presence of an aneurysm is suspected, X-ray examination will sometimes confirm the diagnosis. Albl has described the appearance which an aneurysm with a calcified or partially calcified sac will present. This takes the form either of a complete ring, or of two or more crescentic or partial rings; these "Albl rings" are more likely to be found accidentally than otherwise.

The symptoms caused by leakage or rupture of an intracranial aneurysm are those due as a rule to subarachnoid hæmorrhage—for it is into the subarachnoid space that the leak or rupture commonly occurs. More rarely the rupture may be into the cerebral tissues, and sometimes into a ventricle.

Subarachnoid hæmorrhages may, and do, occur in a number of different conditions, such as the leukæmias, in purpura, septicæmia and so on. But when a spontaneous subarachnoid hæmorrhage occurs in an apparently healthy individual, it is almost certainly due to a leaking or ruptured aneurysm.

One of the most constant symptoms associated with such a leak is intense pain in the head. The patient, who may or may not become immediately unconscious, calls out with pain. The exclamation, "Oh my head!" succeeded by loss of consciousness, with or without convulsion, is almost pathognomonic of an aneurysmal rupture. Papillœdema may develop, and so may hæmorrhages into the retina and around the disc.

The onset of the symptoms is not always so dramatic and fulminating. With a leaking aneurysm the symptoms and physical signs may simulate meningitis very closely. Intense headache, which is always present, vomiting, rigidity of the neck, Kernig's sign, and possibly some ocular palsies, make a most suggestive picture of meningitis. It is quite natural that this should be so, as the symptoms and physical signs are due to meningeal irritation.

Lumbar puncture, which should be done as a routine in the examination of all cases of disease of the nervous system, will almost invariably make the diagnosis clear.

If the fluid is obtained shortly after the onset of symptoms it will be found uniformly blood-stained. It is quite easy to differentiate between a subarachnoid hæmorrhage and blood from a traumatic puncture, as in the latter case the blood is not intimately mixed with the fluid, but diminishes in quantity as the flow continues. After a few days the cerebro-spinal fluid becomes straw-coloured, and remains so for a variable period.

In rare cases of subarachnoid hæmorrhage it is stated that the blood may get shut off, and the cerebro-spinal fluid obtained by puncture will then be clear. I have never to my knowledge seen such a case.

Important urinary changes occur in connection with subarachnoid hæmorrhage, and unless a lumbar puncture is done, may cause errors in diagnosis.

A massive albuminuria is one such finding, and in other cases glycosuria and acetone may occur. A case of the latter type has recently been under my care in Annie Zunz Ward. The patient was admitted in a semicomatose condition, without any very definite history. Sugar and acetone were found in the urine, and she was treated as a case of diabetes with intravenous glucose and insulin. However, vomiting, intense pain in the head and pain with rigidity in the neck suggested the correct diagnosis, which was confirmed by lumbar puncture.

A case under my care some years ago at the Royal Northern Hospital suggested a cerebral tumour. A girl, æt. 19, had for some time past been complaining of headaches. She suddenly collapsed whilst telephoning and was brought to the Hospital. She had a right-sided hemiplegia, and papillœdema in both eyes. Unfortunately I did not do a lumbar puncture, but made a diagnosis of cerebral tumour with a hæmorrhage therein, and had a left-sided decompression operation done. The convolutions were found flattened, but there was no sign of tumour visible. After the operation the girl made a rapid recovery, and in a month's time there was no hemiplegia, the papillœdema had subsided, and the cranial defect showed no sign of any pressure. She was to leave hospital the next day, when she suddenly became unconscious, the operation area became quite tense and bulging, and within an hour or so she died. The autopsy revealed the presence of an aneurysm in the anterior communicating artery which had ruptured. The first symptoms were no doubt due to a similar hæmorrhage.

Recurrent attacks of bleeding are by no means uncommon, and the patient may survive several.

A woman was recently in Annie Zunz Ward dangerously ill with the classical picture of leaking aneurysm, confirmed by lumbar puncture. She was improving and the pain in her head becoming less severe, when one day she was found to have developed a complete palsy of the right third nerve. The next day she had another severe hæmorrhage, but eventually recovered and left the Hospital. Seen two months later she was keeping well and the third nerve palsy was less complete.

The treatment of these cases at present consists in keeping the patient during the recent condition at rest with morphia, and reducing the intra-cranial pressure by lumbar puncture and by intravenous glucose. Enemas of magnesium sulphate may also prove useful. These measures serve to relieve the headache, and theoretically to minimize the risk of recurrent hæmorrhage by reducing the intra-cranial pressure.

The diet is liquid, and only as much given as may be necessary to relieve thirst. It may be possible, as time goes on, that surgical treatment and ligature of the affected vessel may become practical politics, but at present this method can only be applied when the aneurysm affects the internal carotid and the signs of its doing so are definite, such signs being due to pressure on the cranial nerves passing through the walls of the cavernous sinus.

The prognosis in any case must be very grave. But many patients survive, not only one leak, but many, and there is always the chance that the sac of the aneurysm may become filled with laminated clot, and that it may ultimately calcify.

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C. M. HINDS HOWELL.

THE MUNICIPAL HOSPITAL SERVICE.

IF work so hard and contentedly at Bart.'s that some things that are happening in London escape our notice or, at least, they attract less of our attention than they deserve. Yet everyone should read the recently published Volume IV (Part I) of the Annual Report of the London County Council, 1930, which deals with public health (general and special hospitals). There, in a condensed statement of facts covering 207 pages, and including 80 pages of statistical tables, is a record of the present task of the Central Public Health Committee of the London County Council.

In his preface to this volume, Sir Frederick Menzies gives some idea of the work which his Committee has undertaken:

"Between the closing of office hours on the evening of 31st March and the morning of 1st April, 1930, no fewer than 76 Hospitals and Institutions, containing over 42,000 beds and a staff of nearly 20,000, were transferred to the public health department of the London County Council. Prior to that date they had been administered by the late Metropolitan Asylums Board and the 25 Metropolitan Boards of Guardians, and thereafter they constituted one great hospital service under central direction and control."

This change in hospital administration in the County of London was determined by the Local Government Act, 1929. It marks an epoch not only in the Public Health Department, but also in the whole medical service of London. As time goes on it will fundamentally affect both the voluntary hospitals and the profession of medicine. The change-over was effected so smoothly and perfectly that no one would ever have known, unless they had been told so, that this great change had taken place, and this in spite of the fact that on the morning of April 1st, 1930, all the patients and staff were fed by a new authority; arrangements for the admission and care of the sick were uninterrupted, and all wages falling due at the appropriate date were paid. It must be placed on record that this was a remarkable achievement.

For those of us who are impressed by the importance and the traditions of the voluntary hospital service in London, with its 14,000 beds, it is stimulating to think of a municipal hospital service with more than 42,000 beds, controlled by a highly efficient organization, the London County Council.

The administrative control of most of the hospitals transferred under the Act, and the general medical services in the County of London, have been entrusted to the Central Public Health Committee of the Council. This committee took over fever hospitals, sanatoria for tuberculous patients, and hospitals for children and surgical tuberculosis from the Metropolitan Asylums Board. It took over 29 hospitals containing 18,074 beds previously administered by the 25 Metropolitan Boards of Guardians, together with one children's hospital and 12 infirmaries. The latter have now been allocated for use as hospitals. For the time being they are chiefly occupied by chronic sick and contain a proportion of able-bodied inmates. The committee has acquired Queen Mary's Hospital, Sidcup, mainly as a convalescent home (500 beds) for men.

In addition to the medical and surgical work provided by so large a number of beds for the treatment of acute and chronic sick in general hospitals, the variety of work done in the Council's hospitals is shown by the number of special hospitals under its control. The large fever hospitals are well known to all of us, for instruction in fevers has been provided in them for medical students since the Poor Law Act, 1889. It has been possible to reduce the accommodation for smallpox in recent years,

and Long Reach Hospital, with 250 beds, was rebuilt in 1928 as a permanent hospital for smallpox cases. The hospitals and sanatoria of the Council's medical tuberculosis service contain 1389 beds. There is also a small hospital for the treatment of women and girls suffering from venereal disease. A scheme is in progress for equipping 4 male and 4 female units with a total of 122 male and 89 female beds for the treatment of venereal disease. A hospital of 125 beds at Winchmore Hill was established in 1925 for the treatment of patients suffering from the effects of sleepy sickness.

The care of children forms a most important part of the Council's work taken over from the M.A.B. Special provision is made for children suffering from ophthalmia and other contagious diseases of the eye (also interstitial and phlyctenular keratitis), children suffering from contagious diseases of the skin and scalp, mentally deficient children, and children requiring convalescent treatment. At Queen Mary's Hospital, Carshalton (1312 beds), children suffering from rheumatic fever, orthopædic disease, non-pulmonary tuberculosis and certain other diseases are treated.

The provision of maternity and child welfare services is limited by the fact that the City Corporation and the Metropolitan Borough Councils are the authorities responsible for the administration of the Act of 1918. The Council has, nevertheless, a few maternity beds set apart in its general hospitals, and a fully equipped maternity block with 36 beds and 3 labour wards at St. Andrew's, Poplar. Ante-natal clinics have been established at each of the Council's hospitals, except in the case of one hospital where the patients attend the borough clinics. The expansion of this service has been postponed for fuller consideration at a later date. At Edmonton and Brentwood the Council has two large colonies for epileptics, the former containing 342 beds, and the latter 488. 125 patients are maintained in voluntary epileptic colonies. The accommodation for and classification of mental patients, has been affected by the Mental Treatment Act, 1930, and certain rearrangements are being made in consequence of this Act. There are observation wards in 11 of the Council's hospitals. As far as accommodation allows, senile dements are transferred to the care of the Mental Hospitals Committee

The auxiliary medical services include pathological laboratories, X-ray units, and a large ambulance service. The northern and southern group laboratories and the Belmont laboratories were taken over from the late Metropolitan Asylums Board. In addition to specialized and routine pathological work, these laboratories supply culture media, stains and certain stock vaccines to all institutions under the control of the Central Public Health Committee. Diphtheria antitoxin is supplied by the Belmont laboratories. The quantity issued amounts to an average daily output of 1 million units of concentrated antitoxin. The pathological units are being considerably extended to provide for the growing needs of the municipal hospital service by the equipment of five "group" laboratories at the Lambeth, Archway, Lewisham, Mile End, and St. Mary Abbot's Hospitals, and by the provision of simpler laboratories for routine tests at other hospitals.

Readers of the JOURNAL will be chiefly interested in the medical service at the Council's hospitals. It is the policy of the Council to provide a whole time medical service, and to maintain a permanent staff at every hospital.

The junior appointments are those of House Physician and House Surgeon (resident), and part-time Clinical Assistants (non-resident). The appointments are for six months to qualified medical practitioners, without their necessarily having had previous hospital experience. The period of engagement may be extended for further periods of six months up to a maximum of two years, provided that not more than twelve months are spent in one hospital.

Assistant medical officers come next in seniority. These appointments are made to qualified medical practitioners of at least one year's standing in their profession, who have held a residential post for at least six months in a general hospital. Though general hospital experience is desirable, lack of it does not necessarily debar an otherwise suitable candidate from appointment at a special hospital. Engagements are limited to four years, unless the officer's name is on the "promotion" list at the end of that time. Appointments are terminable at any time within the four years by a month's notice on either side. The first year's service is on probation.

Senior assistant medical officers: Preference is given to medical officers holding higher medical qualifications, M.R.C.P. or M.D. in the case of physicians, F.R.C.S. or M.S. in the case of surgeons, and in the case of "obstetric" officers to those holding a higher qualification, together with special experience in obstetrical work, preferably by having held an obstetrical post. Senior assistant medical officers acting as deputy medical superintendents at hospitals of 600 beds and under (except at the smallest hospitals) are graded Grade I officers.

Deputy medical superintendents will be employed as a rule only at hospitals of over 600 beds, Grade I deputies being employed at hospitals of over 750 beds, and Grade II deputies at hospitals of between 600 and 750 beds.

Medical superintendents: This is the senior office in the service. A candidate for this appointment should have high qualifications in at least one branch of medicine, and he should be both a good administrator and a first class clinician. A decision as to consultant services has not as yet been reached.

The scale of salaries and emoluments is given in the following table:

Grade.	Remuneration exclusive of the emoluments of board, lodging and washing, valued at £150 per annum in each case.		
	Minimum.	Increase.	Maximum.
	£	£	£
Deputy medical superintendent (Grade I)	650	50	800
,, ,, ,, (,, II)	600	30	750
Senior assistant medical officers (Grade I)	550	25	650
,, ,, ,, ,, (,, II)	500	25	600
Assistant medical officers . . .	350	25	425
,, ,, ,, yearly engagement	250	—	—
House physicians and house surgeons .	£80 (resident).		
Clinical assistants (non-resident) . .	£100 (non-resident and no emoluments, but meals when on duty)		

These scales are subject to certain modifications in the hospitals mainly used for convalescent and other special cases. The total maximal values of the office of medical superintendent vary between £1000 and £1650 per annum, including an unfurnished house. In the general conditions of appointment of all whole-time medical officers, it is a condition that the appointment is made to the Council's hospital service and not to an individual hospital. Appointment to the service includes liability to be called upon, if necessary, for consultation, and/or to perform an operation on a particular case at another hospital. But if, on account of the officer's special skill, he is frequently called to consultations at other hospitals, a grant of a personal allowance or some other form of extra remuneration may be considered. Whole-time permanent medical appointments are pensionable under the Council's superannuation and provident scheme.

In order to encourage the medical staff to improve their qualifications and to render additional professional knowledge or experience available for the benefit of the service, the Council have decided that leave of absence for a period not exceeding six weeks in any one year shall be granted to an assistant medical officer with rates of pay (not exceeding full pay) varying in accordance with the service of the officer concerned. When an officer continues his duties at the hospital or institution and requires only occasional daily leave for the purpose of attending a course of instruction for a medical degree or diploma, such leave on full pay and facilities may be granted. A general condition is attached to the grant of such leave, namely, that on its expiry officers must remain for at least a year in the Council's service.

It will be obvious from this brief survey that the Municipal Hospital Service offers a great opening for those who wish to adopt an institutional life. For others it provides an opportunity of earning a livelihood and gaining invaluable experience as House Physician, House Surgeon or Assistant Medical Officer previously to entering private practice or some other independent path in medicine.

Municipal hospitals differ from voluntary hospitals in that they are under a statutory obligation to admit the destitute sick. Patients in municipal hospitals must pay the cost of their maintenance and treatment, either a fixed sum, or according to their means. Service in the municipal hospitals is in the main a whole-time service. To one like myself who has received a salary paid regularly every month as a temporary naval surgeon for 4½ years, and who has lived, as it were, from hand to mouth for many years as a private medical practitioner, it is obvious that the choice between a salaried appointment and private practice is a matter of temperament. In making a choice between these two walks in life a man must know himself.

GEOFFREY EVANS.

DIAPHRAGMATIC HERNIA, WITH REPORT OF A CASE.

A RECENT case of congenital diaphragmatic hernia, admitted to the wards of the Surgical Unit, has so many features of interest and is of so rare a type that one feels justified in presenting it for publication. Search for details of similar cases has revealed that the subject as a whole is afforded little space in standard text-books of surgery. It is therefore felt that a more complete discussion may prove of interest. A clear conception of the various types of diaphragmatic hernia depends on an adequate understanding of the development of the diaphragm: it is proposed to deal with this subject fully, and then consider the various forms with reference to their mode of origin.

Development of the diaphragm.—The diaphragm is developed in five parts: (1) The central tendon, derived from the septum transversum; (2) the dorsal and antero-lateral muscle-sheets, each of which is bilateral. Three stages must be considered in its formation: (*a*) The formation of the septum transversum and pleuro-peritoneal canals; (*b*) migration of septum transversum and formation of muscle-sheets; (*c*) closure of pleuro-peritoneal canals.

(*a*) The primitive body cavity, or cœlom, is early divided into

four parts. At the cephalic end of the embryo it forms the pericardium, lying immediately ventral to the pharynx. Immediately posterior to this the primitive dorsal and ventral mesenteries of the fore-gut divide the cavity into the right and left cœlomic spaces. The primitive ventral mesentery, in this region, extends only as far as the termination of the fore-gut, and hence, immediately posterior to this, the right and left cœlomic spaces in the abdomen are thrown into one and form the peritoneal cavity. A second mesodermal partition is also found stretching obliquely across the body-cavity in the cervical region. This structure, the septum transversum, is of such importance in the formation of the diaphragm that its relations must be clearly understood. By the fourth week it is well marked, and when viewed in sagittal section, it is seen to be attached by its dorsal extremity at the level of the second cervical segment, from which it extends obliquely caudalwards to reach the ventral surface of the embryo, passing immediately dorsal to the pericardium (Fig. 1). Through its substance pass the primitive dorsal and ventral mesenteries of the fore-gut, which at this period are not differentiated from it, and hence the structures developed in these mesenteries—the aorta, œsophagus, azygos veins, thoracic duct, vagus nerves and inferior vena cava—perforate the median or

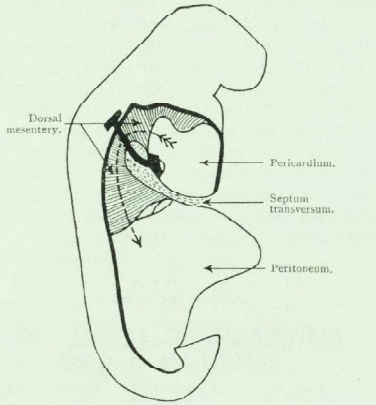

FIG. 1.—SHOWING RELATIONSHIP OF SEPTUM TRANSVERSUM TO PERICARDIUM, DORSAL MESENTERY AND PERITONEUM. ARROW INDICATES LEFT PLEURO-PERITONEAL CANAL—FIFTH WEEK.

central part of the diaphragm (1). Dorso-laterally the septum is deficient and is here in relation with the right and left cœlomic spaces, later known as the pleuro-peritoneal canals. Around the margins of these canals the ducts of Cuvier pass from the dorsal body-wall to the sinus venosus and right auricle. The septum transversum is subsequently differentiated into two portions—(1) the pericardial, (2) the diaphragmatic.

(b) *Migration of septum transversum and formation of muscle sheets.*—In the fifth and sixth weeks the lung buds appear and develop rapidly. Lying at first in the mesentery of the fore-gut, they grow outward on each side into the narrow pleuro-peritoneal canals—the portion of the cœlomic lining which is invaginated as a covering on the lung bud becoming the visceral pleura. During the fifth week the pleural cavities are situated in the cervical region under the fourth and fifth spinal segments; as they expand they dislocate from the neck and depress within the body-cavity a partition, which completely divides it into thorax and abdomen. The rapid expansion of the pleural cavities forces the septum transversum down into the thorax. At the same time they burrow into the body-wall, producing an infolding of the innermost layer of the two primitive muscle-sheets to form the musculature of the diaphragm. Thus the inner layer of the primitive subvertebral musculature is folded in on either side and sinks down into the substance of the dorsal mesentery, to form the two dorsal portions of the diaphragm.

A similar separation of the innermost layer of the two ventral longitudinal sheets forms the antero-lateral or sterno-costal portions of the diaphragm. All these sheets obtain an insertion into the septum transversum. A small intermuscular interval, the foramen of Morgagni, may be recognized between the sternal and costal portions of the antero-lateral sheets (Fig. 2). The dorsal sheets derive a nerve supply from the third and fourth cervical segments, and the antero-lateral from the fourth and fifth. An extension forward of the pleura, through the upper surface of the septum transversum separates the pericardial from the diaphragmatic portions. By the eighth week that part which contains the great veins has become an integral portion of the dorsal aspect of the pericardium.

As the diaphragm passes downwards during the fifth and sixth weeks the stomach is also carried caudal-wards, from its retro-pericardial position, with subsequent elongation of the œsophagus. Should this migration be incomplete two results may ensue: (1) Permanent arrest takes place. The œsophagus remains abnormally short: the cardiac end of the stomach occupies and distends the normal œsophageal orifice, a portion of the peritoneum extending over its surface to invest it with a sac. (2) Descent is completed at a later period, the œsophagus being drawn out to its normal length and the stomach passing entirely within the abdomen. The peritoneal diverticulum above referred to persists on one or both sides of the œsophagus as the para-œsophageal recess, into which subsequent herniation may occur.

(c) *Closure of the pleuro-peritoneal openings* is completed at the sixth to seventh week by the formation of a double fold of pleura

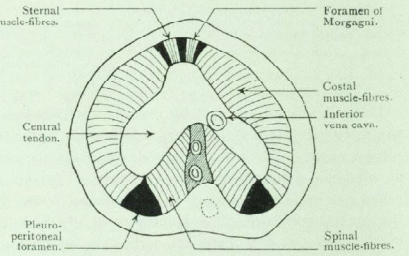

FIG 2.

and peritoneum across their lumen. Obliteration of the lumen is effected by zygosis or growth adhesion, assisted by outward migration of the spinal fibres to the arcuate ligaments and inward migration of the costal fibres to the eleventh and twelfth ribs. The permanently collapsed state of the lungs permits the liver on the right side and the abdominal viscera on the left to force the diaphragm up against the thoracic wall, and obliterate the orifice by mechanical pressure. Up till the twelfth week these orifices can be recognized as pale areas devoid of musculature. Complete formation of the diaphragmatic musculature takes place by the twelfth week.

It will thus be seen that three periods can be recognized in the formation of the diaphragm: (1) Up to sixth week approximately, pleuro-peritoneal canals patent; (2) sixth to twelfth weeks, canals closed by double fold of pleura and peritoneum, diaphragmatic musculature incompletely developed here and elsewhere; (3) twelfth week onwards, musculature completed.

It will be remembered that the right dome of the diaphragm covers the developing liver, whilst the left is completely occupied by a small portion of the liver and the stomach and intestine, together with the suprarenal body. The distal portion of the mid-gut, or colon, is at this period (fifth to eighth week) undergoing rotation around the vitelline artery. "The grouping of intestine in this region is due to the fact that this is the most roomy part of the abdominal cavity, the antero-posterior diameter of the lower abdomen being much less, and the pelvis merely a potential space" (2).

Ætiology.—Two factors are concerned in development of hernia through the diaphragm: (1) A breach or point of weakness in its structure; (2) an increase of intra-abdominal pressure

Increased intra-abdominal pressure may occur within the fœtus as well as in adult life. Normally a portion of the intestine lies at first in the extra-embryonic cœlom. An early return of this portion of the bowel to the abdominal cavity—before the eighth week—will cause an increase in pressure before the diaphragm is fully formed and so herniation may be produced. After the fifth or sixth week the resulting protrusion of intestine will, as shown above, carry with it a peritoneal sac, whether this occurs through the obliterated pleuro-peritoneal canal, or at some point of weakness such as the foramen of Morgagni. Such a sac may retain its contents till adult life without giving rise to symptoms, or form a recess into which intestines may be forced at a later date. Of these the former is the most probable occurrence. Some authorities regard the presence of a peritoneal sac as indicating that the hernia is acquired Thus Lawford Knaggs (3), in describing 8 cases of hernia at the œsophageal orifice, found a peritoneal sac in 6. "This," he states, "is conclusive evidence that the rupture has been acquired." An acquired hernia will, however, always carry a peritoneal sac with it, unless the peritoneum is injured in the causative lesion.

The following classification may be adopted:

1. **Traumatic.**—Due to: (a) *Laceration:* Stabs, gun-shot wounds, etc., affecting chiefly the costal region of the diaphragm.

(b) *Compression causing rupture* of muscle-fibres, or *protrusion* through the normal openings of the diaphragm.

2. **Congenital.**—(a) *Through congenital apertures:* (1) Persistent pleuro-peritoneal hiatus; (2) absence of left half of diaphragm.

(b) *Hernia at lines of fusion.*

(c) *Hernia at œsophageal orifice.*

(d) *Hernia through the dome.*

Hernia through a persistent pleuro-peritoneal hiatus is the commonest type, occurring more frequently on the left than right, owing to the protection afforded to the latter side by the liver. It is due to increased pressure causing protrusion through the hiatus before the pleuro-peritoneal membrane closes the aperture, hence the absence of any sac. The contents of such herniæ include the stomach and intestines and occasionally the suprarenal. A large portion of the bowel being intra-thoracic, such herniæ are incompatible with life. In Keith's series of 21 cases (4), only 2 survived more than a few weeks after birth. An extreme degree of this type is hernia into the pericardium. Associated congenital defects resulting from this condition are: (1) Incomplete rotation of the bowel, further rotation being arrested after the gut becomes herniated; (2) incomplete development of the lung; (3) dextrocardia (rare).

Absence of left half of diaphragm.—In this type the dorsal and antero-lateral muscle-sheets on the left side have not formed; the pleura and peritoneum, however, develop normally and form a continuous sheet. The partly-rotated intestine being almost entirely intra-thoracic, the condition is usually incompatible with life.

Hernia at the lines of fusion may occur at three sites: (1) The pleuro-peritoneal hiatus after closure by the pleuro-peritoneal membrane; (2) the foramen of Morgagni (rare); (3) the line of fusion of the dorsal mesentery and septum transversum.

The method of formation has already been discussed. In the first two types a peritoneal sac is always present, and the gut is rotated to a degree corresponding to the date of formation, being frequently accompanied by a partly detached left lobe of the liver, presumably forced through with the bowel at the time of formation. In the third type the stomach is usually herniated at the line of fusion.

Hernia at the œsophageal orifice occurs into the para-œsophageal recess. The stomach constitutes the usual content of such herniæ, and is sometimes accompanied by portions of partly rotated intestine. Simple arrest of descent of the stomach should not be included under this heading. In this respect the conclusions of Findlay and Brown Kelly (5), in their paper on "Congenital Shortening of the Œsophagus and Thoracic Stomach," may be quoted: "If the abnormality under consideration is due to congenital shortening or hypoplasia of the œsophagus, whereby the stomach is prevented from descending into the abdomen, the portion of the stomach remaining above the diaphragm cannot then be said to have herniated into the thorax."

Hernia through the dome arises from the septum transversum giving way from increased intra-abdominal pressure, usually before the diaphragmatic musculature is completed, *i. e.* before the twelfth week. The left side is most commonly affected. The presence of the left lobe of the liver (a frequent content of such herniæ) has given rise to the suggestion that they are caused by perforation of the diaphragm by an abnormally developing liver. In one case in which both right and left domes were perforated by portions of a liver which was developed in three parts this is the most probable explanation. The liver, however, is developed immediately posterior to the septum transversum, from the peritoneum on the under surface of which its ligaments are derived. It is therefore more probable that the liver is forced through with the extruded intestine. A peritoneal sac is present in roughly half the cases of this type. Incomplete rotation of the bowel is less frequently met with, possibly owing to herniation occurring at a later date.

Congenital hernia may be incompatible with life at birth, or persist without giving rise to symptoms till early adult or middle life, or may be discovered by accident at post-mortem. *Symptoms* may affect the digestive, cardiac and respiratory systems. Indigestion, dyspnœa and cyanosis are the commonest. Profound anæmia has occurred in several cases owing to severe melæna caused by venous congestion *Physical signs* are those of a pneumothorax, usually on the left side, borborygmi being heard over the affected area. X-rays and fluoroscopy are a valuable aid to diagnosis, the diaphragm showing lack of excursion on the affected side. *Complications* include acute intestinal obstruction, acute distension of herniated stomach, volvulus of stomach, gastric ulcer with and without perforation, acute and chronic appendicitis in misplaced appendix, sudden cardiac failure.

Report of a Case.

E. H. M—, æt. 29, a salesman, was admitted to Percivall Pott Ward under care of the Surgical Professorial Unit (1 : 2 : 32) complaining of pain in the stomach after food.

History of present condition.—1924: Onset of *colicky* upper abdominal pain, situated chiefly in epigastrium, occurring two hours after food, relieved by more food. No nausea, vomiting or melæna. Bowels acted regularly. Micturition normal. Numerous attacks since then, chiefly in winter months.

December, 1931, last attack commenced; pain now occurs immediately after food, relieved by passing flatus or bringing up wind.

Past history.—No previous illness; no injury.

On examination.—Healthy man. Chest: Apex-beat in fifth space 3¼ in. from mid-line. Area of cardiac dullness obscured by tympanitic note, extending as high as third rib, variable in extent, usually covering whole præcordium. Heart-sounds were natural. Borborygmi audible over whole præcordium, accentuated after coughing. Expansion of lungs and respiratory movements normal.

Abdomen: No physical signs. *Per rectum* hæmorrhoids, internal and external; congestion of rectal mucosa. Benzidine tests for occult blood negative on three occasions.

X-rays.—Plate A: Barium enema and bismuth swallow shows œsophagus filling normally. Partially gas-filled portion of bowel situated immediately posterior to the sternum, above the level of the diaphragm.

Plate B: Barium enema. Terminal ileum, appendix, cæcum and colon above the level of diaphragm. Constriction of colon suggests point of compression at anterior attachment of diaphragm; gut is partly rotated and under-developed, there being no hepatic or splenic flexures, and the distance from cæcum to pelvi-rectal junction abnormally short.

Operation (by Mr. T. P. Dunhill), 16 : 2 : 32.—Abdomen was opened by a 6-in. supra-umbilical mid-line incision. Peritoneum was opened and terminal ileum was seen to be ascending and portion of colon descending, immediately in line of incision, and passing through an abnormal aperture in the anterior part of diaphragm, posterior to xiphisternum. Peritoneal hernial sac was present. Palpation within the sac showed that it extended 3 in. to the left anterior to pericardium and 2½ in. to the right, anterior to the thin lower portion of right pleura. The neck of the sac admitted four fingers.

Contents.—Terminal ileum, cæcum, appendix, portion of colon and small mal-developed left lobe of liver, lying curled around right postero-lateral margin of sac.

Contents were withdrawn readily. The appendix was found to be bound down with numerous adhesions. Mal-rotated colon still preserved a primitive dorsal mesentery in its entire length as far as the iliac colon. The sternum was divided in the mid-line and the sac was exposed from above, separated from the pleura and reduced. The diaphragm was closed with three fascia lata suture grafts. Appendicectomy was performed, and the colon was anchored to right wall of abdomen forming an hepatic flexure. The wound was closed with drainage. The patient made an uninterrupted recovery, subsequent X-rays showing that the colon had completed its rotation, the cæcum lying in the right iliac fossa.

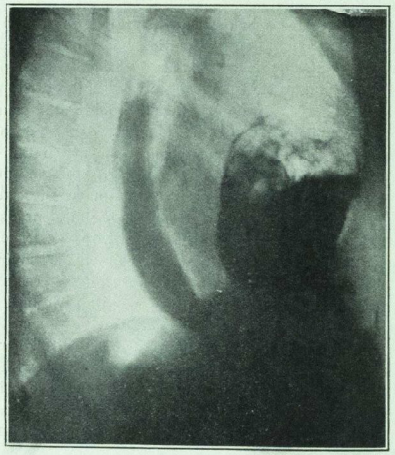

PLATE A.

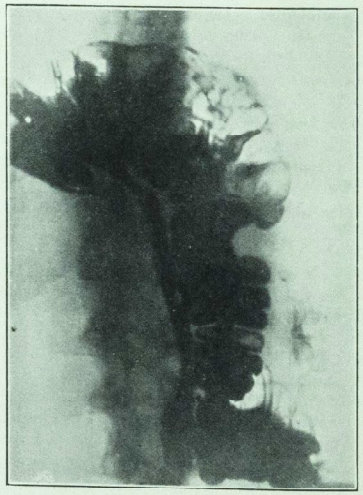

PLATE B.

Summary.—This case presents the following features: (1) Hernia through the foramen of Morgagni is extremely rare. (2) The origin was congenital, as evidenced by the incompletely rotated colon with its primitive dorsal mesentery and abnormally short length. (3) The presence of a peritoneal sac fixes the date of formation at some time later than the sixth week, which corresponds with the degree of rotation of the colon. (4) Symptoms were attributable to the chronically inflamed appendix and not to the hernia itself.

My thanks are due to Mr. T. P. Dunhill, Associate Surgeon to the Surgical Professorial Unit, for his kind permission to publish this case, and to Mr. J. B. Hume for permission to reprint an illustration from his article in the *British Journal of Surgery*, from which I have also obtained many references and much valuable information. G. C. KNIGHT.

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(1) KEITH.—*Human Embryology*, p. 355.
(2) HUME, J. B.—*Brit. Journ. Surg.*, 1922, x, p. 208.
(3) KNAGGS, LAWFORD.—*Lancet*, 1904, ii, p. 358.
(4) KEITH.—*Brit. Med. Journ.*, 1910, ii, p. 1297.
(5) FINDLAY and BROWN KELLY. *Proc. Roy. Soc. Med.*, 1931, xxiv, pp. 85–102.

ON "CHRONICS."

It is with a certain bitterness that one reflects upon the huge figure representing the number of out-patients treated annually at this Hospital; for while surgical cases are grudged each foot of unnecessary bandage, far larger numbers of healthy ladies from the East End carry off bottles and bottles of medicine every day, return a week later and ask for more.

It may be said that three sorts of medical patients attend the surgery, children, patients genuinely ill, and those whom we affectionately know as "chronics." Upon the first two classes time and trouble are always well spent, and they in turn are very grateful for their treatment. Unfortunately they are rare, for every morning the chronics arrive in overwhelming numbers and fill the Surgery from door to door. Their reason for coming is obscure, for it is certain that they look down upon the Hospital as an inferior institution. How often is one greeted with the remark, "I have been much too ill to come to hospital, but couldn't afford a private doctor any longer." Perhaps the private doctor deliberately raised his fees in the hope that his patient would turn elsewhere! Be that as it may, at the back of their minds is the comforting knowledge that they are getting something for nothing, as well as a pleasant holiday from the morning's work at home. Chronics have their own days of attendance; fine days and Saturdays are immensely popular, while on Mondays one sees but a few. Others favour the late afternoon and come up at that time with obstinate persistence. From Whitechapel and Hoxton and Spitalfields they come—(Why don't you go to the London Hospital? "I wasn't satisfied with the treatment there!")—and they sit upon our benches gossiping throughout the morning and exchanging symptoms with one another. It is a lively gathering.

But once in the box their whole demeanour changes; their faces become drawn and their voices melancholy, and in every possible way they strive to give the impression that they are dying. They are optimists, however, and carry less conviction than a bulky Jewess who once waddled up to my table wailing, "Doctor, I waste so much that I lose my clothes!" Nevertheless it is these patients who *insist* upon being examined, who volubly deny all knowledge of the existence of alcohol, and who waste more successfully than any others the time of the doctors and nurses alike. No treatment is of the slightest avail, and if by some rare chance an organic disease is discovered, they loudly proclaim that they do not hold with insulin—that they are too ill to have their teeth extracted—that in *their* opinion they should by "put under the X-ray." Undaunted by receiving "more advice than treatment," they return week after week. With every visit a fresh symptom has appeared, yet an inquiry as to how and when they take their medicine reveals the fact that they have not even troubled to read the label on the bottle. At last the inevitable happens, and they are referred by a disillusioned and exhausted H.P. to one of the special departments, where they take hold with an even firmer grip.

It is a tragedy that a great hospital, taking its place amongst the highest courts of medical authority (albeit in urgent need of money), should thus be heavily encumbered by patients for whom the only treatment and the only possible advice is—"Get away from your homes." Yet unconsciously they, too, realize that this is what they need, and sick in mind rather than in body, they visit the Surgery as often as may be, wasting the time and tempers of all with whom they come into contact, and costing the Hospital a large sum for treatment which is altogether ineffectual.

If ever censorship were needed, it is needed here.

H. B.

ABERNETHIAN SOCIETY.

Prof. Hugh Cabot, who has promised to give the Summer Sessional Address on Thursday, April 14th, at 8.30 p.m., announces that the title of his lecture will be "Hunting with a Movie Camera in Northern British Columbia," and not "Further Travels with the North American Indians," as previously stated.

A meeting of the Society was held on Thursday, March 10th, at 5.30 p.m., in the Abernethian Room, with the President, Mr. Fawcett, in the chair. Sixty-two members were present when the President called upon Dr. Maxwell to open a discussion on "Need we lose our tonsils."

In his preliminary remarks Dr. MAXWELL congratulated the Society on choosing this subject for their discussion, and he referred to the marked absence in surgical literature of any mention as to the why and wherefore of tonsillectomy. As to the justification for the 230,000 tonsillectomies performed yearly in this country, who knew to what end the majority were carried out, and how many students were instructed when such operations should be undertaken?

The present-day knowledge on these all-important questions is hopelessly at variance, and the inadequacy of experience and teaching of the student is the root for the abuse of this operation. All that the young practitioner is taught, before he leaves his *alma mater*, is that the tonsils are vestigial structures and therefore a livelihood for young enthusiastic surgeons.

A subject might be classified in a number of ways; we might stick to the old method of congenital and acquired, or trauma, inflammation and new growth, but in classifying a community these were obviously inapplicable, and Dr. Maxwell suggested that he might divide the present meeting into (*a*) the non-tonsillectomized, (*b*) the tonsillectomized, (*c*) a combination of both. He would first ask the non-tonsillectomized, "What ill-effects do they feel from having these vestigial structures, and do they feel inferior or superior to their opponents?" He would then turn to the tonsillectomized and inquire "How much better they were for losing their tonsils?" To the third group he would ask "Whether they were prepared to undergo tonsillectomy again, and how much worse they were made by the operation?"

It was obviously difficult to answer these questions, and there are no statistics at hand to consult, but the important criteria are (1) the absence of sore throats and colds, (2) the alleviation of causal conditions, (3) the escape from harmful after-effects. In regard to the first criterion, it must be remembered that many of the sore throats in childhood tend to disappear in the course of time, while only a small number of the tonsillectomized are without sore throats of the dry pharyngeal type. The more important after-effects which are constantly being met with are (1) bleeding from the site of operation, (2) local sepsis, which occasionally spreads to a generalized septicæmia, (3) antral infection, (4) lung abscess, (5) remote effects, *e. g.* deafness, mental defect.

Recurrence was by no means rare, and in Dr. Maxwell's experience the maximum number of tonsillectomies in one patient was four, although he had heard of as many as seven. He was told by the authorities that regrowth of the tonsil took place from the lingual pole.

In conclusion he said that 80% of the present operations were unnecessary, but there still remained a small group of patients on whom it might be performed with justification. These indications were:

(*a*) *Local.*—Recurrent sore throats (more than three, and after palliative measures had been tried without success), quinsy, grossly diseased tonsils.

(*b*) *General.*—For the elimination of focal sepsis:

(1) In recurrent bronchitis.
(2) In rheumatoid arthritis.
(3) In acute rheumatism.
(4) In acute hæmorrhagic nephritis during the quiescent stage.
(5) In Graves's disease—thyroidectomy may be averted.

The main contra-indications which were so greatly ignored to-day are:

(1) Normal tonsils.
(2) As a speculative measure.
(3) In the presence of active infection, either local or general.

The President then asked Mr. C. H. Hogg to open the discussion on the surgical side.

Mr. HOGG said that he was largely in agreement with what Dr. Maxwell had said, and was sorry that he could not turn the discussion into a heated argument between physicians and surgeons. The functions of the tonsils are not known, but two main theories existed:

(1) That they function as other lymphocytic structures in being a barrier to infection.
(2) That they are living test-tubes for the formation of antibodies.

The fact that large tonsils do not necessarily mean disease is constantly overlooked in school clinics and by young practitioners, for the hypertrophy must be accompanied by enlargement of the adenoids and cervical glands before tonsillectomy is justifiable.

The local indications for the operation are:

(1) Recurrent sore throats (more than two).
(2) Quinsy.
(3) Chronic cervical adenitis after excluding carious teeth.
(4) Otitis media is often due to neglect of adenoid and tonsil vegetations in childhood.
(5) General infection of the tonsil leading to fœtor oris, etc.
(6) Diphtheria carriers.
(7) ? Recurrent colds and sinusitis.

The contra-indications, besides those already mentioned, are:

(1) Before the age of two it is generally inadvisable.
(2) Hæmophilia.

Old age was not considered to be a contra-indication.

Mr. Hogg then dealt briefly with the methods of the operation, which are vitally important for gaining success. He said that enucleation was by far the most satisfactory procedure, and should be performed whenever possible, if not as a routine. Diathermy must be guarded against, as it "cooked" only a small portion of the tonsil and left a sloughing remnant, which often shut off a small sac of buried pus.

Lung abscess was very uncommon, and should not be seen with modern technique and suction apparatus. Finally it is important to warn all patients who are singers that their voice may be altered by the operation—the beautiful soprano sometimes becomes a deep contralto.

The discussion was then open to the meeting.

Mr. BOYD said that Dr. Maxwell had painted a very pessimistic picture in regard to the harmful effects of the operation. Lung abscess was especially rare, and there had been only one case out of 2000 tonsillectomies at this Hospital during the previous year. The mortality of the operation was practically *nil*, and in only seven cases of this series had there been any definite harmful after-effects. The complications were no doubt more obvious in the provinces and at other hospitals where the technique was bad.

In Mr. Boyd's experience he found that his friends who had had tonsillectomy were free from sore throats for a year or more, but that they eventually developed a granular pharyngitis which was worse than the original tonsillitis. In conclusion he suggested that adults should think twice before having their tonsils removed, but that the risk of complications to which they would be likely to succumb was very slight.

Mr. ROBERTON stated that at the age of thirteen he had his tonsils and adenoids removed on account of his being a mouth-breather. When he is in London he now finds that he suffers from sore throats, but on staying in the country all symptoms disappear. He therefore suggested that surgeons should consider whether a patient is going to spend the rest of his life in a town, where he is constantly in contact with infection, or in the country, where he would be free from it.

Mr. R. F. PHILLIPS considered that the question of the tonsils and focal sepsis was really of little importance, but that in children the effect of enlarged tonsils and adenoids in producing deafness and consequent mental backwardness was not fully recognized.

Mr. CHIVERS said that he had tonsillectomy at the age of 4, and that ever since he had suffered from sore throats, bronchitis and antral trouble.

Mr. KERSLEY favoured tonsillectomy in rheumatoid arthritis.

It was suggested that a census be taken of the present meeting, which was as follows:

Non-tonsillectomized	23	
Tonsillectomized	23	
(*a*) After age of 7	10	improved, 8. not improved, 2.
(*b*) before age of 7	13	

In reply Dr. MAXWELL said that he was afraid these figures illustrated nothing. (Cheers.) He summarized his remarks by saying that in his opinion 80% of tonsillectomies were unjustifiable, and that by persevering with the ordinary palliative methods (gargles, coll. alk. pig. mandl), patients could hope for complete amelioration of their sore throats and thus preserve their tonsils.

The PRESIDENT passed a hearty vote of thanks to Dr. Maxwell and Mr. Hogg for opening this discussion and for giving the Society such an enjoyable evening.

The meeting was then adjourned.

STUDENTS' UNION.

RUGBY CLUB.

The Annual General Meeting of the Rugby Club was held on Monday, March 7th, 1932, in the Committee Room, the President, Dr. Barris, being in the Chair.

The officers for the coming season, 1932–33, were elected as follows:

President: Dr. J. D. Barris.
Vice-Presidents: Mr. W. Girling Ball, Mr. H. E. G. Boyle, Mr. F. C. W. Capps, Dr. C. H. Harris, Mr. J. P. Hosford, Prof. E. H. Kettle, Mr. G. L. Keynes, Dr. Wilfred Shaw, Sir Charles Gordon-Watson.
Captain: W. M. Capper.
Vice-Captain: E. M. Darmady.
Hon. Sec.: J. K. Kingdon.
Hon. Treas.: J. K. K. Jenkins.
Capt. "A" XV: J. W. Cope.
Hon. Sec. "A" XV: L. H. Buckland.
Hon. Secs:
Extra "A": D. A. Prothero.
"B" XV: A. R. C. Young.
Extra "B" XV: T. H. Mason.
"C" XV: D. C. S. Kendal.
Extra "C" XV: F. G. Hollands.

Results

Sat., February 27th, *v.* Nuneaton, away, lost 3—5.
Sat., March 5th, *v.* Rosslyn Park, home, lost 8—14.
Sat., March 12th, *v.* Moseley, home, lost 3—16.

Final Junior Hospital Cup.

London "A," won, 8—5.

THE JUNIOR RUGBY CUP.

The Junior Cup-ties this year have all been close and hard fought. The total margin of 8 points for all three matches is a very narrow one indeed.

Second Round: v. Guy's Hospital.

Played at Winchmore Hill.

Guy's were the first to score, and held their lead at half-time (5—3), Thomas having crossed far out just before the interval. In the second half the Bart.'s forwards, fitter than the opposing pack, forced their advantage and gave their backs plenty of the ball. Nel kicked a good penalty goal and gave us the lead (6—5). Play remained in Guy's "25," and Beilby crossed under the posts, but the kick failed (9—5). Guy's rallied well after this, but Bart.'s stuck to it and forced them back, and from a tight scrummage near their line Ward sent Cope over on the blind side (12—5). Secure with a 7-point lead and a minute to go Bart.'s slacked off badly, and Guy's went straight through from the kick-off to score under the posts. The try was converted (12—10). "No-side" followed immediately.

Semi-final: v. St. Thomas's Hospital.

Played at Winchmore Hill.

Bart.'s were without Thomas and Swinstead, who were injured. St. Thomas's started strongly. They had fast bustling forwards, and kept Bart.'s within their own "25." A penalty goal for offside gave Thomas's an early lead. Towards the end of the first half, however, the Bart.'s forwards began to wear down their opponents. As a result of a rush Wilson went over in the corner (3—3). No further score in the first half. After the resumption Thomas's again started strongly, and after a quarter of an hour's play a good movement on their left wing enabled them to score near the posts (8—3). The Bart.'s forwards rallied well. Nel, at full-back, was in his best form, and eased the work of the forwards with fine length kicks. This probably saved the game, for the forwards were now again establishing themselves in control. After long pressure on the St. Thomas's line Buckland raced round his man to score under the posts. Nel converted (8—8). A few minutes to go. The ball was carried again to the Thomas's line. At last, from a loose maul the ball came out. Beilby took it, beat his man, passed into the forwards, Lewis secured the ball and forced his way over. The kick failed (11—8). "No side" soon followed.

The Final v. London Hospital.

Played on the St. Thomas's ground at Chiswick. Without Lewis, and the last-minute scratching of Nel, our chances did not seem very bright. The London had a full and strong side out. Baker was taken from the pack to full back and Hanbury Webber brought in to take his place in the middle of the back row. The first quarter's play was rather dull, and many opportunities were missed by both sides. Territorially Bart.'s had the advantage. The game was seldom out of the London "25." A brilliant cut-through by Beilby gave Bart.'s the first score. The kick failed. Much encouraged the Bart.'s forwards rallied and the game became very keen. There was no further score, however, in the first half, and we crossed over with a 3-point lead. London were unfortunate at this point to lose Heanly, who received a cartilage injury and left the field with a locked knee. With only seven forwards London started the second half strongly, and their forwards began to gain the upper hand. Ward frequently relieved the pressure with fine kicks along the touch-line. The London effort was soon rewarded. A blind-side movement started by Fisher, their scrum-half, resulted in their left wing scoring far out. A magnificent kick gave them the lead, 5—3. Bart.'s then rallied and made a superb effort. The forwards were getting the ball consistently in the tight scrums, and Ward gave Beilby fine long passes from the scrum. The backs resorted to long punts ahead and gained considerable ground. At last, Kirkwood, running strongly, forced his way over, only to drop the ball when he was clear. The London cleared from the 5-yard scrum, but Bart.'s rallied again and forced their way back to the London "25." A fine movement on the right, and Fairlie Clark was away with his wing man up on the outside and Beilby inside. A well-timed inside pass to the latter enabled him to race away to score beneath the posts. Baker converted (8—5). Only a few minutes left, the London rallied and forced their way into our "25." A fine forward breakaway and Hutton seemed to have our line at his mercy, but he hesitated and ran across, only to be overtaken by Kirkwood. The pace was now very fast; London were making a final effort. Baker kept them out, however, with good-length kicks, and play returned to mid-field till "no side." Bart.'s, 8 points; London, 5 points.

Of the Bart.'s forwards Wilson was very conspicuous in the loose. In the line-outs Barber and Grant did good work. Moynagh hooked well throughout the game; Ward and Beilby were excellent at half. Kirkwood ran very strongly in the centre; Baker was an excellent substitute at full-back.

Team.—F. J. Baker (*back*); L. H. Buckland, G. A. Fairlie Clark, R. M. Kirkwood, J. W. Perrott (*three-quarters*); F. J. Beilby, F. G. Ward (*halves*); F. H. Masina, K. D. Moynagh, E. E. Harris, A. H. Grant, A. Barber, J. D. Wilson, R. Hanbury Webber, J. W. Cope (*forwards*).

HOCKEY CLUB.

FINAL OF THE SENIOR HOSPITALS' CUP.

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

Played at Kent House on Thursday, March 10th. Won, 1—0.

The 1st XI finished a very enjoyable season by just defeating St. Thomas's in a close game for the Hospital Cup. As is usual in such games, the hockey seen was only of a moderate standard, play being more remarkable for its keenness than for its cleverness. Quite a decent crowd lined the touch-line, and we were grateful to those Bart.'s men who came and cheered us on to victory. The ground was in very good condition, though it soon cut up considerably.

The game began at a good pace, everyone going all out, though the St. Thomas's men seemed to be just a little quicker on the ball and keener in tackling. The teams appeared very evenly matched, with the defence prominent on both sides. Two or three times Bart.'s came very near to scoring, but the ball was well cleared by the Thomas's goalkeeper, who came out of his goal just at the right moment. Thomas's pressed, too, at times, but their forwards lacked cohesion and finish, and few of their movements looked really

dangerous. On the whole Bart.'s had the best of the first half, though neither side had scored up till then.

The second half started promisingly, but soon degenerated into typical cup-tie play. Both teams were hitting wildly, there was little or no combination between individuals, and both umpires had plenty to do. Thomas's had the best of this half, and twice only an excellent save by Hodgkinson kept them from scoring They forced three or four corners, but were not quick enough to take advantage of them. They gave the impression of playing far too much to their right-wing forward, who, though very good, yet was naturally well marked by both Hunt and Hindley, and had little opportunity of using the passes sent to him. Finally a corner gave us our chance. The ball was stopped for Hay-Shunker to send in a hard shot, and Davidson, following up very closely, took the rebound off the goal-keeper's pads, returning it like a flash into the net.

Thomas's tried their very hardest to equalize in the remaining five minutes, but unsuccessfully, and finally the whistle went for time, Bart.'s having won somewhat luckily by the only goal scored in the match.

Five days later a similar result was recorded in the final of the Junior Hospital Cup, Bart.'s beating Thomas's after an excellent and fast game by 1 goal to *nil*.

RETROSPECT.

Looking back on the past season we have reason to be satisfied with the results. Since Christmas the 1st XI have lost only one match (and on that occasion only five of the regular team were playing). The 2nd XI have done almost equally as well. And the season has been fittingly wound up by the winning of both the Senior and Junior Hospital Cup Competitions. The annual general meeting of the Club will shortly be held, at which everyone interested in hockey is invited to attend.

CRICKET CLUB.

Fixtures have been arranged for three elevens. New members are asked to put their names on the list in the Abernethy Room. There will be a practice game and nets towards the middle of April.

1st XI Fixtures.

Sat.,	April 30.	Southgate	Home.
Wed.,	May 4.	Wanderers	,,
Sat.,	,, 7.	Hampstead	,,
Sat.,	,, 14.	Winchmore Hill	,,
Mon.,	,, 16.	Croydon	Away.
Sat.,	,, 21.	Metropolitan Police	,,
Thurs.,	,, 26.	M.C.C.	Home.
Fri., Sat.,	,, 27. ,, 28.	St. John's College, Cambridge	Away.
Sat.,	June 11.	Past *v.* Present.	Home.
Wed.,	,, 15.	Guy's Hospital	Away.
Sat.,	,, 18.	Old Paulines	,,
Sat.,	,, 25.	Old Leysians	Home.
Wed.,	,, 29.	King's College, London.	,,
Sat.,	July 9.	Hornsey	,,
Sat.,	,, 16.	Shoeburyness Garrison	Away.
Wed.,	,, 20.	St. Anne's	,,

Draw for the Hospitals' Cup.

London, St. Thomas's, Charing Cross, St. George's

King's, Middlesex

St. Bartholomew's, St. Mary's

Guy's, U.C.H.

J. B. D.

INTER-HOSPITALS' CROSS-COUNTRY CHAMPIONSHIP.

This was run at Richmond, from the Hospitals' headquarters, Drs. Tidy, Munro and Morley Fletcher kindly judging the race. There were about 35 starters, with the result of the team race apparently rather open, although Sandiford, of Thomas's, was perhaps slightly the favourite for individual honours.

After the usual jostling at the start, there was a great struggle for leadership, Sandiford, Strong and Kinnear (Bart.'s) and Smyth (London) all running together, with Lewis (London) and Dalley (Bart.'s) a little way behind, followed by Perrott (Bart.'s), and then Morris (Thomas's) and Lee (Bart.'s). After just over a mile Lewis dropped back and Dalley joined the leaders, who ran in a bunch for a couple of miles, the leadership continually changing hands, leaving the rest about 300 yards behind. By this time, unless the impossible happened, we were obviously going to win, having three men in the first five, and 7th and 8th.

Sandiford started to push the pace, thus splitting up the leading five, and for the first time looked like winning. Smyth and Strong challenged him, but the latter could not last the pace and was caught up again by the other two Bart.'s men, leaving Smyth and Sandiford to fight it out between themselves. Sandiford had the better finish, and won by 150 yards in 38 min. 13 sec., thus scoring his fourth individual win. Strong, Kinnear and Dalley, reassured as to the team result, were content to finish together, hand in hand, to the obvious delight of the spectators. Much to everyone's surprise the next man home was Perrott, who, with practically no training, ran a very plucky race, just beating Morris after a great struggle. Our fifth man home was Lee, who, in spite of the claims of "District," ran well to finish 8th.

The whole team ran much better than was expected, and we were easy winners, beating Thomas's (holders) by 21 points, and, incidentally, creating a record by getting our scoring five in the first eight. The last time we won was in 1926, but with a young and promising team we should repeat this year's success for several years to come. A very encouraging feature of the day was the number of Bart.'s men who turned up to cheer, and, thanks to a plentiful supply of cars, easily followed the progress of the race.

Order and team placing:

		min.	sec.
1.	H. B. C. Sandiford (St. Thomas's)	38	13
2.	P. M. Smyth (London)	38	32
3.	J. R. Strong, A. I. Kinnear, A. Dalley (Bart.'s)	39	12
6.	J. W. Perrott (Bart.'s)	39	45
7.	R. S. Morris (Thomas's)	39	52
8.	H. B. Lee (Bart.'s)	39	54
9.	J. L. Lewis (London)	39	56
10.	P. A. Forsyth (Thomas's)	39	58

1. St. Bartholomew's (3, 4, 5, 6, 8) = 26 pts.
2. St. Thomas's (1, 7, 10, 14, 15) = 47 ,,
3. London (2, 9, 11, 12, 19) = 53 ,,
4. Guy's (13, 16, 17, 18, 20) = 84 ,,

BOXING CLUB.

The activities of the Club ceased after the Inter-Hospitals Boxing Tournament, which was held on March 4th.

The season was a not too prosperous one, and owing to illness and lack of support results were not up to past standard. Nevertheless, a strong and enterprising team of seven men (L. R. Taylor, the middleweight, was unfortunately taken ill at the last moment) made a good and hearty attempt at regaining the Boxing Cup from St. Thomas's. Though failing in their object one cannot forget the whole-hearted attempts of most of the members of the team.

F. G. Ward, W. H. D. Trubshaw and B. F. Jackson are deserving of great credit for their gameness in the ring, and were only beaten by the narrowest of margins. It is hard to forget also the keen pugilistic spirit of S. P. Mullick and A. H. Hunt, who, despite the lack of any serious training, entered the ring full of grim determination. Our condolence to J. H. Armstrong, who had the misfortune to fracture his thumb, and so was deprived of an almost certain victory.

The Tournament being over, the Club once more creeps into oblivion for the summer, though, needless to say, many pairs of eyes are on the look-out for talent among would-be pugilists.

The results of the Inter-Hospitals Competition are as follows:

Fly-weight (Final): L. Griffiths (Thomas's) beat S. P. Mullick

Bantams (Semi-final): E. W. Rees (Thomas's) beat L. D. B. Frost.

Feathers (Final): M. Blasker (Charing Cross) beat B. F. Jackson.

Light (Semi-final): E. C. Mayer (London) beat W. H. D. Trubshaw.

Welter (Final): W. D. F. Lytle (Thomas's) beat F. G. Ward.

Light Heavy (Semi-final): A. F. Fowler (Thomas's) beat J. H. Armstrong.

Heavy (Final): D. Goddard (Thomas's) beat A. H. Hunt.

CORRESPONDENCE.

TO MUSICIANS.

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

SIR,—There must be many students at the Hospital who learnt to play on musical instruments in their schooldays, and are now, through lack of opportunity to play, in danger of losing their skill. I heartily recommend them to join the London Junior Orchestra (Past Public and Secondary Schools Orchestra). Rehearsals are held every Friday from 6 to 8 p.m. at the Royal Academy of Music, by that inspiring and most genial conductor, Mr Ernest Read. The next concert is on May 21st, at the Central Hall, Westminster, at 3 p.m. The rehearsals afford unrivalled opportunities for making a cheerful noise. There are over 100 players, and those who, like myself, are afraid of playing alone need have no qualms. The subscription is one guinea for the season (3 concerts), or 12s. 6d. for the half season, and no further expenses are incurred. Inquiries may be addressed to the Secretary, 40, Marlborough Hill, London, N.W. 8.

I am, Sir, etc.,

J. CHILTON.

Connaught Club, W. 2;
February, 1932.

THE FUNDUS OF THE HUMAN EYE.

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

SIR,—In the review of Mr. Ernest Clarke's book *The Fundus of the Human Eye* in the March number, p. 121, your reviewer has fallen into error in attributing to me the selection of the drawings and the writing of the descriptive legends. Mr. Clarke was good enough to ask me to look through the drawings and legends, which I did, but the work is Mr. Ernest Clarke's, and not mine.

I am, Sir, etc.,

A. H. LEVY.

London, W. 1;
March, 1932.

REVIEWS.

DISEASES OF THE KIDNEY. By W. GIRLING BALL, F.R.C.S., and GEOFFREY EVANS, M.D., F.R.C.P. (London: J. & A. Churchill, 1932.) Pp. viii + 424. 8 coloured plates, 159 illustrations. Price 30s.

A book by Bart.'s men is always interesting to Bart.'s men, and one by two active members of the Senior Staff carries with it an added interest. We look in it for the present views held by those who have been, or still are, our teachers. The views of physician and surgeon, combined within one cover, form a rarity, and it is not at first obvious that the kidney is the organ which is going to lend itself readily to this combination. The book is clearly divided into various sections, and it is probably most satisfactory to review these in order.

The anatomy is described, as it must needs be, accurately; the physiology is dealt with shortly, but serves adequately to revive past memories, and as a review of present work, whilst the plentiful references are useful to those who would go farther afield.

The next two sections deal with the symptomatology and investigation of a urinary case, and it is here that we are on medico-surgical ground. The chemical tests might be described more fully. It would have been a happy thought to have included illustrations of crystalline deposits, since, although these may be pleomorphic, there are few good illustrations of them available for reference. Cystoscopic examination and urography by both the distension and excretion methods are dealt with in excellent detail. The relative uses of the two methods are clearly indicated, and the correct interpretation of their results is assisted by skiagrams, which are, for the most part, good.

Congenital and traumatic lesions are dealt with shortly. It seems a pity that falls from aeroplanes on to church steeples should be omitted as a cause of punctured wounds of the kidney! Hydronephrosis, a long and difficult subject, is described in a non-controversial manner and without undue length.

Bright's disease is the heading of the next section, and is a satisfactory term, to embrace both nephritis and the non-inflammatory medical disorders of the kidney. The classification employed, though not so simple as Van Slyke's, seems workable both from a pathological and clinical standpoint, and is infinitely preferable to that of Russell. Methods of treatment are clearly indicated. Therapeusis is well dealt with, although as these conditions are all progressive, treatment consists rather in the alleviation of the patient's symptoms than in the treatment of the disease process.

The conditions which may be termed "surgical infections of the kidney" are evenly classified and described, the most space being given to pyelitis and tuberculosis. The hæmatogenous origin of pyelitis and its almost invariable association with disorders of the other portion of the urinary tract or of the bowel are emphasized: a diagnosis of pyelitis by itself is incomplete, although simple to make. The various investigations for arriving at the correct state of affairs are described; if these investigations, as they often do, prove negative, then the line of treatment of the pyelitis, whether acute or chronic, is given. Tuberculosis of the kidney is dealt with on the fullest possible lines. The description, like the disease itself, is not confined to the kidney; the lesions of the lower urinary tract are described, and those found in the bladder are well illustrated by cystoscopic pictures. The value of persistence in the search for tubercle bacilli is emphasized. Two methods of examination for the organism are described, the first mentioned being probably the better. The section on treatment is very practical, and the debatable facts and indication for lines of treatment are fairly discussed. The long-continuing increased frequency of micturition and irritability of the bladder are explained, and the need for perseverance on the part of the patient and careful supervision by the doctor are stressed. General treatment of the disease must not be forgotten, and it is in infections of the urinary tract that tuberculin injection appears to be of some benefit.

The chapter on renal calculi is the best in the book. The formation of a stone in the kidney is described from the first crystal, and the possible causes of the deposition of the crystal and its subsequent fate are easy to follow. Diet and vitamin deficiencies are not allowed to escape from the etiology, but climate, in spite of the prevalence of calculi in India and Egypt, is not regarded as a convincing factor. Radiography is essential to the diagnosis, and the importance of pyelography, is again pointed out. The operative procedures, nephrectomy, pyelolithotomy and nephrolithotomy are discussed, the various indications for each being clearly tabulated and explained. Pyelolithotomy is the operation of choice, nephrolithotomy the most old-fashioned and least indicated. The difficult problem of the patient with bilateral calculi is not avoided, and the writers' views are backed with common sense. Statistics make the chapter complete.

The microscopic view of a hypernephroma is well known: it would have been useful to include one in this otherwise complete description of kidney tumours. The explanation, put forward by Sudeck and Stoerk of the much disputed origin of the Grawitz tumour, is adhered to and put down in simple words.

The operations on the kidney are placed in a chapter at the end; the indications and steps are practical and easily understood. The opinions are dogmatic, as one would rightly expect from a surgeon of wide experience in this field.

The aim of the book throughout is to be practical, and great pains are taken to detail all the manœuvres described. The large number of illustrations include many very clear X-rays and coloured plates. The accompanying brief case-notes enhance the interest of the pictures, and impress them on the memory. The reference numbers given to specimens in the St. Bartholomew's Hospital Museum will prove of value to many.

The index is full and cross-references are numerous. There is the added attraction of a name index to those eponymically inclined. Throughout the book are innumerable references to original articles; these will prove of great value to writers of theses and investigators.

Mr. Thornton Shiels is to be congratulated on his realism, and, as is usual for a book coming from the press of Messrs. Churchill, this one is a pleasure to read and to hold.

The authors had completeness as their object. This they have achieved, without damping our desire for further knowledge of the kidney.

THE GENESIS OF CANCER. By W. SAMPSON HANDLEY, M.S., F.R.C.S. (London: Kegan Paul, Trench, Trübner & Co., 1931.) Pp. xix + 258. 133 illustrations. Price 21s.

This monograph is one of the latest and most important of those published in the Anglo-French Library of Medical and Biological Science. The books are intended to bring closer together the

intellectual efforts of the medical men of the two nations, in order that each may know what the other is doing and thinking. The monographs are therefore published in English and French. The editor remarks that Mr. Sampson Handley needs no introduction to any British surgeon or pathologist. Furthermore, it is a particularly happy choice that has given him the task of writing this book.

He has a case to state, which he does very thoroughly, which can be summed up in a few words—that the histological changes found in cancerous growths if studied from their early stages show chronic lymph stasis as the original change. He states quite clearly that in his opinion lymphatic obstruction is the cause of cancer, and has painstakingly traced the pathology of lupus carcinoma through the phases of lymphangitis, papilloma and carcinoma. The first stage is a tuberculous lymphangitis.

This conception of the cause of cancer does not remove the parasitic or virus theories and the various cellular ones, which may act by some irritant disturbing the function of cell metabolism. Mr. Sampson Handley contends that his views can hold good with both these theories, inasmuch as the chronic lymphatic obstruction is there. Confirmatory results have been received by eminent workers, among whom the English surgeons and pathologists are well represented. The author's contention recurs throughout the book, and is reiterated with the persistence of the theme in a Bach fugue. Moreover, he has illustrated it by many cases and numerous specimens, which are reproduced in beautiful photomicrographs—the most notable feature of the 113 illustrations. These have undoubtedly done an enormous amount to remove the tedium which might have been met in a work of this size, which is chiefly histological. The descriptive matter is lucid and adequate. Nobody can deny from such evidence the truth of the author's research.

If this represents how cancer occurs, the question of why it occurs is left to those workers who have a valuable piece of evidence in common. Chronic irritation means chronic lymph stasis. The solution may rest with the bacteriologist, the biochemist or the embryologist.

Mr. Sampson Handley has written on a difficult subject, and presented it with an elegance of style which makes the book a model for one who seeks to compose a scientific thesis. The book deserves a wide recognition.

HANDBOOK OF SANITARY LAW. By B. BURNETT HAM, M.D., D.P.H. Eleventh edition. (London: H. K. Lewis & Co., 1932.) Pp. xxxi + 330. Price 7s. 6d.

This book appears again and, as the author states, endeavours to keep pace with the ever-increasing and amending legislation relating to public health. In spite of this enormous mass of legislative matter, the book manages to be portable, easily slipped into a pocket, well printed in clear type with rational and helpful sub-headings, copiously indexed and a mine of information. The subject is not an easy one to present so attractively, and with all respect to Dr. Burnett Ham we must admit that even with his treatment we do not find the subject-matter easy reading. It is accessible, and perhaps one of the best little books of reference on the subject that we can call to mind.

EXAMINATIONS, ETC.

University of Cambridge.

The following degrees have been conferred:

M.D.—Mellor, A. W. C.
M.B., B.Chir.—Radcliffe, W.
B.Chir.—Kersley, G. D.

University of London.

The following Diploma has been conferred:

D.P.H.—Cochrane, E.

British College of Obstetricians and Gynæcologists.

The following Member has been elevated to the **Fellowship:** Shaw, W.

The following has been elected a **Member:** Bell, A. C. H.

CHANGES OF ADDRESS.

ALLOTT, E. N., 40, Kings Avenue, Bromley, Kent.
BARNES, F. G. L., Shrubbery House, Horton, Epsom, Surrey.
LANGFORD, J. C. C., 28, Wellesley Road, Chiswick, W. 4. (Tel. Chiswick 2463.)
MARSH, F. D., 10, Church Road, Edgbaston, Birmingham. (Tel. Edgbaston 0236.)
MCGLADDERY, S., 100, Longbridge Road, Barking, Essex.

APPOINTMENTS.

BELL, A. C. H., M.B., B.S.(Lond.), F.R.C.S., M.C.O.G., appointed Obstetric Registrar, Charing Cross Hospital.
NICOL, W. D., M.B., D.P.M., appointed Lecturer in Clinical Psychiatry to the London (Royal Free Hospital) School of Medicine for Women.

BIRTHS.

FRANCE.—On March 6th, 1932, at Ludlow, Bromley Common, to Eileen, wife of Francis France, M.B.—a daughter.
HARKNESS.—On March 7th, 1932, at 20, Devonshire Place, W. 1, to Sheila, wife of R. C. Harkness, F.R.C.S.—a daughter.
HARRISON.—On February 29th, 1932, at Beckenham, to Dr. Mirabel Grace, wife of Dr. W. R. E. Harrison—a son.
HUBBLE.—On February 24th, 1932, to Joan, wife of Douglas Hubble, M.B., of 105, Kedleston Road, Derby—a daughter.
ORCHARD.—On March 21st, 1932, at 12A, Kensington Court Place, W. 8, to Sheila (*née* Whitaker), wife of Dr. Stuart Orchard—a son.
TOOTH.—On March 6th, 1932, at Clare House, Lewes, to Betty (*née* Stotts), wife of Ronald S. Tooth, M.A., M.R.C.S., L.R.C.P.—a son.

GOLDEN WEDDING.

HELME—LEES.—On March 15th, 1882, at Wesley Chapel, Hill Top, by Rev. W. George, James Milner Helme, M.D., The Firs, Rusholme, Manchester, second son of James Helme, Lancaster, to Lydia, younger daughter of the late John Lees, Beacon View, Hill Top, West Bromwich.

DEATHS.

GIBSON.—On March 7th, 1932, at Eastbourne, Thomas Sidney Gibson, M.R.C.S., L.R.C.P., D.P.H., of "Old Basing," Gerrard's Cross, aged 48.
HEBBLETHWAITE.—On March 18th, 1932, at Sevenarches, Lansdown Parade, Cheltenham, S. Montague Hebblethwaite, M.D., M.R.C.P., youngest son of the late J. W. Hebblethwaite.
MORGAN.—On March 2nd, 1932, Leslie Stuart Morgan, M.R.C.S., L.R.C.P., only son of Mr. and Mrs. F. Stuart Morgan, "Greyholme," Henley-on-Thames, aged 35.
SMITH.—On March 17th, 1932, suddenly, in London, William Robert Smith, Colonel R.A.M.C. (ret.), Knight Bachelor, M.D., D.Sc., LL.D., F.R.S.(Ed.), Barrister-at-Law, Emeritus Professor of Forensic Medicine in the University of London, aged 82.
STYAN.—On March 13th, 1932, at Lyndhurst, Sevenoaks, Thomas George Styan, M.D.(Cantab.), Officer of the Order of St. John of Jerusalem, aged 75 years.

ACKNOWLEDGMENTS.

The General Practitioner of Australasia—L'Écho Médical du Nord—Bulletins et Mémoires de la Société de Médecine—Giornale della Reale Società Italiana d'Igiene—Nursing Times—British Journal of Nursing—Cambridge University Medical Society Magazine—The Queen's Medical Magazine—The Kenya and East African Medical Journal—The Quarterly Journal of the Research Defence Society—King's College Hospital Gazette—St. Mary's Hospital Gazette—Guy's Hospital Gazette—The Clinical Journal—The Middlesex Hospital Journal.

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: National 4444.*

St. Bartholomew's Hospital Journal.

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

VOL. XXXIX.—No. 8.] MAY 1ST, 1932. PRICE NINEPENCE.

CALENDAR.

Mon., May 2.—Special Subjects: Clinical Lecture by Mr. Just.
Tues., ,, 3.—Sir Thomas Horder and Sir Charles Gordon-Watson on duty.
Wed., ,, 4.—Surgery: Clinical Lecture by Mr. Harold Wilson.
Cricket Match *v.* Wanderers. Home.
Tennis Match *v.* St. Thomas's Hospital. Away.
Fri., ,, 6.—Medicine: Clinical Lecture by Sir Thomas Horder.
Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Swimming Match *v.* Old Millhillians. Away.
Sat., ,, 7.—Cricket Match *v.* Hampstead. Home.
Tennis Match *v.* London Hospital. Home.
Mon., ,, 9.—Special Subjects: Clinical Lecture by Dr. Cumberbatch.
Tues., ,, 10.—Dr. Gow and Mr. Girling Ball on duty.
Wed., ,, 11.—**View Day.**
Thurs., ,, 12.—Swimming Match *v.* University College. Home.
Fri., ,, 13.—Medicine: Clinical Lecture by Dr. C. M. Hinds Howell.
Prof. Fraser and Prof. Gask on duty.
Sat., ,, 14.—Cricket Match *v.* Winchmore Hill. Home.
Tennis Match *v.* Balliol College, Oxon. Away.
Sun., ,, 15.—Whit-Sunday.
Mon., ,, 16.—**Bank Holiday.**
Cricket Match *v.* Croydon. Home.
Tues., ,, 17.—Sir Percival Hartley and Mr. L. Bathe Rawling on duty.
Wed., ,, 18.—Surgery: Clinical Lecture by Mr. Girling Ball.
Swimming Match *v.* Old Citizens. Away.
Thurs., ,, 19.—**Last day for receiving matter for the June issue of the Journal.**
Fri., ,, 20.—Medicine: Clinical Lecture by Sir Percival Hartley.
Sir Thomas Horder and Sir Charles Gordon-Watson on duty.
Sat., ,, 21.—Cricket Match *v.* Metropolitan Police. Away.
Tennis Match *v.* R.N.C. Greenwich. Home.
Mon., ,, 23.—Special Subjects: Clinical Lecture by Mr. Elmslie.
Tues., ,, 24.—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Wed., ,, 25.—Surgery: Clinical Lecture by Sir C. Gordon-Watson.
Swimming Match *v.* Old Paulines. Away.
Athletic Club: **Annual Sports** at Winchmore Hill.
Thurs., ,, 26.—Cricket Match *v.* M.C.C. Home.
Fri., ,, 27.—Medicine: Clinical Lecture by Sir Thomas Horder.
Dr. Gow and Mr. Girling Ball on duty.
Cricket Match *v.* St. John's College, Cambridge. Away. (2-day match.)
Mon., ,, 30.—Special Subjects: Clinical Lecture by Mr. Scott.
Tues., ,, 31.—Prof. Fraser and Prof. Gask on duty.

EDITORIAL.

THE outstanding Hospital event of the past month was the visit of Prof. Hugh Cabot from the Mayo Clinic. This visit, unlike his last, was an unofficial one, and we regret that we did not see more of him. Prof. Cabot is a lecturer of wide fame, and those who heard him on "The Present Position of Prostatic Surgery" were not disappointed. This lecture is specially interesting when compared with his address on a similar subject in June, 1926, we hope to publish it in full in our next issue. We greatly enjoyed his films of travel and wild life in British Columbia and his delightful running commentary. Prof. Cabot possesses that American quality of humorous phrase-making which gave added zest to travel film and surgical lecture alike.

* * *

THE JACKSONIAN PRIZE.

The Jacksonian Prize of the Royal College of Surgeons has been awarded to Mr. Paterson Ross for his essay on "The Surgery of the Sympathetic Nervous System." This distinction has often fallen to Bart.'s men in the past, several members of the present Surgical Staff having won it in recent years. We offer Mr. Paterson Ross our heartiest congratulations on having added his name to this distinguished list.

* * *

BRITISH MEDICAL ASSOCIATION, 1832–1932.

This year is the Centenary of the British Medical Association, which has a membership of 34,000, distributed in 100 branches and 250 divisions throughout and beyond the Empire. The great extent of its work for members of the medical profession makes it one of the outstanding medical associations of the world, and in Tavistock Square it has a headquarters worthy of its prestige.

In July the Association will hold in London its Centenary Meeting, the programme for which has been published in the *British Medical Journal*.

The following St. Bartholomew's men, amongst others, hold office or will be taking part in this Hundredth Meeting:

Honorary Organizing Secretary: Dr. E. A. Worley.

Medicine.—President: Sir Humphry Rolleston, Bt., G.C.V.O., K.C.B., M.D. Vice-Presidents: Arthur J. Hall, M.D., F.R.C.P., Sir Thomas Horder, Bt., K.C.V.O., M.D.

Surgery.—Vice-Presidents: W. McAdam Eccles, M.S., F.R.C.S., G. E. Gask, C.M.G., D.S.O., F.R.C.S. Honorary Secretary: R. M. Vick, O.B.E., M.Chir., F.R.C.S. Discussion: Kenneth M. Walker, F.R.C.S.

Obstetrics and Gynæcology.—Honorary Secretary: Wilfred Shaw, M.D., F.R.C.S.

Physical Medicine.—Vice-Presidents: E. P. Cumberbatch, M.D., M.R.C.P., Sir Henry Gauvain, M.Ch., F.R.C.S. Discussion: E. P. Cumberbatch, M.D., M.R.C.P., Sir Henry Gauvain, M.Ch., F.R.C.S., C. B. Heald, C.B.E., M.D., M.R.C.P.

Public Health.—President: Sir George Newman, K.C.B., M.D., F.R.C.P.

Oto-Laryngology.—Vice-President: Sir James Dundas Grant, K.B.E., M.D., F.R.C.S. Hon. Secretary: F. W. Watkyn-Thomas, F.R.C.S.

Pathology.—Vice-President: E. H. Kettle, M.D., F.R.C.P. Discussion: E. H. Kettle, M.D., F.R.C.P., A. F. S. Sladden, M.D.

Bacteriology.—Vice-Presidents: S. R. Douglas, M.R.C.S., M. H. Gordon, C.M.G., C.B.E., M.D. Discussion: S. R. Douglas, M.R.C.S.

Radiology.—Vice-President: N. S. Finzi, M.B. Hon. Secretary: W. M. Levitt, M.B., M.R.C.P.

Diseases of Children.—Hon. Secretary: R. A. Ramsay, M.Chir., F.R.C.S. Discussion: Ogier R. Ward, M.Ch., F.R.C.S., R. H. Crowley, M.D., F.R.C.P., J. H. Thursfield, D.M., F.R.C.P.

Pharmacology and Therapeutics.—Vice-Presidents: A. J. Clark, M.D., F.R.C.P., F. R. Fraser, M.D., F.R.C.P., Philip Hamill, M.D., F.R.C.P. Discussion: R. R. Armstrong, M.D., F.R.C.P.

Physiology and Biochemistry.—President: Sir Henry Dale, M.D., F.R.C.P. Hon. Secretary: Reginald Hilton, M.D., F.R.C.P.

Ophthalmology.—President: Sir J. Herbert Parsons, C.B., M.B., F.R.C.S. Vice-President: R. Foster Moore, O.B.E., F.R.C.S. Discussion: R. Foster Moore, O.B.E., F.R.C.S., C. M. Hinds Howell, D.M., F.R.C.P.

Orthopædics.—Vice-Presidents: R. C. Elmslie, O.B.E., M.S., F.R.C.S., E. W. Hey Groves, M.S., F.R.C.S. Discussion: R. C. Elmslie, O.B.E., M.S., F.R.C.S.

Anæsthetics.—Vice-President: C. Langton Hewer, M.B., B.S.

Tropical Medicine.—Vice-President: Sir Ronald Ross, K.C.B., K.C.M.G., M.D. Discussion: R. G. Cochrane, M.D., M.R.C.P.

Mental Disorder.—Discussion: R. H. Crowley, M.D., F.R.C.P.

Tuberculosis.—Vice-Presidents: Sinclair Gillies, M.D., Sir Pendrill Varrier-Jones, M.R.C.S.

History of Medicine.—Vice-Presidents: J. A. Nixon, C.M.G., M.D., F.R.C.P., Sir D'Arcy Power, K.B.E., M.B., F.R.C.S. Hon. Secretary: W. R. Bett, M.R.C.S.

Forensic Medicine.—Vice-President: Sir Bernard Spilsbury, M.B., F.R.C.P. Discussion: Sir Bernard Spilsbury, M.B., F.R.C.P.

Medical Sociology.—Honorary Secretaries: L. G. Glover, M.D., N. E. Waterfield, M.B., F.R.C.S.

Comparative Medicine.—Vice-President: J. A. Arkwright, M.D., F.R.C.P.

In view of the attendance of members from all over the Empire, and of delegates from foreign medical bodies, as well as of specially invited guests from foreign countries, the London meeting in July 1932 is likely to be of international importance.

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St. Bartholomew's Hospital Women's Guild.

The Guild is to be congratulated in securing for the Annual View-Day Meeting the patronage of the Lady Mayoress, and the services of Major Ian Hay Beith, C.B.E., M.C., as chief speaker. The name of Ian Hay is familiar to everyone. Many of us have read his address to the students of Guy's Hospital some years ago, and were charmed by the wit and wisdom it contained. The ladies of the Guild are anxious to have as large an audience as possible. Students are invited to bring their visitors to the Great Hall on View Day, May 11th, at 4.15 p.m. Tea will be served at the end of the meeting.

We feel that the object and work of the Guild are not sufficiently well known in the Hospital. The Guild Committee are therefore anxious to enlist the interest and co-operation of all present Bart.'s men, and through them of their relations and friends, in the work which is being undertaken.

* * *

The Athletic Club will hold their Annual Sports at Winchmore Hill on Wednesday, May 25th. We are asked by the Secretary to draw attention to this date, as, in the past, attendance has always been strangely meagre. Students and their friends are invited to this important function, and are asked to give the Club their support. They will be sure of a good afternoon's entertainment. The Club must be congratulated on winning the Inter-Hospital Cross-Country Championship so easily; this splendid success was due to fine team-work. They secured five of the first eight places—a record for this event.

* * *

The Fifth Summer Meeting of the St. Bartholomew's Hospital Golfing Society is to be held at Walton Heath Golf Club on Thursday, June 23rd, 1932. Through the kindness of Lord Riddell, members of the Society will be allowed to play without paying any green fee. Details of the competitions will be circulated in the early part of June. We hope that, if there is any Bart.'s man who is not a member of the Society, and is anxious to play at this meeting, he will communicate with Dr. Graham, 149, Harley Street, or Mr. Rupert Corbett, 91, Harley Street.

* * *

The Whitsun "meet" of the St. Bartholomew's Hospital Alpine Club will be held at the Pen-y-Gwrwyd Hotel in the Snowdon district on May 14th. Hospital men who intend to be present should inform the secretaries of the Club immediately, and state whether they wish accommodation to be reserved for them at the Hotel (at the rate of 16*s.* 6*d.* per day). It may be possible to arrange for some members to be taken by car, but, failing this, trains can be taken to Bettwys-y-Coed from Euston at 8.30 a.m., 10.30 a.m. and 11 p.m. (fare, 38*s.* 6*d.* week-end). Arrangements will be made to meet members at Bettwys-y-Coed station if the Secretaries are notified.

* * *

The Annual Past *v.* Present cricket and tennis matches will be played at Winchmore Hill on Saturday, June 11th. Old Bart.'s men who are cricketers and who wish to play for "The Past" should send their names as soon as possible to Dr. Geoffrey Bourne, 27, Harley Street. Sir Charles Gordon-Watson, 82, Harley Street, will be pleased to receive the names of those who wish to play tennis.

* * *

We are asked to remind readers that John Ridley Prentice, eldest son of the late Dr. Hugh Ridley Prentice, is a candidate for a Foundation Scholarship at Epsom College this year. At the last election he received many votes, but not sufficient to obtain him a scholarship. The support of Bart.'s men and any other readers, who may have unallocated votes in this year's election, is needed to bring about the happy result.

* * *

Our apologies are due to the *British Medical Journal* for having omitted to state in our last issue that the portrait of the late Sir Frederick Andrewes was reproduced by their kind permission.

§

A CASE OF SEVERE SEPSIS OF THE HAND, WITH SOME NOTES ON THE GENERAL TREATMENT OF SUCH CONDITIONS.

THE following case is of interest as illustrating the diagnosis and treatment of advanced septic conditions of the hand and forearm, and the value of the incisions advised by Kanavel in such cases.

Case-Notes.

History of present condition.—P. G—, æt. 4, was admitted to hospital with swelling and severe pain in the right hand and forearm. He had fallen down and scratched his hand four days previously.

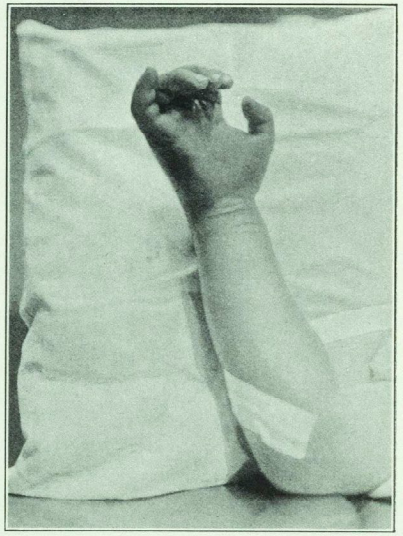

FIG. 1.—PHOTOGRAPH TAKEN IN THE THEATRE BEFORE OPERATION, SHOWING THE ORIGINAL STATE OF THE HAND AND ARM. NOTICE THE SWELLING OF PALM AND WRIST, AND THE FLEXED POSITION OF THE FINGERS.

Condition on examination.—The child was obviously very ill. His temperature was 102·6° F. and his pulse-rate 116. The right hand (Fig. 1) was swollen and œdematous, with swelling both of the palm and dorsum. There were a number of superficial blisters on the dorsum of hand and wrist. There was also swelling and œdema of both flexor and extensor aspects of the forearm in its lower two-thirds. The little finger and thumb appeared to be more affected than the other digits. The skin of the whole of the lower forearm and hand was a dusky red in colour, and considerably hotter than the opposite side. On palpation the limb was extremely tender, and the œdema was found to be most marked over the dorsum of the wrist and hand. Tenderness was present over the lower ends of the radius and ulna, but the point of maximum tenderness was difficult

to determine, as the child cried whenever his hand was touched or moved in the slightest degree. For the same reason it was not possible to determine properly the range of movements at the wrist and finger-joints, although they were obviously limited. The epitrochlear gland was enlarged and very tender, but there was no enlargement or tenderness of the glands in the right axilla.

Operation.—This was performed almost immediately under a general anæsthetic. The hand and forearm were cleaned with ether and painted with picric acid. Incisions were then made as indicated in Fig. 2.

(1) The little finger was opened and the theca incised. Pus was found, and the incision was continued up the ulnar border of the hand so as to open the ulnar bursa. This was found to be infected only slightly, so that it was not counter-drained by incision above the wrist. This incision was also made to drain the main palmar space.

(2) The thenar space was then explored and a good deal of pus under pressure was found.

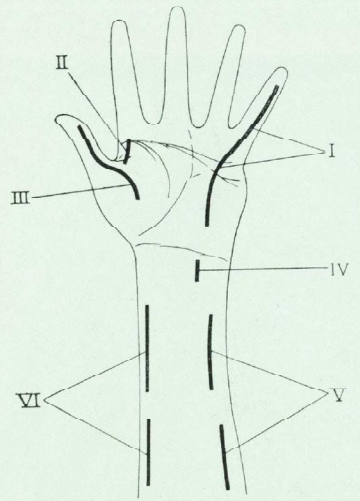

FIG. 2.—DIAGRAM ILLUSTRATING THE INCISIONS EMPLOYED IN THIS CASE.

N.B.—Incisions in figure numbered to correspond with the text.

(3) The tendon sheath of the thumb and radial bursa were then opened and a large amount of pus burst out under pressure.

(4) An incision for counter-drainage was therefore made above the wrist.

(5 and 6) The forearm was then drained by two lateral pairs of incisions. The whole of the lower part of the forearm was found to be distended by pus, extending between the flexor profundus muscle anteriorly and the interosseus membrane posteriorly, from the anterior annular ligament to the junction of the upper and middle thirds of the forearm. The wrist-joint did not appear to be infected.

In each case glove drainage was left in position, passing subcutaneously between adjacent incisions.

The whole hand and forearm were then wrapped in gauze soaked in flavine and paraffin; plenty of cotton-wool was applied and bandaged tightly to control any hæmorrhage which might take place. A straight splint was strapped on to prevent movement. On arrival in bed the arm was immobilized in a raised position on a pillow, between sandbags.

Post-operative treatment and progress.—The patient was given morphia gr. $\frac{1}{3}$ and continuous rectal salines. For the first twelve hours he was given as much fluid by mouth as he would take. After the first twenty-four hours he was given light diet, with extra fluids and a daily laxative. Full diet was resumed on the fourth day after operation.

The dressings were left undisturbed for twenty-four hours, as the temperature and pulse dropped after operation and the child seemed better. The arm was then dressed after a preliminary soaking in warm hypertonic saline. Very little oozing had occurred, but a good deal of purulent discharge was present on the dressings. The tracks between the incisions were irrigated with eusol, the incisions themselves dressed with gauze soaked in flavine and paraffin, and the splint reapplied. This was continued daily until the tracks closed and the wounds had almost healed.

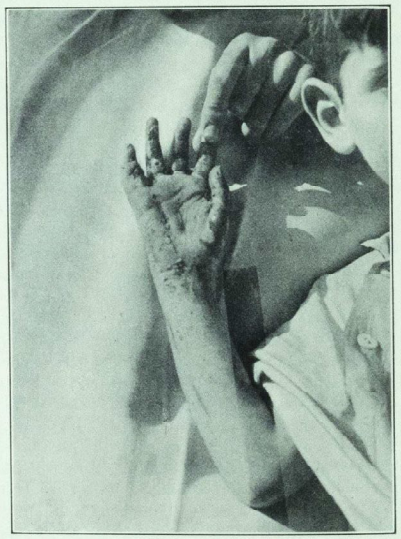

FIG. 3.—PHOTOGRAPH TAKEN RECENTLY, SHOWING THE PRESENT STATE OF THE HAND AND ARM. THE DESQUAMATING SKIN RATHER MASKS THE TRUE APPEARANCE OF THE LIMB IN THE PHOTOGRAPH.

On the fourth day the rubber drainage-strips were removed and the straight backsplint changed for a "cock-up" splint, providing about 20° hyperextension at the wrist-joint.

On the twenty-fifth day the incisions had so far healed up as to allow of massage and movements of the wrist and fingers to be commenced. The only exception was the little finger, which was still discharging pus, and in which part of the proximal phalanx appeared to be separating as a sequestrum.

At the present time (six weeks after the operation) movements of the wrist-joint are about 60% and of the fingers 40% of the normal. The hand (Fig. 3) is fairly normal in appearance, except for the scars of the incisions and the state of the little finger, which is still swollen and discharging sero-pus. The result is extraordinarily good, considering the original condition of the child on admission to hospital. The sequestrum has not yet separated from the little finger, but appears likely to do so in a few days' time.

CLINICAL TYPES OF INFECTION OCCURRING IN THE HAND.

Infections of the hand are grouped clinically into four recognized types:

(a) *Subcuticular.*—These are usually obvious, and are generally of little importance.

(b) *Subcutaneous.*—In this type the infection has spread to the pulp of the hand or finger, and is bounded by the partitions which subdivide this space. The skin of the terminal phalanges of the digits is closely bound down to the bone and periosteum by multiple fibrous septa, so that the subcutaneous space cannot expand to any extent in this situation. Hence inflammation and consequent rise of tension in this space are very likely to be followed by necrosis of most of the bone of the terminal phalanx, unless relieved by early and adequate incision. The base of the terminal phalanx, however, into which the deep flexor tendon is inserted, has a separate blood supply from outside this closed space, and is therefore not involved in the general necrosis. The subcutaneous space in the hand is divided by the palmar fascia and its deep connections into three main partions: (i) The thenar space, laterally; (ii) the hyopthenar space, medially; (iii) the intermediate main palmar space. But the deep fascia between the hypothenar and the main palmar space is only poorly developed, with the result that infection of either is generally accompanied by infection of the other. The thenar space does not extend into the forearm; but the palmar space extends upwards for about an inch above the anterior annular ligament, between the flexor profundus tendons anteriorly and the pronator quadratus posteriorly. Neither the palmar nor the thenar space communicates distally with the pulp of the fingers or thumb, so that infection can only spread from the latter to the subcutaneous spaces of the palm by way of the tendon sheaths.

(c) *Thecal.*—In this type infection of the tendon sheaths is present. It is a most serious condition, since pus spreads rapidly along the sheaths and may burst through them anywhere along their length, thus causing both infection of distant structures and possible sloughing of the tendons themselves. The tendon sheaths may be infected directly by spread from infection of the subcutaneous spaces, or by careless incision when opening up the latter. The tendon sheaths of the middle three fingers do not usually communicate with either of the palmar bursæ, whilst the tendon sheath of the little finger communicates with the ulnar bursa, and that of the thumb with the radial bursa. Both the ulnar and radial bursæ pass proximally into the forearm for about $1\frac{1}{2}$ in. and usually do not communicate. But in a number of cases this arrangement of the sheaths varies from the normal—the radial bursa occasionally communicates with the ulnar bursa above the anterior annular ligament, and the tendon sheath of the index finger may communicate with the ulnar bursa. Hence infection of any of the digital tendon sheaths except those of the ring and middle fingers may cause infection of both palmar bursæ, extending up into the forearm.

(d) *Subperiosteal.*—This is really an acute periosteomyelitis, and generally causes local or total necrosis of bone underlying it. The infection may spread along the tendon sheath, and travelling along it manifest itself elsewhere.

THE DIFFERENTIAL DIAGNOSIS IN THIS CASE.

This case illustrates very well some of the more important points in the differential diagnosis of advanced septic conditions of the hand.

No initial focal point of infection was apparent, so the problem was to decide which of the clinical types of infection was present, and thus enable adequate incisions to be made without the risk of damaging uninfected structures. The patient was a child and in great pain, and thus unable to localize any point of maximum tenderness. The lower ends of the radius and ulna were very tender to the touch, and this raised the possibility of osteomyelitis of both bones as a cause of his condition. But the obvious advanced inflammatory changes in the hand and fingers rather suggested that the primary focus had been somewhere in the hand, and that the condition was one of severe sepsis of the latter rather than an initial bone infection. Moreover the extreme degree of swelling of the palm of the hand suggested that there was infection of the palmar space; as although swelling of the dorsum of the hand commonly occurs with an inflammatory condition of the forearm alone, swelling of the palm never occurs unless actual inflammation of the palmar space (or its contents) is present. There were no enlarged or tender glands in the right axilla, and this was rather in favour of a bone infection; although in cases of severe sepsis, if the resistance of the patient is low, the axillary glands do not always act in their usual capacity as a barrier to infection.

Thus it seemed evident that in this case the infection had originally started somewhere in the palmar space, and had spread distally by way of the tendon sheaths to the fingers, and proximally *viâ* the ulnar and radial bursæ to the forearm. This also explained the relatively increased septic condition apparent in the thumb and little finger, since the middle three digits

do not usually communicate with either of the palmar bursæ.

GENERAL TREATMENT OF SEPSIS AS ILLUSTRATED BY THIS CASE.

The treatment of septic conditions of the hand may be grouped under three main headings.

A. *Pre-operative Treatment.*

In the case described the condition necessitated immediate operation, so that no pre-operative treatment was performed. Such treatment consists essentially of resting the inflamed part and of the application of heat to it. The latter may take the form of hot fomentations applied *frequently* (the common custom of placing a hot fomentation—which only stays hot for about ten minutes—on the infected area and then renewing it every four hours is almost useless), hot poultices, hypertonic saline baths or radiant heat. The application of heat to the septic area increases the blood-supply to it, thus increasing the concentration of antibodies in the inflamed area. An alternative way of increasing the blood-supply to the inflamed part is by means of Bier's passive hyperæmia. The resting of the injured part is usually easy, as the patient is generally only too loth to attempt any movement which may cause him pain.

B. *Operative Treatment.*

The essential of operative treatment in all cases of sepsis is *free* incision, so as to provide adequate drainage. The incision should be as nearly as possible the whole length of the inflamed area, avoiding all important structures. This may appear drastic, but the rapidity with which such really properly drained tissues recover is amazing, if one only has sufficient moral courage to open them up really thoroughly. Very little bleeding usually occurs if the incision has been made in the correct place, since the blood-vessels are partially thrombosed, as a result of the sepsis. Such minor bleeding as occurs as a result of the incision may easily be controlled by firm packing after the operation, and in any case is of little importance compared with the beneficial results of really free drainage. If necessary, counter-drainage should be performed, two lateral incisions being made and connected subcutaneously by strips of glove drain. This method of drainage is particularly suited to cases such as subcutaneous whitlow of the finger, where a single median incision may involve risk of damage to the tendon; or where, owing to the area of the inflammation, one central incision would not alone provide adequate drainage.

Undoubtedly the best incisions for sepsis of the hand and forearm are those advocated by Kanavel (see Fig. 4), nearly all of which were used in this case. Briefly they are as follows:

(a) *Infection of the distal phalanges.*—Cases of this type require immediate incision for the reasons stated above. A horse-shoe incision is made parallel to the nail and about $\frac{1}{8}$ in. anterior to it, and deepened to form a flap. Removal of the nail should be performed when there is pus below it; or two parallel incisions may be made running proximally from the supero-lateral angles of the nail, and the flap thus marked out reflected and held away from the nail by flavine and paraffin gauze.

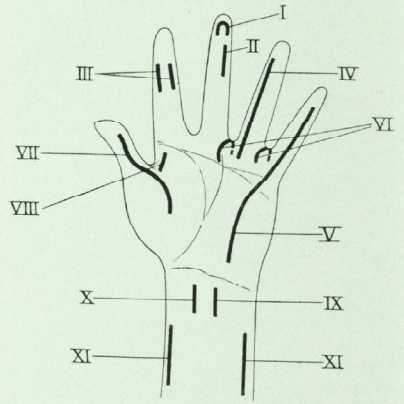

FIG. 4.—DIAGRAM ILLUSTRATING KANAVEL'S INCISIONS FOR THE TREATMENT OF SEPTIC HAND.

(i) Horse-shoe incision for sepsis of terminal phalanx. (ii) Single antero-lateral incision. (iii) Double antero-lateral incision with counter-drainage. (iv) Incision for infection of tendon sheath of 2nd, 3rd and 4th fingers. (v) Incision for opening ulnar bursa and tendon sheath of little finger. (vi) Incisions for draining main palmar space. (vii) Incision for opening tendon sheath of flexor longus pollicis and radial bursa. (viii) Incision for draining thenar space. (ix) Incision for counter-drainage of ulnar bursa. (x) Incision for counter-drainage of radial bursa. (xi) Paired lateral incisions for drainage of forearm.

(b) *Infection of the middle and proximal phalanges.*—Either a single antero-lateral incision may be made or bilateral antero-lateral incisions with counter drainage. In either case care should be taken not to injure the tendon sheath if this is not already involved in the inflammation. If, however, the latter *is* involved, it should be split up from the side (for its entire length) so as to leave it as functionally perfect as possible, should the tendon recover.

(c) *Infection of the main palmar space.*—Antero-lateral horse-shoe incisions should be made deeply in the web between the little and ring or ring and middle fingers, depending on the physical signs present as to the point of maximum tension. A pair of artery forceps is then passed along the deep surface of the lumbrical muscle into the main palmar space, and glove drain left in position. In severe cases these incisions may be supplemented by an incision running parallel to the ulnar border of the hand, over the hypothenar space.

(d) *Infection of the thenar space.*—Incision should be made in the web between the thumb and index finger, and parallel to it. Artery forceps should then be passed between the adductor transversus muscle posteriorly and the short muscles of the thumb anteriorly into the space, and glove drain left *in situ*.

(e) *Infection of the ulnar bursa.* This usually occurs secondary to a whitlow of the little finger, and the tendon sheath of the little finger should first be incised for its whole length, as described above. This incision is then carried down into the ulnar bursa along the ulnar border of the hand, to the ulnar side of the flexor tendons, as far upwards as the distal margin of the anterior annular ligament. Should the infection have burst upwards through the proximal end of the ulnar bursa, the latter is opened by a vertical incision in the wrist above the anterior annular ligament, between the flexor sublimis digitorum and the flexor carpi ulnaris tendons. Counter drainage is then established by glove drain connecting the two incisions beneath the anterior annular ligament.

(f) *Infection of the radial bursa.*—The tendon sheath of the flexor longus pollicis should be opened up as described, and this incision should then be carried proximally upwards and inwards over the inner part of the thenar eminence, to a point about $1\frac{1}{2}$ in. below the lower wrist crease. It should not be carried further proximally than this, for fear of injuring the branch of the median nerve to the short thumb muscles. If the infection has burst through the proximal end of the bursa, an incision for counter-drainage is made above the anterior annular ligament between the flexor sublimis digitorum and flexor carpi radialis tendons, as described in (*e*) above.

(g) *Infection of the forearm.*—If infection has extended upwards into the forearm by extension from the palmar bursæ, lateral incisions should be made above the wrist, just anterior to the radius and ulna respectively, and adequate drainage established by glove drain passing transversely between the incisions, deep to the flexor profundus muscle. Care should be taken not to injure the radial artery (which crosses the radius about $1\frac{1}{2}$ in. above its styloid process) by extending these incisions too far distally.

All these operations are rendered much easier by the previous application of a tourniquet. Tube drainage should never be used because of the danger of further damage to the already partially damaged structures in the inflamed area. The whole forearm and hand should always be splinted after operation, so as to prevent contracture from occurring, and in order to keep the injured part at rest.

C. *Post-operative treatment.*

The after-treatment of such conditions of the hand and arm is extremely important, and may be regarded under the following headings:

(a) *General treatment.*—This consists of the usual post-operative measures—rectal salines and morphia, or some other analgesic for the first twelve hours, then a light diet, increasing to full diet as soon as possible. It adds considerably to the patient's comfort if the hand and arm are elevated on a pillow between sandbags—at any rate for the first few days. It is important to give some aperient daily until the wound is healed, and extra fluids are also beneficial until convalescence is well advanced. As soon as the patient is able to take it, a tonic is advantageous; whilst the physical and psychical improvement resulting from the administration of a bottle of beer or stout a day to adult patients accustomed to it, has to be seen to be appreciated.

(b) *Treatment of the wound.*—If adequate drainage has been established, the dressing of the wound is rendered much easier. Daily or bi-daily dressings of eusol or of flavine and paraffin are the usual routine. If there is reason to suspect "pocketing" of pus, and in all cases of thecal infection, irrigation of the whole track of the wound with eusol and normal saline solution through a small-sized nasal tube or a soft rubber catheter is very useful. In some cases of severe sepsis continuous irrigation with Carrol-Dakin's solution may be necessary for a few days, to remove inaccessible sloughs. Secondary suture is rarely advisable in cases of infection of the hand, and in any case should only be performed when the organisms in a smear of the discharge have fallen to one or less per $\frac{1}{12}$th microscope field. When sequestra are present, they should never be removed until they are completely free from the underlying bone, or more harm than good will be done to the surrounding tissues. In cases where there is a large clean granulating area, it is a good plan to dress the wound with the "tulle gras" dressing familiar to plastic surgeons, which reduces both the pain of the dressing and the likelihood of tearing off any of the delicate growing epithelial cells.

(c) *Restoration of function.*—Possible contractures of

the wrist and fingers are treated by prophylactic splinting from the time of operation; but if the correct incisions are made, trouble is very unlikely to arise from this cause. A much more common sequel of these cases of sepsis of the hand is stiffness and lack of movement of the damaged fingers, owing to adhesions between the tendons and the tendon sheaths, or between the tendons and surrounding structures. A good deal can be done to prevent this catastrophe by commencing gentle massage and movements as soon as the condition of the wound will allow; but even this treatment is not always successful. In such cases manipulation under a general anæsthetic (*not* nitrous oxide—which rarely provides sufficient relaxation for the purpose), with a subsequent course of massage and active movements, will often restore function to a considerable degree. If the digit in question still remains useless, and by its immobility prevents full use being made of the hand, the question of amputation arises; but this should never be performed within three months of healing of the wound, on account of the danger of infection of the stump occurring. Very grave consideration is necessary in the case of the thumb, as no portion of this digit can be sacrificed without considerable disability of the hand as a result.

In conclusion I wish to thank Mr. C. Naunton Morgan for his kind permission to publish the records of this case under his care at the Metropolitan Hospital.

DAVIS A. BEATTIE.

A CASE OF OBSTINATE CONSTIPATION TREATED BY SYMPATHECTOMY.

THE following notes are possibly of interest, not only on account of several unusual features of the case, but also as illustrating a line of treatment which is being employed at the present time with some measure of success.

Miss M. H—, a trained nurse, æt. 38, was admitted to Lawrence Ward on October 27th, 1931, complaining of (*a*) constipation, (*b*) diminished frequency of micturition.

History of the condition.—In January, 1928, following a subtotal hysterectomy, the patient noticed increasing constipation and abdominal distension. At this time she had her bowels open on alternate days with soap enemata, aperients, of which she tried a large variety and in large doses, being ineffective, with the sole exception of castor oil, which she was occasionally obliged to take.

Superimposed on this chronic obstruction, about once a fortnight she used to get attacks of acute abdominal pain, nausea and vomiting, associated with a slight rise of temperature to 99·6° F., the constipation becoming worse, so that even enemata produced a very poor result. The pain was colicky in nature, and situated mostly in the lower abdomen. The vomitus consisted of the previous meal and a brownish fluid, the whole attack lasting about 24 hours.

The patient also noticed that since 1929 she had been able to pass long periods without micturating, although her fluid intake was normal. Further, on questioning, it was found that she suffered considerably from coldness of the lower extremities, her feet particularly becoming white and quite painful in cold weather.

In July, 1931, she was admitted to Queen Mary's Hospital, Roehampton, for investigation and treatment. An X-ray taken there is alleged to have shown "the gut to be kinked and bound down." She was there for three months, during which time she was given many aperients and abdominal massage without any real improvement in the constipation, so she was discharged as incurable. Lord Moynihan, however, who saw the X-rays and notes, suggested surgical treatment, and sent her to St. Bartholomew's Hospital.

Her appetite was poor, she suffered with indigestion and flatulence, and had lost weight during the last few years. The bowels were open on alternate days with soap enemata, the result consisting mostly of scybalous masses and some mucus; no obvious blood. The micturition was quite normal apart from the diminished frequency.

Past history.—Scarlet fever and measles (æt. 6) in 1900. Acute appendicitis and appendicectomy without drainage (æt. 22) in 1916. She always had menorrhagia and dysmenorrhœa, which later became complicated by epimenorrhœa, so she was treated by Dr. Donaldson in Martha Ward as follows:

February, 1921: Ionization.

August, 1921: 25 mgrm. radium inserted into uterine cavity for twenty four hours.

February, 1922: Right oöphorectomy.

These measures only gave a temporary improvement and, as the menorrhagia was not controlled by medical means, in—

November, 1929: A subtotal hysterectomy and partial left oöphorectomy were performed.

Family history.—*Nil ad rem.*

On examination she was seen to be thin and pale, but otherwise a healthy-looking patient. Temperature 97° F., pulse 60, respirations 20. The eyes were normal, the tongue clean and moist, and teeth showed no obvious sepsis. No enlarged glands were palpable in neck, axillæ or groins. The heart and lungs were quite natural. Blood-pressure 120/85. The abdomen was symmetrical, but rather distended below the umbilicus. Right pararectal and left paramedian scars of previous operations were healthy. There was no visible peristalsis.

On palpation the muscle tone was poor and there was a marked aortic pulsation in the epigastrium. Tenderness was elicited in both iliac fossæ, but specially over the pelvic colon, which was easily palpable and indented on pressure. Cæcum was distended and hyper-resonant. Reflexes were natural, and no other enlarged viscus was palpable.

Per rectum.—Nothing abnormal discovered.

The feet were white and cold, but otherwise normal.

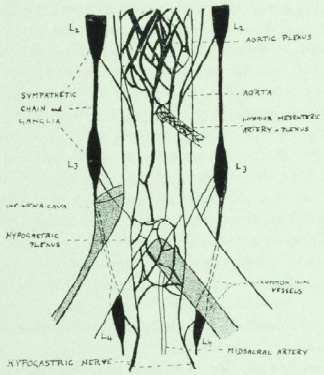

FIG. 1.—DIAGRAM OF SYMPATHETIC CONNECTIONS AS SEEN AT OPERATION.

Special examination.—The stool was a brown liquid, alkaline in reaction. It contained no undigested food and no occult blood; no starch granules.

Blood.—Red blood-cells, 3,860,000 per c.mm.; white blood-cells, 7250 per c.mm.

X-ray.—Report after barium meal: Enteroptosis; no evidence of adhesions.

A diagnosis of chronic intestinal obstruction, functional in nature, probably due to over-activity of the sympathetic, was made, the diminished frequency of micturition being only another manifestation of the same fundamental dysfunction.

On November 6th, 1931, an operation for lumbar sympathectomy was performed by Prof. Gask in Theatre G under general anæsthesia. The abdomen was opened by a right paramedian incision, 8 in. long, extending from the pubes to 2½ in. above the umbilicus. The table was then tilted into the Trendelenburg position and the pelvis explored, when it was found that there were numerous old adhesions between the small intestine and cæcum, on the one hand, and the cervical stump and the left ovary, which was cystic, on the other. These adhesions were divided, and the posterior abdominal wall exposed by retracting the small intestine and colon to the right and left respectively. The posterior parietal peritoneum was then incised to reveal the aorta, inferior vena cava and common iliac vessels. All the loose cellular tissue lying on the fifth lumbar and first sacral vertebræ at the bifurcation of the aorta was then dissected away, the middle sacral artery being ligatured in the process. The anterior surfaces of the proximal inch of the common iliac arteries and aorta itself, as far up as 1 in. above the origin of the inferior mesenteric artery, were then similarly treated, thus ensuring a complete removal of the pre-sacral nerves (hypogastric plexus), the commencement of the inferior mesenteric plexus and their numerous connections with the lumbar sympathetic ganglia, which were identified at this stage. Hæmostasis was secured, the table levelled and the wound closed in layers.

Following the operation there was a temporary rise of the temperature, pulse and respirations, to 100°, 110 and 40 respectively, but the patient was comparatively comfortable, the passage of a rectal tube being sufficient to relieve the slight flatulence of which she complained.

Thirty-six hours later she passed a normal motion for the first time in three and a half years. Micturition also became normal, the frequency increasing to 4–5/0.

The convalescence was uninterrupted, and she was discharged on December 1st, 1931, five weeks after admission, her bowels continuing to act normally once a day except for a few temporary remissions, lasting a day, which responded readily to a pill containing aloes.

DISCUSSION.

At first sight it might appear that the obstructive symptoms and their subsequent relief could well be explained by the adhesions found at operation, but these adhesions could scarcely have accounted for the micturition symptoms, so it seems more reasonable to ascribe a common origin to them, *viz.* a nervous disorder. Thus, although the case is not a true congenital dilatation of the colon as originally described by Hirschsprung, in that there is no evidence that the disease was congenital, while the colon, as seen at operation, and by radiography, was not markedly dilated, there are, nevertheless, certain marked similarities in the symptomatology and clinical findings,

while the fact that both conditions have been successfully treated by lumbar sympathectomy suggests that the pathology may be the same.

The exact nature of this or any other disorder of the sympathetic nervous system is not really understood, but a glance at the accompanying diagram, showing the distribution of the efferent pathways to the bladder and colon, will show how close is the relationship.

Briefly stated, the motor nerve supply of these structures is double:

(*a*) Sacral autonomic (nervi erigentes or parasympathetic).

(*b*) The sympathetic proper.

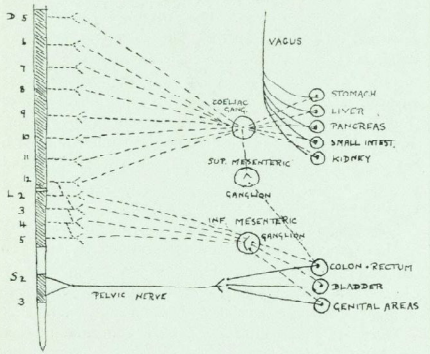

Fig. 2.—Diagram of Autonomic Nervous System in the Abdomen (Modified from Meyer and Gotlieb). Continuous Lines = Parasympathetic; Interrupted Lines = Sympathetic.

(*a*) The efferent neurons leave the cord *viâ* the anterior primary divisions of the second and third sacral nerves, and are distributed *viâ* their visceral branches through the pelvic plexuses to plexuses in the wall of the viscera, which they supply, where the effector neuron arises.

(*b*) The sympathetic fibres going to the rectum and bladder are derived from the hypogastric plexus (presacral nerve) lying at the bifurcation of the aorta. This plexus has three roots (1), which derive their fibres from—

(*a*) The semilunar ganglia.

(*b*) Periarterial renal plexuses.

(*c*) Intermesenteric or aortic plexus.

(*d*) The first and second lumbar ganglia.

The nerve then divides into the two hypogastric nerves, which pass into the pelvis to the lateral wall of the rectum to form the hypogastric ganglia, which are joined by small communicating rami from the third and fourth lumbar ganglia. Numerous fibres then pass forwards to the wall of the rectum and bladder. The colon receives its sympathetic nerve supply from the inferior mesenteric plexus, which is a direct continuation of the intermesenteric (aortic) plexus, and is formed by branches from the semilunar and aortico-renal ganglia. The segmental origin of these fibres is not definitely known, but probably extends from the fifth dorsal to the fourth lumbar.

It will be remembered that in experiments performed on dogs, stimulation of the sacral autonomic or nervi erigentes supplying the bladder causes contraction of the detrusor muscle and relaxation of the sphincter vesicæ, thus emptying the bladder; while stimulation of the hypogastric nerves causes relaxation of the detrusor and contraction of the sphincter. Similar results can be obtained with the colon and rectum, although in these cases the contraction of the pelvirectal and internal rectal sphincters is not so marked (5). More recently similar experiments have been carried out on patients at the Mayo Clinic. Learmonth, who made the observations, noted the result of faradic stimulation of the presacral and hypogastric nerves during operations, while an assistant simultaneously recorded the effect on the bladder musculature by cystoscopy. Briefly summarized, he found that faradic stimulation of the presacral nerve caused—

(*a*) Contraction of the ureteric orifices.

(*b*) Contraction of the internal sphincter.

(*c*) Increased tone of the trigone.

(*d*) Contraction of the blood-vessels in the bladder-wall.

(*e*) Contraction of the prostatic musculature and seminal vesicles.

When the hypogastric nerve on one side only was stimulated the results were almost identical, except that the contraction of the ureteric orifice was ipsolateral only.

Stimulation of the central cut end of these nerves gave rise to no observable phenomena, except that the patient, who was under spinal anæsthesia, but did not know what was being done, complained of a "crushing" pain, which he referred to the bladder. This is of interest, as it suggests the presence of sensory fibres in these nerves, and explains the rationale of sympathectomy as a palliative measure in the treatment of intractable bladder pain.

In none of these experiments, however, did he notice any marked change in the tone of the detrusor muscle, and as more elaborate tests were not feasible in the operating theatre, he carried out further investigations, using himself as the subject.

Having passed a catheter, he connected it to a manometer containing a column of fluid, which gave a measure of the intravesical pressure. An intravenous injection of ·07 c.c. of 1 in 1000 adrenalin then led to an immediate active dilation of the bladder, as shown by a drop in the level of the fluid in the burette. This lasted approximately five minutes, and the pressure then rose suddenly, giving him an intense desire to micturate.

Section of the sympathetic nerves supplying the bladder, however, does not cause any noticeable change in the tone of the detrusor muscle, the immediate relaxation of the trigone and internal sphincter which does occur soon passing off, leaving an apparently normally functioning bladder. Learmonth, however, reported a case (1) in which disease of the sacral region of the cord, involving second and third sacral segments, from which the parasympathetic arises, led to paralysis of the detrusor, so that the patient had to be catheterized three times a day for five years—a condition which was relieved completely by section of the presacral nerve. This seems to prove that the sympathetic contains inhibitory fibres, which either by over-activity, or else by unrestrained activity due to paralysis of the parasympathetic, cause decreased frequency of micturition or even actual retention of urine.

In the case under discussion, however, although the onset of the symptoms soon after a pelvic operation (hysterectomy) at first sight suggested that there might be some association, such as damage to the parasympathetic leading to over-activity of the hypogastric nerves, actually this cannot be so, as damage to the nervi erigentes, such as might occur in a pelvic operation, could not account for the constipation; and, moreover, it is almost certain that the patient post-dated the onset of her symptoms, as reference to her old notes showed that there had been difficulty in getting the bowels open during her previous admissions some years before.

The exact pathology underlying this postulated sympathetic over-activity cannot be surmized, and although much work has been done on the subject, a satisfactory conclusion has not yet been arrived at.

Von Noorden (2) (1892), amongst others (Judd and Adson) (4), regards faulty autonomic balance as a visceral neurosis associated with, or closely allied to, neuroses of other types, as psychic and emotional disturbances of a purely functional type may result in parasympathetic or sympathetic hyperexcitability. Thus it is a well-known fact that hyperthyroidism, in which there is a marked increase in the sympathetic irritability, may be precipitated by worry or mental stress, suggesting that there is some connection between the autonomic centres in the subthalamic region and the cerebral cortex.

The ductless glands have also been regarded with suspicion in functional defects of the involuntary nervous system (3), and although there is a tendency to ascribe many conditions in which the ætiology is not clear to endocrine disturbances, it would almost seem as if in this case the suspicion were justified, as it is significant that the patient suffered for many years from menstrual disorders, for which no definite pathological cause was found. Whether the nervous manifestations are the result or cause of the endocrine disturbance is, however, not clear.

It has been repeatedly shown, however, that alteration in the acid-base balance of the blood leads to changes in the delicate relationship normally present between the sympathetic and the parasympathetic nervous systems, so that the effect of adrenalin on the blood-pressure is greatly reduced after the administration of calcium chloride, which shifts the acid-base balance of the blood towards the acid side (2). Clinical observations support these findings, as it has been found that patients suffering from diseases commonly associated with hyperchlorhydria, such as bronchial asthma, diabetes insipidus and chronic peptic ulceration, seldom show any increased sympathetic activity to adrenalin, while patients with hyperthyroidism, in whom the increased sensibility to adrenalin is well known, exhibit a shifting of the acid-base balance towards the alkaline side. Conversely, Fokin (1925), Lande (1926) and Ballint (1927) have shown that chronic duodenal and gastric ulcers are associated with vagotonia and hyperacidity in about 75% of cases, although the hydrogen ion concentration of the blood does not deviate beyond physiological limits.

Histo-pathology, however, still lags behind biochemistry, as profound morbid changes may occur in conditions like exophthalmic goitre and Raynaud's disease, without any definite demonstrable change in the cytology of the vegetative nervous system. It is, nevertheless, known that severe toxæmias do affect the sympathetic, causing at first an increased excitability, which later goes on to hypotonia in the terminal stages of the disease. This is particularly seen in tuberculosis, which in the later stages demonstrates vagotonia, the hectic flush and relatively slow pulse found even during pyrexial periods being explainable by parasympathetic predominance (2).

Moreover, it is well known that some acute infections, such as enteric, are accompanied by marked vagotonia, as shown by a slow pulse, which cannot be increased in frequency even by comparatively large doses of atropine, tachycardia, when it occurs, making the prognosis

grave. In scarlatina, on the other hand, the rapidity of the pulse rate is out of all proportion to the pyrexia—a clinical observation which still awaits a satisfactory explanation.

Autonomic disorders have been put forward as the cause of many conditions, the list ranging from Raynaud's disease, causalgia and scleroderma peripherally, to such things as epilepsy, Graves's disease and bronchial asthma centrally, but the treatment by sympathectomy is, in many instances, purely empirical and the list is gradually being revised, as it is becoming increasingly clear that very often the autonomic nervous manifestations are secondary to a more fundamental factor.

The surgery of the autonomic nervous system is still in its infancy, and will, probably, in future years be entirely replaced by less radical means, but until the factors which govern the functional activity of the "sympathetic" are better understood, it offers the best, if not the only means, of treating an increasing number of conditions which have in the past baffled physicians and surgeons alike.

As early as 1889 Jobulay and Alexander (2) treated epilepsy by bilateral superior cervical ganglionectomy, since when most of the autonomic system has been removed by different operators in the treatment of diseases as numerous as they are divergent in their manifestations. The results, unfortunately, were often indifferent—a fact which led sympathectomy into some disrepute; but there is at present a recognized number of diseases which are definitely ameliorated by this form of treatment, which is once more coming into its own. The credit for adding Hirschsprung's disease to the list goes to Royle (1927) (6), who was the first to observe that some cases of constipation could be cured by lumbar sympathectomy. In a series of 25 patients on whom he performed this operation for congenital spastic paraplegia, he noticed that 13 suffered from obstinate constipation, which was subsequently relieved in 11 out of the 13. Consequently, in 1929, working in conjunction with Wade (7), he treated 5 cases of megalocolon by lumbar sympathectomy with such encouraging results that many other operators (4) have since followed his example, and this form of treatment has practically replaced the severe and extensive colectomy which was formerly advocated for this intractable condition.

It is quite obvious, however, that the success of the operation depends not only on the technical skill of the surgeon, but also on his clinical acumen in selecting suitable cases. A lumbar sympathectomy would scarcely be justified if medicine could achieve the same results, for in this instance, at least, surgical interference should only be resorted to when medical means have failed.

I have to thank Prof. Gask and Dr. Donaldson for permission to publish these notes, and Mr. J. Paterson Ross for many helpful suggestions.

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J. R. BLACKBURNE.

ROBERT KOCH.

Opening Address at a Symposium on "Robert Koch: the Man, the Years, the Harvest," held on March 11th at the East London Children's Hospital, under the Chairmanship of Sir Percival Hartley, C.V.O.

MANKIND, Sir, may conveniently be divided into two classes: that blessed minority who by the grace of Providence are privileged to speak before you, and the ill-starred majority who for their sins must needs speak after you. How salutary and indeed how amusing to contrast their inarticulate striving after expression or their empty rhetoric with your effortless and exquisite flow of words, the arresting suavity of your voice, and the rich sparkle of your happy thoughts. Be that as it may, I am here to-night to open a symposium on "Robert Koch: the Man, the Years, the Harvest." Now the term "symposium" is derived from two Greek words meaning "to drink together," but all I can see before me at the moment is a decanter filled with what looks to me like water.

Those of you who read your Bible earnestly will recall that there was only one man who asked for water, and he was in Hell. Indeed, it is improbable that water was ever intended for human consumption. Is it not described in Scripture as something with which only the wild ass quencheth its thirst?

Half a century! A lifetime for the individual who measures his folly and bliss in mathematical terms of hours which swell into years. Half a century! But an incident in the austere life of an institution such as this, whose arteries were hard and whose hair was grey long before you and I had been given a chance to waste time. Half a century! A raindrop evaporating on the eternal rock of history.

It is the evening of March 24th, 1882. The lecture-room of the Physiological Society at Berlin is crowded. In the chair is the University Professor of Physiology, du Bois Reymond, of fresh complexion and athletic frame, of whom it was said that he succeeded in accomplishing the seemingly impossible: he wrote scientific German with the elegance and precision of the French. Among the audience you will notice many whose fame has echoed down the Corridors of Time. You will have no difficulty in spotting the slight, elastic figure of Rudolf Virchow with the fiery eyes. It was he who turned men's thoughts to the individual cells rather than the tissues as the seats of disease. Thus he is the Father of Cellular Pathology. Yet how upset he was, perhaps just a trifle annoyed when he saw his disciples triumphantly invade his battlefield with their heterodox doctrines of bacteriology. There is Paul Ehrlich, in those days a young and obscure worker, to whom we owe the modern method of staining the tubercle bacillus. There is Löffler, a surgeon in the Prussian Army, who discovered the cause of swine-erysipelas and of glanders, but is best known to you as one of the two men who isolated the organism responsible for diphtheria, the Klebs-Löffler bacillus. On the platform stands a small, serious-looking man, with a short pointed beard and gold-rimmed spectacles. His voice is quiet, his story modest and plain. The epoch-making events of the world are seldom dramatic; only the things that do not really matter are trumpeted to the four corners of the earth. He tells his audience that he has discovered the cause of consumption, of tuberculosis, the tubercle bacillus. There is no discussion: for there is nothing to say. The paper is a model of accuracy and completeness, the experiments are conclusive, the arguments unequivocal. His name is Robert Koch: and none more resounding in the history of medicine.

While we leave this distinguished assembly to collect their hats and coats, let us from the dizzy height of our intellectual superiority take a bird's eye view of Koch's life and achievements. Born on December 11th, 1843, at Klaustal, in Hanover, one of thirteen children of a mining engineer, he studied medicine in the University of Göttingen, and after taking his doctor's degree in 1866, became a general practitioner in the country. He could not afford the luxury of an academic career. Besides, he wanted to get married. He spent eight years in Wollstein, a God-forsaken little place in Posen, where he was busy enough. He had to ride on horseback through the mud to see a child choking with the diphtheria. How he felt his inability to help as rottenness in his bones! But how could he interfere if he did not even know what caused the disease?

In Paris at that time there was a lunatic at large who shouted from the housetops that microbes were the cause of consumption. Against this cracked evangelist who was not even a medical man the whole French army of medicine rose in a body and spat ridicule and contempt. His name Louis Pasteur. But as the result of his preaching, Koch called in the local carpenter to put up a partition in his consulting room. In one part he saw his patients, the other he used as a laboratory where he kept his microscope and mice. Busy all day with his professional duties, in the evening he hurried through supper, grunted good-night, and shut himself up in his laboratory. From his wife who saw little of him he received no encouragement. All she could say was "Robert, how you smell!" In 1880 came promotion. How refreshing it is to come across an instance in medicine of a stone that is fit for the wall and is not left lying in the road. Koch was called to Berlin to the Imperial Health Office, which put at his disposal a fine laboratory and trained assistants. In due course he discovered the smallest but most deadly enemy of the human race, the tubercle bacillus. Next day the world is full of his fame. People mention him in the same breath as Cæsar and Napoleon and call him "Privy Councillor" and "Excellency." Honours are showered upon this modest little man who is forced to attend receptions and eat enormous dinners which give him indigestion.

In 1890 Koch announced to the International Medical Congress at Berlin that he had found a cure for tuberculosis—tuberculin. No declaration of war could have caused wilder excitement. The telegraph wires carried his words to distant lands. There was a pathetic rush of consumptives by train or ship for Berlin, the Mecca of suffering mankind.

A very old man sits by the window and watches the snowflakes fall, softly, silently, covering the earth and hiding her many ugly scars. He is cold. He shudders.

A spasm shakes his body. He coughs. He spits bright blood into his handkerchief. His eyes are hollow, his lips parched, his nose sharp, his temples sunken. For many years he has been waiting for Death, but that grim jester who comes too soon to most men has forgotten his existence. His wife, too, has been waiting patiently these many years. She does not like the sight of blood. It makes her feel ill. Time has changed her love to indifference, to aversion. There is a knock at the door. The very old man shudders. Is it at last the bony knuckle of Death? Will they come now to wash his body, to tie up his jaw, to carry him out of the house in a long narrow box, with his hard-faced widow muttering her grim farewell: "Surely, a bloody husband wert thou to me"? The knock gets more vigorous, more triumphant. The door opens. There enters a small, serious-looking man, with a short pointed beard and gold-rimmed spectacles. It is Robert Koch, wearing the halo of the Messiah. "Come unto me all ye that are weary . . ." And behold! new life is poured into the very old man's hollow eyes, his dry lips glow afresh. He goes down on his knees. He who has long ceased to believe in a personal God thanks the Almighty for sending this Saviour. Poor fool! save your breath, save your prayers. The Messiah indeed is a false prophet who has promised more than he can keep. It is perhaps natural that we who could never hope to discover a new bacillus ourselves should frown upon tuberculin as the one great folly of this great scientist. No doubt he was persuaded against his better judgment to publish his research too soon. Yet posterity cannot shut its eyes to the fact of his grave responsibility. His rash and boundless enthusiasm led many foolish old men to risk travelling to Berlin in a biting northern winter. Some never reached Mecca alive. In many cases there was no improvement whatever. There were a number of unexpected deaths which tarnished the splendour of Koch's fame.

In addition to the tubercle bacillus, Koch discovered the organisms responsible for anthrax, cholera, and Egyptian ophthalmia.

In 1893 he left the wife of his youth to live with one who had charm and sympathy to offer him. This action of his led to much harsh criticism which he bore with dignity. He died of heart-failure on May 27th, 1910, at the aged of 67, at Baden-Baden, that tragic health-resort, which has witnessed the last days of some of the world's most famous men. His first wife lived on for three years, obscure, lonely, bitter.

Personally Koch was shy and reserved but he could be polite, even charming, unless he was overworked.

Just one final story before I sit down. In 1908 he went to Washington to attend the International Tuberculosis Congress. On landing he was pounced upon by reporters who asked him "Well, Doctor, and what do you think of the future of medicine?" Koch was furious, and when annoyed he did not select his words very carefully. He is recorded to have addressed the gentlemen of the Press as "Lice-pickers."

W. R. BETT.

ABERNETHIAN SOCIETY.

THE Summer Sessional meeting was held on Thursday, April 14th, in the Medical and Surgical Theatre, the President, Mr. Kersley, being in the Chair. Prof. Hugh Cabot gave an address entitled "Hunting with a Movie Camera in Northern British Columbia."

The feature of the address was the series of beautiful films which were taken by the lecturer during his annual summer holiday on the tributaries of the Frazer River. Prof. Cabot, in his opening remarks, said how delighted he was to be back again within the walls of Bart.'s, of which, as a perpetual student and an honorary member of the Abernethian Society, he was highly proud. The country in which the films were taken had a diameter of about 800 miles north and south, and 650 miles east and west; it lay between the North West Territory on the west and Saskatchewan on the east, containing two main mountain ranges, of which the Rocky Mountain group were the best known. It also contained a long river, the Frazer River; it was on this river and its tributaries that Prof. Cabot had explored in regard to their natural history.

There were three methods of travelling in this country—by water, by dog sleigh and snow shoe, or by air. What a difference this latter method of travelling had made to these outlying parts of the world to-day! By water one travelled in light canoes, which needed skilful handling, and it was by this means that the Frazer River was traversed by the lecturer when the films were taken. Prof. Cabot apologized for the amateurness of the pictures, as he was not an expert photographer himself, but the best film, he said, had unfortunately been drowned during the sudden fright of one of his colleagues who was taking it. There were many difficulties to be overcome, as most of the animals shown had never seen a human being before and were difficult to photograph.

The first film introduced the grandeur of the Rocky Mountains as they were approached in the train; then the scenery changed to that of the Frazer River itself, with the canoe team prepared for their adventure. Moose were seen drinking and feeding on the banks of the river as the canoes paddled onwards. At this point the lecturer said that these animals were considered to be very savage by some people, but showed no evidence in his experience. The male moose was noticed to be much more inquisitive than its cautious mate, which preferred the security of its home to the public gaze of the camera—a very human touch. Beavers with their dams, geese, gulls and many other animals were seen while Prof. Cabot gave a running commentary on the animals and their habits, his imitation of the call of the moose being especially memorable. In the final film a moose was shot in mid stream and the method of dissecting the head from the trunk illustrated; there were also scenes of camp life and of fishing, thus ending a most instructive lecture, which was loudly applauded by the large audience.

Mr. HUME, in proposing the vote of thanks, referred to the professional work of the lecturer, and said what a priviledge it had been for him and other Bart.'s men to work at his clinic in America. The spirit of adventure which had been shown in the lecture to-night was carried throughout Prof. Cabot's clinical work, and all who came in contact with him could not help being stimulated by the refreshing atmosphere. Prof. Cabot exhibited the outlook of an explorer which had been handed down to him through the blood of his forefathers, John and Sebastian Cabot, and finally he said, "You may judge a man by the manner in which he spends his leisure hours." The vote of thanks was seconded by W. D. COLTART, who ably mentioned with what interest he had listened to the lecture, and said that he had every intention of visiting Whipsnade at an early date to try out "the call of the moose," which he had now learnt.

Prof. CABOT, in reply, thanked the audience for listening to him so patiently, and said what a pleasure it had been to show the films.

The meeting was then adjourned.

STUDENTS' UNION.

STUDENTS' UNION.

The Annual General Meeting of the Students' Union was held in the Abernethian Room on March 18th, 1932, at 12.30 p.m. The President, Dr. J. D. Barris, occupied the Chair.

The following officers were elected for the year 1932–33:

President: Prof. E. H. Kettle.
Vice-President: L. B. Furber.
Hon. Treasurers: Dr. Wilfred Shaw, Mr. J. Paterson Ross.
Senior Secretary: A. J. Owston.
Junior Secretary: S. E. Furber.
Financial Secretary: K. A. Latter.
Constituency A: L. H. Buckland, A. H. Pirie, J. R. Robertson.
Constituency B: G. H. Ellis, H. L. Wolfe.
Constituency C: B. Rait-Smith.

Mr. L. B. FURBER proposed, Mr. J. H. HUNT seconded, a vote of thanks to Dr. J. D. Barris on his retiring after two years as President of the Students' Union, and thanked him for his great interest and help in the many activities of the Union.

Mr. Reginald Vick's resignation as Hon. Treasurer, after his long association with the Union of twelve years, was accepted with much regret, and a vote of thanks was expressed to him and Dr. Wilfred Shaw for their hard work in the interests of the Union.

Mr. A. J. OWSTON then proposed, Mr. J. H. HUNT seconded, a vote of thanks to Mr. L. B. Furber, the retiring secretary, who had served the Council so efficiently. All good wishes were extended to him.

This concluded the business and the Chairman adjourned the meeting.

A. J. OWSTON } *Hon. Secs.*
S. E. FURBER }

RUGBY FOOTBALL CLUB.

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

Played at Winchmore Hill on March 12th. Lost, 16—3.

This was the last home match of the season, and as with all our fixtures with Moseley, was really enjoyable, the game being much more even than the score suggests.

The Moseley full-back played a magnificent game, in contrast to ours, who had rather an off day. This was unfortunate, as owing to close marking, the main method of attack on both sides was the short punt ahead over the threes, which was done by Kingdon to a degree not warranted by the conditions.

Between the two packs there was nothing to choose except that Moseley were quicker in backing up.

We obtained an early lead by a blind-side try, the ball going quickly from Taylor to Kingdon, who drew the wing and passed to Powell, who got over in the corner. Moseley began to press and scored through Trentham, making it 3—3 at half-time.

Afterwards we were nearly always on the defensive, and Byrne and Davis scored tries for Moseley, which Hill converted, besides which he kicked a magnificent penalty goal from nearly half-way.

The sorrows of defeat were well drowned in the dinner that the two teams partook of afterwards.

Team.—C. W. John (*back*); J. D. Powell, L. M. Curtiss, A. H. Pirie, J. G. Youngman (*three-quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper, E. M. Darmady, D. W. Moynagh, R. Mundy, J. D. Wilson, K. J. Harvey, J. M. Jackson, B. S. Lewis (*forwards*).

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

Played at Bristol on March 29th. Lost, 9—0.

This game was remarkable for being very pleasant in spite of being played in rain on a water-logged pitch, it being impossible at the end to distinguish anybody on either side.

Owing to exams. and injuries we could not produce a full team, but with the assistance of H. F. Wickert, P. L. Armstrong and W. H. E. James, managed to produce fifteen men; neither were Bristol at full strength.

We began with a rush into their "23" and continued to have a slight advantage all the first half, till Spilsbury kicked a penalty goal for Bristol (3—0).

The second half produced tries for Bristol through Spilsbury and Rigg, but also nearly produced several for Bart.'s, as the forwards brought off some perfectly magnificent rushes, and were only stopped just before they reached the line.

Among the forwards, Darmady, Capper and Lewis were prominent throughout the game, while outside Powell and Nel both showed to advantage.

Team.—J. G. Nel (*back*); J. D. Powell, R. M. Kirkwood, W. H. E. James, P. L. Armstrong (*three-quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper, E. M. Darmady, R. Mundy, B. S. Lewis, D. W. Moynagh, K. D. Moynagh, A. H. Grant, H. F. Wickert (*forwards*).

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

Played at Pontypool on April 2nd. Lost, 28—5.

We again had difficulty in raising a team, but with the aid of Messrs. James, Armstrong, Burrow and Dowell managed to get fifteen, though naturally a disjointed team.

The weather was kind, but the mud had not recovered from Easter and was quite exceptionally glutinous. Most of our troubles in the game were due to the elusiveness of their scrum-half, who evaded tackling and did not pass till he reached our fly-half, thus giving Pontypool a man over at the wing. Their advantage from this was further increased by some inco-ordination of tackling on our left wing. Consequently their right wing, Bodger, who played a very fine game indeed, managed to secure 5 tries for himself. He scored his first almost immediately after the start. Then we nearly scored from a forward rush. This was typical of the first half, and we were unlucky to be down as much as 11 points at half-time.

In the second half we did less attacking as we got the ball less. Armstrong injured his leg and was moved to back, James going on the wing and Nel coming up to centre. Pontypool collected 17 more points, and not till the last minute of the game did we score, by a movement in which Kingdon drew fly-half and centre; Kirkwood ran straight on through the middle and passed to Nel, who scored.

Team.—J. G. Nel (*back*); J. D. Powell, R. M. Kirkwood, W. H. E. James, P. L. Armstrong (*three-quarters*), J. R. Kingdon, J. T. C. Taylor (*halves*); H. C. Burrow, A. Barber, E. M. Darmady, R. Mundy, A. H. Grant, E. N. Dowell, W. M. Capper, J. W. Cope (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* PLYMOUTH ALBION.

Played at Plymouth on April 9th. Lost, 39—3.

This was the first match of our tour, and we were without Capper, Taylor and Harvey and suffered accordingly, for the forwards, though managing to hold and sometimes push the heavy Albion pack, were almost completely unable to secure the ball for the outsides. Consequently the outsides spent the whole afternoon in trying to stem the Albion three-quarter movements, which started after nearly every scrum. They commenced scoring almost at once, and amassed 17 points before half-time.

Immediately afterwards the Albion fly-half was injured and they took a man out of their pack to complete the outsides. On our side Wilson was injured and retired into the scrum, Masina taking his place. We then began to attack, and Prowse, catching the ball on the bounce from some loose kicking by the Albion forwards, ran straight for the line and scored, leaving the Albion standing on the other side of the field. This was our only attempt at scoring, while Albion kept up an incessant attack and continued to score, ending up at 39—3.

Team.—J. G. Nel (*back*); J. D. Powell, C. B. Prowse, A. H. Pirie, J. G. Youngman (*three-quarters*); J. R. Kingdon, J. D. Wilson (*halves*); E. M. Darmady, D. W. Moynagh, H. C. Burrow, J. M. Jackson, R. Mundy, B. S. Lewis, F. H. Masina, J. W. Cope (*forwards*).

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

Played at Redruth on April 11th. Lost, 12—3.

This game, as we now expect when we play Redruth, was unusually good. We started downhill with a terrific gale but a pleasant sun, and began pressing immediately. The forwards managed to heel the ball both often and cleanly and we appeared to be in for a good time. Soon, however, Curtiss was injured and had to go off. Nel was brought up to the "three" line, John going back and Masina scrum-half. Then the sun went in and we had snow. This made handling difficult, but Masina nearly managed to get over from a break-away near their line. Then by a quick heel and a rapid pass out by Masina, Kingdon contrived a good opening, and quick passing by Pirie to Nel allowed the latter to score. This was not converted, so we led 3—0. After an attack by the Redruth backs it was half-time.

The wind dropped and the sun returned. Redruth, obtaining the ball more often, became more dangerous, and eventually scored a good try. This was not converted, and so we were 3—3. Redruth continued to press, and eventually their back scored with a beautiful drop. They led, 7—3. A hailstorm then arose, with a terrific wind against us; we survived this, but night came on suddenly, and they scored almost unseen. They converted this, and the game ended 12—3.

Team.—J. G. Nel (*back*); J. G. Youngman, A. H. Pirie, L. M. Curtiss, J. D. Powell (*three-quarters*); J. R. Kingdon, C. W. John (*halves*); E. M. Darmady, D. W. Moynagh, E. E. Harris, R. Mundy, A. H. Grant, B. S. Lewis, F. H. Masina, J. W. Cope (*forwards*).

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

Played at St. Ives on April 12th. Won, 6—0.

This was a more decisive victory than the score suggests, as we were continually attacking, except for two periods, one in each half, when the scrum settled on our line and could not be moved for a very long time. We scored early on with a good passing movement, enabling Powell to get over. This was not converted. St. Ives were getting the ball from the scrum more often than we were, but our marking was so close that they seldom managed to do anything with it. The referee luckily differed from the crowd in the interpretation of the offside rule. Near the end Kirkwood after cutting through the centre passed to Powell, who scored again. This was not converted, and the game ended with a 6—0 victory for us.

Our tour perhaps should not be called successful after the start at Plymouth, but that it was extremely pleasant everyone on it will agree.

Team.—J. G. Nel (*back*); J. G. Youngman, A. H. Pirie, R. M. Kirkwood, J. D. Powell (*three-quarters*); J. R. Kingdon, C. W. John (*halves*); E. M. Darmady, D. W. Moynagh, E. E. Harris, R. Mundy, A. H. Grant, J. W. Cope, F. H. Masina, B. S. Lewis (*forwards*).

MATCH RESULTS.

	Played.	Won.	Lost.	Drawn.	Points. For.	Points. Against.
1st XV	34	15	19	0	269	353
"A" XV	33	23	8	2	404	272
Extra "A" XV	20	6	13	1	169	271
"B" XV	21	8	9	4	196	186
Extra "B" XV	15	9	6	0	200	124
"C" XV	16	6	9	1	160	195
Extra "C" XV	12	5	4	3	134	154

SEVEN-A-SIDES.

The 2nd VII managed to defeat the Old Grammarians 8—5 on their ground while we were a man short.

We then played Sutton at Cheam, and were only defeated after extra time had been played.

The first VII were defeated unluckily in the 4th round by Westminster Bank.

ASSOCIATION FOOTBALL CLUB.

THE Annual General Meeting was held in the Committee Room on Friday, April 22nd, 1932. The following officers were elected for the season 1932–33:

President: Dr. W. H. Hurtley.
Vice-Presidents: Sir Charles Gordon-Watson, Dr. A. E. Gow, R. Foster-Moore, Esq.
Captain: R. Shackman.
Hon. Secretary: A. H. Hunt.
Hon. Match Secretary: W. M. Maidlow.
Hon. Treasurer: D. R. S. Howell.
Committee: F. E. Wheeler, D. R. S. Howell, and W. M. Maidlow.
Captain, 2nd XI: W. A. Owen.
Hon. Sec., 2nd XI: E. E. Brown.
Captain, 3rd XI: H. S. Rassim.
Hon. Sec., 3rd XI: G. H. Darke.

ATHLETIC CLUB.

With the beginning of this month the track season opens in full swing. All during the winter a small band of hardy and possibly much misguided men, stumbling over the stickiest of ploughed fields, and floundering hopelessly through ice-cold water and farm-yard mud, struggle and strive against one another till either their hearts give out or their shorts are lost.

This winter they achieved their ultimate aim in winning the Inter-Hospitals Cross-Country Championship. Upon this splendid success they are to be heartily congratulated. But the matter does not rest there, for this hard-earned victory prognosticates an equally successful track season.

The cross-country club always supplies a most essential nucleus to the track section, and it may be said that the fortunes of both sections of the Athletic Club run very closely parallel to each other. A review of the last few years will make this quite clear.

The last time Bart.'s won the track championship was in 1925, when, mainly through the great work of H. B. Stallard, the Olympic Games runner, and the finest athlete Bart.'s has ever had, we beat Guy's by 84 pts. to 60. That year T. R. Griffiths won the 100 yds. in 10 sec. dead, to equal the record, while Stallard won the 880 yds., 1 mile and 3 miles, thereby securing 30 pts. himself.

The following winter Bart.'s cross-country team won the Inter-Hospitals championship by a substantial margin. From then onwards, both on the track and over the country, we just failed to win, being second every year but one.

In 1930 we showed a distinct improvement, however, being second to St. Thomas's by 10 points on the track, and again second to the same hospital by 23 points over the country.

In 1931 we were only 2 points behind them on the country, and were just beaten on the last event, again by 2 points, in the track championship last summer. It will be remembered that in spite of repeated endeavours to get together a tug-o'-war team, we were quite unable to produce an eight to "pull over" a scratch Guy's team collected from the spectators. Had we fielded eight men from the Rugger team, even without any training, we should have qualified for the Final, thereby gaining 3 points, which would have won us the championship. Let us hope that there will be a little help forthcoming from the "tough" men of some of the other clubs this summer.

For this year it is highly probable that we shall again annex the Shield which we have not seen for seven years. Our win over the country was so decisive as to leave very little doubt as to our summer prospects.

Among many new athletes we have with us K. W. Martin, the Cambridge pole-vaulter, who, in the absence of L. T. Bond, the St. Thomas's international and record holder, should undoubtedly secure us first place in that event. We are, however, very weak in the long jump, high jump and hurdles. Any new talent lying hidden in the Hospital is urgently asked to make itself known to any member of the Athletic Club. In the track events we are, as always, very strong, and we hope these men will pull us over the heads of St. Thomas's.

A very full fixture list has been arranged, including matches with Reading University and two of the Cambridge Colleges. A place in the teams will be found for any man who is keen and shows promise.

At the Annual General Meeting in December the following officers were elected:

President: Mr. Theodore Just.
Vice-Presidents: Dr. Morley Fletcher, Sir Charles Gordon-Watson, Mr. H. B. Stallard, Mr. Girling Ball, Mr. Reginald Vick, Prof. Gask, Dr. Adolph Abrahams.
Captain. J. R. Strong.
Hon. Secretaries. W. H. Jopling and J. W. Perrott.
Committee: K. W. Martin, J. Shields, G. D. Wedd, C. E. Goodhart, W. D. Coltart, R. J. Simcox, J. R. Hill, J. G. Nel.

FIXTURES FOR SEASON 1932.

May	12th.	Thursday.	*v.* Emmanuel College, Cambridge. Home.
,,	18th.	Wednesday.	*v.* Queens' College, Cambridge. Home.
,,	23rd.	Monday.	Heats for Annual Sports.
,,	25th.	Wednesday.	**Annual Athletic Sports.**
June	1st.	Wednesday.	*v.* Westminster Bank. Away.
,,	6th.	Monday.	Heats for Inter Hospital Sports.
,,	8th.	Wednesday.	**Inter-Hospital Sports.**
,,	20th.	Monday.	*v.* Reading University. Away.
,,	23rd.	Thursday.	*v.* Lensbury A.C. Away.
,,	29th.	Wednesday.	*v.* Barclay's Bank. Away.
July	20th.	Wednesday.	*v.* Metropolitan Police A.C. Away.

J. R. S.

THE ST. BARTHOLOMEW'S HOSPITAL ALPINE CLUB.

WHITSUN MEET.

At the inaugural meeting of the Club on November 4th, 1930, the President suggested the possibility of holding a club-meet somewhere in the English hills, with the idea of starting off the Club on that "active" basis which seems to be so desirable for the prosperity of such an organization. The Snowdon district was mentioned as being the most readily accessible from here.

The Hospital Alpine Club exists for the benefit of any members of the Hospital, either past or present, who are interested in mountaineering or ski-ing, or who love the hills. The objects of the Club may be said to be twofold. In the first place it affords opportunity for the social enjoyment of a common interest, so to this end three Club meetings are held throughout the year, at which members dine together, and hear a lecture or a paper read on some subject of mountaineering or ski-ing interest. In the second place, it seeks to stimulate a growing interest in the actual practice of mountain-craft. It is with this latter object in view that we propose to hold a club-meet in Snowdonia over the Whitsun week-end. The meet will be an excellent opportunity for anybody who feels that he is an embryo mountaineer to gain an introduction to the methods of hill-craft in a safe and pleasant manner.

The district chosen is the Snowdon massif, and it is proposed to arrange accommodation for the Club party at the Pen-y-Gwrwyd hotel. Members who wish to be accommodated with the party should inform the secretaries at the earliest possible opportunity. The hotel contains a billiard-room, and there is a certain amount of fishing (brown trout) in the neighbouring llyns and streams. There are other hotels in the district for members who wish to arrange their own accommodation. There are also facilities for camping.

Parties will be arranged for those who wish to rock-climb; less agile members will find magnificent fell and ridge walking. Among the mountains of the district may be mentioned: Snowdon, Crib Goch, Llwedd and the Glyders, whilst Tryfen is somewhat outlying. Botanists, geologists and ornithologists will have opportunity for field-work.

It may be possible to arrange for those members who have motor transport to find room in their cars for less fortunate persons.

With regard to equipment, old clothes, and, if you are going to climb, a pair of stout and properly nailed boots are the only essentials; but all information with respect to these and other details can be obtained from the secretaries of the Club.

We hope that any member of the Hospital who is interested in mountains and mountain craft will come on the meet, where he will be welcomed.

C. B. M. WARREN } *Hon. Secs.*
R. G. ORR }

The next general meeting and dinner of the Club is due to be held some time in the middle of May. Notice of this meeting will be posted on the Students' Union screens shortly. The guest and lecturer at this meeting will be L. R. Wager, Geologist to the "British Arctic Air Route Expedition," and leader of the party which attempted the ascent of Mount Forel in Greenland.

CORRESPONDENCE.

"ON CHRONICS."

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

DEAR SIR,—The short article about "Chronics" published in the last issue of the JOURNAL has the ring of truth and first hand experience about it. The writer evidently is, or recently has been, a junior house physician. One can see him rather wearily leaving his box in the Surgery at one o'clock or after, drained of vitality, and worn out by the demands made on his strength and knowledge during his previous four hours' work. It is obviously too much for him. He is a sympathetic man, and the people who come to the Out-Patient Department of our Hospital are "sick in mind rather than in body." "No treatment is of the slightest avail." They waste the time of the medical and nursing staff. This too simple view of an important matter is emphasized by the approval given it in your editorial remarks.

But there is another aspect of the case which has to be taken into account. We are training the doctors of the future, not only among our medical students, but also among the Resident Staff. The Visiting Staff are also learning. It is something new, surprisingly new, to learn that our aim should be "to restrict the use of the Out-Patient Departments as much as possible to emergencies and to those requiring consultants' opinions or special treatment." Emergencies, consultations, special treatment! Perforated gastric ulcers, dental sepsis, diathermy! Fractured bases, P.U.O., infra-red! I see the surgeon, the dental surgeon, consulting physician, oto-laryngo-rhinologist, ophthalmologist and physico-therapeutist. But where is the doctor? Where is the man who knows something of medicine and surgery, and something of men and women, the man who is a trusted adviser, and often a friend, too, of his patients? He is as much wanted as the others. He is the doctor of the past *and* of the future. May we not supply material for his education and experience in the Out Patient Department of St. Bartholomew's Hospital?

Let me assure you, Sir, that the majority of those who attend our Out-Patient Department come for help. As "H. B." says, with true insight, many are sick in mind rather than in body. When *he* wants to extract their teeth they refuse, but possibly *they* know that the infection of their tooth-sockets is not the cause of their suffering. They do "not even trouble to read the label on the bottle," and, may I add, on arrival home they probably do not even trouble to draw the cork! And why? Perhaps it is because they think the bottle contains a tonic or a purge. The times are changing. Though we are very conservative in the medical profession and at Bart.'s, we must change with them. The veterinary surgeons are forging ahead of us. Recently a letter appeared on the front page of the *Times*, addressed to stock-owners who both love animals and make their money out of them. "Is it good enough?" "Is it kind?" "Is it fair," the writer asks, "to dose them so?" He is writing about giving horses tonics and purgatives indiscriminately. If horses cannot stand these things, is it surprising that some poor patients shirk them?

And yet these people get good from attending the Hospital. They get some support and satisfaction at least. It may be little they get, but it is little they want. There is probably nowhere else where they can get even the little offered at Bart.'s. Sometimes they want a little understanding and get sympathy or encouragement, or a medical problem is realized, isolated and recognized. And then, of course, there is the meeting of other friends and sufferers, there are the operations, dentists, X rays and consultations, and the reputation of a Hospital that in times of far greater poverty, squalor and ignorance has done its best for those who asked its help.

Workers in the Out-Patient Department must keep a bright eye open for medical and surgical problems, because they are more often present than is thought, though a little indistinct and sometimes hidden by other things. In regard to patients who do not present a tangible problem of medicine or surgery, there is something more important in the people themselves. In the Out-Patient and Casualty Departments much can be learned about the people in the world. The practice of medicine "outside" is not unlike work in the surgery. There are a few emergencies, consultations and special treatments every day, every week or every month, according to the type of practice. But in every busy practice there is that insistent pressure of work (a pressure that sometimes threatens to swamp the worker when he is tired), which is so obvious in the work of the Surgery and Out-Patient Departments. The sooner the doctor, whether a student or not, learns, not only to cope with this pressure—this strain which is almost too great at times—the better for his education and his work in later years. And lastly, in his work in the Out-Patient Department, it goes hard with the man who mistakes his vocation. If he thinks he is there to make out and dried diagnoses and effect clever cures, he is doomed to disappointment and failure. He must know, and work in the Surgery soon teaches it, that "medicine is not the art of curing diseases; it is the art of treating them, with the hope of curing them, and of soothing and satisfying sick people." Medicine has advanced since Corvisart doctored Napoleon, but his idea of medicine still has truth in it.

I am, Sir,
Yours faithfully,
GEOFFREY EVANS.

London, N.W. 1;
April 25th, 1932.

SIR,—I was so impressed by the folly of the chronics who waste our precious time that I decided to ask some of them why, if they are well, they go on attending the Hospital.

The first was a rheumatic old lady. She said that she was no better than when she first attended. Perhaps she was worse. I

pointed out that it was most illogical to keep on coming. She replied that she was so much worse when she stopped the medicine that she had to keep on with it. She could manage the journey on a fine day.

The next half-dozen were suffering from family trouble and indefinite ill-health, and over-work. The medicine gave them strength, and a kind word from the nice young doctor helped a little, and stopped them from breaking down completely. They had not enough money to pay a private doctor.

The next had once complained of constipation. Since coming to the Hospital she had not had a solid motion. She had now three motions a day, and hoped by perseverance to reach the state of grace of six!

I looked at the cards of a few more. They complained of aches and pains. The doctors had not found causes for them. Perhaps there were no causes. Anyhow, the patients suffered intensely from the pains. They felt, rightly or wrongly, that something was being done for them.

I tried to work out how many could be supplied with medicine for the price of an appendicectomy. I gave it up. It was a good many.

When I am a millionaire I shall endow a Christian Science Department to deal with these patients. Until then, I suppose things will have to go on as they are.

H. G. C. RHEO.

REVIEWS.

DIPHTHERIA, PAST AND PRESENT: ITS ÆTIOLOGY, DISTRIBUTION, TRANSMISSION AND PREVENTION. By J. GRAHAM FORBES, M.D., F.R.C.P., D.P.H., Principal Assistant Medical Officer, London County Council. With an Introductory Note by the late Sir Frederick Andrewes, M.D., F.R.S. [John Bale, Sons & Danielsson, Ltd., 1932.) Pp. xx + 832. 45s. net.

When the Medical Research Council Monograph on Diphtheria appeared some years ago it was generally felt that the last word had been said on this subject; at first sight the publication of another encyclopædic volume dealing with this disease is therefore somewhat surprising. In order to comprehend its purpose, it is necessary briefly to survey the history of diphtheria in the last forty years' and the means which have been found to combat the disease. In this period the four principal achievements have been, successively, the introduction of antitoxic serum in treatment, the recognition of the carrier as the chief agent in spreading infection, the application of the Schick test for determining susceptibility, and the use of toxin-antitoxin mixtures and other preparations for the purpose of immunization. It is still by no means universally known that a series of three injections, producing little or no local reaction or constitutional disturbance, will confer immunity on a previously susceptible individual. This method of immunization may either be confined to Schick reactors, or applied indiscriminately without a previous test of susceptibility; it should, however, be succeeded by this test in order to determine that immunization has been successful.

A method is therefore available by which the risk of diphtheria can be reduced to a minimum. In this country it has been applied only in a limited number of centres, and there only to a fraction, sometimes small, of the child population. The latter half of Dr. Graham Forbes's book is occupied by an account of the efforts made in this direction, not only in this country, but in many other parts of the world, and his chief concern is clearly to urge more general, if not universal, prophylactic immunization—an aim which, as he briefly suggests in the last few lines of his book, calls not only for the assent and interest of local authorities, but for the provision of extra staff.

The earlier part of the book is devoted to a study of the distribution of diphtheria in England and Wales at different periods and in different localities, and to much shorter sections on "Ætiology" and "Transmission," which might well have been combined, since both deal with factors concerned in the spread of the disease, or supposed at some time to have had an influence in this direction. These complete the subject-matter, which is thus confined strictly to the province of the public health administrator. There is no discussion of treatment, no consideration of the disease from the pathological or bacteriological aspects (except an addendum recording the recent observation that *C. diphtheriæ* exists in two forms), and no description even of the technique and pitfalls of the Schick test. The absence of these features is recorded, not as criticism, but in order that the reader may not look in these pages for what was not intended to be there.

As a compilation of accurate information the book is a monumental achievement, and it must become a standard work of reference which should be available for all public health officials. The only criticism on which we would venture is one which was doubtless in the mind of Sir Frederick Andrewes when he wrote in the foreword that he could wish the author had been "less sparing in his comments." It is exceedingly difficult for the reader to extract valid and general conclusions such as this imposing mass of data must be capable of affording, and the introduction of summaries indicating such conclusions, or commentaries emphasizing and interpreting the salient points in what has gone before, is almost indispensable to the reader seeking general guidance rather than any specific item of statistical information.

THE COMMONER NERVOUS DISEASES. By FREDERICK J. NATTRASS, M.D., F.R.C.P. London: Humphrey Milford, Oxford Medical Publications, 1931. Pp. 218. 2 coloured plates. 15 illustrations. Price 12s. 6d.

This book is designed for students and practitioners, to supply the necessary fundamental knowledge of neurology. The author, believing that difficulties in neurology arise more frequently from lack of knowledge of the variations in common diseases than from ignorance of rarities, has confined himself to the commoner nervous diseases, and has produced a very readable little text-book, which is by far the best introduction to neurology that we have seen. In the preliminary chapter on "Principles of Diagnosis," we are introduced to a clear and orderly method of history-taking and examination, illustrated by useful plates of the fundus oculi, photographs of the actual tests, and diagrams of the sensory and motor pathways. Dr. Nattrass examines first cranial nerves, then upper limbs, trunk and lower limbs. We feel that it is more conducive to orderly thinking to examine the parts of the nervous system in turn in some such order as this. Mental condition, cranial nerves, motor system (shape, size, active, passive and involuntary movements, co-ordination, cerebellar functions), sensory system, reflexes, posture, gait and cerebro-spinal fluid.

The subsequent chapters contain an account of the commoner nervous diseases and their variations, each type being illustrated by a brief case-history, and many valuable references given to recent original papers. Each account is admirably reasoned out, and the pathology of each symptom is indicated where possible. In the chapter dealing with syphilis the importance of the early sensory loss in tabes is very properly emphasized. Recent work on the pathology of this condition is well summarized. The treatment of dementia paralytica is very briefly dealt with, and no account of tryparsamide is given. The chapter on epilepsy is the best in the book. Epilepsy is regarded as a symptom (as is chorea), which may appear in various conditions; the word "epileptiform" is abandoned. No mention is made of the treatment of epilepsy by ketogenic diet. The author might have stressed the point that epilepsy, starting in adults, is rarely idiopathic. The chapter on hemiplegia is far from complete, but includes a useful account of cerebral aneurysms.

Students who are confused in their ideas of epidemic encephalitis should read this account of it, the most clearly written exposition we have ever read of this protean disease.

The brief chapter on psycho-neuroses, admirably written as it is, might have been omitted, and an account of syringomyelia substituted.

The book can be recommended to students and practitioners with every confidence, although the information it contains will scarcely suffice for the final examinations.

FERTILITY AND STERILITY IN MARRIAGE. By TH. H. VAN DE VELDE, M.D. London: William Heinemann, 1931. Pp. xx + 448. 20 plates. Price 25s.

SEX HOSTILITY IN MARRIAGE. By the same author. Pp. xix + 296. 42 illustrations. Price 17s. 6d.

These two volumes complete Dr. Van de Velde's trilogy on "synousiology," the first book being the widely-read *Ideal Marriage*, which appeared some years ago. *Fertility and Sterility in Marriage* deals with methods of achieving a desired pregnancy, causes and treatment of sterility, and finally, with enormous detail, the prevention of undesired conception. The sociological and ethical sides of contraception are discussed, and the views of the various religious sects are given and criticized.

Sex Hostility in Marriage deals with the whole problem of the unhappy marriage from the point of view of psychology. There are multitudinous references to other writers, scientific and otherwise, in both these books. The language is a curious mixture of scientific and non-scientific phraseology. The ovum is vibrating with "urges, needs and sensations," the zygote "writhes as though in parturition, a world in travail."

The amount of information contained in these two books is enormous; about half of it is interesting, and a twentieth part is practical. As a guide to married people these two books, for all their erudition, are inferior to the smaller books, whose name is legion. There is no doubt that a great deal of unhappiness and mental upset among married people can be attributed to ignorance of facts which they ought to have known. But these books will not relieve apprehension or give confidence; they are more likely to have the opposite effect, so complicated does "this woman business" appear.

As a guide to medical men the books are of some value, but the useful portion is diluted with so much unnecessary detail and periphrasis that the text provokes irritation and impatience. Many of his statements of fact are mere theory.

We have no doubt, however, that the books will find a good market among the lay public, if only for their illustrations. Dr. Van de Velde's reputation as a teacher would rest on a firmer basis had the last two legs of the tripod failed to materialize.

TEXT-BOOK OF GYNÆCOLOGY. By SIDNEY FORSDIKE, M.D., F.R.C.S., B.S. (London: William Heinemann, 1932.) Pp. xii + 290, with 142 illustrations. Price 15s. net.

This is a stimulating little book, which is itself, among text-books of gynæcology, a rare virtue.

It is well laid out, and on reading through it fact upon fact is presented in logical sequence. The chapters are short, and thereby impress themselves the more readily upon the memory, and the illustrations, by Mr. Sewill, amply testify to his skill as a medical draughtsman. There is an excellent chapter on dysmenorrhœa; while on the vexed question of chronic metritis the author is discreet though lucid. A brief outline of the therapeutics of radium, with a short summary of the reasons for controlling its rays and their application to gynæcology, is very helpful.

Mr. Forsdike's views on the action of radium on the ovary and endometrium, and the mode of production of the artificial menopause, are contrary to those taught at this Medical School, but the facts supporting his views are well set out. He says: "Amenorrhœa usually ensues in 6–9 months—the question as to whether this result is due to direct action on the endometrium, or upon the ovaries, was examined by the author in a series of experiments upon the ovaries of cats. It was conclusively proved that the effect was entirely due to the endometrium, for at a distance of three inches, which is the distance of the normal ovary from the uterine cavity, no demonstrable change was found in the ovary, whereas the endometrium exhibited profound change."

This little book, then, can be thoroughly recommended to the student, as a nucleus around which he may build his knowledge of gynæcology, whether it be gleaned in the ward, on rounds, or in the out-patient department.

A TEXT-BOOK OF X-RAY THERAPEUTICS. By ROBERT KNOX, M.D., C.M.(Edin.), M.R.C.S.(Eng.), L.R.C.P.(Lond.), M.I.E.E., D.M.R.E. Completed and edited by WALTER M. LEVITT, M.B., (Irel.), M.R.C.S.(Lond.), D.M.R.E (Camb.), Medical Officer in Charge of the Radio-Therapeutic Research Department, and Assistant Medical Officer to the X-Ray Department, St. Bartholomew's Hospital, London. (A. C. Black, Ltd., 1932.) Pp. xii + 250 with 11 plates and 95 illustrations. Price 21s. net.

Although case-reports on the results of irradiation are becoming numerous, there has been a lack of general literature on this subject in English.

Dr. Levitt is to be congratulated on fulfilling so creditably the difficult task of rewriting and enlarging this comprehensive work. The first few chapters are devoted to a practical account of the physics of X-ray therapy, its dosage, and the biological effects of irradiation. The new Chapter VIII on the principles of technique is particularly good, and the illustrations of this, and indeed those throughout the book are excellent. A chapter is given to the treatment of each system, including skin and blood diseases.

In the chapter on thyroid disease (XIX) there is a departure from the plan of the rest of the book in the shape of a description of the ætiology, signs and symptoms of Graves's disease; the need for this is scarcely obvious. Discussion of the relative positions of surgery and irradiation in therapy (pp. 130 and 136) are of great value.

None interested in medical radiology should fail to get this book.

A DESCRIPTION OF THE PLANES OF FASCIA OF THE HUMAN BODY. By B. B. GALLAUDET. (London: Humphrey Milford, 1931.) Pp. 75. Price 14s. net.

The author considers that the fasciæ of the abdomen, pelvis and perinæum are inadequately described in our standard text-books, while most of us perhaps consider that already too much space is devoted to their description.

The present trend of anatomical teaching is to consider most fascial planes as artefacts produced at the will of the dissector, few being of practical importance.

In this book the author stresses the law of continuity of fascia, and proceeds to describe the common plane of fascia at first systematically and then regionally, confining himself to the abdomen, pelvis and perinæum. It seems a pity that the more interesting planes have been omitted, *e. g.* the intermuscular septa of the arm and the fascial compartments of the palm, which have some practical application, and description confined to regions which have little but academic interest.

The book is, doubtless, the outcome of much work and thought, but the descriptions are difficult to follow, and there is much repetition. Nevertheless there is contained in it a systematic and connected account of the abdominal fasciæ which may be of use to senior students of anatomy.

HANDBOOK OF SKIN DISEASES. By FREDERICK GARDINER, M.D., B.Sc., F.R.C.S.E., F.R.S.E. Third edition. Edinburgh: E. & S. Livingstone, 1931. Pp. 283. 13 coloured plates. 46 illustrations. Price 10s. 6d.

We welcome this, the third edition, of Dr. Gardiner's well-known work, which has long been recognized as one of the best of the smaller text-books on dermatology. Only the commoner conditions are described, and the book is therefore eminently useful for purposes of revision before an examination.

We should like to draw attention to the excellent quality of the coloured plates and illustrations.

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

AINSWORTH-DAVIS, J. C., M.B., F.R.C.S. "Enlarged Prostate." *Proceedings of the Royal Society of Medicine*, February, 1932.

——— "A Piece of Slippery Elm Removed from the Bladder." *Proceedings of the Royal Society of Medicine*, February, 1932.

ARMSTRONG, R. R., M.D., F.R.C.P. "Immediate Pneumococca Typing." *British Medical Journal*, January 30th, 1932.

ATKINSON, E. MILES, M.B., F.R.C.S. "A New Tonsil Abscess Forceps." *Lancet*, April 16th, 1932.

BARNES, E. BROUGHTON, F.R.C.S.(Ed.). "Keloid of Mastoid Scar." *Proceedings of the Royal Society of Medicine*, February, 1932.

BOUCAUD, J. E. A., M.B. (and WATERMAN, J. A., M.B.). "Persistent Allantoic Diverticulum Causing Intestinal Obstruction." *Lancet*, March 12th, 1932.

COCHRANE, R. G., M.D., M.R.C.P., D.T.M.&H. "A Survey of the Modern Development of Leprosy Work (1917–1931); With an Appreciation of the Present Position." *British Journal of Dermatology and Syphilis*, March, 1932.

DUNDAS-GRANT, Sir JAMES, K.B.E., M.D., F.R.C.S. "Shortening an Elongated Uvula for the Cure of Cough." *British Medical Journal*, February 27th, 1932.

DUNHILL, T. P., C.M.G., M.D., Ch.B. "Horseshoe Kidney." *Proceedings of the Royal Society of Medicine*, February, 1932.

FLETCHER, ERNEST, M.B.(Camb.), M.R.C.P. "The Detection of Presymptomatic Tuberculosis in Children." *Lancet*, February 27th, 1932.

HALDIN DAVIS, H., M.D., F.R.C.P., F.R.C.S. "Some Recent Work on Psoriasis." *Practitioner*, February, 1932.
——— "Some Interesting Drug Eruptions." *British Medical Journal*, March 5th, 1932.
HARMER, DOUGLAS, M.A., M.B., M.Ch., F.R.C.S. "Two Cases of Carcinoma of Pyriform Fossa Treated by X-Rays." *Proceedings of the Royal Society of Medicine*, February, 1932.
HEALD, C. B., C.B.E., M.D., M.R.C.P. "Paralysis Agitans." *Proceedings of the Royal Society of Medicine*, January, 1932.
HOSFORD, JOHN P., M.S., F.R.C.S. "Some Factors in the Causation of Hydronephrosis." *Lancet*, February 27th, 1932.
——— "Angioma of Epididymis." *Proceedings of the Royal Society of Medicine*, February, 1932.
HOWELL, B. WHITCHURCH, F.R.C.S. "Sarcoma of the Foot." *Proceedings of the Royal Society of Medicine*, February, 1932.
LLOYD, ERIC I., M.B., B.Ch., F.R.C.S. "Osteitis of the Tarsal Scaphoid (Bilateral); ? Cause." *Proceedings of the Royal Society of Medicine*, February, 1932.
LLOYD, W. ERNEST, M.D., M.R.C.P. (DOROTHY J. DOW, M.A., M.B., Ch.B., and W. E. L.). "A Comparative Study of Chest Radiograms and the Mantoux Test in Children." *British Medical Journal*, April 16th, 1932.
MACMAHON, CORTLANDT, M.A.(Oxon.). "A Note on the Treatment of Functional Aphonia." *Journal of Laryngology and Otology*, xlvii, No. 4, 1932.
MCCURRICH, H. J., M.S. F.R.C.S. "Compressed Fracture of First Lumbar Vertebra; Reduction of Compression." *British Medical Journal*, May 5th, 1932.

ACKNOWLEDGMENTS.

Bulletins et Mémoires de la Société de Médecine de Paris—L'Écho Médical du Nord—Bulletin de l'Hôpital Saint Michel—Giornale della Reale Società Italiana d'Igiene—University of Toronto Medical Journal—McGill Medical Undergraduate Journal—Medical Times and Long Island Medical Journal—The Kenya and East African Medical Journal—Quarterly Journal of the Research Defence Society—The Leprosy Review—The Nursing Times—The British Journal of Nursing—The Hospital—The Birmingham Medical Review—Cambridge University Medical Society Magazine—Guy's Hospital Gazette London Hospital Gazette—St. Mary's Hospital Gazette—Middlesex Hospital Journal.

EXAMINATIONS, ETC.

University of Cambridge.

First Examination for Medical and Surgical Degrees, December, 1931.

Part II.—Mechanics.—Frye, E.
Part III.—Physics.—Frye, E., Somerville, E. W.

Second Examination for Medical and Surgical Degrees, December, 1931.

Part I.—Organic Chemistry.—Edwards, T. A. W.
Part II.—Human Anatomy and Physiology.—Robins, J. M., White, D. M.

University of London.

Second Examination for Medical Degrees, March, 1932.

Part I.—Armstrong, J. H., Baker, F. J. S., Beeley, F. J. L., Bickford, B. J., Bradley-Watson, J. D., Brentnall, G. C., Cates, J. E., Clarke, E. P., Dancer, J. B., Dubash, J. J., Fairlie-Clarke, G. A., Fearnley, J. D. O., Flavell, M. P., Grundy, T. N., Harper, K. H., Henig, L., Hollande, F. G., Kinnear, A. I., Leask, L. R., Lewis, C. L., Lopez-Garcia, L. J., McGladdery, J. P., Moore, F. T., Ogilvie, J. D., Oliver, W. A., Roberts, J. L. D., Rotter, K. G., Samuel, D. M., Stoddart, W., Thackray, A. C., Vahrman, J., Williams, R. T. H.

Part II.—Anderson, C., Atkinson, E. C., Bangay, E. B. D., Barber, D. S. D., Barnard, E. J. W., Bohn, G. L., Cohen, S., Craig, D., Dransfield, C. M., Frost, L. D. B., Houghton, P. W., Hugh, H. M., Kennedy, A. R., McGladdery, H. M., Nash, D. F. E., Premdas, I. H., Rigby, E. P., Sansom, S. V., Tidswell, T. H., Weiner, D., Yarrow, H.

CHANGES OF ADDRESS.

BEVAN, F. A., White House, Woodstock, Oxfordshire. (Tel. Woodstock 23.)
DAVIES, C. SIMS, c/o Director of Medical and Sanitary Services, Livingstone, Northern Rhodesia.
HARRISON, S. G., c/o Hon. D.M.S.S., Accra, Gold Coast, West Africa.
HOGDEN, G. HAMILTON, Council Offices, Swinton, Manchester.
RADCLIFFE, W., The Grove, Dedham, Essex.
SODEN, W. N., Queen Mary's Hospital, Roehampton, S.W. 15.
TOOTH, R. S., The Gables, Southover, Lewes.

APPOINTMENTS.

BURROWS, H. J., M.B., B.Chir.(Cantab.), F.R.C.S., appointed Honorary Cytologist, Royal College of Surgeons; appointed Honorary Orthopædic Surgeon, East Ham Memorial Hospital.
HECKFORD, F., M.R.C.S., L.R.C.P., appointed Honorary Ophthalmic Surgeon to the Royal Isle of Wight County Hospital.
LLOYD, W. ERNEST, M.D., M.R.C.P., appointed Assistant Physician to the Brompton Chest Hospital.

BIRTHS.

BONNER-MORGAN.—On April 4th, 1932, at Penang, to Susan, wife of W. R. Bonner-Morgan—a son.
DIETRICH.—On February 29th, 1932, to Thelma (*née* Corder) wife of Gilbert Dietrich, M.R.C.S., L.R.C.P., of Northmead, Benoni, S. Africa—a son.
DRURY.—On March 20th, 1932, at Maseno, Kenya, to Helen Flora Hewlins (*née* Catling), wife of Dr. Graham Dru Drury—a son.
HORDER.—On April 10th, 1932, at Ben-lui, Boyne Park, Tunbridge Wells, to Jessie, wife of Cecil A. Horder, M.B., F.R.C.S.—a son.
MUIR.—On April 21st, 1932, to Eleanor (*née* Stirling) and David Miller Muir, of Exeter—a son.
SALMON.—On April 1st, 1932, at Wolverhampton, to Muriel, wife of K. Gordon Salmon, M.A., M.B., B.Ch.—a daughter.

MARRIAGES.

BOLTON—WILSON.—On March 31st, 1932, at the Wesleyan Church, Donaghadee, by the Rev. Chas. Wilson (father of the bride), assisted by the Rev. H. B. Rattenbury, Ralph, youngest son of Mr. and Mrs. Edward Bolton, Charlbury, Oxfordshire, to Eileen Margaret, eldest daughter of Rev. and Mrs. Chas. Wilson, Donaghadee, Co. Down.
HAMILL—FINDLATER.—On April 7th, 1932, at Our Lady of Victories, Kensington, by the Rev. W. Owen, D.D., John Molyneux Hamill, O.B.E., M.D., D.Sc., to Lesley, daughter of the late R. B. N. Findlater and Mrs. Findlater, of 187, Queen's gate, S.W. 7.
RIDSDILL SMITH—LATHAM.—On April 7th, 1932, at the Church of the Holy Cross, Morton, Thomas Ridsdill Smith, son of the late Mr. T. Ridsdill Smith and Mrs. R. G. D. Laffan, to Dorothea Mary, daughter of the Rev. W. L. and Mrs. Latham, Morton Rectory, Derbyshire.

DEATHS.

EVANS.—On March 15th, 1932, at Felinfach, Cardiganshire, Evan Evans, M.R.C.S., L.S.A., D.P.H.
GOODWIN.—On April 1st, 1932, at the Old School House, Catcott, Bridgwater, Wycliffe Goodwin, M.B., late of Rhyl, North Wales, aged 65.
IZARD.—On February 16th, 1932, suddenly, at Auckland, New Zealand, Dr. Arnold Woodford Izard, O.B.E.
ORCHARD.—On March 23rd, 1932, at 12A, Kensington Court Place, Timothy, the infant son of Dr. and Mrs. Stuart Orchard, aged two days.
SMITH.—On March 31st, 1932, James Edmund Smith, M.R.C.S., L.R.C.P., of 44, Whiteheads Grove, Chelsea, S.W.
STEPHEN.—On April 11th, 1932, suddenly, at Bordighera, Lieut.-Colonel Guy Neville Stephen, O.B.E., M.R.C.S.(Eng.), D.P.H. (Lond.), Officier de Santé France, late Foreign Office Medical Service and R.A.M.C., third son of His Honour the late Judge James Stephen, aged 74.

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: National* 4444.

St. Bartholomew's Hospital Journal.

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

VOL. XXXIX.—No. 9.] JUNE 1ST, 1932. PRICE NINEPENCE.

CALENDAR.

Thurs., June 2.—Swimming Match *v.* Old Millhillians. Home.
Fri., ,, 3.—Medicine: Clinical Lecture by Sir Percival Hartley. Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Sat., ,, 4.—Tennis Match *v.* King's College Hospital. Away.
Mon., ,, 6.—Special subjects: Clinical Lecture by Mr. Bedford Russell.
Tues., ,, 7.—Sir Thomas Horder and Sir Charles Gordon-Watson on duty.
Wed., ,, 8. Surgery: Clinical Lecture by Mr. Harold Wilson.
Thurs., ,, 9.—Swimming match *v.* Old Stortfordians. Home.
Fri., ,, 10.—Medicine: Clinical Lecture by Dr. A. E. Gow. Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Sat., ,, 11.—Cricket and tennis matches: **Past *v.* Present.**
Mon., ,, 13.—Special subjects: Clinical Lecture by Mr. S. L. Higgs.
Swimming match *v.* National Provincial Bank. Away.
Tues., ,, 14.—Dr. A. E. Gow and Mr. Girling Ball on duty.
Wed., ,, 15.—Surgery: Clinical Lecture by Mr. L. Bathe Rawling.
Cricket match *v.* Guy's Hospital. Away.
Fri., ,, 17.—Medicine: Clinical Lecture by Dr. C. M. Hinds Howell.
Prof. Fraser and Prof. Gask on duty.
Sat., ,, 18. Cricket match *v.* Old Paulines. Away.
Tennis match *v.* Royal Artillery (Woolwich). Away.
Mon., ,, 20.—**Last date for receiving matter for the July issue of the Journal.**
Special subjects: Clinical Lecture by Mr. Bedford Russell.
Tues., ,, 21.—Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Wed., ,, 22.—Surgery: Clinical Lecture by Mr. L. Bathe Rawling.
Thurs., ,, 23.—Swimming match *v.* National Provincial Bank. Home.
Fri., ,, 24.—Medicine: Clinical Lecture by Dr. A. E. Gow. Sir Thomas Horder and Sir Charles Gordon-Watson on duty.
Sat., ,, 25.—Cricket match *v.* Old Leysians. Away.
Tennis match *v.* Winchmore Hill. Home.
Mon., ,, 27.—Special subjects: Clinical Lecture by Mr. Elmslie.
Tues., ,, 28.—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Wed., ,, 29.—Surgery: Clinical Lecture by Sir Charles Gordon Watson. Cricket match *v.* King's College, London. Home.
Tennis match *v.* R.N.C. (Greenwich). Away.

EDITORIAL.

VIEW Day is a custom peculiar to our Hospital. It dates back to pre-Reformation times and possibly is coeval with the Hospital's foundation. The Hospital "Journals" go back as far as 1549, when View Day was apparently a well-established ceremony. At this time the Governors were summoned to be present at 6 a.m. on a March morning, and the round began with a religious service. In modern times the event takes place in the afternoon of the second Wednesday in May, and is not preceded by a service. The dinner in the Great Hall, the culminating event of the day, has been discontinued since 1900. The Head Porter, in his black gown, still heads the procession, bearing the staff with its silver globe and figure of St. Bartholomew holding a flaying knife. The traditional questions are asked in every ward, and the answer is still the same. The house-man has his annual opportunity of outshining his chief in magnificence, and may even be mistaken for him by admiring visitors.

This year there was the additional View Day ceremony of the opening of the Nigel Cohen Garden by Miss Peggy Salaman. This exquisite little garden is tucked away between the New Block and the Nurses' Library. It is possible that some of us have not yet seen it, or heard of it, so quietly did the construction and the opening take place. It is a fine memorial to Nigel Benjamin Cohen, whose death occurred through a flying accident last September.

* * *

The Women's Guild is to be congratulated on the results of the Fair and Jumble Sale last month. The net profits amount, we understand, to nearly £600. The organizers, among whom Mrs. Hinds Howell, Mrs. Elmslie and Mrs. Roberts played a prominent part,

worked hard for this result. Those who visited the Great Hall on View Day to hear Ian Hay were not disappointed. We fully expected to find that, as a result of the Sale, the front square would be less tightly packed with vehicles in their various stages of dissolution. This has not been the case. It is rumoured that a census has been taken of these cars, and that a good many of them actually do belong to persons connected with the Hospital, but not all.

* * *

The Annual Sports took place on Saturday, May 28th, amid a steady downpour. Visitors were unfortunately few, but we were glad to welcome Sir Charles Gordon-Watson, Mr. Girling Ball, Mr. Hume, Mr. Bedford Russell and Mr. Just from among the Visiting Staff. In spite of the inclement weather, the competitors enjoyed themselves thoroughly, and put up a very good show.

* * *

The dinner of the 7th Decennial Contemporary Club will be held on July 6th at the Trocadero at 6.45 for 7.15 p.m. All who entered the Hospital between 1875 and 1885, and subsequently qualified, are eligible for membership of this Club, whose secretaries are Sir James Berry and Dr. Owen Lankester, 5, Upper Wimpole Street, W. 1.

* * *

The dinner of the 9th Decennial Contemporary Club will be held at the Langham Hotel on Wednesday, July 6th, at 7.30 p.m. The secretaries are Dr. Hinds Howell and Mr. Elmslie, 1A, Portland Place, W. 1.

* * *

Dr. F. G. Chandler has been appointed representative of the Royal College of Physicians at the forthcoming centenary celebrations of the British Medical Association. We congratulate him on this honour, and we also congratulate Dr. Bernard Myers, who is President-Elect of the Clinical Section of the Royal Society of Medicine for the session 1932–33.

ACKNOWLEDGMENTS.

The British Journal of Nursing—The Nursing Times—Sydney University Medical Journal—Medical Times and Long Island Medical Journal—The Kenya and East African Medical Journal—Revue Belge des Sciences Médicales—L'Echo Médical du Nord—Bulletins et Mémoires de la Société de Médecine de Paris—The Caduceus—The General Practitioner of Australasia—The Queen's Medical Magazine—The Student—The Hospital—Clinical Journal—Magazine of the London Royal Free Hospital—The Guy's Hospital Gazette—St. George's Hospital Gazette—St. Thomas's Hospital Gazette—St. Mary's Hospital Gazette—University College Hospital Magazine—Charing Cross Hospital Gazette—Report of the Manchester Royal Infirmary—The University of Toronto Medical Journal—The Quarterly Journal of the Research Defence Society.

THE PRESENT POSITION OF PROSTATECTOMY.*

By Prof. HUGH CABOT, M.D., C.M.G., F.A.C.S.
Surgeon to the Mayo Clinic.

NEARLY six years ago I had the pleasure of speaking upon this same subject in this same place to a similar audience. I am hopeful that none of you have looked to see what I said at that time, and if you have, that you will not feel required to point out that I have changed my mind. The fact of the matter is that if I did not to-day point out to you that the situation was different from that which existed six years ago, only one of two conclusions could properly be drawn—either that no progress had been made, and consequently that the field had been neglected, or that I had entirely failed to appreciate what had taken place. Now it so happens that I believe that important changes have taken place, and that still more important changes are foreshadowed by developments which are, as yet, in their early stages.

It may perhaps be appropriate to spend a moment in reviewing the long and brilliant story of the development of prostatectomy. Without going too far back into the more or less accidental performance of prostatectomy, one may date the intentional operation for removal of obstruction from those put forward almost simultaneously by McGill in this country and Belfield in the United States. These were in the later 'eighties of the last century. They were not prostatectomies as we now think of them, and though performed by the suprapubic route, were only partial operations, and for this reason only partially successful. Their incomplete success led to the rise during the 'eighties and 'nineties of the last century of the operation of perinæal prostatectomy, in which the French school, typified perhaps by the work of Proust, played an important part. In America, Watson, Alexander, and at a later date, Young, made important contributions to this method of approach. Then at the beginning of the present century came the much more complete suprapubic operation, probably first done by Fuller of New York, but developed and popularized by Sir Peter Freyer. As a development or offshoot of suprapubic prostatectomy came the so-called two-stage suprapubic operation, intermittently done during the first ten years of the century, but perhaps first clearly and strongly advocated by Pilcher. This had for its purpose the division of the operation into two stages, the first of which provided adequate and, if necessary, prolonged

* A lecture delivered before the Medical College on April 18th.

drainage, and the second enucleated the prostate through the little, if at all, enlarged wound, and resulted in a considerable diminution in the mortality, particularly in the less favourable cases. Finally, bringing the matter fairly up to date, one should note the so-called one-stage open dissecting operation, first in the United States, clearly described and frequently done by Judd in 1914, and so fully developed and beautifully done by Sir John Thompson Walker and other British surgeons.

In this period of something like thirty years there have become established certain principles, and many of the earlier types of operation have entirely disappeared from present-day practice. Of these principles one may pick out the following:

(1) *Gradual decompression.*—It is generally accepted that the obstructed and over-distended bladder should be emptied gradually, thereby avoiding the accident of bleeding, but, as I think, more importantly the resulting acute fulminating infection, involving, if serious, the upper urinary tract.

(2) *Drainage.*—About thirty years ago the importance of preliminary drainage as a method of improving kidney function and stabilizing the conditions in the upper urinary tract was first clearly stated, and has become an established principle. It will be obvious that the duration of drainage will depend upon the evidence of derangement of kidney function, and the evidence of the ability of the patient to restore the function of the kidney to a reasonably satisfactory level.

(3) Finally, it has become clearly established that successful prostatectomy requires effective removal of the obstruction. This may seem elementary, but it must be recalled that the early operations of McGill and Belfield failed because they did not satisfactorily remove the obstruction, that the convincing success of the operation of Fuller and Freyer was due to the very complete removal of the enlarged portions of the prostate, and finally, that in those cases in which the prostate is small, fibrous or contracted, no methods of operation have been as satisfactory as in the cases where there was massive enlargement, and the obstructing tissue could be readily and certainly removed.

Bearing these principles in mind, one may dogmatize in regard to the present situation. Drainage may be established by one of two methods—either by the introduction of an inlying urethral catheter, or by suprapubic cystostomy. Urethral drainage is suited to those cases in which it need not be unduly prolonged—a period which may be set at two or possibly three weeks, and in which the catheter can be reasonably tolerated by the patient. Suprapubic drainage is suited to those cases where prolonged drainage, continued for from a few weeks to several or even many months, is indicated in order to stabilize function, and will also be required for those cases in whom the catheter for any reason becomes intolerable. If drainage can be satisfactorily carried out through the urethra we then have at our disposal, as I now believe, two methods of attack: we may either proceed by the now well-known and well-established one-stage suprapubic prostatectomy in which full exposure is obtained, the enlarged portion of the prostate is removed under sight and the bleeding is satisfactorily controlled; or we may apply a relatively recent, but as I believe, important new-comer in this field—a so-called transurethral prostatectomy. As I shall spend some time in discussing the details of this method later I will not go into it here. It will be noted that I have entirely discarded the operation of perinæal prostatectomy, though I am aware that it is still popular with many very able urologists in the United States, and do not doubt that it will continue to remain so for a considerable period. I have, however, come to the conclusion, which at this time I can only state dogmatically, that the newer operation of trans-urethral prostatectomy will finally push perinæal prostatectomy from the stage, and that it will do everything which this operation has done for us in the past in an equally satisfactory way and at a lesser risk. For that group of cases which has required prolonged suprapubic drainage we now have, as I think, two procedures at our disposal:

(1) The second stage of the so-called two-stage prostatectomy, which may be carried out through the suprapubic wound, during the earlier weeks without enlarging the wound, and later by moderate enlargement transversely in order to avoid possible injury to the peritoneum. This operation is, of necessity, a blind procedure, but has given very satisfactory results in the group of cases in which it has been required, and does not require niceties of exposure essential to the satisfactory control of bleeding in the one-stage operation, because the prolonged drainage will be found to have virtually eliminated serious bleeding from the list of possibilities.

(2) Transurethral prostatectomy: Growing experience has, I think, shown that a very considerable group of patients, for whom prolonged suprapubic drainage has been required, and for whom, at the time of instituting drainage, it seemed that suprapubic enucleation would be required, will be found after the lapse of many weeks or months with a prostate so shrunken as to come readily into the field admittedly appropriate for transurethral attack. For this group of cases perinæal prostatectomy has never appeared to find a large place, though I have never been quite sure why the enthusiastic advocates of the operation did not regard it as a

satisfactory procedure for removal of the obstruction, even though prolonged suprapubic drainage had been required in the interests of improved and stabilized kidney function.

It will thus appear that I am of the opinion that prostatectomy is rapidly being boiled down to three procedures: (1) drainage, (2) one-stage suprapubic prostatectomy or transurethral prostatectomy, and (3) two-stage prostatectomy, either suprapubic or transurethral. I need not burden you with further discussion of one-stage prostatectomy or two-stage suprapubic prostatectomy, since they are not new procedures, and have become thoroughly established in the surgical world. It does, I think, behove me to give some account of the latest candidate for favour—transurethral prostatectomy—in order to make it clear why I have given it such an important place in the field. We should perhaps date the beginning of the procedures which have led up to present transurethral prostatectomy to the introduction by Bottini in the 'eighties of the last century of his cautery knife for incising the bladder neck. With this instrument, introduced through the urethra, an incision was made through the bladder neck, and the obstructing tissue divided by means of an electrically heated blade. The operation was difficult of performance, was blind, and never became widely popular. The next important step in somewhat the same direction was the introduction by Young of Baltimore of his so-called prostatic punch—an instrument having a large window in its heel, and which can be introduced readily into the urethra by means of an obturator. This obturator having been withdrawn, a portion of the obstructing bladder neck then protruded into the window, and was cut away by a circular knife introduced in place of the obturator. This instrument was a very important advance, but as the procedure was not conducted under sight, the precise amount and relations of the tissue removed were doubtful, and in a varying but important number of cases troublesome bleeding occurred, which might even require suprapubic opening of the bladder for its satisfactory control. An important improvement upon this instrument was introduced by Caulk, who substituted a circular cautery knife for the cold knife of Young, and thus reduced to a minimum or even abolished troublesome bleeding. Except in the hands of its inventor, however, this instrument never enjoyed wide popularity, since the operation was necessarily a blind one, and the precise amount of heat developed by the knife was not easily regulated, so that there was danger of cauterizing the surrounding tissues if the heat was too great, or failing to control the bleeding satisfactorily if the heat was too little. However, the operations of Young and Caulk clearly prepared the field for the developments of recent years. In 1924 Stern, of New York made an important advance by developing an instrument resembling a cystoscope, by means of which the bladder neck was constantly under view, and through which the introduction of a wire loop, heated by a high-frequency current, could be manipulated in such a way as to pare away portions of the bladder neck. Stern did not succeed in developing this instrument to his entire satisfaction, and I believe later abandoned it, but it was pioneer work which has led to the development of a variety of instruments, in which the essential principle of complete visualization of the field and the removal of obstructing tissue by knives, wire loops or other forms of cutting blade have been developed. At the present time the operation is being done with a very considerable variety of instruments, utilizing these general principles. Among the instruments most employed and most successful at the present time may be named those of Davis, McCarthy and Bumpus. By means of all of these a complete view of the bladder neck is obtained, the obstructing tissue is accurately located and then accurately removed by methods which control the bleeding.

Coming now to the principles involved in this operation, it must be at once admitted that they revert to the earlier types of partial prostatectomy, and would seem thereby to expose themselves to the disasters which befell the operations of McGill and Belfield. On the other hand, it will be widely recognized that prostatic obstruction bears little or no relation to the size of the prostate, that very large prostates may produce no obstruction, whereas the most complete obstruction can be caused by glands which show no enlargement and may even be smaller than normal. We are thus forced to the conclusion that it is not the size of the prostate, but the position of the obstructing tissue which is important. The work of Young, Caulk and their modern successors appears to have demonstrated that the obstructing tissue is that which lies between the veru montanum in front and the inter-ureteric bar behind. The success which has apparently attended the transurethral operations which remove tissue in this location, suggests that the lateral lobes, which are commonly the most palpable and the most obvious, play a relatively small part in the obstruction, and there is at least a strong suggestion, which can develop into a certainty only with further experience, that even very considerable enlargement of the lateral lobes may be neglected if a clear channel is established through the region above mentioned. The operations with the instruments of Davis, McCarthy or Bumpus remove the tissue in relatively small pieces, but particularly with the instrument of Bumpus the tissue is not destroyed by electro-coagulation, and can thus be submitted to pathological examination, which is occasionally important in the discovery of early cases of malignant disease. Davis, whose experience is perhaps the largest, removes large quantities of tissue, and does not hesitate to devote considerable time, amounting occasionally to one or even two hours, to the procedure. Bumpus, on the other hand, is satisfied with removal of somewhat less tissue, and his operations are of much less duration. In the cases operated by Bumpus and his colleagues at the Mayo Clinic the average weight of tissue removed is about 5 grm., the extremes being 20 grm. and 1 grm.

Having thus briefly described the nature of the operation, it is proper to inquire upon what authority it has intruded itself into the field, and what are its present limitations. The best evidence of its right to be considered a very important procedure appears to me to rest upon the experience of Caulk, with his, as I think, less satisfactory apparatus, but with an experience going back over fifteen years, and more recently upon the work of many urologists other than those above mentioned, who, together, have presented for our consideration a large group of patients showing satisfactory results over periods varying up to as much as ten years. Their accumulated experience appears to me to show conclusively that operations done in this way do in fact satisfactorily remove obstruction. The next important considerations are those of the operative risk and the duration of hospital confinement. There are enthusiastic advocates of the operation who express the opinion that there is no mortality properly attributable to the operation. Our experience at the Mayo Clinic, which now runs to about 250 cases, does not appear to me to justify such great optimism. Our mortality from all causes during a period of six weeks from the operation is somewhat under 3%, and it does not seem to me likely that in any large series of cases a much lower mortality will be obtainable. In any operation done upon patients in this age-group, it does not seem to me helpful to attempt to exclude from mortality statistics patients alleged to have died from vascular accident or of intercurrent pneumonia, thought not to be connected with the operation itself. It appears to me wiser to credit ourselves with all of this mortality on the general ground that the patients probably would not have died if no operation had been undertaken. Moreover, I do not think that it is helpful to paint the lily, and if this method of operation will in fact relieve the obstruction at an operative risk between 2 and 3%, it will achieve better results than have yet been forthcoming from any other operation for prostatectomy. Perhaps one of the greatest advantages claimed, and I think substantiated, from this operation is the relatively brief confinement as compared with any other method. At best the perineal operation confined patients for a period of three to four weeks, not including the period of drainage. For the suprapubic operation a somewhat longer period was generally necessary. The transurethral operation can be expected to require confinement varying from three or four days to two weeks at the maximum, and averaging between seven and ten days. At the end of this period the patients are up and about, completely emptying their bladders, and in a condition safely to leave the hospital and perhaps even the immediate care of the surgeon. This is a very great improvement over other methods, and deserves being marked up to the credit of the procedure.

It will doubtless be objected that as only a relatively small amount of tissue is removed recurrence will be more likely. To this one can only reply that recurrence has not been unknown after relatively complete operations by the suprapubic or the perineal route, though it must be admitted that such recurrences were relatively uncommon. It is true that at the present time there is no commanding array of patients treated by this method more than five years ago from whom conclusions can be drawn. There are, however, a considerable number over five years, some even more than ten years, in whom recurrence has not taken place. Furthermore, it is not inconceivable that an operation of relatively trivial risk might properly be repeated after a lapse of four or five years, and the patient yet be better off than had he been forced to withstand the fundamental disturbance of a more serious operation.

The field of application of transurethral prostatectomy.—It is proper, I think, in conclusion that I should state to you my own view as to the proportion of cases of obstructing prostate which may properly be treated by this method. It will generally be admitted that the operation is most obviously suited to patients with small glandular hypertrophies, and in general to the smaller types of obstruction. I am still doubtful whether the operation can be satisfactorily applied to patients with very great enlargement of the comissural subcervical glandular structures—in general the group commonly referred to as median lobe enlargement. Some of these enlargements reach very great size, project backward, entirely covering the trigone and in some cases being more or less pedunculated. For this group I have hesitated to advise transurethral prostatectomy, though I am aware that it has been successfully employed in such cases. For the present at least I should prefer for these patients the suprapubic

method of attack. I am also hesitant in regard to patients with large lateral lobes, which have herniated backward through the vesical sphincter and come to lie in an obstructing position in the mid-line. The transurethral approach seems to me considerably handicapped in dealing with this group. Here suprapubic prostatectomy is at its best, and I think further experience, at least, is required before admitting that the lesser procedure will produce wholly satisfactory results. For the moderate enlargements such as would be classified as one and two on a scale of four, I am satisfied that the transurethral attack is well suited and has demonstrated satisfactory results. At the present time at the Mayo Clinic something like half of the cases of prostatic obstruction appear to us wholly suited to this method, and I observe that the percentage which we regard as suitable has steadily increased during the last two years.

Briefly stated, then, my opinion is this. I will not, at the moment, go "sled-length" with the enthusiasts who take the view that any obstructing prostate can be satisfactorily dealt with in this fashion. I shrewdly suspect that with growing experience and with the inevitable improvements of technique something like three-quarters of the cases will, within the next few years, come properly within the field of this operation. It will be observed that it is equally applicable to the patient who requires but little urethral drainage and to the patient who has required prolonged suprapubic drainage, that it carries beyond question the lowest mortality of any of the modern operations, and that it appears to give satisfactorily permanent results.

THE CAUSATION AND PREVENTION OF CHRONIC EMPYEMAS.

AN empyema becomes chronic when the cavity persists for an abnormal length of time after the original drainage. It may either be draining more or less completely through the opening in the chest-wall, or the opening having been allowed to heal, pus has reaccumulated in the cavity.

A chronic empyema rarely occurs if the original acute empyema has been treated properly. There are many different opinions as to the proper treatment for an acute empyema, but little difference in the final result if three main principles are observed, namely, drainage at the correct time, at the correct place, and continued until the cavity is completely obliterated.

As to the *correct time*, drainage should never be performed during the acute pneumonic process, but delayed until the pleural adhesions round the margins of the empyema are sufficiently strong to prevent collapse of the whole lung and a shift of the mediastinum when the chest is opened. Drainage performed too early may cause the death of the patient, but, on the other hand, if delayed too long there will be a thick fibrous deposit on the visceral pleura which will hamper the lung in its expansion. The optimum time can be estimated from a sample of pleural fluid after it has stood in a test-tube for twenty-four hours, the pus will settle to the bottom, leaving the serum above, and when there is 75 to 80% of pus, open drainage may be performed with safety. Closed intercostal drainage is employed in infants and, very occasionally, in syn-pneumonic empyemas, but is unsatisfactory for the ordinary meta-pneumonic empyemas.

The *correct place* for the drainage opening is on a level with the bottom of the cavity, so that when the patient is sitting or standing upright, no pus can collect. This site is found by aspiration at several different points. It must be remembered, however, that a large basal empyema depresses the diaphragm; after drainage this rises and the costo-phrenic sinus tends to be obliterated, so that the ninth rib laterally, or the tenth rib posteriorly, are usually the lowest limits for resection.

By far the commonest cause of a chronic empyema is the removal of the drainage-tube before the cavity is obliterated.

If the tube is removed while the cavity is still discharging pus, the opening in the chest-wall, although reduced to a pinhole, is kept open by the pressure of the pus in the chest; if, on the other hand, the tube is not removed until the cavity is "clean," the opening in the chest-wall closes rapidly. What happens to the cavity after closure of the drainage opening must depend on the number and virulence of any remaining organisms and the resistance of the host. In the majority of cases the tissues are able to deal with the infection, the lung gradually expands and the cavity is obliterated by firm fibrous union between the two pleural surfaces. But in others a small pocket or chink is left that contains micro-organisms, and sooner or later these get the upper hand, pus accumulates and distends the cavity and the patient becomes ill again; the empyema then either ruptures spontaneously through the old site of drainage, or is redrained by operation. Too often the doctor, not appreciating what has happened, again removes the tubes early; the same story is then repeated time and time again, and in the meanwhile the lung is becoming imprisoned by a thicker and thicker layer of fibrous tissue, so that closure of the cavity becomes impossible without an extensive operation. It is surprising how

long an interval of apparently normal health can intervene before these empyemas recur. I have known cases go from ten to fifteen years, and then get a recurrence at the site of the previous empyema; this would be impossible, I think, if the original empyema had been completely healed.

There are three *simple methods of examining an empyema cavity* to find out its size, and to know when it is obliterated, viz.: (*a*) The introduction of a finger through the drainage opening; (*b*) probing the cavity through the drainage opening with a uterine sound, soft metal gall-stone probe or urethral bougie; (*c*) measuring the capacity with fluid as follows: The patient lies down so that the opening is the highest point of the cavity, and fluid is then slowly introduced with a graduated syringe; this method cannot be carried out so long as there is a broncho-pleural fistula.

The drainage-tube should have its inner end just inside the cavity, and be fixed in that position by a safety-pin and adhesive strapping on to the chest-wall, so that it will not slip in or out. It is unnecessary to take the tube out more than once a week, and instead of daily irrigations (mechanical lavage), it is preferable to lie the patient down and then fill the cavity with Dakin's solution and leave the patient in that position for fifteen minutes. When the cavity is clean and its capacity is under 25 c.c. the size of the drainage-tube is reduced, and finally a small soft capillary tube remains until the last traces of the cavity are obliterated. In the ordinary course of events an empyema should be completely healed in four to six weeks.

The longer the walls of an empyema cavity are bathed in pus, the thicker becomes the fibrous deposit on the visceral pleura, and therefore after drainage, *the quicker the infection can be cleared up the better* is the chance of an early expansion of the lung. There are several points to be noted in this connection: (*a*) The removal at the time of operation of all fibrin lying loose in the cavity or adherent to its walls. (*b*) The avoidance of a puddle of pus at the bottom of the cavity by having the drainage opening at the lowest point. (*c*) The avoidance of a long drainage-tube projecting up into the cavity so that pus can only escape by overflow, which state of affairs is indicated if a stream of pus escapes when the tube is withdrawn. (*d*) The use of Dakin's solution, which assists in clearing up the infection: this, however, is less important than the other three points, and sometimes cannot be used on account of a broncho-pleural fistula.

As an empyema heals by the lung expanding to fill the cavity, this will depend on the state of the visceral pleura and condition of the underlying lung. *Factors delaying expansion* are: (*a*) A thickened visceral pleura; the cause of this has already been dealt with above (*b*) A broncho-pleural fistula, which is often present during the first two or three weeks after drainage, and is of no serious consequence unless it persists, when there must be some infection, such as an abscess or tuberculosis in the underlying lung. A fistula prevents expansion, as the inspired air escapes out of the opening instead of distending the lung. Forced expiration by blowing up balloons, air-rings or water from one bottle into another is a very helpful adjunct in assisting the normal lung to expand, but as long as a fistula is present, it is ineffective, and tends to prevent it from healing. (*c*) Fibrosis of the lung as the result of suppurative pneumonitis would, if extensive, prevent healing, but it is very rarely that the non-expansion of the lung can be traced to this factor, except, of course, in tuberculosis, where it is the main cause.

A foreign body in an empyema may prevent it from healing, or it may appear to heal, only to break down again at some later date. Once when draining an empyema at the Ministry of Pensions Hospital, Roehampton, I explored the cavity as usual with my finger, and found a large piece of shrapnel which had lain there without causing symptoms for fifteen years. In another soldier who had had recurrences of his empyema for many years, we found a piece of rubber tubing, and in this case as a result of the prolonged suppuration the pleura was 2 in. thick. The danger of a drainage-tube falling into the cavity and being overlooked is prevented if there is a safety-pin through the extra-thoracic portion of the tube, and also if the same person does the dressing every day. Another type of foreign body is a small piece of dead bone which is the result of osteomyelitis in the cut ends of the rib, the sequestrum having fallen into the cavity. These are rarely seen on an X-ray, and are not discovered until the cavity is re-explored. The chance of osteomyelitis of the rib ends is minimized by only stripping the periosteum off that portion of the rib which is to be resected, and cutting the rib cleanly across with sharp forceps rather than splintering it with a blunt instrument. Infection of the rib is more often a cause of persistent sinus than chronic empyema.

Finally there is a group of causes quite unavoidable by the surgeon that lie in *the nature of the infecting organism, or an abnormal ætiology* which may have been unsuspected at the time of drainage. A secondarily infected tuberculous effusion or empyema is not readily distinguished from an ordinary pyogenic one unless there is a previous history that throws light on the diagnosis. These are drained, quite correctly, by open operation, and it is only when the lung fails to expand that the underlying tuberculous infection is

suspected. If the diagnosis is in doubt at the time of drainage, a biopsy should be taken from the parietal pleura, or if after drainage, some granulation-tissue can be removed from the cavity with a curette. Sections are cut from one piece, while the rest is ground into an emulsion and injected into a guinea-pig. Actinomycosis occasionally causes an empyema, and in bronchial carcinoma an empyema develops in 10% of cases. In both of these conditions the pus must be drained, but unless they have been fully investigated beforehand, the underlying cause will not be discovered until the time of operation or later.

During the first four months of this year Mr. Roberts and I have drained twelve empyemas at the Hospital. Eight of these have healed completely in an average time of 5½ weeks, the quickest being 30 and the longest 44 days. There have been no deaths, but four cases are still under observation. The history of these four cases is, briefly, as follows:

1. Is a young woman who had two loculated empyemas on the same side, one of these being a large apical collection. The operation was performed 5½ months ago, the lung at the apex expanded very slowly, but she is now out of hospital and is very well. She has a sinus 2½ in. long with no discharge, but on account of this she is being kept under observation.

2. Is a middle-aged woman whose empyema was drained 7½ weeks ago. She now has a sinus ¾ in. long, which is still, however, discharging pus. The cause of the chronicity is obscure, and we have advised exploration, as there may possibly be a foreign body such as a piece of dead rib at the bottom of the trouble.

3. Is a young man whose empyema was drained 9 weeks ago. He still has a drainage-tube, but practically no discharge, and is now at the seaside; but when he left hospital he still had an empyema cavity. On his return if he still has an intra thoracic cavity we shall advise exploration.

4. Is a young man who was drained 5 weeks ago. He still has a tube, but practically no discharge, and there has been very little expansion in the lung, the capacity of the cavity being between 400 and 500 c.c. The history and the X-ray appearance in this case make it almost certain that he has a secondarily infected tuberculous empyema. His general health has, however, continued to improve, and he is about to go to a convalescent home.

If an ordinary empyema is still discharging pus after three weeks, and is not healed at the end of six, investigation should be carried out to find the reason for this delay. The history should be reviewed for a possible unsuspected ætiology, such as tubercle or growth. The drainage-tube and cavity should be examined to see that the drainage is satisfactory, the size and capacity of the remaining cavity should be measured, and the inside of the cavity may even be inspected with a cystoscope or bronchoscope. Some of the granulated tissue lining the cavity should be removed with a curette for investigation. X-rays are employed to show the state of the lung parenchyma, to exclude a loculated collection of pus, and confirm the clinical observations as to the site of drainage and size of the cavity. The cavity can be best demonstrated by filling it with an opaque medium, and then taking antero-posterior and lateral films. Lipiodol or barium emulsion are the usual substances, the cavity being filled with the patient lying down, and the opening is then plugged with gauze to prevent its escape. If a fistula is present the lipiodol is injected into a long piece of fine rubber tubing, which is then pushed into the cavity, where it coils round the walls.

Of all the methods of investigation operative exploration under an anæsthetic is by far the most satisfactory. The cause may then be directly dealt with, and if feasible, the thickened visceral pleura can be removed by the operation of decortication, so as to permit expansion of the lung.

To summarize the causes of chronic empyema:

1. Removal of the drainage-tube before the cavity is completely obliterated.
2. Persistence of the infection.
   - (*a*) Failure to remove the fibrin at the time of operation.
   - (*b*) Drainage opening not at the bottom of the cavity.
   - (*c*) Drainage-tube too long.
3. Delayed expansion of the lung:
   - (*a*) Thick visceral pleura due to 2.
   - (*b*) Broncho-pleural fistula.
   - (*c*) Fibrosis of the lung.
4. Foreign body.
5. Tuberculosis, actinomycosis or growth.

H. P. NELSON.

SOME POINTS IN THE TECHNIQUE OF SUBCUTANEOUS INJECTIONS.

SINCE the discovery of insulin a large and continually growing number of people give themselves subcutaneous injections. When a patient has to do injections twice a day, he soon learns to hurt himself as little as possible.

1. The amount of pain caused by the injection can be much reduced if all the movements are done slowly. A jab always causes pain. The point of the needle should be placed on the skin, and then pushed firmly but slowly through the subcutaneous tissues about a quarter of an inch deep. Some patients can tell whether any particular points on the skin are tender, and always avoid these. The angle which the needle should make with the skin is about 30°.

If the needle is pushed through slowly, the operator can tell by the resistance of the skin whether the point of the needle is blunt or sharp. If the injection is done quickly the operator cannot tell, but the patient always knows.

2. It is the custom of many doctors and nurses, after they have given the injection, to rub firmly the site with cotton-wool for ten to thirty seconds. This is presumably done to render the absorption of the substance injected more rapid. The diabetic rarely does this because the site of the injection, which is distended with 0·5 to 1 c.c. of fluid, is tender, and firm pressure will cause pain. There is no need to rub the tender spot, because the absorption of insulin is rapid enough to lower the blood sugar slightly within thirty minutes. An intravenous injection should be given if a rapid effect is desired. Some patients do prefer to rub the site of injection gently as it relieves a slight itching.

3. The patient occasionally finds that a drop of blood appears when the needle is withdrawn. The bleeding will stop with light pressure, but a bruise may appear in the subcutaneous tissues. The bleeding may occur because a small vein has been transfixed, and if this is so no other symptoms will occur. Sometimes, however, the point of the needle will stay in the lumen of the vein, and the injection will be given into the blood-stream. If this happens the blood-sugar will decrease much more rapidly than usual. As a rule no untoward effects occur, because the carbohydrate of the next meal raises the blood-sugar sufficiently to prevent the onset of the symptoms of hypoglycæmia. But a severe hypoglycæmia may occur occasionally in the interval between the injection and breakfast, and may cause great alarm to the patient's attendants, and even risk to life. This is especially liable to occur where the interval between the dose of insulin and the meal is an hour, as is sometimes necessary in order to prevent the blood-sugar rising too rapidly after breakfast.

An intravenous injection of adrenalin is much more dangerous, as the tachycardia produced may be very great, and the auricles may actually fibrillate for a few minutes. If the patient is quite healthy, the tachycardia, pallor and faintness soon pass off without leaving any ill-effects, but if the patient has a damaged heart the results may be serious. Sudden death has occurred after even a small dose (5 minims) of adrenalin, and it is possible that this was due to the adrenalin having been given intravenously. The risk can be easily avoided by the following procedure: the plunger of the syringe is slightly withdrawn before the injection is given. If any blood enters the syringe, the syringe must be slightly withdrawn and the same test with the plunger applied. It is suggested that this technique should be adopted as a routine for all subcutaneous injections. It is simpler to do this than to have to remember in each individual case that an intravenous injection of the drug in question may cause harm.

4. The needle should never be plunged in up to the hilt. If a needle breaks, it does so as a rule at the hilt, and it is important to leave a piece of needle, say an eighth of an inch, sticking out, so that the needle can be easily withdrawn. Edward Lear has summed up the situation for another kind of needle very aptly:

> "There was a young lady of Cheadle,
> Who sat down in church on a needle.
> There being some thread
> Attached to the head,
> It was promptly pulled out by the beadle."

5. The syringe should be kept ready for use, with the needle attached. It is unnecessary to pass a wire through the needle if it is being used every day, as the point will have become blunt long before the needle is blocked by rust. The syringe should be kept either in a metal or glass tube filled with disinfectant. Stainless steel needles can be kept in industrial spirit, but ordinary steel needles should be kept in a mixture of lysol and methylated spirit, ʒj to the pint. The disinfectant in either case should be washed out in three to six changes of boiled water or saline. The total amount of time which would be saved during the day, if syringes were always kept ready for use instead of disconnected, would be considerable.

GEORGE GRAHAM.

INFECTIONS OF THE TERMINAL PHALANX.

IN these days of national economy it is appalling to think how large a number of days of employment is lost to our struggling industry and declining commerce by such a seemingly trivial and unimportant complaint as "only a septic finger"—a pernicious phrase, because it encourages slovenly diagnosis, and it is upon accurate anatomical diagnosis that good treatment and rapid and full recovery depend.

That facts, though well known, are so frequently lost sight of is, I think, sufficient justification for offering for publication these notes on common infections of the terminal phalanx.

Anatomy.

To make an accurate diagnosis we must understand the anatomy of the part, and accordingly we begin with a brief account of the anatomy of the terminal phalanx, to make clearer the diagrams given. The nail represents

the stratum lucidum of the skin, and it grows in length from the stratum mucosum at its root, and in thickness from that part of the stratum mucosum which lies under the lunula. Except at its free margin the edges of the nail narrow and pass under the skin, which is reflected over it. At the base the sulcus is deep, and the overlying thinned-out skin is called the eponychium. The connective tissue between the nail and the bone is richly supplied with blood-vessels — the subungual

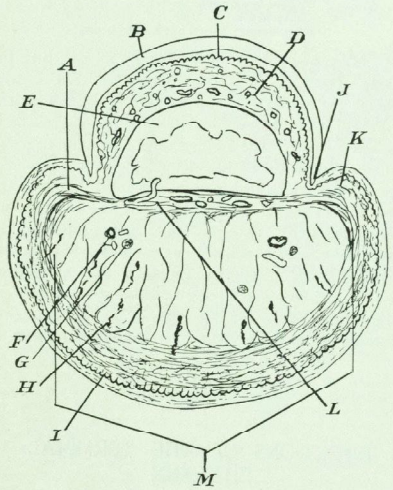

FIG. 1.—DIAGRAM OF A TRANSVERSE SECTION THROUGH THE TERMINAL PHALANX.

A. Paronychium and subungual space shut off from the pulp by thickened fibrous tissue. B. Nail. C. Nail bed. D. Subungual plexus. E. Shaft of the terminal phalanx. F. Digital vessels. G. Digital nerve. H. Sweat-gland. I. Thick epidermis with thick dermis underneath. J. Tapering edge of the nail lying in the nail sulcus. K. Paronychium. L. Vascular anastomosis, showing a branch entering a nutrient foramen. M. Distal anterior closed space.

plexus. The primary centre of the diaphysis of the phalanx appears at the eighth week, and the epiphysial centre appears at the sixteenth year—they unite at nineteen. To the dorsum near the base is attached the extensor tendon, which acts as the posterior ligament to the joint. There are strong lateral ligaments, and a fibrocartilaginous thickening of the capsule forms the anterior ligament. Passing over this and fusing with the periosteum of the palmar aspect of the phalanx is the flexor profundus tendon, whose sheath ends short of the joint at a point marked on the surface by the distal flexion crease. Here the tendon sheath lies unprotected, close beneath the surface, and is easily damaged by accident, or by the use of a median incision to open the finger pulp. The distal part of the shaft of the phalanx has on its palmar surface a roughened raised area. The whole shaft, and particularly this area, is pierced by many relatively large nutrient foramina which admit the branches of the digital arteries. The epiphysis is supplied from the digital arteries by branches which are given off before they enter the distal anterior closed space. The distal anterior closed space is a closed fibrous sac, lying between the anterior surface of the terminal phalanx and the skin from the distal flexion crease to the tip of the finger. From its outer boundaries septa of fibrous tissue extend inwards to the bone, blend intimately with the periosteum, and pass into the bone as Sharpey's fibres. Thus the periosteum here is difficult to distinguish, especially over the raised roughened area. Into the fat lying between the septa of fibrous tissue sweat-glands penetrate deeply and may be seen lying adjacent to the bone. The space has running through it the terminal branches of the digital nerves and the digital vessels of supply to the diaphysis. At the very extremity of the finger the skin is loosely attached to the tip of the phalanx by fibrous tissue.

Acute Infections of the Palmar Surface.

Some slight superficial damage to the skin of the pulp of the finger may lead to the formation of a purulent blister or subepidermal abscess, and this, if opened by cutting away the whole of its skin covering and dressed with some such antiseptic as flavine, will allow the finger to be used normally in a few days, but infection may spread into the deeper tissues by the lymphatics or the sweat-glands and enter the distal anterior closed space—the finger pulp. On cutting away the coverings of a supepidermal abscess there may be seen in its floor an opening through which escapes pus or serum from the deeper tissues. Here we have an abscess in two parts: one subepidermal and one in the deeper tissues. It is important to recognize this, for, while treating the superficial, the deeper and more serious lesion may remain neglected. These dumb-bell or collar-stud abscesses are commonly seen in the hand on the palmar surface where the epidermis is very thick.

If, however, the original wound penetrates deeply enough we will find an infection of the finger-pulp without the antecedent blister, but it is to be remembered that finger-pulp infections may occur without any history of a wound of any kind.

Pathology.—As the inflammatory process continues the tension in the finger-pulp rises, the blood supplied through the arteries in the space to the diaphysis of the phalanx is cut off and the bone dies. Or it may be that the death of the diaphysis is due to an infective osteomyelitis produced by the infection in the pulp passing easily into the medullary cavity of the bone through the numerous large nutrient foramina. Necrosis does not occur after crushing injuries; here the tension in the pulp is much increased by the œdema caused by the injury, and not by infection. This, therefore, suggests that the ischæmic theory is probably incorrect, and that infection plays

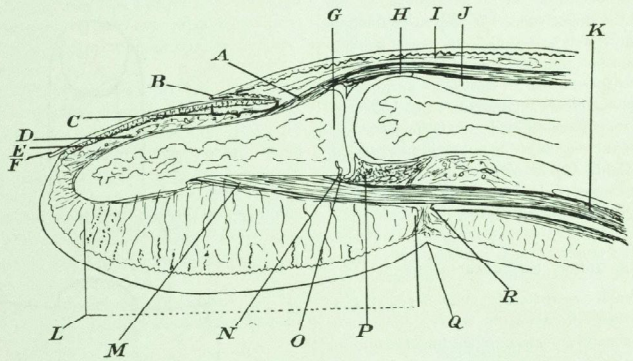

FIG. 2.—DIAGRAM OF A LONGITUDINAL SECTION THROUGH THE TERMINAL PHALANX.

A. Insertion of the extensor tendon. B. Eponychium. C. The nail matrix lying under the tapering end of the nail. D. Subungual plexus. E. Nail bed. F. Nail. G. Distal phalanx (epiphysis). H. The proximal posterior reflexion of the synovial membrane of the joint. I. The dorsal subcutaneous space. J. Dorsal subtendinous space. K. The flexor tendon. L. The distal anterior closed space. M. Insertion of the flexor tendon. N. Separate artery entering the epiphysis. O. Small subtendinous space accommodating the reflexion of the synovial membrane of the joint. P. The anterior ligament. Q. The distal flexion crease. R. The distal and anterior extremity of the flexor tendon sheath.

the major part in the production of necrosis of the bone. That the epiphysis often escapes may be due to the fact that its artery enters from outside the distal anterior closed space, and so escapes both pressure and the infected area.

Clinically we find that, a day or even as much as a week after an injury to the finger tenderness increases, and is followed by a pricking sensation and later an aching pain, which soon develops an intense bursting and throbbing character. At first tenderness is the only sign; then the finger becomes red, and as the pain is at its height there is a certain pallor in the centre of the pulp. It is swollen, indurated, and exquisitely tender. If left untreated the pain abates, and fluctuation appears with the formation of pus, and, as we shall see later, destruction of the fibrous trabeculæ of the pulp, and, very probably, death of the bone. The condition has to be distinguished from a commencing lymphangitis, burns and bruises; if there is a subepidermal abscess, it is to be determined whether a pulp infection is present as well.

The treatment consists in early drainage, rest and antiseptic dressing. If the diagnosis is in doubt it is better to drain. Less harm is done by incising an uninfected finger than by neglecting an infected one. The procedure we adopted was to open all these infections under general anæsthesia in a bloodless field; to drain the pulp space incisions were made at the side of the finger from a point a quarter of an inch distal to the flexion crease to within a quarter of an inch or less of the tip, at the level of the palmar surface of the bone, and a strip of thin rubber was passed between them. A dressing of gauze soaked in hot, saturated boracic acid solution was applied, the arm put in a sling, the patient kept away from work and advised to rest at home, and to adopt general treatment for infection as regards nutrition, bowels, etc. Next day the rubber drainage was removed and a hot dressing reapplied. On subsequent days watery flavine dressings were used. The arm was kept in a sling until healing was almost complete. It was found that in early and uncomplicated cases the pain was greatly relieved immediately after

the operation, and had disappeared by the third or fourth day, leaving the finger fit for duty at the end of the second week.

The disadvantages of the incision described is that occasionally the drainage it provides is inadequate, although more so than in any unilateral incision, and usually as adequate as that given by the horseshoe incision recommended by Fifield. Fifield's incision gives the best drainage at the expense of a scar at the tip of the finger which, if healing is delayed, may produce troublesome deformity. Neither of these incisions causes damage to the nerves, and after healing sensation is unimpaired. A median incision gives bad drainage, as it passes along one trabecula rather than across all the trabeculæ of the finger pulp. It may by extending too far proximally open and infect the flexor tendon sheath. It gives a bad scar and should not be used.

On making the incision in an early case no pus will be found, but only a serous inflammatory exudate. In older cases pus may have formed, and if incision has been long delayed the tissues of the pulp will be replaced by pus and the diaphysis will be bare and occasionally lying free in the abscess cavity, especially in children in whom the epiphysis has not yet united.

Chronic Infection of the Palmar Surface.

The finger, even if treated early, may not heal, and we are left with the "chronic septic finger." We may classify chronic pyogenic infections of the finger resulting from a primary palmar infection into two groups—those without and those with necrosis of bone.

Clinically the first type, without necrosis of bone, may be called drumstick fingers, there is little or no pain, the whole terminal phalanx is swollen and œdematous, granulations are pale, the finger is tender, the dorsal surface is secondarily involved and the nail has usually been removed, but the X-ray examination shows no bony change, other than generalized rarefaction of the terminal phalanx. The condition is usually associated with deterioration in general health, and appears to be due chiefly to prolonged treatment by moist heat, especially fomentations in which some waterproof material, such as jaconette, is applied under the wool "to keep the heat in." The jaconette may or may not keep the temperature higher for a few moments longer, but it will hinder the evaporation of moisture and cause a bogginess of the fomented part delaying resolution. Much the same effect is produced by the persistent use of a vaseline or liquid paraffin dressing. *The treatment* of this type of infection consists in applying dry or spirit dressings, and dry heat. The heat is best supplied by exposing the finger to the radiant heat from a 16 candle-power carbon filament lamp at a distance of 4 to 6 in. from half an hour to an hour two or three times a day.

The second type is commoner. Bone necrosis is present, and clearly it is a more intractable condition, and one into which the first is liable to progress. Here we have a finger chronically inflamed, in which there is a sinus leading to the bone. A sinus in the terminal phalanx almost invariably leads to bare bone. An X-ray photograph will usually show a localized area of rarefaction, or a sequestrum, but there are some cases in which a sinus leading to bone has been present for some months with no definite X-ray change to be seen.

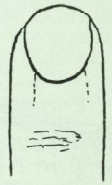

FIG. 3.—THE DOTTED LINES SHOW THE INCISIONS MADE FOR REMOVING THE NAIL.

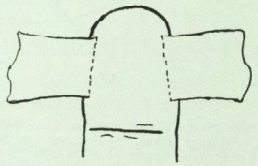

FIG. 4.—SHOWING THE METHOD OF DRAINING THE PULP BY TWO TRANSVERSE INCISIONS THROUGH WHICH IS PASSED A RUBBER STRIP.

The treatment may be considered under two headings—conservative and operative. The conservative treatment is similar to that advised for the first group. The radiant heat may be used for longer periods and more frequently. Operative treatment is advised if there is any dead bone. It should be removed with as little damage to surrounding tissues as possible. Even if no dead bone is seen in the X-ray photograph and the finger is not responding to conservative treatment, the sinus should be explored and scraped. In a few cases when, after careful conservative treatment, the removal of a sequestrum, or the scraping of a sinus, the finger still does not heal, we remove the terminal diaphysis. A horse-shoe incision is made down to the bone and, with a narrow gouge, the periosteum is reflected off the anterior and posterior surfaces, the bone cut across near its base and the flaps sewn back into position, with a strip of rubber placed transversely between them to serve as drainage. This operation produces a soft terminal phalanx which at first appears useless, but within a few weeks after the wound is healed the finger-tip, though short, is firm and useful, and movement is present.

Even after the most careful conservative treatment some chronic infections of the finger will not heal. This is seen most frequently in debilitated or elderly people with arteriosclerosis or diabetes, in whom after several weeks of suppuration there appears a dark discoloration of the skin, followed by moist gangrene. However, by the time gangrene has appeared at the tip, the infection is sure to have spread beyond the terminal joints. The treatment in these cases is early, open amputation.

The spread of the inflammatory process beyond the terminal phalanx usually begins by the infection involving the epiphysis, and escaping from its volar aspect into the small subtendinous space, which accommodates a reflection of the synovial membrane of the joint. The joint is thus involved, and infection spreads from the proximal reflections of the synovial membrane into the dorsal subaponeurotic space and on the palmar surface to the palmar subtendinous space, whence it reaches the second phalanx.

Tuberculous and gummatous ulcerations of the terminal phalanx are very rare, and we shall not describe them.

Infections of the Dorsal Surface.

In spite of their proximity to one another infections of the pulp at their onset are infrequently associated with infections of the dorsum of the finger, although a secondary spread is common. On the dorsum we may meet with suppurative or non-suppurative inflammation of the tissues adjacent to the nail, and according to their anatomical situation the inflammatory lesions receive such names as eponychia, paronychia or subungual abscess. The process is usually caused by small penetrating wounds with splinters, needles and the like.

Clinically they are characterized by pain, which is seldom severe, swelling and redness of the part affected, and there may be a discharge of pus from under the eponychium or paronychium. When subungual infections are present the pain is usually greater, and may be very severe indeed. The extent of the infection is easily seen through the nail.

The treatment is to drain the abscess, and if this requires the removal of the nail enough should be removed to provide adequate drainage for the pus. The operation for removal of the nail is done in a bloodless field if we want to determine the limit of the infection. Care must be taken not to damage the nail matrix. Two incisions are made, leading proximally from the corners of the nail. The eponychium is then pushed back and the nail raised from its bed and removed. If gross damage is done to the nail matrix either by the incision, the rough separation of the nail or by prolonged suppuration, the nail will be permanently deformed. A hot, moist dressing is applied and the arm put in a sling. Next day the finger is washed, the wound dried, and a sterile vaseline dressing applied. Thereafter the finger should be kept dry and radiant heat given. There is usually some pain after the operation, which disappears by the third day, but the hypersensitiveness and tenderness last for about a week or a fortnight. In an uncomplicated case the nail will have grown again in four to six months.

Chronic paronychia is the result of inefficiency in drainage, rest, or dryness of the finger, and is associated with poor health. The inflammation rarely spreads to the palmar surface without also spreading up the finger, but palmar infection not infrequently involves the nail-bed. The treatment is conservative.

Paronychia in newly born babies is not uncommon and, of the cases I have seen, none has been treated by surgery, and none has done anything but resolve rapidly and satisfactorily on conservative treatment.

H. W. RODGERS.

STUDENTS' UNION.

CRICKET CLUB.

Owing to the bad weather the first three 1st XI matches *v.* Southgate, Wanderers and Hampstead had to be scratched.

On Saturday, May 14th *v.* Winchmore Hill C.C., on a very wet wicket we were badly defeated at home. Nunn, Wedd and Capper were not playing. Boney and Hindley both made 24, their captain making a very good 70. Our fielding was bad, a number of matches catches being dropped.

Scores.—Bart.'s, 96; Wichmore Hill, 240 for 6.

On Whit-Monday we played Croydon on their ground. Owing to the weather we started at 3 p.m. and drew stumps at 7.30 p.m. Our opponents batted first and made 154. Our fielding was better, six catches being held. We started slowly and made 100 for 5 wickets with 25 minutes left. We went for the runs and were all out for 139, the last wicket falling in the last over. Hindley 43, Boney 28, Nunn 22.

2nd XI.

Saturday, April 30th: *v.* Southgate, 151 (for 6, dec.); Bart.'s 126 (for 5). Match drawn.

Saturday, May 7th: *v.* Downing College, Cambridge, 105; Bart.'s 152. Match won.

Saturday, May 14th: *v.* Haileybury College. Scratched.

Monday, May 16th: *v.* Wallington. Scratched.

3rd XI.

Wednesday, May 11th: *v.* Enfield Chamber of Commerce. Scratched.

Saturday, May 14th: *v.* Winchmore Hill C.C., 130; Bart.'s 49.

The Annual Past *v.* Present Match will be held on Saturday, June 11th.

Will all old Bart.'s men wishing to play please communicate at once with Dr. Geoffrey Bourne, 47, Queen Anne Street, W.1?

J. B. B.

TENNIS CLUB.

The first six fixtures had to be scratched because of rain, and so far only two matches have been played.

May 15th: 1st VI *v.* Balliol College. Away.

1. K. A. Latter and J. R. Blackburne beat 1st pair, 7—3, 0—6, 6—4; beat 2nd pair 6—4, 6—2; beat 3rd pair 6—4, 3—6, 6—0.

2. S. P. Mullick and B. Thorne-Thorne lost to 1st pair 4—6, 1—6; lost to 2nd pair 1—6, 6—2, 4—6; beat 3rd pair 7—5, 6—3.

3. T. J. Hardie and A. Hunt lost to 1st pair 2—6, 6—2, 3—6; beat 2nd pair 6—4, 3—6, 6—4; lost to 3rd pair 4—6, 4—6.

Match won 5 sets to 4.

May 18th: 2nd VI *v.* St. Mary's Hospital, at Winchmore Hill.

1. T. J. Hardie and R. K. Frewen beat 1st pair 7—5, 6—4; second set unfinished owing to rain, 9—7, 2—5; beat 3rd pair 6—1, 6—1.

2. R. C. Witt and R. L. Benison lost to 1st pair 4—6, 4—6; beat 2nd pair 6—2, 1—6, 6—2; beat 3rd pair 6—0, 6—0.

3. J. Smart and R. H. Dale lost to 1st pair 3—6, 2—6; lost to 2nd pair 3—6, 2—6; beat 3rd pair 6—2, 6—2.

Match won by 5 sets to 3, the odd one being stopped because of rain.

J. R. K.,
Hon. Sec.

UNITED HOSPITALS SAILING CLUB.

A meeting of the Hospital Sailing Club was held at the beginning of last month. Dr. Dudley Stone took the chair. Unfortunately the attendance was extraordinarily poor, in spite of ample notice.

The season has started well, the Bart.'s dinghey gaining six first places in six races for the Inter-Hospital Trophies.

There is still nearly five months of the summer left, and anyone interested is reminded that the initial subscription of 5*s.* enables them to sail a boat free of charge practically every day until October should they so wish there being no further expense in connection with the boats.

HOCKEY CLUB.

The Annual General Meeting of the above Club was held on Thursday, April 7th. Dr. Gow was in the chair.

The following officers were elected for the ensuing year:

President: Dr. A. E. Gow.
Vice-Presidents: Mr. Just, Dr. Geoffrey Evans.
Captain: G. T. Hindley.
Hon. Sec.: K. W. Martin.
Match Sec.: C. A. Hinds Howell.
Captain 2nd XI: C. Fletcher.
Hon. Sec. 2nd XI: W. A. Oliver.
Captain 3rd XI: T. Smart.
Hon. Sec. 3rd XI: F. Avery-Jones.
Extra Committeemen: P. M. Wright, V. C. Snell.

A. D. I.

FIVES CLUB.

The Fives Club has now completed its first season since the building of the new court, and, judging by the number of men who have been playing fives and the continuous use to which the court has been put, those responsible for its erection may rest assured that their efforts have been greatly appreciated.

The competition which was run during the winter months resulted in a win in the Singles for W. H. Gabb, who defeated G. Oppenheimer in the final by 30 points to 15. Gabb's severity of stroke, accompanied by accurate placing and excellent anticipation, were the deciding factors in his success. Oppenheimer, however, possesses a very sound knowledge of the game, and should improve rapidly.

Partnered by O. A. Savage, Gabb was again successful in the Doubles against J. R. Kingdon and K. F. Stephens. This match was very well contested, and Kingdon made some remarkable recoveries from what appeared to be impossible positions.

The play of many of the competitors augurs well for the future, and it is to be hoped that next season more matches may be arranged, so as to include a greater number of players.

K. A. L.

CORRESPONDENCE.

ON CHRONICS.

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

DEAR SIR,—Dr. Geoffrey Evans's reply to my short article on "Chronics" which appeared in your last issue raises some interesting points. With great moderation and characteristic restraint, he paints a happy picture of the young doctor so wonderfully trained in St. Bartholomew's Surgery that he passes out into the world spiritually and intellectually equipped to soothe all the sufferings of his fellow men. It is a high ideal, and for it I can feel nothing but the most profound respect—*but*, I do not believe that it is a practical policy. As Dr. Langdon Brown has said, the work in the Surgery affords a unique opportunity of learning to distinguish between "those who are unhappy because they are sick, and those who are sick because they are unhappy," and there can be no doubt that this knowledge is essential in every doctor worthy of the name. Further, it is a platitude to assert that a doctor cannot know too much of human nature. But I do not believe, and nothing will persuade me, that it is essential for the salvation of every junior H.P. to spend four hours a day for six months surrounded by the squalor of Whitechapel.

The lesson that the Surgery has to teach is valuable, but it is *quickly learnt*. The interesting cases are side-tracked to the many special departments of the Hospital, and there are left only chronic bronchitis, chronic arthritis and menopausal complaints.

Years ago Sir Archibald Garrod remarked that the method of procedure in the Surgery was equivalent to "using razors to chop wood." Dr. Geoffrey Evans would believe that this is too high a compliment to our junior H.P.'s; but after all even a junior H.P. is an educated and highly trained man, and the material with which he is presented in the Surgery is something that calls, not for his special knowledge, but for sympathy and common sense.

If it is true that it is the duty of the Hospital to offer help to all who come, then surely it might also help its pupils by appointing a larger number of Casualty H.P.'s to deal with these patients, and by making the appointment of a shorter tenure than three months. In this way many students who go straight and somewhat unprepared from Hospital to general practice would have had a finishing touch put to their education.

But I do *not* believe that St. Bartholomew's exists for the distribution of indiscriminate charity as it did 800 years ago. I believe that it is a high court of medical authority, and that in the greater and more specialized division of labour which marks the passing years it should take its place in the vanguard of medical science. Its Resident Staff, which presumably represent its best students, should have the opportunity of concentrating upon the treatment and cure of organic disease. And if the Church or local G.P.'s fail in their task of comforting the souls of the people, it is a mystery why a scientific institution should take it over.

In conclusion let me emphasize that I do *not* question the part that must be played by the G.P. in private life: I am merely doubtful of the ultimate good that is served by H.P.'s supplying paraffin in large quantities to hordes from the East End, who carry it home and fry their fish in it or put it on their hair.

I am Sir, etc.,

London; H. B.
May 9th, 1932.

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

DEAR SIR,—Might I put forward a further claim on behalf of the "Bart.'s Chronic," and ask those responsible for their care, in whatsoever Department they are being treated, to remember that they are frequently their own "failures," or the "failure" kindly referred by some other Department?

Is it quite fair to cast them aside, or wish to do so? Where are they to go? To their panel doctor if they have one, to private doctors if their pockets allow. But what of the rest, the many thousands left over? Where are they to go? Why, to Bart.'s, of course, if they belong to Bart.'s, and we must learn to receive them cheerfully just as we smile when our successes turn up.

I am, Sir, etc.,

Dalston; DUDLEY H. COCKELL.
May, 1932.

"ABERNETHY'S" CHAIR.

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

SIR,—The chair which in my student days (up till 1895) graced the Abernethian Society's room was always called "Abernethy's Chair." I am uncertain whether this chair, where the President sat during ordinary meetings, even as I did, with the orator as the guest on his right hand, is still in this room or where it is. But I am asking if anyone can throw any light on its history. In *The Life of Sir James Paget*, edited by his son Stephen, p. 152, a footnote reads: "It was Mr. Mitchell Henry, M.P., who persuaded the Abernethian Society to buy their grand Presidential chair, with the angels on the top of it; which had originally been designed for a church." Mitchell Henry, a house surgeon, seems to have been in the School in 1845, some years after the foundation of the Society. Is there anywhere a minute of the transaction? Now it will be found in vol. ii, p. 827, of Norman Moore's great book on St. Bartholomew's Hospital that in 1803 "the President used to sit 'in Mr. Pott's old chair.'" Abernethy probably did sit in this chair. What has become of this chair? Is it in the possession of any descendant of Abernethy, or perchance mouldering in a second-hand furniture shop?

In one's student age no one troubles about aught but the approaching examinations, but in antiquity one's thoughts turn very readily to ghosts, and not without pleasure. Hence this.

Yours faithfully,

W. H. MAIDLOW.

REVIEW.

DISEASES OF THE THYROID GLAND. By CECIL A. JOLL, M.S., F.R.C.S. (William Heinemann, Ltd., 1932.) Pp. xviii + 682. With 24 plates and 283 figures. Price £3 3*s.* net.

The student, as well as the practitioner, will welcome Mr. Joll's book, for not since Mr. (now Sir James) Berry wrote his volume mere than thirty years ago, has there been a work published in England covering the whole range of the subject to which he could refer. Individuals have contributed articles, many of them very valuable, but the lack of precise knowledge on some of the problems, and of agreement on others, has hitherto prevented any one individual from publishing a complete volume. Notwithstanding this, great advances have been made. The physiology of the gland is better understood, and the biochemistry has been advanced, and while patients have ceased to be content to suffer the conspicuous deformity associated with the simple types of the disease, or the extreme discomfort and disability associated with the toxic types, surgeons have become skilled in avoiding the dangers of operation, and in perfecting the technique necessary to restore these patients to normal. Many books and a vast literature have been published abroad, and the time was ripe for such a publication in England. Mr. Joll was peculiarly well-equipped to write it, and he has given us a book which contains within its covers practically all that is known about the thyroid gland. The anatomy and physiology are detailed and complete. The biochemistry is particularly informative, and contains full reference to the work of Kendall in isolating, and Harington in synthesizing, thyroxine. The chapter on the parathyroid glandules is good, but it does not contain the work done in the last few years on hyperparathyroidism. The inflammations—including Riedel's disease—are dealt with in a manner much more satisfactory than is usual in text books, but it must be remembered that all authors do not agree that Riedel's disease and lymphadenoid goitre are separate diseases. Sufficient space is given to developmental abnormalities.

The classification of simple, toxic and malignant goitre has been made commendably simple. As becomes the prevalence and importance of simple goitre, much space has been given to its ætiology, pathology and treatment. These chapters are full of interest. Many of the points are still the subject of keen discussion, and a great deal of work is being carried out on pathogenesis. The student will find a wealth of information on any aspect of it of which he may be in search. The signs, symptoms and complications are excellently described and illustrated.

The classification of malignant epithelial tumours is similar to that used by Allen Graham and Simpson in America, and Dunhill in England.

In the chapters on toxic goitre, Mr. Joll has given, from the department of the Registrar-General, evidence of an increase in the incidence of this disease. He divides it into primary and secondary types, the distinction being whether the toxic condition begins without or with a pre-existing goitre. The subject is dealt with in the greatest detail. The pathogenesis, signs and symptoms are such as we are familiar with. Complications and associated conditions such as cardio-vascular breakdown, glycosuria and mental disturbance are well discussed, as well as its occurrence in early life and its association with pregnancy. The advantage of Mr. Joll's experience in all these circumstances is of great value to the student.

Much space is given to the question of basal metabolism, to anæsthesia, and to the details of operation, including preparation, dangers and after-treatment. In the actual operation Mr. Joll differs in some details from British practice, and follows continental custom in that he ligatures the inferior thyroid artery early, and doubly ligatures and divides practically all vessels.

While giving his own judgments, backed by his lengthy experience, there is an entire absence of dogmatic assertion, and Mr. Joll gives full weight to the views and the work done by investigators and surgeons in this and other countries.

The illustrations are beautifully reproduced and the bibliography is very extended.

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

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MORLOCK, H. V., *M.C.*, M.D., M.R.C.P. (A. J. SCOTT-PINCHIN, F.R.C.P., and H. V. M.). "Bronchoscopic Apparatus." *Lancet*, March 26th, 1932.

MYERS, BERNARD, C.M.G., M.D. "Gaucher's Disease: Splenectomy." *Proceedings of the Royal Society of Medicine*, February, 1932.

——— "Practical Points on Modern Infant Feeding." *Practitioner*, April, 1932.

OKELL, C. C., *M.C.*, M.B., B.Ch., M.R.C.P. D.T.M.&H. "The *Rôle* of the Hæmolytic Streptococci in Infective Disease: I. Their Modes of Attack." *Lancet*, April 9th, 1932. "II. Properties of the Erythrogenic (Rash-producing) Toxin of the Streptococci." *Lancet*, April 16th, 1932.

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——— "Erythromelalgia-like Symptoms with High Blood-pressure." *Proceedings of the Royal Society of Medicine*, February, 1932.

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——— "Urticaria Pigmentosa (Telangiectatic Variety) in an Adult." *Proceedings of the Royal Society of Medicine*, March, 1932.

——— (and HARRIS, KENNETH E., M.D.). "A Case of Widely-distributed Superficial Telangiectatic Nævus (Capillary Hæmangiectatic Nævus) Associated with Areas of Nævus Anæmicus—Indications that a Portion of the Cerebral Meninges are Similarly Involved." *British Journal of Dermatology and Syphilis*, February, 1932.

——— (and SCHWARZ, E., M.D.). "Thrombophlebitis Migrans vel Recurrens." *Practitioner*, April, 1932.

——— ——— "Erythrodermia with Œdema." *British Journal of Dermatology and Syphilis*, April, 1932.

WOODMAN, E. MUSGRAVE, M.S. "Two Cases of Carcinoma of the Hypopharynx." *Proceedings of the Royal Society of Medicine*, February, 1932.

YOUNG, F. H., O.B.E., M.D., M.R.C.P. "Chronic Non-Tuberculous Infection of the Lungs in Children." *British Medical Journal*, April 2nd, 1932.

EXAMINATIONS, ETC.

University of Cambridge.

The following Degrees have been conferred:

M.Chir.—Taylor, H.

M.B., B.Chir.—Harris, A. G. J.

Royal College of Physicians.

The following have been elected **Fellows:**

Carmichael, E. A., Hadfield, G., Harris, C. F., Haynes, G. S., Okell, C. C., Young, F. H.

The following have been admitted **Members:**

McMenemey, W. H., Price, R. K., Ragab, A. F.

Conjoint Examination Board.

Pre-Medical Examination, April, 1932.

Chemistry.—Berman, B., Friedburg, K. W. S., Goodrich, B. H., Halford, R. B., Henderson, J. L., Perrott, J. W.

Physics.—Berman, B., Friedburg, K. W. S., Goodrich, B. H., Halford, R. B., Perrott, J. W., Witt, R. C.

Biology.—Benson, T. L., Coates, H., Friedburg, K. W. S., Goodrich, B. H., Henderson, J. L., Scott, K. B., Williams, W. R.

First Professional Examination, April, 1932.

Anatomy.—Adel, M., Ball, P. H., Bensley, W. E. C., Curtiss, L. M., deVine, J. G. B., Libertson, W., Nicoll, J. A. V., Philip, D. N., Shemilt, W. P., Williams, R. J. G., Wilson, J. D., Wolfe, H. L.

Physiology.—Adel, M., Ball, P. H., Curtiss, L. M., Knight, W. C., Libertson, W., McAskie, L., Macdonald, J. M., Philip, D. N., Wilson, J. D., Wolfe, H. L.

Materia Medica and Pharmacology.—Barker, J. E., Bressler, D. M., Burstal, E. W., Dias, N. J., De Freitas, A. J. S., Edwards, L. J. L., French, J., Jones, N. H., Lloyd, G. M., Orlek, A., Ross, W. T., Weekes, C. R. H.

Final Examination, April, 1932.

The following have completed the Examination for the Diplomas of **M.R.C.S., L.R.C.P.,** and had the Diplomas conferred on them:

Brookman, G. H., Crabb, D. R., Dexter, L., Evans, W. B., Francis, A. E., Freeman, L., Gilbert, R. G., Groves, J. N., Hall Smith, C. S., Hollinrake, A., Hosford, M. D. C., Jackson, J. M., Knox, R., Kravchick, W., Leishman, A. W. D., McBride, J. R. B., Martin, J. R. M., Mears, A. R. R., Murless, B. C., Papert, A., Radcliffe, F., Ranganathan, K. S., Roberts, L. O., Saunders, S. B. H., Savage, O. A., Scowen, E. F., Strong, J. R., Tubbs, O. S., Viljoen, D. P., White, H. D., Wilson, W.

L.M.S.S.A.

The Diploma of the Society has been conferred on:

Perkins, R.

CHANGES OF ADDRESS.

DODD, T. A. J. M., 140, Richmond Park Road, Bournemouth.

HOGBEN, G. HAMILTON, "Craigmore," May Road, Swinton, Manchester.

KAYNE, G. GREGORY, St. Charles' Hospital, St. Charles' Square, Ladbroke Grove, W. 10.

LEVITT, W. M., 40, Harley Street, W. 1. (Tel. Langham 1011.)

8, Stone Buildings, Lincoln's Inn, W.C. 2. (Tel. Holborn 4620.)

MORGAN, C. NAUNTON, 40, Harley Street, W. 1. (Tel. Langham 1011.)

RADCLIFFE, W., 7, High Street, Wivenhoe, Colchester.

APPOINTMENT.

SHARP, B. B., M.D., M.R.C.P., appointed Physician to the Princess Beatrice Hospital, Kensington.

BIRTHS.

GARNHAM.—Whitsun, 1932, at Nairobi, to Esther (*née* Long Price), wife of Dr. P. C. C. Garnham—a son.

JOHNSON.—On May 2nd, 1932, to Betty (*née* Coutts), wife of Athol I. Johnson, M.B., B.Ch. (W.A.M.S. Reserve)—a son.

LEHMANN.—On April 25th, 1932, at Lynn House, Wickham Market, to Margaret (*née* Elford), wife of H. P. Lehmann, M.R.C.S., L.R.C.P., —a daughter.

MORTON.—On April 24th, 1932, at Clarendon Lodge, Mitcham Road, London, S.W. 17, to Dorothy (*née* Heddle), wife of John E. C. Morton, M.R.C.S., L.R.C.P.—a son.

NAUNTON MORGAN.—On May 15th, 1932, at 27, Welbeck Street, W. 1, to Ena, wife of Mr. C. Naunton Morgan, F.R.C.S.—a son.

NICHOLSON.—On May 22nd, 1932, at 172, Park-road, West Hartlepool, to Constance Isobel (*née* Murray), wife of Dr. W. A. Nicholson—a son.

NORRISH.—On April 20th, 1932, to Norah (*née* Bennett), wife of R. E. Norrish, F.R.C.S., of 38, Avenue Road, Highgate, N. 6—a daughter.

SHAW.—On May 7th, 1932, at 27, Welbeck Street, to Anne, the wife of Wilfred Shaw, M.D., F.R.C.S.—a son.

TUNBRIDGE.—On May 14th, 1932, at Blythewood, Camberley, to Mildred (*née* Roddy), wife of Dr. W. S. Tunbridge—a son.

WARD.—On April 10th, 1932, to Marjorie (*née* Thomas), wife of Roy Ward—a son.

WARD.—On May 8th, 1932, at 20, Devonshire Place, W. 1, to Elsie Antoinette, wife of Ronald Ogier Ward—a son.

MARRIAGES.

COOK—CAPPER.—On May 23rd, 1932, at St. Bartholomew's Church, Zaria, Nigeria N.P., B.W. Africa, by the Rev. H. Guy Bullen, M.C., M.A., Norman E. Cook, M.B., B.S., D.T.M. & H., of C.M.S. Hospital, Zaria, son of Dr. and Mrs. J. Howard Cook, of 31, Narcissus Road, W. Hampstead, to Clarice Edith Capper, B.A., younger daughter of Mr. and Mrs. W. J. Capper, of Fieldsdene, Newport, Monmouthshire.

MCKINSTRY—HOLMAN.—On May 7th, 1932, at All Souls' Church, Loudoun Road, N.W. 8, by the Vicar, the Rev. S. N. L. Ford, B.A., assisted by the Rev. G. A. T. Jackson, M.A. (formerly Vicar of St. Paul's, Avenue Road, N.W. 8), William Kilbourn McKinstry, M.A.(Camb.), M.R.C.S.(Eng.), L.R.C.P.(Lond.), only son of Dr. and Mrs. McKinstry, of 3, Gwendwr Road, W. 14, to Sibyl Mildred, second daughter of Dr. and Mrs. F. Kay Holman, of 76, Avenue Road, Regent's Park, N.W. 8.

ROCHE—BRIGGS.—On May 7th, 1932, at the Register Office, Kensington, Alex. E. Roche, M.D., M.Ch., F.R.C.S., to Cicely Mary, only daughter of Mr. and Mrs. Briggs, of 21, Wellington Road, Enfield.

STALLARD—PAGE.—On May 21st, 1932, quietly, at St. Bartholomew the Great, London, by the bride's father, H. Bristow Stallard, F.R.C.S., of 33, Harley Street, W. 1, to Gwynneth Constance, daughter of Canon and Mrs. F. G. T. Page, of Warwick.

DEATHS.

BLACKBURN.—On May 11th, 1932, William Howard Blackburn, M.A., M.B., B.Ch., D.P.H., M.R.C.S., M.O.H., son of the late John Blackburn, of Liverpool.

LEGGE.—On May 7th, 1932, at Wintergreen, Warlingham, Sir Thomas Morison Legge, M.D., C.B.E., Medical Adviser to the Trades Union Council, late of the Home Office, aged 69.

WILLETT.—On May 6th, 1932, at a nursing home in London, John Abernethy Willett, M.D., of 11, Bryanston Street, W. 1, second son of the late Alfred Willett, F.R.C.S., aged 59.

WYNTER.—On May 7th, 1932, at Clifton, Bristol, Dr. Andrew Ellis Wynter, son of the late Dr. Andrew Wynter, aged 70.

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: National 4444.

St. Bartholomew's Hospital Journal.

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

VOL. XXXIX.—NO. 10.] JULY 1ST, 1932. PRICE NINEPENCE.

CALENDAR.

Fri.,	July 1.	Dr. A. E. Gow and Mr. Girling Ball on duty.
Sat.,	,, 2.	Cricket Match *v.* St. George's Hospital. Home. Tennis Match *v.* Royal Artillery (Woolwich). Home.
Tues.,	,, 5.	Prof. Fraser and Prof. Gask on duty.
Fri.,	,, 8.	Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Sat.,	,, 9.	Cricket Match *v.* Hornsey. Home. Tennis Match *v.* Guy's Hospital. Home.
Tues.,	,, 12.	Sir Thomas Horder and Sir C. Gordon Watson on duty.
Fri.,	,, 15.	Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Sat.,	16.	Cricket Match *v.* King's College Hospital. Home. Tennis Match *v.* Shoeburyness Garrison. Away.
Tues.,	,, 19.	Dr. A. E. Gow and Mr. Girling Ball on duty. **Last date for receiving matter for the August issue of the Journal.**
Wed.,	20.	Cricket Match *v.* St. Anne's. Away. Athletic Match *v.* Metropolitan Police.
Fri.,	,, 22.	Prof. Fraser and Prof. Gask on duty.
Sat.,	,, 23.	Tennis Match *v.* Staff College (Camberley). Away.
Tues.,	,, 26.	Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Fri.,	,, 29.	Sir Thomas Horder and Sir C. Gordon Watson on duty.

EDITORIAL.

THE Treasurer's Report for the year 1931 provides some interesting information for those who take an interest in the finances of the Hospital. In spite of decreased annual subscriptions and donations, the Income and Expenditure Account shows a substantial balance on the right side—a fact which speaks highly for the success of the recent economy campaign. Very interesting and significant are the facts relating to the Reconstruction Appeal, whose activities have now been reduced to a minimum, although it has not been entirely closed down.

It appears that 42% of our in-patients come from the provinces; this indicates that the Hospital is an institution of national as well as local importance. Moreover, we frequently receive and welcome medical men as visitors from all parts of the world.

The inadequacy of the in-patient accommodation of the Women's Department is commented upon, and the scheme of amalgamation with a neighbouring maternity hospital is mentioned. Negotiations are going on at present with this object in view, but the necessary building operations would mean very considerable capital outlay. A satisfactory scheme for financing the project has yet to be evolved. The same difficulty delays the commencement of alterations in the South Wing, which now stands empty.

Rumours are abroad that a site has been selected for the new Medical College, which is so badly needed. We sincerely hope that the necessary financial support will be forthcoming.

* * *

We congratulate all those members of the Hospital who have recently been successful in their examinations, and whose names will be found in the appropriate columns. Out of 41 successful candidates at the recent Final Fellowship examination, 13 were Bart.'s men, including Mr. R. F. Phillips and Mr. V. C. Thompson, who are at present working in the Hospital.

* * *

We congratulate our Treasurer, Lord Stanmore, on receiving the honour of appointment to His Majesty's Privy Council. Other Bart.'s men appearing in the Birthday Honours List were Lt.-Col. F. E. Fremantle, M.D., F.R.C.S., A. S. Woodwark, Esq., M.D., F.R.C.P., and A. R. Cook, Esq., M.D. (Knights Bachelor); also H. B. Owen, Esq., M.B., and E. K. Campbell, Esq., M.B., F.R.C.S., who each received the O.B.E., and Brevet-Col. F. P. Mackie, M.D., F.R.C.S., F.R.C.P., who received the decoration of C.S.I.

* * *

We regret to announce the death of Dr. Herbert Mundy, of Natal, on May 26th, at the age of 61. Dr.

Mundy was a well-known figure at Bart.'s thirty years ago, and his son is with us at present.

Dr. Maurice Pearson, of Durban, writes: "By the death of Herbert Mundy the profession in Natal has lost not only one of its senior members, but one who was universally popular, alike with his colleagues and with the public. Apart from his brilliant professional qualities, Mundy's most outstanding characters were his imperturbable good humour and his gift for seeing the cheery side of things.

"Mundy's hospital career was a great one; he trained at St. Bartholomew's Hospital, where he took the Treasurer's and other prizes, and was House Surgeon to Sir Henry Butlin and Mr. Lockwood. He then took his English F.R.C.S., securing top marks, and became Demonstrator of Anatomy—an appointment which at that time was the first rung on the ladder leading to the Senior Surgical Staff. No one then doubted that he was destined for a consulting and operative career on the Staff. An upset in health, and perhaps some uncertainty as to being able to stand the financial strain of waiting, caused him to change his plans and come to Natal about 1903.

"He was joined in partnership by another Bart.'s man, Burnand (nephew of Sir F. Burnand, of *Punch*), who died during the war. Almost at once Mundy worked up a large general practice. His physical energy was tremendous; no distance was so great, no night so wet as to deter him from going, often on foot (for it was before the days of motors), to a patient in the country; he never refused rich or poor, European, native or Indian, and therefore necessarily he did a great deal of unpaid work. Big game shooting was almost his only hobby apart from his work, and a hobby to which he devoted his annual holiday right up to the end.

"In his practice Mundy was one of those sound and level-headed men who never get a 'bee in the bonnet,' who never allow themselves to be rushed off their feet by the newest theory; in fact a man that any one of us, his colleagues, could most gladly and with absolute confidence go to for help if ill himself. He had one of the largest practices in Natal, and had not an enemy in the world.

"Mundy was returning from a visit to his farm in Zululand when his car broke down, and he spent the night with a companion and a native boy in the veldt, devoured by mosquitoes. All three developed severe malarial symptoms eleven days later. Mundy died after only five days' illness, and was unconscious most of the time."

We should like to express to Mrs. Mundy and her sons and daughters our sympathy with their recent bereavement.

THE CANCER PROBLEM: A PLEA FOR PERIODIC EXAMINATION.

THE cancer problem has been likened to a gigantic puzzle, and like all such puzzles, the more pieces that are correctly put together, the easier it is to find the next piece. It is not until the last one is put in position that the whole picture can be properly understood.

On this great problem thousands of workers are employed, but broadly speaking they can be grouped under three headings: Firstly, those who are working at the ætiology of the disease; secondly, those who are investigating the best methods of getting an early diagnosis; and thirdly, those who are interested in finding out the best treatment. The public are always looking for some single discovery that will solve the whole problem, but unfortunately this is extremely unlikely. It is true that definite advances have been made in discovering certain ætiological factors, and very great improvements have been obtained in the methods of treatment, but on the question of early diagnosis it must be confessed that not much advance has been made, and only very little work is being done. This is the more surprising, since a careful examination of cancer statistics shows without a doubt that the one great hope of successful treatment at the present time lies in recognizing the disease and treating it in its very early stages.

Overwhelming evidence of the value of early diagnosis is to be found in the series of reports on cancer issued by the Ministry of Health from time to time. For example, the Ministry of Health Circular No. 716 (1926), on Cancer of the Breast, states that: "It was found that of the patients subjected to early operation, that is to say before the disease had extended beyond the breast itself, 94% were alive and well at the end of three years, 91% at the end of five years, and 87% at the end of ten years. On the other hand, the ghastly state of affairs that exists at the present moment is shown from Report No. 66, which states that "only 50% of patients suffering from malignant disease seek medical advice in a sufficiently early stage to have any proper cancer treatment whatever," and only a small percentage of these are early cases. In another Report it is mentioned that the average time that elapses before patients suffering from cancer of the uterus come to their medical adviser is from six to nine months, and in the case of cancer of the rectum, twelve months.

There are two main reasons why this state of affairs exists. The first and most important of these is *fear*. A great many people are too frightened even to mention the word "cancer," and if a patient realizes that he is suffering from the disease he asks his friends not to noise it abroad, almost as if it were something unclean and to be ashamed of. The community as a whole has made up its mind that cancer is incurable and unavoidable, and that it should, therefore, be cut out of everyone's thoughts and made a taboo subject.

The second difficulty which militates against the early discovery of the disease is due to the fact that in its early stages cancer gives rise to no pain and to no urgent symptoms.

It will thus be seen that there are two problems to be solved—a psychological one and an educational one. The psychological problem has not been sufficiently realized by the medical profession. It has been argued that since only a few patients come and definitely say they are anxious lest they have cancer, therefore only a minority of people in the world are worried about it. Nothing can be further from the truth. The patients who are most exercised in their minds concerning cancer go to a doctor and relate various indefinite symptoms, but will *not* disclose the real object of their visit, with the result that they are frequently given a tonic and told not to worry about their health. On the other hand, the few who have got the moral courage to go and ask a definite question are often met with the well-meaning remark: "Why should you have cancer? You are looking quite fit."

There is only one way in which the psychological difficulty can be overcome, namely, by boldly telling the public that periodic visits to the doctor to exclude malignant disease or any condition likely to lead to it is a common-sense precaution, which should be undertaken by everyone over the age of forty. Such a suggestion may at first sight sound very revolutionary, but after all this common-sense precaution has been adopted by the majority of the public in connection with the care of their teeth, and such precautionary measures are considered to be the right procedure by every expectant mother throughout the country. Why, then, should it be impossible to persuade the public to do the same in the case of malignant disease, which attacks the most healthy of people with so little warning?

It has been suggested that if the public are prepared to go for periodic examinations in connection with malignant disease, they should go for such examinations in respect of all diseases. As a matter of fact there is not the same necessity in the majority of other diseases, since the body as a rule develops resistance, at any rate for a time, *pari passu* with the disease, and there is still time to treat the patient successfully after symptoms have developed. Apart from any question of desirability, it is probably easier to persuade the public to attend for an anti cancer inspection than for a general overhaul.

An argument that is sometimes used against such periodic visits is the difficulty of diagnosing any but the "accessible cancers." My friend Dr. Patterson has looked up statistics for me, and finds that deaths from the "accessible cancers" in 1926 accounted for 37·3% of all cancer deaths; and surely if it is possible to reduce the mortality by anything like that percentage, it would be a big move in the right direction. Again, it may be said that forty years of age is somewhat young to start periodic examinations. As a matter of fact, there is a sharp rise in the incidence of cancer between 40, 45 and 50. Before 45 the deaths from accessible cancers are 10·1%, but between 45 and 50 they rise to 20·2%.

The alternative to such periodic examinations is to try to teach the public symptomatology. Although there is no doubt that great benefit will result from discussing with intelligent patients the question of early symptoms of malignant disease, yet efforts to teach the masses symptomatology can never be successful nor desirable. Unless the patient fully understands that the symptoms of malignant disease can occur with other conditions which are of little importance, there is a very grave risk of creating neurasthenics, whereas periodic visits to the doctor, with complete faith that he will give an answer to their question, cannot but relieve the haunting fear that exists in the minds of so many people.

Once it has been agreed that the former course is preferable and probably more practicable, the following organization is suggested as a means of carrying it out. First, the public must be educated to discuss cancer frankly, and be encouraged to go to their own practitioner and ask him if there is any condition which, if left untreated, might lead to cancer. Secondly, there must be diagnostic centres near at hand to which any doubtful case can be referred by the practitioner.

Medical students in their short time in hospital can only see a certain number of cases of malignant disease, and unfortunately at present they see the disease in its advanced stages. When they go into practice they see even fewer patients per year suffering from cancer. This has led some people to argue that it would be of little value to visit their own doctor. This, however, is far from the truth. After all, the general practitioner does not have the responsibility of making the final diagnosis, but has merely to realize that there is something abnormal about a particular organ, and then to send the patient to a diagnostic centre for a further opinion.

One of the most encouraging signs of the times in

§

connection with the early diagnosis of malignant disease, is the increasing number of patients who come to the Out-Patient Department, with a note from their doctor saying that he is not quite happy as to whether the condition might not be a very early cancer.

This short note is written to encourage every Bart.'s man to do all in his power to help in the early diagnosis of malignant disease, and to stimulate patients to pay periodic visits to their medical practitioners, and thus to ease the minds and save the lives of thousands of people.

MALCOLM DONALDSON.

ROBERT BOYLE.

An Address given to the Osler Club on April 15th.

IT is a commonplace to observe in relation to the history of science and medicine that progress had slept the sleep of the dead for fourteen hundred years, from the time of Galen until ruddy awakened by William Harvey at the beginning of the seventeenth century. The publication of *De Motu Cordis* in 1628 is a convenient point for fixing this intellectual earthquake. Within a few years it had shaken all Europe, and started the vibrations in the world of science which have never lost their force up to the present day. The whole secret of Harvey's influence was, of course, the introduction of the experimental method into the elucidation of natural phenomena. The fascination which his discoveries and his methods exercised upon his contemporaries must have been extreme, though there was an interval of some twenty or thirty years before references to him and his work became at all numerous in the books of other writers in this country. I have long thought that this may have been due to the fact that Harvey's influence was really advanced more by his second book, *De Generatione Animalium*, published in 1651, than by his first. The fame of this book, which deals with generation and embryology, has been overshadowed by his more spectacular demonstration of the circulation of the blood. However this may be, it is not until after 1650 that the results of his work become obvious.

In the history of experimental science the name of Lord Bacon takes an honourable place beside that of Harvey, for his *Sylva Sylvarum*, his last work and published after his death in 1626, is an experimental natural history, ranging over every department of physical and biological science. Did he not also write that strange and wordy allegory, his *New Atlantis*, about 1615? This was printed with the *Sylva Sylvarum* in 1628, and is said to have had much influence in the establishment of the Royal Society. But Lord Bacon was more philosopher than practical man, and few of his experiments can be said to have resulted in new discoveries. He insisted, however, that experimental science is not necessarily of immediate use, and he spoke often, according to his secretary and editor, of *Experimenta Fructifera* and *Experimenta Lucifera*—Experiments of Use and Experiments of Light. He had, therefore, the true scientific spirit.

I must now turn for a moment to one whose name should never be omitted at these gatherings, for our Patron Saint is listening. Sir Thomas Browne was born in 1605, and he was therefore forty-one when he wrote his celebrated letter of advice upon what to read to his young friend Henry Power, who was then studying medicine. Browne was himself an assiduous experimenter, as is proved by a perusal of his works, especially the miscellaneous papers which were not printed until 150 years after his death. He therefore begins his letter with a piece of what was then modernistic advice: "ἐκ βιβλίου κυβερνῆτα is grown into a proverb; and no less ridiculous are they who think out of books to become physicians." After this warning he enumerates the authors whose works Power must read, and in the middle he ejaculates: "And be sure you make yourself master of Dr. Harvey's piece *De Circul. Sangu.*; which discovery," he adds, "I prefer to that of Columbus."

There is an unfortunate doubt here as to whether he meant the discovery of America by Christopher Columbus, or the work of the other, Realdus Columbus, on the pulmonary circulation, but in any case the moral was the same. Power was to read books, but he must also not be a stranger to the useful part of chymistry. He must see chymicall operations in hospitals and private houses, and see what chymistators do in their officines. He must perfect himself in anatomy, be well versed in *materia medicamentorum* and surgery, but all with a view to physic, which was his business. Power was twenty-three when he had this letter from Browne in 1646, and he proved to be much more than merely a good pupil. He practised medicine, but he also thought and experimented on his own account, the outcome being his book on *Experimental Philosophy*, published in 1664. This was actually the first work on microscopy published in this country, but, like so many of the most desirable books, it is uncommon and little known, so that I had not appreciated its attractions until I obtained a copy a few months ago. It is full of references to Harvey, Bacon, Browne and other contemporaries, but for my present purpose its chief importance lies in its more

philosophical observations. Power sensed and expressed so admirably the spirit that was abroad in those extraordinary years, and his language, profoundly influenced, it is obvious, by Browne, is so picturesque, that I cannot help quoting: "Had the winged Souls of our modern Heros been lime-twig'd with such ignoble conceptions as these, they had never flown up to those rare Inventions with which they have so enriched our latter dayes; we had wanted the useful Inventions of Guns, Printing, Navigation, Paper, and Sugar; we had wanted Decimal and Symbolical Arithmetick, the Analytical Algebra, the Magnetical Philosophy, the Logarithms, the Hydrargyral Experiment, the glorious Inventions of Dioptrick Glasses, Wind Guns, and the Noble Boyle's Pneumatick Engine.

"Nay what strangers had we been at home? and within the circle of our own selves? We had yet never known the Mesentericall and Thoracical *Lacteæ*, the Blood's Circulation, the Lymphiducts, and other admirable Curiosities in this fabrick of our Selves.

"All which incomparable Inventions do not only solicite, but me-thinks should inflame our endeavours to attempt even Impossibilities, and to make the world know there are not difficulties enough in Philosophy for a vigorous and active reason. . . .

"You are the enlarged and Elastical Souls of the world, who removing all former rubbish, and prejudicial resistances, do make way for the Springy Intellect to flye out into its desired Expansion. When I seriously contemplate the freedom of your Spirits, the excellency of your Principles, the vast reach of your Designs, to unriddle all Nature; me-thinks you have done more than men already, and may be well placed in a rank specifically different from the rest of groveling Humanity.

"And this is the Age wherein all men's Souls are in a kind of fermentation and the Spirit of Wisdom and Learning begins to mount and free itself from those drossie and terrene Impediments wherewith it hath been so long clogg'd, and from the insipid phlegm and *Caput Mortuum* of useless notions, in which it has endured so long a fixation."

At last I am brought down to the proper subject of this discourse. Power has mentioned in his exordium the name of Robert Boyle with his pneumatick engine, and Boyle it was who typified the spirit of his age and translated that spirit into action. His mind was above all others the one in which Power's "kind of fermentation" was working, and it worked with such a fury that Boyle himself must sometimes have been astonished at his own output. Of course I ought to have introduced this subject by giving you an account of the origin, in 1645, and later development of the Royal Society of London, weaving into the story the names of Samuel Pepys, John Evelyn, and King Charles II, of Sir Christopher Wren, Lower, Willis, Hook, and all Boyle's other associates who were carrying on the experimental method in London and Oxford. But this story has been written many times before, and my object is to concentrate on Robert Boyle, who was the hub of the scientific world of his day, and to attempt a presentation of his personality and achievements. I may say at the outset that in doing this I am merely the unworthy mouthpiece of your late Treasurer, Dr. John Fulton. It was from him that I received the impetus to form a collection of Boyle's works, and in making this communication I have stolen extensively from his writings without further acknowledgment.

Robert Boyle was born in Ireland in 1627. He was not, however, an Irishman, being the seventh son and fourteenth child of Richard Boyle, first Earl of Cork, who had gone to Ireland in 1588 as a clerk in the service of Queen Elizabeth. This Richard Boyle was a shrewd and unscrupulous man, who, within ten years of leaving England, became the most wealthy and powerful man in all Ireland. His youngest son, Robert, did not inherit his father's worldly wisdom, so that it was most fortunate that he did not have to earn his living. His early education he received at Eton under Sir Henry Wotton, and he then travelled with a judicious tutor on the Continent, seeing the world, gathering general culture, and learning the languages. When he returned to England he divided his time between the house of one of his sisters in London and his own estate in Dorset. After leaving Eton he had no further formal education, and his fortunes enabled him to follow untrammelled the bent of his own mind, which led him naturally and inevitably to scientific experiment. He afterwards became familiar with Oxford and its atmosphere, because his associates of the "Invisible College," as the nucleus of the future Royal Society called themselves, congregated there; but although he lived there from 1654 to 1668, he never really absorbed the academic atmosphere of the visible colleges, and he remained the perfect example of the amateur who rode his scientific hobby-horse to such purpose that his achievements transcended those of any of his professional contemporaries. At that date, the universities did not regard general science as a part of their proper activities, and any scientist outside mathematics, astronomy and medicine was almost necessarily an amateur, or "virtuoso" as it was then called. Before the age of 20 Robert Boyle was a dynamic force in the embryonic world of science, and by the time he was 23 he had written his remarkable book on *The Usefulness of Experimental Philosophy* (published in 1663), in which he appeared as the persuasive exponent of the experimental method. In this

book he shows a wide knowledge of natural history, medicine, physics and chemistry. It is divided into two parts, the first being concerned with a general consideration of experimental philosophy in relation to the mind of man.

He makes an eloquent plea for the habit of curiosity, and likens the incurious man to "a Spider in a Palace, who, taking notice only of those objects that obtrude themselves upon her senses, lives ignorant of all the other rooms of the house," and so spends a self-centred and ignoble life entrapping flies. Her cobwebs, even though consisting of very subtle threads, are unserviceable for any other than her own trifling uses. He attaches a special virtue to curiosity as to the structure and workings of man's body. "One would think," he says, "that the conversing with dead and stinking Carkases (that are not onely hideous objects in themselves, but made more ghastly by the putting us in mind that ourselves must be such) should be not onely a very melancholy, but a very hated employment. And yet, there are Anatomists who dote upon it; and I confess its Instructiveness has not onely so reconciled me to it, but so enamor'd me of it, that I have often spent hours much less delightfully, not onely in Courts, but even in Libraries, than in tracing in these forsaken Mansions, the inimitable Workmanship of the Omniscient Architect."

The second part of *The Usefulness of Experimental Philosophy* deals chiefly with physic, and is divided into five sections—Physiological, Pathological, Semiotical, Hygienical and Therapeutical. In the course of a postscript to the Pathological section he describes the first experiments which he made at Oxford with Wren and Wilkins on the intravenous injection of drugs into dogs, experiments which soon led to the nobler discovery of the possibility of blood transfusion. There are innumerable other interesting experimental observations in relation to medicine, both projected and actually performed. In other ways, such as his estimation of the value of post-mortem examinations, he takes a remarkably enlightened view.

It was characteristic that so early in his career Boyle should have put down his scientific creed in writing, presumably in order to clear his mind, for there can have been no thought of publication at the time, and the book was not printed until thirteen years later, when his reputation was already established.

Having now laid his philosophical foundation, Boyle proceeded with his experimental work, and in 1658 engaged the services of Robert Hooke at Oxford. Hooke was then a student chorister at Christchurch, but he possessed an inventive genius, and he and Boyle together devised their celebrated air-pump. With this they carried out their investigations into the properties of gases, thus providing material for Boyle's first scientific work, entitled *The Spring and Weight of the Air*, 1660. The second edition, published in 1662, contains the formulation of "Boyle's law," and thus, at the age of 35, Boyle had made a contribution to physical science of fundamental importance, which ensured the immortality of his fame.

Boyle's first published work had been a devotional tract entitled *Seraphick Love*, or *Some Motives and Incentives to the Love of God*, and dated 1658. His last book, called *A Free Discourse against Swearing*, was published after his death in 1695, though written in his youth. This was his 42nd book, and he had contributed in addition 35 papers to the *Transactions* of the Royal Society. Of the 42 books, 30 were scientific treatises, the remainder being theological or philosophical works. Nearly every one of his scientific works contains something of first-rate or considerable importance, and you may thus begin to get some idea of Boyle's total contribution to the progress of human thought and knowledge.

It is impossible to classify Boyle's works in any satisfactory scheme, since each book is apt to contain a medley of observations in different branches of science. There was, indeed, a wonderful amateurishness (as we should now regard it) about all his methods and writings. His mind was so actively bubbling with ideas, and the results of his experiments so fruitful, that he did not always trouble to sort out his subjects, to arrange his protocols, or even to correct his proofs! When a book was already in type he would have afterthoughts which had to be inserted, pages had to be cancelled, and the tracts of which the book was composed to be re-arranged. Some of the volumes thus became the despair of the contemporary binders, and are now the agonizing delight of collectors and bibliographers. In certain instances it is hardly possible to find two copies exactly alike, or to establish a standard of bibliographical finality.

Boyle's literary style was discursive and colloquial, and he constantly introduced personal irrelevancies into serious scientific treatises in a manner which would certainly shock most modern scientific consciences, because it is now the custom for science to divorce itself from humanity. Boyle's irrepressible humanity is manifested over and over again in the very titles of his books, as you will presently hear, and it has undoubtedly resulted more than once in obscuring the originality of his thought, since only a very careful reader can penetrate to the essence of his message. This may seem to be a defect in Boyle's scientific character, but there is no doubt that his methods endeared him to his contemporaries, and that his books found a far wider public

than a drier exposition would have done. Amusing proof of this is to be found in Pepys's comments on Boyle's *Hydrostatical Paradoxes*, which he read during his journeys up the Thames, always with delight, though confessing that he understood but little of their import.

Boyle was unquestionably a very honest recorder of the results of his work, and he is much concerned with doubts and difficulties. His book of *Physiological Essays* (1661) contains, indeed, a discourse on "The unsuccessfulness of Experiments," which may be taken as evidence of his veracity. Associated with his disinterested honesty is his disregard for questions of priority. Thus it was only the other day that Prof. Patterson, of Glasgow, set physiologists right as to who deserves to be remembered as the originator of the modern theory of respiration and combustion. For many years this has been attributed to John Mayow, an obscure Oxford graduate; but Prof. Patterson has shown that none of Mayow's ideas were original, all being borrowed from Boyle's works on *The Spring and Weight of the Air*, published several years earlier. I may quote from Boyle's chapter headed "A Digression containing some doubts touching respiration" as an example of his method and style. He is describing experiments on the effect of a vacuum on mice and birds, and observes: "Another Bird being within about half a minute cast into violent convulsions and reduc'd into a sprawling condition, upon the Exsuction of the Air, by the pitty of some Fair Lady's (related to your Lordship) who made me hastily let in some Air at the stop-cock, the gasping Animal was presently recovered, and in a condition to enjoy the benefit of the Lady's Compassion. And another time also, being resolv'd not to be interrupted in our Experiment, we did, at night, shut up a Bird in one of our small Receivers, and observ'd, that for a good while he so little felt the alteration of the Air, that he fell asleep with his head under his wing: and though he afterwards awak'd sick, yet he continued upon his legs between forty minutes and three quarters of an hour; after which, seeming nearly to expire, we took him out, and soon found him able to make use of the liberty we gave him for a compensation of his sufferings."

The nature of combustion Boyle examines in his books, *New Experiments touching the relation betwixt Flame and Air*, 1672, and *Suspicions about some Hidden Qualities in the Air*, 1674, and again, as Dr. Fulton points out, he must take precedence of Mayow.

Dr. Fulton concludes that Boyle approached the discovery of oxygen more closely than anyone before Priestly and Lavoisier. This led also to his consideration of the atomic theory which is contained in his three books, *The Sceptical Chymist*, 1661, *Certain Physiological Essays*, 1661 (which are for the most part not physiological in the modern sense, but physical), and *The Origine of Forms and Qualities*, 1666. *The Sceptical Chymist* is pronounced by Dr. Fulton to be one of the great books in the history of scientific thought, since it marks the transition from alchemy to modern chemistry. Boyle defined the element for the first time, distinguished mixtures from compounds, and made extraordinarily shrewd predictions about future chemical discoveries. Further observations of great importance on the properties of gases are contained in his *Essay on the Great Effect of Even, Languid and Unheeded Motion*, 1685, which is also an important treatise on thermodynamics; and finally he virtually enunciated the modern kinetic theory of gases in one of his last books, *The General History of the Air*, 1690.

Another book of great importance is *The Experimental History of Colours*, 1663, which, among a great variety of observations, anticipates some of Newton's generalizations in his treatise on *Optics*. Incidentally Boyle first discovered the change in colour of certain vegetable extracts when made acid or alkaline, and so introduced the use of chemical indicators.

In *The Experimental History of Cold*, 1665, Boyle first described the thermoscope or graduated thermometer, and proved that water expands when it freezes. He also made many interesting observations on the physiology of cold in regard to both man and animals, and showed that meat could be preserved from putrefaction by cold.

In *Hydrostatical Paradoxes*, 1666, he establishes many facts about liquids, including the transmission of pressure equally in all directions, experimenting on tadpoles, to prove his point that divers need not fear the greatest depths.

In his *Origin of Formes and Qualities*, 1666, he made advances of the greatest importance towards the Newtonian conception of light and in the theory of the nature of matter, and these questions were further developed in a volume of *Tracts*, 1671, the first of which is called *The Cosmicall Qualities of Things*. He discourses also about *The Temperature of the Subterraneall Regions*, and writes some *Relations about the Bottome of the Sea*.

In 1672 he published a book entitled *An Essay about the Origine and Virtues of Gems*. This engaging title really covers the first serious essay in the science of crystallography, for he elucidates origin and structure of crystals, which he had even examined in diamonds under the microscope, and rightly ascribes their colours to the admixture of small quantities of metal. As regards the medicinal properties of gems he is cautious,

pointing out that before any such properties are dismissed it should be proved that objects passing through the human body without sensible change of bulk can have no influence. "For, we know," he adds, "that some Chymists make Bullets of the *Regulus* of Antimony which they call *Pilulæ perpetuæ*, because when they have performed their operation in the body, and have been ejected with the Excrements, they are by some more thrifty than cleanly persons, washed and employed again and again to the former purposes." There are many other interesting and amusing observations in this book on the contemporary practice of medicine.

It is difficult to pass rapidly over any of Boyle's scientific works. It might have been supposed that we need not carefully examine a work entitled *Tracts consisting of Observations about the Saltness of the Sea: An Account of a Statical Hygroscope and its Uses: Together with an Appendix about the Force of the Air's Moisture: A Fragment about the Natural and Preternatural State of Bodies. To all which is premis'd a Sceptical Dialogue About the Positive or Privative Nature of Cold.* Yet here we find important observations on the lowering of temperature by mixing vinegar and salt of tartar, and its accurate measurement with a spirit thermometer. Also very practical experiments on the problem of making sea-water fit for drinking by sailors.

Boyle's next book, *Experiments, Notes, &c. about the Mechanical Origine or Production of divers particular Qualities*, 1675, is again of the very greatest interest. It contains a number of tracts, including two on electricity and magnetism, which are accepted as original contributions of first-rate importance. Dr. Fulton claims that the term "electricity" was first brought into common usage by Boyle, if not actually invented by him. In the same book are the first monographs in physiological literature dealing with the special senses of taste and smell.

It would be difficult to predict what discoveries Boyle announced in his two tracts entitled *The Aerial Noctiluca*, 1680, and *The Icy Noctiluca*, 1682. They are, of course, treatises on the phenomena of phosphorescence, or, as he calls it, *A Process of a factitious Self-shining Substance*, and you will not be surprised, by this stage of my discourse, to learn that he was almost certainly the first scientist to isolate phosphorus, making it from urine, to prove that it was an element, and to make the fundamental observation that phosphorescence ceases in a vacuum.

We are next translated to the realm of almost pure physiology. In 1684 Boyle published his *Memoirs for the Natural History of Humane Blood*, and this can justly be said to mark the starting-point of physiological chemistry. He first describes the physical properties of whole blood, serum and corpuscles, and then considers various problems, such as the differences between serum and the red part of blood, its chemical analysis and uses, and the differences between the bloods of men, animals, birds, fishes and sanguineous insects. He discusses some of the similarities between blood and urine, and in a series of experiments investigates anticoagulants. Blood was easily obtained for his investigations, for as he says, he only had to go at any time to a barber's shop to obtain a few ounces of freshly let blood. The book also contains a series of headings for a similar account of urine, but this was never completed.

Physiology is taken a stage further in Boyle's next book, *Experiments and Considerations about the Porosity of Bodies*, 1684, for this is nothing more than the first published account of osmosis and the passage of substances through living membranes. It includes observations on the absorption of medicines through the skin and through wounds, and describes an experiment on the Earl of Mount-Alexander, who had an unhealed thoracic wound, exposing, as Harvey years before had already told, his heart and lung. Boyle records that when his thorax was irrigated with medicated liquor or when aromatic substances were placed over the opening the Earl was quickly aware in his mouth of their taste and smell.

Since Boyle was an amateur scientist, the times in which he lived determined that he should also be an amateur physician. All his books abound with references to medical science, and Dr. Fulton claims that one of them entitles him to a distinguished place among the medical writers of the seventeenth century. This is a volume entitled *Of the Reconcileableness of Specifick Remedies to the Corpuscular Philosophy, To which is Annexed A Discourse about the Advantages of the Use of Simple Medicines*, 1685. He there examines the nature of specific remedies, and betrays a considerable knowledge of many common diseases, such as nephritis, heart failure and gangrene.

Of less importance is his later work, *Medicinal Experiments; or a Collection of Choice Remedies, for the most part Simple, and Easily Prepared*, 1692–1696. This work, while exhibiting Boyle's credulity in the face of the medical practice of his time, is a curious commentary on the state of that practice. But, as Dr. Fulton says, we should, in charity, "forget that he warmly recommended Paracelsus' receipt of pulverized human dung for sore eyes, and recall that he elected to take laudanum for toothache and linseed oil for burns."

In another work, *Experimenta et Observationes Physicæ*, 1691, there is another medical, or rather surgical, reference of great interest. For there he gives a detailed and accurate account of the effect of a depressed fracture of the skull in the parietal region with an incomplete flaccid hemiplegia, and the immediate result of the removal of the spicule of depressed bone twenty-four weeks after the accident. Boyle did not, in consequence, describe the motor area of the brain, although in effect he had discovered it.

Boyle's interest in medical matters led him near the end of his life to write the first tract in English upon the determination of specific gravity. This was *Medicina Hydrostatica: or Hydrostaticks Applied to the Materia Medica. Shewing, how by the Weight that divers Bodies, us'd in Physic, have in Water, one may discover Whether they be Genuine or Adulterate*, 1690. The principle involved was not new, but Boyle first drew attention to its practical importance in physics and chemistry.

As Boyle grew older he naturally tended to express his matured views in works of a more general bearing. Thus in 1686 he published *A Free Enquiry into the Vulgarly Receiv'd Notion of Nature*, and this is one of his most important philosophical writings. In 1688 appeared another book, *A Disquisition about the Final Causes of Natural Things*, in which, Dr. Fulton says, Boyle "takes us into his confidence, and gives us briefly his *confessio fidei* as a biologist." The work is "essentially a plea for a teleological interpretation of natural phenomena," and it is filled with interesting observations in biology and physiology. An appendix to it on *Some Uncommon Observations about Vitiated Sight* sounds irrelevant, but it is of great interest to ophthalmologists, giving a variety of case-histories illustrating defects in sight in individuals whom Boyle had himself examined. He had, as he records elsewhere, once consulted Harvey about his own eyes, and perhaps the prime interest of this tract to us at the present time is the following paragraph:

"And I remember that when I asked our famous Harvey, in the only Discourse I had with him, (which was but a while before he dyed) What were the things that induc'd him to think of a *Circulation of the Blood*? He answer'd me, that when he took notice that the Valves in the Veins of so many several Parts of the Body, were so Plac'd that they gave free passage to the Blood towards the Heart, but oppos'd the passage of the Venal Blood the Contrary Way: He was invited to imagine, that so Provident a Cause as Nature had not so Plac'd so many Valves without Design: and no Design seem'd more probable, than That, since the Blood could not well, because of the interposing Valves, be sent by the Veins to the Limbs: it should be sent through the Arteries, and Return through the Veins, whose Valves did not oppose its course that way. . . ."

So through the mouth of Boyle we are come again to the beginning with a living memory of the words of William Harvey, the true source of all experimental, and therefore of most modern, knowledge.

I have mentioned of Boyle's work enough, I hope, to take your breath away and perhaps enough to weary you. But even so I have omitted several of his scientific works and all his theological works, with his entertaining discourse, *About the possibility of the Resurrection*, 1675, which includes reflections on the difficulties which would result in the case of a man eaten by a cannibal.

I have said nothing of his wonderfully naïve volume of *Occasional Reflections*, 1665, upon such subjects as "Sitting at ease in a Coach that went very fast," "Upon his paring of a rare Summer-apple, "Upon the prodigiously wet weather," "Upon the sight of a fair Milk-Maid singing to her cow," "Seeing a Child picking the plums out of a piece of Cake his Mother had given him for his breakfast," and so on; or of his 35 contributions to the *Transactions* of the Royal Society, which include papers on blood transfusion, monsters, preservation of specimens in alcohol, sunspots, phosphorescence in meat, ambergris, rot in sheep, air-bladders in fishes, and many other subjects already mentioned in his books. I have not revealed that he published in 1678 a treatise on transmutation entitled *An Account of a Degradation of Gold Made by an Anti-elixir; a strange Chymical Narrative.* Boyle, after all, was human, whatever I may have said to give you the impression that he was superhuman, and some degree of credulity is to be found associated with the greatest intellects.

I hope I have convinced you of the reality of the "kind of ferment" that was working in Boyle's mind, and of his claim to be remembered as one of "the enlarged and Elastical souls of the world," and therefore as one of the great masters in experimental science.

ST. DAMIAN.

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A CASE OF INTRACRANIAL ARTERIO-VENOUS ANEURYSM OF TRAUMATIC ORIGIN.

THE *rôle* played by trauma in the production of aneurysm of the intracranial arteries is uncommon, while the literature is disappointingly barren. Having read Dr. Hinds Howell's interesting "Notes on Cerebral Aneurysm" in the April issue of the JOURNAL, I have been prompted to describe what I believe to be an instance of the production of an arterio-venous aneurysm of the cavernous sinus and internal carotid artery resulting from an injury.

The present case bears some resemblance to one reported by Rollett and Cobrat (1), the development of ocular palsies and proptosis being significant features in both.

In his article Dr. Hinds Howell lays stress upon the fact that a bruit within the skull is practically never to be heard with a true aneurysm, but is usually present in the case of arterio-venous aneurysm. It was a feature of Birley's case, which he quotes, as it was in this present one.

Birley (6) has given us a valuable critical study of a case of traumatic aneurysm of the intracranial portion of the internal carotid artery in which it became necessary to ligature the common and external carotid arteries on the affected side, and includes a note on the surgical aspect by Wilfred Trotter.

REPORT OF CASE.

A farm labourer, æt. 54, had been knocked down by a car three weeks before coming under observation. He received a fracture of the left clavicle and some ribs, and in addition a ragged cut under the left eye which required suturing.

A few days before being seen he developed paresis of the left external rectus, while the left eye became "blood-shot" and painful. There was an associated supraorbital pain and nausea.

There was found to be complete paralysis of the left sixth nerve with diplopia to the left. Along the inferior bony margin of the orbit was an unhealthy granulating wound where the sutures had evidently given way. The left pupil was sluggish in reacting to light, slightly irregular but not dilated. The disc was pale and somewhat cupped, while the retinal veins were engorged. Visual acuity of that eye was only $\frac{6}{36}$. There was no proptosis, and no involvement of cranial nerves other than the left sixth. His general condition was poor, but there was no evidence of arterial disease.

Under local anæsthesia the margin and base of the wound were excised and the wound closed by a subcuticular suture.

Two weeks later, on discharge, the wound was healed but the ocular palsy remained unchanged.

One month later he again came under observation because of the sudden development of severe chemosis of the conjunctiva of the lower fornix, associated with the onset of severe pain over the left frontal region.

The lower conjunctival fornix was now found to be obliterated by œdematous and greatly thickened conjunctiva, which protruded from between the lids, preventing their closure. The whole of the bulbar conjunctiva was very markedly injected. Exophthalmos was now a prominent feature, but this was not of the pulsating variety. The tension of the eye was raised, while the appearance of the fundus remained as before.

The sixth nerve palsy had now been replaced by complete ophthalmoplegia, both external and internal, while the visual acuity had fallen to counting fingers at 4 ft.

An X-ray suggested some opacity of the left orbital shadow; the Wassermann reaction was negative, and no abnormality of the nasal sinuses was found.

Taking into consideration the continuous and severe nature of the pain, together with the evidence of chronic glaucoma and the economic problem resulting from the probable loss of employment entailed by a prolonged absence from work, it was decided to enucleate the eye.

Tenon's capsule having been opened there was a sudden and copious hæmorrhage, which was venous in appearance. The globe was freed from its attachments as speedily as possible, and the hæmorrhage checked by plugging the socket. The orbit was expeditiously explored with the finger, but without discovering anything abnormal.

The plugging was cautiously removed after forty-eight hours without the occurrence of any fresh hæmorrhage.

Subsequent progress was marked by the patient complaining of noisy pulsations in the head. Auscultation over the head revealed a loud and resonating bruit synchronous with the pulse. This bruit gradually disappeared during the week following operation, and the patient returned to his home three weeks after operation with a healthy socket and free from symptoms.

DISCUSSION.

The particular point of interest was the long latent period between the original trauma and the development of the proptosis. It is probable that the progressive nature of the affection with the development of the proptosis and ophthalmoplegia is to be explained as a leakage from an aneurysm of the internal carotid or ophthalmic artery, causing a retrobulbar hæmatoma, while the bruit heard following the operation owes its origin to the conversion of a simple aneurysm into an arterio-venous one with the cavernous sinus. This then underwent spontaneous cure.

In conclusion it may not be out of place to refer briefly to the relationship of ocular palsies and aneurysms of the basal arteries.

Pfingst and Spirling (2) have considered fully the *rôle* of aneurysms in the production of ocular palsies, and quote statistics to show relative frequency of their occurrence. Fearnsides, in 1916, in a series of autopsies which disclosed the presence of cerebral aneurysms, notes that the clinical histories indicated in most instances involvement of the motor nerves of the eye, but considers that only those cases where a leak has occurred manifest symptoms due to pressure.

Paton (3) quotes Uhthoff as stating that ocular palsies are present in 70% of cases, and in more than half of them the third nerve is affected.

Paton (4) himself affirms that "It is difficult to say whether any ocular symptoms have been produced by unruptured aneurysms of the basal arteries. They certainly have not been diagnosed during life."

Yet Mr. Foster Moore (5) reports a case where such a clinical diagnosis was made, and confirmed subsequently at autopsy.

I wish to express my indebtedness to Mr. Conroy Dixon for his kindness in allowing me to make use of the notes of his case.

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C. B. V. TAIT.

SOME OBSERVATIONS UPON A CASE OF ACUTE NEPHRITIS, FOLLOWING AN ACUTE CELLULITIS OF THE HAND AND FOREARM.

THE ætiology of a case of acute nephritis is usually obscure. It is believed by some observers that the most common cause is the presence, elsewhere in the body, of some focus of bacterial infection, and that the kidney lesion arises as a complication. That the primary focus is often not found is unfortunate, and this has caused many to doubt that a focal infection is the cause of the condition. The following case, however, serves as an excellent example of an acute nephritis arising in the course of an acute pyogenic infection.

B. D—, æt. 19, fisherman, was admitted to hospital on January 16th, 1930, with an acute staphylococcal infection of the tendon-sheaths and deep tissues of the left hand and forearm. The history was that a piece of wire hawser was run into the palm of the hand 11 days previously, and that 6 days before admission a tender swelling in the palm had been opened by the ship's captain. On admission the boy looked flushed and ill. The left hand was hot, red, tender and swollen; there was fluctuation all over the palm. Active movements of the digits were possible but very painful. There was a small infected wound in the palm near the base of the third digit; the left forearm was a little swollen and tender, but did not fluctuate; several enlarged and tender glands were felt in the left axilla. The temperature was 103·2—the pulse 120, respirations 24. The urine contained no albumen.

Directly after admission free incisions were made into the palm of the hand and drainage established; further operations upon the hand and forearm were performed on the 5th and 15th days after admission. One month after admission albumen was first noticed in the urine, and 4 days later well marked œdema of the face, back and legs was present. The urine was then red, and contained 7300 red blood-cells per c.mm.; there was 0·015 grm. of albumen per 100 c.c. of urine; casts were present. The blood-urea was 128 mgrm. per 100 c.c. of blood, thus showing that the kidney was seriously damaged. Cultures of the urine showed a profuse growth of *Staphylococcus aureus*. A diet containing 60 grm. of protein, 300 grm. of carbohydrate and 100 grm. of fat was given. No meat was allowed, and the fluid intake was restricted to 40 oz. in the 24 hours. Two days after the appearance of the blood and albumen in the urine all the incisions were enlarged; the necrosed

head of the hamate bone was removed and the antecubital fossa was opened and drained.

Notwithstanding this fresh drainage operation, the blood-urea, which was being estimated frequently, continued to rise quickly, and reached 158 mgrm.% on February 28th, 1930 (Fig. 1). At this point, however, the rise became less steep, so that on March 3rd, 1930, when the question of amputation of the arm was considered, it was decided that the check in the rise of the blood-urea was sufficient justification for postponing operation. Unfortunately the lull was only a temporary one, and on March 8th, 1930, the blood-urea had risen to 266 mgrm. %. By this time the condition of the wounds was so much improved that amputation was not considered. It fell equally suddenly to 232 mgrm. % during the next two days, and then more gradually for two further days. The patient then complained of sore throat. On March 19th, 1930, the blood-urea reached 248 mgrm. %. From this point, however, with the recovery of the sore throat, and following the drainage of a pocket of pus over the internal epicondyle and the transfusion of 600 c.c. of citrated blood, there was a dramatic fall in the blood-urea to 140 mgrm. % in 12 days. This fall was absolutely uniform at the rate of 9 mgrm.% every day for 12 days. The patient then again complained of sore throat, and the tonsils were red and inflamed; this event corresponded with a slackening in the rate of fall of the blood-urea.

The anæmia was still profound—hæmoglobin 35%, red cells 2,450,000 per c.mm., and a second transfusion of 550 c.c. of citrated blood was given. This produced a rise in the hæmoglobin to 42%, and in the red cells to 3,040,000 per c.mm. One week later, the local condition of the hand being stationary, the wound was explored, and a sequestrum removed from the radius. This procedure was again followed by a rapid fall in the blood-urea, but this only lasted for 3 days, when there was a recrudescence of the sore throat, and a consequent slackening in the rate of fall.

With the primary focus of infection almost healed, and the throat condition held in check, the blood-urea then continued to fall slowly, save for one small rise.

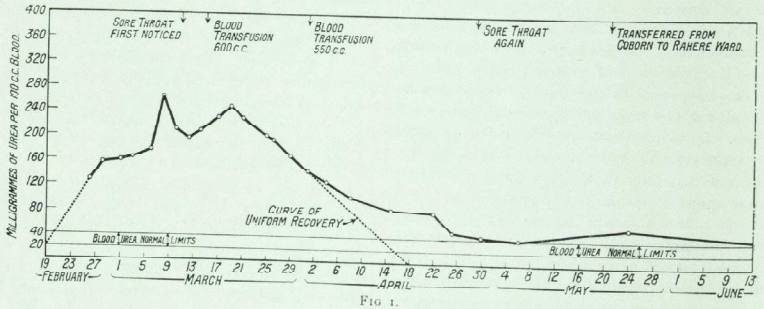

FIG 1.

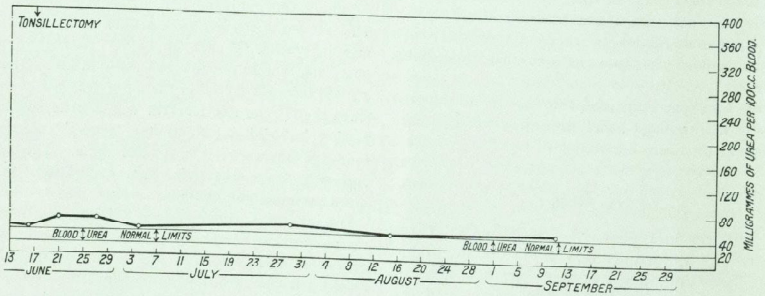

FIG 2.

This coincided with the appearance in the urine of *Bacillus coli communis*, which grew abundantly, to the complete exclusion of the staphylococci. Tonsillectomy was performed at this stage, as the tonsils were definitely infected.

The passing of the acute stage of the nephritis was marked by the gradual disappearance of the red cells from the urine. The greatest number recorded was on March 1st, 1930, when there were 7400 red cells per c.mm. in the urine. On May 27th, 1930, they had fallen to 5300 per c.mm. The *B. coli* infection persisted, in spite of the fact that the urine was kept alkaline throughout the 24 hours with potassium citrate—40 gr. 4-hourly.

When the number of red blood-cells in the urine had fallen to less than 10 per $\frac{1}{6}$-in. field microscopically, the urine was made acid with acid sodium phosphate, and kept so for 48 hours before hexamine was given as well. Within 2 days the urine, which had previously been turbid and highly offensive, became clear and lost its fishy odour. The hexamine administration was continued for one week, when a large amount of blood appeared in the urine. A prompt return to potassium citrate, however, very quickly stopped the hæmorrhage, and the urine subsequently remained clear and non-offensive.

The present condition of the patient is that he has severely damaged kidneys, with a blood-urea just above the upper limit of normal and a crippled left hand, for, apart from the deformity produced by the extensive ulceration, there is an ulnar paralysis. An attempt was made to remedy the latter by suture of the nerve, but in the hand no trace of the nerve could be found, although its upper end was traced down into a mass of fibrous tissue in the upper part of the palm. He is still anæmic in spite of treatment, the last examination giving him only 50% of hæmoglobin and 3,900,000 red cells per c.mm.

CONCLUSIONS.

The foregoing account illustrates several points in connection with the ætiology, diagnosis and prognosis of acute nephritis:

(1) An acute nephritis may arise as a sequel to a focus of bacterial infection elsewhere in the body. In this case an acute staphylococcal cellulitis of the hand and forearm was followed within three weeks by an acute nephritis with staphylococci in the urine, which, although not rare, is certainly very much less common than the more usual streptococcal infection.

(2) Repeated urine examination in any case of acute focal infection is of the first importance.

(3) Frequent blood-urea estimations are of great value in determining the progress and the immediate or ultimate prognosis of acute nephritis.

(4) Adequate treatment of the primary focus of infection will help to bring about recovery in a case of acute nephritis, but if any focus, however slight, still remains in the body, the recovery will be retarded.

(5) Hexamine, correctly administered, together with acid sodium phosphate, is a valuable urinary antiseptic in some cases.

I have to thank Dr. Graham and Mr. Roberts for permission to publish the case, and Dr. Harrison and Dr. Archer for the estimations of the blood-urea, and my colleague, Mr. Richards, for the extracts of the notes on the surgical condition.

C. B. PROWSE.

ANNUAL ATHLETIC SPORTS.

The only record that was broken at the Annual Athletic Sports was that there was a larger rainfall during the afternoon of Saturday, May 28th, than probably on any other Bart.'s Sports Day. The track, of course, was so sodden that even with long spikes it was difficult to maintain a foot-hold, and this affected the length of stride. Thus any times taken were no criterion of individual ability. However, in spite of such misfortune with the weather, we were pleased to see about 40 visitors who were undaunted by the conditions, and took enough interest in Bart.'s Athletics to make their way to the Winchmore Hill ground. We were particularly grateful to Mrs. Girling Ball who kindly distributed the cups and medals at the conclusion of the meeting.

Perhaps the outstanding athlete of the day was J. G. Nel, who won both the 100 Yards in 11$\frac{1}{2}$ sec. and 220 Yards in 24$\frac{3}{5}$ sec., although in the latter race he only just caught T. L. Benson on the tape. J. R. Strong and J. W. Perrott dead-heated in the Mile after a very slow first three laps, the two racing in together in the last 100 yards. The conditions suited our cross-country men, H. B. Lee and G. Dalley, in the $\frac{1}{4}$-Mile handicap. Both Perrott and Strong failed to catch them, giving a 40 yards' allowance, and Lee won comfortably from Dalley in 2 min. 7$\frac{1}{5}$ sec. W. H. Jopling, the holder, retained the $\frac{1}{2}$-Mile in 58 sec. He showed an excellent judgment of pace, and won without much difficulty.

Of the field events, C. M. Dransfield's javelin throw of 123 ft. was the best performance under the conditions, although K. W. Martin cleared 10 ft. 3 in. into a flooded sand-pit in the Pole Vault, while J. S. Smart carried off the High Jump at 5 ft. 1$\frac{1}{2}$ in.

The Inter-Club Relay, which is always a favourite and exciting event, resulted in the three Rugger teams which had entered finishing 1st, 2nd, and 3rd. The "B" XV representatives won easily from the "A" XV, closely followed by the "Extra A."

The heats of the 440 Yards and 220 Yards were run on the previous Monday at Winchmore Hill under very much better conditions. J. R. Strong also retained his 3-Mile title in 16 min. 17 sec. A. I. Kinnear, whose cross-country performances have been decidedly promising, was only narrowly beaten after a great last-lap race, in which he overtook Strong and looked like winning, but was outpaced in the finishing "straight."

It was decided to hold the 120 Yards Hurdles and Long Jump finals at a later date, and these were decided at Stamford Bridge on Tuesday, May 31st.

There has not been such a wealth of athletic ability among the freshmen this year as of recent years, yet there are one or two who show an undaunted enthusiasm, which should result in good performances next year. We are, however, extremely fortunate in having K. W. Martin, the Cambridge Blue, with us this year. His Pole Vaulting, together with J. S. Smart's High Jumping, will be of

the greatest assistance to us both in Inter-Hospital Sports and in matches.

In conclusion we should like to express our gratitude to all those officials who so kindly turned out in a continuous downpour, and helped to make our Annual Sports a success.

RESULTS.

100 Yards: 1, J. G. Nel; 2, W. H. Jopling. Won by 2 yards. Time, 11½ sec.

220 Yards: 1, J. G. Nel: 2, T. L. Benson; 3, W. H. Jopling. Won by 1 ft. Time, 24⅘ sec.

440 Yards: 1, W. H. Jopling; 2, J. W. Perrott; 3, G. A. Fairley-Clarke. Won by 7 yards. Time, 58½ sec.

880 Yards Handicap: 1, H. B. Lee (40 yards); 2, G. Dalley (40 yards); 3, J. W. Perrott (scr.). Won by 10 yards. Time, 2 min. 7⅘ sec.

1 Mile: 1, J. R. Strong and J. W. Perrott; 3, H. B. Lee. Won by 15 yards. Time, 5 min. 5⅘ sec.

3 Miles: 1, J. R. Strong; 2, A. I. Kinnear; 3, H. B. Lee. Won by 5 yards. Time, 16 min. 17 sec.

120 Yards Hurdles: 1, W. D. Colthart; 2, H. W. Rodgers. Won by 1½ yards. Time, 17⅕ sec.

High Jump: 1, J. S. Smart; 2, K. W. Martin; 3, F. W. Rushby. Height, 5 ft. 1½ in.

Long Jump: 1, R. E. Gibson; 2, J. G. Nel. Distance, 19 ft. 10 in.

Pole Vault: 1, K. W. Martin; 2, J. Shields. Height, 10 ft. 3 in.

Putting the Weight: 1, J. S. Smart and R. T. Simcox. Distance, 31 ft. 7 in.

Throwing the Javelin: 1, C. M. Dransfield; 2, E. E. Harris; 3, G. Dalley. Distance, 123 ft.

120 Yards Handicap: 1, B. A. Thomas; 2, F. W. Rushby. Won by 2 ft. Time, 13 sec.

Inter-Club Relay, 4 × 220 Yards: 1, Rugger "B" (W. H. Jopling, K. T. Simcox, T. P. Storey, T. L. Benson); 2, Rugger "A" (G. A. Fairley-Clarke, J. W. Cope, C. M. Dransfield, J. W. Perrott); 3, Rugger "Extra A."

J. W. P.

INTER-HOSPITAL SPORTS.

The Inter-Hospital Sports were held at the White City Stadium on Wednesday, June 8th. The ideal weather and the excellence of the track made the afternoon a most enjoyable one, and though no new records were established, the usual high standard was maintained. Bart.'s captured three first places through J. R. Strong, C. M. Dransfield and K. W. Martin, and won the Mile Relay Race for the tenth year in succession. The Relay Race was a memorable one, for the team (J. R. Strong, W. H. Jopling, J. R. Hill and G. J. Nel) recorded 3 min. 44⅗ sec., only ⅕ sec. slower than the record of 1924.

St. Thomas's Hospital won the Shield with 54 points, and Bart.'s were runners up with 42 points. St. Mary's scored 23 points, and King's scored 21.

RESULTS.

100 Yards: J. R. J Rinkel (St. Thomas's), 1; J. R. Hill (St. Bartholomew's), 2; R. W. Purser (St. Thomas's), 3; J. G. Nel (St. Bartholomew's), 4. Time, 10⅖ sec.

220 Yards: L. R. J. Rinkel (St. Thomas's), 1; J. E. Kead (King's), 2; J. G. Nel (St. Bartholomew's), 3; W. A. Groom (Guy's), 4. Time, 23⅘ sec.

440 Yards: A. T. Marrable (St. Thomas's), 1; C. W. Claydon (King's), 2; W. H. Jopling (St. Bartholomew's), 3; A. G. Brown (Guy's), 4. Time, 52⅗ sec.

880 Yards: T. B. L. Bryan (Mary's), 1; C. W. Claydon (King's), 2; J. W. Perrott (St. Bartholomew's), 3; W. G. S. Lawson (St. Thomas's), 4. Time, 2 min. 03 sec.

1 Mile: T. D. L. Bryan (St. Mary's), 1; J. R. Strong (St. Bartholomew's), 2; H. M. Lester (King's), 3; I. G. Robin (Guy's), 4. Time, 4 min. 33 sec.

3 Miles: J. R. Strong (St. Bartholomew's), 1; R. S. Morris (St. Thomas's), 2; P. M. Smyth (London), 3. Time, 15 min. 45 sec.

440 Yards Hurdles: R. S. Richmond (St. Mary's), 1; R. T. Norman (St. Thomas's), 2; T. L. Benson (St. Bartholomew's), 3; J. F. E. Bloss (St. Thomas's), 4. Time, 59⅗ sec.

120 Yards Hurdles: J. F. E. Bloss (St. Thomas's), 1; G. J. McFarlane (St. Thomas's), 2; E. Evelyn (Guy's), 3; D. Kami (St. Mary's), 4. Time, 17⅖ sec.

Pole Vault: K. W. Martin (St. Bartholomew's) and H. H. Bayley (King's), 1; R. H. Bailey (King's), 3; J. Shields (St. Bartholomew's), 4. Height, 10 ft. 6 in.

High Jump: A. R. Le Fleming (St. Thomas's), 1; J. Smart (St. Bartholomew's), 2; L. C. Revell (Guy's) and J. Organe (Westminster), 3. Height, 5 ft. 7½ in.

Long Jump: A. T. Marrable (St. Thomas's), 1; G. S. Organe (Westminster), 2; L. T. Bond (St. Thomas's), 3; J. G. Youngman (St. Bartholomew's), 4. Distance, 20 ft. 4¾ in.

Putting the Weight: C. E. Elliott (St. George's), 1; J. G. Anderton (Westminster), 2; G. D. Wedd (St. Bartholomew's), 3; M. W. Lloyd-Owen (St. Mary's), 4. Distance, 40 ft. 1½ in.

Throwing the Javelin: C. M. Dransfield (St. Bartholomew's), 1; W. L. Kerr (King's), 2; M. W. Lloyd-Owen (St. Mary's), 3; L. T. Bond (St. Thomas's), 4. Distance, 136 ft. 5 in.

Relay: St. Bartholomew's, 1 (J. R. Strong, W. H. Jopling, J. R. Hill, J. G. Nel); St. Thomas's, 2; St. Mary's, 3; Westminster, 4. Time, 3 min. 44⅗ sec.

Tug-of-War: Winners: St. Thomas's. Runners-up: St. Mary's.

STUDENTS' UNION.

CRICKET CLUB.

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

On May 26th at Winchmore Hill. Lost by 9 runs.

The M.C.C. batted on the first hard wicket of the season. We did well to dismiss them for 102, Hay-Shunker bowling well, taking 4 wickets for 27.

Our batting was bad. Wedd, making 33 (including one 6), was playing well when he ran himself out. The last three wickets fell for 13 runs and we lost by 9 runs.

CUP TIE.

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

Our second round Cup match, *v.* St. Mary's Hospital, was played at Winchmore Hill on June 1st. We won by 2 wickets.

Mary's batted first. Goodwin batted well for 45. Wedd, 5 for 53, and Hay-Shunker, 4 for 29, took the wickets. Gabb held two good catches. We had a full side except for Mundy.

We then went in an hour before tea. Wickets fell quickly through rank bad batting, 6 wickets down for 22, then 8 wickets for 44 at tea. Hindley and Hay-Shunker then went for the bowling and runs came quickly. Both batted confidently, Hindley scoring very freely. Between them they turned what looked like certain defeat into a very good win, both being undefeated at the end.

Scores:

ST. MARY'S HOSPITAL.		ST. BARTHOLOMEW'S HOSPITAL.	
Stinerson, c Gabb, b Wedd	18	Boney, lbw, b Goodwin	7
Walters, b Gabb	21	Masina, b Goodwin	3
Carnegie-Brown, b Wedd	20	Gabb, b Carnegie-Brown	5
Goodwin, c Boney, b Wedd	45	Wedd, c Cockburn, b Carnegie-Brown	0
Morgan, c Gabb, b Hay-Shunker	3	Nunn, b Carnegie-Brown	2
Gideon, c Hindley, b Hay-Shunker	0	Hindley, not out	80
Richmond, b Wedd	4	Rait-Smith, b Carnegie-Brown	0
Cockburn, b Wedd	0	Anderson, b Carnegie-Brown	6
Parry, b Hay-Shunker	7	Wilson, b Goodwin	0
Cooper, lbw, h Hay-Shunker	8	Hay-Shunker, not out	33
Corbin, not out	3	Bamford, did not bat.	
Extras	14	Extras	15
Total	143	Total (for 8 wkts.)	151

The annual "Past *v.* Present" match was played at Winchmore Hill on June 11th.

The "Present" batted first. Wheeler and Boney opened in the absence of Nunn, and put on 83 for the first wicket. Wheeler continued to bat well, making a good 75, Wedd making 25, including a 6 on to the pavilion roof. Gabb hit hard for a useful 53. The "Present" declared their innings closed an hour before tea. For the "Past" Mackie and Maingot put on 33 for the first wicket. Maingot batted steadily. Melle, the old Hampshire player, hit hard for 24. Maley offered stubborn resistance and was undefeated. Phillips, last man in, with two overs to go, had no difficulty in playing out time. Comic relief was supplied by Gabb chasing a dog (the property of one of the "Past"), round the field, who took a liking to the ball, while the batsmen ran an energetic six.

Dr. Wilfred Shaw and Mr. H. E. G. Boyle very kindly umpired. In addition we were very pleased to see Mr. Wilson, Mr. Girling Ball and Prof. Kettle.

Match drawn. Scores:

PRESENT.		PAST.	
A. R. Boney, b Parrish	28	K. M. Mackie, b Hay-Shunker	13
F. E. Wheeler, b Parrish	75	R. Maingot, c Anderson, b Wedd	32
G. T. Hindley, run out	5	B. G. Melle, c Capper, b Wedd	24
G. D. Wedd, c Maley, b Melle	25	R. G. Gilbert, c Anderson, b Hay-Shunker	17
W. H. Gabb, c Bourne, b Taylor	53	W. Gaistord, c Capper, b Anderson	14
J. D. Anderson, b Melle	2	G. Bourne, b Gabb	2
W. M. Capper, b Maley	9	J. Parrish, b Hay-Shunker	11
C. C. Hay-Shunker, b Maley	4	M. L. Maley, not out	24
R. Mundy, not out	5	D. M. Dean, b Mundy	8
J. D. Wilson, not out	4	J. T. C. Taylor, b Gabb	9
J. B. Bamford, did not bat.		R. F. Phillips, not out	0
		Extras	21
Extras	24		
Total (for 8 wkts. dec.)	234	Total (for 9 wkts.)	175

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

We played a half-day game *v.* Guy's at Honor Oak on Wednesday, June 15th. Owing to the Cambridge and Oxford exams., slackness, and quite an unexplainable, unbelievable and unnatural keenness for work on a perfect summer afternoon, our team included ten 2nd XI men. We batted first on a perfect batsman's wicket and were dismissed for 81, the whole side being bowled. Guy's went in and knocked off the runs with loss of 2 wickets, thus winning by 8 wickets.

ST. BARTHOLOMEW'S HOSPITAL *v.* THE OLD PAULINES.

Played at Thames Ditton on Saturday, June 18th, on a very fast ground in ideal weather. We lost the toss. The Old Paulines batted first. Mundy and Dolly bowled unchanged for us. Mundy, bowling magnificently, took 9 wickets for 43 against a good side on a perfect batsman's wicket, Dolly at the other end keeping a good length and the runs down. The Old Paulines were 81 for 5 wickets at lunch after 110 minutes' batting. After lunch Mundy continued to bowl well, taking the last 3 wickets in four balls. Set 97 to get, Boney and Masina opened confidently, but were soon separated, and the side collapsed, 61 for 6 wickets. Wade then batted perfectly while Bamford kept his end up and the Paulines' score was passed. Thus we won by 4 wickets. Wade continued to bat well and made a delightful 75; Bamford made 32. Eventually we made 191. This was a very creditable win, due entirely to Mundy's bowling and Wade's batting, especially as six 2nd XI men were playing.

J. B. B.

2ND XI.

The most noteworthy feature of Hospital cricketing activities has been the continued success of the 2nd XI. Since our auspicious opening each game has been marked by some creditable performance, and the whole augurs well for coming seasons. The batting and fielding have been particularly sound, and the gaiety and spirit of our team is unusually high.

ST. BARTHOLOMEW'S HOSPITAL *v.* HORNSEY GRANGE.

Played at home on Saturday, May 21st.

The soft wicket was responsible for some low scoring, Ball's making 95 and the opposition 70. Capper made 33 and Dransfield 22. Walch (3 for 19) and Dransfield (4 for 10) shared the bowling honours.

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

Played at Winchmore Hill. The late arrival of the visitors entailed curtailment of play, but this was neutralized by our quick scoring. On going in to bat the runs came very quickly, so that by tea we had declared our innings closed at 171 for 6.

The opening pair, Wedd and Dransfield, put on 95 for the first wicket before the latter was run out, Wedd in a particularly attractive knock making some fine off drives in amassing 74 runs. Dolly made 30 and Dransfield 27. The visitors were dismissed for 113 runs, one of the opening batsmen contributing 58. Wedd took 3 wickets for 38 and Dransfield 3 for 19.

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

Played at Winchmore Hill on Saturday, June 4th.

Our visitors being the only team we had not beaten, this match was awaited with interest. We batted first on a firm wicket, and consistent batting again placed us in an unassailable position. Each batsman made double figures, and the declaration total was a formidable one of 191 for 6, Hindley's innings of 63 being the outstanding feature.

The visitors found runs hard to get, and Wedd (5 for 23) and Hay-Shunker (4 for 19), bowling unchanged, dismissed them for 46. The bowling was backed up by bright fielding and Hunt's wicket-keeping was first class.

SECOND ROUND CUP-TIE.

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

Played at Winchmore Hill on Thursday, June 9th.

Again we had the fortune to bat first on a hard, fast wicket, and again our batting was consistently good.

Wade (43) and Dransfield (59) put on 102 for the first wicket—this, I believe, is a record in the second team annals—and Wheeler (55 not out) and Dolly (25) continued a high rate of scoring. The batsmen were essentially free scoring, and a great total of 222 (for 5 wickets declared) was reached in 1 hour 58 minutes.

St. Mary's found run-getting less easy, and were dismissed for a total of 48. Mundy, in 12 overs, 6 of them maidens, took 6 wickets for 10 runs—truly a magnificent consistency. Gillman backed up well in taking 4 for 24. Wheeler's slip fielding was characteristic of the high standard maintained by the other members of the team.

TENNIS CLUB.

May 21st: 1st VI *v.* R.N.C. Greenwich. Home.

J. R. Blackburne and J. R. Kingdon lost to 1st pair, 2—6, 6—4, 9—8; beat 3rd pair, 6—2, 6—2.

F. J. Beilby and B. Thorne-Thorne lost to 1st pair, 4—6, 4—6; beat 2nd pair, 6—1, 3—6, 6—4.

O. A. Savage and P. J. Hardie beat 3rd pair, 6—1, 3—6, 6—4.

We were leading by 3—2 when rain stopped play.

May 21st: 3rd VI *v.* London Hospital. Away.

F. J. S. Baker and M. L. Narac beat 1st pair, 6—1, 7—5; beat 2nd pair, 6—1, 6—4; beat 3rd pair, 6—2, 6—3.

R. L. Benison and R. K. Levick lost to 1st pair, 16—14, 2—6, 4—6.

I. N. Blusger and W. P. Shemilt beat 2nd pair, 6—1, 6—4; beat 3rd pair, 6—2, 6—3.

The other matches were stopped by rain, so we won 5—1.

May 25th: 2nd VI *v.* Guy's Hospital. Home.

R. C. Witt and E. M. Darmady beat 1st pair, 2—6, 6—2, 6—4; beat 2nd pair, 6—2, 2—6, 6—4.

K. J. Harvey and A. Innes beat 2nd pair, 16—14, 6—4; beat 3rd pair, 6—4, 6—4.

F. J. S. Baker and W. P. Shemilt beat 1st pair, 4—6, 6—4, 7—5; lost to 2nd pair, 4—6, 4—6; beat 3rd pair, 6—1, 7—9, 6—1.

Won, 6—1.

June 4th: 1st VI *v.* King's College Hospital. Away.

J. R. Blackburne and J. R. Kingdon beat 1st pair, 4—6, 8—6, 6—4; lost to 2nd pair, 4—6, 4—6; beat 3rd pair, 6—4, 6—1.

O. A. Savage and J. H. Hunt lost to 1st pair, 4—6, 4—6; lost to 2nd pair, 4—6, 4—6; beat 3rd pair, 6—3, 3—6, 6—1.

A. Papert and R. C. Witt lost to 1st pair, 4—6, 3—6; lost to 2nd pair, 4—6, 6—4, 6—8; beat 3rd pair, 6—4, 6—4.
Lost, 4—5.

June 4th: 2nd VI *v.* Beverley L.T.C. Home.
R. K. Levick and A. Innes beat 1st pair, 6—3, 6—4; lost to 2nd pair, 3—6, 2—6; beat 3rd pair, 6—1, 6—2.
R. L. Benison and F. J. S. Baker beat 1st pair, 6—4, 16—14; lost to 2nd pair, 4—6, 2—6; beat 3rd pair, 6—2, 6—2.
F. J. Beilby and E. M. Darmady beat 1st pair, 6—2, 6—2; lost to 2nd pair, 6—2, 5—7, 0—6; beat 3rd pair, 5—7, 6—2, 6—1.
Won, 6—3.

June 8th: Cup-tie *v.* Westminster Hospital. Home.
Singles:
Latter beat Evans, 6—2, 6—3.
Blackburne beat Brown, 6—2, 6—1.
Savage beat Anderton, 6—0, 6—3.
Kingdon beat Swaby, 6—1, 6—1.
Witt beat Billington, 6—4, 6—0.
Doubles:
Latter and Hunt beat 1st pair, 6—4, 6—4; beat 2nd pair, 8—6, 6—2; beat 3rd pair, 6—2, 6—0.
Blackburne and Kingdon beat 2nd pair, 6—0, 6—1; beat 3rd pair, 6—4, 6—2.
Witt and Savage beat 1st pair, 6—4 6—4; beat 3rd pair, 6—3, 3—6, 6—3.
We won 12—0, and so enter the semi-final round.

June 11th: "Past *v.* Present" Home.
Latter and Hunt beat Oulton and Way, 6—1, 6—2; Gibson and McLay, 6—3, 6—3; Everett and Courtney-Evans, 6—2, 6—2.
Blackburne and Kingdon beat 1st pair, 6—0, 4—6, 6—2; beat 2nd pair, 4—6, 6—4, 6—1; beat 3rd pair, 6—1, 6—0.
Savage and Witt beat 1st pair, 2—6, 4—6, 6—4; beat 3rd pair, 6—3, 6—4.
This was a most enjoyable match, and for a change was played in sunshine. Our only regret was that neither Sir Charles Gordon-Watson nor Mr. Bedford Russell were able to play, but everybody hopes that they will be able to play in next year's match.

June 11th: 3rd VI *v.* St. Mary's Hospital. Away.
R. H. Dale and J. Smart beat 1st pair, 3—6, 6—3, 6—4; beat 2nd pair, 6—1, 6—0; beat 3rd pair, 6—2, 6—0.
A. Innes and R. L. Benison beat 2nd pair, 6—3, 6—1; beat 3rd pair, 6—1, 6—2.
E. M. Darmady and E. H. T. Smyth lost to 1st pair, 5—7, 6—4, 4—6; lost to 2nd pair, 0—6, 0—6; beat 3rd pair, 4—6, 6—0, 6—0.
Won, 6—2.

June 12th: 1st VI *v.* Bank of England. Away.
K. A. Latter and J. H. Hunt lost to 1st pair, 6—2, 7—5; beat 2nd pair, 6—2, 6—4; beat 3rd pair, 6—4, 6—3.
J. R. Blackburne and J. R. Kingdon beat 1st pair, 6—3, 6—4; beat 2nd pair, 6—2, 6—3; beat 3rd pair, 6—4, 6—2.
R. C. Witt and P. T. Hardie lost to 2nd pair, 6—3, 3—6, 5—7; lost to 3rd pair, 9—11, 6—8.
Won, 6—2.

RIFLE CLUB.

Early in the year, judging by the scores made on the miniature range during the winter and the increased number and enthusiasm of active members, our chances for doing well at Bisley appeared good. Unfortunately we lost one of our most promising "shots" in the death of G. S. Druce in March following an operation. During the practice shoots our hopes were still maintained, a particularly notable event being the score of 101 (possible, 105) made by J. S. Bailey in his first long-range shoot of the season.

The shooting for the Armitage Cup was held in three stages on June 4th, 11th and 18th respectively. The other hospitals competing were Guy's, London, St. Mary's and St. Thomas's.

1st Stage.—Conditions were good; the wind was steady and the light, except at 600 yds., was excellent. Team score was as follows:

	200 yds.	500 yds.	600 yds.	Total.
K. F. Stephens	34	32	34	100
J. S. Bailey (Capt.)	33	32	32	97
J. R. Gillman	33	34	29	96
B. C. Nicholson	31	32	31	94
P. G. F. Harvey	31	29	32	92
B. P. Armstrong	32	30	28	90
Total				569

This left us first, with a lead of 5 points, St. Mary's being second with 564.

2nd Stage.—Conditions were not so good, the extreme changes in the wind proving our main difficulty. Team score was as follows:

	200 yds.	500 yds.	600 yds.	Total
B. C. Nicholson	31	32	31	94
K. F. Stephens	31	31	31	93
J. R. Gillman	31	29	31	91
J. S. Bailey (Capt.)	31	31	28	90
B. P. Armstrong	29	28	30	87
P. G. F. Harvey	29	29	27	85
Total				540

This score brought us down to third place in the aggregate of the two stages. St. Mary's being first with a total of 1126 and Guy's second with 1118.

3rd Stage.—An extremely hot day. The light was very bright, and a "tricky" wind *again* made high scores very few and far between. Team score was as follows:

	200 yds.	500 yds.	600 yds.	Total.
J. S. Bailey	33	33	32	98
J. R. Gillman	33	31	33	97
B. C. Nicholson	32	33	31	96
K. F. Stephens	31	29	29	89
P. G. F. Harvey	30	27	29	86
D. O. Davies	31	29	22	82
Total				548

The final results were as follows:

1. St. Mary's	1676
2. Bart.'s	1657
3. Guy's	1649
4. St. Thomas's	1610
5. London	1101

The "Benefunk" Challenge Cup, awarded for the best aggregate score in the Armitage Cup, was won by J. S. Bailey with a score of 285.

At the United Hospitals' Prize Meeting, held on Saturday, June 18th, the following won prizes:

		Score.
J. R. Gillman	2nd Prize, 600 yds.	33
J. S. Bailey	3rd Prize, Aggregate	98
K. F. Stephens	Donegall Badge	46

K. F. S.

GOLF CLUB.

STAFF *v.* STUDENTS.

Played at Denham, May 18th.

Singles.

Staff.		*Students.*	
Mr. Milner	1	Carr	0
Mr. Just	0	Cutlack	1
Dr. Roxburgh	0	White	1
Dr. Graham	½	W. Wilson	½
Dr. Hinds Howell	0	Wedd	1
Dr. Garrod	1	Stanton	0
Prof. Kettle	1	Groves	0
Mr. Ball	0	J. Wilson	1
Dr. Wroth	0	Hole	1
Dr. Wells	1	Robins	0
Dr. Brewer	1	Gordon-Williams	0
Dr. Harris	0	Wynne Thomas	1
Mr. Meyrick Thomas	1	Nunn	0
Dr. Wade	1	Tideswell	0
Mr. Bedford Russell	0	Maclay	1
Mr. Higgs	0	Robertson	1
Mr. Foster Moore	0	Tubbs	1
Prof. Hopwood	1	Murless	0
Dr. Sparks	1	Leishman	0
	9½		9½

Foursomes.

Roxburgh and Milner	1	Carr and Cutlack	0
Graham and Hinds Howell	0	White and W. Wilson	1
Ball and Just	1	Groves and J. Wilson	0
Garrod and Kettle	0	Stanton and Wedd	1
Brewer and Harris	1	Hole and Tubbs	0
Higgs and Hopwood	0	Maclay and Nunn	1
Wade and Bedford Russell	1	Wynne Thomas and Robins	0
Meyrick Thomas and Foster Moore	1	Robertson and Leishman	0
Wells	0	Murless	1
	5		4

ATHLETIC CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* EMMANUEL COLLEGE, CAMBRIDGE.

Emmanuel brought down quite a strong team to compete against us on May 12th at Winchmore Hill. They had included E. W. Dennison, the 3 Mile Blue, and several Relay and Ulverston Colours. Although the weather was warm and fine, the track was heavy after overnight rain and fast times were not expected.

Emmanuel won most of the events—in fact Bart's were only victorious in three; yet our first and second strings obtained 2nd and 3rd positions in nearly every event, so that we just managed to gain a well-earned victory by 4 points. Counting 5 pts., 3 pts. and 2 pts. for 1st, 2nd and 3rd places respectively, Emmanuel led us by a couple of points until the 220 yards, which J. G. Nel won easily for us, and J. W. Perrott just managed to get 2nd place. The Quarter Mile was the remaining event, which C. A. Smith, of Emmanuel, won in 55½ sec., with W. H. Jopling and G. A. Fairlie-Clarke finishing 2nd and 3rd for Bart.'s. Thus Bart.'s won an excellent and enjoyable match by 42 pts. to 38.

We were extremely fortunate in having the services of W. Hertzog, the Olympic athlete, in the Javelin and Weight events. J. G. Nel and the Emmanuel first string provided an excellent race in the 100 Yards. The result was a dead-heat after a somewhat doubtful start. E. W. Dennison, the Blue, never exerted himself much in the 2 Miles, and after allowing A. I. Kinnear and G. Dalley (Bart.'s) and E. I. Akeroyd (Emmanuel) to set the pace for the first 1½ miles, went right away in the last half-mile to win easily. J. W. P.

The following team represented the Hospital:

100 Yards: J. G. Nel and W. H. Jopling.
220 Yards: J. G. Nel and J. W. Perrott.
440 Yards: W. H. Jopling and G. A. Fairley-Clarke.
880 Yards: J. R. Strong and J. W. Perrott.
2 Miles: A. I. Kinnear, G. Dalley and H. B. Lee.
120 Yards Hurdles: H. W. Rodgers and F. W. Rushby.
Throwing the Javelin: W. Hertzog, C. M. Dransfield and G. Dalley.
Putting the Weight: W. Hertzog, G. D. Wedd and R. T. Simcox.

CORRESPONDENCE.

CAVALCADE.

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

DEAR SIR,—It is just two years since Dr. Langdon Brown contributed an article to this journal on the "Greek Play at Cambridge," in which he compared Noel Coward to Euripides—both post-war scoffers, both of outstanding excellence—and now it seems that that bold comparison has been vindicated in *Cavalcade* for the widely different reactions that this play has produced upon various members of the audience constitute such a tribute to the genius of the author as to raise him in eminence almost to the position of his Greek predecessor.

These few criticisms of the play were heard within the confines of the Hospital.

A simple student: "It was a wonderful spectacle, but I can't see why it should be praised so highly. The play seemed to me rather ordinary."

A sentimental student: "The saddest play I have ever seen."

An intellectual: "Noel Coward certainly had his tongue in his cheek when he wrote *Cavalcade*."

A major: "I enjoyed it enormously. The way in which the tunes were worked in was particularly clever."

A quiet nurse: "I was not thrilled. I felt as though I were back at school again turning over the pages of the picture books I had as a child."

An old Scotch lady: "What terrible luck those two poor people had—losing both their sons in that way."

A Jew: "Of course it was written for money. It is a magnificent business proposition, and was produced at the psychological moment. But the cheapness of the thing is unpardonable; losing one son on the 'Titanic' and another on Armistice day!"

Bewildered, I turned to a wise philosopher, and he said: "In *Cavalcade* the author holds up the mirror to life with such consummate skill that each one of us sees our own views reflected in it."

I am, Sir, etc.

H. B.

REVIEWS.

RECENT ADVANCES IN PATHOLOGY. By GEOFFREY HADFIELD, M.D., F.R.C.P.(Lond.), Professor of Pathology in the University of London, Pathologist to the Royal Free Hospital; and LAWRENCE P. GARROD, M.A., M.B., B.Ch.(Camb.), M.R.C.P. (Lond.), Bacteriologist and Lecturer in Bacteriology; late Demonstrator of Pathology, St. Bartholomew's Hospital. (London: J. & A. Churchill, 1932.) Pp. 392. 67 illustrations. Price 15s.

The preface begins: "We conceive the main purpose of this volume to be to present recently acquired knowledge of disease processes in a form useful to the student of Medicine." This purpose has been admirably achieved. The difficulty in writing a book of this type must be to know what to omit, and yet the authors have, in a few hundred pages, succeeded in giving a clear, concise and interesting description of the practical problems and advances in modern pathology. This achievement is the more remarkable when one considers the mass of material at their disposal. Under a number of separate chapter headings the important current views on a wide variety of subjects are set forth, and opposing arguments are clearly stated, usually with a minimum of bias.

The first seven chapters concern the reticulo-endothelial system, tissue culture, cancer research and deficiency diseases. The descriptions of these difficult subjects are well-nigh perfect. There follows an outline of endocarditis and a provocative chapter on the diseases of arteries. The respiratory system contains extremely good accounts of pneumonia, primary cancer of the lung, the pneumoconioses and anoxæmia.

The chapter on the digestive system, divided into three sections, on peptic ulcer, necrosis of the liver, and the pancreas, is too brief and sketchy. Indeed, the section on the liver had been better omitted than included in its present attenuated form.

A relatively large amount of space has been devoted to Bright's disease. The first of two chapters contains a critical discussion about this controversial subject. But in the second chapter dealing with the morbid anatomy, considerable stress has been laid on one particular classification. One is thankful to see the distinction between the renal changes in chronic glomerulo-nephritis and arteriosclerosis clearly made and illustrated. Many will disagree, however, with the complicated subdivision of chronic glomerulo-nephritis into one diffuse and four focal forms.

Under the central nervous system, gliomata are discussed, and there is a lucid description of the encephalitis problem.

The last chapter on the ductless glands is excellent as far as it goes, but includes only the thyroid, the parathyroids, and the adrenals.

The illustrations throughout are beautiful. The list of references at the end of each chapter might be amplified with considerable advantage.

In conclusion, this book is worthy of the highest recommendation.

PREPARATION FOR MARRIAGE. A Handbook Prepared by a Special Committee on Behalf of the British Social Hygiene Council. Foreword by the Right Rev. the Lord Bishop of Liverpool. Edited by KENNETH WALKER, F.R.C.S. (London: Jonathan Cape, 1932.) Pp. 191. Price 5s.

On first thoughts the appearance of another book on this subject would appear unnecessary, so enormous is the literature already existing. It is indeed difficult to imagine how any person who is able to read could remain in ignorance of the physical facts of married life, since they are described in detail in books at all prices and obtainable on every bookstall. But this book is different from all the others. Recent correspondence in the *British Medical Journal* led us to expect something good, and we have not been disappointed. It was originally planned that the book should be a symposium of the views of several specialists, including a clergyman of the Church of England, two anthropologists, a physiologist, a psychologist, and an expert on genetics. On second thoughts these disjointed essays were welded together by the unifying pen of Mr. Kenneth Walker, whose own views are expressed in the opening chapter. Here at last is a book in which the facts are not manipulated in order to point a moral or to support the convictions of the writer. Information, not propaganda; sense rather than sentiment: these are the aims of the writer, who has also done the book the inestimable service of humanizing it, and removing from it the impersonal chill of the laboratory.

The teaching of the Church upon matters of sex is examined and criticized; the part played by the Church in preserving the institutions of marriage and the family is alluded to, and the asceticism of her teaching is explained. The anthropological aspects of marriage are next considered. It is shown that in the vast majority of peoples marriage is and always has been backed by a religious as well as by a legal sanction: the necessity for both is examined and maintained. The trial marriage is discussed and rejected by moralist, anthropologist and psychologist alike. Premarital intercourse, although it may be a means of testing the physical suitability of the partners, cannot be indulged in without risk to the future relationship. The succeeding chapters deal with anatomy and physiology in the usual way. The ethics of limitation of the family for reasons of economy or health are discussed, and the voluntarily childless marriage is deprecated. Heredity and the elements of Mendelism next claim attention. Birth-control methods are briefly described. It is confessed that no remedy for the postponement of marriage till the late twenties has yet been found. Continence as a universal ideal is apparently impossible to achieve. Whether or not it is desirable from the point of view of psychology is fully discussed. It is manifestly unjust to demand continence of all when the burden falls so unequally on different individuals. The advice to be given to young people therefore depends upon whether we attach more importance to morality and the race or to the individual.

Special value is to be attached to the remarks in the concluding chapter entitled "Advice to Advisers." Marriage is not so beset with problems and difficulties as the books lead us to believe. Where there is love few difficulties will appear; the couple happily married do not need an adviser. The book ends on the note of optimism.

Those who have read Mr. Kenneth Walker's delightful book *On being a Father* will not need to be urged to read this one also. Like its predecessor, it is interesting in every line and full of common sense and understanding. It will prove useful to all who contemplate marriage, or who wish to take upon themselves the task of advising others on matters of sex. A useful bibliography is appended. Mr. Kenneth Walker is to be congratulated upon the result of his labours.

BIOLOGY FOR MEDICAL STUDENTS. By C. C. HENTSCHEL, M.Sc., and W. R. IVIMEY COOK, B.Sc., Ph.D. (London: Longmans, Green & Co., 1932.) Pp. xii + 618. Price 18s.

We should like to congratulate the authors of this volume on their enterprise in writing a text-book of this nature for London University students. It is somewhat surprising that the task they set themselves has not hitherto been attempted, especially as the students working for the first medical examination of London University, have, for many years, been a numerically important body. While text-books have been written dealing with the zoological and with the botanical requirements of this class of student, the only text-book of biology written for the London medical student was designed to meet the needs of those working for the Conjoint Board Diploma.

With the passing of the years there has been a material increase in the number of candidates taking the first examination at the University, so that the book under review is published at an opportune moment if indeed it is not overdue.

The authors stress their conviction that the general principles of biology can be most satisfactorily taught by treating the subject as a comprehensive whole. With this point of view we are in profound agreement, for a broad outlook on all the manifestations of life should be part of the equipment of every medical man. Biology is, in fact, a foundational subject for those who intend to devote their lives to an intensive study of that branch of it which is called medicine.

The work may be whole-heartedly recommended to all first-year students. The mode of treatment and general arrangement of the subject-matter is thoroughly satisfactory, and the authors write in a style which is clear and interesting. It is evident that they have had considerable experience in teaching the medical student, and that they have taken pains throughout to consider his peculiar needs. They have not hesitated to illustrate their remarks from a wide field, and in a way which adds much to the general interest of the text. We commend as a very useful feature the short glossary of prefixes and suffixes. This has a special value to-day, when so few of those who study medicine have any knowledge of Greek. The volume is well produced and bound, the type being exceptionally clear, while the price cannot be regarded as excessive.

As regards the illustrations, there are over 300 new figures, in addition to a number of useful diagrams from other works. As well as some excellent photographs, we note a number of new drawings of considerable artistic excellence, though certain of these are marred by their small size. In the new figures the authors have adopted the wise course of naming the parts in full, and thus sparing the reader the task of identifying them by the aid of letter in a foot-note.

St. Bartholomew's men will approve the well deserved tributes to T. W. Shore, which appear both in the preface and in a foreword by the Director of the Surgical Unit.

THE LABORATORY IN SURGICAL PRACTICE. By E. C. DODDS, M.V.O., M.D., and L. E. H. WHITBY, C.V.O., M.D., M.R.C.P. (London: Constable & Co., 1931.) Pp. ix + 187. Illustrated. Price 8s. 6d.

The appearance of this new manual on clinical pathology is entirely justified by the admirable style in which it is written, the sound quality of the views expressed, and the precision and simplicity of its descriptions. It is meant to be a help to the clinician who has to do his own pathology, rather than for the pathologist and biochemist. The opinions expressed are derived from the authors' personal experiences in the field of clinical pathology. No details are given of analytical methods, except in a few simple cases.

The chapter on blood transfusion is the best in the book. The technique of grouping is described in detail, and all its fallacies are carefully considered. An indirect test and a direct test are insisted upon in all cases. The transfusion of whole blood is advocated where possible; this is a procedure which demands considerable skill. The technique is not, however, given. Two admirable plates illustrate pseudo-agglutination as compared with true agglutination, both the naked-eye and the microscopic appearances being given.

A useful section deals with bacteriophage and its use in treatment of intestinal and urinary infections. Modern views on osteitis fibrosa are outlined, but the consideration of calcium metabolism might have received fuller treatment, in view of its increasing importance.

Very useful and interesting information is given on the examination of urethral and prostatic smears in chronic gonorrhœa and the standards of "cure." This is the clearest account we have read of this condition.

Van Slyke's urea clearance test is omitted, and Esbach's estimation of protein in urine is condemned in favour of a colorimetric biuret reaction, details of which would have been welcome.

The excellent plates illustrating intravenous pyelography deserve special mention. The book can be recommended thoroughly to students and practitioners.

SURGERY OF THE GENITO-URINARY TRACT. By RALPH COYTE, M.B., B.S., F.R.C.S. (London: Jonathan Cape, "The Modern Treatment Series," 1932.) Price 5s.

This small book is one of the "Modern Treatment Series," intended to provide at a small cost a manual of pocket size for the senior student or general practitioner. The subject concerned is reviewed and the most modern methods recounted while leaving out the more academic and theoretical matter. They are thus intended to be practical.

Mr. Coyte covers much ground, and although it is stated in the preface that such treatment as is described should, roughly speaking, be within the scope of a general practitioner, we feel that the book errs on the generous side in this matter.

The arrangement is an anatomical one—diseases of the kidneys and ureter, and so proceeding distally; finally there is a chapter describing operations on the kidney and ureter.

There are no illustrations—a feature which is a mixed blessing. A few simple line drawings greatly aid the reader. On the other hand, Mr. Coyte's descriptions are extremely lucid, and diagrams would of course increase the bulkiness of the book. The writer is very pessimistic as to the value of nephropexy—an operation for which he apparently has no use.

The book is neatly produced and should be a useful work, especially for general practitioners, who have here a ready means of keeping their knowledge of genito-urinary work up to date.

A GUIDE TO GENERAL PRACTICE. By A. H. DOUTHWAITE, M.D., F.R.C.P. (London: H. K. Lewis & Co., 1932.) Pp. vi + 96. Price 4s. 6d.

This very moderately priced book is a gold-mine of useful information for those who are about to embark upon a career of general practice, whether alone or in partnership. Dr. Douthwaite has had a large experience of general practice, and the advice which he gives is entirely practical, none of his opinions being based upon theory. The proper procedure of choosing and entering upon a partnership is fully dealt with and occupies a great part of the book. Sound advice is given on the matter of present and future income tax liabilities of the incoming partner—an aspect usually ignored or forgotten by the uninitiated, who may suffer severely in consequence. An equitable provision for dissolution of the partnership should be made; this important matter is not always given due consideration, and its omission may be expensive, involving sacrifice of all or a large part of the money which the junior partner put into the venture. The book can be read through in a couple of hours, and the time will be well spent. The chapter on articles of partnership will be useful for reference. An amusing list of undesirable habits is given, and the chapter on the business aspects of practice is extremely useful and practical. The book bridges effectively the hiatus which exists between the hospital education of the recently qualified man and the entirely different self-education of the experienced general practitioner.

AN INTRODUCTION TO DERMATOLOGY. By NORMAN WALKER, Kt., M.D., F.R.C.P.; assisted by G. H. PERCIVAL, M.D., F.R.C.P. Ninth edition. (Edinburgh: W. Green & Son, 1932.) Pp. xix + 382. 100 plates and 92 illustrations. Price 20s.

We welcome the latest edition of this famous text-book of skin diseases, which first appeared in 1899. It is undoubtedly the most readable and attractive book on the subject that we have seen, and its success in reaching a ninth edition is ample evidence of its value. Dermatology as a science is making rapid advances, but only the recent work of proved worth and general acceptance is included in this volume. As the title indicates, only the commoner skin diseases are described fully; the rarer conditions are briefly dealt with. The beauty of the coloured plates is well known; we imagine that they have contributed more to the success of the book than any other single feature of the work.

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EXAMINATIONS, ETC.

University of London.

Third (M.B., B.S.Lond.) Examination for Medical Degrees, May, 1932.

Honours.—Scowen, E. F. (*d*).

(*d*) Distinction in Surgery.

Pass.—Baxter, W. S., Jardine, D. K., Keele, K. D., Knox, R., Reid, R. D., Riley, A. C., Smith, D. A., Ward, E. M.

Supplementary Pass List.

Group I.—Barber, A., Gilbert, R. G., Hosford, M. D. C.

Group II.—Angel, R. E., MacVine, J. S., Matheson, I. W.

CHANGES OF ADDRESS.

BAYNES, H. G., Reed House, Old Avenue, West Byfleet, Surrey. (Tel. Byfleet 595.) 5, Park Square West, N.W. 1. (Tel. Welbeck 2747.)

CHILTON, N., c/o D.M.S.S., Dar es Salaam, British East Africa.

CHOLMELEY, W. F., Old Chimney Cottage, Chideock, Dorset.

CLARK, B. M., 319, S.A. Mutual Buildings, Church Square, Pretoria.

NELSON, H. P., 26, Harley Street, W. 1. (Tel. Primrose 3900.)

ROTH, E. J. H., 40, Harley Street, W. 1. (Tel. Langham 2424.)

WOOD SMITH, F. G., 2, Ashley Place, Westminster, S.W. 1. (Tel. Victoria 3908.)

BIRTHS.

BARNSLEY.—On June 7th, 1932, at Ellesmere, Shropshire, to Doris (*née* Shaw), wife of Arnold Barnsley, B.Chir., M.R.C.S., L.R.C.P.—a daughter.

BURTON WOOD.—On May 29th, 1932, at 8, Park Village West, Regent's Park, to Dr. and Mrs. W. Burton Wood—a daughter.

EBERLIE.—On May 28th, 1932, at Flint Cottage, Luton, to Dr. and Mrs. W. F. Eberlie—a son.

HOUNSFIELD.—On June 19th, 1932, at The Beeches, Stowmarket, to Evelyn (*née* Ranleigh Jones), wife of Dr. Maurice C. Hounsfield—a son.

JEPSON.—On June 10th, 1932, at 27, Welbeck Street, to Jean, wife of W. Baly Jepson, of West Byfleet, Weybridge—a daughter.

WALSH.—On June 5th, 1932, to Marian (*née* Jacks), wife of Robert A. Walsh, D.M., of Stucley House, Great West Road, Lampton, Middlesex—a daughter.

MARRIAGES.

BRAIMBRIDGE—FEAR.—On February 5th, 1932, at St. Andrew's, Nairobi, Kenya, Clifford Viney Braimbridge, M.V.O., F.R.C.S.Ed., East African Medical Service, to Molly Fear.

BUNCOMBE—RICHARDS.—On June 18th, 1932, at St. Stephen's Church, Norwich, by the Rev. F. E. Cole and the Rev. A. W. E. McCombe, Guy Hope Buncombe, M.R.C.S., L.R.C.P., eldest son of Dr. and Mrs. Wm. Dewey Buncombe, of Walberswick, Suffolk, to Grace Ellen, daughter of the late Mr. and Mrs. Philip Richards, of East Harling, Norfolk.

CROSS—GRAYRIGGE.—On May 23rd, 1932, at the Brompton Parish Church, London, Dr. R. M. S. Cross, only son of Dr. R. G. Cross, J.P., and the late Mrs. Cross, of Petersfield, Hants, to Mary, younger daughter of the late Gray Grayrigge and Mrs. Grayrigge, of Kensington.

FOX—CROMBIE.—On June 8th, 1932, in London, George Noel Fox, B.A.(Cantab.), L.M.S.S.A.(Lond.), eldest son of Dr. and Mrs. Fox, of Downderry, Cornwall, to Esther, only daughter of Mr. and the late Mrs. A. B. Crombie, of Edinburgh, now of Yoxley Drive, Ilford, Essex.

HOSFORD—VAUGHAN EDWARDS.—On June 10th, 1932, at Heworth Parish Church, York, John Hosford, M.S., F.R.C.S., 8, Harley Street, London, second son of Dr. and Mrs. B. Hosford, of Highgate, to Millicent Sacheverell, elder daughter of Brigadier-General C. Vaughan Edwards, C.M.G., D.S.O., and Mrs. Vaughan Edwards, Heworth Hyrst, York.

LLEWELLYN—STEWART.—On June 2nd, 1932, at Holy Trinity, Brompton, by the Rev. B. G. Bourchier, E. E. Llewellyn, M.D., Virginia Water, to Irene Lockhart Stewart, only daughter of the late H. R. Stewart, of Tientsin, China, and Mrs. Davy, of Fieldmoor, Virginia Water.

POPE—INNES-LILLINGSTON.—On June 11th, 1932, at St. Paul's Church, Knightsbridge, Edwin Stanley Pope, second son of Mr. and Mrs. F. R. Pope, Twitts Croft, Five Ashes, Sussex, to Barbara Joan, younger daughter of Lieut-Col. and Mrs. Innes-Lillingston, of East Sheen, Surrey.

RADCLIFFE—BRÉE.—On May 26th, 1932, at the Parish Church, Manningtree, Walter Radcliffe, son of Dr. and Mrs. Frank Radcliffe, of Dedham, to Muriel Laure, daughter of the Rev. W. Brée and the late Mrs. Brée, of St. Servan, France.

ROBINSON—WILLIAMS.—On May 29th, 1932, at Benton, Richard Deane Robinson, M.B., B.S., eldest son of the late Major-General W. H. B. Robinson, C.B., I.M.S., and Mrs. Robinson, of Charlbury, Oxon, to Freeda, younger daughter of Mr. and Mrs. C. Williams, of Benton, Illinois, U.S.A.

THOMPSON HANCOCK—BARNES.—On June 4th, 1932, at St. Margaret's, Westminster, Percy Ellis, eldest son of Dr. and Mrs. Thompson Hancock, to Dorothy (Blue), youngest daughter of Mrs. Bramwell Barnes, of 74, Knightsbridge, S.W.

DEATH.

MUNDY.—On May 26th, 1932, Herbert Mundy, F.R.C.S., D.P.H., of Durban, Natal.

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: National* 4444.

St. Bartholomew's Hospital Journal.

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

VOL. XXXIX.—No. 11.] AUGUST 1ST, 1932. PRICE NINEPENCE.

CALENDAR.

Tues., Aug. 2.—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Fri., ,, 5.—Dr. A. E. Gow and Mr. Girling Ball on duty.
Tues., ,, 9.—Prof. Fraser and Prof. Gask on duty.
Fri., ,, 12.—Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Tues., ,, 16.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Fri., ,, 19.—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.

Last date for receiving matter for the September issue of the Journal.

Tues., ,, 23.—Dr. A. E. Gow and Mr. Girling Ball on duty.
Fri., ,, 26.—Prof. Fraser and Prof. Gask on duty.
Tues., ,, 30.—Sir P. Hartley and Mr. L. Bathe Rawling on duty.

EDITORIAL.

FOR eight hundred years St. Bartholomew's Hospital has received the sick poor of London, and witnessed throughout the centuries the changing pageant of London's life and history. The Medical College is not much more than a century old, if we regard John Abernethy as its real founder. Although there have been students here since the middle of the seventeenth century, systematic teaching did not begin till Abernethy's time, and since then the College has expanded and developed to reach its present high position in the world of medical education. It has already established its traditions, and Bart.'s men carry with them to the uttermost parts of the earth the undefinable stamp of their School.

Now, for the first time in its history, the Medical College is making an appeal for funds in order to provide increased accommodation for the departments in which pre-clinical subjects are taught, and also to provide a Residential College. Details of the scheme will be found in a special article in these pages, together with a letter from the Dean, explaining the steps which are being taken to obtain the necessary funds, and asking for the help of all Bart.'s men, past and present. This appeal is quite distinct and separate from the Hospital Appeal, which was made some time ago; it is quite a private affair. The necessity of seizing this opportunity of acquiring the Merchant Taylors' School site is self evident. We feel confident that this appeal, occurring but once in a lifetime, and being made for such an urgent and important object, will meet with a ready response, in spite of the financial difficulties through which we are all passing.

The appeal has the enthusiastic support, moral and financial, of the members of the Staff and the Consultant Staff.

Dr. Langdon Brown writes: "I should like to support this appeal very strongly. It offers an opportunity such as will never occur again for a real collegiate life for our students. In September, 1843, Sir James Paget wrote, 'It is probable that the College will soon give place to a new College worthy of the Hospital.' After all these years of deferred hopes, the chance of realizing them is at hand. When I have had occasion to visit medical schools in the provinces and in the United States, I have envied them their spacious buildings, and have longed to see our College housed in a manner befitting its splendid traditions. What local patriotisms have been able to accomplish elsewhere is surely not beyond the power of this great city."

Sir D'Arcy Power writes: "The Merchant Taylors' Company has proved itself a true and constant friend. It has given me prizes, sent me cheques when it thought that I had done anything worthy of reward, and supported me with votes at contested elections. What the Company did for me, it did for many others of its scholars. There has thus always been a close connection between the Merchant Taylors' School and our own Medical School at St. Bartholomew's Hospital. Those

of us who are alumni of both ancient institutions are delighted beyond measure to think that what to many of us is the new Merchant Taylors' School—for it was only opened in April, 1875—may now become a part of the Medical College. The opportunity must be seized at once. It can never occur again. A site close to the Hospital, with a large and well-tended grass plot, a Hall which equals many of those in Oxford and Cambridge, laboratories recently built, and the heritage of the traditions of two great public schools and even of the Charterhouse itself! What more could be desired? The purchase money alone is wanting, but that should be no obstacle. Let the Council take its courage in both hands, and the Medical College will be housed in a habitation worthy of its name."

* * *

We congratulate Sir Holburt Waring on his election as President of the Royal College of Surgeons in succession to Lord Moynihan. We also congratulate Mr. K. M. Walker, Mr. J. Paterson Ross and Mr. H. Jackson Burrows, who have been appointed Hunterian Professors, and Mr. R. W. Raven, who is Arris and Gale Lecturer. Mr. E. T. C. Spooner has been elected to an Official Fellowship at Clare College, Cambridge, and Dr. Walter Graham Scott-Brown has been awarded a Research Fellowship in Tuberculosis by the Medical Research Council.

* * *

Congratulations to the Cricket Club on their very successful season. They have won both the Senior and Junior Inter-Hospitals Cricket Cups. In the Senior Cup match they beat St. Thomas's Hospital by an innings and 96 runs, making the record score of 448. Both Boney and Gabb made centuries. The Rifle Club have put up an excellent show at Bisley this year. Details of their success will be found elsewhere.

* * *

We regret to record the death of Dr. Bedford Pierce, M.D., F.R.C.P., a celebrated Bart.'s man, at the age of 71. Dr. Pierce was for thirty years Medical Superintendent of The Retreat, York, a mental hospital founded by William Tuke, the Quaker pioneer of humane treatment of the insane. He was also Lecturer on Mental Diseases in Leeds University, and Ex-President of the Psychiatry Section of the Royal Society of Medicine. After his retirement from The Retreat, Dr. Pierce became a Commissioner of the Board of Control under the Mental Deficiency Act.

We have also to record the death of Dr. W. Wingate-Saul, who was Senior Medical Officer and Commodore Surgeon to the P. & O. Company. Full obituary notices will appear in the September issue of the JOURNAL.

APPEAL FOR FUNDS FOR THE MEDICAL COLLEGE.

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

DEAR SIR,—The Appeal which is now being made for funds to enable us to acquire the site and buildings of the Merchant Taylors' School in Charterhouse Square for the purposes of the Medical College is unconnected with the recent appeal made by the Hospital.

The Appeal is being carried out privately, and we have to solicit the help of all our friends.

To enable us to obtain the large sum of money required, endeavour is being made to enlist the interest of such persons as may be willing to make substantial gifts for the purpose of medical education. We hope to succeed in this endeavour, but we may not perhaps succeed fully enough to enable us to carry out the whole scheme. We are therefore appealing to all Bart.'s men to help us. Every man who has qualified from the Hospital will shortly receive a copy of the Appeal which sets out our aims. In order that the present students may be familiar with the scheme it is hoped that you can see your way to incorporate it in the Hospital JOURNAL.

The individual members of the present Staff have already volunteered to give a substantial sum of money towards the Appeal, and are working energetically to get help from others. We hope that the students also may feel inclined to do something.

Perhaps the Students' Union would start a scheme of its own. Perhaps there are wealthy students who might like to contribute. There is also the possibility that some students have among their friends and acquaintances well-to-do persons whom the scheme might interest, and whose attention could be drawn to the Appeal. If any student thinks he can help me, and will call at my office, I shall be very pleased to discuss with him any suggestion he may put forward.

Yours sincerely,

W. GIRLING BALL.

Dean of the Medical College.

THE rebuilding of St. Bartholomew's Hospital began in the year 1905 with the erection of a new Out-Patient Department. This was followed in succeeding years by the erection of a Pathological Block, a Nurses' Home, and a Surgical Block, provided with Operation Theatres and capable of dealing with the treatment of 250 patients. The latter was opened in 1931.

In recent years the Governors of the Hospital have been considering a layout plan for the completion of the rebuilding in the light of modern requirements. The area required far exceeds that which had previously been in their minds, owing to the rapid advance in our knowledge of medical science.

Since the Hospital is built on an island site, it is not possible to expand on this area. It has accordingly become clear that any future buildings for departments required for the treatment of patients must displace those buildings, which hitherto have been occupied by the Medical College.

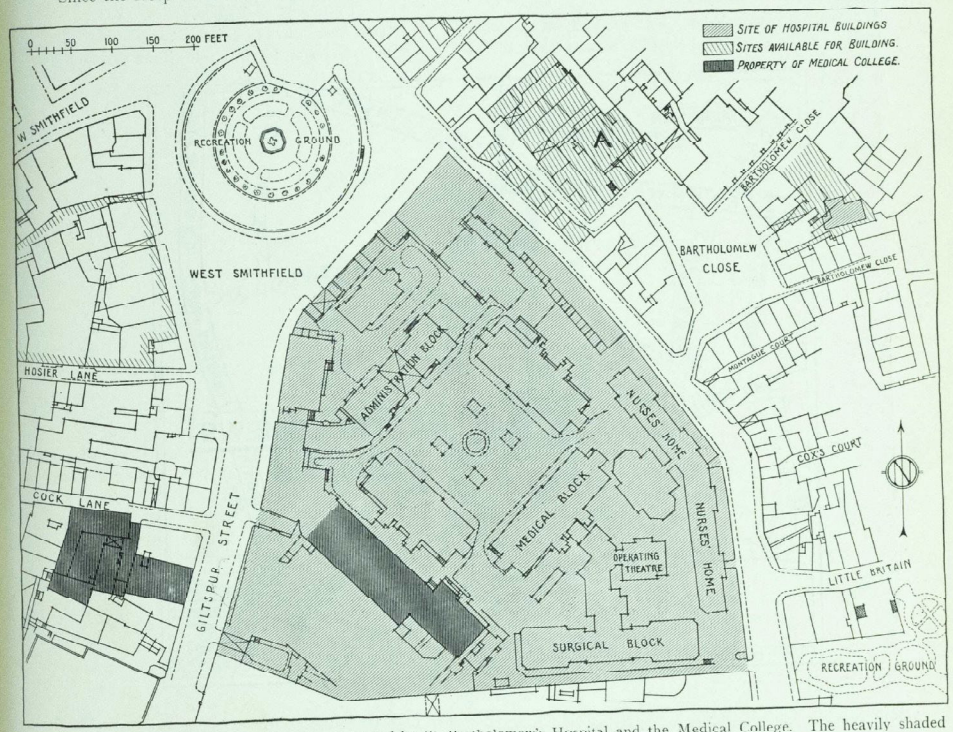
Previously incorporated with the Hospital, the Medical College in 1921 obtained its own Charter, and became to that extent a separate institution. It is essential, however, for the training of the students, who number about 800, that the two institutions should remain in the closest co-operation for the purpose of clinical studies. The Pathological Museum, the Library and Clinical Lecture Theatres must remain on the Hospital site.

The Departments for the teaching of the pre-clinical subjects, which are even now somewhat scattered, could, however, be moved elsewhere with advantage both to the Hospital and the Medical College.

To this end the Council of the Medical College, in 1930, passed the following resolution:

"That the whole of the pre-clinical departments (including Chemistry, Physics, Biology, Anatomy, Physiology and Pharmacology) and a Residential College should be placed on one site."

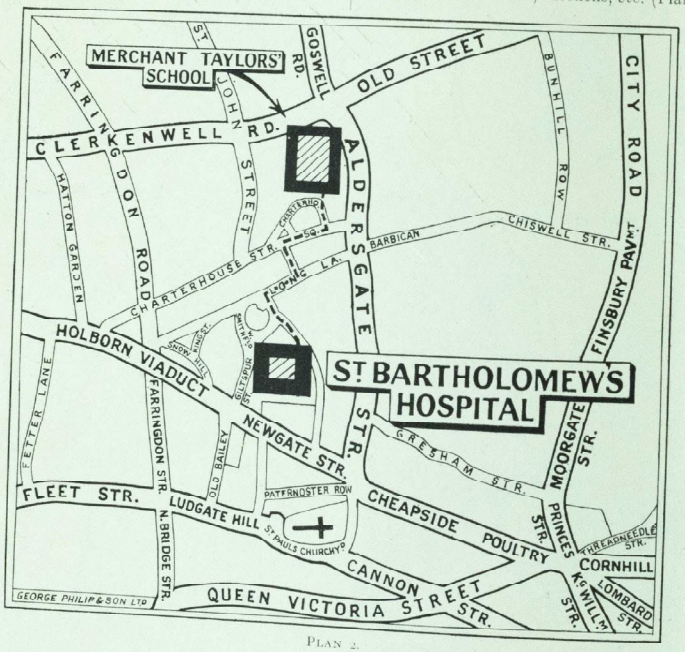
It was at first thought desirable to investigate a site



PLAN 1.—The shaded areas represent property owned by St. Bartholomew's Hospital and the Medical College. The heavily shaded areas represent the site of buildings to be vacated. A. Little Britain site.

in Little Britain (Plan 1, A) adjoining and belonging to the Hospital. Plans, showing that the above resolution could be put into effect and that the available area would suffice, were prepared. They showed, however, that the buildings would be cramped, and that the site would not permit of expansion for future needs. Moreover, the space allotted to the Residential College was inadequate.

The scheme, nevertheless, was transmitted to the Governors of the Hospital with a request that they



PLAN 2.

house the Departments of Chemistry, Physics, Biology and possibly Pharmacology, subject to minor alterations, which could be easily made (Plan 3, B, C).

2. That the main buildings would, with alterations, house the Physiology Department (Plan 3, A).

3. That a new Anatomy Department would have to be built at a cost of £25,000.

4. That there already exist admirable and quite suitable refectories, kitchens, etc. (Plan 3, D and E).

would consider the possibility of allotting the site to the purposes of the College. The Governors were at the time unwilling to give a decision on this point, but they suggested that the College authorities should investigate another site, shortly to become vacant, namely, the Merchant Taylors' School site, situated in Charterhouse Square, five minutes' walk from the Hospital (Plan 2).

This site was investigated, and on the advice of the architects to the College, Messrs. Lanchester & Lodge, it was established:

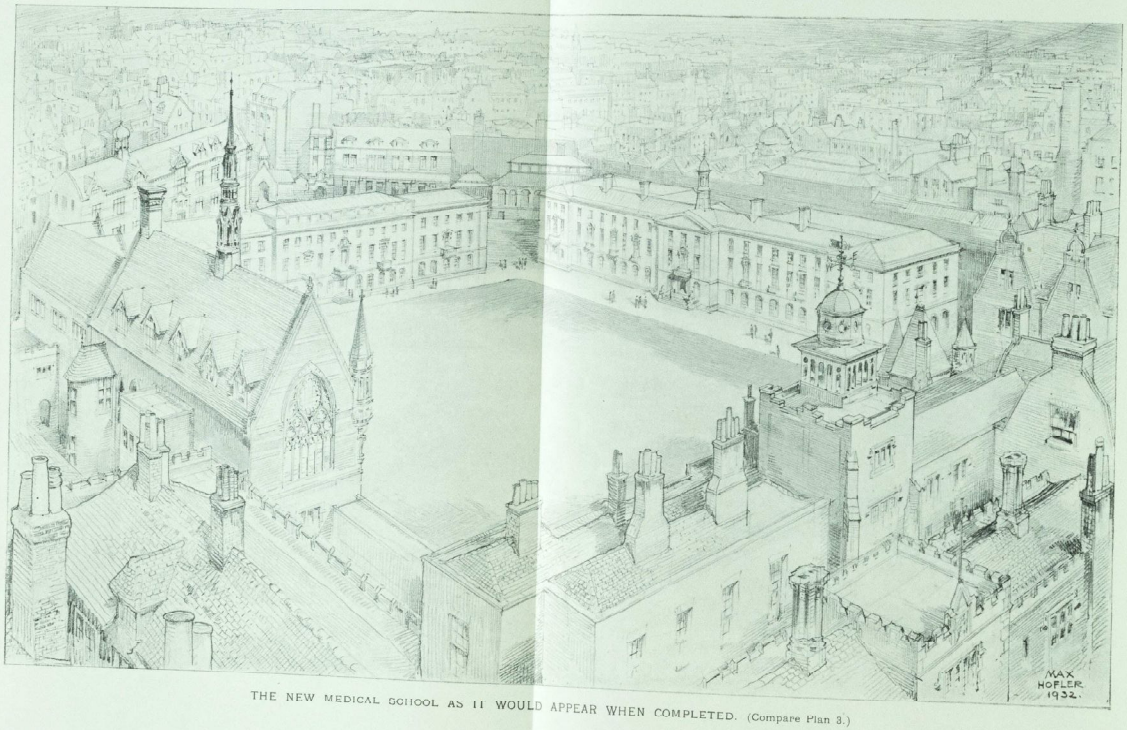
1. That certain buildings at present on the Merchant Taylors' School site would, as they stand,

5. That Executive Offices could be placed in other buildings on the site.

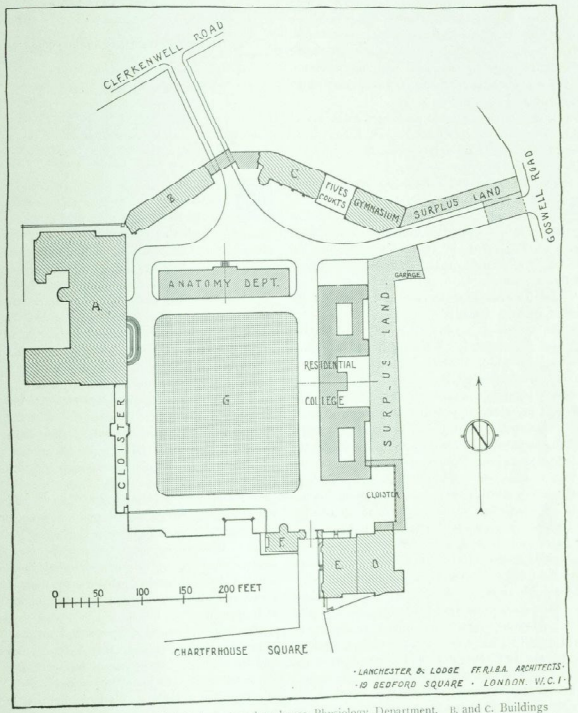
6. That there is ample room on which a Residential College could be built (approximate cost, £30,000), leaving sufficient space for tennis courts, etc.

7. That there are two strips of land which would not be required and could be sold (Plan 3, surplus land).

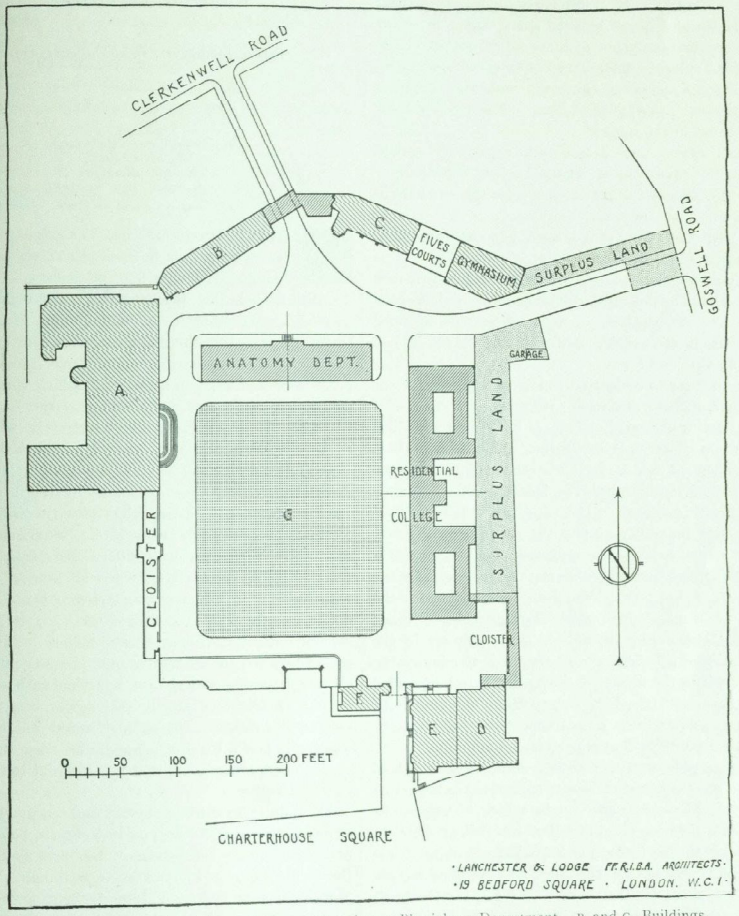
Reports were also received with reference to rates, taxes, upkeep, etc., and the Council agrees that it would be able to maintain the College re-organized on this site.



THE NEW MEDICAL SCHOOL AS IT WOULD APPEAR WHEN COMPLETED. (Compare Plan 3.)



PLAN 3.—A. Building in which it is proposed to house Physiology Department. B. and C. Buildings suitable for housing Chemistry, Physics and Biology. D. Refectory. E. Warden's House and Offices. F. Porter's Lodge. G. Grassed area suitable for tennis courts, etc. The areas marked Anatomy Department and Residential College are those proposed for new buildings. Surplus land might be sold.



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Several meetings have been held to consider this proposition. While appreciating that it is desirable to house the departments of pre-clinical subjects as near to the Hospital as possible, the Council has come to the conclusion that the short distance which separates the Merchant Taylors' School from the Hospital is a matter of little consequence as compared with the amenities which the site provides both for present needs and for development in the future.

It has therefore been decided that every effort should be made to acquire the Merchant Taylors' School site.

The provision of the funds needed for the purchase of the site must now be undertaken.

It is estimated that a sum of about £200,000 is required to complete the scheme.

The only available asset is the building which now houses the Physiological Department. It has been valued at £20,000, but, in view of present financial conditions, it is probable that not more than £15,000 would be obtained for it.

It is therefore necessary to make an appeal for the remainder, namely, a sum of £185,000.

The University of London, of which the Medical College is a constituent institution, is not in a position to make a grant in aid. With the cordial approval of the Governors of the Hospital, the Medical College Council now issues this appeal, in the hope that generous benefactors may be willing to give the necessary assistance.

The Council fully realize that there are many persons who, though willing to give money to a Hospital for the treatment of sick persons, will not so readily come to the help of a teaching institution such as this. Perhaps naturally the public do not so easily appreciate the importance of a College whose duty it is to educate the men by whom the health of the Nation is to be guarded in the future. It is, however, to those public spirited people who do appreciate the importance of the training of medical students that this appeal is addressed.

The matter is urgent. The Merchant Taylors' School site becomes vacant at the end of 1932 or at the beginning of 1933. The necessary funds must, therefore, be obtained quickly. The Council of the College desire to emphasize the fact that, if from lack of support the opportunity to obtain the Merchant Taylors' School site is lost, there will remain no alternative but the Little Britain site, which, as shown, does not fulfil the requirements of the College. There is, moreover, the further possibility that the Governors of the Hospital may find that they themselves require the Little Britain site for the expansion of the Hospital. If that were the case there would be no other site in the neighbourhood on which it would be possible to develop the Medical College or even to maintain its present status and efficiency.

THE LIFE AND WORKS OF SIR WILLIAM SAVORY.*

Πάντα δοκιμάζετε, τὸ καλὸν κατέχετε.

—*Saint Paul.*

I.

"Who would true valour see
Let him come hither,
One here will valiant be
Come wind, come weather."

"*The Song of Valiant-for-Truth*," *John Bunyan.*

CLAUDE Bernard has said, "True Science teaches us to doubt and in ignorance to refrain. The doubter is a true man of Science." For the scientist a faith that follows blindly some will-o'-the-wisp of a new theory is no virtue. His should be a steady progress into the unknown, with eyes ever alert for the hidden path to his Promised Land. "The practice of Medicine is a lonely road which winds uphill all the way and a man may easily go astray, and never reach the Delectable Mountains, unless he early finds those shepherd guides, Knowledge and Experience, Watchful and Sincere."† Here it is that, by an honest doubt, begotten of a genuine desire for truth, one man can restrain his less vigilant fellows from too precipitate an advance, giving time for a careful separation of the true from the false. Valiant indeed, then, is he who has the courage to cry "Halt" when all around press on with haste, who can doubt and stay constant to that doubt, in spite of scorn and prejudice.

Such a man was William Scovell Savory. Living in a time when old things were rapidly passing away and all things were becoming new, when an enthusiasm for novelty in discovery and invention was carrying men beyond the range of reason and sound judgment, he was the last of a band of men who by their stand succeeded in removing much that was harmful to the spirit of true Science.

The span of his threescore years and ten saw the birth of many now accepted dogmas in Religion, Science, Art and Economics. The decade of his birth gave also to the world Pasteur and Joseph Lister, Helmholtz, Virchow, Morton, Spencer Wells and Florence Nightingale—people who were to turn the world upside down in their own realms of Science. His youth saw the advent of Anæsthesia and also the reform in Nursing; with his middle age came the birth of Bacteriology and the great revolution in Surgery. Everything everywhere spelt change. As soon as new ideas and theories were taken up, weighed

* The Wix Prize Essay, 1932.
† Sir William Osler.

in the balance and found wanting or profitable, others were produced for attention. The many absurdities and blunders of childhood pass unnoticed by the parent, but are often very obvious to the observant spectator. Savory saw much that was wrong, and he tried to eradicate the evils. His opponents called him narrow-minded and old fashioned. They said that he was obstinate in his maintenance of old traditions, but someone has written that obstinacy is but an overstepping of those manly virtues of constancy, uprightness, courage and singleness of purpose, and it is often hard to say when these virtues have become a fault through excess.

The stranger meeting William Savory for the first time, perhaps with a mind prejudiced from hearsay to expect harshness and severity, would find that his appearance was in keeping with his reputation. He would have seen a tall, broad-shouldered, well-developed figure of a man—that is, well developed but not powerful, for his build gave an accurate picture of the student that he was. His full height was not at first evident, for he had a typical "students' stoop," and when he walked he showed a peculiar shambling gait that betrayed a tendency to flat-foot. It was in his face, however, that the full force of his character was portrayed. A large smooth brow under long, slightly curling hair, strikingly piercing blue eyes and a strong determined mouth and jaw, all showed the unwavering tenacity of purpose and transparent sincerity of the man. His face showed remarkably few lines, even in old age, for it was characteristic of him that he rarely betrayed his emotions even by as much as a smile. It was this that made it almost impossible for a stranger, such as an examination candidate, to divine his mood, but those who knew him well could foresee the approach of storm or sunshine. For example, a pulsatile working of his masseters betrayed displeasure, while in amusement or satisfaction he would scratch the top of his ear with his thumb.

The facets of his character that catch best the rays of retrospection were his perfect sincerity and honesty, his constancy to an opinion supported by a remarkably sound judgment, his indefatigable industry and his intense reserve and abhorrence of ostentation. It has been said that he would have made his mark just as well as a barrister or judge, but these qualities were those most needed by Science, and especially Medical Science, in that very critical period of history.

He was born on St. Andrew's Day, November 30th, 1826, in Monument Yard, near Tower Hill, in the Ward of Billingsgate. Here he lived in that part redolent still with the faded glories of the old London of the Boar's Head and Dame Quickly, of Mr. Pepys and the Great Fire, with its "merry Eastcheap, that ancient region of wit and wassail, where the very names of the streets relished of good cheer, as Pudding Lane bears testimony even at the present day. . . . The mad roister has given place to the plodding tradesman, the clattering of pots and the sound of 'harpe and sawtrie' to the din of carts and sound of the accursed dinging of dustmen's bells; and no song is heard save haply the strain of some siren from Billingsgate, chanting the eulogy of diseased mackerel."*

Here he lived, a Londoner of Londoners, a true-born Cockney. This nursery was one of which he was always proud, and he took pains that the flowery, pedantic society of his later years should never erase the effects of his early surroundings. This showed itself in his love for his city, for he never lived away from it even for his holidays, and also in his speech. A story is told of his son often sweeping an apparently clean floor with brush and coal-shovel, who answered the query, "What are you doing, Borradaile?" with "I am just sweeping up the h's you've been dropping."

William was the elder son of a surgeon,* William Henry Savory, by his second wife, Mary Webb. A vault in St. Mary-at-Hill, in Love Lane, Eastcheap, where Mr. Savory was churchwarden for many years, bears the names of his first wife, Mary Ann Savory, who died in 1821, and two young children, William and George, who died on the same day earlier in the year of William Scovell Savory's birth, probably in one of the cholera epidemics. His brother, Charles Tozer, three years his junior, became later a successful practitioner in Canonbury, North London.

The brothers received their early education at a private school in Ramsgate under a Mr. Darnall, an educationist of "copy-book" repute at that time. Here William quickly showed promise of what he was to become in later years. It is recorded that once he acted with conspicuous success as Cato in Addison's play. He was also prominent in the school debating society, and often showed his love of rhetoric by crossing swords with the best of his fellows in discussion.

In 1844, when he was seventeen, he went directly to the newly-formed Medical School at St. Bartholomew's Hospital. "In the Session 1842–3, the School had fallen to its lowest level." Sir James Paget writes,‡ "All felt that 'something must be done.' The something was to be the institution of the collegiate system, and I was to manage it." Seven houses in Duke Street

* Washington Irving's *Sketch Book*.
† All authorities except Plarr's *Lives* state that he was a city merchant, but Sir D'Arcy Power found in an old medical register the name William Henry Savory as that of a surgeon practising in the city.
‡ *Memoirs*.

were altered and furnished, and a College was prepared for twenty-three students and Mr Paget the Warden.

Other students who entered this year and afterwards left their mark on their profession were J. A. Kingdon, Oliver Pemberton, George Dunn, Henry Fenton, and Savory's great friend, Henry Power. These two, Power and Savory, both new and lonely, without any introductions, here began the friendship that lasted all their lives. Lawrence and Stanley were Surgeons to the Hospital, with Wormald and Skey assistants. Sir George Burrows, was one of the Physicians, and Paget was Lecturer in Physiology and Demonstrator in Morbid Anatomy.

Savory immediately established for himself the name of a keen and clever worker. Later, when he was Tutor, reproving a student for slackness in attending lectures, he told him that he had never missed a single one of Mr. Paget's lectures, held at eight o'clock in the morning. He evidently early realized the importance of this ground-work, for he was by far the most brilliant student of his time, and was awarded all the chief prizes and scholarships. Though he was always ready to make use of his knowledge by helping a fellow-student in difficulties, there lay behind his information a hint of rebuke, as if he would say, "Why could you not take the pains to discover that for yourself?" His successes never made him in any way supercilious, but there was always about him an undefinable air of inward exultation and thankfulness that he had been given power to work hard enough to attain such high rank.

He would undertake the most formidable and tedious labour to ascertain any doubtful point, and was impatient of any distraction that led him away from his work. It may have been easier for a young man in his day to work hard, for his London was not the giddy pleasure-seeking vortex of to-day, the gradual transition from the stolid, serious city of Charles Dickens to the staid prosperity of the Victorians had just commenced. On the other hand, many of the students had a reputation for a wildness and profligacy that would not be tolerated in this generation. Perhaps these were as Helots to those young Spartans who were sensible enough to keep themselves apart from these tinsel pleasures. The cult of games had not entered to divide the attentions of even the most studiously inclined in the way it does now, and as much of the day could be devoted to work as inclination required. Had such sport existed it is not improbable that William Savory would have taken part, for in later life he was always interested in the Hospital games. He was frequently present at the Inter-Hospital Rugby Cup-ties, and a friend recalling his appearance, leaning forward, watching such a game, said that he had never seen such a look of intense, controlled excitement, even at such spirited times, for he seemed as if he could ill repress a desire to cast off his years and dignity to join the wildly shouting throng on the "touch-line."

Savory held his surgical dressership under Lawrence, and he "clerked" for Burrows. Lawrence's assistant, Skey, was so interested in the young student that he took him to assist at his private operations. Later on he placed such reliance on Savory's proficiency that he asked him to correct and, to a certain extent, modify his *Operative Surgery*. Savory also wrote the entire section dealing with diseases of the eye. In the preface, after acknowledging his valuable services, Skey writes, "A season of probation is due to all members of our laborious profession; no amount of knowledge, no quantum of industry, no acquired accomplishment can obtain a level path to fame, or give to Youth the stamp and experience of Age. Mr. Savory will bide his time; but I am greatly in error if he do not hereafter tread the highest paths of professional eminence." This was a far-sighted prophecy, rapidly to be fulfilled.

It must have been difficult to work to the satisfaction of both Lawrence and Skey, for whatever cause for variance it was that arose, they were sure to take opposite views. Lawrence would call Lilliputian what Skey had diagnosed as Brobdingnagian, and the fads and fancies of one would have to be forgotten by the dresser before the other took over duty. That he should become a personal friend of each was a high tribute to Savory's gift of keeping friends of widely different views. This power showed itself in subsequent days, when he often stood alone as peacemaker between violent and abusive parties at the College of Surgeons and elsewhere. He was to write the memoirs of both Lawrence and Skey in the *Hospital Reports*, where he laid stress on those characteristics which were so attractive to himself, and which greatly influenced his future practice and procedure. From Skey he learnt the value of Nature's methods in promoting restoration, and the avoidance of gross surgical interference until all other means had been abandoned. Lawrence's influence was more on the man than on the surgeon, but the surgery, the oratory and even the general conduct in the wards of this great gentleman were to mark those of his young disciple.

His examinations were as successful as his work. At the University of London in 1848 he obtained the Gold Medal and Scholarship in Comparative Anatomy and Physiology, in Surgery and in Midwifery. He passed with Honours in Medicine. These distinctions led to his appointment as Demonstrator in Anatomy and Teacher in Operative Surgery, after a short period as House Surgeon to Lawrence. These he held until

he became Lecturer in Anatomy and Physiology as well as Curator to the Museum, when Paget succeeded Lawrence as Lecturer in Surgery in 1859.

In 1850 he was appointed Medical Tutor—a position carrying with it duties similar to that of Dean of the Medical College in the modern *régime*—with rooms in the College. Since his entry as a student, numbers had increased from forty to over a hundred new entrants, so that, with a rising College, with the wonderful example of his predecessor, Mr. Paget, and with his own newness to such work—for he was only twenty-six years of age—he had excellent scope for his talents of administration and management.

During his time as an Anatomy Demonstrator he conducted much research, both on animals and on the human cadaver. He became a Fellow of the Royal College of Surgeons in 1852. Much of his time was taken up in connection with a commission appointed to report on "Suspended Animation," of which he was secretary. This dealt with theories of breathing and suffocation and their relation to anæsthesia, and involved many experiments on animals, covering a period of nearly ten years. Many of the experiments were performed at St. Bartholomew's Hospital.

The first editions of Holmes's *System of Surgery* contain chapters by Savory on Scrofula, Hysteria and Insomnia, which, with the section in Skey's work, constitutes his only contribution to contemporary text-books.* He contributed in 1853 a paper to the Royal Society on "The Structure and Connexions of the Valves of the Human Heart," the outcome of many detailed and elaborate dissections. Two further papers on "The Relative Temperature of Arterial and Venous Blood" and "The Development of Striated Muscle Fibres in Mammals," in the *Philosophical Transactions*, were followed by his election to the Fellowship of the Royal Society in 1858. During this period also the *Lancet* published short notes of his on cases under his care, dealing mainly with diseases of arteries. A long article in vol. i of 1858 concerning "The Effects upon the Mother of Poisoning the Fetus," describes a course of experiments he carried out by observing the results of injecting toxins into mother and offspring, and deducing therefrom the relations of the two circulations to diseases, especially those termed "hereditary." Finally an article of some surgical importance appeared "On the Shape of Transverse Wounds of the Arteries in Relation to their Physiology."

These publications all show his interest in the anatomy, physiology and pathology of the blood circulatory system—an interest which permeated his surgery, for he liked few operations better than those on the blood-vessels. The articles illustrate a principle which he never failed to impress on his students, and which he admired as one of the greatest marks in the work of others—the collection of a number of facts by patient and personal experiment and thought, and then the formation of a theory. "First facts, then principles," he said. His writing was simple and straightforward, his style crisp and lucid to the point of genius. The conclusions he came to were always supported by the mass of facts he had himself accumulated. His great love for truth led him to state plainly and humbly any doubt that still existed. He very rarely, if ever, wrote on subjects which he had not investigated by his own research, so that when the time came that he could no longer pursue his inquiries, his scientific writings practically ceased. He was always loth to publish his lectures and speeches, usually prefacing the works by stating that he issued them only after much persuasion. Thus it cannot be said of him, as it was said of Hunter, that "He lives again in the vast stores of Knowledge left behind him." His work for posterity lay more in the teaching of sound doctrine and skilful practice to the multitude of students that passed through the Hospital during his long period as lecturer and teacher.

Throughout his career Savory had Sir James Paget as his immediate predecessor. It is possible that the greatness that he attained was to a certain extent due to this fact, for a man's character is determined largely by the standards he sets himself. In Paget's achievements there was the very highest degree of excellence, and even an industrious worker would have to be at his very best to avoid an appearance of failure in comparison. Yet Savory always enhanced the reputation made by his predecessors. This was well shown when he was Curator. He made it his duty to elaborate and develop as much as lay in his power the foundations of that great Pathological Museum laid by the care and toil of Pott, Abernethy, Stanley and Paget. Here again he showed that trait which characterized his dealings with other men and their labours—an intense admiration for all that came as the fruit of industry.

He lectured in Anatomy and in Physiology from 1859 to 1869, when he was appointed to the Lectureship in Surgery. This he held conjointly with Holmes Coote at first, and then with George William Callender, until the latter's death in 1879. His colleagues thereupon persuaded him to remain as sole Lecturer, which he did until his retirement in 1889. When Wormald became Surgeon to the Hospital on the retirement of Eusebius Lloyd in 1861, Savory was elected Assistant Surgeon, to be appointed Surgeon on Wormald's resignation in 1867.

* Besides helping with later editions Savory edited the fourth edition of *Kirkes' Physiology*, containing the material of Paget's lectures and now become *Halliburton's Physiology*.

He had opportunities to show his wonderful powers of statesmanship in his connections with the Royal College of Surgeons. In the days of great change his strong conservatism had a steadying influence on the more reckless of the reformers, though he never forced his opinion on anyone, and withdrew any opposition he held when he found that the majority voted for change. He was associated with the union of the Royal Colleges of Surgeons and Physicians in the Conjoint Scheme, and with the erection of their Examination Hall. He was a member of the Court of Examiners for fourteen years, and always showed a keen interest in problems of education and curriculum. The rule that the business of the Committee of the Conjoint Board should be adjourned at 10.30 p.m. has its origin in the attempt to curtail the very lengthy discussions between Lister and Savory on the respective merits of the English and Scottish systems of medical education. He once wrote an indignant protest to the *Lancet* when the suggestion was made to increase the time necessary for study before qualification by raising the standard of the examinations and thus causing a greater number to fail. He said this was both unfair to the candidate and failing in its purpose to increase knowledge, and proposed the extension of the period to five years, which was eventually the time decided upon.

He was elected a member of the Council of the College of Surgeons in 1877, Vice-President in 1883 and 1884, and President the next year. This period was one of the most critical in the history of the College, and a man was needed who could exert great powers of patience, foresight and wisdom. About this time the long fester of grievance between the ordinary members and the Fellows had come to a head, and Savory had to control many stormy meetings. These even became violent and abusive almost to the point of blows, but by his calmness and uncompromising courage he safely guided their decisions in the right direction. He had the power to make an unwelcome adversary smart under the severe sarcasm of his eloquence, and was consequently the target of many of the attacks on the Council. As President he was the victim of an action-at-law against the Council concerning the funds of the College, but he emerged from the case victorious.

So greatly was his leadership appreciated that he was asked to remain President for the next year—a course unprecedented in the history of the College. He was President not only for that year, but also for the succeeding one, and for the year after that, so that for the four years 1885, 1886, 1887 and 1888 he held the highest position his profession could give him. He delivered the Bradshawe Lecture in 1884 on the "Pathology of Cancer," and the Hunterian Oration in 1887. In this latter year he was also appointed Surgeon Extraordinary to Queen Victoria. Three years later he was created a Baronet, and this signalled his retirement from active work, for he had also to resign his Hospital appointment on reaching the age-limit of 65, and he became a Consulting Surgeon. His retirement was marked by a reception in the Great Hall at the Hospital, where he was presented with a portrait in oils, painted by William Ouless, R.A. The portrait is on the south wall of the Great Hall, next to that of Sir James Paget. It fails in its representation of the commanding personality of the sitter, but the bust by Mr. Hope-Pinker, now in the same Hall, shows this to the full. Sir William Savory bought a house, "Woodlands," at Stoke Poges, Bucks, where he spent his retirement. The house remains in the possession of his grandson, Sir William Borradaile Savory. He still retained his connections with his profession, for he continued to serve on various commissions until his death.

II.

> "Like a man walking alone in the darkness, I resolved to proceed so slowly and carefully that even if I did not get very far I was certain not to fall."—*Rene Descartes.*

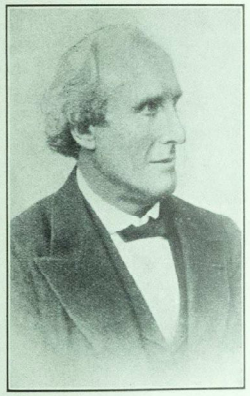
While he was Lecturer in Anatomy and Physiology, and Curator of the Museum, Savory began to be especially interested in the subject for which he has always been remembered.

Surgery had always been the most backward of the Medical Sciences. The nearest coasts of the "world of the infinitely small" had been but dimly seen in the far distance. No exploration was possible until the microscope had been perfected, and none had dared even to guess at the nature of its inhabitants and their relation to disease, especially to pyæmia and its close allies, septicæmia, erysipelas, tetanus and gangrene, which still baffled scientists as to their cause. Operations had become a matter of speed and strength of hand in order to shorten the agony of the hapless patient. Any success that may have been achieved on the table was always in danger of being snatched away by the evil harpies, Pain and Sepsis. The avenging Zetes and Calais did not arrive until late in history, when they came in the persons of William Green Morton, armed with Anæsthesia, and Joseph Lister, armed with Antisepsis. Of the two, Sepsis was the worse enemy of mankind, for the advent of Anæsthesia did not diminish much the appalling mortality, and for twenty years Sepsis continued to claim her victims. Savory spoke of this when he said in 1879, "It is not only an evil spread over the whole field of surgery—in what class of cases is its deadly presence unknown?—but it is, if not the sole one, almost beyond comparison the chief evil which

waits upon the surgeon's own work. It seeks its quarry not only in disease and accident, though here might be found scope enough for its powers of destruction, but it hovers over every operation, and by its fell swoop can destroy the best work and the fairest promise of the surgeon.

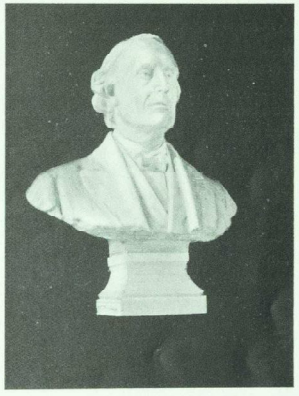
The head, thorax and abdomen bore the inscription, "*Noli me tangere*," and none dare disobey, save only as a last resource. Surgery was attended by dangers so great as to inspire in the general mind a horror unrelieved by any gleam of hope.

Joseph Lister, while Professor of Surgery at Glasgow University, began in the early fifties a study of the



problem. What was the cause of all this "wound fever" and this inflammation? He accused the hospital site on the old plague-pits, with the Necropolis nearby; he accused the smoke-polluted city air and strove to purify it. Then, by a happy chance, he was shown an article by Pasteur, at that time an obscure French chemist, on the "fermenting globules" which caused deterioration in wine. Then began the ruthless hue and cry for the malevolent microbe. The estimation of its powers for evil far surpassed any ideas held to-day. Dressings were stealthily changed, and the greatest precautions were taken to thwart the waiting enemy. At first Lister used the newly discovered disinfectant, crude carbolic acid, in undiluted solution, and many cases of carbolic poisoning resulted. Later he tried weaker solutions in water or in certain oils with more success. He invented a machine for enveloping the surgeon and patient in a spray of carbolic. With a complicated array of armour, Lister's "guards" of block-tin and his "donkey-engine" spray, with his glazier's putty, carbolized, and with his layer upon layer of carbolic gauze and oiled silk, an elaborate technique was evolved for the exclusion of the versatile germ. The principle was excellent and it revolutionized surgery, but the methods were cumbersome, and expert hands were needed for their effective practice. Less care was taken to decrease the chances of infection by strict cleanliness and free ventilation than to kill the microbe after it had arrived.

It was not unnatural, therefore, that Savory, brought up in the doctrine of Lawrence and Skey—that "Surgery



should not anticipate the course of Nature," and that "the best results are obtained by the simplest means"—should, on these grounds alone, regard the whole procedure with suspicion. He once said, "Disdaining to take any hint from her operations and to wait modestly upon her work, we, too often, I think, baffle Nature by a blind and mischievous activity."

But there were other reasons. Some years before the production of Lister's first paper in 1867, Savory had carried out careful experiments on animals relating to blood-poisoning. He injected separately "putrid fluid," fresh pus and an inorganic suspension (lead oxide), carefully noting the results. He decided that there were two causes of the local congestion and suppuration in pyæmia—a mechanical stasis due to embolism by suspended particles, and a change in the blood due to an admixture of the "morbid fluid" injected. Two months before Lister's publication he commenced a series of

articles in the same journal, the *Lancet*, on "Pyæmia."* In these, among other things, he discussed the possible relation of sepsis to what he called "zymotic diseases," such as smallpox and typhus, caused by a ferment-like agent. After weighing the arguments, he decided that sepsis was more nearly related to those diseases caused by inorganic toxins. He confused cause and effect, but it must be remembered that he worked at a time when bacteriology was absolutely unknown. In summing up his essay he hinted that at the root of the whole matter lay the need for cleanliness. He made the remark, very interesting in the light of modern aseptic methods, "To what extent pyæmia might prevail in spite of perfect cleanliness, we cannot tell, but it must be admitted that, when it appears, there has been too often neglect of due and proper precaution."

He himself had long advocated absolute cleanliness in the treatment of wounds, and this had a great effect in the lowering of the mortality from "wound-fever" in St. Bartholomew's Hospital. It is true, this cleanliness applied more to the wards than to the operating theatre. Although it was customary, even then, for operators, on entering the theatre from the dissecting rooms, to exchange their coats for clean ones hanging in the corner, Savory rarely did so, merely turning up the cuffs of his dissecting coat to operate. Even his initial washing of the hands was very superficial. He judged cleanliness by the absence of odours and dirt and the presence of sunshine and ventilation, as, for a time, he pooh-poohed the "germ theory" of Lister and the omnipotence of the microbe. Often he used to command anyone entering the theatre to "shut the door quickly, in case one of Mr. Lister's microbes walks in." However, as soon as he appreciated the value of antiseptics he did not hesitate to use them to a modified extent. It is interesting to discover that he kept his instruments in a solution of iodine, many years before the Antiseptic Era, more for fastidious reasons than anything else.

In 1879, in his presidential address to the Section of Surgery at the British Medical Association's meeting in Cork, he spoke on "The Prevention of Blood Poisoning in the Practice of Surgery." This was the last great stand against the Listerian technique. He defined antiseptic surgery as "the principle which aims to secure healthy wounds and their repair as speedily as possible by scrupulous cleanliness" not only in the common, but also the surgical sense. This was the only true surgery. He said that Lister's statistics were those of hospitals which had, before the dawn of antiseptics, been remarkable for gangrene and "hospitalism," where dirt and stench were not regarded as unusual in the wards. To illustrate his point he told of a German surgeon who, boasting of his scrupulous antiseptic cleanliness, said that he and his assistants washed themselves, very thoroughly, "at least once every day." Statistics should compare conditions in hospitals only differing in the issue at stake. Antisepsis was not the only reform in surgery the last decade had seen. He then proceeded to give a brief account of his own surgical technique. In order to compare it with that of the present day, it would not be out of place to quote it here at some length :

"Taking a case, say, of amputation through the thigh. . . . I would treat the wound in the way following. Having carefully arrested all hemorrhage, using most probably the carbolised catgut ligature, and having removed any particles of blood clot that may have lodged on the surface, employing only clean water or sponges just rinsed out of it, I should without any further interference with the surface of the wound, bring the edges together, adapting these as nicely as possible with silver wire ligatures. . . . Then over the course of the wound and for some distance on either side of it, I should place a layer of folded lint which had been well soaked in olive oil containing one part in fifty of carbolic acid. Over this again I would place two or more layers of dry lint either with or without cotton wool ; so arranging this as, by gentle and equable pressure to secure without any violence the accurate adaption of the surfaces of the wound throughout, avoiding thus any considerable cavity in the interior. I should secure all this by strapping or bandage, or both, so adjusting them that they may be removed with the least disturbance. I should place the patient and the wound in the most comfortable position possible, having special care to the fact that fluids, as they form, may flow outwards. As a rule I do not disturb this arrangement for forty-eight hours, although very often I change the dressing and inspect the wound after twenty-four. The dressings are removed with the utmost gentleness and the state of the wound carefully inspected. If it showed no other evidence than that of satisfactory repair, I should dress it as before and proceed in this fashion, dressing and examining it daily or less frequently according to circumstances. But if, at the first dressing, or at any time afterwards, the discharge became at all profuse or the surfaces did not remain in contact, or there was much tension or blush at the edges, I should forthwith substitute a bread-and-water poultice, and continue this until it least all the deeper portion of the wound had closed. When I dressed the wound I should wash it from the first with tepid water, containing some Condy's fluid or other potent antiseptic of the least irritating kind. I aim here at the utmost possible cleanliness having at the same time due regard to the avoidance of any unnecessary disturbances, that the process of repair be not interrupted, and withal I endeavour, by means I need not indicate, to secure for my patient the most complete rest and the purest air." It can be seen how little his procedure differed from that of the modern surgeon, considering the ignorance of bacteriology at that time, seventy years ago. Though it was infinitely better than the evil it avoided, the rigid antiseptic ritual of Lister was further away from the ideal than the milder method of Savory, yet they termed the latter an "elderly, bigoted surgeon" of the obstinate old school. Throughout the controversy, however, he stressed the fact that his opposition was directed, not against the aim, but against the detailed procedure. In his speech Savory agreed with Lister's principle, but said that, while in the days before Antisepsis they had sought the cause of blood-poisoning entirely within the body, now they were at the other extreme, and tended to deal with its effects without any reference at all to the patient or to Nature's own methods of overcoming disease. They had reduced Surgery to a mechanical routine, and the after-treatment of wounds, by a skilled inspection and judgment of their state, had been complicated by the tedious array of dressings. Was it a prophetic glimpse into the present day that made him ask, "Is it rash to affirm that the future practice of Surgery will be the most successful when it is carried on, not where Antiseptics are most largely used, but under conditions least in need of them"?

He had very good reasons for the faith within him. When Lister's new ideas first reached London, Thomas Smith, the St. Bartholomew's Surgeon, sent his junior, Mark Vernon, to Glasgow to study methods. He returned by the next train home with the report that the system was too complicated to be worth attention. A contemporary *Science and Practice of Surgery*,* quotes figures comparing the mortality at St. Bartholomew's, where Savory's modified treatment in antisepsis was carried out, with that of the Edinburgh Royal Infirmary and all its rigours of the Listerian technique. A very slight difference in favour of the latter was amply accounted for by its better surroundings and its much smaller practice. The writer continues, "These statistics (at St. Bartholomew's) show a noble amount of surgical success, and I do not hesitate to say, not many years ago they would have been considered incredible. . . . If Listerian antisepsis and healthy hygienic conditions in an hospital are thus about equally effectual in relation to aseptic wound treatment, then the influence of this method on the results of treatment under these favourable conditions must be almost *nil*." Even that redoubtable exponent of Listerism, William Watson Cheyne, in his book on *Antiseptic Surgery*, said that the only wound treatment which did not owe its virtue solely to interference with bacteria, and which was extensively used, was "Mr. Savory's favourite bread-poultice dressing."

Since the origin of Antisepsis many other reforms had been instituted which made for better results in Surgery. The old practices such as "bleeding," "cupping," and the application of leeches, had been largely replaced ; careful sanitation and skilled nursing, with the improvement in post-operative treatment, the better education of surgeons, and their intense rivalry for good results, all worked together for good. Though Antisepsis played by far the greatest part in the introduction of the New Surgery, its effects were not as tremendous as its adherents claimed at first.

Men at the head of the Profession like Sir James Paget, George Callender and Sir James Simpson held views similar to Savory's, but not so actively hostile. Lawson Tait, the Birmingham gynæcologist, said he "got as good results as anybody with simple soap and hot water"! In 1879, in an Abernethian Society debate,* the House Surgeons decided that the Listerian technique, greatly modified from that first evolved, probably yielded the best results in those operations concerned with the abdomen and with joints, as well as in the treatment of compound fracture, but that in most other cases the rest given by Savory's methods made for quicker recoveries.

Savory was in error in his vigorous opposition to Lister, but his error was one of pure judgment, and his mind was never swayed by prejudice or passion. The reasons for his stand were excellent and its results justify him, but he failed to see that the fault of too great a zeal was far better than the evil of a foe so deadly in its grasp. He said himself, "The only sure test of a genuine and thorough belief is the work which comes out of it," and if he had waited to allow the first mistakes to disappear by an experience of trial and error, it might have been a much longer time before the ideal was attained. The law, "By their fruits ye shall know them," holds for methods as for men, and had not Savory stood out against the early fallacies of the Listerian routine, the growth of modern Aseptic Surgery might have been long delayed.

III.

"Life is not as idle ore,
But iron dug, from central gloom,
And batter'd by the shocks of doom
To shape and use."

Savory as a Surgeon was held in excellent repute by his contemporaries, for his results were a good deal

* *Lancet*, 1867, vol. 1.

* Gant's *Science and Practice of Surgery*.

* *St. Bartholomew's Hospital Reports*, 1880.

better than most in his day. This was mainly due to the care with which he chose his cases and to his skilful post-operative treatment; he always preferred to "dress" his own patients personally. In contrast to Sir James Paget, who had been restrained throughout his earlier professional career by the shackles of a family debt, and who was thus compelled to pay careful heed to the financial side of his work, Savory soon freed himself from monetary anxiety and was able to work as he willed. For a period his emoluments surpassed those of any in those days.* He was very fortunate in having as a close friend a prominent member of the Stock Exchange, who wisely directed him to many profitable investments. Thus he could confine his work to the Hospital, and he never sought private practice. He could hardly have kept pace with the labour this would have entailed had he done so, for much of his time was occupied with administration, such as that at the Royal College of Surgeons.

As an operator he never achieved any great renown *in aura popularis*, for he regarded dexterity in a surgeon as only occupying a place behind those of skill in diagnosis and success in treatment. Though he could not conceal his contempt for the ostentation of the "showy" surgeon who operated intent upon gallery applause, he never failed to appreciate the skilled excellence of contemporary operators like Fergusson.

He was ambidextrous, but he preferred to operate with his left hand. Lithotomy cases, returning to the wards for other ailments years afterwards, could always be recognized as "one of Savory's" from the angle and position of the incision.

He maintained the reverence of the older school of surgeons for operations involving the abdomen and peritoneum. As his early researches prophesied in his published papers, his chief interest and repute lay in operations on the peripheral blood-vessels. In ligaturing an artery in its continuity and in the surgical treatment of varicose veins he had few equals. However, admirers exhibiting his skill to friends from other hospitals preferred a Symes' amputation as his *coup de maître*.

In the wards his methods were very thorough, and called for the best from his assistants. As a clinical teacher he was unpopular with those who preferred to stand and listen to a wise and wordy discourse on a case, than to exert the extra concentration in watching carefully the methods and actions of their teacher. Once, when he had to give a lecture on Clinical Surgery in a theatre, he compared learning Surgery away from the bedside with learning to ride without a horse. Like Lawrence, he spoke very little in the wards, his only words being questions or instructions about the line of treatment to the sister or house surgeon. He would have proved an excellent illustration of Mr. Bernard Shaw's rule, harsh and often not true, "He who can, does—he who cannot, teaches." The student who took the pains to follow his actions and methods learnt more than any discussion or harangue could have taught him.

He disliked all work performed under the tyranny of that monotonously wearisome taskmaster, Routine, which he regarded as requiring only the inferior faculties of man's wisdom. However, when work of this nature was essential, as it so often is in hospital practice, he was the first to see that it was done, and well done too. Again, his irritation sometimes showed itself in the thankless task of teaching the most elementary principles of Surgery to a quotennial brood of new Dressers which was, for the most part, of a disposition foreign to his love of well-applied industry. To those who were prepared to attain the summits of Knowledge by sheer effort he showed deep sympathy and interest. "The path to any height," he once said, "is either steep or gradual." He fully appreciated the toil of pilgrims on that road, but he could hardly conceal his impatience with the dunce or the charlatan, the idler or the fool. It was only from these that he obtained the reputation of being harsh and unyielding. Actually he was regarded as very tolerant and forbearing by those who had to work under him, provided they were keen. Once he was discussing the question of allotting beds with a new Assistant Surgeon, and he said, "Well, take what you like, and if we find that is not enough let us talk the matter over again." Such consideration for his juniors was repaid by his great popularity with them, and a testimony to this was the presentation, on his retirement, of a bust of himself, carried out by Hope-Pinker, to which his thirty-five past House Surgeons subscribed.

As an Examiner, Savory was held in great reverence, and he had a reputation of expecting too high a standard of his candidates. This merited the writing of a "Lay" in the Hospital JOURNAL which commenced—

> "Bill Savory of Bartholomew's
> By Scarpa's Scalp he swore
> 'Of five and twenty candidates
> I will pluck twenty-four . . .'"

But again, the student who knew his work well had little to fear. Unlike his contemporaries Hulke and Holmes, who would allow the wretched fellow to plunge deeper and deeper into a Slough of Ignorance of his own making, with inscrutable faces and their quiet, terrible "Go on; what else?" Savory quickly showed signs of satisfaction or displeasure. Of all the devices employed by candidates to placate judges, he most despised an appeal expressed or implied for pity. "I would rather," he said, "be 'plucked' at once than make an appeal *ad misericordiam*."

Though he had little fame as a bedside teacher, as a lecturer he was renowned throughout his profession. He had the great honour paid him of having ordinary lectures attended through more than one Session by eminent lecturers from other Medical Schools. He lectured for more than thirty years in three of the most important subjects of the Medical Curriculum—Anatomy, Physiology, and Surgery. He always insisted on a thorough groundwork in the Natural Sciences, esteeming them fundamental to successful practice. In one of his Introductory Addresses he lays stress on the need of this. "He alone can become a sound and successful practitioner who has been a diligent student of those sciences which investigate our structure and functions in their healthy and natural state. We must know what we are before we can profitably investigate what we may become." On so high a plane did he place these preliminary Sciences that he never lectured without studying his matter most carefully or without the support of his own researches, for he greatly disliked imparting Knowledge that came "second-hand." Each of his lectures was an oration in itself, laboriously prepared and beautiful in composition. When occasion required he could use irony, wit or satire to the fullest advantage.

In oratory he occupied a position in the eyes of his profession beside that of the great Paget himself. Conscious from very early years of his gift, he studied the art with an assiduity that was worthy of one destined for the vocations where eloquence was an essential. While still a Medical Student he was a constant visitor to the Houses of Parliament, City Churches and the Law Courts, where he acquainted himself with the style, delivery and fluency of all the greatest speakers of his day. He also took the pains to be trained in public speaking by an eminent West-End divine, a Mr. Bellew, renowned for his great gifts of rhetoric. A great part of his spare time was spent in training and improving his skill and his attainments. In these days, when the work that should be done is always greater than the time in which to do it, when leisure has to be made as much of a duty as eating and sleeping, when work laid aside means work never finished, the constant study and patience that is needed to cultivate such a gift as eloquence has to be foregone. Oratory is rapidly becoming a lost art, and even in the Pulpit, in Parliament or at the Bar the really fine speaker is rare. We may never see again the equals of Spurgeon, Gladstone or O'Connell.

Many opportunities were present for comparing Savory and Paget, for their speeches were often consecutive. They showed as great contrasts as could reasonably be seen in two such men. Paget, with his soft, musical voice and every word clear-cut and calm, carefully chosen beforehand, was only the faultless vehicle of his message. His attitude and action were simple, and sentence after sentence came out as it were involuntarily. The beautiful cadences of his delivery could be recalled even in the reading of his speeches, and his point was gained more by the force and clarity of his material than by the personality of the orator. On the other hand, the reader loses much of the powerful energy of Savory's art, for it lay more in the man than in his matter. Yet his speeches, even in cold print, impress one by the logic of his conclusions, which often lead the reader *gradatim* until he has turned his back on his primary object and is moving in an entirely new direction. Many were the occasions that Savory entered a discussion opposed by his entire audience, to leave it with a vote in favour of an opinion of his, originally regarded as eccentric. He had an excellent treasury of apt simile, and his aphorisms show a wisdom worthy of a greater recognition. But it was his whole delivery, his impressive manner and his measured periods that carried most weight with his hearers. He carefully watched the response to his words, and then used his expression and actions as the Sweet Singer used his harp. His great speech at Cork, long referred to as the "Swan-song of Anti-Listerism," was a masterpiece of persuasion, worthy of some great Mark Antony, pleading for a lost cause.

He twice delivered the Introductory Address to the new students, in 1860 and 1866. This was a duty of great responsibility, for on it very often might depend the future course of a few at least of the students. First impressions are always the most profound, and an ambition, prejudice or inclination first formed is the hardest to obliterate. Savory had to portray to each one of his varied audience such a panorama of the beauty and majesty, privileges and obligations of their calling that even the most indolent in nature should be turned by the vision into the narrow way of diligence and probity. No description could reveal as much of his loftiness of outlook and his depth of wisdom as his own words. A few concluding paragraphs from his first address are typical:

"Gentlemen, Life is before you. If Anticipation, the enchantress of Youth, could by a touch of her bewitching wand disclose to your view the future of your lives; could you, as you are, see what you might become, there need be no misgivings of the course you would pursue. But what is now all mist and shadow,

* For the year 1880–1881 these exceeded £2000—a very large sum in those days. On his death he left a "gross personality" of £93,000.

Time the great magician will soon, too soon, reveal: so soon, that before this session will have passed, it may not be impossible to discern the destiny of many amongst you. Your choice is still free, but you have no hours to spare. Though that alone were not inglorious, there are far higher motives to industry than mere worldly advancement. Industry will ensure Knowledge, and Knowledge is excellent for its own sake. The Knowledge that you will acquire is most excellent and useful. Most useful to yourselves, for it will, if rightly employed, enlarge every faculty, exalt the understanding and ennoble your whole mind. Nay more, the study of the last of Nature's works should teach the truest wisdom; for this transient structure tells, in every stage it undergoes, of a life Elysian for the spirit it enshrines. And lastly, though not least, most useful to others, for the aim and end of your work is to do good, 'to give a true account of your gift of reason for the benefit and use of man.'

"All is before you. Difficulties and disappointments you must inevitably encounter. They may dishearten for a while but they cannot destroy you. There are no conditions so hard, no circumstances so opposed that they will not yield to the labour which overcomes all things.

"Work is before you. No matter how far he may be removed from the necessity of labour, no man can be at once idle and virtuous. Industry is essential to happiness in the life that now is. In the present time there can be no real pleasure apart from it, and the retrospect of a life well spent is the sole means of securing peace when we most need it. The faint and obscure traces of truth that we may here discern are indeed but the shadows of revelations to come. Yet if now we can only see through a glass darkly, hereafter we shall be face to face. If now we are permitted to know only in part, then shall we know as also we are known.

"Life is before you!
A sacred burden is the life ye bear,
Look at it, lift it, wear it solemnly;
Stand up and walk under it steadfastly:
Fail not for sorrow, falter not for sin,
Onward and upward, till the goal ye win;
God guard ye and God guide ye on your way
Young pilgrim warriors who set forth this day."

Savory delivered the Bradshawe Lecture at the Royal College of Surgeons in 1884 and the Hunterian Oration in 1887. The latter, delivered before an audience well trained in criticism, was classical both in its purity of style and in the nature of its material. It was spoken without a note. Only four other men have ever had the ability or courage to accomplish such a feat before such an audience—James Paget, Henry Butlin, Henry Power and Berkeley Moynihan. Even Paget was nervous enough to keep his notes at hand in his pocket, though it was not found necessary to use them. It was on this occasion, fifty years before, that Lawrence so incensed his hearers that he was forced to stop, and then continue his oration after the famous remark, "When the geese have ceased their hissing, I will resume."

Savory dealt with the somewhat hackneyed subject in a manner that was as unique as it was masterly. He spoke of the great latitude of Hunter's ange of study, and used this as a *point d'appui* for an attack on the growing tendency, even at that time, to over-specialization in the many departments of Medicine. Hunter strove by his collection of all manner of heterogeneous detail to master the whole subject, and then only did he feel competent to concentrate on the single aspect of it that called for his immediate interest. Many were attempting to become merely anatomists, physiologists, aurists, ophthalmologists, and all the rest, without any Knowledge of the whole subject. This was a favourite theme of Savory's, and showed his justifiable reluctance to accept any radical change from the old order that called for less industry.

Though he did not prepare his speeches to such a degree that he had learnt by heart whole portions after the manner of Paget, he would always, if he could, write out his address as an essay, to obtain an orderly sequence of thought. He had, however, a command of extemporaneous speech that proved invaluable in debate or argument. He never raised his voice in anger, or lost control of his temper, but was always uncompromising in his attitude to what he thought was contrary to sound practice. "He argued only for Truth and could never be seduced by a desire for victory or self aggrandisement." The axiom of the historian Froude, that sincerity and fine oratory are incompatible, proves false in Savory's case.

He only published one book, and even that consisted of the substance of four lectures, *On Life and Death*, delivered before the Royal Institution in 1863. The Lectures consist mainly of an application of the principles of physiology to current ideas on philosophy and metaphysics. They show the speaker's diffidence in dealing with a subject that he spoke of as being almost "beyond the realm of man's wisdom and experience." The very wide range of Savory's reading is also displayed in the essay, for he quotes from writers that included all the foremost thinkers and experimenters of his time, both British and foreign. The book is of great interest in the study of the man's life and character, not only as revealing his ideas on subjects more or less outside the range of his profession, but also as giving a glimpse into a part of that life that was usually concealed by the heavily barred door of an intense reserve—his religion.

One quotation from this book shows how he related his life-work, Science, to his faith: "Natural laws are not analogous to human laws. No one can for a moment imagine that the Creator is bound by any law; but in recognizing the Divine plan to have been throughout perfect and complete, we understand why it is immutable. The term 'Law of Nature,' then, is only an expression of the uniformity observed by the philosopher in the phenomena of the Universe. The Law of Nature is the Will of God." A sincere Christian, Savory was too honest and transparently truthful to take part in that hypocrisy of outward show that was in some measure a characteristic of so many of the "religious" in the Victorian age.

William Savory made no startling discovery in the popular sense of the term, but the value of a life does not depend on any single act or method. The chief merit of his work lay in the fact that it was unobtrusive, for he was modest to a fault, and shunned all appearance of advertisement. It is said that he would even have refused his Baronetcy if he had not had a son.

His character can be estimated by a study of his whole life, noting an ability in this or that direction, better than by a mere expression of opinion. He was very highly strung and almost painfully sensitive. This caused those who met him to think of him as austere and unsympathetic, but his intimate friends knew the reason and made allowances for his extreme modesty, so graceful in one with such great endowments. He was a man of superlatives, capable of intense feeling, very retiring, but rather too readily swayed by sudden likes and dislikes, though he was always extremely loyal to his associates in any difficulties of theirs. It was in accordance with his sensitiveness that he should be roused by things that most would regard as too insignificant to notice. He never, however, allowed his opposition to a principle to change his regard for its supporter, or a dislike of an opponent to obscure his judgments of the merits of the case. This was especially noticeable in his opposition to Lister when he said, "I know that in a greater issue—the advance of Surgery—we are heartily together; and, with unfeigned diffidence in my own judgment, I have yet another consolation in the assurance that, if I am in error, these words of mine, even from this place, will prove no obstacle to the progress of Truth." Tempted by no seductive theory into undue haste and hardly ever lost in an unsound conclusion, his opinions were regarded by friend and foe alike as worthy of the closest attention, and he had a genius for revealing the flaws in an argument or theory.

In private life Sir William Savory was a different man, for his reserve almost disappeared in an environment where he was understood and appreciated. He was genial at home, full of quiet fun and banter, though he rarely allowed the physical side of amusement to master his features. Sir D'Arcy Power says that he never once saw him laugh, and that even a smile was unusual. The anxiety or illness of a friend elicited from him the fullest sympathy, while sickness in a near relative drove him almost to the verge of panic. His reserve was such that his intimate friends were few, but these all boasted of a loyalty and a devotion that many would envy. Henry Power, Ophthalmic Surgeon at St. Bartholomew's, and the father of Sir D'Arcy Power, and John Whitaker Bulke, Senior Surgeon at the Middlesex Hospital, were the closest of these friends.

He married Louisa Borradaile in 1854, and had only one son, Borradaile, who was to continue his father's association with the Hospital by becoming Rector of St. Bartholomew's the Great; he was concerned in those excavations and restorations that have made the old church a place of such historical interest. The family lived at first at 13, Charterhouse Square, adjoining Smithfield Market, as the Hospital authorities required Assistant Surgeons to reside within easy call. The house still stands, on the north side, one of a group between the two gates of the old Charterhouse, but it has been sadly "refaced and renovated," converted, alas, into "Somebody's Hotel." On Savory's promotion they moved to Stanley's old house at 66, Brook Street, Grosvenor Square, which is also standing. The small family was a very happy one, and Savory spent every moment he could at home. Holidays were never spent far away from the scene of his life and labours, but usually at a Rectory in Uxbridge, where the time was spent "just pottering about." This is another contrast to Sir James Paget, who spent his holidays touring the cities of Europe with his large family retinue, which a *douanier* used to call *toute la caravane*.

Savory had an ideal partner in his wife, and his home was one where he could obtain just that sympathy and refreshing quiet that was very necessary in a life so busy and full of anxiety as his. But in the chiaroscuro of life, it takes the shadow of tragedy to accentuate the splendours of true joy. In 1867 he contracted blood-poisoning from a case he was examining. He passed through the severest illness of his life. His wife, in dressing his poisoned finger, fell a victim to the same dreadful disease and succumbed, leaving her husband distraught. After this he was always quieter and even more reserved than before. His loneliness seemed accentuated by the great empty house in Brook Street, where he lived until his retirement.

His remaining years were spent at Stoke Poges and, after a life of such powerful vigour and intellectual activity, it must have been hard to settle down to the

leisure and repose of retired life. But the sky was already touched by the colours of sunset and night came after a day of fierce heat, not with the long slow twilight of our northern summer, but with the sudden swiftness of the tropics. His friend John Whitaker Hulke had just died of pneumonia, and this death strangely affected Sir William. He spoke even of a sense of premonition that he would be the next to go. He had already complained of cardiac oppression and breathlessness, and was being attended by Dr. Habershon and Dr. Pavy, whose daughter had married Borradaile Savory. He became gradually more depressed and he kept to his room. He remarked to his daughter-in-law on leaving his study for the last time, "I may say good-bye to it, as I shall never see it again." Influenza and bronchial catarrh supervened, and Sister John was summoned from St. Bartholomew's to nurse him. There was extreme weakness, very little sleep, and much restlessness in body and mind. He only once complained of this apprehension and anxiety when he answered a remark about his uneasiness, "Ah, Habershon, this restlessness is but the conflict of Disease with the constitution. If the constitution gains the mastery, the end is peace, and if Disease conquers, the end is also peace, but it is the peace of death." His was to be the second peace, for these were almost his last words. Profound collapse followed a slight rally, and he passed away on March 4th, 1895, maintaining right to the end that unusual possession of mental power which had characterized his whole life. D. W. MOYNAGH.

LIST OF WORKS BY SIR WILLIAM SAVORY.

Published separately.

PAMPHLETS.

1852. *Polypus of the Urinary Bladder.**
*Observations on the Structure and Connections of the Valves of the Human Heart.**
1853. *Cases Illustrating the Use of Chloroform in the Treatment of of Hernia.*
1856. *Case of Complete Obliteration of Arteries of the Upper Extremities and of Left Side of the Neck.*
1857. *On the Relative Temperature of Arterial and Venous Blood.**
1858. *Experimental Inquiry into Effect upon the Mother of Poisoning the Fetus.*
1859. *On the Shape of Transverse Wounds of the Blood-Vessels in Relation to their Physiology.*
1860. *Introductory Address to Students at St. Bartholomew's Hospital.**
1861. *Relation of the Vegetable and Animal to the Inorganic Kingdom.* A Lecture at the Royal Institution.
Ditto. An Abstract.
1862. *On Motion in Plants and Animals.*
1864. *On Dreaming and Somnambulism in Relation to the Function of Certain Nerve-centres.*
1866. *Introductory Address to Students at St. Bartholomew's Hospital.*
1867. *The Life of Sir William Lawrence.*

BOOKS.

1863. *On Life and Death: Four Lectures at the Royal Institution.**
1884. *The Bradshaw Lecture on the Pathology of Cancer.**
1887. *The Hunterian Oration.**

* In the Library of St. Bartholomew's Hospital.

"THE MOON WAS GOOD."

HE had been a commercial traveller; one
Who all his life in wet and fine had gone
From shop to shop in town and countryside
To represent a hardware firm. He plied
Much to-and-fro in slow provincial trains,
Which jolt your limbs and jog to sleep your brains;
Though since the war he had travelled more by road,
Driving an old Ford van. He and his load
Made circuit of a score of little towns
And scattered villages deep in the downs.
Well known he was (but count it not a sin)
At many a wayside hospitable inn
That travelling men frequent. Until one day
He sickened, felt suddenly old and lay
Supine in hospital; only his eyes
Moved restlessly in anxious slow surmise.
I got to know him then. Though he was ill
His face above the sheet shone jovial still.
And still he loved to talk, so bit by bit
From listening to the drolling of his wit
I pieced together half a century's tale
Of life lived zestfully in hill and dale
And little market towns. One day he said,
Dropping his voice until I bent my head
To hear, "The moon was good last night." (I knew
That where he lay he saw a patch of blue
Above the neighbour-roof.) The moon was good!
How hard it was in words to match his mood,
To sympathize! That was the last he saw
Of moons; it waned, and he had died before
The next moon rose. 'Twas left to strangers then
To bury him.
He seemed to other men
A red-faced, friendly, tedious little man,
Who more than forty years ago began
To drink himself to death. Only I guessed
A sense of beauty not to be expressed
That lay in him. . . . that even a summer night
Had moved his soul to solemn strange delight;
To see the sweet, the solitary moon
Toss through the foam of pale-lit clouds and swoon
Faint in the west as haunting daylight came.
I guessed—but have forgotten quite his name.

C.

ABERNETHIAN SOCIETY.

A meeting of the Committee of the Abernethian Society was held on Wednesday, July 6th, with the President, Mr. Kersley, in the Chair.

The election of officers for the coming year resulted as follows:
Presidents: G. Kersley, J. Molineux Jackson.
Vice-Presidents: J. H. Hunt, J. McGavin.
Hon. Secretaries: A. W. Leishman, J. Owston.
Extra Committeemen: C. H. Harris, A. Innes.

A vote of thanks was passed to R. E. Fawcett for his services as President to the Society during the past year.

STUDENTS' UNION.

CRICKET CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD LEYSIANS.

Played at Winchmore Hill on Saturday, June 25th. Won.

We won the toss and batted first on a fast wicket. Boney and Wade opened, but Wade was lbw in the first over. Rait-Smith and Boney then batted confidently and runs came freely, both completing 50 before lunch. The partnership realized 132 before Rait-Smith was caught, having made a very good 63, including nine boundaries. Boney continued to bat really well and completed an excellent century (108), the first for the Hospital this season. Mundy played well for 24, and our innings closed for 235, leaving our opponents two and a half hours to get the runs.

They started well, putting on 40 for the first wicket, but wickets fell steadily owing to good bowling by Mundy and Hay-Shunker (81 for 7 wickets). Bach then made a stand of 41 not out, but eventually all their wickets fell with 6 minutes to go. This was largely due to the fine bowling of Hay-Shunker, who took 5 wickets for 52 runs.

Scores: St. Bartholomew's, 235; Old Leysians, 156.
Team: J. B. Bamford, A. R. Boney, R. Mundy, C. L. Hay-Shunker, B. Rait-Smith, G. V. Wade, J. D. Wilson, R. C. Dolly, W. M. Maidlow, W. T. Ross, J. Berry.

ST. BARTHOLOMEW'S HOSPITAL *v.* KING'S COLLEGE, LONDON.

Played at Winchmore Hill on Wednesday, June 29th. Drawn.

Six members of the 1st XI were absent. We lost the toss, and King's batted first and lost 4 wickets for 55, but Anderson and Jayewickreme then both made 50, and the side eventually made 212. Dolly bowled well, taking 5 wickets for 67 runs. They left us two and a quarter hours for our innings, and we started badly, losing 3 wickets for 26. Mundy and Wilson then batted very steadily, putting on 100 runs, Wilson making a good 53. We then hit out, Mundy still in, making 40 in the last 20 minutes to complete an excellent 100 not out. We just failed by 6 runs with 2 wickets in hand.

Scores: King's College, London, 212; St. Bartholomew's Hospital, 207 for 8 wickets.
Team: J. B. Bamford, R. Mundy, B. Rait-Smith, G. V. Wade, J. D. Wilson, R. C. Dolly, C. M. Dransfield, W. M. Maidlow, R. C. Walsh, J. D. Powell, W. A. Owen.

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

Played at Winchmore Hill on Saturday, July 2nd. Won.

We won the toss and batted first. Boney, going in first, batted very nicely for an excellent 82, which included eleven fours. He was seventh out, and received support from Hindley (25) and Mundy, who hit hard for a good 30. Dransfield, 21 not out, and Fulton, 18, were the other main scorers. We made 242.

Mundy and Wade then bowled practically unchanged and dismissed St. George's for 158, Hunter, making 53, being their top scorer.

Mundy took 6 wickets for 59, and Wade 4 wickets for 81.

Scores: St. Bartholomew's Hospital, 242; St. George's Hospital, 158.
Team: A. R. Boney, R. Mundy, R. Rait-Smith, G. T. Hindley, G. V. Wade, J. D. Wilson, F. H. Masina, C. M. Dransfield, W. T. Ross, I. N. Fulton, J. D. Powell.

SEMI-FINAL OF THE HOSPITAL CUP.

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

Played at Winchmore Hill on Thursday, July 7th. Won by 20 runs.

For the second time this season we had our full side out.

Nunn lost the toss, but Guy's put us in. Nunn and Boney opened; both started confidently. At 27 Nunn was bowled by a very good ball from Lewis just when he looked set, and Wedd hit a six before being bowled by a ball that kept very low. Wade, however, batted very nicely for 40. Soon after lunch we had a very heavy downpour of rain, which held up play till 4.30. Our last 3 wickets fell quickly, leaving a total of 132. The ground now was very wet. Guy's started very slowly and wickets fell steadily, Mundy and Hay-Shunker bowling well; they were well supported by some good catches. When Guy's were 62 for 7 wickets they decided to hit out, and runs came more quickly till they were 94 for 8 wickets. The end came with a good catch in the slips by Wedd off Mundy's bowling, and we won an exciting game by 20 runs.

We now play St. Thomas's Hospital in the Final for the third consecutive time.

Scores:

ST. BARTHOLOMEW'S HOSPITAL.

Boney, c Cameron, b Alexander	13
Nunn, b Lewis	19
Hindley, b Alexander	14
Wedd, b Lewis	11
Gabb, b Payne	19
Wade, not out	40
Mundy, b Whitteridge	3
Rait-Smith, b Lewis	4
Wilson, b Whitteridge	2
Hay-Shunker, c Whitteridge, b O'Shea	1
Bamford, lbw, b O'Shea	0
Byes, 1; leg-byes, 5	6
Total	132

GUY'S HOSPITAL.

Ridsdale, c Nunn, b Mundy	12
Lewis, c Gabb, b Hay-Shunker	10
Devan, b Hay-Shunker	1
Staines, c Gabb, b Mundy	1
Doherty, c Wedd, b Mundy	11
Alexander, c Hindley, b Wedd	6
Outfin, b Mundy	18
Cameron, c Wade, b Hay-Shunker	18
Whitteridge, c Wedd, b Mundy	23
Payne, b Wedd	4
O'Shea, not out	5
Byes, 1; leg-byes, 2	3
Total	112

Bowling: Hay-Shunker, 3 for 31; Mundy, 3 for 32; Wedd, 2 for 26.

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

Played at Winchmore Hill on Saturday, July 9th. This was a half-day game. Drawn.

We won the toss and batted first. Runs came quickly on a fast wicket. Boney 36, Wheeler 23, Masina 26, all batted well. Gabb played a very sound innings, hitting the ball hard in making his 71. He had good support from Rait-Smith, when runs were wanted quickly, who hit seven fours in his score of 37 not out. Nunn declared at 232 for 5 wickets, leaving them a sporting chance to score the runs.

Hornsey started badly, and wickets fell at regular intervals. They took no risks and batted slowly, and with one over to go before time they were 127 for 8 wickets. With the second ball Wedd bowled their No. 10. Their last man in survived the last four balls. Wedd took 4 wickets for 24 runs.

Scores: St. Bartholomew's Hospital, 232 for 5 wickets (dec.); Hornsey, 129 for 9 wickets.
Team: J. A. Nunn, W. H. Gabb, J. B. Bamford, G. D. Wedd, A. R. Boney, C. L. Hay-Shunker, B. Rait-Smith, G. V. Wade, F. E. Wheeler, F. H. Masina, R. C. Dolly.

ST. BARTHOLOMEW'S HOSPITAL *v.* SHOEBURYNESS GARRISON.

Played at Shoeburyness on July 16th. Won.

We lost the toss and were put in to bat on a very fast wicket in perfect weather.

Wade and Wheeler opened, and put on 23 before Wade was caught behind the wicket off their fast bowler. Boney never looked comfortable and was well caught in the slips. Wheeler was batting very well and scoring quickly; he made his 50 after batting an hour. He hit the ball hard and never gave a chance. Gabb, at lunch, was 37 not out, and then continued to give an excellent display of batting, reaching his century in an hour and half. In Gabb's total of 138 not out he hit no less than one six and twenty-two fours. Wedd,

who made 74 in forty minutes, hit very hard. Hindley made 36 not out in thirty minutes. Gabb declared the innings closed with our total at 355 for 4 wickets. These runs had been made in two hours and fifty minutes—a very creditable performance. The Garrison were left with three hours to get the runs.

Hay-Shunker and Wedd opened the bowling, both bowling well. Hay-Shunker was very unlucky not to get more wickets. Capt. Nightingale and Major Rossiter both batted well. The result was never in doubt, and we dismissed the Garrison for 161 with fifty minutes to spare.

St. Bartholomew's Hospital.		Shoeburyness Garrison.	
Wheeler, c Godby, b Jordan	70	Parkinson, c Hindley, b Wedd	15
Wade, c Slater, b Godby	6	McEvoy, b Wedd	1
Boney, c McEvoy, b Jordan	11	Nightingale, c Hay-Shunker, b Gabb	43
Gabb, not out	138	Godby, c Bamford, b Gabb	14
Wedd, c Parkinson, b McEvoy	74	Jordan, st Bamford, b Gabb	7
Hindley, not out	36	Rossiter, c Gabb, b Wade	46
		Bowler, c and b Hay-Shunker	1
		Stewart, c Hindley, b Gabb	28
		Harrod, st Bamford, b Wade	0
		Lyons, c Hindley, b Wade	3
		Slater, not out	0
Byes, 10; leg-byes, 8; no-balls, 2	20	Extras (wides)	3
Total (for 4 wkts. dec.)	355	Total	161

Rait-Smith, Kirkwood, Hay-Shunker, John and Bamford did not bat.

Bowling: Gabb, 4 for 20; Wade, 3 for 26; Wedd, 2 for 50; Hay-Shunker, 1 for 53.

Final of the Hospital Cup.

St. Bartholomew's Hospital *v.* St. Thomas's Hospital.

Played at Winchmore Hill on July 22nd and 23rd. Won by an innings and 96 runs.

Scores: St. Bartholomew's Hospital, 448 (Boney 120, Gabb 101, Nunn 53); St. Thomas's, 1st innings, 200 (Bartley 74); 2nd innings, 152.

Nunn won the toss and we batted first on a fast wicket. Boney and Hay-Shunker opened for us, the latter having a *viva* in the afternoon. 37 runs were made before Hay-Shunker was bowled. Nunn then joined Boney and runs came at a good rate. Both were undefeated at lunch when the score was 142 for 1, Boney being 70 not out and Nunn 43 not. Nunn completed an excellent 50. Soon after, however, he was caught in the slips, the partnership realizing 120 runs. Boney continued to bat well, playing a very valuable innings and completing his second century of the season. Wade hit hard before being caught. Gabb and Boney then put on 50 in 30 minutes before Boney was well caught in the slips, having played a magnificent innings and helped to put on 250 runs. Wedd was out to a good catch on the leg side by the wicket-keeper. Wheeler then joined Gabb, both playing good cricket. Gabb hit hard. Rain then fell heavily, and play was eventually abandoned for the day, the score being 333 for 5 wickets, Gabb 77 not, and Wheeler 17 not. Next day Gabb completed his hundred, including fourteen fours—a delightful innings. Wheeler continued to play well before being stumped for a good 39. The remaining batsmen went for the bowling, leaving St. Thomas's 40 minutes' batting before lunch, during which time Hay-Shunker bowled Pearson with a very good ball. Bartley offered resistance in making 74. Gabb (3 wkts.), Hay-Shunker, Mundy and Wedd (2 each) bowled well. The side were out for 200 at 5.15. St. Thomas's going in a second time were 248 behind. Nunn changed the bowling frequently, Hay-Shunker bowling very well before he slipped and sprained his ankle. They were 32 for 6 wickets when Milligan came in and played a real captain's innings of 84 not out. We went on playing till 8.0 p.m., Nunn taking the last four wickets, the side making 152. Thus we won by an innings and 96 runs.

We were very pleased to have the support of Mr. Boyle on Friday and Saturday, and Dr. Shaw and Prof. Kettle on Saturday.

St. Bartholomew's Hospital.

C. L. Hay-Shunker, b Milligan	6	G. T. Hindley, c Light, b Smith	14
A. K. Boney, c Hunton, b Milligan	120	B. Rait-Smith, c Smith, b Schilling	13
J. A. Nunn, c Bartley, b Schilling	53	R. Mundy, c Smith, b Schilling	17
G. V. Wade, c Winkworth, b Maling	21	J. R. Bamford not out	5
W. H. Gabb, c Light, b Schilling	101	Byes, 46; leg-byes, 7; wides, 2; no-balls, 4	59
G. D. Wedd, c Gibson, b Barbor	0	Total	448
F. E. Wheeler, st Gibson, b Schilling	30	Bowling: Schilling, 5 for 127	

St. Thomas's Hospital.

1st Innings.		*2nd Innings.*	
C. J. Pearson, b Hay-Shunker	19	run out	13
J. H. Gibson, b Gabb	27	b Hay-Shunker	8
C. H. Bartley, c Wedd, b Wade	74	b Mundy	2
E. R. Smith, b Gabb	6	c Bamford, b Hay-Shunker	0
A. F. Hunton, b Gabb	11	b Hay-Shunker	2
P. J. Milligan, b Hay-Shunker	0	not out	84
L. H. B. Light, lbw, b Wedd	26	c Nunn, b Gabb	5
T. C. Maling, b Mundy	8	b Nunn	17
R. C. Barbor, c Nunn, b Wedd	4	st Bamford, b Nunn	0
R. F. Winkworth, not out	7	b Nunn	0
R. S. F. Schilling, b Mundy	4	lbw, b Nunn	10
Byes, 13; leg-byes, 1	14	Byes, 7; leg-byes, 3; no-balls, 1	11
Total	200	Total	152

Bowling: Gabb, 3 for 31.

Bowling: Nunn, 4 for 32; Hay-Shunker, 3 for 18.

2nd XI.

Our programme was completed on Thursday, July 14th, when, in fitting climax, we proved successful in the Junior Cup Final, heavily defeating our opponents, St. Thomas's.

This has been a season outstanding in its content of victory. Records have gone, and the brilliance of individual feat has been only dwarfed by the assured uniformity of a resolute team work.

Perhaps possibilities are emphasized by the satisfactory way complete backing has been afforded to the 1st XI on the occasions when demanded, the trial being a true indication of future cricketing strength.

Semi-Final Cup Tie.

St. Bartholomew's Hospital 2nd XI *v.* Guy's Hospital.

Played at Winchmore Hill on Thursday, June 23rd.

Winning the toss, the visitors batted first on a firm, fast wicket, but from the start they found run getting a difficult matter, as the fall of wickets at 7, 19, 32, 43, 60, 63, 88, 97, 101 and 111 illustrates. Mundy, Gillman Taylor and Dolly provided an intelligently steady attack, the latter being most successful with 3 wickets for 14 runs. Probably the outstanding feature was Fulton's wicket-keeping, which was very admirable.

Though we had an unpromising start to our innings, in that the first and second wickets fell at 12, Walch and Dransfield carried the score to 62 before the latter was run out. The eventual total, 126 for 5, was soon reached, Walch by then having collected 61 runs. Though we might criticize his running between the wickets, his batting was very highly commendable. We thus won by 5 wickets. If comment is to be added, we might say that the Guy's man who had bowled our 1st XI out for 90 runs a week before was treated with a very scant respect.

The fixtures arranged for the successive Saturdays, June 25th and July 2nd, had to be scratched. On each occasion, with the bulk of the team promoted to fill the places of the 1st team absentees, and with term having ended, we were unable to raise a side.

On Wednesday, July 6th, an amusing encounter was staged between the Enfield Police and ourselves. The policemen, whose cricketing abilities, attitude and attire were essentially uniform, were soon dismissed for 63. Dolly bowled extremely well in taking 6 for 18. Our batting order was reversed to give our tail-enders an innings; victory soon resulted, lack of practice being no apparent obstacle to the latter.

St. Bartholomew's Hospital 2nd XI *v.* Wallington.

Played at Wallington on Saturday, July 9th.

This was a new fixture, and therefore it seemed a great pity that again a very weakened side had to take the field, only two regular members of the 2nd team being included. As before, the absent ones were representing the 1st XI.

Wallington opened on a fast wicket, and though losing an opening batsman without a run scored, they managed to reach a total of 173 (for 9 wickets declared; all clean bowled). Their other opening bat, missed before scoring a run, collected 31. Dransfield bowled 20 successive overs in an endeavour to keep one end going and took 5 wickets for 52; such was the paucity of bowling talent. Sorkias's cover fielding was absolutely capital.

Apart from Ross (59), Youngman (23) and Harris (18 not out) our batting was weak and we did well to reach 141, the innings being finished off by a "hat-trick." This was our second defeat of the season, and neither would have occurred with anything approaching the full team strength.

Junior Cup Final.

St. Bartholomew's Hospital *v.* St. Thomas's Hospital.

The close came with the Junior Cup Final, at Chiswick, on July 14th. Lacking the services of Mundy and Wade (both no longer eligible), Gillman and Walch, we naturally viewed the prospect with no small amount of trepidation. However, our outlook was quite reversed when, by lunch-time, we had outed the opposition for a total of 98.

The wicket was hard and fast and seemed to indicate a glut of runs, but Thomas's, losing 3 wickets for 11 runs, had difficulty in thwarting some resolute bowling. Dransfield and Taylor opened the bowling, and with the fifth over completed 3 wickets had fallen; the former went on to bowl 13 overs and to take 7 wickets for 41 runs, whilst the latter took 2 for 28. Both were aided by Fulton's magnificently superlative wicket-keeping, who caught 3 and stumped 1, the latter off medium-fast bowling. The last wicket, after the 7th, 8th and 9th had fallen at 94, fell with the last ball before lunch, and so we had the whole afternoon to get the runs.

The opening pair put on 14 before Ross was out, and then Wheeler and Dransfield proceeded to score the necessary runs. We thus won by 9 wickets, the latter completing 50 almost coincident with the winning hit. Wheeler, in a tremendous battery of admirable drives, including 3 consecutive sixes, beat up 99 runs before his dismissal. The sequence was well maintained by Dolly, and Maidlow, the most delightfully orthodox of our batsmen, contributed his best effort of the season. The ultimate total was one of 272 for 8, scored in 2¼ hours.

St. Thomas's Hospital.		St. Bartholomew's Hospital.	
Wood, c Fulton, b Dransfield	2	Dransfield, st Gavin, b McCann	57
Winckworth, c Fulton, b Taylor	2	Ross, c Gavin, b Wood	4
Stewart, b Dransfield	2	Wheeler, c Wood, b Maisey	99
Tuke, c Fulton, b Taylor	2	Dolly, lbw, b Maisey	33
Norman, c Harris, b Dolly	55	Maidlow, not out	41
Bond, b Dransfield	12	Sorkias, b Maisey	4
Maisey, b Dransfield	9	Youngman, st Gavin, b Maisey	0
Goldsworthy, b Dransfield	4	Fulton, c Goldsworthy, b Caverhill	24
McCann, lbw, b Dransfield	0	Harris, run out	0
Gavin, not out	1	Hopkins } did not bat	
Caverhill, st Fulton, b Dransfield	2	Taylor }	
Extras	7	Extras	11
Total	98	Total (for 8 wkts.)	273

Dransfield, 7 for 41; Taylor, 2 for 28; Dolly, 1 for 22.

Maisey, 4 for 47.

The leading 2nd Team averages for the season are appended:

Batting.

Name.	Innings.	Not out.	Highest score.	Total runs.	Average.
F. E. Wheeler	5	1	99	165	41·25
C. M. Dransfield	10	3	77*	286	40·86
R. C. Welch	5	2	61*	100	33·33
W. M. Maidlow	7	3	41*	99	24·75
R. C. Dolly	6	1	42*	123	24·60
G. V. H. Wade	8	0	74	167	20·88
W. M. Capper	3	0	33	56	18·66
W. T. Ross	7	1	59	110	18·33

* Signifies not-out innings.

Bowling.

Name.	Overs.	Maidens.	Runs.	Wickets.	Average.
R. Mundy	38	11	65	11	5·91
G. D. Wedd	30·2	10	91	15	6·07
R. C. Dolly	42·2	6	124	16	7·75
C. M. Dransfield	59·1	10	186	21	8·86
J. R. Gillman	30·3	7	98	7	14·00

C. M. D.

TENNIS CLUB.

June 15th: 2nd VI *v.* St. Thomas's Hospital. Away.

J. Smart and B. Thorne-Thorne lost to 1st pair, 4—6, 4—6; beat 2nd pair, 12—10, 6—2; beat 3rd pair, 6—3, 6—1.

A. Innes and R. H. Dale lost to 2nd pair, 0—6, 4—6; beat 3rd pair, 5—7, 6—3, 6—3.

R. L. Benison and R. K. Levick lost to 1st pair, 0—7, 3—6, 4—6; lost to 2nd pair, 4—6, 1—6; lost to 3rd pair, 4—6, 4—6.

Match lost, 5—3.

June 18th: 1st VI *v.* R.A. Woolwich. Away.

R. C. Witt and P. J. Hardie lost to 1st pair, 5—7, 6—8; beat 2nd pair, 7—5, 5—7, 6—1.

W. K. Frewen and B. Thorne-Thorne beat 2nd pair, 2—6, 7—5, 6—2; beat 3rd pair, 6—1, 6—2.

S. P. Mullick and R. L. Benison lost to 1st pair, 1—6, 1—6; lost to 2nd pair, 2—6, 2—6; lost to 3rd pair, 2—6, 4—6.

Match lost, 4—3.

Saturday, June 18th: 2nd VI *v.* St. George's Hospital. Away.

E. M. Darmady and K. J. Harvey lost to 1st pair, 4—6, 3—6; lost to 2nd pair, 4—6, 7—5, 3—6; beat 3rd pair, 6—4, 6—4.

W. P. Shemilt and I. H. Moxon lost to 1st pair, 1—6, 2—6; lost to 2nd pair, 4—6, 3—6; beat 3rd pair, 6—0, 6—1.

R. K. Levick and M. L. Nairac lost to 2nd pair, 4—6, 3—6; beat 3rd pair, 7—5, 6—2.

Match lost, 3—5.

Wednesday, June 22nd: 1st VI. Cup-tie Semi-final *v.* King's College Hospital. Away.

Singles:

K. A. Latter won 6—2, 6—0.

J. R. Blackburne lost 4—6, 2—6.

J. R. Kingdon won 6—1, 6—2.

R. C. Witt won 6—4, 7—5.

B. Thorne-Thorne won 6—2, 6—3.

A. H. Hunt won 6—0, 3—6, 6—1.

Doubles:

Latter and Witt beat 1st pair, 7—5, 7—9, 6—2; beat 2nd pair, 6—3, 6—4.

Blackburne and Kingdon beat 2nd pair, 6—2, 4—6, 6—2; beat 3rd pair, 6—4, 6—1.

Hunt and Thorne-Thorne beat 3rd pair, 7—5, 6—4.

Match won, 10—1.

2nd VI. Cup-tie Semi-final *v.* King's College Hospital at Winchmore Hill.

Singles:

E. W. Burstal won 6—3, 6—4.

S. P. Mullick won 6—3, 8—6.

P. J. Hardie won 6—1, 6—2.

F. J. S. Baker won 6—4, 6—1.

R. H. Dale lost 3—6, 10—8, 1—6.

Doubles :

Burstal and Mullick beat 1st pair, 6—3, 6—1 ; beat 3rd pair, 6—4, 6—1.

Frewen and Hardie beat 2nd pair, 6—2, 6—4.

Baker and Dale beat 3rd pair, 6—2, 6—2.

Match won, 8—1.

June 29th : 1st VI *v.* R.N.C, Greenwich. Away.

B. Thorne-Thorne and R. C. Witt lost to 1st pair, 2—6, 3—7 ; lost to 2nd pair, 4—6, 0—6 ; beat 3rd pair, 6—2, 6—4.

E. W. Burstal and W. K. Frewen lost to 1st pair, 3—6, 4—6 ; lost to 2nd pair, 5—7, 5—7 ; beat 3rd pair, 8—6, 6—3.

O. A. Savage and R. Williamson lost to 1st pair, 3—6, 3—6 ; lost to 2nd pair, 1—6, 2—6 ; lost to 3rd pair, 2—6, 1—6.

Match lost, 7—2.

2nd VI *v.* R.N.C. at Winchmore Hill.

F. J. S. Baker and K. J. Harvey beat 1st pair, 8—6, 6—1 ; beat 2nd pair, 7—5, 6—3 ; beat 3rd pair, 6—3, 8—6.

R. L. Benison and G. Dalley lost to 1st pair, 2—6, 3—6 ; lost to 2nd pair, 5—7, 5—7 ; lost to 3rd pair, 3—6, 2—6.

R. K. Levick and J. L. D. Roberts lost to 1st pair, 2—6, 2—6 ; lost to 2nd pair, 3—6, 2—6 ; lost to 3rd pair, 4—6, 1—6.

Match lost, 3—6.

July 2nd : 1st VI *v.* R. A. Mess, Woolwich, at Winchmore Hill.

J. R. Blackburne and J. R. Kingdon beat 1st pair, 6—2, 6—2 ; beat 2nd pair, 6—1, 6—0 ; beat 3rd pair, 6—4, 7—5.

R. C. Witt and W. K. Frewen beat 1st pair, 3—6, 6—4, 6—3 ; beat 2nd pair, 6—1, 6—2 ; beat 3rd pair, 6—2, 8—6.

J. H. Hunt and E. W. Burstal beat 1st pair, 6—1, 7—5 ; beat 2nd pair 6—4, 6—4 ; beat 3rd pair, 12—10, 6—4.

Match won, 9—0.

July 7th : 2nd VI, Cup Final *v.* St. Thomas's. Away.

Singles :

E. W. Burstal lost to Flowerdew, 3—6, 0—8.

S. P. Mullick lost to Hunton, 0—6, 5—7.

P. J. Hardie lost to Maisey, 2—6, 6—3, 7—5.

F. J. S. Baker lost to Jameson, 1—6, 10—8, 2—6.

R. H. Dale lost to Sze, 0—6, 1—6.

Doubles :

Burstal and Frewen lost to 1st pair, 3—6, 1—6.

Mullick and Hardie lost to 2nd pair, 3—6, 2—6 ; lost to 3rd pair, 3—6, 0—6.

Baker and Dale lost to 3rd pair, 3—6, 3—6.

Lost, 9—0.

July 9th : 2nd VI *v.* Guy's Hospital. Away.

R. H. Dale and R. L. Benison lost to 1st pair, 4—6, 6—3, 3—6 ; lost to 2nd pair, 2—6, 3—6 ; beat 3rd pair, 7—3, 6—3.

J. Smart and A. Innes beat 1st pair, 6—4, 3—6, 6—3 ; lost to 2nd pair, 3—6, 1—6 ; beat 3rd pair, 3—6, 7—5, 6—2.

J. G. Nel and A. R. Pope beat 1st pair, 6—4, 6—2 ; lost to 2nd pair, 6—2, 2—6, 5—7 ; beat 3rd pair, 7—9, 6—3, 6—2.

Won, 5—4.

July 14th : Cup Final *v.* St. Thomas's Hospital at Roehampton Club.

This was the third year in succession in which we reached the final, but, as usual, we lost by being unable to win sufficient singles.

Singles :

K. A. Latter lost to Buzzard, 7—9, 4—6.

J. R. Blackburne lost to Van Meurs, 3—6, 2—6.

J. H. Hunt lost to Liem, 4—6, 4—6.

J. R. Kingdon lost to Milligan, 4—6, 2—6.

R. C. Witt lost to Beilby, 4—6, 3—6.

B. Thorne-Thorne lost to Rouillard, 3—6, 6—3, 5—7.

Doubles :

Latter and Hunt beat Buzzard and Sowerbutts, 6—4, 15—13.

Blackburne and Kingdon lost to Beilby and Van Meurs, 5—7, 5—7 ; beat Rouillard and Liem, 6—4, 6—1.

Witt and Thorne-Thorne lost to Beilby and Van Meurs, 5—7, 4—6 ; lost to Rouillard and Liem, 3—6, 4—6.

SWIMMING CLUB.

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

This match, the semi-final of the Inter-Hospitals Championship, was played at Fitzroy Baths on Wednesday, June 8th. Having lost the toss, the Hospital defended the shallow end in the first half.

Bart.'s started well, and a clever piece of combination play by Sutton, Vartan and Kanaar resulted in a well-shot goal by McKane. After this U.C.H. rallied, and were pressing dangerously when a fine clearance by West gave the ball to Sutton, who promptly scored. U.C.H. again pressed, and several shots were saved by Kirkwood until he was beaten by a "back-flip." Play was then even, but just before half-time U.C.H. again managed to net the ball. (Half-time, 2—2.)

The play restarted with Sutton at centre forward and Vartan at centre-half, and by means of long passing movements three more goals were added by Sutton. U.C.H., however, were not without fight, and quickly replied with another two goals, but before the final whistle the result was assured by Sutton, who, after a long solo swim, again scored.

Result : Won by 6 to 4.

M. P. FLAVELL.

RIFLE CLUB.

UNITED HOSPITALS CHALLENGE CUP.

The shoot for this Cup was held during the Bisley Meeting on Monday, July 11th, and resulted in a win for Bart.'s by 1 point.

Weather conditions were anything but favourable ; there was a torrential downpour of rain just as our last two men were finishing at 300 yards, which cost us a "magpie," and the visibility at 600 yards was poor. The wind was fairly steady.

The resulting score was very satisfactory, being only marred by a shot on the wrong target at 600 yards, which deprived us of 4 valuable points.

Praise is due to Shackleton Bailey and Gillman for their excellent coaching and wind-judging throughout.

The individual scores were as follows :

	300 yds.	500 yds.	600 yds.	Total.
J. Shackleton Bailey	34	32	34	100
B. P. Armstrong	32	32	34	98
J. R. Gillman	34	31	33	98
B. C. Nicholson	30	31	31	92
K. F. Stephens	27	30	24	81
Grand total				469
Other scores were :				
St. Mary's				468
Guy's				454
St. Thomas's				448
London				425

J. Shackleton Bailey is to be congratulated on his extremely successful shooting at Bisley this year :

(1) He was a member of the English team who won the National Challenge Trophy with a record score.

(2) He individually won (*a*) Conan Doyle Challenge Cup ; (*b*) Clementi-Smith Challenge Cup.

(3) He was fourth in the Grand Aggregate.

The Lady Waring Handicap Cup will not be awarded this year.

K. F. S.

BOAT CLUB.

The Annual United Hospitals Regatta was held on May 25th, 1932, at Putney. St. Bartholomew's Hospital entered an "eight" and a light "four." The conditions were very bad for any but a heavy crew, and St. Thomas's Hospital, rowing very heavy men, won both events without difficulty. The St. Bartholomew's "eight" started well, but could not hold their opponents for more than two minutes in the wind. The crews were :

VIII : Bow, K. Stephens ; 2, M. Danino ; 3, H. M. Bateman ; 4, R. Bennett ; 5, R. H. H. Williams ; 6, W. I. C. Berry ; 7, W. H. Oxley ; str., S. E. Budsall ; cox, R. E. Knox.

IV : Bow, W. H. Oxley ; 2, W. I. C. Berry ; 3, R. H. H. Williams ; str., S. E. Budsall.

It is hoped that we shall be able to do some winter rowing this year with a view to entering a crew for the Head of the River Race in spring.

THE ST. BARTHOLOMEW'S HOSPITAL GOLFING SOCIETY.

The Fifth Summer Meeting of the St. Bartholomew's Hospital Golfing Society was held on Thursday, June 23rd. The large number of thirty six players enjoyed the privilege of playing over Walton Heath Golf Course as the guests of Lord Riddell.

The Gordon-Watson Cup was played for under ideal conditions, but the foursomes were seriously interfered with by a heavy rain-storm at tea-time, which swamped some of the greens.

Thirty members stayed to supper, when the following announcements of the results were made :

Singles.

Gordon-Watson Cup : Winner	Dr. G. Graham, "all square."	
Runner-up	Mr. J. Cunning, 1 down.	
Winners of best score for last nine holes	Sir Milsom Rees	1 down.
	Dr. L. P. Garrod	
	Dr. B. H. Cole	
Winner of six sealed holes	Dr. A. C. Roxburgh, 4 up.	

Foursomes.

Winner of eighteen holes	Dr. J. W. Buttery	1 down.
	Mr. J. G. Milner	
Runners up	Dr. L. W. Bathurst	5 down.
	Mr. J. Cunning	
Winner of first nine holes	Dr. J. W. D. Buttery.	
	Mr. J. G. Milner.	

Mr. R. Coyte (last year's winner) was censured for not producing the cup. Sir Charles Gordon-Watson presented small replicas of his cup to past winners.

The Autumn Meeting will be held at Sandy Lodge on Wednesday, September 28th.

REVIEWS.

A SHORT PRACTICE OF SURGERY. By HAMILTON BAILEY, F.R.C.S., and R. J. MCNEILL LOVE, M.S., F.R.C.S. Vol. I. (London : H. K. Lewis & Co., Ltd., 1932.) Pp. 530. With 269 illustrations. Price 20s. net.

The first volume of this work by two well-known authors will be welcomed by students, both undergraduate and graduate, as well as by those who have passed the examination stage.

A vast amount of information covering many aspects of surgery is presented in a manner which is both concise and readable.

The volume includes very complete chapters on general pathology, on diseases of the upper parts of the alimentary canal, on the thyroid, larynx and pharynx and on the breast. The section dealing with the genito-urinary system is treated very fully and from a useful and practical standpoint. Diseases of bones and joints are well described in the terminal chapters.

There is abundance of excellent photographic illustration, and the whole will be eagerly read by those who are negotiating the precarious paths of their surgical examinations.

Vol. 2 of this work is expected to arrive shortly, and with it the completion of an extremely useful addition to the surgical works of to-day.

PSYCHOTHERAPY. By HANS PRINZHORN, Ph.D., M.D. Translated and Edited in collaboration with the author by ARNOLD EISSART, B.Sc., Ph.D. (London : Jonathan Cape, Ltd., 1932.) Pp. 352. Price 15s. net.

This, the first English edition of this German edition of three years ago, is an important contribution to the problem of the closer association of the psychologist and the doctor. In his excellent introduction Dr. Crookshank has drawn attention in no mild fashion to that suspicion and incredulity which has not only for years almost ignored the value of the work of Freud, Jung, Adler and Prinzhorn, but has refused to allow their teaching and principles to be considered as contributing anything much of value to the armamentarium of the medical practitioner. He maintains that a proper conception of the mass of knowledge lying at our doors would produce a revolution in the possibilities and opportunities of treating the so called "functional" or "nervous" disorder, and would eliminate from the curriculum a large number of so-called "disease-entities" which have by long-established custom become fixed in the teaching of the established schools of medicine.

Prinzhorn in his introductory chapters reviews the present position of psychotherapy, and shows how the work of Adler helped to bring the straighter views of Janet Dubois and Freud, so that they could be better adapted for enlightening and guiding the masses. He incidentally touches upon a vital point, namely the problem of the rarity of those physicians able to distinguish psychotherapeutically accessible patients, and can assess the best approach, the best method of treatment and the probable duration. A similar phenomenon presents itself in the matter of what we call "surgical judgment" or "clinical sense," and it is everywhere recognized that academic and technical excellence does not nearly always mean a good surgeon or physician.

The study of psychotherapy as an adjunct to our medical treatment in this country is comparatively recent. It is stated that before 1900 and until 1914 it was classed particularly with hypnosis as "unprofessional."

Dr. Prinzhorn next proceeds to discuss at length the biology and pathology of the person, and the methods and conditions whereby it is attacked by ill-health. This section is arranged from trauma at birth to old age.

He deals successively with the commoner complaints and desires of the sufferers, the methods whereby these may be treated by advice given in consultation, by better discipline of the will and many other methods.

The latter part of the work is confined to the goal of psychotherapy, the essence of curative mental action, and the changes in the social standing of individuals between 1900 and 1930.

The book is a careful exposition of the subject. The translation is good, and can have presented no easy task to the translator.

The work can be recommended to all who desire to amplify their knowledge of the human being, the working of the mind and the treatment of disease by methods which the author has so lucidly described.

THE USE OF LIPIODOL IN DIAGNOSIS AND TREATMENT. By J. A. SICARD, M.D., and J. FORESTIER, M.D. A Clinical and Radiological Survey. (London : Humphrey Milford, Oxford University Press, 1932.) Pp. ix + 235. Price 16s. net.

This volume, written by the pioneers who first appreciated the diagnostic possibilities afforded by lipiodol, contains a very complete account of the numerous uses to which this substance has been put, both in diagnosis and in treatment. Its scope is catholic, in that it deals with the examination of every part of the body in which hitherto lipiodol has been employed. In the case of each region, the technique is first described, the results are illustrated and the value of the method is discussed.

The first section deals with the physical, chemical and physiological properties of lipiodol. The second section deals with lipiodol injection of the subarachnoid space ; the authors are strongly convinced of the value of the results obtained, and support their contention by means of a number of excellent skiagrams.

The third section is devoted to the respiratory tract. The chief methods of introduction are discussed, but no mention has been made in this edition of the recently described nasal route. On the whole, the illustrations in this section are disappointing. Only 9 lipiodol skiagrams are reproduced, and there is no illustration of bronchial obstruction due to carcinoma. In future editions this feature might well be expanded.

The remaining sections deal with the investigation of the genito-urinary system, blood-vessels, abscesses and sinuses, the accessory nasal cavities and a few minor applications. The final section, which deals with the therapeutic uses of lipiodol, is moderately written, and the indications are discussed without undue bias.

The volume contains a large bibliography, chiefly continental, although the English edition contains an additional short list of papers published in this country.

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

BAILEY, LINDSAY W., M.B., M.R.C.P. "What is Wrong with the Medical Curriculum ?" *Lancet*, July 16th, 1932.

BOURNE, GEOFFREY, M.D., F.R.C.P. "Acute Rheumatism as a Cause of Unexplained Fever." *Clinical Journal*, June 29th, 1932.

——. "Lateral Thoracic Jerk : A Sign of Aneurysm of the Descending Thoracic Aorta." *Lancet*, July 9th, 1932.

CHOPRA, R. N., M.A., M.D., I.M.S. (and CHAUDHURY, S. G.) "On the Electric Charge of Erythrocytes. Part I: Effect of pH and Quinine Bihydrochloride." *Indian Journal Medical Research*, April, 1932.

——— (and DIKSHIT, B. B., and CHOWHAN, J. S.) "Pharmacological Action of Berberine." *Indian Journal Medical Research*, April, 1932.

DALE, Sir H. H., C.B.E., M.D., F.R.C.P., F.R.S. (and CHASSAR MOIR, M.D., F.R.C.S.(Ed.); with note by Sir H. H. D.). "The Action of Ergot Preparations in the Puerperal Uterus." *British Medical Journal*, June 18th, 1932.

EVANS, GEOFFREY, M.D., F.R.C.P. "The Significance of Albuminuria and the Treatment." *Practitioner*, July, 1932.

FLETCHER, Sir WALTER, K.B.E., F.R.S., M.D., F.R.C.P. "The Scope and Needs of Medical Research." *British Medical Journal*, July 9th, 1932.

KEYNES, GEOFFREY, M.A., M.D., F.R.C.S. "Prevascular Femoral Hernia." *British Journal Surgery*, July, 1932.

MAINGOT, RODNEY, F.R.C.S. "The Modern Treatment of Burns and Scalds." *Practitioner*, July, 1932.

POWER, Sir D'ARCY, K.B.E., F.R.C.S. "A Century of British Surgery." *British Medical Journal*, July 23rd, 1932.

——— "Some Bygone Operations in Surgery. IX. A Case of Strangulated Umbilical Hernia: Queen Charlotte of Anspach." *British Journal Surgery*, July, 1932.

ROCHE, ALEX E., M.A., M.D., M.Ch., F.R.C.S. "Cystitis." *Practitioner*, July, 1932.

ROLLESTON, Sir HUMPHRY, Bart., G.C.V.O., K.C.B., M.D., F.R.C.P. "1832–1932 and the British Medical Association." *Practitioner*, July, 1932.

——— "Changes in the Medical Profession and Advances in Medicine During Fifty Years." *British Medical Journal*, July 23rd, 1932.

SHAW, WILFRED, M.D., B.Ch., F.R.C.S., F.C.O.G. "The Pathology of Ovarian Tumours." *Journal of Obstetrics and Gynæcology of the British Empire*, Summer No. 1932.

WEST, RANYARD, M.D., M.R.C.P., D.P.H. "Curare in Man." *Proceedings of the Royal Society of Medicine*, May, 1932.

ACKNOWLEDGMENTS.

The Royal Dental Hospital Magazine—The Clinical Journal—The Nursing Times—The East African Medical Journal—L'Echo Médical Du Nord—The Speculum—Bulletin of the Johns Hopkins Hospital—The British Journal of Nursing—Medical Times and Long Island Medical Journal—St. Mary's Hospital Gazette—The Bombay Medical Journal—The Hospital—Bulletin de L'Hôpital Saint-Michel—Giornale della Reale Società Italiana D'Igiene—St. George's Hospital Gazette—South African Medical Journal—Cambridge University Medical Society Magazine—Leprosy Review—The Post-Graduate Medical Journal—The Queen's Medical Magazine—University College Hospital Magazine—Bulletins et Mémoires de la Société de Médecine de Paris—The Student—The London Hospital Gazette—Kwang Chi Hospital Magazine—The Middlesex Hospital Journal—King's College Hospital Gazette—Revue Belge des Sciences Médicales—The General Practitioner of Australasia—The Broadway—Charing Cross Hospital Gazette.

CHANGES OF ADDRESS.

BARTON, J. K., 23, Lindisfarne Road, S.W. 20.

FAULDER, T. J., Weymouth Court, 1, Weymouth Street, Portland Place, W. 1 (Tel. Langham 4322.)

FAWCETT, R. E. M., 54, Dyer Street, Cirencester.

GRAHAM, J. H. P., Down Field, Hastingleigh, Ashford, Kent.

HOGG, J. C., 106, Harley Street, W. 1. (Tel. Welbeck 3525.)

STALLARD, H. B., 35, Harley Street, W. 1. (Tel. Langham 3330.)

STRUGNELL, Surgeon-Commander L. F., R.N., 3, The Terrace, H.M. Dockyard, Devonport

WILKIN, W. J., 50, London Road, Gloucester.

APPOINTMENT.

WILKIN, W. J., M.B., B.Ch.(Cantab.), F.R.C.S., appointed Assistant Surgeon to the Gloucestershire Royal Infirmary and Eye Institution.

BIRTHS.

BALFOUR.—On July 15th, 1932, at Downholm, Ringmer, Sussex, to Constance, wife of Ivor H. C. Balfour—a son.

BODY.—On June 23rd, 1932, at 27, Welbeck Street, London, to Lorna, wife of H. A. Body, F.R.C.S., of Melbourne—a daughter.

CAPPS.—On July 4th, 1932, to Gertrud (*née* Torell), wife of F. C. W. Capps, F.R.C.S.—a son.

CULLINAN.—On July 18th, 1932, at 34, Arkwright Road, Hampstead, to Joy, wife of Dr. Edward Cullinan—a son.

MALEY.—On July 18th, 1932, to Mary (*née* Livingston), wife of M. L. Maley—a daughter.

TRACEY.—On July 1st, 1932, to Katherine Reavell (*née* Scott) and Basil Martin Tracey, of 62, Thorpe Road, Norwich—a daughter.

MARRIAGES.

ABERCROMBIE—UNDERHILL.—On July 7th, 1932, at St. Mary's Church, Plympton, by the Rev. C. K. Bull, assisted by the Rev. E. G. Cocks, George Francis Abercrombie, M.A., M.B., of 59, Belsize Park, Hampstead, son of the late Mr. G. K. Abercrombie and of Mrs. Abercrombie, to Marie, younger daughter of Mr. Frank Underhill, J.P., and Mrs. Underhill, of The Firs, Plympton, South Devon.

BATEMAN—WILSON.—On June 25th, 1932, at the Church of St. Peter-in-Eastgate, Lincoln, Dr. Henry Fauconberge Bateman, third son of the late Rev. Percy Elliot Bateman, Fellow of Jesus College, Cambridge, to Joan Eleanor, only daughter of Mr. Herbert Charles Wilson, J.P., and Mrs. Wilson, of Mainwaring Road, Lincoln.

BRADSHAW—DUKE.—On July 11th, 1932, at Holy Trinity Church, Prince Consort Road, by the Rev. H. Earnshaw Smith, assisted by the Rev. A. C. Kestin and Rev. H. P. Coward, George Haythorne, younger son of Mr. and Mrs. W. G. Bradshaw, of Crawley Down, Sussex, to Dorothy Margaret, elder daughter of Mr. and Mrs. Nevile O. Duke, late of Cannes.

HALL-SMITH—GASTON.—On July 16th, 1932, at Sutton, Surrey, Cedric Sharr, son of Dr. and Mrs. Percy Hall-Smith, of Russettings, Sutton, to Kathleen Mary, younger daughter of Mr. Edward Page Gaston and the late Mrs. Gaston, of Logmore, Cheam, Surrey.

PAGAN—WATKINS.—On July 16th, 1932, at the Church of St. Peter-in-Eastgate, Lincoln, by the Rev. Canon A. M. Cook, Dr. Alfred Theodore Pagan, eldest son of the late Rev. Alfred Pagan and Mrs. Pagan, of Beccles, Suffolk, to Alice Elizabeth, elder daughter of Mr. and Mrs. W. G. Watkins, 20, Wragby Road, Lincoln.

RAVEN—BROWN.—On July 7th, 1932, in Carlisle, Ronald William Raven, F.R.C.S., eldest son of Mr. and Mrs. F. W. Raven, of Mountain View, Coniston, Lancashire, to Vida Eugenie, elder daughter of Mr. and Mrs. E. P. Brown, of Stancroft, Carlisle.

DEATHS.

PIERCE.—On July 8th, 1932, suddenly, at Bankcroft, Harpenden, Bedford Pierce, M.D., F.R.C.P., aged 71.

WINGATE-SAUL.—On July 11th, 1932, suddenly, Dr. William Wingate Wingate-Saul, second son of the late Dr. W. W. Wingate-Saul, of Lancaster.

WREFORD.—On June 17th, 1932, Catherine Hannah, wife of Heyman Wreford, M.R.C.S., L.R.C.P., of Exeter, Devon.

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: National 4444.*

St. Bartholomew's Hospital Journal.

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

VOL. XXXIX.—No. 12.] SEPTEMBER 1ST, 1932. PRICE NINEPENCE.

CALENDAR.

Fri., Sept.	2.	—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Tues., ,,	6.	—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Fri., ,,	9.	—Dr. A. E. Gow and Mr. Girling Ball on duty.
Tues., ,,	13.	—Prof. Fraser and Prof. Gask on duty.
Fri., ,,	16.	—Sir P. Hartley and Mr. L. Dathe Rawling on duty.
Mon., ,,	19.	—**Last date for receiving matter for the October issue of the Journal.**
Tues., ,,	20.	—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Fri., ,,	23.	—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Sat., ,,	24.	—Rugby Match *v.* O.M.Ts. Home.
Tues., ,,	27.	—Dr. A. E. Gow and Mr. Girling Ball on duty.
Fri., ,,	30.	—Prof. Fraser and Prof. Gask on duty.

EDITORIAL.

THE Appeal on behalf of the Medical College has made a good start, but a still larger response will be needed in order to enable the College Council to acquire the buildings of the Merchant Taylor's School, so admirably suitable for a New Medical College. Indeed the acquisition of these buildings is imperative if the present standards of medical education at Bart.'s are to be maintained in the future. It has been suggested that Bart.'s men who are general practitioners might approach their patients for financial support in aid of this cause. Mr. H. G. Spicer, who is a lay member of the Medical College Council and also a Governor of the Hospital, has written us a letter emphasizing the desirability of doing this.

"As a layman," he says, "I feel strongly that most patients of a general practitioner will listen readily to an appeal to help the Medical College of the man who is their medical adviser. Personally, I should respond at once and I believe that at least twenty patients out of the total number of patients of each general practitioner would willingly give £5. I am sure that a number would give more. If this were attempted by 1,500 old Bart.'s men, the whole scheme would rapidly be carried to a successful completion."

* * *

The retirement of Sister Hope was simultaneous with the change in the name of her ward. She is therefore the last Sister Hope. The Hospital owes much to her, and she is remembered with gratitude and affection by many Bart.'s men who had the privilege of working in her ward.

A member of the Consulting Staff writes: "As for nearly nine years I had the great advantage of Sister Hope's care of my patients, I should like to add my word of appreciation of the great services she has rendered to our Hospital.

"No one could come into contact with her without realizing that here was a woman of great ability. Some might feel that this ability had insufficient scope as a hospital sister. There can be no doubt that as a medical woman she would have risen high in the profession, but there were other sides to her character which could only find complete expression in nursing. Only those who experienced it can realize the depth and tenderness of her sympathy with suffering, and few beyond the recipients know of her innumerable acts of kindness done in secret. But that was not the side she showed to the world and probably she will not thank me for referring to it. She did not suffer fools gladly; still less would she tolerate insincerity, slackness or dereliction of duty. But for those who were willing to learn, her stores of knowledge and experience were freely

available. The lucid and logical working of her mind made her an admirable teacher, and to these gifts her successful handbook, *Practical Preparations*, bears witness.

"Utterly unsparing, indeed too unsparing of self, devoted to her work with an enthusiasm which was positively fiery, she allowed nothing and no respect of persons to come between her and her conception of duty. This I do know, that in many parts of the world there are Bart.'s men who realize that they owe to her a higher ideal of their profession. That she may greatly enjoy her well-earned leisure and have ample opportunity for indulging in her passion for travel will be the cordial wish of all her friends."

* * *

It is a little late to announce that Mr. W. McAdam Eccles has been ill, since he himself has proclaimed his recovery in a letter to *The Times*, in which he describes himself as a City resident, and points out that the Hospital includes the vast majority of persons sleeping in the City. We congratulate Mr. Eccles on his rapid recovery and we can only regret that the organ removed at operation has not been judged worthy to take its place in the Museum beside that of Mr. Eccles's distinguished colleage.

* * *

Dr. Donaldson's article advocating periodic examinations for cancer, published in our July issue, appears to have aroused considerable comment and some opposition. We publish one reply in this number and we shall be glad to hear from others of our readers who hold views on this problem.

* * *

The prominence gained first by R. J. C. Sutton and now by A. C. Kanaar in their swimming activities calls for the congratulations of all Bart.'s men. Sutton is the holder of the 100 yards and 220 yards A.S.A. Championships and is also the record holder in the last event. He is a member of the Plaistow United Water Polo Team, who have been national champions since 1928: he is also captain of the English team this year and has been capped on six occasions. He represented Britain in the Empire Games in Canada in 1930, the British Universities in Darmstadt in 1931, and Great Britain in the Olympic Games in Amsterdam in 1928 and at Los Angeles in 1932.

A. C. Kanaar's magnificent attempt at the Channel on the night of August 29th is deserving of high praise. After spending a week at Dover, he had intended to attempt the swim on the 23rd. Everything was ready for the start at 1 a.m. At the last minute, however, a strong N.E. wind and a heavy sea made the attempt unwise. The chance came again on the 29th. Leaving Gris Nez at 7.27 a.m. in ideal weather, Kanaar made such good progress that by 6.30 he was within two miles of Dover. A strong tide was running down the Channel. At 8.30 he was within one and a quarter miles of his goal and not unduly fatigued. But at this point a fierce thunderstorm arose and made the conditions so bad that it would have been foolhardy to continue. Reluctantly therefore he left the water and ten minutes later the motor boat was at Dover. To have been foiled by the weather when so near the end was very hard luck and we wish him better luck next time.

With two such swimmers as these in the Hospital and with a very useful number of young and enthusiastic men, it is not surprising that the Swimming Team at present is the strongest we have had since the war. This year they won the Inter-Hospital Swimming Cup for the third and the Water Polo Cup for the fourth consecutive year.

* * *

The Opening Sessional Address will be delivered to the Abernethian Society on Thursday, November 3rd in the Medical and Surgical Theatre by Lord Moynihan at 8.30 p.m. The subject will be "Ancient Medicine and Surgery."

* * *

The St. Bartholomew's Hospital Golfing Society will hold the Autumn Meeting at Sandy Lodge on Wednesday, October 5th. As this date comes after the expiration of "Summer Time," neither foursomes nor supper will be arranged.

* * *

Many visitors to the College Offices will have noticed the absence of Edward Spurgeon. He has retired on account of illness. Spurgeon entered the service of the Medical College in 1909 when the new Pathological Block was opened. He will be remembered by many old Bart.'s men, who on their entrance to the medical profession were ushered by him into the august presence of the Dean. We are glad to know that he is able to be up and about again, and we wish him many years in which to enjoy his retirement and pension.

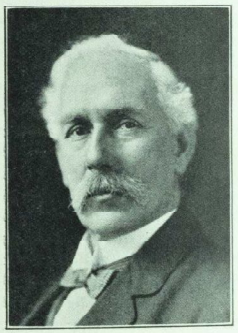
* * *

The Warden requests us to state that the closing date for applications for house appointments in November is 12 mid-day, Saturday, September 10th, 1932.

OBITUARIES.

DR. BEDFORD PIERCE.

BEDFORD PIERCE, whose death was recorded briefly in the last issue of the JOURNAL, was born in Manchester in 1861, the son of Edmund Kell Pierce and Eliza Ann (formerly Tyler). His father's death at an early age left the family in reduced circumstances, and after four years at Croydon School, Pierce was apprenticed at the age of 14 to a firm of pharmaceutical chemists at Liverpool, where he remained for eight years. It was only towards the end of this time that he determined to enter the profession of Medicine, in spite of possessing comparatively slender resources



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and of the formidable task of facing London Matriculation on little more than spare-time study. He entered St. Bartholomew's in 1884, and won all the scholarships and prizes for which he was eligible (seven in all, from the Open Scholarship in Science to the Lawrence Scholarship and Gold Medal). He was far from attaching undue importance to examination successes, and quite aware that they did not necessarily betoken the qualities demanded for successful practice.

After qualifying in the then minimum time he became House Physician to Dr. James Andrew, on whom and on Dr. Gee he looked as his greatest teachers. Following a period of study in Vienna he was appointed Casualty Physician, and it was then his intention to enter consulting practice. In all probability he would eventually have been a Physician to the Hospital had he not at this time been invited to become Medical Superintendent of the York Retreat, a mental hospital founded and controlled by the Society of Friends, of which he was a member. The decision to accept this invitation was difficult, as he was not only very loth to leave Bart.'s, but open to the accusation of sacrificing ambition for an easy competence. That he at least never regarded it in that light is proved by the record of his thirty years' work at the Retreat, which is one of continual expansion and far-reaching reforms. In no direction were his efforts more fruitful, not only at York but for mental hospital administration generally, than in raising the standard of mental nursing, which is really the essential change in a process which has now justified substituting the term "mental hospital" for "asylum."

After his retirement in 1922 he acted for a time as temporary Lord Chancellor's Visitor, and in 1930 he was appointed a Commissioner of the Board of Control. Among other positions he filled were Lecturer on Mental Diseases in Leeds University, President of the Medico-Psychological Association (1919–20), of the Section of Psychiatry of the Royal Society of Medicine (1921–22), and Member of the General Nursing Council.

He married in 1890 Mary Isabella Hamilton, who died in 1926, and leaves a daughter, Dr. Marjorie Garrod, who is also a member of the profession, and a son.

Bedford Pierce is remembered by many with great affection. His commanding personality and generous and sympathetic disposition qualified him ideally for dealing with mental patients, and in his many other duties his consideration for others and his aptitude for conciliation smoothed the path for everything which he undertook. No man ever commanded more willing service or greater loyalty from his staff, and this is at the same time the secret of much of his success, and the clearest tribute which can be paid to his character.

WILLIAM WINGATE WINGATE-SAUL, M.B., B.CH.(CANTAB.), M.R.C.S., L.R.C.P.,

Senior Medical Officer and Commodore Surgeon to the P. & O. Company.

The death occurred suddenly on July 11th, from heart failure, of Dr. W. W. Wingate-Saul. Educated at Rugby and Trinity College, Cambridge, before proceeding to St. Bartholomew's in 1895, he graduated in Medicine in 1902 and in the same year entered the medical service of the P. & O. Company, in which he remained until his death.

He was first appointed to the S.S. "Japan," and subsequently served in twelve other steamers of the Company, his latest vessel being the luxury liner "Viceroy of India." Throughout the war he was associated with the transport of troops in the S.S. "Kaiser-i-Hind," and was passing continually through the danger zones. Recently he was Lord Inchcape's

§

personal medical attendant on board the yacht "Rover" at Monte Carlo until within a few days of the latter's death.

Dr. Wingate-Saul possessed much personal charm, and was deservedly popular with all with whom he came in contact. He made, during his voyages, numerous friends of people in all walks of life, including royalty, and was the recipient of many gifts in gratitude for his medical skill and kindness. It was not unusual for travellers to the East to delay their voyage so that they might sail with him. Many Bart.'s men who were passengers on his ship will remember his hospitality to them, and the pleasant periods spent with him on deck or in his cabin.

He was very keen on medicine and kept abreast of all its developments. In 1929 he returned to St. Bartholomew's during his shore leave, and studied Clinical Pathology so as to avail himself of the excellent medical equipment in the S.S. "Viceroy of India." On return voyages from Bombay he often had under his care many dangerously ill Anglo-Indian patients, whose safe voyage home depended on his unremitting attention.

After medicine his greatest interest was music, and he was an accomplished pianist with a strong taste for classical music. At the time of his death he was acting as P. & O. Harbour Surgeon at Tilbury Dock. He was unmarried. H. F. B.

APPEAL FOR FUNDS FOR THE MEDICAL COLLEGE.

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

DEAR SIR,—Since the last number of the JOURNAL appeared, the Appeal for Funds for the Medical College has been circulated to all Bart.'s men. There has been a good response to this Appeal and many generous donations have been subscribed. It is hoped, however, that the number of subscribers will be considerably increased during the next month so that it will be possible to announce at the Old Student's Dinner on October 3rd, that a large sum of money has been obtained.

The idea of acquiring the Merchant Taylors' School site for the purposes of the Medical College has met with universal approval. But there are certain criticisms of our methods of attempting to collect funds which seem to require an explanation.

The most important of these is that the relationship between the doctor and his patient is considered to be such that some doctors find it impossible to appeal for funds for such a scheme. This may be. Clearly a suitable discretion is required in approaching patients, but surely some patients are the personal friends of their doctors and only require to have their attention drawn to such a scheme as this to give it, at least, serious consideration. The needs of medical education can only be known to medical men. Who better can pass on this information to the general public than the doctor and who better than the trusted doctor of any given individual? An expression of the gratitude for services given to their patients must be the experience of most doctors and if such circumstances as we are placed in are properly explained to them, they are sometimes willing to express their thanks by giving help to the institution which has trained their doctor.

It has occurred to one correspondent that the acquisition of new premises means an increase in the number of students to be trained in the College, which he regards as unwise. I will say at once that this is not the intention of the scheme at all. In fact, it is not our desire to admit more students than we do at present. Our primary object is to improve our teaching departments and their equipment to the standard required by modern science. We have done this in many ways already, but some of our departments still require to be improved. It is also desirable that the departments of preliminary study should be housed all on one site. In the course of a few years, we shall be compelled to remove certain of our departments from the Hospital site owing to the needs of the Governors who require the land for building for the treatment of patients. An opportunity of acquiring an admirably suitable site at the present time has led us to forestall the needs of the future and make every effort to acquire the Merchant Taylors' School. There is the additional advantage of this site that we can erect a residential college for our students and give them other facilities which we cannot provide now. It is hoped in this way not only to house many students who come from the country and must, perforce, reside in London, but also to give facilities for junior teachers who may elect to live within this building. I would like to put forward a suggestion which has been made to me by more than one other Bart.'s man, namely, that the country should be divided into areas, say counties; that in each county a secretary should be appointed whose effort should be to bring together all Bart.'s men in that county, to discover some concerted method of obtaining funds. This appears to me as a possible means of making our scheme a success. I shall be glad to hear by correspondence the views of others as to whether it is worthy of being put into execution.

Let me again repeat our view that a successful issue to this scheme requires the whole-hearted co-operation of all old Bart.'s men. We know that many are giving help already but we trust all will make an effort, if not by donation, at least by advertising our needs.

Yours sincerely,
W. GIRLING BALL,
Dean of the Medical College.

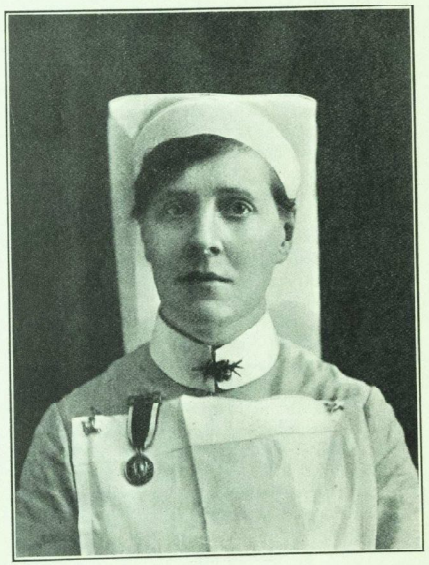
SISTER HOPE.

MISS N. W. POWELL, better known as Sister Hope, and for many years well known as Sister Luke, has resigned after twenty-four years of service at St. Bartholomew's Hospital. True to the tradition of our great institution she has left the place so simply and quietly that the fact of her having gone will come as a surprise even to many of the regular workers in the Hospital.

Miss Powell entered the Hospital in 1908. In April, 1911, she was Gold Medallist, and gained her Blue Belt. She then served as Sister Pink in the old Isolation Ward, and in 1912 was appointed Sister Luke. The Professorial Units were instituted in 1919, and Sir Archibald Garrod, on his return from the war, made it a stipulation of his undertaking the Medical Unit that Miss Powell was made Sister-in-Charge of the Medical Ward. She remained in Mark Ward until her appointment in charge of Hope Ward in 1921, and there she has worked until the date of her retirement.

Miss Powell meant a lot to all those who came in contact with her, and there are hundreds who have reason to be grateful for her interest in their personal welfare. There are many others who learnt as much from her as from any member of the Staff at Bart.'s. Nursing was her vocation. Not only did she supervise every detail herself, but she built up a system of nursing of which there is some record, in tabloid form, in her little book called *Practical Preparations*, published by Faber and Faber, Ltd., in 1931. This invaluable book for nurses and doctors gives an insight into Sister Hope's expert knowledge of nursing and her interest in medicine.

It was in Luke Ward in 1913 that temperature charts were first used with rulings for plotting the pulse- and respiration-rates. Within a month of these new charts being in use Sister Luke was plotting the record in green and violet ink of the 24-hourly intake of fluid and the output of urine in those cases in which this information was of value. Her charts, in a small neat writing, contained, too, a record of the patient's treatment, and saved many a reference to the Blue Board. Such accuracy and wealth of record led to a better control of treatment and even to improved treatment. It brought out, for instance, the importance of an adequate supply of fluid to febrile patients. These charts of fluid intake and output called attention to water shortage, and I have no doubt that many lives have been saved by supplementing fluid taken by mouth by giving salines *per rectum* to patients desiccated by high fever or profuse sweating. Her patients and her house physician gained



much from her knowledge of food and food values. Lenhartz diet became "modified" and is still in use as such after nineteen years. The unsuitability of milk for many patients on a fluid diet led her to evolve a diet without milk for typhoid patients.

House physicians will remember her interest in medicinal treatment. Sister Hope knew the value of drugs, and she carried her experience and the experience of others from one house physician to the next, and from one chief to another. Omnopon, intravenous strophanthin and adalin were given their first systematic trial in Luke Ward. Working on Trousseau's dictum that a drug, if indicated, should be given in sufficient dosage to produce its effect, I remember the difficulty in getting

5 minims of croton oil from the Dispensary for a constipated man with hemiplegia.

So much for nursing and treatment. But there was also medicine. If her house physician read a German weekly journal, she read the *Presse Médicale*. And so it happened one afternoon that Prof. Chauffard and Prof. Falta, who had come to see the Hospital, were not to be found. Going into Luke Ward with Sir Archibald Garrod we found them listening to a demonstration on tests of pancreatic function given by the Sister of the Ward, a bit of French for the one and German for the other. Behind this knowledge of medicine was a keen understanding and common sense. Many a house physician, after going over a new case, has taken a hint as to the diagnosis from Sister Hope. He might have seen her playing with a "path." card which only wanted a signature for a blood W.R., and this might have made him first think of an aneurysm of the aorta as an alternative to disease of the aortic valves. It was always very tactfully done when the matter was medical. But if it was a matter of ward routine, information was given quite cut and dried, and to students and nurses crisply as orders with some authority. Sister Hope was something of a disciplinarian, and required things done her way in her department of the work.

Fortunately for Miss Powell, even the absorbing interest in her work was not the whole of her life. The canary in its cage and the flowers in their window-box were signs of her interest in other things. We, who worked with her, heard too of travellings abroad, of adventures in Spain and elsewhere. We shall miss her in the Hospital as long as we work there, but we are glad to know that she leaves us with a keen zest for life. She leaves behind her such a record of work and achievement for the good of others that few can reach.

A. G. E.

CANCER AND THE PERIODICAL OVERHAUL: THE EXPERTS EXAMINED.

DR. Malcolm Donaldson's plea for periodic examinations in the July issue of the JOURNAL undoubtedly raises very important issues. Attention is focused on a subject on which opinion is widely divergent, and one, moreover, on which the medical profession in the next generation will have to make up its mind. It is well, therefore, that those who are opposed to these ideas should state their opinions as forcibly as possible; there is already much in the Public Health Service from which no demonstrable good comes to the community. The economic condition of this country makes it certain that schemes involving fresh expenditure of public money will be subject to severe criticism, and that even well-established usages will be keenly re-examined. Now, then, is the time for a consideration of these and kindred questions, and for the assertion of the corporate mind of the profession.

I attempt to discuss in this article the value of "the regular overhaul," the advantages of periodical examinations for the early diagnosis of cancer, and, very briefly, the general question of anti-cancer propaganda.

Although these matters are highly controversial, it may be assumed that all the disputants are primarily concerned for the improvement of the health of the individual.

THE REGULAR OVERHAUL.

This idea of periodical examinations is American-born, and it has a superficial attraction for the intelligent layman who assumes that physicians are capable of recognizing the very early evidences of disease. It is said that in the United States several insurance companies are arranging for the regular re-examination of their life-insurance clients. It will be twenty years before the results can be estimated actuarially, but one hazards the opinion that they are unlikely to be profitable.

This subject has already become a dinner-party commonplace amongst the lay public, and the family doctor's opinion is frequently sought.

"Is it worth my while to come to you for an examination once or twice a year?" is the usual question. I believe the only honest answer is, "No, not as long as you remain well. Come to me whenever you notice anything wrong—but not otherwise."

This propaganda for an annual or biennial overhaul is undoubtedly retrogressive; it ignores two fundamental tenets of modern clinical medicine.

(1) *The first sign of the disordered function of any organ is, most commonly, a symptom.*

(2) *It is always difficult, and sometimes impossible, to assess the value of any one sign if it is unaccompanied by symptoms.*

There are certain obvious exceptions to these axioms, but to find their ample justification it is only necessary to consider for a moment where the diagnosis, prognosis and treatment of pulmonary, cardiovascular and abdominal disorders would stand if symptomatology were excluded.

It is, I believe, futile to hope that we shall give our patients much help unless they come to us with some definite symptom to be elucidated. The line of true advance in medicine, as Mackenzie spent the last years of his life in demonstrating, lies in the better understanding of the earliest symptoms of each organ's disordered working.

Dr. Donaldson refers to our periodic visits to the dentist; this is a well-worn but unsound analogy.

It will be readily appreciated that in the extent and frequency of their decay, in ready diagnosis, with easy access, and the possibility of remedial work, the teeth are unique amongst all our organs.

That these repeated examinations may be disadvantageous to the patient in that they suggest possible disease rather than positive health is discussed below—but they have, too, definite disadvantages for the doctor.

Financially, they would represent quite a respectable addition to his income, but ethically, they smack a little of dishonesty, for the physician inevitably promises more than he can perform. One does not need very much imagination to conjure up distressing scenes. A palpable lump is discovered in the abdomen. Too late—inoperable. "But my doctor examined me only three months ago and declared me perfectly healthy . . . ."

The frequent examination of healthy persons causes far greater difficulties than these. It is attended by two besetting dangers. Either the physician gets bored by so much seeking without finding and his methods become cursory, or he invents some "sign" which is present sufficiently often to make his search exciting.

It requires a strong mind to avoid both this Scylla and that Charybdis. It is the tracking down of a symptom which provides much of the interest of clinical medicine.

PERIODICAL EXAMINATION FOR CANCER.

I think it may be regarded as essential that to justify regular examinations for certain cancers the following stipulations should be made:

(a) *The cancer should be silent,* i. e. *it does not make its presence known in the early stages by a symptom or group of symptoms.*

(b) *The cancer must be diagnosable with certainty in its early stages and without recourse to repeated elaborate investigations.*

(c) *The cancer must be accessible, and early treatment must offer a reasonable chance of success.*

If it is agreed that these conditions are essential, it will be seen that very few cancers fulfil these criteria. Let us examine them in more detail.

(*a*) If the cancer declares itself by symptoms before it is readily diagnosable by other methods, then it is both sufficient and preferable that patients should be instructed to consult a doctor when they are aware of the persistence of some symptom which is abnormal.

This excludes all the commoner cancers, with the probable exception of cancers of the cervix uteri, breast, prostate and rectum.

(*b*) It is obvious that repeated and extensive investigations are out of the question. The performance of laryngoscopic, bronchoscopic, cystoscopic, radiographic, histological and biochemical investigations every year is palpably absurd. If it is rejoined that these investigations should only be done if a special organ is thought to be implicated, we immediately return to condition (*a*), *i. e.* that the patient complains of certain symptoms.

Moreover, it is only in the mouth, rectum, cervix and breast that it is possible without elaborate investigations to give the patient even a moral certainty that he or she is free from cancer.

(*c*) We may accept Dr. Donaldson's figure that in 1926, 37% of all deaths were from "accessible" cancers. The degree of accessibility of cancer varies enormously; it is certain that in males a large proportion of these deaths from so-called accessible cancers were of the stomach and rectum. Yet I think it is incontestable that in these cancers we have not yet arrived at the stage where early diagnosis is of much avail to the patient.

The physician with the largest "abdominal" practice in London told me but a few months ago that the results of operation for gastric carcinoma are so profoundly disappointing that he practically never advises it. This is partly due to the fact that it is almost impossible to diagnose cancer of the stomach in its early stages, although surgeons in my student days blamed the G.P. for not sending cases to them sufficiently early.

The same is true of cancer of the rectum, so that the operation of choice for a man who insists, if possible, on living another two years is a colostomy. The pathologist at a London hospital was engaged in collecting the end-results of all cases of rectal carcinoma operated on at the hospital. He desisted. The results were too appalling to publish.

It will be seen that the exclusion of cancers which do not come within the prescribed conditions leaves for practicable purposes only cancers of the breast and cervix uteri as silent, easily diagnosable and accessible cancers.

It may be pointed out that as the years pass diagnosis and treatment will improve and more cancers will fulfil the conditions. It is an adequate reply that the whole problem will then merit re-examination.

Periodical Examination of the Breast and Cervix Uteri.

It is an interesting example of the concentrated outlook of the specialist that the only cancers which might repay periodical examinations such as Dr. Donaldson suggests are cancers occurring in women.

It is undoubtedly true that if these conditions came earlier to treatment there would be a great prolongation of life; but even here it is greatly to be doubted whether Dr. Donaldson's suggestion would result in much lowering of mortality.

The exact frequency of these periodical examinations has not been suggested, but it must be pointed out that even if annual or biennial examinations are made, it still allows ample time for a cancer to become "late" in between the examinations, and we are still left with the necessity for instructing the woman to come up if she notices anything abnormal.

In carcinoma of the cervix, the mortality would, as it is, be greatly reduced if women came for examination as soon as they noticed irregular bleeding.

The chances of getting even a minority of healthy women over forty to come up for a vaginal examination every six months are so slight that it is hardly worth discussion.

Antenatal examinations are not analogous; there the woman knows that something dangerous is happening to her in a few months, and antenatal examination will give her greater safety.

The intelligent woman knows that the chances against malignant disease are 20 to 1, and it will be time enough to think about it when she notices anything wrong. This is the attitude of mind to be encouraged—an attitude which is symptomatic of good health and yet not neglectful of disease.

In carcinoma of the breast most women are aware of a lump quite sufficiently early for adequate treatment; they refrain from coming to the doctor, sometimes because they are negligent, sometimes because they are fearful of the truth. All doctors must occasionally have seen this last curious shrinking in trained nurses; I have only twice known instances of carcinoma of the breast in nurses, yet in one case the woman waited six months, and in the other nine months, before consulting a doctor.

This does not augur well for the success of propaganda; it is not obvious that increased knowledge by the public will lead inevitably to earlier diagnosis.

Moreover, if such women will not come to a doctor when they know they have a lump in their breasts, all the cancer campaigns will not get them there if they know they have not.

To sum up, then, I believe these periodic examinations for cancer to be impracticable, because women will not have them; unnecessary, because the mortality might be almost equally reduced if advice was sought at the onset of symptoms; unwise, because of their harmful psychological effects; and inefficient, because the patient would feel unjustifiably secure in the interval between the examinations.

Anti-Cancer Propaganda.

Mass propaganda is a powerful weapon, but it demands great skill in the handling and it is undoubtedly double-edged. There were many instances in the Great War where unwise propaganda produced exactly contrary effects to those desired.

As far as the family physician sees, sitting in his consulting-room and going about among his patients, this is precisely what is happening with cancer-propaganda. It is driving the neurasthenic and the weak-minded in their scores into our consulting-rooms, men and women who are frightened by the fear of cancer, and, like Rachel, some of them refuse to be comforted, even though one submits them to the completest investigations to restore their confidence.

Family doctors are inarticulate persons, and no word of these unfortunates appears to reach the cancer-experts who continue to preach their religion of fear.

It is interesting to observe that while this generation has succeeded in casting off a theology which held men in thrall by the fear of eternal damnation, modern medicine is fastening on the shackles again by preaching this fear of malignant disease. The old religion sought to make men virtuous by the fear of hell-fire; the new medicine seeks to make them healthy by proclaiming the terrors of disease.

If those who think this parallel far-fetched will read accounts of cancer campaign meetings, they will see that the resemblance to an old-fashioned revival meeting is irresistible. This is the sort of eloquence to which the audience is treated:

"Five out of every hundred women die of cancer of the breast, three of every hundred women die of cancer of the womb . . . ."

The flesh creeps, the victims squirm in their seats, and one almost expects a penitent form, with free examinations for all, in the vestry after the meeting.

Is it surprising that these phobiacs in the arms of Christian Science are made radiant and calm?

Is there no middle way of health between the scientist (Christian) who says, "There is no disease," and the scientist (cancer) who says, "Even now the disease-cells may be growing in your body—ceaselessly dividing and multiplying"?

I am persuaded that there is, and I am confident that the profession and the public will adhere to it.

There is no need to talk of teaching the public the symptomatology of the various sorts of cancer; the whole burden of sane cancer propaganda may be summed up in a sentence: "Don't worry about cancer, but if at any time you are aware of something happening in your body which is in any way abnormal, consult your doctor at once."

DOUGLAS HUBBLE.

TO THE THEOLOGIANS.

(That they may answer me.)

"A Potman's Suicide," the headlines ran,
"Love Incident Recalled," and so I read
Of how a potman, poor deluded man,
Had with a razor severed trunk from head—
Or very nearly so. (Such gruesome tales
Ensure our local weeklies of their sales.)

Poor potman! Launched upon his desperate way,
What haven has he gained, if any? For
I've heard of paradise for those who may
Have lived uprightly and kept all the law,
And hell for those who do no kind of right.
But where go folk in our poor potman's plight?

He sought no palm, nor harp, nor crown of gold;
And for his evil he had suffered much.
A girl had jilted him, and he was bold
Enough to put his fortune to the touch
Of all eternity. Poor potman! Well,
Is he roast now, or cool—in heaven or hell?

C.

A LETTER FROM LENA.*

July 18, 1932.

DEAR SISTER

I was ever so please to get your card last Saturday & I do thank Sister for it well Sister I feel a lot better just now at times I am not so well I have no strength to go about A woman who is doing my housework takes me out in A chair I left St. Lukes about 6 weeks now I was very happy whiles their altogether I was in St. Lukes 19 weeks every one was so kind to me I received A letter from Matron last weeks to say they will always have me back so I have that comfort dear Sister my tall Son has hurt his hand at work 4 weeks ago very badly but its going on very well now he is attending the London hospital his own Doctor sent him he is their today again well Sister how are you keeping yourself well I hope I often think of Sister & your kindness to everyone if all goes well & the Docter let my Son go they will be going away on Saturday in their own moter boat for A fortnight they go to different places I think its as well I wont go with them this time now Dear Sister I must now thank you again for thinking so much of me & may God give you strength & help you to carry on in your good work.

Your sincerly

LENA.

* See "Lena's Crab," *St. Bartholomew's Hospital Journal*, November, 1930. The crab was removed on July 18th, 1930. Lena has been in St. Luke's on two occasions, but her time is not yet.—ST. D.

SOME RESULTS OF BLOOD TRANSFUSION IN CHILDREN.

In this communication brief notes of 40 consecutive transfusions in children are reported. Much has been written about blood transfusion, and this is not in any way an exhaustive account. In children, and particularly in infants, where the total quantity of blood can be appreciably augmented, transfusion is a valuable therapeutic measure in a wide variety of conditions. Certain rules must be strictly observed. Besides an initial grouping, the child's serum and the donor's corpuscles must always be directly matched. The quantity given must not exceed 10 c.c. per pound of body-weight, and the blood must be given slowly, 20 to 30 minutes being a suitable time. If these precautions are taken, blood transfusion is a safe procedure in children, and in this series only 7 showed febrile reactions, and in none were the symptoms alarming. Transfusion into the longitudinal sinus is dangerous and unnecessary. Of the 19 cases under a year old, 14 were done by the scalp vein technique, and in only 5 was it necessary to dissect out an ankle vein.

Forty transfusions are reported and the results set out in a table. All cases are included, and it is obvious, in the light of subsequent findings, that a number were hopeless when transfused. By reporting selected cases a more favourable impression could be created, but it is considered of greater value to record the series of consecutive transfusions.

TABLE OF RESULTS.

Group.	Excellent.	Good.	Indifferent.	Bad.	Total.
I. Nutritional anæmias	5	1	0	0	6
II. Other blood diseases	2	5	1	0	8
III. Acute infections	1	8	6	1	16
IV. Chronic infections	1	2	2	0	5
V. Miscellaneous	1	1	3	0	5
Total	10	17	12	1	40

GROUP I.—*Nutritional Anæmia.*

Name.	Age and weight.	Reason for transfusion.	Method	Quantity of blood. Total and per lb. c.c.	c.c.	Time (mins.).	Rejection.	Result of transfusion.
I. Fred. R—	1 3/12	Profound nutritional anæmia (hæmoglobin 23%). T.B. contact. Developed pneumonia soon after admission to hospital. Transfused on second day of pneumonia	Scalp vein	90	7	40	T. 105° 4 hours after transfusion	Great improvement in general condition. Gradual settling of temperature. Lung signs cleared rapidly. Improvement maintained and hæmoglobin continued to rise (100% 6 weeks later).
II. Herbert C—	1 4/12; 19 lb.	Nutritional anæmia. (Hæmoglobin less than 20%)	Arm vein; puncture	200	10	20	T. 103·8° half an hour later	Immediate and sustained improvement in general condition. (Hæmoglobin 36% 7 days later.)
III. Harry L—	5 years; 27 lb.	Nutritional anæmia. (Hæmoglobin 26%)	Ditto	275	10	30	None	General condition much improved. (Hæmoglobin 46% 1 week later.)
IV. Mary J—	12 months 11½ lb.	Nutritional anæmia. Six weeks before transfusion hæmoglobin 28%. After 5 weeks of medical treatment in hospital 40%	Ankle vein; dissection	120	10	20	,,	Marked improvement in general condition and gain in weight dating from transfusion. (See weight chart.)
V. Jennie T—	6 months; 10½ lb.	Severe nutritional anæmia	Scalp vein	105	10	30	,,	Much brighter. Taking foods more readily and gaining weight.
VI. Lancelot A—	2 years; 20 lb.	Nutritional anæmia	Ankle vein; dissection	150	7·5	15	,,	Improved.

GROUP II.—*Other Blood Diseases.*

VII. James J—	1 day	"Congenital purpura." Petechiæ, melæna and jaundice	Ankle vein; dissection	40	7	20	None	Immediate cessation of hæmorrhage.
VIII. ,,	1 month	Recurrent petechiæ and failure to gain weight	Scalp vein	35	6	15	T. 100°	No apparent effect.
IX. ,,	,,	Transfused again a day later on account of failure of last transfusion to control hæmorrhage	,,	35	6	15	None	No fresh petechiæ appeared for 4 days.
X. ,,	1 ,,	Four days after third transfusion hæmatemesis and melæna occurred again	,,	40	7	20	,,	Bleeding ceased for a further 4 days.
XI. Doris T—	11 years	Myelocytic leukæmia. (Hæmoglobin 40%)	Arm vein; puncture	500	..	50	,,	General condition improved. Red cell-count remained raised and more nucleated red cells appeared in the circulation.
XII. ,,	,,	Transfused again on account of sudden fall in white blood-count following X-ray therapy. Same donor as before	Ditto	500	..	30	Severe febrile reaction. T 109·8°	Steady improvement in both general condition and blood-picture followed.
XIII. Baby L—	2 days; 8 lb.	"Hæmorrhagic disease of newborn." No response to intramuscular injection of blood. Apparently moribund when transfused	Ankle vein; dissection	80	10	20	None	Immediate cessation of melæna. No fresh petechiæ appeared. General condition improved rapidly and complete recovery followed.
XIV. Ernest R—	1 3/12; 24 lb.	Purpura with multiple subcutaneous hæmatomata	Arm Vein; dissection	220	9	20	,,	No further hæmorrhages occurred after transfusion.

GROUP III.—*Acute Infections.*

XV. Jack W—	13 weeks	Secondary pneumonia	Scalp vein	50	7	30	None	Slight improvement in general condition with temporary fall of temperature.
XVI. Irene S—	1 6/12	Meningococcal meningitis—pending vaccine	,,	120	7	30	,,	Some improvement with fall of temperature.
XVII. Doris W—	4 3/12	Fever and positive blood-culture	Arm vein; puncture	250	7	25	,,	Temperature settled and general improvement followed.
XVIII. Jack H—	3 months; 11 lb.	Osteomyelitis right maxilla	Scalp vein	80	7	20	,,	No improvement. Died 3 days later.
XIX. John R—	2 10/12	General peritonitis following perforated appendix. Moribund when transfused	Arm vein; puncture	350	12	30	,,	Pulse improved during transfusion. Died 2 hours later.
XX. Peter W—	1 6/12; 20 lb.	Tuberculous peritonitis; acute intestinal obstruction. One week after operation developed primary disseminated pneumonia; T. 103°. Transfused on second day of pneumonia	Ankle vein; dissection	200	10	20	..	General condition much improved. Temperature normal for 3 days after transfusion. Lungs showed signs of clearing on the following day.
XXI. ,,	1 6/12; 20 lb.	Transfused again 5 days later; temperature had been raised for 2 days and a fresh area of consolidation had appeared in the left upper lobe	Ankle vein; puncture	200	10	20	T. 103° 6 hours later	General condition improved.
XXII. ,,	1 7/12; 20 lb.	Transfused a third time 6 weeks later on account of continued fever and decline in general condition	Ankle vein; dissection	200	10	25	None	Temperature became normal for 3 days but general condition continued to decline. Ten days later died of tuberculous meningitis.
XXIII. Joyce H—	11 months; 10 lb.	Extensive eczema. Pneumonia. Going downhill	Scalp vein	100	10	30	,,	Much worse after transfusion and died 36 hours later.
XXIV. Gerald G—	5 months; 12 lb.	Secondary pneumonia	,,	120	10	25	,,	Much improved.
XXV. ,,	5 months; 12 lb.	Worse again 10 days later, so transfused again	,,	120	10	20	,,	No effect noticeable.
XXVI. Stanley P—	4 years	Streptococcal septicæmia; positive blood-culture. Osteomyelitis both tibiæ, multiple subcutaneous abscesses, suppurative arthritis left hip-joint, and bilateral otitis media	Arm vein; dissection	400	?	30	,,	General condition improved; but large doses of scarlet fever antitoxin had also been given.
XXVII. ,,	,,	Transfused again 9 days later. No more metastatic abscesses since first transfusion. "Holding his own," but temperature swinging up to 103° each day	Arm vein; needle	300	..	25	,,	Much improved. Temperature began to settle after transfusion.
XXVIII. ,,	,,	Ten weeks later. Afebrile for last 2 weeks but anæmic and apathetic	Ditto	400	..	25	,,	Much improved. Soon became bright and talkative.
XXIX. Ronald L—	8 months; 13 lb.	Secondary pneumonia of 2 months' duration. Joint effusions and anæmia	Ankle vein; dissection	130	10	22	,,	Not improved.
XXX. Peter M—	1 3/12	Prolonged secondary pneumonia with anæmia (hæmoglobin 60%)	Ditto	150	7	20	Slight urticarial eruption on face	Improved. Temperature settled gradually.

GROUP IV.—*Chronic Infections.*

XXXI. Margaret G—	3 3/12; 25 lb.	Psoas abscess secondarily infected with streptococci. Operation for drainage six weeks previously; not doing well. Severe anæmia	Arm vein; dissection	250	10	20	None	General condition improved.
XXXII. ,,	3 4/12; 25 lb.	Transfused again 5 weeks later after operation for drainage of large secondary abscess in thigh. Much foul discharge and general condition deteriorating	Arm vein; needle	250	10	25	T. 103·4° 1 hour later	,, ,,
XXXIII. Jenry H—	5 years; 30 lb.	Empyema drained 6 weeks previously. Slow progress; persistent fever, but no evidence of pus pocketing	Ditto	300	10	30	None	Temperature settled immediately after transfusion and did not rise again. Wound healed rapidly. General condition showed great improvement dating from transfusion.
XXXIV. Joseph S—	6 months; 8 lb.	Chronic meningococcal meningitis. Gastro-enteritis (hæmolytic streptococcus), 2 months' duration	Scalp vein	80	10	25	,,	Gained a little weight, but general condition unchanged
XXXV. ,,	6 months; 8 lb.	Transfused again 2 weeks later on account of lack of progress	,,	80	10	25	,,	No improvement.

GROUP V.—*Miscellaneous.*

XXXVI. Dennis K—	4 months; 7 lb.	Wasting	Ankle vein; dissection	50	7	20	None	Rapid gain in weight followed the transfusion but acid feeds were started at the same time and may have been a factor in the improvement. (See weight chart.)
XXXVII. Ernest N—	9 weeks; 5½ lb.	Pyloric stenosis. Transfused 2 weeks after Rammstedt operation on account of persistence of vomiting and failure to progress	1. Scalp vein 2. Peritoneal	25 45	5 ..	10 5	,,	No improvement. Died 4 weeks later.
XXXVIII. Alice R—	11 4/12	Severe hæmorrhage occurring 4 hours after operation for tonsils and adenoids. Moribund when transfused	Arm vein; needle	600	?	20	,,	Pulse improved during and after transfusion. Died suddenly 1 hour later.
XXXIX. Vincent R—	9 weeks; 8½ lb.	Pyloric stenosis. Rammstedt operation 2 weeks previously. Losing weight	Scalp vein	85	10	25	,,	Improved. Began to gain weight.
XL. Robert K—	6 weeks; 6½ lb.	Pyloric stenosis; severely shocked after Rammstedt operation. Transfused when moribund	,,	65	10	40	T. 105°(? due to transfusion)	Condition improved for 2 hours after transfusion. Then suddenly collapsed and died.

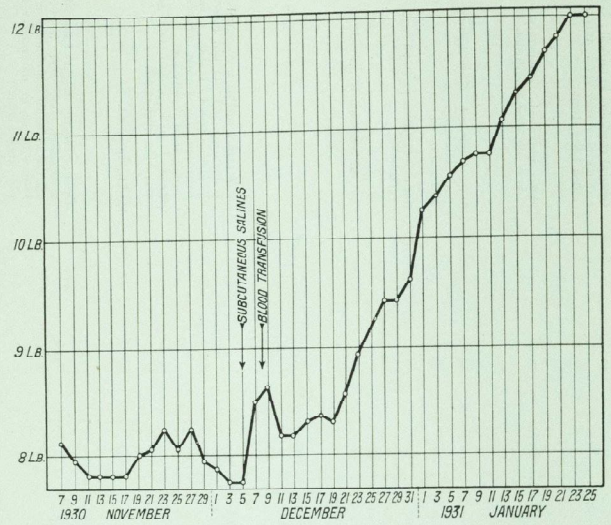


CHART I.

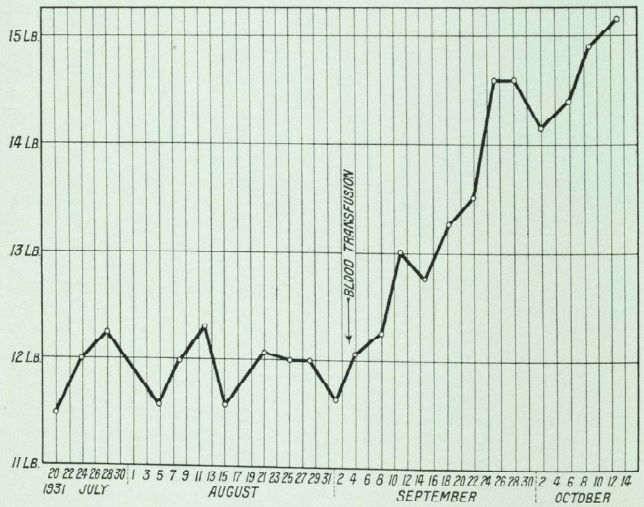


CHART II.

In infancy the association of profound anæmia and wasting is common, and is in many cases due to a nutritional defect. These cases respond particularly well to treatment by transfusion. They have been classified as nutritional anæmia in the tables, and two satisfactory weight charts are appended. In the case of Dennis K— (Case XXXVI), the transfusion coincided with the introduction of an acid feed, and the latter may have been an important factor in the improvement, but in the second example (Case IV) there was a long control period before and the result was clearly due to the transfusion.

In conclusion, I would like to thank Dr. Harris for his encouragement and interest in transfusion therapy, and for his suggestions and criticism of this article. My thanks are also due to the members of the Honorary Staff of the Royal Manchester Children's Hospital for permission to use the cases under their care.

R. KEMBALL PRICE.

THE PHILOSOPHY OF TREATMENT IN GENERAL PRACTICE.*

WHEN one considers the progress that has been made in engineering, physics and astronomy, is it not surprising that medicine seems to lag so far behind? It is true we can point to immense medical institutions of stone, concrete and steel, housing a multitude of typists, apparatus, research workers and patients, but the common cold and puerperal morbidity continue to exact their toll, while our arteries harden and our stomachs erode with an altogether undiminished vigour.

My title—"the Philosophy of Treatment"—pretentious as it may sound to you, has been chosen because it touches on what I believe to be at the moment the cardinal weakness of our profession. A horrid metamorphosis seems to occur when the medical student enters on the practice of his profession. For five long years or more he has been marching surefooted with gallant comrades along that macadam road of anatomy, physiology and pathology, following the course of artery and nerve, learning the chemistry of digestion, studying the changes in tissue under stress, with fact and theory, known and unknown, clearly defined. Then suddenly the road ends, and those surefooted ranks are transformed into flocks of frightened fowl scattering over the marsh of general practice, clucking out nostrums and squawking in competitive panic on a thousand different notes. Can this shocking spectacle be entirely the result of following that famous precept, "Treat the patient and not the disease"? Can this really excuse the multitudinous recipes for the same ailment? I think not. For whenever disease has been mastered, you will find that—despite that avuncular maxim—uniformity of treatment rules successfully a thousand patients at a time. Swayed by fashion, stampeded by competition, we shilly-shally between the bread poultice of our forefathers and the vaccine of an age to come. So that the bystanders—and they are many—are driven to exclaim, "What in the name of Hippocrates are they up to?" We scarcely know ourselves.

We stand before the public to-day as purveyors of facts about the body. The man in the street, that final arbiter of all worldly things, will not be fobbed off with fancies. Let us consider for a moment the patient's point of view. Whether he be suffering from over-smoking, a stone in the kidney, or unrequited love, he comes to us as to professed experts in bodily ailments to be cured, or, if that is not possible, to know the true condition of his economy in so far as we know it. As I write I see again the picture of an aged Oriental crouched on his bed who, as the doctor enters, raises a lean forefinger and exclaims, "O doctor, if there is anything the matter, for the sake of Allah, tell it me not." We will continue, however, the consideration of the more normal cases. The patient wants to be cured. He has, for instance, a fractured femur. Surely here there can be no problem save the mechanical one of alignment and fixation. And yet, what answer do we give? One of us produces splints, bandages and rolls of the most expensive cotton-wool, another plaster-of-paris, another, liking blood and complications, sets his whole staff to work at boiling steel plates, while his rival mutters something about grafts and beef-bone pegs. And yet fractures have occurred since the beginning of bone life, and we live in an age whose fierce attack on mechanical problems is well-nigh incandescent. And yet (to make matters worse), this particular problem has actually been solved once and for all by skeletal traction some twenty years ago. This, then, is my first and simplest example of treatment at fault, not because we do not know, but simply because we cling in a hazy way to the magic of diversity, and find it easier to fulminate against the bone-setters.

To take another instance of the treatment of a known and curable disease, let us consider the person suffering from peptic ulcer. Here we have tragi-comedy bordering on farce; for it seems at the moment as if the unfortunate individual himself must decide—and his very fate hangs on it—whether he shall apply to Dr. A—,

* An address delivered before the Medical Association of Syria and Palestine, Tiberias, March 2nd, 1932.

who, backed by the authority of the heaviest income-tax payers of the profession, will remove two thirds of his stomach in order to save him from certain death, or to Dr. B—, the mysterious, who, living exclusively on X-rays, prescribes wholesale the ghoulish diet of bismuth and olive oil. Yet here is a known and established disease. We can see the ulcer, we can almost hear it drip, and we have had—heaven knows—enough statistics of the opposing schools of treatment to enable us to form a judgment; yet the patient of to-day will find it difficult to discover an adviser who will not express himself as partial either to medicine or surgery, as though he were discussing the respective merits of beef and mutton. The actual controversy is irrelevant; I would merely insist that we seem to have failed in our duty to the public when we allow ourselves to become partisans. I would ask you to consider how much of the bias is due to sheer inability to assess scientific evidence, and how much to the fact—that ominous fact about which I shall speak later—that the money consideration very definitely takes the field. I would point out that some of our most expensive and lucrative medical nursing homes are maintained by ulcer patients, while the gastric surgeon claims for an intricate and technically very interesting operation a not uninteresting fee.

But so far we have been on firm ground. Who can deny that the profession as a whole lags pitiably behind in its application of established discoveries? Who can doubt that the bias of specialism turns often to the detriment of the sufferer? But now we must launch out into the blue. By far the largest part of our work has to do with diseases where time, rest and warmth are the sole factors in the treatment. Rest and warmth have already been prescribed by the home circle, and we are called in to give the assurance of the expert that time will do the rest. What happens? At first all goes well. The patient is questioned and examined with meticulous care. Advice is given as to food and drink, the temperature of the room and the probable duration of the disease. So far all is above-board. And then, with pantomimic suddenness, magic enters. In the room voices are hushed, the doctor takes out a pad of peculiar paper, and the family follows anxiously the scratching of the professional pen. Mumbo-Jumbo sits enthroned; the prescription is being written. Rest, warmth, diet; unalarming prognosis, simple home remedies, are not enough. Like a fool's cap crowning the scene comes the mysterious formula, to be got as often as not only at a certain pharmacy, conveyed in writing, cunningly illegible to all but the fellow conspirator. Thus do we, forsaking honesty, grasp at opportunity, backed by tradition and a hundred arguments; thus do we seek to maintain our hold, using dubious means, and reaping the advantage of a false association. It is because I believe in drugs that I condemn this practice as intolerable; it is because I am proud of our art that I consider its misuse a prostitution. I shall be told that the public expects it. The public has expected many things which we have not given it. There was time when men, alarmed by fever, estimated the skill of a doctor by his ability to prescribe a febrifuge (still earlier was it not a purge?). Our all too willing associates, the manufacturers of synthetic preparations, promptly produced a truly appalling list of these dangerous drugs. Then suddenly—one fine morning as it were—some bold person suggested that we might tell our patients that fever was beneficial, a sign even that the body was doing its best. The public was startled, wobbled for a year or two, then bowed with a sigh to the new decree. It is just because our position is so overwhelmingly strong that I consider humbug—whatever the excuse—to be intolerable. It is a significant fact that when a doctor treats his family, still more when he treats himself, prescriptions costing solid cash do not somehow figure so prominently, and I suspect that the laity is becoming aware of it.

To sum up this aspect of the subject, I maintain that in by far the greater number of our cases we are asked in for diagnosis, prognosis and simple advice, and that our patients are quite prepared to consider that they have had their money's worth without being asked to contribute to the pharmacist next door.

Some of us more especially have to treat those suffering from some chronic non-fatal disability, for which no cure is known. Weeks, even months, may have to pass in examination and diagnostic treatment, in which the prescribing of drugs of known and well-tried action certainly plays an important and essential *rôle*; but finally the day must come when we are faced with a patient who has appealed to us in vain.

When at last we are obliged to pronounce on the chronic incurable, we must not only destroy all hope of cure at our own hands, but also—without disloyalty to our colleagues—discourage the patient from seeking it elsewhere. No one who has lost an eye pesters the oculist for a new one. If our particular patient is not made to feel that continuance of any form of treatment is as absurd as that, we have failed to render the only service that was required of us.

The question is not so simple when we come to discuss the neurotic. I mean by that term those who, finding that life is too much for them, have been drawn to take refuge in the contemplation of their bodily functions. Such come to us primarily for the sympathy one expects from a sharer of the same hobby. Fortunately (for both parties) there is no diagnosis more hazardous or difficult to establish than that of the neuroses. Fortunately, I say, for much time must be consumed while the inevitable and expensive examinations take place, so necessary to eliminate a lesion of the brain, the hidden cancer, or an obscure focus of infection. Even so, sooner or later the day arrives when the answer must be given. Many of these unfortunates show on their abdomens the scars of incisions, doubtless admirably devised. Many have travelled round the world seeking sun, seeking baths, seeking more and yet more physicians; all have their pocket-books stuffed with well-creased prescriptions. Well, and what shall we do? "Why not psycho-analysis?" It is, or was, a magic word, and the treatment is at least carried out on a scientific basis; but our job as humdrum practitioners is over. Wrapped in the majesty of all the findings of the laboratory and clinic, we can tell such a one that the trouble lies in his own fat head, and that unless he wishes to find himself in an asylum, he had better set to work and sail a boat! Of course I know there is the old lady, with her lap-dog and comfortable balance in the bank, and that clever doctor who does do her such a lot of good with his bright, breezy bi-weekly visits and funny stories. Many a stout family has been reared, many a good car kept on just such a practice. But I suggest that these gentlemen, trading on personality, exploiting jolly good fellowship, blowing like a great healing wind through the sick-room—these I say should be given in addition to their M.D. a special diploma, just to distinguish them from *us*.

But how should one treat those afflicted with necessarily fatal disease? Palliation of pain, of course, but what else? An individual is found to be afflicted with a disease which he will never get rid of, a disease, moreover, which will probably curtail his life, always supposing that it is not done for him by a passing car. Can there be any doubt that the sooner we lay these facts before him the better we shall be fulfilling our duty? Then, and only then, freed from gnawing anxiety and ineffectual striving, can he look to his business and set his house in order, making the most of the precious moments that remain. And yet I have heard friends successfully persuade the doctor to hide the truth, and compel the condemned to fritter away his time and the money which he might leave to his dependents in consulting one physician after another, seeking the unattainable. Does gloom necessarily cloud over such a man when he knows the truth? The Cancer Wing of the Middlesex Hospital, London, is a sufficient answer to such a question. I know of one circumstance, and only one, when a doctor is justified in hiding the truth from his patient, and that is—when he does not know it.

I must at this point register an emphatic protest against the great combines of therapeutic products, which at the moment form the greatest bar to sanity in treatment. These firms are deluging the world with new products, many of which have as their sole claim to consideration the fact that they do no obvious and immediate harm. Drug upon drug, after trial on three guinea-pigs and the lab. boy, is confidently recommended for our use, and we, poor fools that we are, afraid of falling behind the times, forgetting the solid training of our long early years, prescribe them recklessly for a week or two, until the next traveller comes, by bringing in new gay-coloured wares. Buried in the rubbish there lurks, no doubt, many a valuable compound, but who can stay to essay, who can take time to prove its worth? And yet—and the more is the pity—a determined concert of doctors could call this tune.

But enough, or too much of destructive criticism. We stand as professed purveyors of facts concerning the functions of the human body. Where no particular treatment is required, none should be given. Where it is indicated, we should make certain of every agent that we use, so that whether we fail or succeed, at least we learn. Specialism means bias, often to the detriment of the patient, but by far the greatest obstacle to honest dealing is the failure to realize what our patients really want from us. Of practical measures I have suggested a concerted stand against drug combines. Still more important to my mind is the need for a complete dissociation of any particular treatment from a corresponding pecuniary reward. I am convinced that some form of universal State medicine would, whatever its disadvantages, cut right at the heart of these problems. I think that all treatment by suggestion must be abandoned. Legitimate in psychiatry, elsewhere it infallibly retards the advancement of our science. Even when successful it is paid for with the incommensurable loss of our self-esteem; when it fails it drives our indignant patients straight into the power of the empirics. We must abandon that triple *rôle* of wizard, father-confessor and friend that has in some measure been thrust upon us.

But how can we meet our obligations? How answer the cry of the sufferer if we once expose the meagreness of our learning, the pitiable inadequacy of our tools? Surely even with our glimmering of knowledge, our rudiments of science, we yet represent the best that bewildered humanity can devise for protection against the outer cold! This, I maintain, is the argument of despair, employed from earliest times by whatever caste, taking too much upon itself, attempts to mediate between God and Man. Let us take courage. Much has been done, and time cannot dim the solid beauty of accomplishment.

In conclusion, consider whether even under existing conditions we cannot do something to raise medicine to its rightful place among the sciences. We have everything in our favour, but we are apt to mistrust the fundamental wisdom and common sense of common man. The fear of suffering and disability, the strongest single force in life impels men to seek our aid. We have chosen the practice of medicine to answer that appeal. Those who come to us asking for the waving of wands must be sent empty away. We have no right to misapply the consecrated ritual of medicine and surgery to meet that need. Humanity, stumbling through the valley of the shadow, needs trusty guides. It does not expect omnipotence, omniscience or infallibility, but craves deeply for honesty. Inured to trickery at the counter and before the altar, it will not forgive the physician who, undeceived himself, cries, "Take this and thou shalt be healed."

E. H. R. ALTOUNYAN.

THE NEW EAR, NOSE AND THROAT THEATRE.

THE new Ear, Nose and Throat Theatre, in the basement of the Old Surgical Block, was formally inspected on Thursday, July 21st, by Lord Astor and representatives of the Staffs of the *Times* and *Times* Book Club, who were responsible for its equipment.

Lord Stanmore, on behalf of the Hospital, welcomed the visitors, and thanked them for their generosity and self-sacrifice, which would be the means of alleviating much suffering.

Mr. Sydney Scott briefly outlined the history and growth of the Ear Department. At its inception, Mr. Cumberbatch attended the Out-Patient Department twice a week, each session lasting about ¾ hour. Now the Ear Department had four sessions a week, the total yearly attendances being in the neighbourhood of 10,000, with a similar number in the Throat Department.

Every effort had been made to economize in the cost of equipment, so that, for instance, the operating table designed by Mr. Bedford Russell to pull up, cost approximately £30, as compared with the push-up type in the Surgical Theatres, costing about £150.

But although the Department had in such ways endeavoured to reduce expenditure to a minimum, this did not prevent them from hoping that when economic conditions improved they would be able to bring all their equipment up to date.

Lord Astor, on behalf of the visitors, said that although the *Times* could boast six centuries less of history than St. Bartholomew's, still for the past century and a half they had been very good neighbours. Bart.'s had always been ready to treat any cases of accident or sickness from Printing House Square, and so had earned their deep and lasting gratitude.

During the crisis of last year the Staffs of the *Times* and the *Times* Book Club decided to open a fund for assisting the Hospital, and later decided that the money so raised was to be used for equipping the theatre.

They were extremely proud of what they had been able to do.

On the wall of the Theatre is this plaque commemorating the gift:

"The cost of adapting and equipping this theatre for the use of the Throat and Ear Departments was borne by the Staffs of the *Times* and the *Times* Book Club, April, 1932."

A list of the Sisters and House Surgeons of the Department was compiled by Mr. Scott, and is here appended:

	Ward Sisters.	*Throat O.-P.*
1906.	Lady Gillies (*née* Miss K. M. Jackson).	Miss I. Armitage.
	Miss Lucy Lowe.	Miss H. Liell (1st T. Dept. Sister).
	Mrs. Atterbury.	Miss Wharry
	Mrs. W. C. Coates.	Miss K. Jones.
		Miss K. Soden.
		Miss R. Pape.

House Surgeons.

1907.	Colin Clark.	
1908.	A. E. Gow.	
	F. C. Trapnell.	
1909.	W. B. Griffin.	
	H. D. Gillies.	
1910.	K. Pretty.	
	J. W. Adams.	
1911.	B. Biggar.	
	A. Abrahams.	
1912.	T. H. Just.	
	H. S. Crichton Starkey.	
1913.	H. B. G. Russell.	
	A. B. Pavey Smith.	
1914.	G. W. Carte.	
	W. Farrer Thompson.	
1915.	F. W. Watkyn Thomas.	
	Samuel L. Green.	
1916.	J. S. White.	
	R. Moser.	
1917.	A. Morford.	
	H. J. Churchill.	
	J. E. A. Boucaud.	
	Ph. A. Smuts.	
1918.	J. E. A. Boucaud.	
	H. N. Hornibrook.	
	W. V. Robinson.	
	F. T. Burkitt.	
1919.	J. A. Van Heerden.	
1919.	J. E. A. Boucaud.	
	E. B. Barnes.	
	K. B. Bellwood.	
1920.	H. M. Wharry.	
	C. H. Thomas.	
1921.	A. R. Dingley.	
	A. D. Wall.	
1922.	C. S. C. Prance.	
	C. A. Horder.	
1923.	F. C. W. Capps.	
	A. C. Visick.	
1924.	C. Meyrick Thomas.	
	B. M. Tracey.	
1925.	R. T. Payne.	
	N. A. Jory.	
1926.	H. B. Savage.	
	H. J. Seddon.	
1927.	J. C. Hogg.	
	R. H. Bettington.	
1928.	G. G. Holmes.	
	A. W. L. Row.	
1929.	W. J. Wilkin.	
	R. W. Raven.	
1930.	F. H. Ward.	
	W. G. Burgess.	
1931.	A. M. Boyd.	
	G. K. McKee.	
1932.	G. C. Knight.	

EXAMINATION HOWLERS.

Q.: "Describe a severe attack of migraine."

A.: "A young woman, say 18, goes to meet her *fiancé*, vomits, and has a severe headache."

STUDENTS' UNION.

RUGBY FOOTBALL CLUB, PROSPECTS, 1932-33.

An extended fixture-list has been arranged for all teams this year, and we hope to run seven fifteens every Saturday. The season opens for the 1st XV on September 24th with a match against the O.M.Ts. at Winchmore Hill. Subsequently we have stiff propositions with Pontypool, Plymouth Albion and Bedford, all away, in the first fortnight of October. We play the Varsity at Cambridge soon after and must go all out to secure victory; last year we only lost through lack of training and stamina in the last ten minutes. Among other good fixtures there are those with the Harlequins, Halifax, and Bristol, while new fixtures have been arranged with the Wasps, Llanelly, Rugby, Exeter, and Falmouth.

At present it is difficult to speak of the *personnel* of the team. As usual, we seem to have no lack of forwards and should be strong in the line-out. One of our great faults last season was inability to secure the ball regularly in the set scrums: hooking is an art which takes a long time to accomplish, and we should do well to take a lesson from the west country packs, who are adepts at getting down quickly and obtaining the first shove.

We shall miss J. R. Jenkins very much; his secretarial abilities were a great factor in our having such a successful club side last year, and his wing-forward play, more particularly at Devonport, was especially valuable. He will be acting as Treasurer and linesman this season. Behind the scrum we have a good fly-half in J. R. Kingdon, who has undertaken the secretarial duties. We badly need a sturdy centre who can run fast and straight and who can give a clean pass. We are hoping to retain the services of J. T. C. Taylor at scrum-half, as his individuality has been the making of the team during the past few seasons. No doubt the powers above will look on him kindly and give him another appointment.

There will be practice games on September 10th and 17th, when both last year's "A" and 1st will be expected to turn up. On September 17th there will also be a game for any freshmen, and two more trials will be held early in the season. The junior sides have a full programme arranged, and as usual they will form the backbone of the club. We wish all members a very successful season.

W. M. C.

Fixture List: 1st XV.

Sept.	24.	O.M.T.	Home.
Oct.	1.	Pontypool	Away.
,,	5.	London Hospital	Home.
,,	8.	Plymouth Albion	Away.
,,	15.	Bedford	,,
,,	19.	Cambridge University	,,
,,	22.	Wasps	Home.
,,	29.	Moseley	Away.
Nov.	5.	Redruth	Home.
,,	12.	Old Alleynians	,,
,,	19.	Llanelly	Away.
,,	26.	Devonport Services	,,
,,	28.	R.N.E.C., Keyham	,,
Dec.	3.	Rugby	,,
,,	7.	R.M.A., Woolwich	Home.
,,	10.	Northampton	Away.
,,	17.	Old Paulines	,,
,,	31.	Moseley	Home.
Jan.	7.	Harlequins	,,
,,	14.	Rosslyn Park	Away.
,,	21.	Coventry	,,
,,	28.	Bridgwater and Albion	,,
Feb.	4.	Pontypool	Home.
,,	11.	Exeter	Away.
,,	18.	Old Paulines	Home.
,,	25.	Old Leysians	Away.
Mar.	4.	Halifax	Home.
,,	11.	London Irish	,,
,,	18.	Old Haileyburians	,,
,,	25.	Torquay Athletic	Away.
,,	27.	Redruth	,,
,,	28.	Falmouth	,,
April	18.	Bristol	,,

UNIVERSITY OF LONDON O.T.C.

There were no official Territorial camps this year, and consequently the O.T.C. lost their customary fortnight at the sea-side. Our standing camp near Princes Risboro' thus came in very useful, and the improvements which had been carried out during the last year were greatly appreciated. The Medical Unit had the Artillery Unit as their companions under canvas, and an enjoyable week resulted. The quality of the work done is well illustrated by the fact that recruits passed Certificate A after only a week's training; all the Bart.'s men taking their Certificates A and B passed—a very creditable performance. Recreations included riding—an excellent demonstration of how to fall off without getting hurt being given to the gunners by Lee—shooting, cricket and cinema. It is understood also that the Canteen made a record week's profit.

The Bart.'s Contingent is now 40 strong, and it is hoped during the coming year to enrol sufficient recruits to make us in this, as in other things, the strongest of the Hospitals—Guy's are at present about 90 strong, and the whole Medical Unit, 300.

TENNIS CLUB.

July 20th: 3rd VI *v.* Guy's Hospital. At Winchmore Hill.

A. Innes and J. Smart beat 1st pair 6—4, 6—2; beat 2nd pair 6—2, 7—5; lost to 3rd pair 8—10, 7—5, 6—8.

J. G. Nel and L. M. Curtiss beat 1st pair 6—1, 6—0; beat 2nd pair 7—5, 6—0; lost to 3rd pair 8—6, 4—6, 3—6.

E. M. Darmady and H. W. Rogers lost to 1st pair 6—2, 2—6, 6—3; lost to 2nd pair 9—7, 5—7, 6—8; beat 3rd pair 6—4, 6—4.

Match won, 5—4.

July 23rd: 1st VI *v.* Staff College, Camberley. Away.

R. C. Witt and B. Thorne-Thorne lost to 1st pair 6—8, 8—10; beat 3rd pair 6—4, 6—1.

A. Papert and J. R. Kingdon beat 1st pair 6—4, 8—6; lost to 2nd pair 2—6, 4—6; lost to 3rd pair 0—6, 1—6.

A. Hunt and L. M. Curtiss lost to 1st pair 8—10, 8—10; lost to 2nd pair 2—6, 3—6; lost to 3rd pair 4—6, 5—7.

Match lost, 2—6.

The season has been successful, though many of the earlier matches were scratched owing to rain. There have been more players available for matches, and so no matches were scratched due to lack of men.

In the cup matches, both the 1st and 2nd VI's reached the final by beating Westminster and K.C.H., but they were defeated chiefly by their inability to win any of the singles. The doubles were more even.

The results of the three teams are these of completed matches, and so appear few in number.

1st VI: played 8, won 4, lost 4.
2nd VI: ,, 7, ,, 4, ,, 3.
3rd VI: ,, 3, ,, 3, ,, 0.

J. R. K.

REVIEWS.

SOME FACTORS IN THE LOCALIZATION OF DISEASE IN THE BODY. By HAROLD BURROWS, V.B.E., F.R.C.S. (Baillière, Tindall & Cox, 1932.) Pp. xii + 299. With 8 coloured plates and 6 figures in the text. Price 15s. net.

In the manifold and patient attempts at elucidating the mysterious workings of disease, how true are the words of Sir Thomas Browne: "Some have digged deep, yet glanced by the royal vein; and a man may come unto the pericardium, but not the heart of truth."

A book with so attractive a title is sure to attract many readers in different walks of professional life and of intelligence. While all will admire the author's painstaking industry and the stupendous amount of reading which must have preceded the writing of this work, and while many will be stimulated to fresh mental effort by the host of suggestions scattered throughout its pages, others, too eager, perhaps, to bathe in the genial sunshine of expectation, will frown at the ever-deepening cloud of disappointment.

Mr. Burrows has brought to his task a mind keen, critical, original, and steeped in historical appreciation. He writes simply and modestly. To those who find difficulty in studying the original literature, one of the most valuable aspects of the book is the collection of interesting and pertinent examples from the English, American, and Continental literature. There are 13 pages of references alone. Many weary hours must have been spent hunting for a particular reference in a long German article (and how few of these are kind enough to give a summary!).

The work is divided into three parts. Part I deals with the localization from the blood-stream of colloidal and other matters, including bacteria and cells. Here the author introduces the apt term "diapiresis" (suggested by Sir D'Arcy Power) to denote the passage of matter through the unbroken walls of the blood-vessels. Part II Factors in Localization—discusses increased permeability of the capillary endothelium, the transport of matter from the blood-stream to the tissues, and the retention of colloids and other substances by inflamed tissue. Part III is given up to a general discussion. The writer concludes that three conditions determine the localization of many blood-borne diseases: Abnormal permeability of the walls of the small blood-vessels; the presence of forces to transport noxious agents through the endothelium; and the retention of such agents in inflamed tissues. These conditions lead to localization not only of the agents of disease, but to factors of defence. Of the chapters of special interest may be mentioned those on Syphilis and Tattooing, on the Localization of Cancer and its Metastases, and on Therapeutical Considerations.

The coloured plates are effective and some sensational, and the price of the book is reasonable.

COLONIC IRRIGATION. By W. KERR RUSSELL, M.D., B.S. (Edinburgh, E. & S. Livingstone, 1932.) Pp. ix + 191. Price 10s. 6d. net.

This monogram gives a complete account of the history, technique, and use of colonic lavage. The immense detail, especially when describing the various modern methods, renders the book of little interest to medical students, but of value to practitioners who use or recommend this form of treatment.

As one of the most ancient branches of physical medicine, colonic lavage presents an interesting history, of which an account is given by the author in his opening chapter. We learn that the practice originated in ancient Egypt, and references to ox-bile enemata have been found on papyrus! Their regular use was recorded by Herodotus in his account of the Egyptians. It is also of interest to find that Hippocrates taught that enemata were generally preferable to purgatives. A number of references to its use in England are given, including a quotation from "Othello." The clyster or enema had its greatest popularity in the seventeenth century at the French Court where it became a fashionable craze.

Dr. Russell further introduces his subject by an accurate and concise account of the anatomy, physiology and bacteriology of the large gut. This introduction has much to commend itself. The various methods of irrigation are described exhaustively and their relative merits discussed. A complete list covering twelve pages of irrigating solutions is given. That such a large number of solutions should be in use does not point to the greater efficiency of any particular one over the others. The author ends with an account of the conditions benefited by colonic lavage. It has been used with some success in most of the allergic diseases besides true colonic conditions. An impressive record of its value in the treatment of mental disorders is given, but it would be of greater value if details of a control series were given. It is said to be of value in gastric and duodenal disorders and to relieve anorexia. It is, however, difficult to accept the statement that the secretion of gastric juice is reflexly stimulated by the active colonic movements which the lavage induces.

RECENT ADVANCES IN ANÆSTHESIA AND ANALGESIA. By C. LANGTON HEWER, M.B., B.S. (London: J. & A. Churchill, 1932.) Pp. viii + 187. 64 illustrations. Price 12s. 6d.

It was a happy idea of the publishers to add a volume on anæsthesia to their "Recent Advances" Series, and no better choice could have been made than to entrust it to Mr. Langton Hewer. The volume under review makes no claim to be a text-book, and the author explains that no attempt has been made to describe elementary methods and appliances. For this reason it is not to be recommended to the student about to commence his work as a first-time anæsthetic clerk. But for the senior man sufficiently interested in the subject to undergo a second period of instruction, and still more for the recently qualified practitioner desirous of an appointment as resident or visiting anæsthetist to any institution, this book will provide a mine of necessary information. In fact it is not too much to say that no highly trained anæsthetist of long experience could read any of the nineteen excellent chapters, dealing with the most divers aspects of the subject, without substantially adding to his knowledge, and definitely clarifying his views on some of the most difficult anæsthetic problems.

Without going over-deeply into the subject, modern views as to the mechanism by which anæsthetics produce their results are well summarized. The difference between the action of the oxygen-replacing, non lipoid-soluble and little-toxic agents, such as nitrous oxide and oxygen, and the more toxic and lipoid-soluble ether and chloroform is emphasized throughout. The mechanism and treatment of primary cardiac failure is well described. Like most other anæsthetists, while admitting that *status lymphaticus* may often be made to take the blame of faulty administrations, Mr. Hewer is far from agreeing with the Joint Committee of the Medical Research Council and the Pathological Society that no such condition exists.

The action and uses of the so-called basal narcotics are described and criticized, and the numerous ways in which carbon dioxide can be made to serve the anæsthetist are given due prominence. There is a brief but useful chapter on the dangers of explosions associated with anæsthesia. The large subject of local analgesia receives full attention, and the merits and demerits of the various methods are fairly and impartially discussed. It is interesting to note that while still recognizing the value of splanchnic analgesia in selected cases, Mr. Hewer considers that its usefulness has been diminished by the excellent results more simply obtained by high epinal block with percaine.

The better-known and somewhat complicated machines now so largely used for nitrous oxide-oxygen anæsthesia are illustrated, and their employment briefly but adequately described.

Special chapters are devoted to special branches of surgery. Perhaps those dealing with thyroid and thoracic surgery will be read with most interest and instruction by those who know how much the author has done to advance the art of anæsthesia in such cases. The section dealing with thoracic surgery is one of the best in the book. The various problems confronting the anæsthetist are well described, and the best methods of avoiding and combating difficulties are fully discussed.

The illustrations are numerous and excellent. Not the least valuable part of the book consists in the comprehensive list of references appended to each chapter.

ANATOMY OF THE HUMAN ORBIT AND THE ACCESSORY ORGANS OF VISION. By S. ERNEST WHITNALL, M.D. Second edition. (Humphrey Milford: Oxford Medical Publications, 1932.) Pp. xii + 467. Price 25s.

It is to be noted that this book is a monograph of over 400 pages, with about 700 bibliographic citations and 212 figures. It is a real book on a comparatively small territory of the human body. It contains no terrifying list of the examinations which the author may be or may have been associated with, and therefore there appears no compulsory reason for anyone reading the book, except the fact that the book is what it sets out to be—a complete summary of the anatomical information collected by many investigators on the orbit. Thus anyone who proposes to study seriously the science of ophthalmology would of course find here everything that is known about the anatomy of the parts the book deals with. It is a book out of which other books will be made.

It is interesting to note that this is the second edition of the monograph, and the new edition is slightly larger than the first, but is not altered in any substantial way. One therefore concludes that ophthalmologists not only read the book, but also buy it. Furthermore it becomes apparent that he who embarks on the special study of some one province of medicine gains little in the way of reduction in the amount he must read and think about. The small books are written for those who study many things. The large books are written for those who must study a fragment of the whole extensively.

This book is an excellent one: one that is a pleasure to the anatomist, for he finds his subject treated in the grand manner with reference to authorities, discussions as to the validity of the information given, and a proper regard for how knowledge is come by and what it is worth.

RADIOLOGY IN RELATION TO MEDICAL JURISPRUDENCE. By S. GILBERT SCOTT, M.R.C.S., L.R.C.P., D.M.R.E. (London: Cassell & Co., 1931.) Pp. x + 65. 24 reproductions of radiograms. Price 7s. 6d.

The first part deals briefly with the nature of X-rays and the status of the radiologist. This leaves only 33 pages to describe the various skeletal variations seen by radiology, and 9 pages to describe some of the miscellaneous bone diseases, which may be of significance in medico-legal work. The beautifully reproduced illustrations of excellent skiagrams show well the conditions referred to, and one's chief regret is that such a well written and well illustrated book should be so short. It is, as a consequence, mainly of use in pointing out some of the many pitfalls that may occur, and thus suggests the necessity of an expert radiologist's opinion in every case. It is not in itself sufficiently detailed or inclusive to act as a reference book on medico-legal matters connected with radiology.

CHOOSING A WIFE, AND OTHER ESSAYS. By E. G. DRU DRURY, M.D. (London: H. K. Lewis & Co., Ltd., 1932.) Pp. 275. Price 8s. 3d.

The title essay of this volume has little new in the way of fact to lay before the medical man, dealing as it does with problems of eugenics, but the whole is permeated with a philosophic insight into the minds of men, so that Mendel's theory, in terms of dwarf or giant sweet peas, takes on a new interest when expressed as brown- or blue-eyed, long- or short-lived people, and leads to deeper thought into the often too hastily settled problem of choosing the mother of one's children.

The majority of the essays deal with the psychological aspect of the everyday facts of life, of efficiency and tiredness, of temperament and nerve strain, due place always being given to physiological factors, the two being successfully blended to produce a work of real value in introducing a new point of view, that of the understanding and sympathetic physician to the troubles and "nerves" of seething humanity as they ebb and flow through his consulting room.

TEN YEARS OF INDUSTRIAL PSYCHOLOGY. By H. J. WELCH and C. S. MYERS. (London: Sir Isaac Pitman & Sons, 1932.) Price 6s.

What does the general public or the medical profession for that matter know of industrial psychology? Ten years ago the answer would have been, "Nothing"; to-day, "Very little"; in another ten years it should be, "A great deal."

Industrial psychology is the application of psychological and physiological knowledge to commerce, and *Ten Years of Industrial Psychology* explains how this knowledge is adapted, how the efficiency of a business may be improved and how the community may be benefited by helping the young to select the vocation to which they are best suited. The book is written as a story of the National Institute of Industrial Psychology, with a chapter on each of its main functions and on its constitution. It gives a good idea of the value of this, at present, little-known sociological organization.

THE FRANCIS TREATMENT OF ASTHMA. By ALEXANDER FRANCIS, M.B. (London: Wm. Heineman, Ltd., 1932.) Price 7s. 6d.

This egotistical monograph is not pleasant reading. The first person singular is used *ad nauseam* and the discussion of the æetiology of asthma is (to say the least) biased. It is a book written with one purpose, to advocate a particular treatment, but that treatment is in its practical details left delightfully indefinite. The treatment consists of cauterization of a patch of mucous membrane, preferably of the nasal mucosa, in order to "stabilize the vaso-motor centre." Claims are made of startling improvements in the symptomatology of about 85% of over a thousand cases, and on these grounds the book justifies itself, and if it encourages others to substantiate or refute these claims it has served its purpose.

LABORATORY SERVICE AND THE GENERAL PRACTITIONER. By ARNOLD RENSHAW, M.D. (Humphrey Milford: Oxford Medical Publications, 1932.) Price 10s. 6d.

The aim of this book is to put into the hands of the busy general practitioner a memorandum of the uses of the laboratory to him in investigating a case, and an interpretation of the data so obtained. This aim is high and difficult to achieve, and there are many ways in which the problem might be tackled. Dr. Renshaw commences with a detailed list of lesions which may affect the mouth with suggestions for pathological investigations. He then proceeds to chapters on the examination of stomach contents, urine, fæces, kidney and liver function and the blood. This is followed by suggestions for investigation of cases of pyrexia of doubtful origin and toxæmias and finally there is a very detailed chapter on the spectroscope in analysis. He has made no attempts at giving details of laboratory technique, an omission with which we completely agree, but we are disappointed with the lack of detail in the instructions for the collection of specimens and the absence of discrimination in the choice and value of the information resulting from tests. We are pleased with the account of the Van Slyke uric clearance test, but look in vain for mention of the alcohol test-meal and the use of histamine, and also for a note on the simple achlorhydric anæmias. Although this book is slightly unbalanced in the deposition of detail, it should certainly achieve its object in being useful to the busy practitioner.

CORRESPONDENCE.

"THE CANCER PROBLEM."

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

DEAR SIR,—Allow me to thank you for your courtesy in bringing DR. Hubble's letter to my notice; and I am sure that he would like me to answer his criticisms forthwith.

The first part of his letter deals with the question of a general overhaul from the point of view of any disease. This is a problem for physicians rather than for surgeons, the value of which is more difficult to assess than is that of periodic examinations to exclude accessible malignant disease.

The only observation I have to make concerning this section of his letter is his poor opinion concerning members of the medical profession. It would appear from what he says that they find it difficult to tell a patient that, in their opinion, he or she is healthy, and secondly, your correspondent seems to think that the reputation of the doctor is going to be ruined if he has missed a mass in the abdomen which three months later becomes easily palpable. If he is really thinking of it from the medical man's point of view, surely the number of patients who are passed as fit and who do not get such tumours would be so great as to keep the doctor's reputation intact.

Turning now to that part of his letter dealing with periodic examination for cancer, I quite agree with him as to his three conditions which must be fulfilled in order to make it worth while having such examinations. When, however, he comes to the list of "silent" cancers, he has omitted at least two important ones, *i. e.* the tongue and buccal cavity, and the vulva; and moreover he does not realize that carcinoma of the cervix uteri and the breast form nearly 40% of malignant disease in females.

In discussing accessible cancer Dr. Hubble includes malignant disease of the stomach. This is not in the list of "accessible cancers," and will for many years to come defeat all efforts at early diagnosis. Carcinoma of the rectum, however, is quite another matter. No time or great skill is needed to pass a sigmoidoscope and to see that the rectum is normal. If the mucous membrane of the rectum is unhealthy it may take an expert to decide to what that condition is really due. The end-results of rectal carcinoma quoted are undoubtedly due to the fact that it is a "silent" cancer, and the majority of patients do not come to the surgeon until it is very advanced and colostomy is the only treatment left.

The next specific points dealt with are carcinomata of the breast and cervix uteri. Surely Dr. Hubble is under a very great delusion in imagining that the majority of these tumours are capable of growing from the very earliest sign to inoperable in three or four months.

Again, he states that if patients were examined and nothing abnormal found, it would give them a feeling of security during the ensuing six months. What could be more desirable than that they should have this freedom from fear. In addition, at the time of the examination they could be told, in a way not to cause anxiety, that some symptoms, such as bleeding, lumps in the breast, etc., should be reported, as in certain cases they are of serious import; so that this feeling of security would not in any way prevent them coming for abnormal symptoms.

Further on he states that the intelligent woman knows that "if she notices anything wrong, that will be time enough to report to a medical adviser." Unfortunately this is not true. Carcinoma of the cervix is often "silent" until it is inoperable.

At the end of this second section of his letter he states that periodic examinations would be unnecessary if advice were sought at the onset of symptoms, but higher up he states that it is not obvious that increased knowledge by the public leads to earlier diagnosis.

The fact seems to be that he wishes to put the responsibility on to the public rather than on to the medical profession, and does not realize that broadcasting symptomatology increases cancer phobia.

Dealing with the last section of his letter, I heartily agree with him that the vast majority of cancer propaganda in the past has done an infinite amount of harm, and was based on the same principle as the theology of the Middle Ages, *i. e.* fear. Proper propaganda should emphasize that *early cancer can be cured*, and should not include symptomatology except to the intelligent individual when certain symptoms can be explained without causing unnecessary fear. Such propaganda has already been started in a small way, and will do much to instil the idea of health into the minds of the public, rather than disease.

I would venture to change Dr. Hubble's concluding sentence and sum up propaganda as follows:

"Dont worry about cancer, but go to your doctor twice a year just to exclude any condition which if left untreated might in time lead to serious results."

The medical profession *must* take the responsibility of diagnosing disease and not wait for the laity to do it for them.

I am, Sir,

Harley Street, W. 1; *August*, 1932. Yours faithfully, MALCOLM DONALDSON.

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

DEAR SIR,—Thank you for allowing me to see Dr. Donaldson's reply to my article.

It would not be valuable to follow him in his criticisms: occasionally he misunderstands or misinterprets what I have written; occasionally (as when I include carcinomas of the stomach in his list of accessible cancers) he convicts me of error.

The difference between us is fundamental, and it is well illustrated by his insistence that the essence of cancer propaganda is that *early cancer can be cured*. It would be almost exactly twice as true to state that *cancer, whether early or late, cannot be cured*. Northcliffe said that the only axiom for propagandists was—"Tell the people the truth." The truth is that in about one-third of all cases of cancer, with early diagnosis and suitable treatment, life will be definitely prolonged.

Yours sincerely,
DOUGLAS HUBBLE.

THE LATE DR. HERBERT MUNDY.

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

DEAR SIR,—As one of his dressers for six months, I should like to pay a tribute to the memory of Herbert Mundy. He was an excellent H.-S. to work under for anyone who wished to become a surgeon. He was both quick and accurate in diagnosis, and on a busy day in the Surgery would point out at once the thing that required most attention in a patient. I learned much from him that has stood me in good stead ever since. I am sure each of his dressers would say the same.

To unquestionable ability in his profession was added a keen sense of humour, and I can recall many incidents which brought this out. It certainly helped at times to relieve the tedium of a heavy day in the old surgery when hands were short!

The world is poorer for the loss of such men as Herbert Mundy.

I am, Sir, etc.,

Clifton, Bristol; *July 31st.* A. E. J. LISTER.

THE BREAST-FED BABY IN GENERAL PRACTICE.

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

DEAR SIR,—It would be interesting to know to which of our rosy-cheeked or precocious contemporaries this recently published work refers.

I am, Sir, etc.,
CONSTANT READER.

CHANGES OF ADDRESS.

BOLTON, R., Wesleyan Mission, Hankow, China.
GIBSON, A. J., Bendigo, Shenfield Road, Brentwood.
HECKFORD, P., Montagu House, Dover Street, Ryde, Isle of Wight, and 20, St. John's Street, Chichester, Sussex.
JOWERS, L. E., Windgrove Cottage, Caldbec Hill, Battle.
ROBERTS, C. L. DIGBY, Queen's Road, Guernsey, Channel Isles.
THOMAS, J. SAULE, c/o Midland Bank, Ludgate Hill, E.C. 1.

BIRTHS.

BROCKLEHURST.—On July 25th, 1932, in London, to Beatrice, wife of G. L. Brocklehurst, M.D., of Margate—a daughter.
CHURCH.—On July 21st, 1932, at Willand, Devon, to Decima, wife of Dr. J. E. Church, Gahini Ruanda—a son.
DAY.—On August 9th, 1932, at 17, Chapel Field East, Norwich, to Dr. and Mrs. George Day—a son.
DONELAN.—On August 2nd, 1932, at St. Bartholomew's Hospital, E.C. 1, to Nellie, wife of C. J. Donelan, M.B., D.P.H.—a son.
KERR.—On August 2nd, 1932, at Penzance, to the wife of Kenneth Kerr—a son.
NIXON.—On August 2nd, 1932, at Red House, Rudgwick, Sussex, to Mollie (*née* du Vallon), wife of Guy P. Nixon, M.R.C.S.—a son.
POSEL.—On July 25th, 1932, at Johannesburg, South Africa, to Gertie, wife of M. M. Posel, M.D., M.R.C.P.(Lond.)—a daughter.
STURGESS.—On August 2nd, 1932, at St. Bartholomew's Hospital, E.C. 1, to Christine (*née* Page), wife of Dr. G. W. Sturgess—a daughter.
WHITTINGTON.—On August 11th, 1932, at Toongahra, Reigate, Surrey, to Dr. and Mrs. Gerald Whittington—a son.

MARRIAGES.

BOSTON—CARNON.—On August 16th, 1932, at Woodchurch Parish Church, by the Rev. J. Cooper, Francis Kenneth, M.A., M.R.C.S., L.R.C.P., youngest son of Mrs. Boston and the late John Boston, Esq., of St. Wyburn, Birkdale, to Kathleen Felix, youngest daughter of Capt. James and Mrs. Carnon, of Prenton.
HUMPHRIS—GRAY.—On Thursday, July 21st, 1932, at North Wootton, King's Lynn, John Howard, elder son of Major and Mrs. J. Proctor Humphris, Ingoldisthorpe, to Aline Margaret Douglas, elder daughter of Mr. and Mrs. Douglas Gray, North Wootton.
JOHN—MCALDOWIE.—On August 4th, 1932, at St. Peter's, Leckhampton, Cheltenham, A. H. John, M.B., of Stoke-on-Trent, to Sheila, second daughter of the late Dr. McAldowie and Mrs. McAldowie, of 8, Halland Road, Cheltenham.

DEATHS.

DERRY.—On July 31st, 1932, Herbert George Berry, M.R.C.S., L.R.C.P., of Reepham, Norwich, Norfolk.
BRASH.—On July 22nd, 1932, James Bassett Brash, M.R.C.S., L.R.C.P., of Bassingbourn, Royston, Herts.
CURRIE.—On July 12th, 1932, at 107, Eastbourne Road, Darlington, John Currie, D.S.O., B.Sc., M.R.C.S.(Eng.), devoted husband of Mary C. V. Currie, and son of Mr. and Mrs. Robert Currie, of East London, South Africa, aged 38.
FIELD.—On August 8th, 1932, at St. Paul's Hospital, Manila, Philippine Islands, Frederick Arthur Field, M.D.(Lond.).
PERSHOUSE.—On August 3rd, 1932, Dr. Frederick Pershouse, of Oak House, Monmouth, aged 65.

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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