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St. Bartholomew's Hospital Journal.

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

VOL. XL.—NO. 1.] OCTOBER 1ST, 1932. PRICE NINEPENCE.

CALENDAR.

Sat., Oct. 1.—Rugby Match *v.* Pontypool. Away.
Association Match *v.* St. Thomas's Hospital. Away.
Mon., ,, 3.—Term begins.
Tues., ,, 4.—Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Wed., ,, 5.—Rugby Match *v.* London Hospital. Home.
Fri., ,, 7.—Sir Thomas Horder and Sir C. Gordon Watson on duty.
Medicine: Clinical Lecture by Dr. Hinds Howell.
Sat., ,, 8.—Rugby Match *v.* Plymouth Albion. Away.
Association Match *v.* Harrod's. Away.
Mon., ,, 10.—Special Subjects: Clinical Lecture by Mr. Just.
Tues., ,, 11.—Dr. C. M. Hinds Howell and Mr Harold Wilson on duty.
Wed., ,, 12.—Surgery: Clinical Lecture by Mr. Harold Wilson.
Fri., ,, 14.—Medicine: Clinical Lecture by Sir Thomas Horder. Dr. A. E. Gow and Mr. Girling Ball on duty.
Sat., ,, 15.—Rugby Match *v.* Bedford. Away.
Association Match *v.* Old Brentwoods. Home.
Mon., ,, 17.—Special Subjects: Clinical Lecture by Mr. Bedford Russell.
Tues., ,, 18.—Prof. Fraser and Prof. Gask on duty.
Wed., ,, 19.—Surgery: Clinical Lecture by Mr. Harold Wilson.
Last date for receiving matter for the November issue of the Journal.
Rugby Match *v.* Cambridge University. Away.
Fri., ,, 21.—Medicine: Clinical Lecture by Sir P. Hartley.
Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Sat., ,, 22.—Rugby Match *v.* Wasps. Home.
Association Match *v.* Selfridge's. Away.
Mon., ,, 24.—Special Subjects: Clinical Lecture by Mr. Elmslie.
Tues., ,, 25.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Wed., ,, 26.—Surgery: Clinical Lecture by Mr. Girling Ball.
Fri., ,, 28.—Medicine: Clinical Lecture by Sir Thomas Horder. Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Sat., ,, 29.—Rugby Match *v.* Moseley. Away.
Mon., ,, 31.—Special Subjects: Clinical Lecture by Mr. Bedford Russell.

EDITORIAL.

IT is characteristic of Bart.'s that no fuss is made in welcoming Freshmen at the beginning of the October term. There is no speech-making and no public prize-giving, as in many of the younger medical schools. You enter this great institution, as you will one day reluctantly leave it, quietly and without ostentation. Whatever may be your feelings during your first few weeks in the Laboratories, Dissecting Rooms and Lecture Theatres, or in the Surgery and Wards, it is certain that eventually your affection for the place will grow more and more as she gradually claims you. This is a place older than Cambridge or Oxford, and more deeply steeped in tradition than either of them. The Hospital still occupies the site where it was first built. We still enter by the Smithfield gate where our founder Rahere entered eight hundred years ago.

"Think," says Sir D'Arcy Power, in a celebrated Abernethian Address, "as you go across the Square of the many generations who have walked across it before you. Patients innumerable, with their friends, some in the deepest grief and anxiety, others rejoicing in their new-found health. Great teachers going to lecture at the College of Physicians or the Barber Surgeons' Hall: now and again a false man like Dr. Lopez, our first physician, going to his traitor's doom at the Tower for plotting to poison Queen Elizabeth, or again a political prisoner like the Governor of Dunkirk who complained that the Sisters emptied their slops under his bedroom window. Think also of those other occupants of the Hospital who were not medical men, and yet lived within its precincts, of Sir Thomas Bodley, the founder of the Bodleian Library, and of Col. Pride on the dull December morning when he started off to ride to Westminster to purge the House, and at Cromwell's command to take 'that bauble' away."

In more recent times equally famous men have walked the Square, great physicians and surgeons, and also some whose fame has been won in other fields than medicine. Dr. Grace and the late Poet Laureate are of this number, and so is Dr. Thomas Young, a brief biography of whom appears in these pages.

The tradition of the Hospital is summed up in the

words over the entrance of the Medical College: "Whatsoever thy hand findeth to do, do it with all thy might." It is practised by everyone from the Treasurer to the youngest probationer, and carried by Bart.'s men to the uttermost parts of the earth.

Lest, however, it should be thought that the old custom of giving Freshmen a heavy lecture from the Editorial Chair has been resumed, we shall add no more. Much more interesting reading and more valuable information will be found in Sir D'Arcy Power's *History of St. Bartholomew's Hospital*, a book which everyone will enjoy.

* * *

All his former clerks and house physicians will have noticed with pleasure that Dr. W. Langdon Brown has succeeded Sir Humphry Rolleston as Regius Professor of Physic in the University of Cambridge. We are delighted that this honour should have been conferred upon him. A happier choice could not have been made. Dr. Langdon Brown's contributions to the progress of our Medical School will not be quickly forgotten. *Physiological Principles in Treatment* has done much to place medicine on a sound physiological basis; this and the recognition of the importance of psychology in clinical medicine were advances of the first magnitude. All Dr. Langdon Brown's work bears the clear stamp of a brilliant intellect; the charm of his lectures, the accuracy and inspiration of his teaching and his unerring discrimination between true and false make him an ideal teacher of clinical medicine. His kindness and generosity ensure for him the affectionate regard of all his pupils. We congratulate him heartily upon his recent distinction.

* * *

Subscriptions to the College Appeal Fund from old St. Bartholomew's men have now reached the figure of £19,000. This sum has been raised from less than 300 people. If the remainder of the 3800 to whom letters have been sent would respond in like manner there would be no difficulty in obtaining from Bart.'s men alone the whole sum required.

* * *

Sir Humphry Rolleston has been elected Fitzpatrick Lecturer for 1933 at the Royal College of Physicians. Dr. C. S. Myers is Bradshaw Lecturer and Dr. E. A. Carmichael is Oliver Sharpey Lecturer. We offer them our congratulations.

* * *

We learn with pleasure that Dr. R. H. Bettington has won the Australian Amateur Golf Championship.

* * *

ANNUAL BALL.

A Dinner Dance will be held on Thursday, November 17th, at Grosvenor House, Park Lane. Dinner 8.30 p.m. Dancing, 9.30 till 2.30 a.m. Arthur Rosebery and his Band from Romano's have been engaged. A cabaret will be arranged. Tickets may be obtained from the following:

Mrs. E. H. Kettle.	A. J. Owston.	Hon. Secs.
Mrs. Girling Ball.	S. E. Furber.	
Mrs. J. D. Barris.	B. Rait-Smith.	
Mrs. T. H. Just.	A. H. Pirie.	
	R. H. Barrett.	

Tickets: 35*s.* (double); 21*s.* (single).

* * *

In the last few days two books of special interest have been published. The one is Dr. Roxburgh's long-awaited work, *Common Skin Diseases*, beautifully illustrated with photographs of the author's own cases, many in colour, and published by Lewis's at the modest price of 18*s.* The other is Vol. LXV of *Saint Bartholomew's Hospital Reports*, including a general index to Vols. XLI–LXV (1905–1932), prepared by Mr. Girling Ball. The contents are as follows:

I. In Memoriam:
   Sir Frederick Andrewes, O.B.E. By Hugh Thursfield.
   Dr. James Calvert, C.B.E. By W. Langdon Brown.
II. The Relative Value of Radiotherapy in the Treatment of Cancers of the Upper Air-passages. By W. Douglas Harmer.
III. Causalgia. By J. Paterson Ross.
IV. Chronic Myelocytic Leukæmia in a Child. By C. H. S. Harris and Charles F. Harris.
V. The History and Work of the Cancer Research Committee of St. Bartholomew's Hospital. By R. G. Canti and W. M. Levitt.
VI. The Early Diagnosis of Carcinoma of the Cervix. By John Beattie.
VII. Experimental Work on the Kidney and Ureter in Animals. By John Hosford.
VIII. Hæmatemesis following Peptic Ulceration. By E. R. Cullinan and R. K. Price.
IX. Massive Collapse of the Lung in a Case of Bronchial Carcinoma. By James Maxwell.
X. Subclavian Aneurysm following Fracture of the Clavicle. By H. P. Nelson.
XI. Some Observations on the Lymphocyte in Cancer. By Ralph Phillips.
XII. Secondary Malignant Disease of Bone. By R. W. Raven.
XIII. The Use of Nembutal as a Basal Hypnotic. By A. M. Boyd.

This is one of the best volumes we have had for a long time; it consists largely of work done by the younger members of the Hospital, and is an admirable example of the keenness of the Staff at the present time.

The Bart.'s *Reports* are edited by a Committee with Dr. Geoffrey Evans and Mr. Girling Ball as Editors. The *Reports* give an indication of the work which has been done in the Hospital during the past year, and it is desirable that every Bart.'s man should know of it. The subscription is 15*s.* a year, and should be sent to Mr. Elmslie, 1A, Portland Place, W. 1.

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HOUSE APPOINTMENTS.

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

Junior House Physicians—	
Sir Percival Hartley	W. Wilson.
Prof. F. R. Fraser	E. P. Scowen.
Sir Thomas Horder, Bart.	R. Knox.
Dr. Hinds Howell	O. A. Savage.
Dr. A. E. Gow	H. F. Green.
Junior House Surgeons—	
Mr. L. Bathe Rawling	J. O. Harrison.
Prof. G. E. Gask	H. H. Langston.
Sir Charles Gordon-Watson	J. A. Nunn.
Mr. Harold Wilson	W. H. Gabb.
Mr. W. Girling Ball	J. M. Jackson.
Intern Midwifery Assistant (Resident)	J. T. C. Taylor.
Intern Midwifery Assistant (Non-Resident)	R. A. Sykes.
Extern Midwifery Assistant	J. R. Martin.*
H.S. to Throat and Ear Departments	P. G. Scott.
H.S. to Ophthalmic Department	A. J. W. Beard.
H.S. to Venereal and Skin Departments	G. Wynne Thomas.*
H.S. to Orthopædic Department	I. E. Burrows.
H.P. to Children's Department	M. Westwood.
Junior Resident Anæsthetists	B. C. Murless. S. F. Birdsall.
Non-Resident Anæsthetist	M. D. C. Hosford.
Casualty House Physicians	H. D. White.* J. R. Martin.† H. D. Magnus.† J. N. Groves.†
Casualty House Surgeons	F. J. Beilby.* O. S. Tubbs.†

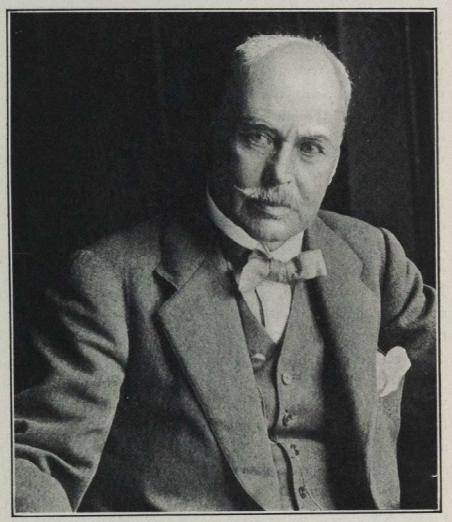
* 3 months, November. † 3 months, February. All others for 6 months.

OBITUARY.

SIR RONALD ROSS, K.C.B., K.C.M.G., F.R.S.

THE death, after a very long and trying illness, of Sir Ronald Ross, on September 17th, at the Institute named after him, removes a many-sided man whose record, like that of some others, proves the fallibility of the old and oft-repeated saying that a man cannot be first-rate in more than one line, and of the more particular dictum that "he is too good a poet to be a good physician." Ross was a poet, a man of letters, a mathematician, and active in other sciences, such as psychology, as well as a genius in parasitology.

Born three days before the outbreak of the Indian Mutiny, on Friday, May 13th, 1857, a day and number on which, in his *Memoirs*, he comments with a light touch as offering an excuse for those who have not made a success of life, he was the eldest of the ten children of General Sir C. C. G. Ross (1824–92), K.C.B., of the Indian Army. His birthplace was Almora in the Kumaon Hills, in the North-West Provinces. After school education in the Isle of Wight and Southampton, he entered the Medical School of St. Bartholomew's



Fox Photos.

Hospital on October 29th, 1874, and without any distinction as a student, qualified M.R.C.S. in 1879, one diploma being then sufficient for registration, and was surgeon on a Transatlantic steamship. After taking the L.S.A. (1881), he obtained a commission in the Indian Medical Service on April 2nd of the same year, being 16th out of the 22 successful candidates, and sailed for India in the following September. In his early years he was attracted to the mathematics of music and to a literary career, but the family tradition in favour of India was dominant. His routine duties, first in Madras and later elsewhere, occupied his time, and there were few opportunities and no official encouragement to undertake original research, but he wrote a prose romance, "The Child of the Ocean," before he

was thirty. Laveran's discovery of the malarial parasite in 1880 was slow in receiving general recognition; Sir Patrick Manson did not hear of it for five years, and looked for it in vain until 1892, when he had come home from China and joined the staff of the Seamen's Hospital at Greenwich; in India its very existence was doubted in 1893, when Ross, writing in the *Indian Medical Gazette*, argued that the "supposed hæmatozoon" was really the result of post-mortem changes in the normal cells of the blood. Before this, Ross had taken the D.P.H. (1889) when on leave, and had attended a course of bacteriology given by E. E. Klein, Lecturer on Physiology at his old medical school.

Early in 1894, Ross, then a major, when home on leave, consulted A. A. Kanthack, Director of the Pathological Department at the Hospital, about malarial problems, and was advised to see Manson, then living at 21, Queen Anne Street. He was thus converted to the reality of the malarial parasite, and inspired with enthusiasm for the hypothesis, based on Manson's discovery in 1877 when at Amoy of this mechanism as regards filarial infection, that malarial infection is also transmitted by the mosquito. This was the beginning of Ross's life-work, for on his return to India he began a long series of patient and laborious experiments, during which he was constantly in correspondence with Manson, to prove the correctness of the theory that the mosquito carries the malarial parasite. In spite of many difficulties this great success was reached in 1898, and, resigning from the Indian Medical Service on July 31st, 1899, Ross came to England to continue the work, especially the prevention of malaria by destruction of the mosquitoes and their breeding-places. Most active in these propaganda, he travelled widely, wrote, spoke, and achieved much, though not the rapid and complete conquest he had optimistically anticipated at first; but Surgeon-General W. C. Gorgas, it will be remembered, wrote to thank him for the means which had made it possible to complete the Panama Canal. Meanwhile he was lecturer, and later professor, at the Liverpool School of Tropical Medicine (1899–1912), and received the Nobel Prize and the C.B. (Civil) in 1902. Honours rightly crowded upon him; he became Fellow (1901), Royal Medallist, and a Vice-President of the Royal Society, and was created K.C.B. (Civil) in 1911, and K.C.M.G. in 1918. In 1912 he came to London as Physician for Tropical Diseases at King's College Hospital, and started practice. On the outbreak of war he rejoined, was active in various ways at home and in Egypt, and later on had the experience of being torpedoed. In 1926 the Prince of Wales opened the Ross Institute and Hospital for Tropical Diseases at Putney Heath, of which Ross was Director-in-chief.

Full of energy, he was a prolific writer: as editor of *Science Progress*, he contributed many essays on psychological and mathematical problems; he wrote his *Memoirs* (1923), "Inscribed to the People of Sweden and to the Memory of Alfred Nobel," romances such as *The Spirit of Storm* (1896), and *The Revels of Orsera* (1920), plays, and many volumes of poems, from one of which, "Discovery," struck out when he had satisfied himself of the proof of the mosquito theory, the opening lines may be quoted:

> "This day relenting God
> Hath placed within my hand
> A wondrous thing."

A strong man with decided and outspoken opinions, Ross made many friends, but became engaged in not a few controversies. He did a wonderful service to mankind, and his name, like that of those outstanding Englishmen, Edward Jenner and Joseph Lister, will be immortal.

R. H.

THE FUNCTIONS OF THE SYMPATHETIC NERVOUS SYSTEM.*

Introduction.

ONE'S very first introduction to anatomy in the dissecting-room is sufficient to impress upon the mind the very great contrast between the anatomy and the physiology of the two great divisions of the nervous system. One quickly appreciates that the great bulk of the nervous system extending to the periphery by discrete and separate fasciculi is associated with sensations pouring in from the outside world, and with the expressions of behaviour and locomotion engendered by these sensations. This portion of the nervous system is concerned with the relation of the organism to its external environment, with what the older anatomists called the animal life—*in short with man as a public character.*

The other system characterized by peripheral ganglia and complicated plexuses obviously tied up with the intestinal, the pulmonic and the cardiac systems, and thus related to nutrition, aëration and circulation, was called by the older anatomists the vegetative system in contrast to the former. It is associated with man as a secluded domesticated animal.

This distinction is valuable, but formerly it was pushed too far, and it led the earlier physicians to draw too sharp a line between the two systems, and even to regard them as quite independent of each other.

* Being a lecture given in the Applied Physiology Course, arranged by Prof. F. R. Fraser.

To understand the sympathetic nervous system we require, as in all other problems in medicine, knowledge drawn from anatomy, histology, comparative anatomy and embryology, as well as a knowledge derived from experiment, pathology, pharmacology and clinical observation.

Comparative Anatomy.

A study of the history of the sympathetic nervous system reveals that its peripheral portion becomes an organized system at a comparatively late period in the evolution of the vertebrates. In the lowest vertebrates the first portion that can be distinguished is the vagal contribution to the para-sympathetic system. Later forms show the possession of a sacral autonomic system; and last of all appears the thoraco-lumbar portion, to which only is the term "sympathetic" now strictly applicable.

At first this sympathetic portion does not form conspicuous nerve-plexuses. These are really represented by a widespread distribution of the chromaffin- or adrenalin-producing elements, these being, of course, but modified sympathetic nerve-cells. Amongst the higher vertebrates the peripheral ganglia and the plexuses become more considerable and extensive, while the adrenalin-producing mechanism becomes more and more restricted, and is concentrated in the adult in the suprarenals. This reduction is still occurring in ourselves, for we possess additional adrenalin-producing masses outside the suprarenals which disappear in the first few years of life.

The events are repeated in the same order in the ontogeny, the development of the organism. First appears the cranial parasympathetic system, then comes the sacral, and last of all appears the thoraco-lumbar portion. The individual steps of the elaboration of the peripheral ganglia and nerve fibres from that part of the neural tube called the neural crest have long been known, and further, the discovery of the transformation of some of these same sympathetic neuroblasts into adrenalin-producing cells is one of the more important contributions of anatomy to medical science.

From these facts it is clear that the organized and complex state of the sympathetic system as we now know it is a comparatively late acquisition. We see clearly also that its late derivation peripherally from the central nervous system must have certain anatomical effects upon it.

The method of comparative anatomy has led us to postulate that the central elements of the sympathetic system are older than the peripheral portions, and anatomists have long placed these centres in the region of the hypothalamus. The medullo-spinal connections of this system have become restricted in the cord (roughly from I.Th. to L. 3), mainly because the rest of the spinal axis had become allotted to the formation of the limb plexuses.

Investigations, then, into the structure and origin of the system lead us to infer that one distinction of this system lies in the fact that its connector neuron and the nerve-cell it makes synaptic relation with, lie outside the cord, and not in it. This arrangement gives us the well-known pre-ganglionic and post-ganglionic fibre, the latter arising from a peripheral nerve-cell. Thus the sympathetic system can no longer be defined in functional terms. It is a morphological conception, and the criterion is the structural basis of pre-ganglionic and post-ganglionic fibre.

The Chemical Relationship.

I have mentioned the transmutation of some sympathetic nerve-cells into adrenalin-producing cells. Further, I have drawn attention to the fact that this transformation is first diffuse, and later becomes restricted and concentrated in one single organ. The position of adrenalin in the sympathetic becomes of some importance. It acts, as is well known, in two ways. In one regard it actually replaces the post-ganglionic fibre, and its distribution by the blood-stream is the equivalent of transmission along a post-ganglionic fibre. For all the splanchnic fibres which reach the medulla of the suprarenal are pre-ganglionic, and the adrenalin-producing cell is the actual ganglion cell, but instead of transmission of a nervous impulse we get the vascular distribution of this sympatho-mimetic substance, giving a slower and more diffuse effect than the actual fibre would have done.

Adrenalin also acts in a second way. It intermediates between the ending of the nerve-fibre and the actual muscle or gland cell. For we all concur now in our observations that these nerve terminals are really pericellular, and not intracellular. The evidence now makes it practically certain that between the ending and the acting structure either adrenalin or an adrenalin-like substance (Cannon calls it "sympathin") intervenes in determining the actual effect. These substances are produced locally, slowly accumulate, diffuse, and get destroyed. The local chemical state does much to account for many of the discrepant results obtained by stimulation, for it has often been observed that the occurrence of an augmentor or of an inhibitor effect depends on the state of tonus in the organ, and what has happened immediately prior to the experiment. In the case of the parasympathetic the intermediate

chemical substance is either an acetyl choline or something very like it.

From our comparative studies we then can conclude that in the higher animals there is a progressive substitution of the more specific and swifter nervous conduction for the slower and more diffuse method of chemical conduction, and reliance is placed rather on the local production of chemical substance for the final executive effect, and not upon their circulation.

Some General Anatomical Considerations of the Peripheral System.

In the outflow of the pre-ganglionic fibres there is in the antero-posterior direction two great sweeps in the system. One with its peak at about the fifth dorsal sweeps upwards, and the other with its peak at about the tenth dorsal sweeps downwards into the abdominal region. These cranial and caudal sweeps innervate the organs in a definite succession, which depends on the order of their embryological development. Thus the upward sweep innervates successively the head and face, then the heart, then the lungs, and then the upper extremity. The same principle holds in the abdominal, pelvic, hind limb and perinæal region.

Embryological investigation makes it clear that in the transverse axis the vertebrate is made up of three principal strata. The parietal stratum represents the body-wall and the limbs, the soma. Next to this is the intermediate or mesonephric ridge, and in the median plane come the visceral or splanchnic structures. The sympathetic system has certain definite arrangements in each of these three areas. The fibres which are destined for the soma or parieties come from the segmental or paravertebral ganglia. They travel incorporated in the peripheral nerves, and thus these nerves are composed of somatic motor, somatic sensory and sympathetic fibres. Those passing to the intermediate mesonephric structures, the kidney and the ureter, the suprarenal, the ovary and the testis, the tubes and the uterus, the prostate and the vesicles, come from lateral ganglia like the renal, the medulla of the suprarenal, the inferior hypogastric ganglia lying on either side of the rectum. In both these cases there are no parasympathetic fibres, unless one is willing to include the antidromic conduction of the ordinary sensory fibres as the homologue of the parasympathetic fibres.

The splanchnic system gets its fibres from the ganglia, which lie in front of the aorta—cardiac, pulmonic, cœliac and mesenteric ganglia and plexuses—and these fibres reach their destination by running in close association with the adjacent blood-vessels. The cervical ganglia represent, of course, not only fused segmental, but also visceral ganglia. Indeed, the cervical sympathetic in part might be looked on as a superior splanchnic nerve. Its segmental branches run with the peripheral nerves, but the visceral elements go to the cavernous, the cardiac and pulmonic plexuses.

Many operations have been invalidated by neglecting these morphological principles.

The Hierarchical Arrangement in the System.

Looked at from another point of view, the sympathetic system is really an inverted pyramid. Unlike the cerebrospinal system, this system reaches its greatest complexity at the periphery, and becomes simpler and concentrated at the centre. The hypothalamic nuclei are small, and concentrated in a small area. The subsidiary centres in the medulla and cord are more spread, but still relatively restricted, while the diffuse complexity of the peripheral plexuses makes their unravelling by ordinary methods almost hopeless. This means that stimulation started from centre must almost of necessity be total in its effects. Some discrimination is possible by the arousal of the medullo-spinal centres, but the pre-ganglionic fibres must, nevertheless, diffuse their effects. Actual investigation suggests that it cannot be less than four to six segments. Thus there is a strong presumption that the general effects of the sympathetic system are likely to be the more important, and that local effects are likely to be unusual, and not important in the body economy.

The Results of Sympathetic Stimulation.

It is usual in text-books to give a list of the effects of sympathetic obtained by stimulation, and to let the matter rest there. This tells us little of how such functions are woven into the general pattern of the life of the organism. It does not even prove that such effects are of any functional value to the organsm. Nevertheless these experimental results need some consideration. You can look up these lists any time you like, but I want to draw your attention to a general view of them. If we take the soma or the parieties of the body, *i. e* its wall and its limbs, to which the sympathetic fibres travel by way of the peripheral nerves, the sympathetic fibres exert a tonic vasoconstrictor effect, a sudomotor effect producing sweating, which is a special and not a continuous action, and also a pilomotor effect producing a hair erection and gooseflesh, which again is an occasional and not a tonic activity.

On the derivatives of the intermediate mesonephric ridge the action is either merely vaso-constrictive or unknown. The renal effect apart from the indirect

vasopressor effect on secretion is unknown. The effect on the gonads, if any, is unknown. On the accessory structures like the vesicles and the uterus the sympathetic augments their muscular contractions. After removal of the hypogastric plexus, which occurs in denervation of the bowel, the vesicles are unable to expel their contents and sterility in males follows

On the splanchnic organs the action of the sympathetic system is reversed. It is still mainly vaso-constrictive and partly vaso-dilator, but on all the entoderm and all the derivatives of the entoderm like the major digestive glands and the lungs it is a depressive nerve. It inhibits peristalsis, but augments the sphincters. It inhibits the glycogenic function of the liver and releases sugar, and perhaps has a similar effect on the protein storage in the liver. It inhibits the production of insulin, and thus opposes the vagal effect on the pancreas. It inhibits the bronchial musculature and thus acts as a bronchial dilator. It is inhibitor to the bladder.

[On the vascular organs like the heart and the spleen it is wholly excitor, and causes both to contract more considerably when stimulated.]

The Maintenance of the Internal Environment.

From this general survey two things emerge: (1) that the function of the sympathetic system is related to anatomical principles, and (2) the functions are of two kinds—inhibitor or excitor, continued or occasional.

This occasional aspect of the sympathetic functions is a rather astonishing affair. The astonishment is increased by the fact that an animal exhibits to casual inspection no difference whether it has a sympatho-adrenal apparatus or not. It is possible, for instance, to remove in the cat the greater part of the sympathetic chain, to cut the splanchnics, and curette out at least the greater part of the adrenal tissue from the suprarenals. Such an animal under simple ordinary conditions shows no difference in its functions and capacities. It is only when it is made emotional by the presence of a dog, with an anti-cat complex, or pain is inflicted on it, or it is over-driven and fatigued, chilled or asphyxiated or given an anæsthetic, that its diminished power of response or endurance becomes evident. In short it cannot adjust its internal environment when this is shifted by muscular exercise or disturbed by emotion.

I do not intend to travel the ground, but it is well known that the *body temperature, water content, salt content, calcium, sugar* and the rest can only move within narrow limits if the animal is to survive. When excess or deprivation occurs, the body by various adjustments can compensate for these digressions, and keep its own circulating media in a state of constant equilibrium. For example, an excess of sugar in the first instance is temporarily segregated in the skin; then it is chemically changed and stored in the liver and muscles as glycogen, and then converted into sugar at such a rate that the blood-level remains constant. Should it fall below 70 mgrm. per cent., then ensues the hypoglycæmic reaction, the pupils dilate, the body-surface pales, the blood-pressure rises, the animal sweats—these are of course sympathetic effects. The vagal-insulin mechanism promotes the formation of glycogen, the sympatho-adrenalin mechanism changes the glycogen to sugar. The balance of these maintains the equilibrium of the internal body economy. Shifts in the equilibrium are likely to occur only under exceptional conditions, hence the occasional activity of the sympatho-adrenal apparatus.

The responses to rise and fall in temperature are again of the same kind. The system is subordinate to our more intelligent efforts at dealing with changes of temperature

In this maintenance of equilibrium the sympathetic is only one method amongst others, such as the threshold levels of the kidney and so on. The generalization may be attempted that the parasympathetic elements on the whole promote digestion, absorption, elimination of waste, and thus restore, build up and conserve the energies of the organism, while the sympatho-adrenal system breaks down, liberates, and mobilizes the energies of the body, thus promoting awareness and activity.

The Tonic Functions.

These are best seen in the case of the eye, and in the constant constrictor tone of the blood-vessels. If the cervical sympathetic be divided there follows Horner's syndrome—narrowing of the pupil, narrowing of the palpebral fissure, and retraction of the eyeball, and to these may be added relaxation of the nictitating membrane and a fall in intra-ocular pressure. These effects will last for years. Though somewhat unsightly, they matter little in any other way. The explanation of the persistent tonic effect in maintaining a wider pupil, an open and forward looking eye and a good intra-ocular pressure can only be explained on the basis that these facilitate the grasp and comprehension of objects in the field of vision, and thus promote the cerebro-spinal activities—a good example of the interaction between the animal and vegetative life.

The Tonic Vascular Effects.

Vascular reflexes are particularly difficult to investigate because so many variables have to be controlled.

However, the maintenance of the blood-pressure and the distribution of the blood depend on the constrictor tonus exerted by the sympathetic nervous system.

If we contemplate a man lying horizontally and completely exposed in a warm room, say about 24° C., we can make a picture of the blood distribution :

(1) The brain uses the constrictor effect but extremely little. It is the master organ, and on no account must the pressure or the rate of flow of the blood through it change. This is secured by the existence of reflexes from the depressor nerve and the carotid sinus, which will raise or lower the pressure according to whatever has occurred.

(2) The heart will be balanced between the vagus and sympathetic, and here increased activity of the heart occasioned by the sympathetic impulses will be accompanied by dilatation of the coronary vessels.

(3) The constrictor tonus in the lungs is extremely slight, and the flow through the lungs will passively follow changes in pressure brought about by changes elsewhere.

(4) There is but slight constrictor tonus in the muscles. It is sufficient to deflect the blood from inactive to active muscles, for vaso-dilatation immediately follows in an active muscle.

(5) In the gut the naso-constrictor tonus is high, and inhibitory effects on gut movements are almost its necessary accompaniment.

(6) Constrictor tonus is extremely high in the skin.

The tonic reflexes are best seen in two situations. One is the vaso-constrictor control of the peripheral blood-vessels, and the other is in the effects on the unstriped muscle of the eye. The distribution of the blood is one of the most complicated things in the body to understand. Blood is, like all fluids, incompressible, and if you push it out of one part, it must go somewhere else. Unless the general pressure is constant, no analysis can be made of the change in volume of a limb, for instance. It might be active contraction or dilatation, or it might be a passive effect due to increase of pressure elsewhere.

Keeping this in mind, nevertheless it can be shown that the vascular reflexes are constantly operating. A whole series of these come into being in order to keep the flow through the brain constant, both in regard to amount and to composition. They have been aptly termed "buffer reflexes." The best known of these are the familiar depressor reflex and the newly discovered reflexes from the carotid sinus. Here the afferent impulses travel through the ninth and tenth nerves, but any nerve may cause them. They execute their results through the vagus and the sympatho-adrenalin mechanism.

There are the reciprocal effects between the skin vessels and the splanchnic area. If one dilates, the other contracts, and *vice versâ*. There are the reciprocal effects between the two sides of the body. If one side of the face, for instance, be dilated, there will ensue a small but definite vaso-constriction of the other, and the same can be shown in the arms. If the cooling or warming be considerable, the centres in the brain will be excited and a general reaction to cold or warmth will ensue, and this, of course, will be appropriate for each kind of stimulation, *i. e.* if cold, general constriction ; if warm, general vaso-dilatation of the skin areas.

A Specific Example of the Application in Medicine.

There are conditions in which a part of the vascular tree shows a continued heightened constrictor tone—Raynaud's disease, for example. We do not know whether this is due to more impulses than usual reaching the periphery ; we do not know if there is more liberation than usual of adrenalin-like substances in the area of these vessels ; we do not know if the vessels are more sensitive than usual to the nerve impulses or the adrenalin substance, or whether they are in themselves in some way abnormal. We do know, however, that if the vaso-constrictor nerves be removed, then a condition of vaso-dilatation follows which endures for a very long period, and which, even if it does not remove the underlying cause, so benefits these patients that clinically they are cured.

It is first a problem in physiology to determine that this constrictor tone is present. If, as a matter of fact, you make experiments on your own body, it is easy to prove that normally there is a fairly strong constrictor tone in the hands as compared with the forearms. It is easy to prove that there is an even higher constrictor tone in the feet than in the hands—this is the real cause we think at the moment for cold feet. We have proved that these constrictor nerves run with the peripheral nerves, and have precisely the same distribution as the peripheral nerves. Those that run with the ulnar nerve stop short at the middle of the ring finger, and it is possible to demonstrate a difference in temperature between the two sides of the ring finger when the ulnar is blocked by novocaine. They do not run with blood-vessels. Then it is a problem in dissecting-room anatomy to decide at what point all the constrictors to the hand, for instance, can be removed. The answer is clear removal of the cervical sympathetic chain. This means in practice the stellate ganglion. Actually it is sufficient to remove either the pre-ganglionic or post-ganglionic fibres, since all the evidence we have got goes to prove there are no reflexes starting from the peripheral ganglia. In practice the ganglion is removed, for this is anatomically the surest and easiest way of getting rid of vaso-constrictors, and also ensures that regeneration will not occur. The approach to the ganglia is a problem in anatomy. It can be done from the front of the neck, or from the back, by removing the first and second ribs. The result of these operations is to induce a permanent vaso-dilatation in the area from which the constrictors are removed. Such a hand is now permanently closer to the temperature of the blood. It no longer reacts to cold and heat like the hand which has its nerve supply intact. It tends to hold its temperature constant, and, if cooled or warmed, changes its temperature more slowly and returns more quickly to its former level than the normal side.

H. H. WOOLLARD.

ON THE DETOXICATION OF ATROPINE *IN VIVO*.

A PRELIMINARY COMMUNICATION.*

OBSERVATIONS on the power of liver extract to break down the molecules of certain alkaloids (notably atropine) *in vitro* date back to comparatively early days, and a full summary of work done on these lines together with references is to be found in Gunn's article on "Tolerance" (1). Yet it is strange that while experiments *in vitro* have been conducted in some detail, the application of this principle in the field of practical therapy has received but little attention. Nevertheless it is clear that if it were possible to detoxicate vegetable poisons *in vivo*, that this would constitute a line of treatment whose significance would be comparable to that of diphtheria antitoxin. It is claimed that the following experiment offers good presumptive evidence that this is indeed a practical possibility, and that the molecule of atropine may actually be destroyed within the living cells of a moribund animal.

The propensity of the rabbit to feed upon deadly night-shade suggested to the writer that the liver of this animal would be likely to contain the most active ferment as regards the destruction of atropine.

Experiment and Results.

A young rabbit was killed and bled, and its liver, after being excised and separated from the gall-bladder, was found to weigh 10 grm. This was cut into small pieces, which were ground up with sand in Ringer's solution long enough to ensure efficient disruption of the cells. The mixture was centrifuged, and the deposit once more treated in the same way. Both mixtures were poured into a flask, and the proteins precipitated by being brought rapidly to boiling point. The solution was filtered, and the precipitate washed through with more Ringer. In this way 15 c.c. clear filtrate were obtained.

A cat weighing 2·8 kgrm. was anæsthetized with A.C.E. and urethane. A cannula was tied into its femoral vein, and the blood-pressure and respiration recorded on a drum. Atropine sulphate in doses of 2 mgrm. was given intravenously at short intervals. Vagal paralysis occurred after the first injection, but it was not until 10 mgrm. had been given that toxic signs appeared. The respiration then became embarrassed and extremely irregular and there is little doubt that the animal was about to die. At this point 5 c.c. of the rabbit's liver extract were injected ; rapid improvement followed, and in a few seconds the tracings, again normal, clearly showed that *the vagus was no longer paralysed*.

The injections of atropine were continued in increasing doses ; 2, 5, 10, and finally 20 mgrm. were given at a time. The blood-pressure and respiration remained steady and regular until, when a total dose of 119 mgrm. was reached, the animal suddenly collapsed. Although its heart continued to beat, the excursion of the pointer on the drum became so small that the blood-pressure was traced out almost as a straight line, and the respiration, after a few seconds of wild irregularity, stopped altogether. The remaining 10 c.c. of liver extract were at once injected, but without apparent effect ; it became necessary to begin artificial respiration. In the next 10 minutes no change occurred, save for two or three isolated inspiratory gasps, showing that life still flickered in the respiratory centre. And at the end of this time, although the heart became a little stronger and the gasps slightly more frequent, the clinical picture was essentially unchanged. Five minutes later a large dose of adrenalin hydrochloride was given, and the usual rise in blood-pressure was followed by a startlingly sudden recovery of the medulla—an effect which has been observed several times, and was first described by J. A. Gunn. Half a minute later the tracings were indistinguishable from those which followed the first injection of atropine 2¾ hours previously ! The recovery was maintained without change for the next ¼ hour, when the experiment was terminated. Lack of atropine prevented our determining the dose which would ultimately have proved lethal.

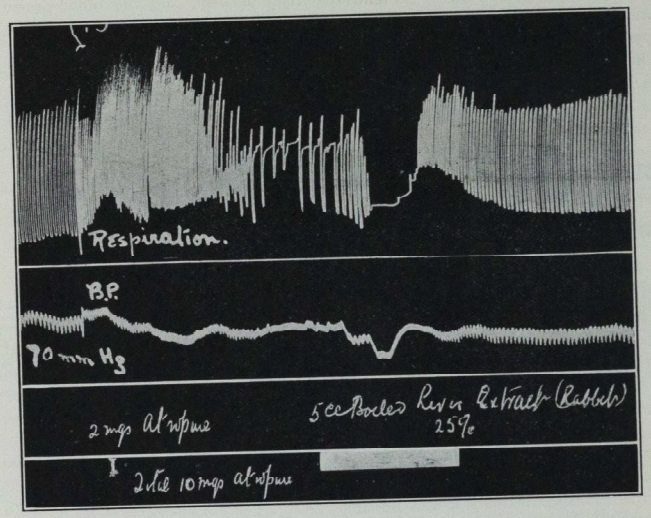
* From the Pharmacological Laboratory, Cambridge.

DISCUSSION.

Belladonna poisoning is neither new nor rare.

From the most remote times the Hindoos have used it for unscrupulous purposes (2), and while it was a favourite amongst the slow poisoners of the Middle Ages (3), "mistakes in pharmacy" are to-day responsible for the majority of accidents.

Yet in spite of our long association with this drug, we *still* are helpless in the face of a large overdose. As is the case with most other vegetable poisons, once absorption has occurred, events must take their course.



CAT WEIGHING 2·8 KGRM. A.C.E. AND URETHANE.

Showing the effect of 10 mgrm. of atropine on the respiration. 5 c.c. boiled liver extract causes the respiration to recover to a normal condition. Note also lifting of vagal paralysis.

The possibility of attacking poisons after they have left the alimentary tract has, on the other hand, yet to be investigated, and it seems as though the application of the physiological principle with which these notes deal may be of considerable therapeutic value.

It is claimed that the foregoing experiment (in which a cat was saved after being given enough atropine to kill at least two men) justifies this assumption; and it is proposed to extend this work to a full investigation.

HARRY BUCKLAND.

REFERENCES.

(1) GUNN, J. A.—*Physiological Review*, 1923, iii, p. 48.
(2) BLYTH, A. W., and BLYTH, M. W.—*Poisons: Their Effects and Detection*. (Griffin).
(3) CHEVERS, Dr.—*Medical Jurisprudence for India*.

A CASE OF PFEIFFER MENINGITIS WITH RECOVERY.

MENINGITIS due to Pfeiffer's bacillus is usually fatal. Rivers (1) in 1922 collected 220 cases, which had a mortality of 92%. There were 13 cases with total recovery, of which two were in this country.

Gibbens (2) in 1931 described two cases, one of which recovered. This was a mild case, the cerebro-spinal fluid became clear after the first puncture, and rigidity disappeared in a week. The patient who died had blockage of the spinal canal, and up to 50 c.c. of fluid were removed on several occasions by cisternal puncture. Gibbens also mentioned two cases of survival with defective sight and hearing.

The case described in this paper is of special interest in that it ended in complete recovery, in spite of the fact that the child was extremely ill for several weeks, and there was blockage of the spinal canal. Cisternal puncture was not performed.

On December 7th, 1930, a girl, aged 2½ years, was admitted to Addenbrooke's Hospital, Cambridge, semi-comatose.

She had complained of headache, had been restless, and had refused food for 6 days. For the last 3 days she had been drowsy, and had vomited frequently.

On admission she refused to talk, except to say "don't" when she was disturbed. She lay on her side, and would not sit up. Her face was flushed. Her eyes were open, and prominent. Temperature 101°, pulse 128, respirations 36.

Nervous system: Cranial nerves natural. No strabismus.

Tendon-jerks exaggerated.

Abdominal reflexes present. Left plantar response extensor, right doubtful.

Rigidity of the neck present. Kernig's sign positive.

By lumbar puncture 25 c.c. of cloudy fluid were obtained. It contained numerous pus-cells, but no organisms were seen. Cultures were sterile. (The fluid was not cultured for some hours after the puncture.)

December 8th: There was a marked external strabismus. The general condition was worse. Rigidity of the neck and extension of the back were more marked. Vomiting continued.

Lumbar puncture was repeated. Only 5 c.c. were obtained, and pressure was not increased. Cultures showed a pure growth of Pfeiffer's bacillus.

For the next few days the rigidity increased, and her eyes became more prominent. She lay on her back, with her eyes wide open. She became extremely wasted. She occasionally asked for water. When she was touched she screamed and scratched.

Lumbar puncture was performed several times, but only a few drops of fluid were obtained.

After a few days her temperature, which had remained at about 101°, began to fall, and her condition began to improve.

On December 31st a clear fluid, under normal pressure, was obtained. This was sterile.

On January 3rd her vomiting became worse. She had a discharge from her right ear, which lasted for a few days. After this she gradually improved.

She was allowed to return home on February 19th, as her family were able to nurse her well.

On discharge she was very wasted, but had more strength than one would have expected from her appearance. She was not able to name objects which she was shown, but saw well enough to blink when a hand was placed in front of her eyes. She was able to hear.

The strabismus remained. She could bend her head forward slightly, but could not touch her chest with her chin. Kernig's sign was doubtful. Ankle and knee-jerks were obtainable with difficulty. Her plantar responses were extensor.

On April 7th, when she was brought up to the hospital again, she was a normal child. Her sight and hearing were good. She was well developed, bright, happy and intelligent. She walked and ran without any clumsiness.

Summary.—A child, aged 2½ years, suffering from Pfeiffer meningitis made a complete recovery in spite of being severely ill for over a month, and in spite of the fact that a satisfactory amount of cerebro-spinal fluid was only drawn off on one occasion.

My thanks are due to Dr. Haynes for permission to publish these notes.

REFERENCES.

(1) RIVERS.—*Amer. Journ. Dis. Child.*, 1922, xxiv, p. 102.
(2) GIBBENS.—*Lancet*, 1931, i, p. 291.

H. E. W. ROBERTON.

DR. THOMAS YOUNG.

IN the autumn of 1773 a serious young Quaker from Somerset entered himself as a pupil at St. Bartholomew's Hospital, and one feels safe in asserting that a more versatile genius never came to this medical school. His name was Thomas Young. Almost everyone who reads this note will recollect having encountered this name twice before without, perhaps, realizing that the same individual was referred to in each case. Young's Modulus of Elasticity and the Young-Helmholtz theory of colour vision are but two of the contributions to science by this gigantic mind.

Of Young's early education there is adequate material for the biographer, as this astounding child wrote a diary in Latin, recording his educational progress up to the age of fourteen years. He tells us that he had read the Bible twice through and all Dr. Watts's hymns before he was four years old. At six he had Goldsmith's "Deserted Village" by heart; at nine he was reading Newton, and had already found that deep interest in optics which was to colour so much of his scientific work. A story (not, we haste to point out, told in his Latin diary) tells of him that at the age of ten he left home for a new school. As an entrance test he, in common with the other young hopefuls, was required to make a copy in his best handwriting of a piece of English prose provided. He was noticed to take longer over the work than the other children, and was doubtless prematurely dubbed a dense scholar—till he handed in

his papers. There was displayed a correct and beautifully written copy in English, together with equally beautiful and accurate translations into Greek, Latin, Hebrew, French and Italian! The following year he added Chaldee, Syriac and Persian to his philological armoury, and began the hobby of telescope making. At the age of fourteen he also had a fair grasp of Samaritan, Arabic, Turkish and Ethiopian.

At sixteen he was "threatened with consumption," and by all the rules of the game he should now have uttered platitudes for a few wan months, died, and been rewarded by an ultra-pious gravestone. But Young always refused to play the game according to the rules. Two years' rest, fresh air, a diet of eggs, vegetables, milk and beef broth and he is well again, and already in possession of much intimate material for the work on "consumption" which he is to write some years later.

The youth who comes up to London at nineteen to start his medical career is serious to a fault. He has decided that he agrees with Reynolds in that geniuses are not born, but made by application; he will take no sugar in his tea, to show his disapproval of the conditions of Negro labour in the plantations; though ignorant of contemporary thought and letters, he is an accomplished classical scholar; he brings with him letters of introduction to Mr. Burke, Dr. Lawrence and Sir Joshua Reynolds; he has been brought up in a *Sandford and Merton* atmosphere, but happily just manages to miss being a prig. He goes first to Westminster for medical and anatomical studies, and later to John Hunter's lectures. The following year he is at Bart.'s, and it is there, in the dissecting room, that he first becomes fascinated by the structure of the human eye.

The scientific world of the moment is buzzing with controversy over theories of accommodation. Does the eyeball increase in length? Does the corneal curvature alter? Does the lens change its shape? Young sets out to disprove the first two propositions. He himself has very prominent eyes, and on turning the right eye nasally the posterior pole of the globe is exposed. He takes a pair of dividers and slips a bureau key over each point. He then adjusts these (and note that cocaine was not introduced for another fifty years) so that they clamp his eyeball antero-posteriorly. On the least pressure "stars" are produced. The divider head is stiff, and, looking into the distance, he adjusts his painful apparatus until no fresh "stars" appear. Then he accommodates for near vision. No more "stars" are produced. Had the eyeball increased in length on accommodation "stars" must inevitably have been produced. His next step is to immerse his head in a glass bowl filled with water. With the eye so arranged, the media on each side of the cornea have the same index of refraction, so that alteration in its curvature would not change the value of the dioptric system. Yet Young finds that he can still accommodate. Therefore the explanation of accommodation does not lie in the cornea. Young decided that the lens was a muscle which contracted or relaxed under the influence of the nervous system, and that accommodation was brought about in this way. He was made more confident that he was on the right track by observing that eyes that had been successfully couched for cataract lost their power of accommodation. While still a student in the dissecting-rooms he wrote a paper on his theory of accommodation, which was acclaimed to be of such merit that he was elected a Fellow of the Royal Society. (It is interesting to note in passing that John Hunter at once announced that he had previously come to a conclusion on the muscular nature of the crystalline lens, and asked to be allowed to embody his ideas on the subject in a Croonian Lecture.)

One has to relate with some sadness that Young was disappointed in the teaching he received at Bart.'s. This gentleman was not given to enthusiasms. After a first visit to see Mrs. Siddons act he remarks, "She was neither below nor much above my expectations. I can form an idea of something more perfect." Bart.'s was below his expectations. Edinburgh was his idea of something more perfect in medical teaching. Not only did the northern capital help him professionally, but here, cut off from the trammels of Quakerism, he enjoyed an unfettered social intercourse such as he had never known before. He writes almost patronizingly of his teachers, and tells how he took the precaution to show his own paper on the mechanism of accommodation to the professor who was, on the following day, to lecture on the eye!

From Edinburgh to Göttingen. Here this amazing youth, though attending all the regular medical classes and perfecting his German, decides that his education has heretofore been too narrow, attends a lecture every morning at eight on European history, and takes regular lessons in riding, dancing, drawing and music. His flute and his dancing are regarded as seriously as his scalpel and his physiology. "I have not yet exhibited myself at a public dance, my master, who is a very sensible fellow, advising against it, but we have agreed that I may venture at the next pique nique."

Back to England. He goes to Emmanuel, and the Master says to his tutors, "I have brought you a pupil qualified to read lectures to his tutors." After such an introduction, what chance had Young of popularity at Cambridge? "He did not seem to know the names of most of our poets or literary characters in the last century, took no delight in the pleasures of the table, and never could either make a joke or understand one." But another observer writes, "He never obtruded his various learning in conversation, but if appealed to on the most difficult subjects he answered in a quick, flippant, decisive way as if he were speaking of the most easy, and in this mode of talking he differed from all the clever men that I ever saw."

Experimental work done in Cambridge on sound and light was embodied in a memoir read to the Royal Society in January, 1800, and although only the first mutterings of his epoch making work on the theory of light, was proclaimed by Sir John Herschel to "... alone have sufficed to place its author in the highest rank of scientific immortality, even were his other almost innumerable claims to such a distinction disregarded."

A legacy makes him financially peaceful, and the owner of a quite exceptionally choice collection of Reynolds pictures. He takes a house in Welbeck Street, from which he practises as a physician for twenty-five years.

His unique position as a scientist and a linguist are reflected in his appointment as Foreign Secretary to the Royal Society. In the years 1802–3, in three papers to the Royal Society, his undulatory theory of light was expounded—a theory which may be said to have held the undisputed field until our own day. At this time Young was Professor of Natural Philosophy at the Royal Institution. This office necessitated his lecturing continuously, and his subjects include mechanics, hydrostatics, acoustics, optics, theory of tides, astronomy heat, climatology. Young was not a popular lecturer, and this appointment must have kept a busy practitioner sadly distracted from professional work. Yet the necessity of preparing lectures drove Young still more thoroughly along avenues of pure science that he would otherwise but have glanced down, and it brought him into contact with two great scientific figures of the day, Davy and Faraday.

Young, though built for philosophical work, nevertheless most craved the laurels of the medical world, and after his lectures to the Royal Institution had been published, decided to write no more under his own name, except on medical subjects. His work published in 1815, *Practical and Historical Essay on Consumptive Diseases*, seems to have been an effort to show the public that he could write on things other than square roots and wave-lengths. Every year from July till October he moved his *ménage* to Worthing for reasons of professional expediency, for here, foreign travel being prevented by war, the better-class patients were to be found. He canvassed unsuccessfully for the position of Physician to the Middlesex Hospital, and in 1811 was elected Physician to St. George's. His duties at the hospital he discharged carefully and successfully, but he was never popular with staff or students. "Dr. Young is a great philosopher, but a bad physician," wrote a student. "He was gentle and gentlemanly, but never genial, and resorted to none of those many (and we may add perfectly justifiable) arts by which some physicians recommend themselves to their patients."

Try as he would, medicine never monopolized his powers. We find him working at Swedish in order to do a translation into English of the works of Berzelius, toying with Chinese, and getting enthusiastic about Egyptian. With Chinese he does not seem to have gone farther than noticing certain similarities between its characters and the hieroglyphics of Egypt, but the language of the Pharaohs is destined to call forth perhaps the greatest efforts of his genius. In a letter to a friend written in 1815 we find his state of mind reflected: "I have a long article on ancient languages already printed ... I am also about another on yellow fever, which is woefully dull to write."

At the beginning of the nineteenth century the French had discovered at Rosetta a stone with three parallel inscriptions, one in the sacred hieroglyphics of the Egyptian temples, one in the common Enchorial characters, and one in Greek. When investigated it seemed probable that the stone held three translations of the same text, and it was realized that here was an opportunity to study the hitherto undecipherable Egyptian script. Three names stand out among those who strove with such success at this herculean philological task—a Swedish diplomat named Akerblad, a Frenchman named Champollion, and Dr. Thomas Young. It is difficult to apportion to each his fair share of commendation, but one is tempted to say of Young once again that "Had he accomplished nothing except his share in this piece of work he would have gained a well-merited place among the greatest thinkers of our race." His success in this realm was applauded far more in France than at home, and in 1828 he was elected one of the eight foreign associates of the Académie des Sciences. Over a period of fifteen years he was frequently at work on Egyptian hieroglyphics, and wrote the standard articles in the *Encyclopædia Britannica* on this subject.

There seem to have been few departments of life where a thorough scientific knowledge could be brought to bear on practical problems in which Young did not exercise his versatile genius. He is ordered to report to the Admiralty on a new principle in marine architecture, and we are reminded that the Modulus of

Elasticity, familiar to us in the physics laboratory, was propounded by him at this stage of his work. He is appointed secretary of a commission to investigate weights and measures; he is on a committee of the Royal Society to examine into the dangers of gas illumination; he is made Secretary of the Board of Longitude and Superintendent of the Nautical Almanack; he is inspector of calculations and medical referee to the Palladium Insurance Company, and works on a formula for expressing the value of life; he makes original and important contributions to the science of bridge building, under the stimulus of the failure of the Parliamentary Commission discussing the replacement of the old London Bridge; the hoops of a brewery vat fail, and he has produced new and practical ideas for the control of semi-fluid and cohesive substances under pressure; he struggles with the problem of dip and compass variations; he produces a theory of tides, which, in his own estimation, was the most successful of his physico-mathematical investigations; he examines Capt. Parry's Arctic expedition to ascertain whether they have reached sufficiently far north to claim a Parliamentary reward. He seems to have been on terms of intimacy with all the great figures of his day. Gay Lussac comes for the week-end; Lawrence paints his portrait; he spends much time with West, President of the Royal Academy. He loves London, and remarks, "No one who was able to live in London would be content to live elsewhere." As a letter-writer he had considerable charm. The real human Young is found here. One more short quotation from a letter written late in life is of great interest: "I have learned more or less perfectly a tolerable variety of things in this world, but there are two things that I have never yet learned and I suppose I never shall—to get up, and to go to bed. It is now past 12 o'clock, but I must write for an hour more."

Often Young's vigorous thought landed him in acrimonious controversies utterly foreign to his own quiet nature. The most bitter of these raged over his conduct of the Nautical Almanack, but the Egyptological and optical work often revealed the pettiness of the minds of his opponents, though always showing the greatness, balance and generosity of his own.

Young died on May 10th, 1829, at the age of 56. Asthmatic attacks had kept him confined to his room for three months previously, and his heart was known to be failing. His last anxiety was that nothing from his side should add heat to the controversy raging at that time over the arrangements of the Nautical Almanack.

Had Young worked merely in mechanics, only at the theory of light, exclusively at optics, or at philology and nothing else, he would have been famous. Yet he worked at all these in turn and at many another subject while carrying on a busy and successful medical practice.

Surely few mightier minds have been produced by our race.

[The biographical details for this note are largely taken from *The Life of Thomas Young*, by George Peacock, D.D., Dean of Ely, printed in 1855. The writer's thanks are also due to Mr. Charles Goulden for stimulus to investigate this extraordinary life, and for several anecdotes.]

RALPH BOLTON.

STUDENTS' UNION.

ASSOCIATION FOOTBALL CLUB.

The following fixtures have been arranged for this season. They will be preceded by the usual trial games. The team showed considerable promise at the end of last season, and this year we are running three regular sides. It would be encouraging if we had a larger number of people to draw upon for the selection of the teams, and the Secretary will welcome all Freshmen who intend to play.

A. H. HUNT.

Fixtures for 1932–33.

Sat.,	Oct.	1.—St. Thomas's Hospital. Away.
,,	,,	8.—Harrods. Away.
,,	,,	15.—Old Brentwoods. Home.
,,	,,	22.—Selfridge's. Away.
,,	Nov.	5.—Old Mercers. Home.
,,	,,	12.—Downing College, Cambridge. Away.
,,	,,	19.—Lancing Old Boys. Home.
,,	,,	26.—Emmanuel College, Cambridge. Away.
,,	Dec.	3.—Guy's Hospital. Away.
,,	,,	10.—Old Brentwoods. Away.
,,	Jan.	7.—Old Wykehamists. Home.
,,	,,	14.—Old Westminsters. Home.
,,	,,	21.—Old Bradfieldians. Home.
,,	,,	28.—Keble College, Oxford. Home.
,,	Feb.	4.—Old Cholmelians. Home.
,,	,,	11.—Old Aldenhamians. Home.
,,	,,	18.—Downing College, Cambridge. Home.
,,	,,	25.—St. Mary's Hospital. Away.
,,	Mar.	4.—Balliol College, Oxford. Away.
,,	,,	11.—Old Foresters. Away.
,,	,,	18.—Casuals. Home.
,,	,,	25.—Brighton Old Grammarians. Home.

UNITED HOSPITALS HARE AND HOUNDS.

The opening run will take place on Wednesday, October 5th, at 3 p.m., from the Hospital's headquarters at the Dysart Arms, Petersham Road, Richmond. There will be a run every Wednesday afterwards throughout the winter. Any freshmen or others wishing to run this winter should give their names to G. Dalley or A. I. Kinnear, or turn up at Richmond.

There is an attractive fixture-list, including matches against Oxford, Cambridge and Dublin Universities and the leading London clubs, concluding with the Inter-Hospitals' Championship in March. Unfortunately we shall not have the services of all the members of the team which won the Inter-Hospitals' championship last winter, so there will be several vacancies for newcomers in the team. The course is light and pleasant, the standard of running is not too high and no special equipment is necessary.

G. D.

UNITED HOSPITALS SAILING CLUB.

The season has ended satisfactorily. Bart.'s have won both the Harvey Challenge Cup and the Bourne Trophy, which are awarded on the season's racing.

In the United Hospitals Regatta on September 18th we gained a first and a third place in the races for the Sherren Cup, which is awarded for a team race, each hospital being represented by four helmsmen.

In the first race we did rather badly to get placed third, but G. C. Brentnall and D. R. Crabb sailed extremely well to win the second race by about two feet from St. Mary's Hospital, the team consisting of R. G. MacFarlane, G. C. Brentnall, D. R. Crabb and W. H. Cartwright.

The final result depends on the method of scoring adopted, and we either win the Cup or share it with St. Mary's, who scored two second places.

The Club thanks are due to the Commodore, Dr. Dudley Stone, who presented us with a new racing mainsail towards the end of the season, which gave us a much better chance of putting up a good performance.

The latest trophy for competition is the "Doubleday Cruising Cup," which has just been presented by Mr. Doubleday of Guy's for the best log of a cruise by U.H.S.C. members during this season. Details of the conditions may be obtained from the Secretary.

The United Hospitals Sailing Club provides the cheapest sailing and racing of any club in the country, and anyone who has sailed or is interested would find it well worth their while to join while they are at the Hospital; not only for their immediate gain, but for the opening it provides to racing and cruising in bigger boats.

W. H. CARTWRIGHT.

CORRESPONDENCE.

THE EARLY DIAGNOSIS OF CANCER.

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

DEAR SIR,—The early diagnosis of cancer, and desirability for periodic examinations as suggested by Dr. Malcolm Donaldson in recent issues of the Hospital JOURNAL, is of special interest if these problems are studied from the actual history of cases coming under a general practitioner's care, which are viewed in the light of these ideas to see how such a scheme works out in actual practice. I quote here from four of the more recent cases of cancer that have come under my observation and the type of history usually obtained.

(1) *A case of cancer of breast.*—Consulted me for first time early July of this year. I have elicited that she had noticed a little sore place on the breast as far back as Sept. 1931. (This, I think, was definitely a case of "fear" before revealing the condition, as I had attended her sister for long periods during that time, and had seen this particular woman several times on my visits to the house; but never a word about herself.)

Let us ask ourselves these three questions:

(*a*) Was this delay the doctor's fault?—No.
(*b*) Was this delay the patient's fault?—Yes.
(*c*) Would periodic examination have helped?—Yes.

(2) *A case of cancer of rectum.*—It was owing to hæmorrhage that she sought advice, although she had been troubled for some few months past with constipation, pain, etc., but did not think it worth while consulting a doctor about it until the hæmorrhage started to frighten her.

Again you will observe a history of months. Applying our questions to this case we obtain exactly the same answers.

(3) *Another case of cancer of breast.*—Said she only knew of trouble for last few weeks, but obviously was of months' standing, probably a year or even a little longer.

Here again we answer our questions as in the first two cases quoted.

(4) *A case of cancer of stomach.*—A case giving a very short history of "definite" symptoms, a case in which the man was able to say that a year ago he was a big man capable of a hard day's work, and now all in three months gone to a shadow and no life left in him.

(*a*) Was this the doctor's fault?—No.
(*b*) Was this the patient's fault?—No.
(*c*) Would periodic examination have helped?—No (I suggest).

It is in such cases and their like—the silent or hidden cancers—that such a scheme suggested would be of, I venture to suggest, little or no value. In what might be termed the external cancers, such as on the breast, tongue, and so on, such a scheme has its uses; for the silent or hidden variety its value is an extremely doubtful quantity. I don't think, until the ætiology of the disease is discovered and its subsequent cure in consequence greatly helped by that knowledge, until, in fact, we as a profession can offer to the public a reasonable chance of permanent cure—as surgery of to-day can do in a large percentage of cases other than cancer—that money spent on propaganda and working of such schemes would be of any real practical value. Spend whatever money is to be spent in discovering its cause and the rest will follow automatically.

I believe, as the problem stands to-day, that there is also another fear, besides that of the disease itself, that prevents the victims (*those that could come early*) from seeking advice, and that is the fear that if it is cancer, what can be done for it? How often do we hear of one treatment having to be followed at a later date by some other! They have heard it too; they leave it to the last moment, as it were, and in consequence we so often hear ourselves repeating, "If only you had come earlier."

Yours, etc.,

62, Forest Road,
Dalston, E. 8.

DUDLEY H. COCKELL.

THE POTMAN'S SUICIDE.

(*To answer "C" though not "theology."*)

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

There lived a man, outcast and hopeless, who,
Deep in Life's miry clay, clutched at a hand
That raised and cleansed, created him anew.
Delivered from the Past, his Future planned,
He met fresh foes, laughed in the face of pain,
Helped other failures to be men again.

He had no right to heaven, when he went
(For, whether good or bad, we all come short).
But one, "The Friend of Publicans," had spent
His life to buy him back from Death; and nought
Had he save this, to ease Man's heavy yoke,
"There's only Him, and Love, and helping folk."

Poor Potman, had he never called to Him?
Or did he scorn such "old, religious stuff"?
He staked his life on Death, for some slight whim
Of that girl's will. Had he not strength enough
To live? Christless, alone, he faces grim
Eternity. How many follow him!

EUTYCHUS.

REVIEW.

HYPNOTISM, SUGGESTION AND FAITH-HEALING. By ALEXANDER CANNON, M.D. (London: Wm. Heineman, Ltd., 1932.) Price 2s. 6d.

It is astonishing what a lot of information is crowded into these 37 pages of Dr. Cannon's book and yet the whole is exceedingly readable. After a short introduction, he describes the methods of hypnotism and then gives a brief account of the theories of its mechanism and its possibilities in therapeutics. It is a sanely written book and should be of great value to those of the medical profession who wish to know something of treatment by suggestion.

ACKNOWLEDGMENTS.

L'Echo Médical du Nord—Revue Belge des Sciences Médicales—Acta Scholæ Medicinalis (Kioto)—Giornale della Reale Società Italiana d'Igiene—Bulletins et Mémoires de la Société de Médecine de Paris—Extrait des Annales de L'Institut Pasteur—East African Medical Journal—Quarterly Journal of the Research Defence Society The Clinical Journal—The Nursing Times—Sydney University Medical Journal—The General Practitioner of Australasia—Guy's Hospital Gazette—St. Thomas's Hospital Gazette—The London Hospital Gazette King's College Hospital Gazette—University College Hospital Magazine Magazine of the London Royal Free Hospital—The Medical Times and Long Island Medical Journal—St. Mary's Hospital Magazine.

EXAMINATIONS, ETC.

University of London.

First Examination for Medical Degrees, July, 1932.

Bateman, A. D., Baum, I. H., Blakelock, L. H., Braines, F. M., Brockbank, C. A., Brooker, A. E. W., Carpenter, M. A., Cunningham, A. G., Darke, G. H., Eunis, J. E., Hambly, E. H., Herbert, G., Hoadley, J., Jackson, H., McKane, T. O., Mountjoy, E. R., Pearce, H. A., Ramsay, F., Rendall, C. D. S., Roy, A. N., Rutherford, S. T., Simmons, G. H. A., Stevenson, R. Y., Sugden, W. G., Thomson, K. W., Tongbal, B., Welply, R., White, R. A.

Royal Colleges of Physicians and Surgeons.

The following Diploma has been conferred:

D.O.M.S.—Adams, W. F. T., Bolton, R., Sal, R., Tait, C. D. V.

Conjoint Examination Board.

Pre-Medical Examination, July, 1932.

Chemistry.—Benson, T. L., Brockbank, C. A., Nixon, J. C., Williams, W. R.

Physics.—Baum, I. H., Brockbank, C. A., Hambly, E. H., Knowles, H.

Biology.—Berman, B., Brockbank, C. A., Clunies Ross, W. G. F., Halford, R. B., Kershaw, R., Knowles, H., MacKelvie, K. C., Perrott, J. W., Storey, T. P.

First Professional Examination, July, 1932.

Anatomy.—Bird, G. E. N., Dolly, R. C., Force-Jones, R. J., Sugden, K. H., Young, W. J.

Physiology.—Bensley, W. E. C., Dolly, R. C., Force-Jones, R. J., Shemilt, W. P., Sugden, K. H., De Vine, J. G. B.

Pharmacology.—Appelman, M., Davies, H. H., Phipps, G. G., De Vine, J. G. B.

Final Examination, July, 1932.

The following students have completed the examinations for the Diplomas of **M.R.C.S., L.R.C.P.**

Bateman, C. H., Bhatia, R. N., Birdsall, S. E., Blackburne, J. R., Cates, B., Davies, D. T., Davies, W. H. D., Gawne, D. W. C., Halperin, J., Hunt, W., Iliff, A. D., Katz, M., Magnus, H. A. Mercer, R. V. F., Ryan, T. J.

L.M.S.S.A.

The Diploma of the Society has been conferred on:

Grace, A. A.

CHANGES OF ADDRESS.

BRANSON, W. P. S., Wharfenden, Frimley Green, Surrey.

BURGESS, W. J., The Old House, Chipping Ongar. (Tel. Ongar 102.)

BURROWS, H. L., 40, Harley Street, W. 1. (Tel. Langham 1011.)

HALL, P., 31, Cumberland Mansions, Upper George Street, W. 1. (Tel. Paddington 5207.)

HARTLEY, K. W. D., Orchard Cottage, Old Road East, Gravesend, Kent.

JENKINSON, Surg.-Lt. S., R.N., H.M.S. "Alecto," 5th Submarine Flotilla, Portland, Dorset.

LANDOR, J. V., General Hospital, Johore Bahen, India.

LEONARD, Col. W. H., I.M.S., c/o Messrs. T. Cook & Son, Hornby Road, Bombay, India.

OAKLEY, D., 1, Lindfield Gardens, Arkwright Road, Hampstead, N.W. 3. (Tel. Hampstead 3053.)

RAVEN, R. W., 115, Hendon Way, N.W. 2. (Tel. Speedwell 4818.)

SCOTT, Group-Captain H. W., R.A.F.M.S., Kiln Cottage, Holmwood, Surrey.

WILLOUGHBY, H., Hillview, Parrock Avenue, Gravesend. (Tel. Gravesend 626.)

APPOINTMENT.

NOON, C., F.R.C.S., appointed Honorary Surgeon, Norfolk and Norwich Hospital.

BIRTHS.

EDWARDS.—On July 13th, 1932, to Fifi, wife of Dr. F. A. Edwards, 91, Bromley Road, Catford—a daughter.

HOBBS.—On September 16th, 1932, at Old Court, Ealing, to Agnes, wife of Dr. A. N. Hobbs, 30, Woodville Road, Ealing—a daughter.

LLOYD.—On September 4th, 1932, at 20, Clifton Road, Rugby, to Hazel, wife of W. Jeaffreson Lloyd, M.B., B.Chir.—a son.

ROBB.—On September 17th, 1932, at Quarrylands, Exeter, to Anna (*née* Austen), wife of W. Austin Robb—a daughter.

MARRIAGES.

HARTLEY—MILLAR.—On August 27th, 1932, at the Church of St. Bartholomew-the-Great, West Smithfield, Kenneth William Dawson, elder son of J. D. Hartley, F.R.C.S., and Mrs. Hartley, of Bedford, Darnley Road, Gravesend, to Elizabeth (Betty) Gibson, only daughter of Mr. and Mrs. A. Millar, of Hillside, Bishops Stortford.

TAYLOR—PEARSON.—On September 17th, 1932, at the Church of St. Bartholomew-the-Great, Hermon Taylor, M.Ch., F.R.C.S., son of Mr. and Mrs. E. O. Taylor, of Edmonton, N., to Méarie Amélie, second daughter of Mr. and Mrs. A. M. Pearson, of Stamford Hill, N.

DEATHS.

DINGLE.—On September 7th, 1932, at "Strathmore," Ilfracombe, William Alfred Dingle, M.D., T.D., formerly of Finsbury Square, E.C. 2, aged 82.

KERR.—On June 21st, 1932, Charles Douglas Kerr, M.B., B.S. (Lond.), of Fremantle, Western Australia.

ROSS.—On September 16th, 1932, at the Ross Institute, Putney Heath, S.W. 15, Col. Sir Ronald Ross, K.C.B., K.C.M.G., F.R.S., N.L., I.M.S.(ret.), aged 75.

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. XL.—No. 2.] NOVEMBER 1ST, 1932. PRICE NINEPENCE.

CALENDAR.

Tues., Nov. 1.—Dr. A. E. Gow and Mr. Girling Ball on duty.
Wed., ,, 2.—Surgery: Clinical Lecture by Mr. L. Bathe Rawling.
Hockey Match *v.* Cambridge Wanderers. Away.
Thurs., ,, 3.—**Abernethian Society: Inaugural Address by the Rt. Hon. Lord Moynihan on "Ancient Medicine and Surgery."**
Fri., ,, 4.—Medicine: Clinical Lecture by Sir P. Hartley. Prof. Fraser and Prof. Gask on duty.
Sat., ,, 5.—Rugby Match *v.* Redruth. Home.
Association Match *v.* Old Mercers. Home.
Hockey Match *v.* Trinity I. Away.
Mon., ,, 7.—Special Subject: Clinical Lecture by Mr. Sydney Scott.
Tues., ,, 8.—Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Wed., ,, 9.—Surgery: Clinical Lecture by Mr. L. Bathe Rawling.
Fri., ,, 11.—Armistice Day.
Medicine: Clinical Lecture by Dr. C. M. Hinds Howell.
Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Sat., ,, 12.—Rugby Match *v.* Old Alleynians. Home.
Association Match *v.* Downing College, Cantab. Away.
Hockey Match *v.* Pulse Hill II. Home.
Mon., ,, 14.—Special Subjects: Clinical Lecture by Mr. S. L. Higgs.
Tues., ,, 15.—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Wed., ,, 16.—Surgery: Clinical Lecture by Mr. Girling Ball.
Hockey Match *v.* R.M.A., Woolwich. Away.
Fri., ,, 18. Medicine: Clinical Lecture by Dr. A. E. Gow.
Dr. A. E. Gow and Mr. Girling Ball on duty.
Sat., ,, 19.—**Last day for receiving matter for the December issue of the Journal.**
Rugby Match *v.* Llanelly. Away.
Association Match *v.* Lancing Old Boys. Home.
Hockey Match *v.* Broxbourne I. Away.
Mon., ,, 21.—Special Subjects: Clinical Lecture by Mr. Sydney Scott.
Tues., ,, 22.—Prof. Fraser and Prof. Gask on duty.
Wed., ,, 23.—Surgery: Clinical Lecture by Sir C. Gordon-Watson.
Fri., ,, 25.—Medicine: Clinical Lecture by Dr. A. E. Gow. Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Sat., ,, 26.—Rugby Match *v.* Devonport Services. Away.
Association Match *v.* Emmanuel College, Cantab. Away.
Hockey Match *v.* Emmanuel College, Cantab. Away.
Mon., Nov. 28.—Special Subjects: Clinical Lecture by Dr. Cumberbatch.
Rugby Match *v.* R.N.E.C. (Keyham). Away.
Tues., ,, 29.—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Wed., ,, 30.—Surgery: Clinical Lecture by Sir C. Gordon-Watson.

EDITORIAL.

THE publication of the volume dealing with the results achieved by the Rose Research on Lymphadenoma was the event of last month. This work was endowed in 1920 by Mrs. T. E. Rose, in memory of her daughter, who lost her life from this disease, and has been going on for twelve years at St. Bartholomew's Hospital. In recent years the research has been carried on by a team of workers under the direction of Dr. Mervyn Gordon. The results are now published in a handsome volume containing the following sections:

1. "A Clinical Concept of Lymphadenoma," by Sir Thomas Horder.
2. "Studies of the Ætiology," by Dr. Mervyn Gordon.
3. "Serological Study of Yeasts," by Dr. Kenneth Stone.
4. "Characters of Yeasts and Further Observations," by Dr. L. P. Garrod.
5. "Hæmatological Observations on Rabbits and Guinea-pigs," by Dr. E. R. Cullinan.
6. "Histology and Histogenesis," by Dr. B. D. Pullinger.

The research has been systematic. Pathogenic agents were sought for one at a time, first spirochætes, then tubercle bacilli, then fungi. Up to this point all the results were negative. It was not until the search for an agent of the virus category was undertaken that

promising results were obtained. It has been discovered that lymphadenoma glands, although they give negative results when examined by ordinary bacteriological methods, contain nevertheless a pathogenic agent capable of producing characteristic disease in rabbits. This pathogenic agent is limited to lymphadenoma glands and appears to be specific to that disease; control glands from cases of carcinoma, sarcoma, leukæmia, chronic adenitis and granuloma have all proved to be inert. This rabbit reaction furnishes a biological test for the presence of the virus, and this test has already proved itself to be of use in diagnosis.

It is therefore probable that we are on the eve of a therapeutic advance of the greatest importance, and it is to be hoped that the conquest of this terrible disease will soon be achieved. The authors responsible for this brilliant and complete research deserve the congratulations and thanks of all medical men.

* * *

Sir Percival Horton-Smith Hartley, after a distinguished career on the active staff of the Hospital, retires at the end of the present year. Sir Percival will long be remembered for his splendid clinical lectures, which were a joy to listen to. As a speaker and a lecturer, Sir Percival is excelled by none within these walls, and no one takes more trouble with his lectures. A dinner is being given to Sir Percival by his old House Physicians on December 2nd at the Langham Hotel. If any of his former Housemen have not already received the necessary details, they should communicate with Dr. A. Clark or Mr. D. Goodhart at the Hospital.

* * *

We congratulate Prof. Edgar Douglas Adrian, a distinguished old Bart.'s man, now Fellow of Trinity College, Cambridge, and Foulerton Professor of the Royal Society, on being elected to share with Sir Charles Sherrington the Nobel Prize for 1932 in Medicine. Their work has been in connection with the function of the neurone.

* * *

We remind readers that the Annual Ball will be held at Grosvenor House on November 17th. Details are given in our last issue.

* * *

The Mid-Sessional Address will be delivered to the Abernethian Society on Thursday, January 19th, 1933, by Sir John Weir on "Homœopathy: An Explanation of its Principles."

* * *

The fifth Autumn Meeting of the St. Bartholomew's Hospital Golfing Society was held at Sandy Lodge on Wednesday, October 5th, 1932. Thirty-one players enjoyed an excellent afternoon's golf under ideal conditions. Unfortunately only one round was possible, as the meeting was held after the expiration of summer time.

The Milsom Rees Cup was awarded to Mr. Bedford Russell, as Sir Milsom Rees very generously withdrew from the competition.

* * *

We congratulate J. T. C. Taylor on his election as Captain of the Eastern Counties R.F.C., an honour which he fully deserves. It is a great pleasure to see Jimmie back again at Bart.'s after his three months of absence.

* * *

THE ANNUAL DINNER OF THE CAMBRIDGE GRADUATES' CLUB will be held on Wednesday, November 23rd, at 7.15 (for 7.30 p.m.) at the Mayfair Hotel.

Mr. Foster Moore (Christ's) will be in the Chair, while Dr. Langdon Brown, Regius Professor of Physic at Cambridge, will be the guest of honour.

The price of the dinner will be 12/-, exclusive of wine; members are asked to inform either Mr. R. M. Vick or Mr. H. N. Burroughes if they intend to be present or if they are bringing any guests. No tickets are required.

* * *

PRIZE WINNERS, 1931–32.

Kirkes Scholarship and Gold Medal		Ghey, P. H. R.
Senior Scholarship (Anatomy, Physiology and Chemistry)		Nash, D. F. E.
Junior Scholarships (Anatomy and Physiology)	1.	Leask, L. R.
	2.	Braithwaite, R.
Harvey Prize		Nash, D. F. E.
Foster Prize		Wilson, J. W.
	Certificates	Barnard, E. J. W.
		Nash, D. F. E.
Treasurer's Prize		Leask, L. R.
	Certificates	Oliver, W. A.
		Mundy, R.
Bentley Prize		Benison, R. L.
Wix Prize		Moynagh, D.
Matthews Duncan Gold Medal and Prize		Medal not awarded.
	Prize	Ghey, P. H. R. } Equal.
		Woodham, C. W. B. }
	Prox. Access.	Norsworthy, L. R.
Brackenbury Scholarship in Medicine		Francis, A. E.
Burrows Prize		Francis, A. E.
Skynner Prize		Knox, R.
	Prox. Access.	Roberts, L. O.
Brackenbury Scholarship in Surgery		Beal, J. H. B.
Walsham Prize		Williams, H. M.
Willett Medal		Hosford, M. D. C.
Shuter Scholarship		Blackburn, G.
Junior Scholarships (Chemistry, Physics and Biology)		Brooker, A. E. W. } Equal.
		Stevenson, R. Y. }
Entrance Scholarship in Science		Ellis, B. H.
Entrance Scholarship in Arts } *Jeaffreson Exhibition*		Fagg, C. G. } Equal.
		Thomson, A. H. }
Combined Hospitals University Entrance (British Universities) Scholarship and Exhibition		
	Scholarship	Turner, J. W. A.
	Exhibition	Kelsall, A. R. } Equal.
		Blackburn, G. }

NOTES FOR A LECTURE ON HÆMOPTYSIS BY SAMUEL GEE.

[A YEAR or two before his death, which took place in 1911, Dr. Samuel Gee gave me two of his lecture note-books. The book from which the following lecture-notes are copied is dated on the fly-leaf May 7th, 1884. As these particular notes occur very early in the book, and as Dr. Gee was lecturing on medicine at the Hospital during this year, it may be assumed that the notes were written about that time. I have transcribed them literally, with only two minor exceptions: I have written abbreviated words in full, and I have omitted references to museum specimens and to Dr. Gee's own case-books.—THOMAS HORDER.]

HÆMOPTYSIS.

Hæmoptoe: Bleeding from air-passages.

i. Rusty sputa, sputa crocea, "bilious"; not usually called hæmoptysis. Commonest in pneumonia. Sometimes sputa quite rusty, and indistinguishable from sputa of pneumonia, for a few days in cases when pneumonia may be said (from absence of all its signs and symptoms) to be certainly not present, *e. g.* in hydrothorax of renal disease, bronchitis.

ii. Sputa cruenta. What is the difference due to? Query: In rusty sputum a small quantity of blood, well aërated and intimately mingled with pure mucus? No sharp distinction between sputa crocea and cruenta; they often pass each into other.

Causes.

I. Bleeding most abundant; quickly fatal. [Fluor sanguinis, *i. e.* unmixed blood.]

i. Rupture of aortic or other aneurysm into air-passages.

ii. From a cavity:

a. Of phthisis; often rupture of small aneurysm.

b. Of gangrene.

II. Less abundant: sputum sanguinis.

i. Tubercular phthisis in all its stages: Often no physical signs, in incipient phthisis, whether hæmoptysis be small or great. Often highly febrile, both in incipient and confirmed phthisis.

In a young man hæmoptysis is a strong suspicion of tubercle.

Also in arrested phthisis with small cavity with callous walls.

ii. Congestion of lungs, especially dilated heart, and mainly mitral, sometimes aortic disease.

iii. Hæmorrhagic infarctus, especially mitral disease.

iv. Chronic bronchitis and emphysema. Common in drunkards. (Laennec, i, p. 258.) Even in young children.

iv*a*. Dilated bronchi.

v. Pneumonia: sputa more than rusty, streaked with blood or deeply imbued with it.

vi. Pleurisy at onset.

vii. Pleural effusions.

viii. Gangrene of lung

ix. Cancer of lung.

x. Hydatids.

xi. Hooping cough.

xii. Aneurysms of aorta or other vessels.

xiii. Abdominal tumours: ascites, pregnancy, ovarian cyst.

xiv. Hæmorrhagic diathesis: *e. g.* scurvy, splenic diseases, etc. In some people a decided tendency to bleed on small causes, which can hardly be called disease, *e. g.* women. Some men also.

xv. Vicarious: of menses. Denied by some, but see Laennec, i, p. 258; Watson, ii, p. 149. Graves, ii, p. 137, speaks of it as a common thing. (Trousseau, i, p. 574.) Arrested by menses. (Hippoc., *Aph.*, v, p. 32.)

xvi. Laryngeal disease very seldom causes hæmorrhage (except cancer, injury).

xvii. Ulceration of trachea; may be visible by laryngoscope.

In Japan and Formosa a parasite (fluke). (See Manson's book: *Distoma Ringeri.*)

The immediate antecedent an effort.

Signs.

I. Bleeding most abundant and quickly fatal:

Blood brought up almost pure.

Death from loss of blood, and suffocation. (Graves, ii, p. 146.)

II. Not immediately fatal:

1. Very copious, blood almost pure, diagnosis from sputa alone cannot be made until the hæmorrhage becomes—

2. Less copious, and blood mixed with mucus.

i. Sputa streaked with blood: no difficulty.

ii. Sputa thoroughly imbued with blood: yet brought up sputum by sputum:

a. Remain distinct, no difficulty.

b. Run together: patient will have been some time expectorating what there is.

Manner in which blood comes up.

i. Distinctly coughed or hawked up.
ii. Comes into mouth without any effort.
  a. Quantity very great, a gush of blood.
  b. Quantity is much smaller than this.
iii. Hæmoptysis attended by effort like that of vomiting. (Laennec, i, p. 384; Trousseau, i, p. 583.)

Symptoms: Assidentia.

1. Signs and symptoms of disease preceding hæmoptysis.
2. Signs (physical) of hæmoptysis itself.
3. Comitants of hæmoptysis.
  i. Fever, very common: even in confirmed phthisis hæmoptysis is often febrile; in ascites, etc. In incipient phthisis (quasi-pneumonic hæmoptysis).
  ii. Clotting of blood in lungs. (Graves, ii, p. 146.)

Diagnosis.

1. Bleeding from nose. (Van Swieten, xii, p. 4.)
2. Bleeding from mouth.
3. Bleeding from fauces. (Van Swieten, xii, p. 5.)
4. Hæmatemesis.
  i. Gastric hæmorrhage.
  ii. Swallowed blood: especially hæmoptysis, epistaxis.

Prognostica.

Even when hæmoptysis is cause of death, hæmorrhage often ceases for some hours before death: patient dies from loss of blood, but not immediately.

Treatment.

I. Regimen:
  1. Rest of body and voice.
  2. Cold food; quantity small.
  3. Cold to chest.
II. Drugs.
  1. Applied to primæ viæ.
    i. Purgatives: saline aperients. (Thos. Young, p. 59; Graves, ii, p. 142; Andrew Clark.)
    ii. Emetics:
      a. Tablespoonful of salt, without water, repeated *p.r.n.* (Graves, ii, p. 142.)
      b. Ipecacuanha.
        i. In emetic doses. (Trousseau, i, p. 584; Duckworth, *S.B.H. Reports*, vii, p. 117.)
        ii. In smaller doses. (Graves, ii, p. 141.)
  2. Which act on vital constitution.
    i. Digitalis.
    ii. Ergot, especially subcutaneously. 1 part ergotin in 2 parts of water; inject 1–3 minims and repeat in 4 hours if necessary.
    iii. Aconite in highly febrile hæmoptysis is sometimes very successful.
  3. Styptics.
    a. Sugar of lead. (Heberden, ii, p. 532.)
    b. Tannin or gallic acid.
    Styptics best not given unless loss of blood really serious.
    Drugs may be combined; *e.g.* lead or ipecacuanha by mouth and ergot subcutaneously.
    Opium, when much weakness. (Graves, ii, pp. 140, 147.)
III. Surgery.
  Production of pneumothorax. (*Clin. Trans.*, 18, p. 278.)

RECENT WORK ON THE HORMONES OF THE FEMALE GENERATIVE SYSTEM.

ONE of the most important advances in pure physiology has been the elucidation of some of the controlling factors of the female sexual cycle. The advance, initiated by the determination of the time relations of menstruation and ovulation in the case of the human female, has led to a stupendous production of experimental data, both physiological and biochemical, by which the average medical man is very much overpowered. It is by no means easy to determine which of the published material can be considered reliable, nor is it easy to be certain which are the facts which can be considered as proven. Further, practitioners are inundated with circulars from manufacturing chemists which advance extravagant claims for their preparations. It can be said very emphatically that the majority of such circulars, while perhaps containing vague hints of reliable experimental work, are almost invariably misleading. Only optimistic therapeutists can hope to obtain results from the administration of the glandular preparations on the market. It is difficult to convince the general practitioner of this fundamental fact, and it is still more difficult to persuade manufacturing chemists that they put forward outrageous claims. Some years ago a well-known firm put on the market an ovarian preparation which contained a very small amount of the œstrus hormone, an amount which at the time appeared to be far too small for therapeutic purposes and which has since been reliably shown to be insufficient. I had the temerity to point this out to the firm in question, and to justify their attitude they showed me a remarkable series of replies from practitioners who had used this product. All the replies praised the efficiency of the preparation in question, but as good results were reported for such contrary complaints as amenorrhœa and menorrhagia I was not greatly impressed. Similarly old students come to me from time to time and praise the efficiency of the ovarian preparations. Some get good results in cases of menorrhagia, others find the same preparation to be specific for cases of amenorrhœa. Two things should be remembered, the first is that a large proportion of such cases spontaneously improve with time, the second is that successful treatment is usually remembered, failures are easily forgotten.

It may be perhaps of some value if a short account of the recent work is presented. It is highly complex and it is not easy to follow.

Of the older work two important contributions have stood the test of time. The first is Heape's description of the sexual cycle of lower animals, the second is the histological work on the human menstrual cycle by Hitschmann and Adler, by Schröder and by others. Human material showed the importance of the corpus luteum phase of the menstrual cycle, and Schröder particularly deserves credit for emphasizing the division of the cycle into proliferative and secretory phases, one due to the influence of ripening follicles in the ovary, the other to the presence of a mature corpus luteum. Ovulation was dated to the inter-menstrual phase, about 14 days from the beginning of the last menstrual period. Recently there has been some opposition to this view, because recorded cases of conception following coitus during the post-menstrual phase have been recorded. It has, however, been suggested that these cases can be explained by assuming long survival periods of spermatozoa. In any case the histological evidence is overwhelmingly in support of the view that ovulation is restricted to about the fourteenth day.

The human menstrual cycle can therefore be subdivided as follows:

(1) *Post-menstrual*, in which the ovaries are inactive and the endometrium is in a state of rest.

(2) *Interval.*—This corresponds to about the tenth to the fourteenth days. The ovaries contain ripening follicles. The endometrium is hypertrophied and its superficial layers are œdematous.

(3) *Pre-menstrual.*—A mature corpus luteum is found in the ovaries, and the endometrium displays the characteristic hypertrophy with crenation of glands and swelling of the stroma-cells.

(4) *Menstrual.*—The corpus luteum shows evidence of retrogression; the endometrium shows disintegration in its superficial layers. These histological findings are well established, and they are closely paralleled by researches on lower animals. Again, it is to Prof. Schröder that credit must be given for suggesting that at least two hormones are produced in the ovary during the menstrual cycle, one which causes the proliferative phase of the endometrium between the tenth and fourteenth days, the other secreted by the corpus luteum which is responsible for the specific premenstrual hypertrophy, a hypertrophy which differs essentially in its histology from that found in the proliferative phase. The German school, headed by Schröder and Robert Meyer, maintain that menstrual degeneration is passively produced by the retrogression of the corpus luteum, but personally I believe that a third factor exists which actively causes the necrosis and degeneration which is seen during menstruation. On the other hand, whereas there is abundant evidence of the existence of the first two factors, it must be admitted that there is neither pharmacological nor biochemical evidence of this hypothetical third factor.

The consideration of the two recognized ovarian hormones demands a knowledge of animal work, and it is the link between gynæcological histology and animal experiment which presents so much difficulty to the medical man. Historically the isolation of the œstrus hormone of the ovary is very interesting. The essential difficulty was to obtain suitable test material for the extracts made. In 1912 Iscovesco used the uterus of isolated virgin rabbits and found hyperplasia to follow the injection of ether and alcohol extracts of the ovary: similar results were reported by Aschner in the following year. In 1922 Allen and Doisy put this preliminary work on a sure basis by employing castrated female guinea-pigs and rats as test animals. Stockard and Papanicolao, and Long and Evans, had previously shown that the sexual cycle of the guinea-pig and rat could be accurately followed by examining vaginal smears.

In the rat and mouse the œstrous cycle can be described as follows:

(1) *Di-œstrus*, the state of rest. The ovaries are inactive. The vaginal smear shows leucocytes, mucus and epithelial cells.

(2) *Pro-œstrus.*—Ripening follicles are present in the ovaries. The lining cells of the vagina are multiplicated and the vaginal smear consists mainly of nucleated squamous cells, although a few leucocytes can be seen.

(3) *Œstrus.*—The follicles in the ovaries are larger, and it is at this phase of the cycle that both mating

and ovulation take place. The vaginal smear consists entirely of *non-nucleated* epithelial cells.

(4) *Post-œstrus.*—The ovaries contain corpora lutea. The smear contains leucocytes and *non-nucleated* epithelial cells. The latter serve to distinguish between di-œstrus and post-œstrus.

(5) *Gestation.*—If mating is permitted during the œstrus phase conception is recognized by mucification in the vaginal smear.

Rats and mice can be easily castrated through small incisions in the loins, and such animals form almost ideal test material for ovarian extracts, for vaginal smears can be easily examined. Allen and Doisy were able to identify a principle which produced the œstrous cycle in the castrated female guinea-pig and rat. At first it was believed that the hormone was limited to the contents of the Graafian follicle, but it was soon found that the hormone had a wide distribution. At the present time it is customary to follow the suggestion of Parkes and Bellerby and to call this hormone "œstrin." The hormone is present in large quantities in the placenta and in the urine of pregnant women, and these two sources are responsible for most of the material which is marketed at the present day.

Œstrin has well-defined properties. It induces the œstrous cycle in castrated animals, it causes well-marked hypertrophy of the uterus, and there is some evidence that it produces abortion if given in large doses. Its standardization is difficult, for test animals vary in their response, and it is necessary to use a series of test animals. The œstrin hormone is marketed at the present day in the preparations "Progynon," "Menformon," "Theelin" and "Sistomensin." The hormone is best administered by injection. Much larger doses are required if the hormone is given by mouth. This point is worth bearing in mind, for although oral administration has the merit of simplicity, it is open to doubt whether much can be hoped from the therapeutic use of the usual preparations in the doses which are available at the present day. Great progress has been made in the last few years in the investigation of the chemistry of the hormone. Doisy and his co-workers, and, almost simultaneously, Butenandt, have succeeded in isolating a crystalline product of high potency.

The Corpus Luteum Hormone. Progestin.

The main defect of Heape's classification of the sexual cycle was the omission of reference to the corpus luteum phase of the cycle. In Man, the corpus luteum phase is the most conspicuous feature, whereas in many lower animals it is masked by pregnancy. In the rabbit and ferret ovulation only occurs after coitus, and if the male animal is vasectomized a corpus luteum phase is induced in the female after copulation. In this way the progestational or nidatory phase of the cycle can be studied. Researches on other animals have demonstrated that a corpus luteum phase can be recognized in most cases. Work with human material showed that the corpus luteum hormone was responsible for the pre-menstrual hypertrophy of the endometrium, for the enlargement of the breasts, which is frequently seen during the pre-menstrual phase of the cycle, and because ovulation is inhibited during pregnancy, it was believed that the corpus luteum inhibits ovulation. It must be emphasized that with human beings the influence of the corpus luteum completely overshadows that of the œstrous-promoting hormone. With lower animals the reverse is the case, and it is for this reason that the recognition of the corpus luteum hormone is of recent date. The early work with extracts of the corpus luteum showed that it contained a water-soluble principle which inhibited ovulation in such animals as the fowl, and guinea-pig. The recent work of Corner, Allen, Clauberg and others has shown that the corpus luteum hormone produces progestational hypertrophy of the endometrium provided always that the uterus is sensitized by the influence of œstrin. Consequently corpus-luteum extracts produce no effect in the uterus of the castrated animal, but after previous administration of œstrin there is well-marked progestational hypertrophy comparable to that found in the corpus luteum phase of the sexual cycle. The third important function of the hormone progestin is that it inhibits the effect of pituitrin upon the isolated uterus. This effect was of course suggested by the earlier work of Marshall and Dixon, and of Knaus.

As yet very little is known of the hormone progestin. It is water soluble and insoluble in lipoid solvents. Efforts have been made to standardize the hormone, but as yet—so far as I am aware—standardized preparations are not on the market.

The Pituitary Hormones.

The relation between the pituitary and the female genital system has been known for a long time, but few people suspected the profound influence which animal experiment has shown the pituitary to exert over the sexual functions. The modern advances were initiated by the experimental work of Smith and Engle, and of Zondek and Ascheim, who, by injecting fresh pituitary emulsions and by grafting pieces of freshly-obtained gland respectively in immature mice and rats, obtained maturation of follicles and the production of corpora lutea in these immature animals. Previously Long and Evans in 1921 had shown that pituitary extracts administered to adult rats resulted in well-marked body-growth together with inhibition of œstrus. Subsequently Wiesner and Crew succeeded in separating the gonadotropic principle from this extract. The evidence is quite clear that the anterior pituitary contains two principles, one a growth-promoting hormone which is capable of producing gigantism, the other a substance which promotes maturation of follicles and the formation of corpora lutea.

The Sex Hormone of the Pituitary.

Difficulties arise when the sex hormone of the pituitary is investigated. These difficulties depend upon the production of two phases in the ovary, one due to follicle maturation with the ensuing induction of the œstrus phase of the cycle, the other due to the outpouring of progestin through the formation of corpora lutea. Zondek and Wiesner maintain that the pituitary gonadotropic principle contains two factors, one purely œstrogenic the other purely luteinizing. On the other hand much of the experimental work can be accounted for by supposing that the effects produced are due to variation in the amount of the hormone used. The position is by no means clear for there is good evidence both ways. It is, however, probably premature to maintain that two sex hormones are produced by the anterior lobe of the pituitary.

The physiological importance of the pituitary sex hormone cannot be over-emphasized. It is clear that the pituitary is capable of stimulating immature ovaries to full sexual maturity. In this way follicle maturation, ovulation and corpus luteum formation are shown to be under the control of the pituitary. Indeed the evidence suggests that the female sexual cycle is determined by the pituitary alone.

During pregnancy the anterior lobe of the pituitary hypertrophies, and it is believed that the increased secretion of the sex hormone leads to the excretion of the surplus in the urine. This view is based upon the identification in the urine of large amounts of a substance which has the physiological properties of the pituitary sex hormone, and indeed the Zondek-Ascheim test for pregnancy is based upon the presence of this substance in the urine. Again there is opposition to this view. It is by no means certain that the substance in the urine is identical with the pituitary sex hormone, and there is some evidence that it is produced in the placenta.

The difficulties in the interpretation of the experimental work appear to have no bearing upon the clinical aspect of the pituitary sex hormone. What is especially required is an available supply of active preparations. At present Zondek's prolan preparations, obtained from the urine of pregnant women, are the chief sources of supply. They are standardized in terms of rat-units. Other sources are follutein and antuitrin. It has been shown that the hormone is destroyed by the gastro-intestinal secretions, and there is very little evidence that results are obtained if it is given by mouth. Further, the preparations are not stable for long. The clinical administration should therefore be by hypodermic injection and only fresh supplies should be used.

The Posterior Pituitary.

The active principle of the posterior lobe of the pituitary has been shown to contain two principles, one which is oxytocic (pitocin), the other vaso-pressor. The action of the oxytocic principle is inhibited by progestin. The pressor principle is anti-diuretic and is responsible for the contracture of the muscles of the gastro-intestinal tract.

The Influence of the Pituitary on Mammary Secretion.

Work on the relation between the breasts and the pituitary is in an embryonic stage of development. There is some evidence that œstrin promotes hypertrophy of the breasts, but there is no reason to believe that this hormone controls the secretion of milk in addition to mammary hypertrophy. On the other hand it has been shown by Corner and by others that anterior pituitary extracts stimulate the secretion of milk in the breasts of spayed virgin rabbits. There is reason for believing that the anterior pituitary mammary stimulating hormone is distinct from the sex hormone for it has been possible to separate the two principles by chemical means. The physiology of lactation is, however, but little understood, and there is a tendency to confuse mammary hypertrophy with secretion of milk—two processes which are quite distinct.

Clinical Application.

The above considerations indicate the individual hormones which will eventually be available for therapeutic purposes. The list is long and it seems quite clear that much clinical skill and judgment will be necessary if the hormones are to be used scientifically. The hormones are as follows:

Ovary.

(1) Œstrin.
(2) Progestin.

Pituitary.

Anterior lobe.—(1) Growth-promoting hormone.
(2) Sex hormone, with the possible division into—
(*a*) Œstrogenic.
(*b*) Luteinizing.
(3) Lactogenic principle.

Posterior lobe.—(1) Oxytocic principle.
(2) Pressor principle.

At the present time only œstrin, the anterior lobe sex hormones (prolan A and B of Zondek) and the posterior lobe hormones are marketed. At once the therapeutic field is restricted. Personally, I cannot believe that startling cures can be expected with the resources of the present day. There is a tendency amongst medical men to hail all new therapeutic remedies with enthusiasm, and very often reports of treatment with such remedies lack critical analysis. Some years ago, with the help of a Bart.'s man attached to a well-known commercial firm, I arranged for the District placentas to be collected and used as a source of supply of œstrin. I carried out a trial of the therapeutic effect of the hormone on a small series of cases. The results were published in due course when I was hesitant to suggest that the hormone had any proved therapeutic effect. Far more enthusiastic reports were subsequently made by other people, but time has shown that the pessimistic attitude I adopted was fully justified.

Similarly with the pituitary sex hormone. On the one hand the Edinburgh school have recently reported good results from its administration and claim extremely good results in cases of repeated miscarriage. On the other hand, in America, Smith, Goldstein and others report exactly opposite results, and Goldstein goes so far as to say that he believes his patients would have gone to term but for the injections of the hormone. My own view is that so long as we cannot be exact in diagnosing precisely which factor in the endocrine chain is at fault, so long will hormone therapy in gynæcology be empirical. This view will be criticized because of its pessimism, but it serves to indicate the road along which clinical research should proceed. To Frank and his co-workers belongs the credit for attacking the problems scientifically. They have made efforts to establish the diagnosis in various endocrinal disorders by biochemical means, by estimating the blood-content of œstrin, the anterior pituitary sex hormone and progestin, and have attempted to correlate their findings with the clinical aspect of the case. The results obtained are encouraging, but I doubt whether they can be considered to have passed the experimental stage. The difficulties are very great and errors can easily be made. The other method of tackling the problem is to separate cases into groups by purely clinical methods. Little progress has been made along these lines, although it is fairly obvious that such a grouping of cases will be essential for future organo-therapy. Nevertheless records should be made of all cases treated with œstrin and the anterior pituitary hormones. It is essential that failures should receive as much attention in the records as successes. Data of this type are of the greatest value.

What I have attempted to convey is the difficulty of assessing the factors at fault in such conditions as amenorrhœa, hypomenorrhœa, epimenorrhœa, and that with our present recognition of a series of nearly half a dozen hormones, one or all or only some of which may be lacking, it is straining accurate therapeutics to the full to aim at rectifying such complaints. The second difficulty is that such disorders often rectify themselves spontaneously, and a critical therapeutist will ponder deeply whether a good result is determined by his treatment or whether it is independent. The most important obstacle to clinical research is lack of active standardized material. The scarcity is very real and it is not clear how it will be overcome. Manufacturing chemists are doing their best to collect supplies, and there is hardly an obstetrical clinic in Germany which is not sending its placentas and urines to be extracted either for œstrin or for the prolan preparations. But at the present time it is very doubtful if the correct dosage of any of the hormones for human beings is known.

These views are, of course, very pessimistic, and doubtless the usual gibe will be made that my therapeutics consist of the administration of aloes pills and nitrohydrochloric acid. But there is what we call somewhat pompously a goal of clinical integrity, and it is perhaps better to avoid empiricism and blunderbuss methods and to await patiently further information.

WILFRED SHAW.

ACKNOWLEDGMENTS.

The League News—The British Journal of Nursing—The Nursing Times—The Student—The Hospital—The Leprosy Review—Extrait des Annales de l'Institut Pasteur—Bulletins de L'Hôpital Saint Michel—L'Echo Médical du Nord—Bulletins of the Johns Hopkins Hospital—Medical Times and Long Island Medical Journal—The Queens Medical Journal—The Post-Graduate Medical Journal—The East African Medical Journal—Guy's Hospital Gazette—The London Hospital Gazette—University College Hospital Magazine—St. Thomas's Hospital Gazette—St. George's Hospital Gazette—The General Practitoner of Australasia.

THE BIRTH OF THE STUDENTS' UNION AND JOURNAL.

IT may interest the readers of the Bart.'s JOURNAL to read of the memories of these events as remain in the mind of the first secretary of the Students' Union. When I came to Bart.'s in the early 'nineties from Cambridge each sport was supported by the effort of the secretary and such friends as he could enlist, in collecting half-crowns from his fellow students with a donation from the member of the staff who was President. How on earth we carried on I don't know, my year as secretary of the Athletic Club was a bit of a nightmare at times, any spare moments during the summer session had to be spent in begging. I have never forgotten one sportsman, "I hear you generally get a prize yourself, why shouldn't you pay for it." Good sports had to pay a half crown to every club in the Hospital. A week before the sports came off there was only about half enough to cover our annual expenses, I had to beg furiously from every one I saw.

Such haphazard methods disgusted men from Cambridge who were used to orderly institutions in their Colleges, a charge in the terms bill did not worry them or their parents. Backed by some of our London colleagues who had felt the evils of the existing system or lack of it, a group of Cambridge men started a crusade to get the clubs amalgamated and persuade the school to collect the subscriptions with the fees. Every club had to vote itself into the scheme. Borcherds, who was at Cambridge when I was, did most of the organizing. He was a very able South African, who was the real founder of the JOURNAL, and, if I remember right, was its first Editor; the only part I took in that enterprise was touting for advertisements. I remember one had to try and speak at each club meeting, a most trying ordeal to me. Only once did I really get going. Billy Royden pointed out the impossibility of collecting pounds when it was like taking a man's lifeblood to extract a half-crown, and then asked if I had ever tried the pastime. After my recent sufferings this was too much, and I got quite fluent.

Owing to the efforts of Mr. Anthony Bowlby and Dr. T. W. Shore, who was then Warden of the College, the School authorities consented to the scheme and undertook to collect the fees. This secured the victory, but it was a hard-won fight; numerous were those who prophesied disaster, there was an astounding amount of feeling, not bad feeling so much as sadness that well-intentioned persons should wreck the clubs.

This was mainly among the old hands; many of my friends were very sore and sad and some refused the half-guinea which was the minimum subscription for joining the new club. In my innocence I felt rather hurt at this attitude, this was my first reform campaign. Later on in life I realized in the I.M.S. that if you were allowed your own way at all, you were lucky to get off with a few kicks, never must you expect any thanks or approbation from seniors. The morning after the amalgamation had been officially announced I met Pa Jessop in the Square, "You have got your own way, my lad, and now you will have to be first secretary," was his greeting. I said I had no time, I was working for my finals and had no knowledge of finance. Jessop said Shore would see to finance, and that getting one's way carried results one could not shirk. How true his words were I realized in after years. Exactly what I did I can't remember; it seems to me that Shore and Bowlby did all the work, I acted as a messenger; but I must have been some use for, after a holiday, I came back to find a kind of rebellion going on; my deputy had been too autocratic, he had dared to criticize accounts, wanted to know how and why money had been spent; in fact had been most unreasonable, and the show was going to be broken up if this went on. Rather poverty with liberty than autocracy with rationed plenty was the feeling of the club secretaries. As far as I can remember nobody got a penny more, in fact nothing but a few kind words and sympathy for the hard worked, but casual secretary. In the end we got reasonable accounts and pulled through the first difficult year with a good balance.

When I go to Winchmore I rejoice at the result. Winchmore was the outcome of the amalgamation, it would have been impossible without it. It was due to the foresight firstly of Dr. Shore and Sir Anthony Bowlby and the generous backing given by the Staff.

The JOURNAL followed the formation of the Union Club, and was owing to Borcherd's efforts, a man of ideas, to whom Bart.'s owe a debt of gratitude. I certainly don't think he got any at the time, but then he had his own way and got a lot of fun out of his Editorship, and he made it a going concern; he had far more business instincts than most of us, but we did not always appreciate these at the time.

Clubs may still have difficulties, but their secretaries can thank their lucky stars they did not have to run clubs in my time.

I wonder if the United Hospitals is properly run now as a 'varsity club is run; in my time we had to pay fares even to Edinburgh to represent London. I remember being blown up by dear old Kent Hughes, one of the finest sportsmen Bart.'s ever had, because I would not or rather could not produce the cash for a return ticket to enable me to run in the quarter at

Edinburgh. I remember trying to soothe him by pointing out that a hard-up widow of a doctor should not be expected to support to this extent a club representing thousands of students, in short if the U.H.A.C. wanted my services they would have to pay my fare.

I wonder if forty odd years have made corporate feeling any stronger, and if the United Hospitals' organization is any better now than then.

My last year at Bart.'s was fairly strenuous; before I took on the secretaryship of the Students' Union I had a more or less sleepless night wondering if I might conscientiously tackle the job with my finals coming so soon. I need not have worried; no job I ever did was so useful in after years in the I.M.S. Shore's teaching was useful; soon after I went out to India I found myself in a plague camp, the cash for some dozen funds was kept in separate bags, accounts were kept on sheets of paper, tied up in the bags. When these papers were full they were filed.

That was my first little bit of reform, and it got me out of a hole later on. A love for reform is a good thing, I suppose, but it gets you into trouble, it makes life exciting; best not to try it unless you have a mingled vein of cynicism and humour. The reformer hurts others inevitably; if he is too hard-skinned he hurts more; if he is too thin-skinned he gets too badly hurt himself; either alternative is bad for the work in view. If you can have an amused sympathy with those who oppose you things go easier, seeing the other fellow's point of view eases things, and your private amusement makes you feel superior; an essential to keeping you happy under critical fire or even abuse. In many things in life we have to work for the future; sometimes we can see our successors making a good job of a thing well begun in our youth, and that is a joy and a help in more important efforts.

To the students of to-day I would say: Never shirk a social effort, any work you do will pay you over and over again in after life. If you retain the youthful love for movement in later life you will not perhaps see the work of your hands recognized, but we live in a world of law, mathematical in its results; no good work is ever wasted.

Sir Anthony Bowlby told me that his idea was that a residential college should be built at Winchmore, so that fellows could get games easily and suggested a special college 'bus service. In these days of motors this should be easy. Bowlby was always keen on men keeping physically fit; he thought the athlete, provided he did things in moderation, had a better balanced mind than the merer book man.

W. GUYON RICHARDS.

GEORGE'S MISSION.

YESTERDAY I went to see George in a nursing home. He was sitting up in bed and, to all appearances, radiantly well; but when I inquired about his health a spasm of anguish twisted his face.

"The pains, my dear fellow, are agonizing," he groaned, "but my doctor is very sanguine. The ——er prognosis is good." He laid one hand gently on his middle and groaned again.

"This last doctor is a psycho-therapist. He is laying bare my mental processes. My complexes, it seems, are definitely inferior, my mind is an appalling sink, and to find a parallel for my emotional reactions he has had to scour Greek tragedy. He murmured something about Œdipus I believe."

"But what has this to do with the terrible pains in your head and stomach?" I asked.

"I was coming to that," he replied. "Narcissus, also, is my blood brother. I love myself too much. I crave for sympathy and I demand attention. These pains of mine procure both for me."

Suddenly he leaned back, closed his eyes and groaned. "Pass me the aspirin, Charles" He took three and his pain passed immediately, for he sat up and inquired brightly, "Don't you agree with him?"

I hesitated, unwilling to commit myself, but he did not wait for my reply.

"The doctor is half right," he said; "this chronic invalidism suits my temperament, but the truth is, Charles, I am a man with a mission—a reformer."

"Yes, yes," I murmured soothingly, for there was a fanatical light in his eye, "so are we all nowadays—Empire Crusaders."

"Charles, I am serious. I am reforming nursing homes. This is the twelfth nursing home I have adorned. All of them bad, but all of them better when I have left."

"The Passing of the third floor back," I said with a smile.

"An exact analogy," he insisted. "The ordinary nursing home is a drab house, preferably on a noisy main street, of northern aspect and surrounded by dripping plane trees, in which the sick are placed in small cubicles, cold and ill-lighted. The patient is laid on a hard mattress, fed with inferior food and—grimmest joke of all—at the head of the bed is a bell, and if he, with the courage born of his extremity, dares to ring it, before the over-worked probationer answers his summons, sufficient time elapses for the decease of Charles II, let alone ordinary men. For all those mercies, and those inevitable extras, one pays handsomely. The bills are not so long at the Imperial Hotel. Picture the poor rich devils lying in these places. The hospitals are positively jolly by comparison."

"But how do you set about reforming them?" I asked.

"The thing is simple. I have a black list and I become a patient at each in turn. I enter them with an indomitable will, a diet sheet which would exercise the skill of a good chef, and a stop-watch. The first day I turn my attention to the room—to such things as the bed, the curtains, easy chairs and flowers. I insist on a box-spring mattress, and I get it—usually from the Matron's bedroom. It takes a week to get the food and the cooking improved, but I work such a revolution that the other patients would rise from their beds and call me blessed if they knew. The second week I turn my luminous intelligence to the internal working of the place. There is now nothing about nursing home administration that I don't know. In the third week I am invariably offered a partnership, or at least a seat on the board."

"Why don't you start nursing homes of your own?" I asked, "a chain of George's Luxurious Nursing Hotels from Land's End to John o'Groats."

He eyed me reproachfully. "You forget I am a sick man."

"Of course," I said hurriedly, fearing another demonstration, "but what about the stop-watch?"

He turned over in bed, took a stop-watch from under his pillow, set it and rung his bell. A nurse quickly entered the room, closed the door and came swiftly to his side. "Did you ring, Sir?" she asked.

"Ten and two-fifth seconds," he said kindly; "that is much better. At four-fifteen, nurse, will you send two pots of tea, one China and one Indian, toasted muffins, scones and honey?"

"Very good, Sir," she replied. "Are you quite comfortable?"

"Yes, thank you, nurse; that is all."

"Up to the present," he said, while we were having tea, "it has been simple, but the next three on the list are surgical nursing homes. Do you realize the meaning of that, Charles?"

"But you can't go into a surgical home without having an operation," I exclaimed.

"Exactly, Charles," he said, "the crisis of my life approaches. I have made up my mind that I shall sacrifice flesh and blood in the sacred cause. Preferably my least vital organs. I shall begin with one tonsil. T.M.G."

"You can't get a surgeon to remove them," I said.

"I have inquired into that," he said maliciously, "and I am credibly informed that the throat surgeons in London who have refused to remove tonsils can be numbered on the fingers of one hand. I shall consult one of the others."

"George," I said, as I wished him good-bye, "you are a hero."

"Who delights in his own heroism," he replied; "and don't forget, Charles, if you have to enter a nursing home, consult my dossier first; it is invaluable."

D. V. H.

SUSCEPTIBILITY.

DO you remember, as we took the road
One night from Amberley to Arundel,
How in the west the sunset drooped and glowed,
As though in some far citadel
Gold, molten, flowed?

The evening sky, so deep yet clear its hue
Was like the rarest silken covering
Spread over earth, rich-wrought in gold and blue.
The world was hushed; only did sing
A bird or two.

A wood of pines, crowning a low hill's brow,
Rose 'twixt the earth and sky—and oh, it seemed
To be a crown of thorns: each separate bough
Shattered the dying sun, which streamed
Christ-like blood now.

You remember? You murmured, "Glory be
To God who made worlds beautiful"; but I
Could only curse, broken at heart to see
Such beauty; and you wondered why,
Not knowing me.

C.

STUDENTS' UNION.

RUGBY FOOTBALL CLUB.

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

Played on Saturday, October 8th. Away. Lost, 3—6.

The Albion were at full strength while we were without Capper and Darmady. The forwards must be especially congratulated on their display under the leadership of Lewis, who, as usual, played magnificently. If only the attacking powers of the outsides were as good as their defence, the team would be superb.

The ground was sticky following heavy rain, and it was made considerably worse by showers during the game. The Albion kicked off against the wind, and were soon in our "25." Both sides were getting the ball to their outsides, and some good passing movements took place. The forwards managed to get a try by Harris following up a kick ahead. This was not converted. We led 3—0. The Albion pressed again and were kept out by really good tackling preventing their outsides from gaining ground, or from passing quickly enough. The ball became very sticky following a shower of rain and passing was difficult, so the remainder of the first half

resolved itself into a forward struggle, except for one good movement by Pirie and Powell. We led at half time 3—0. On resuming, the ball was drier, and as the Albion were getting more of it we were kept in our half for some time, during which Sparks scored a penalty goal, making the score 3—3.

Towards the end the Albion were lucky to score when Curtiss failed to touch down after a poor attempt at a kick ahead by the Albion wing, Rees. Powell replied with a very good run ending almost under their posts, soon after which the whistle went for no-side, and we lost 3—0.

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

Referee: Mr. F. W. Sanders (Plymouth).

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

Played on Saturday, October 1st. Away. Lost, 5—16.

Pontypool kicked off with the wind behind them and kept us in our "25" for the first ten minutes, without actually looking very dangerous. We got out with a fine passing movement by Curtiss, Kirkwood and Youngman, which nearly led to a score, as did a burst by Powell and Lewis soon after. Their back, Newey, relieved the pressure by fine kicks to touch. Powell then intercepted and ran half the length of the field before being stopped. Pontypool began to attack and Bodger nearly scored; they kept up the pressure and Joshua got over. Allen converted (0—5). Bodger again nearly scored, but was well tackled by John. Then Pontypool were awarded a penalty, which they converted, and so led 8—0. Kirkwood made a fine dash, but was stopped in time, Pontypool replying with a kick and follow-up by the back, who caught John in possession. Darmady very nearly kicked a penalty goal, and Youngman was almost over in the corner.

Half-time score was 0—8.

Soon after we got near their line with good touch-finding by Kingdon. We were sent back, however, by a fine dribble by their forwards, ending in a try. They led 11—0. We very nearly scored with a really magnificent effort, the ball going from the scrum to Curtiss and then from Youngman to Kingdon, who passed to Lewis, but he was tackled almost on their line. Powell very nearly scored, but the ball was then swung across to their left wing, who ran nearly the whole length of the field before being caught up by Youngman at the corner post. Pontypool scored soon afterwards by a forward passing movement, this was converted. Lewis again nearly got over for us, and soon afterwards Curtiss followed up a fly-kick and scored. This was converted by Darmady (16—5).

So ended a really good game, well refereed by Mr. Roy Jones, of Cross Keys, in which we were really unlucky to be beaten by so much.

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

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

Played on Wednesday, October 5th. Home. Won, 6—3.

This was a friendly, but London were not at full strength, lacking several of their forwards, while our pack did not exert themselves till the closing stages of the second half. Neither sides' outsides distinguished themselves owing to the rapidity with which wing forwards got up on the fly-halves.

London nearly scored when their left wing, Cooper, intercepted, ran up to John and punted ahead and nearly caught up the ball before it went into touch in goal. They then scored a penalty goal and led 3—0. We nearly replied by a try following a run by Darmady, who passed to Curtiss (who had changed positions with Kirkwood), but his pass to Youngman was knocked on.

At half-time they led 3—0. Our forwards then improved, and Capper and Lewis nearly scored a try between them, immediately after which Darmady kicked a penalty (3—3).

The game finished a good passing movement, which resulted in Curtiss crossing. This was not converted, and so we won 6—3.

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

Referee: Dr. Glyn Hughes.

ST. BARTHOLOMEWS' HOSPITAL *v.* BEDFORD.

Played on Saturday, October 15th. Away. Lost, 0—3.

Bedford were at full strength and possibly were favoured by knowledge of their ground, which is very wide.

Soon after Bedford had kicked off we lost Patterson, our hooker, and so the forwards must be congratulated on the way they secured the ball, especially in the line-outs and scrums. From a punt ahead in a good attacking movement by us, the Bedford left wing managed to gather the ball and make a magnificent run to score in the corner. This was not converted (0—3). We then commenced a series of attacks in which Nel and Curtiss were prominent, one of which, a dribbling movement by Nel and Kingdon, was most unlucky not to be rewarded by a try to the latter.

Bedford returned to the attack, but were kept out by magnificent tackling. Just before half-time Pirie and Powell started a good movement, but were handicapped by lack of backing up. So Bedford led 3—0.

The second half consisted of repeated attacks by our outsides against a stubborn defence. Nel nearly scored, and so did Pirie, Bedford only occasionally getting out of their half. And with any luck Curtiss would have scored but for the fact that the pass destined for him unfortunately went over his head.

We certainly were unlucky not to have forced a draw.

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

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

Played on Wednesday, October 19th. Away. Lost, 3—22.

The weather was fine and the ground in excellent condition. Cambridge kicked off against the wind and began to press almost immediately. Our forwards did not display their usual activity till after half-time. At the beginning our outsides had to stem repeated attacks by the Cambridge backs, mostly inaugurated by Phillips.

After half-time things began to improve, and with a good share of the ball, our backs showed what they could do. Nel and Curtiss made some good runs, but in one attack, on the left wing when we nearly scored, Curtiss was heavily tackled by Rees and both had to leave the field. Wilson was taken out of the scrum and put on the right wing with Nel in the centre. We continued to attack and were unlucky not to score sooner than we did, when after a good movement on the right wing, to which Curtiss had returned, the ball came into the centre again and Lewis managed to score a well-deserved try. Just before the end Cambridge scored again and so won 22—3.

With their opportunities Cambridge should have scored much more in the first half, had it not been for our sound defence, but during the second half our forwards improved immeasurably and deserved to score more than the one try.

Team.—C. R. Morrison (*back*); J. D. Powell, A. H. Pirie, L. M. Curtiss, J. G. Nel (*three-quarters*); J. R. Kingdon, F. H. Masina (*halves*); E. M. Darmady, K. J. Harvey, J. M. Jackson, R. Mundy, A. H. Grant, B. S. Lewis, W. M. Capper, J. D. Wilson (*forwards*).

ASSOCIATION FOOTBALL CLUB.

1ST XI *v.* WESTMINSTER BANK "A."

Played on Saturday, October 8th. Home. Lost, 2—5.

Little importance can be attached to the result of this match. Play was even from beginning to end. It was due to a rebound into the Bart.'s goal off Hunt that the Bank had a lead of 2—1 at half-time. In the second half the Bart.'s forwards saw more of the ball, and nearly scored on many occasions. Our defence, however, was poor, and allowed the Bank to get clean away. Lack of combination left a man unmarked on almost every occasion, the opposing outside right especially, who was quick to seize two of the opportunities that were given him. Both the Bart.'s goals were scored by Shackman.

Team.—D. J Johnson (*goal*); R. McGladdery, A. H. Hunt (*backs*); J. D Ogilvie, D. R. S. Howell, W. M. Maidlow (*halves*); R. C. Dolly, P. Brownlees, R. Shackman, B. F. Jackson, H. A. Pearce (*forwards*).

1ST XI *v.* OLD BRENTWOODS.

Played on Saturday, October 15th. Home. Won, 3—1.

Play was even in the earlier stages of the first half, a light ball and a cross wind contributing to somewhat erratic play. The Hospital, on the whole, combined better, but missed one or two golden opportunities to score. The Old Brentwoods goal-keeper was kept very busy, but he was taken off his guard by one of his own backs who was being harassed by Shackman. In the second half play was fast and keen. Bart.'s opened up the game more than their opponents and carried out their movements w th far greater speed The Old Brentwoods goal was more often in danger, yet the score was levelled by a breakaway by their inside forwards. A few minutes later Pearce scored with a fine dropping shot from the left wing, and soon afterwards Shackman followed suit from a few yards range.

The standard of play in this game was on a different plane to that of the previous week, and there is no doubt that we have the makings of a good side that profits by its mistakes.

Team.—R. A. I. Wenger (*goal*); P. J. Hardie, A. H. Hunt (*backs*); J. W. B. Waring, D. R. S. Howell, J. D. Ogilvie (*halves*); R. C. Dolly, P. Brownlees, R. Shackman, F. D. M. Livingstone, H. A. Pearce (*forwards*).

HOCKEY CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* BECKENHAM II.

Played at Beckenham on October 8th. Won, 4—2.

After an extremely wet morning the weather very kindly cleared up for our first match. The ground was in good condition, considering the amount of rain there had been. Bart.'s won the toss, and decided to play away from the sun. From the beginning, the play was both keen and clean, and both sides made frequent attacks on the opponents goal. Eventually the Hospital managed to open the score. Soon afterwards Beckenham replied. Beckenham then went on to score again, leaving the Hospital one goal down. However, before the whistle went for time, the Hospital had managed to score three goals more.

The play was very promising for a first match. The defence was good, especially H. T. Hindley and V. C. Snell at back. The forward play was scrappy on the whole. We are extremely pleased to have A. Glanden Williams playing for us again this year.

These scoring for the Hospital: A. Glanden Williams (2), A. D. Iliffe and G. Blackburn.

Team.—J. L. D. Roberts (*goal*); G. T. Hindley, V. C. Snell (*backs*); B. Thorne Thorne, K. W. Martin, C. Fletcher (*halves*); G. Blackburn, A. Glanden Williams, A. D. Iliffe, L. Heasman, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* WOOLWICH GARRISON.

Played at Woolwich on October 15th. Won, 5—2.

The game was played under somewhat adverse conditions—a bumping pitch, a blinding light, an hour to play and an air display overhead. It was not until twenty minutes after the start of the game that the Hospital managed to score. A few minutes later the score was increased to two. The Garrison then made an attack and managed to secure a goal through a miskick of Smallhorn's. Each side scored again before the interval, bringing the score to 3—2.

During the second half, the Garrison were seldom dangerous, and the Hospital added yet two more goals to their aggregate.

The forward line was playing much better than on the previous match. C. A. Davidson had a number of attempts at goal from the corner, most of which went behind. He must learn to pass back to the edge of the circle more. In the half-line B. Thorne Thorne played a good game. The defence was not excessively worked during the game.

Those who scored for the Hospital were: G. Blackburn (3), A. Glanden Williams (2).

Team.—D. Smallhorn (*goal*); G. T. Hindley, V. C. Snell (*backs*); B. Thorne Thorne, K. W. Martin, C. Fletcher (*halves*); E. W. Burstal, G. Blackburn, A. Glanden Williams, L. Heasman, C. A. Davidson (*forwards*).

RIFLE CLUB.

The Miniature Range has received good support this term, especially from freshmen, and there is a prospect of some good shooting this year.

The Club has joined the City of London Rifle League and weekly matches are being shot, while matches are also being arranged for a "B" team, and it is hoped to form an Inter-Hospitals' Rifle League for shoulder-to-shoulder matches.

This term competitions have been arranged for spoons, the Newspaper Certificates and the Bell Medal.

The Club now possesses two No. 15 B.S.A. rifles, which are proving very satisfactory.

Tuesday evenings are now reserved for those not in the first team and members of the team are then available for coaching.

D. O. D.

CORRESPONDENCE.

TWO UNUSUAL CASES OF TWINS.

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

DEAR SIR,—The following cases from my practice may be of interest to some of your readers.

The first is a primipara living ten miles away from me. Three days before labour commenced felt a great commotion within and had to retire to bed with faintness.

Commencement of labour was slow, the os being about the size of a two-shilling piece and not enlarging, a drachm of tinct. opii was given which completely stopped the pains for twelve hours. When next labour commenced the pains were violent, with a bloody discharge. On examination the position was L.O.A., and as soon as the os would permit forceps were applied. At the first pull some progress was made, but at the next pull the forceps began to slip.

An investigation with the whole hand inside the uterus revealed a second head with its chin firmly fixed above the sternum of the first baby. This caused the first head to extend itself out of the forceps as soon as traction was made.

The second head was rotated to free the chin and then a 7½ lb. dead boy was easily delivered. The second boy was delivered with forceps shortly after.

What caused the death of these twins?

The second case was a multipara. I was sent for under the Midwives' Act and told that a child had been born about four hours, as a breach. I found the uterus large and heart-shaped, from the vagina the cord of the child was hanging, and on examination it appeared to be attached to the placenta, but a further examination of the abdomen suggested that there was another baby in the uterus, so an examination by the whole hand was decided upon. The placenta before mentioned turned out to be another "bag of waters," and on breaking these another baby was found tightly wedged in the fundus of the uterus, with its back presenting, some difficulty was experienced in getting hold of a leg, and when this had been accomplished the head came away from the fundus like a cork out of a bottle. On examination of the placenta afterwards the cord of the first child was found to be attached to the membranes of the second bag of water.

The two children were girls; I have never heard of this form of attachment before.

Puerperium in both cases was normal, and, I think, shows the advantage of an examination by the whole hand in all cases of any difficulty before undertaking any line of treatment.

I am,

Yours truly,

P. T. SPENCER-PHILLIPS.

Great Baddow,
Chelmsford;
October 18th, 1932.

REVIEWS.

THE RELATIVE VALUE OF RADIOTHERAPY IN THE TREATMENT OF CANCERS OF THE UPPER AIR-PASSAGES. University of London Semon Lecture. By W. DOUGLAS HARMER, M.Ch., F.R.C.S. (London: John Murray.) Pp. vi + 85. Price 6s. net.

Mr. Douglas Harmer's Semon Lecture, delivered in November, 1931, has been published in book form as well as in the current volume of *St. Bartholomew's Hospital Reports*. His subject is one of great complexity, and the technical difficulties of dealing with neoplasms of the upper air-passages have hitherto baffled surgeons and radiotherapeutists alike. Mr. Harmer has, however, made a very definite constructive contribution towards the solution of the problem, and

his message is, on the whole, one of considerable hope. He states that before writing his lecture he circulated a *questionnaire* to other surgeons and institutions in order to obtain their general view of the value of irradiation in the upper air-passages. He received answers which would have been extremely discouraging to any beginner in this field, but fortunately he had already a long and extensive experience of his own to draw upon, and his account of the present position and outlook is a remarkable tribute to his own technical skill and to his determination in the face of difficulty. The basis of his success in treating carcinoma of the larynx, of the antrum and nasal sinuses, of the naso-pharynx and of the tonsil, has been due to the fact that he was able to bring to bear upon them a high degree of surgical skill, together with a sound knowledge of the principles of radio-therapy. Mr. Harmer insists in his "conclusions" on the necessity for this double competence if success is to be attained. The treatment of new-growths in this difficult region must remain, therefore, in the hands of the highly trained few, and even so these few must be a group of experts rather than any individual. Mr. Harmer himself has had the advantage of co-operation at St. Bartholomew's and at the Mount Vernon Hospital with experts in different departments, such as Dr. Finzi, Dr. Levitt, Dr. Canti, Prof. Hopwood and Mr. Stanford Cade, and he is the first to acknowledge the help that he has received. Especially noteworthy is the importance he attaches to the expert use of high-frequency X-rays, such as has been applied to many of his patients by Dr. Levitt. It is still doubtful whether X-rays or a large mass of radium will prove to be the more valuable means of irradiation, but of the value of external irradiation Mr. Harmer has no doubt.

He brings forward a large amount of direct evidence from patients treated, and his conclusions are so concisely stated that his book will be found of great value for reference in deciding how to deal with individual problems. It is excellently illustrated and there is a full list of references.

SYNOPSIS OF THE BRITISH PHARMACOPŒIA. By H. WIPPELL GADD. Twelfth edition. (London: Baillière, Tindall & Cox, 1932.) $4\frac{1}{4}$ in. × $2\frac{3}{4}$ in. Pp. 189. Price 2s. 6d. net.

This little book is especially useful for daily reference as its convenient size makes it fit with ease into the smallest pocket. The appearance of the *British Pharmacopœia* for 1932 makes it necessary that all who prescribe or dispense should be acquainted with the alterations in composition or strength of the articles contained in the new publication.

Many of the names for articles and preparations have been altered, these are set out separately, and there is a list of new drugs and drugs whose strengths have been modified. We recommend this synopsis for its simplicity and utility.

A HANDBOOK OF MIDWIFERY FOR OBSTETRIC DRESSERS, ETC. By COMYNS BERKELEY, M.D., F.R.C.P., F.R.C.S., F.C.O.G. Eighth edition. (London: Cassell & Co., Ltd., 1932.) Pp. x + 609, with 67 illustrations. Price 8s. net.

MR. COMYNS BERKELEY is to be congratulated on the popularity which this handbook has now gained. In this new edition the text and illustrations have been thoroughly revised, and a new chapter has been added on the principal indications for the various obstetric operations. Pupil-midwives will do well to have this book ever by their sides, as the syllabus of the Central Midwives Board is admirably covered except for the physiology of midwifery, which the author has described in a separate volume.

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

ABRAHAMS, ADOLPHE, O.B.E., M.D., F.R.C.P. "Diarrhœa.' *Clinical Journal*, July 20th, 1932.

—— "Errors in Diagnosis." *Lancet*, September 24th, 1932.

ARMSTRONG, R. R., M.D., F.R.C.P., and JOHNSON, R. SLEIGH, M.D., M.R.C.P. "Treatment of Lobar Pneumonia by Anti-pneumococcal Serum." *British Medical Journal*, October 8th, 1932.

ATKINSON, E. MILES, M.B., F.R.C.S. *Intracranial Suppuration.* London: Jonathan Cape, 1932.

BEATTIE, DAVIS A., M.B., and ROBERTSON, H. D., M.R.C.S. "A Case of Simple Cyst of the Liver with an Analysis of Sixty-two other Cases." *Lancet*, September 24th, 1932.

CHOPRA, R. N., M.A., M.D., I.M.S. (and CHOWHAN, J. S.). "Action of Venom of the Indian Daboia (*Vipera russellii* vel *Vipera elegans*) on Certain Protozoa." *Indian Journal of Medical Research*, July, 1932.

COCKAYNE, E. A., D.M., F.R.C.P. "An Unusual Form of Brachy-phalangy and Syndactyly, with Double Proximal Phalanx in the Middle Fingers." *Journal of Anatomy*, October, 1932.

COLT, G. H., M.B., B.Ch., F.R.C.S. (and MORRISON, MARGARET, M. M.). "An Analysis of the Mortality in Acute Appendicitis with respect to Drainage and the Variety of Operation." *British Journal of Surgery*, October, 1932.

COOK, A. B., M.B., B.S. "Peritonitis Due to *B. Friedländer*." *British Medical Journal*, September 10th, 1932.

CROOK, ERIC A., M.Ch., F.R.C.S. "On the Treatment of Rectal Disease." *Lancet*, October 8th, 1932.

CULLINAN, E. R., M.D., M.R.C.P. "Hæmatological Observation on Rabbits and Guinea-pigs." *Rose Research on Lymphadenoma.* Bristol: John Wright & Sons, 1932.

CUMBERBATCH, ELKIN P., M.A., B.M., B.Ch., M.R.C.P., D.M.R.E. "The *Rôle* of Electricity in Treatment." *British Medical Journal*, August 20th, 1932.

DARKE, E. G. C., M.R.C.S., L.R.C.P., R.A.M.C (the late) (Major W. W. S. SHARPE and E. G. C. D.). "A Fatal Perisplenic Abscess Complicated by Malaria." *Journal Royal Army Medical Corps*, October, 1932.

DONALDSON, MALCOLM, M.B., F.R.C.S. "A Plea for Periodical Examination to Reduce the Mortality from Cancer." *Practitioner*, August, 1932.

ELMSLIE, R. C., O.B.E., M.S., F.R.C.S. "Calcareous Deposits in the Supraspinatus Tendon." *British Journal of Surgery*, October, 1932.

FEILING, ANTHONY, M.D., F.R.C.P. "Insomnia." *Practitioner*, July, 1932.

FLETCHER, ERNEST, M.B., M.R.C.P. "Atelectasis, Detelectasis and Apneumatosis." *Tubercle*, October, 1932.

FLETCHER, Sir WALTER, K.B.E., C.B., F.R.S., M.D., F.R.C.P. "Maternal Mortality and Morbidity: the Final Report of the Ministry of Health Committee." *Practitioner*, September, 1932.

GARROD, Sir ARCHIBALD E., K.C.M.G., D.M., LL.D., F.R.S., F.R.C.P. "Recent Developments in Immunotherapy." *Practitioner*, October, 1932.

GARROD, LAWRENCE P., M.B., M.R.C.P. "Characters of Yeasts and Further Observations." *Rose Research on Lymphadenoma.* Bristol: John Wright & Sons, 1932.

GORDON, MERVYN H., C.M.G., D.M., F.R.S. "Studies of the Ætiology of Lymphadenoma." *Rose Research on Lymphadenoma.* Bristol: John Wright & Sons, 1932.

HAMMOND, T. E., F.R.C.S. "A Case of Gall-stones." *Clinical Journal*, August 31st, 1932.

HEALD, C. B., C.B.E., M.D., M.R.C.P. "The Menace of Quackery to Physical Medicine." *British Medical Journal*, September 10th, 1932.

HEWER, C. LANGTON, M.B., B.S., M.R.C.S., L.R.C.P. *Recent Advances in Anæsthesia and Analgesia.* London: J. & A. Churchill, 1932.

HORDER, Sir THOMAS, Bart., K.C.V.O., M.D., F.R.C.P. "A Clinical Concept of Lymphadenoma or Hodgkin's Disease." *Rose Research on Lymphadenoma.* Bristol: John Wright & Sons, 1932.

HORNER, N. G., M.D. "Medica Journalism in the British Empire." *Lancet*, August 6th, 1932.

HUNT, J. H., B.M., and SCOTT, P. G., B.Chir. "Treatment of Burns in Out-patients with Reinforced Tannic Acid Dressings." *Lancet*, October 8th, 1932.

JOHNSON, R. SLEIGH, M.D., M.R.C.P. *See* Armstrong and Johnson.

—— (V. S. HOBSON, M.D., F.R.C.P., and R. S. J.) "Artificial Pneumothorax: Some Results of Out-patient Treatment." *Lancet*, October 8th, 1932.

KETTLE, E. H., M.D., B.S. "The Pneumoconioses." *British Medical Journal*, August 13th, 1932.

MAINGOT, RODNEY H., F.R.C.S. *The Injection Treatment of Varicose Veins, Hæmorrhoids, and other Conditions.* London: H. K. Lewis & Co., 1932.

MANSELL, R. A., M.B.E., R.A.M.C. "Inoculation against Influenza." *Journal Royal Army Medical Corps*, October, 1932.

RECENT ADDITIONS TO LIBRARY.

ABDOMEN.

COPE: *The Treatment of the Acute Abdomen.*
MORLEY: *Abdominal Pain.*

ANÆSTHESIA.

HEWER: *Recent Advances in Anæsthesia and Analgesia.*

ANATOMY.

BEESLEY and JOHNSTON: *Manual of Surgical Anatomy.* Third edition.
WHITTAKER: *Manual of Surgical Anatomy.* Fourth edition.

BACTERIOLOGY.

BIGGER: *Handbook of Bacteriology.* Third edition.
DIBLE: *Recent Advances in Bacteriology.* Second edition.
DOBELL: *Antony van Leeuwenhoek and his "Little Animals."*
MUIR and RITCHIE: *Manual of Bacteriology.* Ninth edition.

BIOLOGY.

HENTSCHEL and COOK: *Biology for Medical Students.*

BRAIN.

ATKINSON: *Intracranaial Suppuration.*
CUSHING: *Intracranial Tumours.*

CANCER.

GYE and PURDY: *The Cause of Cancer.*
KEYNES: *Radium Treatment of Carcinoma of the Breast.*

CHILDREN.

PATERSON and SMITH: *Modern Methods of Feeding in Infancy.* Third edition.
PEARSON and WYLLIE: *Recent Advances in Diseases of Children.* Second edition.
WINNICOTT: *Clinical Notes on Disorders of Childhood.*

DERMATOLOGY.

Jacobi's Atlas of Dermaclisomes. Two vols. Fourth edition.
ROXBURGH: *Common Skin Diseases.*
WALKER: *An Introduction to Dermatology.* Ninth edition.

DIAGNOSIS.

BAILEY: *Demonstrations of Physical Signs in Clinical Surgery.* Third edition.
SHATTOCK: *Handbook of Surgical Diagnosis.*

DIPHTHERIA.

FORBES: *Diphtheria, Past and Present: Its Ætiology, Distribution, Transmission and Prevention.*

EMBRYOLOGY.

FRAZER: *Manual of Embryology.*

FORENSIC MEDICINE AND TOXICOLOGY.

SMITH: *Forensic Medicine.* Third edition.

FRACTURES.

BOHLER: *Treatment of Fractures.* Third edition.

GYNÆCOLOGY.

STEVENS: *Diseases of Women.* New (Third) edition.

HISTORY OF MEDICINE AND SURGERY.

POWER: *The Foundations of Medical History.*
ROLLESTON: *The Cambridge Medical School.*

KIDNEY.

BALL and EVANS: *Diseases of the Kidney.*

LUNGS, ETC.

BRAY: *Recent Advances in Allergy.*

LYMPHADENOMA.

ROSE: *Research on Lymphadenoma.*

MEDICINE.

CONYBEARE: *Text-book of Medicine by Various Authors.*
The Medical Annual, 1932.

NERVOUS DISEASES.

PURVES-STEWART: *Diagnosis of Nervous Diseases.* Seventh edition.

OBSTETRICS.

JOHNSTONE: *A Text-book of Midwifery.* Sixth edition.
The Queen Charlotte's Practice of Obstetrics. Second edition.
TEN TEACHERS: *Midwifery.*

OPHTHALMOLOGY.

DUKE-ELDER: *Text-book of Ophthalmology.* Vol. I.

PATHOLOGY.

BOYD: *Pathology of Internal Diseases.*
BOYD: *Text-book of Pathology.*
HADFIELD and GARROD: *Recent Advances in Pathology.*
ILLINGWORTH and DICK: *Text-book of Surgical Pathology.*
MACCULLUM: *Text-book of Pathology.* Fifth edition.

PHARMACY AND PHARMACOLOGY.

CLARK: *Applied Pharmacology.* Fourth edition.
HALE-WHITE: *Materia Medica.* Twenty-first edition.
MARTINDALE and WESTCOTT: *Extra Pharmacopœia.* Vol. I. Twentieth edition.
The British Pharmacopœia, 1932.

PHYSIOLOGY.

WRIGHT: *Applied Physiology.* Fourth edition.

RÖNTGEN RAYS.

BERTWISTLE: *A Descriptive Atlas of Radiographs.* Second edition.
HOLMES and RUGGLES: *Röntgen Interpretation.* Fourth edition.
KNOX: *Text-book of X-ray Therapeutics.* (New edition, completed and edited by N. M. Levitt.)
KÖHLER: *Roentgenology.*
REDDING: *X-ray Diagnosis.*
United States Army X-ray Manual. Second edition.

STOMACH.

ABRAHAMS: *Diseases and Disorders of the Digestive Organs.*

SURGERY.

BAILEY: *Emergency Surgery.* Two vols.
BAILEY and LOVE: *Short Practice of Surgery.* Two vols.
CHOYCE and BEATTIE: *System of Surgery.* Three vols. Third edition.
ROMANIS and MITCHENER: *Science and Practice of Surgery.* Two vols. Fourth edition.
THOMSON and MILES: *Manual of Surgery.* Three vols. Eighth edition.
WILLIAMS: *Minor Surgery.* Twentieth edition
Collected Papers of the Mayo Clinic and the Mayo Foundation, 1931.

THROAT, NOSE AND EAR.

TURNER: *Diseases of the Nose, Throat and Ear.* Third edition.

THYROID GLAND.

JOLL: *Diseases of the Thyroid Gland.*

TREATMENT.

HUTCHISON: *Index of Treatment by Various Writers.* Tenth edition.
SHORT: *Index of Prognosis and End-results of Treatment by Various Writers.*

EXAMINATIONS, ETC.

University of Oxford.

The following Degrees have been conferred:

D.M.—Elgood, C. L.
B.M.—Nunn, J. A.

University of Cambridge.

The following Degrees have been conferred:

M.D.—Wilson, H. L.
M.B., B.Chir.—Evans, L. P. J.
M.B.—Fordham, M. S. M.
B.Chir.—Gabb, W. H., Graetz, G. H. A., Green, H. F., Masina, M. H., Mercer, R. V. F., Radcliffe, F.

Second Examination for Medical Degrees, Easter Term, 1932.

Part II. Human Anatomy and Physiology.—Debenham, G. R.

Third Examination for Medical Degrees, Easter Term, 1932.

Part I. Surgery, Midwifery and Gynæcology.—Birdsall, S. E., Carr, C. M., Cope, J. W., Gawne, D. W. C., Groves, J. N., Kettlewell, H. B. D., Masina, M. H., Murless, B. C., Pawson, E. B., Shepherd, F. W., Thomas, G. W.

Part II. Principles and Practice of Physic, Pathology and Pharmacology.—Boston, F. K., Cope, J. W., Gabb, W. H., Hall-Smith, C. S., Mercer, R. V. F., Radcliffe, F., Scott, J. L. S., Tubbs, O. S.

University of London.

M.D. Examination.

Branch I. Medicine.—Evans, C. N., Gordon, I., Price, R. K.
Branch V. State Medicine.—de Verteuil, E. J.

M.S. Examination.

Branch I. Surgery.—Payne, R. T.

Second Examination for Medical Degrees, July, 1932.

Part I. Organic Chemistry. Barrett, R. H., Raum, I. H., Ennis, J. E., Hambly, E. H., Johnstone, S. T., McKenzie, J. K., Rogers, K. G., Roy, A. N., Royston, G. R., Smyth, E. H. J., Stephens, A., Underwood, J. E., Williams, A. M., Woddis, G. M.

Part II. (For Internal Students).—Baynes, T. L. S., Braithwaite, R. F., Brown, K. P., Clements, P. E. G., Dalley, G., Dancer, J. B., Davies, H. H., Ellis, G. H., Ershadi, S. S., Evans, D. M., Harvey, M. W., Jones, S. Avery, Mason, J. I. C., Moynagh, D. W., Nairac, M. L., Prothero, D. A., Stewart, J. M., Taylor, G. R., Yates, F. H.

Part II. (For External Students).—Evans, E. H., Waldin, G. G.

Royal College of Physicians.

The following have been admitted **Members**:

Berhman, S., Fordham, M. S. M., Nicol, W. D., Renbom, E. T.

Royal College of Surgeons.

The Diploma of **Fellow** has been conferred on the following:

d'Abreu, F. A., Duke, C. L. S., Glynn, P. E., Keene, R., Kelkar, G. S., Lavery, M. B., Lee, M., McIndoe, A. H., North, J. H., Phadke, G. M., Phillips, R. F., Richardson, A. H., Robertson, J. S. M., Siddiqi, M. A. H., Sinclair, C. G., Sophian, G. J., Tandy, W. H., Thompson, V. C.

The following were successful at the Examination for the **Primary Fellowship**:

Bohn, G. L., du Toit, C. C. T., Nash, D. F. E.

Royal Colleges of Physicians and Surgeons.

The following Diploma has been conferred:

D.P.M.—Hardwick, S. W., Roberts, J. H. O.

CHANGES OF ADDRESS.

BAXTER, W. S., 61, Whitton Gardens, Greenford, Middlesex.

BRADSHAW, G. H., Cade House, Riverhead, Sevenoaks, Kent.

DIETRICH, G., "Harlequin," Eighth Avenue, Northmead, Benoni, S. Africa.

DUNSCOMBE, C., Health Department, 20A, Stour Street, Canterbury.

FAIRBANK, J. G. A., 5, York Gate, Regent's Park, N.W. 1. (Tel. Welbeck 3466.)

HUTCHINSON, H. P., The Hollies, Haywards Heath. (Tel. 88.)

LONG, W. C., Greystones, Crescent Road, Tunbridge Wells. (Tel. 712.)

RICE, R. A. C., 47, Thorpe Road, Norwich.

SHORE, L. R., 22, Barrow Road, Cambridge. (Tel. 3042.)

TAYLOR, H., 32, Avenue Road, Highgate, N. 6. (Tel. Mountview 5427.)

WARD, R. OGIER, 32, Queen Anne Street, W. 1. (Tel. Langham 1351.)

BIRTH.

FRASER.—On October 18th, 1932, at Lima House, Reading, to Marcia (*née* Winchester), wife of Dr. H. D. Forbes Fraser—a daughter.

MARRIAGES.

ATKINSON—HAY.—On October 22nd, 1932, in London, Eric Miles Atkinson to Winifred Stepney (Peggie) Hay.

PHILLIPS—REEVES.—On October 22nd, 1932, at the Priory Church of St. Bartholomew-the-Great, London, by the Rev. Canon E. S. Savage, M.A., Rector, Ralph Francis, younger son of the late Lorraine Phillips and Mrs. Phillips, of St. Albans, to Barbara Alison, youngest daughter of Mr. and Mrs. Herbert K. Reeves, of Leatherhead.

WOODD WALKER—TROILI.—On October 19th, 1932, at Rida, Sweden, Geoffrey Basil Woodd Walker, M.B., F.R.C.S., of 6, Dawson Place, W. 2, to Ulla Troili, of Uddeholm, Sweden.

DEATHS

BULCOCK.—On October 16th, 1932, suddenly, at 86, Foxley Lane, Purley, Joseph Henderson Bulcock, M.R.C.S., L.R.C.P.

HALL.—On September 23rd, 1932, Ben Hall, M.B.(Lond.), of West Mersea, near Colchester.

HART.—On October 6th, 1932, suddenly, at Burnham-on-Sea, Col. Alfred Paul Hart, R.A.M.C., aged 75.

SKELDING.—On October 15th, 1932, at Diptford, S. Devon, Lt.-Col. Henry Skelding, T.D., B.A., M.B., B.C., M.R.C.S., aged 73.

TOSSWILL.—On October 3rd, 1932, at Queen Mary's Hospital, Roehampton, Major Leonard Robert Tosswill, O.B.E.(Mil.), M.R.C.S., L.R.C.P., D.P.H., of Mistletoe Farm, Cuckoo Hill, Eastcote, aged 52.

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. XL.—No. 3.] DECEMBER 1ST, 1932. PRICE NINEPENCE.

CALENDAR.

Fri., Dec.	2.	—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Sat., ,,	3.	—Rugby Match *v.* Rugby. Away. Association Match *v.* Guy's Hospital. Away. Hockey Match *v.* Surbiton II. Away.
Mon., ,,	5.	—Special subject: Clinical Lecture by Mr. Elmslie.
Tues., ,,	6.	—Dr. A. E. Gow and Mr. Girling Ball on duty.
Wed., ,,	7.	—Rugby Match *v.* R.M.A. Woolwich. Home.
Fri., ,,	9.	—Prof. Fraser and Prof. Gask on duty.
Sat., ,,	10.	—Rugby Match *v.* Northampton. Away. Association Match *v.* Old Brentwoods. Away. Hockey Match *v.* R.N. College. Away.
Mon., ,,	12.	—Special subject: Clinical Lecture by Mr. Just.
Tues., ,,	13.	—Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Fri., ,,	16.	—Sir Thomas Horder and Sir C. Gordon-Watson on duty.
Sat., ,,	17.	—Rugby Match *v.* Old Paulines. Away. Association Match *v.* Harrods. Away. Hockey Match *v.* Old Felstedians. Home.
Mon., ,,	19.	—**Last day for receiving matter for the January issue of the Journal.**
Tues., ,,	20.	—Dr. C. M. Hinds Howell and Mr. Harold Wilson on duty.
Fri., ,,	23.	—Dr. A. E. Gow and Mr. Girling Ball on duty.
Sun., ,,	25.	—**Christmas Day.**
Tues., ,,	27.	—Prof. Fraser and Prof. Gask on duty.
Fri., ,,	30.	—Sir P. Hartley and Mr. L. Bathe Rawling on duty.
Sat., ,,	31.	—Rugby Match *v.* Moseley. Home.

EDITORIAL.

THE appeal on behalf of the Medical College is progressing steadily, and we are able to publish a letter from the Dean stating the exact position at the present time. It is hoped that a still larger number of old Bart.'s men will give their help, however small, at this vital moment in the history of the Medical College. There can surely be no better friend this Christmas than one's old medical school, to whom a present is long overdue.

The Dean writes:

"DEAR MR. EDITOR,—The present position of our efforts to acquire funds on behalf of the Medical College is as follows:

"We have collected from old Bart.'s men £22,000, from other sources about £6000, and we have a promise from the Court of the University of London that it will give us £5000 when we are within reach of the figure which will enable us to acquire the site. We are of the opinion that it will be possible to negotiate for the site when we can see our way to acquiring £70,000. The Merchant Taylors' Company have extended our option until the end of the year.

"The above total of £33,000 we hope will be added to very shortly by contributions from the Corporation of the City of London, some of the City companies, and other donors with whom we are in contact. Furthermore we are now permitted by the University of London to make a general appeal to the public which will shortly be launched. This move has the concurrence of the Governors of the Hospital. We have in addition the Harvey Laboratory building, which is valued at £20,000. These circumstances make us very hopeful of acquiring the site which is our earnest desire and the wish of everybody connected with us.

"It is difficult to believe that all the Bart.'s men who intend to do so have contributed to the fund, because we have only received from 330 men out of 3800 on the register. The figure that this number has subscribed is magnificent and we are indeed grateful. We do hope that the number will be greatly added to; in fact, we should like to have every Bart.'s man's name on the list, however small his donation may be.

"We know that some feel quite unable to do so, but it has been very gratifying to have letters expressing

their goodwill; others, however, we feel may be thinking that it is improbable that we shall acquire the site and are therefore not willing to send subscriptions. To these we would state that our view is quite the opposite to this, but we would like them to know that if they wish their money to be returned to them in the event of the scheme not materializing, we are willing to send it back, provided that they will say that this is their wish when the contribution is sent.

"Again we are told that men are not subscribing because they fear their contribution will be too small. No contribution is too small. The students are already commencing to respond to the appeal, and we trust that they will help in every way possible. We are extremely grateful for their assistance.

"Sincerely yours,

"W. GIRLING BALL,

"*Dean of the Medical College.*"

* * *

Congratulations to Dr. Cullinan on his election to the post of Assistant Physician to the Hospital.

* * *

We have been asked to announce that the Amateur Dramatic Society will give their annual performance, by kind permission of the Treasurer and Almoners, on January 10th to 13th, in the Great Hall. They have chosen Dion Titteradge's play, "The Crooked Billet," for their production.

* * *

The Abernethian Society were unusually fortunate in obtaining Lord Moynihan of Leeds as their Inaugural Lecturer on November 3rd. The charm and elegance of the oratory, combined with the interest of the subject, provided the large audience with an entertaining evening.

The President, in introducing his Lordship as a fellow Bart.'s student, proposed that the Society should take the opportunity of electing him an honorary member. This honour had only once been conferred in recent years to a non-Bart.'s man; that was to Prof. Cabot, in 1926. The proposal was carried with enthusiasm.

* * *

We have heard a great deal lately of the pros and cons of the Inter-Hospital Rugby Cup Competition. The final decision as to whether it will take place this season seems to depend on the future position of the "pros" at a certain other London hospital.

* * *

We regret to announce the retirement of Dr. W. S. Baxter from the post of Editor to the JOURNAL after rendering valuable services during the past few years. Mr. J. M. Jackson has been appointed Editor, and Mr. D. W. Moynagh Assistant Editor.

* * *

The library has recently obtained a collection of papers, letters and certificates, the property of the late Dr. Matthews Duncan, and which have been presented to the Hospital by his eldest son, Mr. W. M. Duncan.

The material is rich in historical interest, and contains letters from many of the leading medical personages of the last century, as well as from Duncan's great friend, Queen Victoria.

The collection has been arranged in eight volumes, of varying sizes, bound pleasantly in half brown niger with gold lettering, and indexed by hand. The largest volume consists of sixty-four miscellaneous letters, commencing with a series of six in the neat handwriting of Sir James Paget.

It is to be hoped that these historical relics will not be allowed to moulder in secret cupboards of the Library, and that with the passing of the present financial crisis, some effort should be made to gather in orderly fashion the many books, pictures and instruments that are scattered throughout the Hospital, and which tell the story of past ages and past events.

* * *

We have to announce with regret the death on November 21st of a distinguished old Bart.'s man, Mr. Ernest Clarke, at the age of 75. He was the elder son of Mr. Henry Clarke, of Cannon Hall, Hampstead, and was born on July 21st, 1857.

Mr. Clarke was educated at University College School, from where he obtained an Exhibition in Science to St. Bartholomew's Hospital in 1876. He obtained the M.B. London in 1881, the M.D. in 1885, and a F.R.C.S. in 1894, after serving as House Surgeon at this Hospital. He practised at Blackheath for a few years, but eventually determined to devote himself to ophthalmology, in which branch of surgery he attained much success. His book, *The Refraction of the Eye*, reached its fifth edition in 1924.

Mr. Clarke will be missed, not only by his friends and relations, but also by many devoted patients.

OBITUARIES.

THE LATE DR. C. D. KERR.

THE late Dr. Kerr was born in 1886, and was educated at Plymouth and Mannamead College; he entered St. Bartholomew's in 1904, and qualified M.B., B.S.(Lond.) in 1911.

During his course he won the Junior Scholarship in Anatomy and Biology in 1906, and the Skinner Prize in Morbid Anatomy in 1910.

After qualification he was House Surgeon first at the Royal Surrey Hospital, Guildford, and then at St. Bartholomew's in 1912–13 to the late Mr. C. B. Lockwood, and on his retirement to Mr. McAdam Eccles.

He went to West Australia in 1913. During the Great War, having been rejected for active service, he served at the Military Hospital at Fremantle with the rank of Captain (Australian Army Medical Corps). He practised in Fremantle from 1917 to within a few months of his death, and was appointed Surgeon to the Fremantle Public Hospital in 1918, and later was Senior Surgeon to that Institution. He was also Gaol Medical Officer to the Fremantle Prison, Police Surgeon, and Divisional Surgeon to the St. John Ambulance Brigade, and was Chairman of the Health Committee of the Fremantle City Council.

His publications included "Two Cases of Acute Pancreatitis Simulating Perforated Duodenal Ulcer," "A Case of Lateral Sinus Thrombosis with Hernia Cerebri Ending in Recovery," and "A Bush Doctor's Practice," all published in the Hospital JOURNAL.

He leaves behind him a wife, two sons, and a daughter who is studying medicine at Melbourne.

Dr. Shore writes: "Kerr was a fellow student of mine when we were clinical clerks for Dr. Herringham (as he then was) and Dr. Drysdale in 1910, and was one of the enthusiastic following that those two collected, of which the greater number in due course came on to the House. In 1929 he suddenly appeared in the Museum, apparently little altered in the interval. His enthusiasm for his profession prompted him to work for the M.D. His indefatigable industry was in all probability one of the causes of his ultimate breakdown."

THE LATE MR. C. R. PYLE.

The Hospital and the Medical College of St. Bartholomew's have lost a staunch servant in the "passing over" of Christopher Rice Pyle on October 14th, 1932, who was appointed Resident Clerk of the Works by the Governors in March, 1908.

Mr. Pyle was born in 1866, and was one of a family who, for at least three generations, have been connected with the building trade.

To the Governors of the Hospital he was a most devoted, tactful, conscientious and capable servant, and punctiliously carried out the duties by exerting his abilities with zeal and fidelity to the advantage of the Hospital, and at all times acted with diligence, honesty and uprightness.

Mr. Pyle was ever observant, and sought for knowledge of the various wants and needs of Hospital fittings and plant; this, coupled with an inventive mind, led him to conceive and develop many improvements in Hospital fittings and appliances, all of which are in constant use at Bart.'s, with which Hospital they are associated under the trade name of "Barts-Pyle." The following are a few, and perhaps the more important, of his inventions:

A gas-stove for the use in ward kitchens to give heat to the occupants and warm storage for food, and the possibility of cooking very light food; a drum stand for use in operating theatres; a bed-pan washing and sterilizing cabinet; a metal bed-pan easy of sterilization, and an apparatus for the automatic control of hot water supply to baths. The table recently erected in the throat operating theatre in the East Wing is typical of his developments of the needs put forward by the surgeons, which with certain mechanical devices renders it applicable to the necessary positions of the patient under operation.

The Dean and Council of the College always found Mr. Pyle ready to render any service required from the Works Department.

The writer has been associated with the late Mr. Pyle, as head of his Department, for the last twenty years, and a more loyal, conscientious and capable assistant could not be desired by any principal.

Deep sympathy in their bereavement is extended to Mrs. Pyle, her three daughters and their families.

H. E. M.

§

ACKNOWLEDGMENTS.

The British Journal of Nursing—The Nursing Times—The Caduceus—The Charing Cross Hospital Gazette—The Guy's Hospital Gazette—The Middlesex Hospital Journal—The St. Thomas's Hospital Gazette—The Clinical Journal—The East African Medical Journal—The General Practitioner—The Hospital—Bulletins et Mémoires de la Société de Médecine de Paris—L'Echo Médicale du Nord. The McGill Medical Undergraduate Journal—The Medical Forum—The Medical Times and Long Island Medical Journal—The Post-graduate Medical Journal—Reale Società Italiana D'Igiene—Revue Belge des Sciences Médicales—The Student.

SOME OXFORD MEMORIES OF SIR FREDERICK ANDREWES.

THE following recollections of Sir F. Andrewes in his youth by three old Oxford friends who now hold very distinguished positions in the University cannot fail to be of great interest to his colleagues, and to his numerous old pupils and friends at St. Bartholomew's.

The Hope Professor of Zoology, Prof. E. B. Poulton, D.Sc., F.R.S., writes:

"Sir Frederick Andrewes, born in 1859, was the eldest of four sons by the second marriage of the late C. J. Andrewes, of Reading. His father, who was keenly interested in the municipality, had been Mayor, and was at the time of his death the senior Alderman. He was also a J.P., and would sometimes take one of his sons when very small to sit beside him on the Bench. His love for Reading seemed to be unconsciously expressed in his personality: 'Look at him walking along as if the whole town belonged to him,' were the words once used by a mutual friend when we caught sight of him in Broad Street.

"Andrewes's charming and spontaneous humour, remembered by so many friends, was evidently inherited from his father's family, being equally characteristic of his two half-brothers, of whom the younger, the late Walter F. Andrewes, born in 1854, would in the opinion of many friends have been eminently successful if he had followed a literary career. Among many memories of his irrepressible sense of fun, I may mention one occasion when he was visiting us, and seeing on a little diary the note 'W.F.A. comes,' secretly wrote under a later date 'W.F.A. goes. Mems: Count family plate,' and then remonstrated with me for the insult! I shall never forget a delightful river excursion with Walter and Fred in the long vacation of 1878, rowing and towing with an occasional sail when the wind was favourable, from Reading to Lechlade and back; also the vain attempt to repeat the glorious adventure—for it was something of an adventure in those days—in the terrific rain of the following summer.

"It was our common interest in natural history, especially entomology and geology, which led to a special intimacy between Frederick and myself, and almost bridged the gap between our ages—three years that mean so much in youth and so little in later life. We were also brought together by circumstance. Reading during our boyhood and youth was a flourishing, efficiently administered business town; in which comparatively little interest was felt in intellectual subjects or intellectual pursuits. The happy change wrought by the University College and its culmination in the University of Reading—a change initiated by Andrewes's own College, Christ Church—was still in the unimagined future. In those days the relatively few young men who were keenly interested in science were naturally brought together and bound by the closest of ties—mutual sympathy and help. Hence we were often companions on geological and entomological expeditions, and always met to compare the experiences of the summer holidays, and later of the Long Vacations.

"Andrewes was keen to detect any strange form of a common insect, and among the British butterflies in the Oxford University Museum there is an interesting lemon-yellow form of the male 'Clouded Yellow' (*Colias edusa*, or as it is now called, *croceus*), taken by him at Sidmouth in 1872, and an interesting variety of the 'Small Tortoiseshell' (*Aglais urticæ*) from Caversham Warren, near Reading (about 1873). Also, from the same locality and about the same date, a rare gynandromorph of the 'Brimstone' (*Gonepteryx rhamni*), with patches of the greenish-white colouring of the female let into the bright yellow of the male wings. This remarkable specimen is figured in the *Transactions of the Entomological Society of London*, 1928 (Plate XXII, fig. 14, and p. 524). Of even more significance was the description he once gave me of the wonderfully beautiful 'Herald Moth' (*Scoliopetryx libatrix*), with a shape and colouring of reds and greys like a dead and decaying leaf, and the habit of hibernating in sheltered places where such leaves were likely to drift. He was especially struck by the minute dots like touches of Chinese white upon the fore legs and wings, and suggested that they represent one of the fungi which commonly grow on damp, dead leaves and pieces of stick. Then, as he was examining the living specimen in his father's garden and thinking of these resemblances, the moth was suddenly startled and flew off; whereupon a robin caught and devoured it before his eyes—clear evidence of palatability to insect-eaters, and the danger which diurnal flight would bring to a species with the adaptations of the 'Herald.'

And quite apart from the joy of observing and collecting he had an intense delight in the country, seen and loved as it could be before the deadly triumphs of the internal combustion engine.

"I especially recall his kind and efficient help in the study of an interesting section of the Thames river gravels and the Lower Tertiary beds below them, on the Redlands estate near his father's house at Reading (*Quart. Journ. Geol. Soc.*, May, 1880, pp. 301, 302). It is a pleasant thought that in companionship of this kind was fostered the interest in geology which led to his becoming the Burdett-Coutts University Scholar of 1883. I remember his telling me that, in preparing for the examination, he thought it would be a waste of time and memory to learn in its right order the list of ammonites, each of which gives its name to one of the zones of the lias, and how he constructed an amusing, and, as it turned out, an invaluable *memoria technica* to overcome this difficulty. When Andrewes entered for a Junior Studentship at Christ Church I was told that the examiners were especially pleased with his English essay, and the adventitious aid which it gained from his handwriting—a result which provoked the hilarity of his family; but then families are apt to think lightly, or to profess to think lightly, of qualities admired by others.

"He was warmly appreciative of skill and good work wheresoever he saw it. I remember how, when an undergraduate, working in Prof. George Rolleston's department, he spoke with admiration of the way in which the Senior Demonstrator, Charles Robertson, would display the anatomy of the leech by a single longitudinal incision, saying, 'You mustn't do it this way—I may'; and the enthusiasm with which he described an operation by Sir W. Savory, the great St. Bartholomew's surgeon.

"Returning to his younger years at Reading, I recall his success in a 'spelling bee' held in the Town Hall about 1878. At this curious form of entertainment, which had recently arrived from America, men and women went on to the platform to be tested and oftentimes exposed to the derision of their fellow townsfolk. The Chairman, H. J. Simmonds, gave the meeting a good send off with these words, referring to a clergyman who was unable to preside: 'What is the use of a bee without honey? But alas, Mr. Honey is not here to cast his spell over the audience.' The shouts of joy which attended the effort of a well-known citizen who was commanded to spell 'phlegm' and replied in loud and confident tones 'f–l–e–m' may well be imagined; as well as the laughter which arose when a director of the great firm of biscuit-makers was given 'macaroon'; and similar scenes were at this period being enacted all over England. Andrewes was by some years the youngest of the candidates, and I remember the chairman referring to him as 'the boy.' He easily polished off 'anacephalæosis' as well as numbers of other hard words until the competitors were reduced to two, when, after the dismissal of the other survivor, he finally won by his correct spelling of the strange word 'apricity.' In attempting to describe the events of that evening I have been aided by Andrewes's younger brother Herbert, the eminent authority on Oriental Carabid beetles, who tells me that he is even to this day infuriated because he was not allowed to go up on the platform!

"I cannot conclude these brief memories of a dear, life-long friend without referring to the home which did so much for him. To be, as Andrewes was, one of a large family—large in these days at least—with members differing in many ways, but united by love and sympathy, is to grow up under the most favourable of conditions, and it is a sad thought that in these later years comparatively few of our young people are able to enjoy them."

The Dean of Christ Church, the Very Reverend H. J. White, D.D., writes:

"F. W. Andrewes came up to Ch. Ch. as a 'Junior Student' (he would now be called a 'Scholar') in 1878. The College in those days was broken up into a number of small sets, and there was no Junior Common Room to act as a unifying influence. This was no doubt bad from a College point of view, but it was very nice for the sets; whatever a man's tastes and income were, he could always find a dozen or so of like-minded companions, and with these he could live in very close friendship. The Junior Students naturally formed a little society of their own, and with such men as C. W. Payne, W. A. Wood, etc., Andrewes was in close touch from the beginning; but his set also included some Commoners, such as T. G. A. Burns, T. Garnett and myself. We were, on the whole, a hard-reading group who took our work seriously, and yet contrived to get a great deal of enjoyment out of Oxford life; and as I look back upon it after more than fifty years' interval, I can say with all sincerity that it was enjoyment of a very simple and innocent kind. Few of us were great athletes or did much for the College beyond getting good classes in our respective schools; but none of us were sent down, or did anything that deserved sending down.

"Andrewes was thin and wiry, a fair man at lawn tennis and a mighty walker; fond of music and possessed of a respectable baritone voice; his singing was at its best in burlesque, and his rendering of 'The Death of Nelson' (with a blue tea cosy on his head to give him a naval appearance) was a climax to many a festival in College rooms.

"In conversation he was unfailingly interesting and amusing; all the more because his humour was natural and spontaneous, and he was *not* that worst of all bores, the professional funny man; but there were great depths of seriousness in him, which his friends would realize in quiet talks and arguments.

"Brilliant as were his abilities, his powers of work were worthy of them; he always read hard and regularly. We were in lodgings together when he was competing for the Burdett-Coutts scholarship; he was then working night and day, though the strain was almost more than he could bear, and he would groan when I wakened him of a morning."

The Regius Professor of Ecclesiastical History, Canon E. W. Watson, D.D., of Christ Church, writes:

"We were exact contemporaries and very good friends, though our studies were quite different, as were our Colleges. We were often in each others' rooms and spent a long vacation together at Jena, where he devoted himself to the practice of methods of preparing microscopic sections, etc., for his work in physiology. It was a time when Englishmen were painfully conscious of inferiority to Germans, and he, and I in another pursuit, were unabashed in recognizing our debt. Perhaps we exaggerated, but it made us eager to learn. He was a most interesting companion, collecting snails and poisoning insects with laurel leaves in our spare time, and in various ways I learned much from him that I still value. In 1882 he and I shared another venture. We were not athletes, though we were healthy and took regular exercise, and it occurred to him that we should follow a fashion of the time and walk from Oxford to London in a day. We started from my rooms soon after midnight (Andrewes's brother Herbert remembers that the start was made at 1 a.m.), at Commemoration time, had a delightful walk to High Wycombe, where we breakfasted. With less enthusiasm but without serious discomfort we made our way to Uxbridge, where we lunched. Thenceforward it was a purgatory, trudging through smoking brickfields and suburbs to Inverness Terrace near Hyde Park, where two of my friend's good aunts gave us a welcome bath and tea, with many expressions of doubt as to our sanity. Andrewes insisted after this on our finishing the task by walking to Paddington to the train. When we reached Oxford I confess that I took a cab to my rooms; but he went on foot to his.

"All who knew Andrewes when he was young, and I have heard that the gift did not fail in later life, must have admired his really remarkable sense of humour. It was never exercised on an unworthy topic, and it seemed to consist in a striking capacity for associating together widely incongruous ideas. Flights of imagination into impossible regions were mixed with most prosaic suggestions, and the result was ludicrous. Sometimes—perhaps often—this was little more than a play on words, but even that was effective.

"I cannot help thinking that had it been his lot, instead of a life of experiment, to sit in a chair and turn over books like Burton of the *Anatomy of Melancholy*, or like Lewis Carroll, to allow free play to an uncontrolled imagination, he might have achieved success. There was a strong element of the seventeenth century, with its quaintness and freedom from restraint, in his habit of mind.

"Of course I have said nothing and could say nothing of his scientific success. It was no surprise to me. But perhaps you may find some interest in the thoughts of one who had the honour of Andrewes's friendship, though not latterly of much association with him, throughout his life."

ANTONIO SCARPA.*

BENJAMIN WARD RICHARDSON, who wrote a glowing eulogy of Antonio Scarpa, told the story of one of his students who, in answer to the question, "Who was Scarpa?," replied, "The anatomist who invented the Triangle!"† A man's name is sometimes a convenient label for an elaborate syndrome or a complicated operation which could only be identified by the tiresome repetition of cumbersome and lengthy expressions; and sometimes the name is attached to glorify the eponym. I have no doubt that it was with the latter object that Scarpa's triangle was named, but I believe that our familiarity with the anatomy of the part has led us to infer that the man who described so obvious a structure must have been a person of very moderate ability. The hideous injustice of this assumption may be shown by a brief account of Scarpa's life and work, and it is appropriate to make such a survey now, since we have reached the hundredth anniversary of his death.

Though we have no doubt about the accuracy of this statement, the date of his birth is not definitely known, being given as 1746, 1747 and 1748 by different authorities. He was born, of humble parentage, at Motta di Livenza, a small town on the Italian slopes of the mountainous country which lies between Northern Italy and Austria.

He studied medicine at the ancient university of Padua, and when only 22 years of age was elected Professor of Anatomy at Modena. He determined to extend his knowledge by visiting centres of learning abroad, and with this object he travelled to Holland, France and England, and on his return he was appointed Professor of Anatomy at Pavia (1783) at the age of 37.

In this appointment he was most fortunate, for the Anatomy School at Pavia was large, justly famous, and attracted students from all over Europe. Dissection was unrestricted, and there was a good museum. In addition Pavia was an attractive spot for visitors and residents, and medical practice could become extremely lucrative. Scarpa seems to have been fortunate also in

* A paper read to the Osler Club on October 21st, 1932.
† *The Asclepiad*, 1886.

his colleagues at the University, amongst whom was Alessandro Volta, Professor of Natural Philosophy.

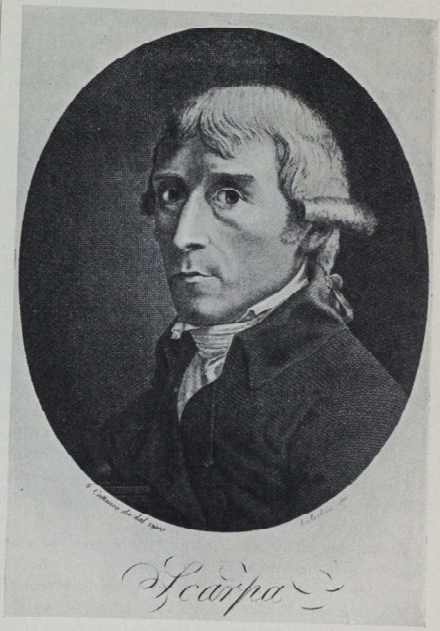
Scarpa's earlier publications dealt with purely anatomical subjects—researches on the nerves of hearing and smell (1789); on the structure of the fenestra rotunda and the labyrinth (he described the membranous labyrinth, and the fluid of the labyrinth was known for many years as the "Liquor Scarpæ"); and a treatise on the nerves of the heart, *Tabulæ Neurologicæ* (1794). He illustrated these works with supreme talent, and a well-known critic has stated that his plates "may be considered among the best anatomical plates that were ever published. They are admirably expressive of the subject, without the gaudiness of the French engravers, who appear to aim principally at effect, or the tameness of the English, who seem to think of little else except economy." Faustino Anderloni executed copper engravings from these drawings, and it is believed that Scarpa himself trained Anderloni for the task.

His later works, though always based on anatomy, refer to surgical problems, and his title changed to Professor of Anatomy and Clinical Surgery in the University of Pavia. He later became Director of the Medical Faculty.

A Commentary on the Structure of Bone appeared in 1799. It treats of the structure, growth and diseases of bone, and includes an essay on the causes and treatment of club-foot, which Sir Arthur Keith has described as "the first accurate account of the state of the bones, ligaments and muscles in cases of club-foot."

In 1804 he published his book on the *Pathology and Surgical Treatment of Aneurysm*, in the course of which he described in detail "Mr. Hunter's operation for the radical cure of popliteal aneurysm, and . . . those changes which practice has suggested to me ought to be made in it." The most important modification lay in the site of ligature. "The surgeon pressing with his forefinger will explore the course of the superficial femoral artery from the crural arch downwards, and when he comes to the place where he does not feel any more, or very confusedly, the vibration of the superficial femoral artery, he will there fix with his eye the inferior angle or extremity of the incision which he proposes to make for bringing this artery into view. This lower angle of the incision to be made will fall nearly on the internal margin of the sartorius muscle, just where this muscle crosses the course of the superficial femoral artery, and at the apex of the triangle formed by convergence of the adductor secundus (brevis) and vastus internus muscles of the thigh." This point lies deep to, but is not the apex of the femoral triangle. The question whether Scarpa actually described the femoral triangle is of less importance than the fact that he was the first to advocate ligature of the superficial femoral artery at this point for the cure of popliteal aneurysm.

Scarpa devoted a great deal of thought to the pathology of aneurysm, the causes of the condition and the changes which occur in the sac during the process of natural cure. But his interest in diseases of the blood-vessels was not limited to aneurysm, and he was the first to regard arterio-sclerosis as a lesion of the inner coats of the arteries.



The next important work is that on common and rare forms of hernia (1809), also beautifully illustrated. This was the nearest approach to abdominal surgery possible at that time, so that Scarpa must be regarded as, in the fullest sense, a general surgeon. First orthopædics, next vascular and abdominal surgery—and then he turned his attention to the surgery of the eye, which he regarded as another branch of general surgery. "Professed oculists," he wrote, "who have already devoted themselves to this department, and from whom great and important improvements might justly have been expected, have only contributed new theories,

which, for the most part, have been disproved by a minute anatomical investigation of the eye, or have merely furnished histories of cures little less than miraculous." He evidently despised the specialists! The book contains drawings of the instruments he used when operating upon the eye, and it is evident that Scarpa appreciated delicate and well-fashioned instruments, and was therefore probably dexterous in their use. He revived the old operation for cataract by *depression* as opposed to extraction of the lens, and he described (with acknowledgments to Cheselden) a new method for making an artificial pupil.

Among his shorter papers is an important "Memoir on Scirrhus and Cancer" (1822), in which he showed that his interest in pathology was as great as his love for anatomy, though, as one would expect, the fanciful theories of his pathology were of much less value than his accurate anatomical observations. He believed in the local origin of cancer, but he held that, though a local disease, it was founded on some general predisposition, a trivial exciting cause producing the local growth in a predisposed person. If we could manage to take him aside and explain that we now speak of a living virus and a specific chemical factor instead, I have an idea that old Scarpa would feel quite at home at a conference of cancer research workers at the present day!

There were other differences in the older terminology, for Scarpa wrote of "scirrhus" as an early stage of the growth which later developed into cancer, the latter, in contradistinction to the earlier insensitive stage, being attended with pruritus, burning heat, pain and swelling of the glands. He taught that the only hope of cure lay in removing the growth in the stage of scirrhus before it had degenerated into cancer—which is still our position a hundred years later.

Among his many minor contributions must be mentioned papers on cutting for the stone, and on hydrocele, and a description of causalgia, which was called "cubito-digital neuralgia" (Garrison).

Scarpa possessed the personality and attributes of the ideal surgeon. He was resolute and confident, imparting confidence to his colleagues and patients. He was keenly observant, and his great intellectual powers enabled him to apply his observations to the advancement of surgery. Since he was a successful ophthalmic surgeon, we may assume that one of his virtues was gentleness.

His enjoyment of leisure was enhanced by many interests outside professional affairs, and when he retired he was able to live in comparative splendour, and to devote himself entirely to the study of agriculture and the collection of works of art.

He received many honours in his own country, and abroad his greatness was acknowledged by the bestowal of Membership of the Académie des Sciences, and the Fellowship of the Royal Society. After his death in 1832, the President of the Royal Society (the Duke of Sussex) paid him the following princely tribute:

"Antonio Scarpa, one of the eight foreign members of the Académie des Sciences of Paris, and probably the most profound anatomist of the present age, was born in the year 1746 and died in October last in his 87th year. He was made Professor of Anatomy in the 22nd year of his age, and for the last half century he has been placed by the common consent of his countrymen at the head of their anatomists and surgeons. He was the author of magnificent and classical works on the organs of hearing and smell, on the nerves, on the principal diseases of the eye, on aneurysm, on hernia, with memoirs on many other subjects of physiology and practical surgery. He had accumulated a handsome fortune by the practice of his profession, and had collected in his palace at Pavia a considerable number of works of art, where he lived for the latter years of his life surrounded by his pupils, reverenced by his countrymen, and in enjoyment and contemplation of that brilliant reputation, the full development of which a great man can rarely live to witness."

J. PATERSON ROSS.

CORONARY THROMBOSIS WITHOUT PAIN.

TWO cases of coronary thrombosis without any history of a painful onset have lately been admitted to this Hospital and the diagnosis has been confirmed at autopsy.

On reviewing the literature to seek for accounts of similar cases, it became apparent that coronary thrombosis without pain is more common than is usually realized, and it is to stress this fact that the cases described below have been recorded.

East Bain and Cary (1) in 1928 described eight cases of thrombosis without pain, and Wedd (2) two others, and there are quite a number of papers (3, 4, 5, 6) drawing attention to the fact that pain may be quite overshadowed by other symptoms, such as dyspnœa, this being the case in as many as 38% of one series of 76 cases (7).

The onset of coronary thrombosis may be heralded in three ways:

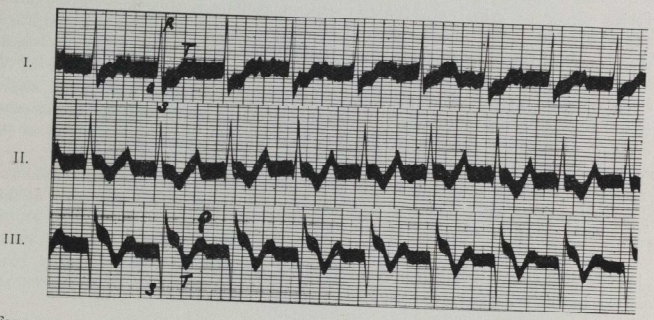
There may be almost instantaneous collapse and death.

There may be, and more frequently is, a sudden severe

constricting pain in the chest or upper abdomen, possibly radiating to the neck and arms. This is usually associated with a feeling of intense weakness.

The thrombosis may occur without pain, and the diagnosis in this type of case may be extremely difficult, but may usually be made if all the facts of the case are properly considered. The subject is usually a man, the condition occurring twice as frequently in the male sex, and is often of heavy build, perhaps rather overweight. There is frequently a hereditary factor in a history of cardio-vascular disease in his ancestors, or there may be a predisposing cause, such as hyperpiesis or diabetes. A past history of anginal attacks may usually be elicited by careful questioning. There is a sudden onset of either paroxysmal or continuous dyspnœa, great weakness and restlessness. The patient becomes ashen grey, cold and sweating. The pulse is usually poor in volume and the rate often raised, but it may be slowed if there is heart-block. Irregularities may be present due to extra-systoles, paroxysmal auricular fibrillation or ventricular tachycardia. The blood-pressure usually falls and the apex-beat cannot be defined, but the area of cardiac dullness is increased. The first heart-sound is very soft, and there may be *râles* at the bases of the lungs due to pulmonary œdema. Later, according to the site of the thrombosis, various sequelæ may follow. If the pericardial surface is involved friction will develop; if the endocardium is affected a mural thrombus may form, with subsequent detachment and embolism of the cerebral, renal or splenic vessels. If infarction of the septum has occurred there may be heart-block, or, if the infarct involves the complete thickness of the wall of the ventricle, softening may result in aneurysm formation and rupture. Ventricular fibrillation is also another frequent cause of sudden death.

Three other pieces of information may assist in making the diagnosis, namely, leucocytosis, rise in temperature and changes in the electro cardiographic tracing; but it must be remembered that the first two of these signs may result from a sterile infarct in any organ of the body. The changes that may occur in the electro-cardiogram are numerous, but the most common is the origin of the T wave, in either lead I or III, being high on the down stroke of the R, the opposite effect being seen in the other lead—that is, a depression of the ST origin. In addition to this change the QRS complex may be of low potential or spread, and one or more of the T waves may be inverted.



ELECTRO CARDIOGRAM OF A CASE OF CORONARY THROMBOSIS, SHOWING ALSO PARTIAL HEART-BLOCK.

Note: (1) Prolongation of PR time, the P wave being superimposed on the previous T (2) Left sided *preponderance*. (3) Abnormal "take off" of the T wave which is spread out, bifurcated in I and inverted in II and III.

The prognosis in coronary thrombosis is that about 50% make an immediate recovery, the immediate danger period being about three weeks, but the ultimate prognosis is bad.

The treatment consists of the use of morphia in large enough doses to control the pain and restlessness, and the treatment of complications. Immediate shock may be counteracted by caffeine sodium benzoate 5 grm. subcutaneously and warmth; later, for cardiac failure, digitalis may be used. Heart block is treated with adrenalin or barium, and ventricular tachycardia by quinidine.

W. B , a man, æt. 42, had always been a healthy individual. He awoke on the day of admission with a slight headache, and while at work, at 9.30 a.m., his

vision became misty, his hands numb, and he lost consciousness. He recovered and passed a loose stool and was then brought up to hospital.

On admission he was collapsed, ashen grey and sweating. His pulse was of poor volume and very rapid, and the systolic blood-pressure was only 70 mm. of mercury. The apex-beat was not palpable, but the area of cardiac dullness was 2 in. outside the mid-clavicular line. The liver was palpable 2 in. below the costal margin. No abnormal signs were found in the central nervous system. At mid-day he complained of a slight burning sensation in the chest, and his blood-pressure had dropped to 60 mm. At 4.30 he passed another loose stool and then collapsed, vomited and became unconscious, and at 9.40 died, about twelve hours after the onset of his symptoms.

In spite of the absence of pain, a diagnosis of coronary thrombosis was made on account of the clinical appearance of the man, the lowness of the blood-pressure, the enlargement of the heart and the feebleness of the heart-sounds. This was confirmed at autopsy, when the left ventricle was found to be almost completely infarcted.

There was no evidence of previous thrombosis, but there was atheroma of the aorta from the second part downwards, and also to a less degree of the basilar artery. The only other pathological condition was œdema of the lungs and a small effusion in the left pleural cavity.

E. P., a short, heavily-built man, æt. 64, was brought to the hospital in a taxi, having collapsed. For the last ten years he had been taking thyroid extract, gr. vj, daily to combat mental and bodily lack of energy, which had developed quite suddenly. For the last few months he had been feeling unfit and had been rather short of breath, but had had no pain. He decided to go for a holiday, and was actually standing on the platform awaiting a train to take him to Worthing, when some friends who were with him noticed that the right side of his face was twitching, and he then became faint. They placed him in a taxi and he collapsed completely. I was called out to the taxi to see him on its arrival at the hospital, as he was thought to be already dead. He was very cyanosed and his pulse hardly perceptible, but with artificial respiration and oxygen he soon began to breathe more deeply and recovered consciousness.

On examination no abnormality was found in his central nervous system. The ocular fundi showed tortuous arteries, but no other abnormality. His pulse was rapid, but regular and of fair volume. The chest was much deformed owing to an old scoliosis and kyphosis, and therefore there was difficulty in ascertaining the size of the heart. The first sound was weak and muffled, and there was a systolic murmur. The blood-pressure was 155/80. On examination of the lungs there was found to be œdema of the bases, and on abdominal palpation the liver was felt an inch below the costal margin. The patient's condition at first improved, but eight hours after admission he suddenly collapsed, became cyanosed, his breathing became shallow and he died within a few minutes, without having complained of pain throughout the attack.

On account of the absence of physical signs in the central nervous system, the sudden onset of the collapse, with cyanosis, the rapid pulse and weak first heart-sound, the case was reported to the coroner with a tentative diagnosis of coronary thrombosis, and at post-mortem examination a thrombus was found blocking the lower third of the anterior descending branch of the left coronary artery. There was also advanced atheroma of the aorta involving the aortic valves and the coronary arteries. The heart muscle was pale and friable, and there were several small "bread-and-butter" patches of pericarditis. The circle of Willis showed atheromatous changes, and there was some brown staining of the lateral wall of the posterior horn of the right ventricle, suggesting the site of an old thrombosis. The lungs showed basal congestion.

I should like to express my thanks to Prof. Fraser for permission to publish the notes of these cases.

BIBLIOGRAPHY.

(1) EAST BAIN and CARY.—*Lancet*, 1928, ii, p. 61.
(2) WEDD.—*New York Med. Journ.*, 1928, xxviii, p. 1091.
(3) PARKINSON and BEDFORD.—*Lancet*, 1928, i, p. 3.
(4) WEARN.—*Amer. Journ. Med. Sci.*, 1923, clxv, p. 250.
(5) GIBSON.—*Lancet*, 1925, ii, p. 1270.
(6) SMITH DAVIS.—*Journ. Amer. Med. Assoc.*, 1932, xcviii, p. 1806.
(7) LEVINE.—*Medicine*, 1929, viii, p. 245.

G. D. KERSLEY.

SOLITUDE.

WHEN I passed by this pond at noon to-day
All was still:
The orchard and the clouds reflected lay
Untroubled in its depth. Nearby at play
A child sang in the mill.

Now, when I pass again as evening falls,
No less still
The pond and orchard are; and if one calls
There's no reply. At length the silence palls:
The child has left the mill.

C.

LUMBAR PUNCTURE AND SUBARACHNOID HÆMORRHAGE.

REPEATED lumbar puncture is an important aspect of the treatment of ruptured cerebral aneurysm. On the one hand Collier (1) advises that "any increase of the symptoms indicating increase in the intracranial pressure should be an immediate indication for further lumbar puncture," whilst on the other hand, Hall (2) considers the procedure to be of little or no value. Intermediate between these two stands, Symonds (3) takes the view that the indications for repeated lumbar puncture are (*a*) dangerous increase in the cerebro-spinal fluid pressure, and (*b*) meningeal irritation.

It would seem that Symonds' caution is a more balanced attitude than Collier's, not only because of the theoretical consideration that increase in the intracranial pressure will tend to arrest hæmorrhage, but also because of the practical fact that sudden deaths have been recorded immediately following lumbar puncture as a therapeutic measure in this condition.

A further way in which lumbar puncture is used varies from these authorities. It is used repeatedly, even daily for patients who do not recover full consciousness after the rupture of the aneurysm in order to drain off the excess of the fluid which is presumably causing the stupor.

In deciding whether repeated lumbar puncture is to be used as in the treatment of ruptured cerebral aneurysm, it must always be remembered that "most of these cases used to recover before lumbar puncture was thought of. Indeed that is the very reason why their true nature was not realized" (2), and it is clearly of importance that we should attempt to define more clearly the factors which would endanger the patient's life, decide whether these can be avoided, and then compare the value of the therapeutic measure against the risk to the patient.

In the first place it is well known that sudden death may follow a lumbar puncture when there is any considerable increase in the intracranial pressure. This factor can be minimized by care in performing the operation; but it cannot be completely eliminated.

In the second place there is a risk of a recurrence of hæmorrhage owing to a lowering of the extravascular (in this case cerebro-spinal fluid) pressure.

In the third place it is of importance to decide what is the variation in the blood-pressure when a lumbar puncture is performed. If we find that the blood-pressure falls when the cerebro-spinal fluid pressure falls, then the danger of recurrent hæmorrhage from a damaged vessel-wall is small, whereas if the blood-pressure rises, then the danger is a serious possibility.

In a series of experiments on the relationship between blood and cerebro-spinal fluid pressures, the blood-pressure was found to rise. The following are typical, and are taken from a larger series:—

	Cerebro-spinal fluid pressure in mm. of water.	Blood-pressure in mm. of mercury
CASE 1:		
(*a*) Before lumbar puncture	..	78/52
(*b*) During ,, ,,		
(i) Initial pressure	260	..
(ii) Final ,,	18 to 20	86/62
CASE 2:		
(*a*)	..	196/138
(*b*) (i)	180	..
(ii)	105	210/162

CASE 3.—Aortic regurgitation, lung abscess and mental confusion. Blood-pressure after lumbar puncture 280/30, and on the following day 150/38. The cerebro-spinal fluid pressures were not taken.

The risk of repeating either small or large hæmorrhages is therefore a real possibility, especially when the arterial wall is weak, *i. e.* soon after an hæmorrhage.

If, then, we start using repeated lumbar puncture immediately after the first apoplectic attack, and if the result of the drainage is equivocal, then the puncture should not be repeated. It is not unreasonable to go a step further than this: since a rise in intracranial pressure will tend to arrest hæmorrhage, and since lumbar puncture will tend to increase hæmorrhage, it may be concluded that lumbar puncture is definitely contra-indicated immediately after the rupture of the aneurysm. This is clearly in direct opposition to Collier's dictum.

In order to assess the value of a therapeutic measure, it is of fundamental importance to define as far as possible the clinical course of the disease that is being studied.

A useful clinical classification of subarachnoid hæmorrhage due to ruptured cerebral aneurysm is given by Hall and is as follows:

(1) Sudden large hæmorrhages causing apoplectiform effects which go on to death sooner or later.

(2) Initial apoplectiform onset, gradually changing to mental confusion and recovery or possibly death from a further attack.

(3) Milder onset without coma, either getting more severe or improving.

Of 16 cases admitted to St. Bartholomew's Hospital the notes of which were collected, 4 came under group (1); 3 of these died on the same day and the remaining 1 five days after admission (all of these cases were

confirmed at post-mortem); 8 came under group (2) and 3 of them died, 1 seven, 1 thirteen days and 1 five weeks after admission; 3 patients came under group (3), all of whom recovered.

The patients treated by numerous repeated lumbar punctures occurred in group (2). Three in all were treated; 2 of them died and 1 recovered. One of the 2 which died was operated upon five weeks after admission, with a fatal result. In none of them was any marked improvement noted as the result of lumbar puncture. Of one of the fatal results I had personal experience:

Mr. J. A. D—, æt. 27, a lorry driver, was admitted to Bowlby Ward on January 25th, 1932, semiconscious.

He was found on the morning of admission unconscious beside his lorry and was brought up to Hospital. Whilst on the way to hospital he vomited several times. On admission he was semiconscious, and the only signs which could be found in his central nervous system were a right pupil larger than his left and retention of urine. Later in the day he became restless, shouting and twisting about in bed, and he was found to have developed neck rigidity and a positive Kernig's sign. A lumbar puncture was accordingly performed, and 50 c.c. of evenly blood-stained cerebro-spinal fluid were drawn off. The result of this puncture was that his restlessness was definitely diminished.

The patient was transferred to Hope Ward two days after admission, and was at this time complaining of pain in the back of his neck. He was stuporose and confused; he lay on his right side with his head markedly retracted. Kernig's sign was positive, but except for a doubtful extensor response on the left side there was no focal sign in the central nervous system. The blood-pressure was 140/96 and he had glycosuria. The Wassermann and Sigma reactions of his cerebro-spinal fluid and the Lange's gold curve were all normal.

From the day of his transfer till his death ten days later the patient became progressively worse. On January 30th the sugar in his urine was 1·5%. On February 1st he developed a left hemiplegia, and the amount of blood in his cerebro-spinal fluid was increased but there was only a trace of urinary sugar. The next day he was noticed to have a clasp reflex on the right side, but apart from this, which may have been present before, his condition remained much the same except that the blood in the cerebro-spinal fluid diminished. The glycosuria was absent on February 4th. Suddenly at 5 a.m. on February 7th he had a fit, went into opisthotonos and was unconscious. Shortly after this a lumbar puncture was performed and fresh blood was found in the cerebro-spinal fluid. Two days later, after developing generalized rigidity and showing tonic neck reflexes, the patient died.

At the post-mortem there was found to be an aneurysm ¼ in. by ¼ in. on the right anterior cerebral artery, from which blood had flowed over both hemispheres and ploughed up the brain on the inner surface of the right frontal lobe. It had also ruptured into the right lateral ventricle, which together with the other ventricles was filled with blood-clot.

During the course of the illness lumbar puncture was performed on nine occasions in the first twelve days; on the day of the second apoplectic attack two punctures were performed without benefit. On each occasion the spinal fluid was drained slowly but the fluid pressure was lowered below normal.

This patient clearly belonged to class (2) of the classification, in which there is a reasonable chance of recovery, though the possible course of the disease was not markedly altered. The outstanding feature was, however, the complete failure of the lumbar puncture to produce any improvement other than the initial restlessness in the state of the patient. It did not alleviate the signs of meningeal irritation, it did not alter the stupor, it did not alter the confusion, and it did not alter the finally fatal coma. It cannot be said, moreover, that the patient was being saved from imminent death, whilst it seems certain that the aneurysm did not cease to leak since blood was always present in the cerebro-spinal fluid. It is not improbable that there were small repeated hæmorrhages as the direct result of lumbar puncture.

From the evidence, experimental and clinical, given above, it would seem that such a drastic procedure as frequently repeated lumbar puncture is valueless and possibly dangerous, and should not take its place in the treatment of ruptured cerebral aneurysm.

Prolonged stupor was the symptom for which repeated lumbar puncture was performed in these cases. There are, however, other symptoms to be considered—confusion, opisthotonos, headache, focal signs and coma. Of these, confusion is not sufficiently commented upon in most of the notes for the value of lumbar puncture to be assessed in its treatment, and focal signs seem to be unaltered or to become worse as the disease proceeds. Opisthotonos has not been noted as altered in any of the cases in this series, but it is mentioned as an indication for lumbar puncture by others (3). There remains headache and coma.

Headache is frequently a difficult symptom to relieve by drugs other than morphia, which should not be used freely in cases of increased intracranial pressure, and it would seem that lumbar puncture might be a preferable method of treatment for this symptom. Referring to the case-notes: In class (2) the headache was severe in 4 cases, and was definitely relieved on more than one occasion in 1 of these; in class (3) it was severe in 2 cases, and was relieved on more than one occasion in 1 case. It was definitely not relieved in 3 cases, and in the remaining case lumbar puncture was not tried.

Turning to coma. This symptom was relieved in only 1 case of the whole series, but in class 1 free drainage of the cerebro-spinal fluid was not tried.

The following case represents the way in which both coma and headache may be relieved by draining the cerebro-spinal fluid:

Miss M. S., æt. 43, was admitted, complaining of "pain in the back of the neck."

Five days before admission she had a sudden onset of severe pain in the back of her neck and face; she then fell and was unconscious for about 15 minutes. When she recovered consciousness her headache was very severe, and she vomited repeatedly throughout that day and night. The next day, in addition to the headache and vomiting, her vision was blurred. She was then treated with aspirin, without improvement.

On admission she was fully conscious, and there was no abnormality in the central nervous system; there was no neck rigidity, no Kernig's sign, and the blood-pressure only 110/75. A lumbar puncture was performed, and the cerebro-spinal fluid was found to be pale yellow in colour. The Wassermann and Sigma reactions were negative in the fluid. Both the headache and the vomiting were greatly relieved by the drainage of the fluid, and progress was satisfactory until 7 days later she saw double and developed slight ptosis on the right side, which on the next day became a complete third nerve palsy. These premonitory symptoms remained stationary until the following morning, when she became unconscious. It was found that the third nerve palsy was still present, and in addition there was an increase in the knee and ankle-jerks and an extensor response on the left side. The cerebro-spinal fluid was drained, and there was obvious blood in three tubes. This drainage restored her to consciousness.

Four days later, on account of the severe headache a further lumbar puncture was performed, with great relief. Further drainage was performed three, five and eight days after this, with relief of the headache.

Seventeen days after admission she was discharged well, apart from her third nerve lesion, which remained stationary.

The problem of using lumbar puncture in the treatment of ruptured aneurysms with subarachnoid hæmorrhage is clearly one which presents difficulties. Why, for instance, was consciousness so materially affected in the case of Miss M. S— and completely unaffected in the case of Mr. S—? Why is the headache so definitely relieved on some occasions and not on others? The difficulties are so evident that it is impossible to give clear indications for interference by cerebro-spinal fluid drainage, but the following scheme has been formulated as a provisional guide:

(1) Lumbar puncture should be contra-indicated for other than diagnostic purposes immediately after the hæmorrhage and for the next 48 hours unless the coma is so severe as to endanger the patient's life.

(2) After the first 48 hours lumbar puncture should be used for the definite purpose of relieving symptoms, and should not be repeated unless decided improvement is noted.

(3) The fluid should be drawn off slowly, and its final pressure should not be below normal.

My thanks are due to Dr. C. M. Hinds Howell for his permission to report these cases.

M. S. M. FORDHAM.

REFERENCES.

(1) COLLIER.—*Price's Textbook of Medicine.* 1929, p. 1446.

(2) HALL, A. J.—*Lancet*, 1932, p. 1135.

(3) SYMONDS, C. P.—*Quart. Journ. Med.*, 1924, xviii, p. 93.

THE DAY'S WORK IN LAWRA.*

IT is improbable that Lawra is marked in any of your maps; it lies, however, in the north-west corner of the northern territories of the Gold Coast, scarcely more than a hamlet. The European population consists of the District Commissioner (hobbies, cat-breeding and the study of Shakespeare), and the Medical Officer (hobbies, work and the enjoyment of idleness); there is a hospital of eighteen beds, police lines (at the time of writing haunted by a ghost), and sixty native compounds. The people are as primitive as they could well be: the men wear nothing but a goatskin slung over one shoulder; the women, a few strings of cowries round the waist, to which are attached one little bunch of leaves in front, and another little bunch of leaves behind. They produce nothing but their own food. The daily diet is guinea-corn, millet, maize, groundnuts, beans, and beer made from guinea-corn. Though the country is alive with fowls, goats, sheep and cattle, meat, eggs and milk are rarely eaten. Fowls are kept for fetish purposes, and other animals merely hoarded as a visible form of wealth.

Gastric ulcer, gallstones, appendicitis, renal calculus, cancer, diabetes, allergies, rheumatic fever and its complications and many other common European complaints are never seen. The hospital is chiefly occupied with yaws, trypanosomiasis, worms of every kind, scabies and various septic conditions. From the surgical point of view it is a very sterile patch; the few who do possess surgical lesions will seldom consent to operation. Yellow fever, smallpox, cerebro-spinal fever and relapsing fever lurk in the background as possible menaces to the general peacefulness, interesting as these may be considered as hospital cases, when the medical officer is also medical officer of health, and has to deal with any situation that may arise single-handed, they are the very last things he wishes to see.

The day begins at six o'clock, when we try to recover from the partial asphyxia induced by a hot night under a mosquito net; this means half an hour or more on the verandah with a glass of Eno's and a cigarette, contemplating the rising sun and the mist in the Volta Valley—where, four years ago, something very like a brontosaurus was seen by the natives. Then a bath and a leisurely breakfast. There is no train to be caught, no appointment to be kept, to none of the local people does time mean anything, so work begins just when it is convenient to the medical officer to appear.

It is Saturday, and after seeing the out-patients and doing the little round we leave Lawra to hold the weekly clinics at Nandom and Lambussie—headquarters of native chiefs, some twenty miles to the north. This morning there are only a dozen out-patients at the hospital; nothing of importance, except one old woman, wasted and comatose. The diagnosis is sufficiently obvious, but a lumbar puncture is done, as there are few more fascinating pathological spectacles than live trypanosomes swimming in cerebro-spinal fluid; and tryparsamide is perhaps more effective when the canal has been drained.

The ancient two-seater is loaded with a dispenser, an interpreter, two boxes of medicines, four gallons of

* See "Correspondence."

mist. alb., tables, chairs, stools, lotion bowls, food and drink for the M.O., and various odds and ends. The road through rolling park-like country is beautifully smooth, being used only by the D.C. and M.O., and we arrive soon after ten. The village is rapidly inspected. The local chief is intelligent and has his people well in hand, so it is cleaner than most. The ground between the houses is not bespattered with human excreta, there are no heaps of rotting garbage, and the yards are not full of pots seething with mosquito larvæ.

The "clinic" is held in the mud and thatch garage attached to the mud and thatch rest-house. Nearly two hundred are collected round it; most are new cases, and must be given papers and entered in the book. Four-fifths are yaws, which in most parts of tropical Africa, where treatment is not available, causes more suffering and disability than all other diseases together. Any one centre of treatment will in a year or two clear three to four hundred square miles of yaws. The severer cases get N.A.B., the rest bismuth sodium tartrate, which is cheap and easily administered. Apart from yaws, there are ulcers to be dressed and ears to be syringed; a good many cases of conjunctivitis and corneal ulcer; worms, and a few lepers. Most of the bellies get mist. alb., the most popular drink in the country—patients for whom bottles have been prescribed have been known to sell it to their friends at home at a shilling a dose; three ounces is the usual effective dose for an adult.

For eight or nine nothing much can be done under the circumstances, and they are advised to borrow a donkey and make their way to hospital. One old lady, apparently fit and cheerful, has what feels like a belly full of rocks. The M.O. would cheerfully give a fiver for an autopsy, and looks at her lovingly, wondering if it cannot be managed somehow, but she escapes with a dose of mist. alb. A man with septic arthritis of the shoulder joint and three large septic wounds states that a month ago he and five others became entangled with a leopard; three of them died of wounds, and the other two were still unable to walk. Another man has osteomyelitis of the femur, twelve months old and untreated—a lamentable spectacle. A woman with no physical signs says she feels very ill, because the other night a crowd of goblins broke into her house and beat her severely. (The Little People are very real to most of the natives of the Gold Coast; even the Dispenser, a typical educated African, asserts that he has seen them.)

At half-past two everyone has gone, and the medical officer collapses into the rest-house to a bottle of beer, a tin of sardines, marmite sandwiches, and *Blackwood's Magazine*.

Thence to Lambussie, a sanitarian's nightmare. When we arrive a little boy is squatting on one of the many heaps of refuse, passing a tapeworm; his family are standing round helping it out with long sticks, and as inch by inch it comes away, masses of flies take possession.

About a hundred and fifty are collected round the rest-house, but it is late, and stocks of medicines low, so the more scabrous yaws and the more loathsome ulcers are picked out, and there is a little battle for recognition; one fellow to emphasize his needs thrusts a round-worm right under the medical officer's nose.

At 5.30 we leave them; the little two-seater has not been within a hundred miles of a garage for over a year, and our lights are doubtful. Any sort of breakdown means walking home.

And the rest of the day? A dance at the club? Bridge? A jolly party somewhere? Lawra knows nothing of these things. The D.C. is out on trek, and the nearest other white man sixty miles away. So after a bath, a drink or two, a little music, dinner, and a book, we go to bed soon after nine.

A distinctly low-brow day; in fact some might say that considered as medical practice this kind of thing was beneath contempt. But it makes a lot of people happy. Recent correspondence in the JOURNAL has dealt with the desirability or otherwise of clearing the Surgery of "chronics," partly in order that those highly educated and highly trained beings, the junior house physicians, may devote their superior faculties to the study of medicine. Most of us spend but a very small fraction of our working time directly applying the medical knowledge we may have gained during our hospital years. But the art—the black art, if you like—of satisfying masses of people in a limited time, of doing the best possible for all parties concerned under difficult circumstances, is one not easily acquired without such experience as the Bart.'s surgery affords. Long may it be spared.

G. L. A.

STUDENTS' UNION.

RUGBY FOOTBALL CLUB.

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

Played on Saturday, October 22nd, at Winchmore Hill. Lost, 3—9.

Conditions were not very good for this game, which was expected to be exciting, for in the previous fortnight the Wasps had beaten both London and St. Thomas's Hospitals very easily.

As it was, the ball was too slimy for good handling and most of the play was forward. During the first half play was fairly open, but the defence on each side was distinctly good and no score was obtained. Near half-time the Wasps' full back had to go off with an injured leg, but this only produced more effort from the remainder.

In the second half there was a bad lapse on our part, as they scored three tries in quick succession, to which we replied with one try by Mundy, following a good forward rush.

They were lucky to beat us by as much as they did, for most of the time we had as much of the ball as they had, and looked far more dangerous when we had it.

Team.—C. R. Morison (*back*); J. G. Youngman, A. H. Pirie, J. G. Nel, J. D. Powell (*three-quarters*); J. R. Kingdon, F. H. Masina (*halves*); W. M. Capper, E. M. Darmady, K. J. Harvey, R. Mundy, A. T. Blair, B. S. Lewis, J. D. Wilson, J. M. Jackson (*forwards*).

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

Played on Saturday, October 29th. Away. Lost, 6—8.

The conditions in this game were appalling, as it had been raining solidly for a whole day and it did not stop at all in the game. It was also terribly cold, and considering this the handling of the ball was extraordinarily good.

We began attacking right from the start and Capper nearly got over twice. Eventually Darmady scored and we led 3—0. Our three-quarters began to get the ball, but were unable to penetrate the safe defence of Lindop and Wright.

One of their forwards injured his knee and had to leave the field, but the rest of them stood up well to our rather heavier pack. They scored through a penalty and so we were even. We continued to attack, and were most unlucky not to score several times before Pirie got over following a fine run by Nel.

Later Moseley obtained a good try by Trentham, which they converted and so won 8—6.

We were very unlucky to be beaten as we had been constantly attacking the whole time, and if conditions had been even a little better must have piled up quite a large score.

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

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

Played on Saturday, November 5th, at Winchmore Hill. Lost, 3—5.

Conditions for this game were good and we had our usual exciting game with the Cornishmen. They had Jennings absent through a knee injury, but otherwise were at full strength.

The early stages of the game were scrappy, and no side could claim any advantage till Nel broke away and would have scored but was recalled for a forward pass.

Following this, from a fine cross-kick from Powell, Wilson managed to gather and score. We led 3—0.

In the second half, following attempts at drop-goals by the visitors, Binge, their centre, got a shoulder hurt and had to go off. They obtained a try soon afterwards, which they converted and so led 5—3.

They kept their lead by stopping all passing on our side by their spoiling tactics, though hardly ever getting the ball out to their own backs. The game was not as open as usual in our matches with them and consequently our advantage outside was nullified.

This was Jimmy Taylor's second match for us this season and he appears to be running into his old form pretty quickly. Our full-back position is secure in the hands of Morison, who has played several games for us already without any apparent fault.

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

ST. BARTHOLOMEW'S HOSPITAL *v.* R.A.F. TRIAL XV.

Played on Wednesday, November 9th, at Winchmore Hill. Won 24—8.

The conditions were good, and both forwards and backs were most successful in their play. The forwards got the ball for most of the game and the outsides made good use of it, there being no dropped passes on our side the whole of the game.

J. D. Wilson scored both our first two tries and throughout the game was always working hard. Tries soon afterwards followed from Nel and Capper.

After the interval their pack became much more lively and gave their outsides more chances, but they only managed to score two tries, to which we replied with one more by Kingdon, following a good passing movement with Taylor and Powell and another by Massia. Three of our tries were converted by Capper, who played magnificently throughout.

Team.—C. R. Morison (*back*); J. G. Nel, L. M. Curtiss, A. H. Pirie, J. D. Powell (*three-quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper, E. M. Darmady, B. S. Lewis, R. Mundy, A. T. Blair, F. H. Masina, D. W. Moynagh, J. D. Wilson (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD ALLEYNIANS.

Played on Saturday, November 12th at Winchmore Hill. Won, 8—3.

The ground was very muddy in this game and the ball soon became slimy, so that our outsides could not score as often as they might have done with the chances given them by the forwards.

The tackling on both sides was very keen and not many passing movements survived for long against it.

The game resolved itself into a forward scramble, in which our pack showed the more initiative and were rewarded by tries by J. G. Nel and K. J. Harvey.

Wilson, playing as scrum-half in Taylor's absence, put up a fine performance, especially in stemming the many rushes of the Old Boys' forwards, and Darmady and Lewis were both especially prominent in our rushes, though the whole pack deserves praise for the way they backed each other up.

The Old Boys' backs contented themselves with touch-finding for most of the time, though they managed to secure one try, which was not converted.

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

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

Played on Saturday, November 19th at Llanelly. Lost, 3—17.

All the papers had said that Llanelly were bound to win, yet till three-quarters of the way through the game we were even at 3 all.

The game began with Llanelly attacking, but the defence was good enough to hold them without getting much chance of attacking. This continued till they scored one in the corner, to which we replied with a really fine try, Taylor going round to the blind side of a loose scrum and passing to Capper, who sent Powell in.

Llanelly returned to the attack, but unable to get through the defence of our centres or wings, began to try punting ahead, but were no more successful, as Morison dealt with them all very well.

Our forwards were playing magnificently; though they could not get much of the ball, they managed to spoil many chances of the other pack to get the ball out clearly. At half-time and for some time afterwards we were equal, but then Dai John, by a well-timed intercept between our halves, managed to score. Then they began attacking in earnest, chiefly because our forwards were beginning to tire, and in the line-outs could not always manage to stop them breaking away and then passing out to their backs.

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

"A" XV Results.

Saturday, September 24th, *v.* Old Cranleighans, at Thames Ditton. Won, 5—3.

Saturday, October 1st, *v.* Haileybury College, at Haileybury. Won, 10—3.

Saturday, October 8th, *v.* Northampton Crusaders, at Winchmore Hill. Won, 16—6.

Wednesday, October 12th, *v.* Duke of Wellington's Regiment, at Winchmore Hill. Lost, 11—36.

Saturday, October 15th, *v.* Richmond "A" at Winchmore Hill. Lost, 6—10.

Saturday, October 22nd, *v.* Old Blues "A," at Fairlop. Won, 17—6.

Saturday, October 29th, *v.* Woodford "A," at Winchmore Hill. Draw, 9 9.

Saturday, November 5th, *v.* London Welsh "A." Scratched.

Saturday, November 12th, *v.* Christ's College, at Cambridge. Won, 14 0.

Wednesday, November 16th, *v.* R.N.C. "A," at Greenwich. Won, 29—0.

L. H. B.

ASSOCIATION FOOTBALL CLUB

ST. BARTHOLOMEW'S HOSPITAL *v.* CATFORD WANDERERS RESERVES.

Played on Saturday, October 22nd, at Beckenham Hill. Lost, 2—4.

Playing six substitutes, we had the greatest difficulty in holding our own during the first half of this game. Heavy rain had made the ground soggy, but this did not appear to slow the Catford attack. Johnson kept goal well, and was largely responsible for the fact that half-time came with the Hospital being led only by one goal to nothing, after prolonged and almost continuous defence. There were a few breakaways, in which Pearce on the left wing came very near to levelling the score.

The second half saw a change in the run of the play, in spite of the fact that Catford were now playing downhill with a low sun behind their backs. Their forwards failed to combine with their earlier effect, and midfield play was even. Brownlees equalized, and we went ahead with a goal from Shackman which followed a goal-mouth *mêlée*. At this stage it appeared that we would win. Johnson, however, unfortunately dispelled the good impression he had made in the first half. By a series of mishaps Catford won 4—2.

Team. D. J. Johnson (*goal*); O. Sookias, A. H. Hunt (*backs*); P. Telfer, D. R. S. Howell, J. D. Ogilvie (*halves*); K. C. Dolly, P. Brownlees, R. Shackman, F. D. M. Livingstone, H. A. Pearce (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD FOREST HILLIANS.

Played on Saturday, November 5th, at Winchmore Hill. Won, 3—2.

The Old Mercers were compelled to scratch their fixture with us on November 5th on account of a cup-tie replay. The game against the Old Forest Hillians was consequently arranged at very short notice, with the result that they arrived and played one short. This gave us a great advantage, but irrespective of that we were a considerably stronger side. Our midfield play, almost all well in the opponents' half of the field, was good, though on some occasions passes seemed to find the right players more by good fortune than skilful placing. A heavy but utterly ineffective bombardment was kept up on the Forest Hill goal. Goals begged to be scored, but none of our forwards seemed at all inclined to seize any of the innumerable opportunities that were offered. The backs had almost nothing to do, in spite of the fact that they came well down the field away from their own half. An almost solitary raid and a mistake by the defence gave Forest Hill a lead of 1—0 at half-time.

After that play was more even, but we continued almost to monopolize the midfield play. Three goals were scored (Shackman, Dransfield and Brownlees) before accidents to Dransfield and Wheeler incapacitated our right wing. We continued to keep up a fairly continuous pressure on the opposing goal, the game being varied occasionally by a dash back down the field to retrieve a mishkick or mistackle. One of these dashes resulted in a good goal for Forest Hill.

Team.—R. A. L. Wenger (*goal*); P. J. Hardie, A. H. Hunt (*backs*); J. W. B. Waring, D. R. S. Howell, W. M. Maidlow (*halves*); C. M. Dransfield, F. E. Wheeler, R. Shackman, P. Brownlees, H. A. Pearce (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* DOWNING COLLEGE, CAMBRIDGE.

Played on Saturday, November 12th, at Cambridge. Lost 2—3.

The game was keen and fast from start to finish, with very little to choose between the two teams. On the whole we had more of the play, while Downing combined better and made more of their opportunities. For the first quarter of an hour we were definitely on top, and it was unfortunate that a substantial lead was not gained before Downing had settled down. In spite of some adroit pieces of work accomplished by Wenger, they scored first from a very good shot by their centre-half. We soon equalized. Shackman swung out a long pass from the half-way line to Wheeler on the right wing, who centred at the right moment, leaving Hunt, who was unmarked, the simple business of steadying the ball and putting it past the goal-keeper. Then, for no very good reason, Downing scored two more goals quickly, one being by no means above gross suspicion.

The second half was brisk and short, with the Hospital just failing to combine sufficiently well to get more than one goal. Downing's lead was reduced to 3—2 by Brownlees, and the final whistle went surprisingly early in the middle of a dull patch of play.

Team.—R. A. L. Wenger (*goal*); P. J. Hardie, J. Shields (*backs*); J. W. B. Waring, D. R. S. Howell, W. M. Maidlow (*halves*); F. E. Wheeler, A. H. Hunt, R. Shackman, P. Brownlees, H. A. Pearce (*forwards*).

HOCKEY CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* R.N. & M., CHATHAM.

October 22nd. Played on a pitch which was far from perfect, the game was yet fairly fast and interesting.

Bart.'s attacked from the start, but soon showed themselves incapable of scoring when in the circle.

The R.N. & M. forwards, however, were now beginning to get together, and in spite of a sterling defence, managed to score after some time (0—1).

After half-time Bart.'s repeatedly attacked and scored through Iliffe off a short corner (1—1). However, several more corners proved fruitless, and the fast R.N. & M. forwards broke through several times, resulting in a goal which gave Crosse no chance.

Play was resumed again, Bart.'s doing most of the attacking, but entirely failing to score. Lost, 2—1.

Team.—J. Crosse (*goal*); V. Snell, J. T. Hindley (*backs*); E. Fowler, K. W. Martin, B. Thorne-Thorne (*halves*), R. T. Davidson, L. Heaseman, A. M. Iliff, J. Blackburn, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* STAFF COLLEGE, CAMBERLEY.

October 26th. Fielding a much depleted side Bart.'s did extremely well to draw a fast and enjoyable game.

In the first few minutes Heaseman scored with a hard shot from the edge of the circle (1—0). The Staff College, however, attacking strongly soon equalized with a hard high shot (1—1).

The score remained so till after half-time, despite several breakaways especially one good run by Hinds Howell down the whole field.

Bart.'s, however, quickly scored after half-time, through a quick piece of following up by Davidson (2—1).

Reprisals by the Staff College led to their scoring two more goals (2—3). And it was not till just before "time" that Bart.'s forced a corner which Burstal rushed in to equalize (3—3). Drawn, 3—3.

Team.—J. Crosse (*goal*); W. A. Oliver, B. Thorne-Thorne (*backs*); L. Taylor, K. W. Martin, E. Fowler (*halves*); R. T. Davidson, A. Hinds Howell, E. W. Burstal, L. Heaseman, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD CRANLEIGHANS.

October 29th. A fast and furious game, which Bart.'s only managed to draw during the last five minutes.

Soon after the start Glandon-Williams dribbled through to give Heaseman an easy chance of scoring—a good piece of backing up (1—0).

The O.C.'s now attacked hard, proving themselves to be a fast and clever side, and managed to score with a good flick-shot.

From thence only determined defence, especially from Snell and one wonderful save by Thorne-Thorne, kept them from scoring again. Meanwhile rushes from Glandon-Williams and Davidson proved fruitless, Heaseman being unlucky with a first-time shot off a pass from the latter.

The O.C.'s, however, scored again after some good combination (1—2).

After the interval play grew faster, Bart.'s starting a series of attacks through the right wing, which only proved availing at the end of the game.

The O.C.'s broke away several times, and Crosse's brilliance alone kept them from scoring.

Finally, through some good combination between Heaseman and Davidson, Blackburn scored from a first-time shot (2—2).

There was no further score till the whistle blew to end a very enjoyable game. Drawn, 2—2.

Team.—J. Crosse (*goal*); V. C. Snell, R. Carpenter (*backs*); E. Fowler, K. W. Martin, B. Thorne-Thorne (*halves*); R. Davidson, L. Heaseman, A. Glandon-Williams, J. Blackburn, J. M. Lockett (*forwards*).

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

November 2nd. Bart.'s were unfortunate not to draw rather a disappointing game. Play was started at a fast rate, but became more subdued as time went on. The Hospital soon scored through Harris, the second of two hard shots beating the goalkeeper (1—0).

Very soon after the Wanderers equalized through a beautiful centre of their right wing's (1—1).

Both their wings were getting the ball across very well, and a second goal was scored almost immediately (1—2).

However the Hospital forwards, though combining poorly, attacked and forced several short corners. From one of these Harris's shot was rushed in on the rebound by Davidson (2—2).

The Wanderers, though, soon replied (2—3).

In the second half play was fairly even, though the Bart.'s forwards were bunching too much and passing too square. And it was not till after the Wanderers' goalkeeper was given some anxious moments that they again scored (2—4).

There was no further score. The forwards again certainly did not show up to advantage, though they could plead Glandon-Williams's absence from the centre-forward position. Lost, 2—4.

Team.—J. Crosse (*goal*); V. C. Snell, G. T. Hindley (*backs*); E. Fowler, K. W. Martin, B. Thorne-Thorne (*halves*); R. T. Davidson, E. E. Harris, L. Heaseman, J. Blackburn, J. M. Lockett (*forwards*).

ATHLETIC CLUB.

The Annual General Meeting of the Athletic Club was held on November 11th, with Mr. T. H. Just, F.R.C.S., in the chair.

The following officers were elected for the 1933 season:

President: Mr. T. H. Just, F.R.C.S.
Captain: W. H. Jopling.
Hon. Secretary: J. W. Perrott.
Assistant Hon. Secretary: J. G. Nel.
Committee: K. W. Martin, J. G. Youngman, G. D. Wedd, J. R. Hill, J. Shields, C. F. D. H. Goodhart, R. T. Simcox, and W. D. Coltart.

All the Vice-Presidents were re-elected, with the addition of Mr. J. P. Hosford, F.R.C.S., and Mr. W. E. Underwood.

The following gentlemen, having gained points for the Hospital in the Inter-Hospital Sports last June, were awarded "Honours" for the 1932 season: J. G. Nel, J. R. Hill, W. H. Jopling, J. R. Strong, J. W. Perrott, J. Smart, C. D. Wedd, C. M. Dransfield, K. W. Martin, T. L. Benson, and J. Shields.

The following were awarded their Cross-Country Running "Honours": G. Dalley, A. J. Kinnear and H. B. Lee.

A somewhat lengthy discussion then followed as regards the awarding of Athletic "Honours." It was pointed out by the President that there must be a definite standard established whereby "Honours" be awarded, and that the awarding of "Honours" at the discretion of the Captain or Committee might lead to dissatisfaction. Certain members present, however, thought that the present system of awarding "Honours" only to those who gained a point in the Inter-Hospital Sports was by no means a fair criterion as to an athlete's ability. These members accordingly proposed that a definite time (or distance) standard be instituted, whereby athletes really deserving their athletic "Honours" might be distinguished by their ability to gain the "standard" in their respective events, rather than by their individual performances against indifferent opposition. It was also proposed that this new "Hospital standard" should be something similar to the "Alverston standard" at Cambridge.

Upon the proposal of K. W. Martin, seconded by J. W. Perrott, it was decided to hold a general meeting of the Club to discuss the matter more fully at a later date.

J. W. P.

GOLF CLUB.

Inter-Hospital Cup Competition.

First Round.

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

Played at West Hill on October 19th, 1932.

Singles.

St. Bartholomew's Hospital.		*St. George's Hospital.*	
Carr (4—3)	1	Elfides	0
Cutlack	0	Hunter (2—1)	1
Wedd (4—3)	1	Jarret	0
Stanton	0	Allen (4—3)	1
White (1 up)	1	Miller	0
J. Wilson (9—8)	1	Houghton	0
Robertson (1 up)	1	Wilson	0
Young	½	Ingram	½
	5½		2½

Foursomes.

Carr and Wedd (4—2)	1	Elfides and Jarret	0
Cutlack and Stanton	0	Allen and Miller (4—3)	1
White and Wilson (4—3)	1	Houghton and Wilson	0
Robertson and Young	½	Hunter and Ingram	½
	2½		1½

Result.—Bart.'s won by 8 matches to 4.

Second Round.

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

Played at St. George's Hill on November 9th, 1932.

Singles.

St. Bartholomew's Hospital.		*Middlesex Hospital.*	
Carr (3—1)	1	Neal	0
White (4—3)	1	Bentley	0
Wedd (3—1)	1	Dickson	0
Stanton (6—5)	1	Johnson	0
J. Wilson (2—1)	1	Haggar	0
W. Wilson	0	Preston (2—1)	1
Cutlack	½	Banham	½
Robins (3—1)	1	Martin	0
	6½		1½

Foursomes.

Carr and White (3—2)	1	Neal and Bentley	0
Wedd and Stanton (3—2)	1	Dickson and Haggar	0
J. Wilson and W. Wilson	0	Johnson and Banham (3—1)	1
Cutlack and Robins (6—5)	1	Preston and Martin	0
	3		1

Result.—Bart.'s won by 9½ matches to 2½.

Final.

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

Played at Sunningdale on November 16th, 1932.

Singles.

St. Bartholomew's Hospital.		*St. Thomas's Hospital.*	
Carr (4—2)	1	Robinson	0
White	0	Knowles (3—1)	1
Wedd	½	Simmonds	½
Stanton (3—2)	1	Harper	0
J. Wilson	0	Taylor (4—2)	1
W. Wilson	0	Bartley (1 up)	1
Cutlack	0	Light (2—1)	1
Robins	0	Milligan (4—3)	1
	2½		5½

Foursomes.

Carr and White	0	Simmonds and Harper (4—3)	1
Wedd and Stanton	0	Knowles and Taylor (6—4)	1
J. Wilson and W. Wilson	0	Robinson and Light (1 up)	1
Cutlack and Robins	½	Bartley and Milligan	½
	½		3½

Result.—Bart.'s lost by 3 matches to 9.

RIFLE CLUB.

In the City of London Rifle League the "A" team made a bad start, but redeemed it the following week by a record score of 588, beating the previous record by 6 points. They have since maintained a good average and have been unlucky to lose the remaining two matches to date. The "B" team have put up good scores and their shooting has been very consistent.

MATCHES.

"A" Team.

October 17th, *v.* Standard Telephones, Hendon, "A." Lost. St. Bart.'s, 569, Std. Telephones, 573.

October 24th, *v.* L.G.O.C., Streatham. Walk-over. St. Bart.'s 588; L.G.O.C. did not return cards.

Scores.

W. H. Cartwright . .	100	P. G. F. Harvey . .	97
D. O. Davies. . .	99	K. F. Stephens . .	97
J. S. Bailey . . .	98	J. E. Underwood . .	97
B. P. Armstrong . .	97	L. R. Leask . . .	93

October 31st, *v.* Corn Exchange. Lost. St. Bart.'s, 579; Corn Exchange, 585.

November 7th, *v.* L.E.D. (Post Office). Lost. St. Bart.'s, 582 (K. F. Stephens, 100); L.E.D., 588.

"B" Team.

October 31st, *v.* Swansea "B." Lost. St. Bart.'s "D," 367; Swansea "B," 576.

November 7th, *v.* Dinas Powis "B." Lost. St. Bart.'s "B," 569; Dinas Powis "B." 570.

TENNIS CLUB.

The Annual General Meeting of the Lawn Tennis Club was held in the Committee Room of the Abernethian Room on November 8th. The President, Sir Charles Gordon-Watson, was in the chair. The following officers were elected for season 1933:

President: Sir Charles Gordon-Watson.
Captain 1st VI: J. R. Kingdon.
Hon. Secretary: R. C. Witt.
Captain 2nd VI: R. H. Dale.
Committee: J. R. Kingdon, R. C. Witt, R. H. Dale and O. A. Savage.

It was proposed that the annual tournament should start as early as possible at the end of April or beginning of May, and that an entrance fee of one shilling should be charged, hoping by this means to cut down the number of entries and also to enable prizes to be given to the finalists. The motion was unanimously carried.

The meeting was then adjourned. R. C. W.

BOXING CLUB.

It is time that the Inter-Hospital Cup came back to Bart.'s, and we are going to make a real effort to win it this season.

The services of Matt Wells have been engaged as a trainer. Freshmen and others wishing to box will be welcomed.

The Club meets on Thursdays, at 4.30 p.m.

CORRESPONDENCE.

ECTOPIC GESTATION WITH UTERINE POLYPUS SIMULATING INEVITABLE ABORTION.

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

DEAR SIR,—The following case, which I recently encountered here in practice, is of interest, and illustrates how easily one can be misled in diagnosing a serious condition, such as extra-uterine pregnancy, by the presence of a uterine mucous polypus occupying the lumen of the cervical canal.

A few weeks ago, at 7.15 a.m., I was called to see a woman (multip.), æt. 46, who, while defæcating at about 7 a.m., had been suddenly attacked by a severe stabbing pain in the left iliac fossa.

The patient, who was a delicate individual, had missed one period, was sure she was pregnant, and had had moderate uterine hæmorrhage for the past three weeks with occasional attacks of slight pelvic pain, not localized to any particular point. On examination the patient did not appear to be in acute pain and her colour was normal. Temperature normal. Pulse 90. On palpation: There was tenderness over the uterus, with marked tenderness in the left iliac fossa. The patient was bleeding moderately *per vaginam*. *P.V.*—The cervix was dilated to the size of about one finger. There was seen partly projecting through the cervical canal a tense, fluctuating, membranous swelling. The uterus was tender, and there was no marked tenderness in the lateral quadrants of the cervix. Diagnosis: Inevitable abortion.

The patient was sent to a nursing home for curettage. When anæsthetized, a speculum was inserted, and on drawing down the cervix with a volsellum, a mucous polypus was found occupying the lumen of the cervical canal. This was twisted off. A sound was inserted into the uterus and found to penetrate slightly deeper than usual. After the cervix had been dilated to the required size, the uterus was curetted. Only a few scrapes had been given when respiration suddenly ceased, and the pulse became feeble and rapid. Treatment for cardiac and respiratory failure during anæsthesia was carried out with success. The operation was continued, and after a few minutes the patient again collapsed, but rallied with the previous treatment.

The uterine scrapings appearing normal, it was concluded that the hæmorrhage which the patient had was caused by the uterine polypus.

For two days following this operation the patient remained collapsed, with a feeble, rapid pulse. Cardiac stimulants were given with no marked effect, and she commenced running an intermittent temperature. The abdomen became distended below the umbilicus, and she complained of great abdominal discomfort. *P.V.* examination: There was marked tenderness in the left lateral fornix, which also felt boggy. Diagnosis: Pyosalpinx.

The patient's condition became so grave that it was decided to operate immediately. A mid-line incision was made below the umbilicus, and on opening the peritoneal cavity a large amount of stale, clotted blood was found. This was removed, and on examining the Fallopian tubes, the left was found to contain a rupture at the ampullary portion. This was treated by removal. The abdomen was then closed and the patient returned to the ward. She made an uninterrupted recovery, and after two weeks was discharged from the nursing home.

Points of interest:

(1) The signs and symptoms of an extra-uterine pregnancy were masked by the presence of a uterine mucous polypus.

(2) The absence of signs of collapse, which one would have expected to be present 15 minutes after rupture of the tubal gestation had occurred.

(3) The sudden collapse during the anæsthesia, due probably to the dislodging of the blood-clot at the seat of rupture, caused by the movement of the uterus in manipulation, the curette giving rise to immediate internal hæmorrhage.

Benoni, S. Africa; GILBERT DIETRICH,
October, 1932. M.R.C.S., L.R.C.P.(Lond.).

THE PERIODIC EXAMINATION.

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

DEAR SIR,—I was very interested in Dr. Dudley Cockell's letter in the October number of the JOURNAL.

After quoting four cases of malignant disease that he had recently met with, in which he admits that 75% would have benefited by periodic examinations, he then condemns the whole scheme.

His objections appear to be, first, financial. Under this heading he suggests that any money spent on propaganda would be better spent on trying to discover the ætiology. Everybody would agree with him that we want a great deal more money for the laboratory work in malignant disease, but the amount of money required for propaganda (£200 or £300 per annum), would be such a minute fraction of what is already spent on efforts at finding the cause, and the results, in my opinion, are so far-reaching that such an objection can really carry no weight.

Secondly, he condemns it because the results of surgical treatment are at present so poor. If every case of appendicitis was allowed to become gangrenous before it was diagnosed—as indeed it was before the profession learnt how to diagnose it early—Dr. Cockell would feel that there was no "reasonable chance of cure" in that disease, and patients who thought that they had appendicitis would not go near their doctor because they would ask themselves, "What can be done for it?"

I venture to think that if the scheme of periodic examinations is undertaken, Dr. Cockell will hear himself repeating less frequently, "If only you had come earlier."

Yours very truly,
MALCOLM DONALDSON.

145, Harley Street, W. 1;
November 2nd, 1932.

A VERY ABNORMAL LABOUR.

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

DEAR SIR,—All students attending Matthews Duncan's Lectures fifty years ago were urged to study Lusk's *Midwifery*, so obediently and with a frugal mind I bought a second-hand copy at Kimpton's.

The other day when turning over the pages of this old book I found an entry in the Index which surprised me. I turned to the page indicated and found that Lusk stated in cases of prolapse of the funis that "instrumental replacement of the cord is apt to prove a veritable labour of Sisyphus."

The previous owner of my book had carefully added to the list of complicated labours in the Index: "Labour of Sisyphus, page 487."

I conclude he was not a Bart.'s man.

Yours faithfully,
The Boltons, EDMUND F. BINDLOSS.
Farnborough,
Hants;
November 2nd, 1932.

THE DAY'S WORK IN LAWRA.

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

DEAR SIR,—Some years ago there appeared in one of the daily papers a series of articles, "My Day's Work," contributed by all sorts of people, from scavengers to captains of industry; and very interesting they were. May I suggest that your readers would appreciate, and might find valuable, a similar medical series? There are Bart.'s men all over the world engaged in every possible sphere of medical activity; and those of us who leave the clinical articles unread would, I think, turn eagerly to a description of life with the R.A.F. on the N.W. Frontier, or life on a sloop in the South Seas.

I enclose a small contribution which you may think suitable for publication if this idea meets with your approval.

Yours truly,
GEORGE L. ALEXANDER,
Lawra, Northern Territories, *West African Medical Staff.*
Gold Coast;
October 24th, 1932.

REVIEWS.

THE ROSE RESEARCH ON LYMPHADENOMA. Bristol: John Wright & Sons, 1932. Pp. 136, with 98 illustrations. Price 21s.

This book, edited by Dr. Mervyn Gordon, contains the results of a concerted attack on the ætiology of Hodgkin's disease by a group of workers at St. Bartholomew's Hospital. The research was made possible by an endowment provided by Mrs. T. E. Rose in memory of a daughter who died from this disease.

In the opening chapter Sir Thomas Horder discusses lymphadenoma from its clinical aspects, and points out that progress remains at a standstill until the causative agent has been defined. The succession of bacteriological researches undertaken with a view to determining this matter is next described by Dr. Gordon. The material investigated consisted chiefly of glands removed from patients for the purpose of diagnosis. Spirochætes and the tubercle bacillus having been sought for without success, an elaborate investigation was carried out in order to ascertain whether evidence could be obtained of a mycotic infection in lymphadenoma. Studies were made of fungi already known to possess pathogenic attributes for man, and glands removed from cases of lymphadenoma were then examined for the presence of organisms of this category.

When methods of culture suitable for the purpose of growing pathogenic fungi were employed, lymphadenoma glands yielded chiefly organisms of the monilia class, and it became necessary to determine their significance. In order to settle this point cultures were made in the same way of glands removed from cases suffering from other diseases, and a special investigation of the monilia obtained from both sets of glands and also from outside sources was carried out by Dr. Kenneth Stone and Dr. L. P. Garrod. These observers, by employing the complement-fixation and precipitin tests succeeded in classifying these monilia serologically, and it was found that the commonest group of pathogenic monilia represented by the thrush fungus show a unity and antigenic simplicity hitherto unrecognized.

Some instructive hæmatological studies were carried out by Dr. E. R. Cullinan on normal guinea-pigs and rabbits, and also on these animals after injection with some of these organisms. Ultimately the conclusion was reached that there is no evidence that lymphadenoma is due to a mycosis.

Spirochætes, tubercle and a mycotic infection having thus been excluded in turn, search was now made by Dr. Gordon for evidence as to the presence of a pathogenic agent of the virus category. For a long time the results were either negative or indecisive, but eventually by making suspensions of lymphadenoma glands in ordinary broth, by allowing these suspensions to macerate in the refrigerator, and then injecting the broth intracerebrally into rabbits, evidence was obtained of the existence of a pathogenic agent in lymphadenoma gland possessed of very definite characters.

After an incubation period varying from 2 to 6 days, this pathogenic agent produces in the rabbit a characteristic condition of muscular rigidity and inco-ordination, accompanied by other symptoms of encephalitis and a progressive loss of weight. The condition is frequently fatal. From preliminary observations, Dr. Gordon considers it likely that the disease set up in this way by suspensions of lymphadenoma glands is a form of meningo-encephalitis. The pathogenic agent responsible for it has a pronounced resistance to drying, and it has also a considerable resistance to heat; for it withstands exposure for 30 minutes to 65° C., but is inactivated within that time at 100° C. Passage experiments as yet have not been successful.

The presence of this pathogenic agent has now been proved in glands from 11 individual cases of lymphadenoma, and its absence has similarly been established in glands from 30 control cases suffering from a variety of diseases other than lymphadenoma. Its further characters are under investigation, but in the opinion of Dr. Gordon the available evidence indicates that in all probability this pathogenic agent that is present in lymphadenoma glands belongs to the virus group. The question of its filterability is not yet settled.

These findings of Dr. Gordon's may have a valuable practical application for diagnosis, and give promise of being a great constructive advance in the ætiology of lymphadenoma—possibly the most marked since the original description of the histological features, in which another member of the Bart.'s pathological school, the late Sir Frederick Andrewes, did pioneer work.

The report of the Rose Research is profusely illustrated, and contains micro-photographs of a very high standard. In addition to the bacteriological report, a careful and independent study of the disease from the histological standpoint has been made by Dr. B. D. Pullinger, now Pathologist to the Mount Vernon Hospital. From her study of the minute tissue changes Dr. Pullinger infers that lymphadenoma consists of a progressive hyperplasia of one type of cell, the reticulum cell, from which both the giant cells and the local eosinophiles are derived. The process would thus appear to be analogous to leukæmia. It will be observed that this view, which is entirely new and is derived from a study of material from some 40 cases of the disease, is not incompatible with the bacteriological evidence.

A NEW THEORY OF CANCER AND ITS TREATMENT. By C. F. MARSHALL, M.Sc., M.D., F.R.C.S. (Bristol: John Wright & Sons, Ltd. London: Simpkin Marshall, Ltd., 1932.) Parts I (pp. 33) and II (pp. 56). Price 3s. 6d. net per part.

> "Surgeons long for some discovery which will enable them to cure cancer by some cunning drug introduced into the circulation."—BLAND-SUTTON.

Those who eagerly and possibly with optimism are ready to embrace the new and seductive theories as to the nature of malignant disease, which almost daily startle the journalistic and weary the scientific world, are doomed evermore to come out by the same door as in they went.

C. F. Marshall teaches that the origin of carcinoma and of sarcoma is in the chorionic villi. The blood contains leucin, which in the case of the former produces a form of ferric oxide in the tissues. Malignant disease can be diagnosed in its early stage by detecting changes in the serum, and can be treated by the injection of colloidal ferric chloride, supplemented by serum therapy. There are chapters on the radiographic diagnosis of cancer with allotropic radium and on preventive inoculation.

Though the print is clear, the two booklets can scarcely be described as attractive. Their speculative teaching lacks scientific precision, and there are no case-reports to give life to the author's theories. The work is clearly a "one-man-show."

EXAMINATIONS, ETC.

University of Oxford.

The following Degree has been conferred :

B.M.—Leishman, A. W. D.

University of Cambridge.

The following Degrees have been conferred :

M.D.—Goodwin, T. S., McCay, F. H.
M.B., B.Chir.—Thorne, V. T., Varley, J. F.
M.B.—Nicholson, B. C.
B.Chir.—Scott, J. L. S., Tubbs, O. S., Westwood, M.

Royal College of Physicians.

The following has been admitted a **Member** :

Honigsberger, M.

Royal Colleges of Physicians and Surgeons.

The following Diploma has been granted :

D.P.H.—Huss, C. B., James, E. T., Lawrence, I. B.

British College of Obstetricians and Gynæcologists.

The following have been elected **Members** :

Beattie, W. J. H. M., Stansfield, F. R.

Conjoint Examination Board.

Pre-Medical Examination, October, 1932.

Physics.—Henderson, J. L.
Biology.—Brown, E. E., Laverick, D., Stevenson, R. Y.

First Professional Examination, October, 1932.

Anatomy.—Bones, A. O., Dale, L. F., Dunn, R. W., Johnson, A., Macdonald J. M.
Physiology.—Beizer. L. S., Bones, A. O., Cole, M. J., Dale, L. F., Dunn, R. W., Johnson, A., Nicoll. J. A. V., Schiller, M., Williams, R. J. G., Young, W. J.
Pharmacology.—Buckland, L. H., Cereseto, H. G., Davies, D. L. L., Edwards, D. H., Lyons, R., Smallhorn, T.

Final Examination, October, 1932.

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

Bamford, J. B., Capper, W. M., Clark, E. M., Cutlack, A. R., Ghosh, S. K., Gunewardine, H. C. P., Hay-Shunker, C. L., Houghton, A. W. J., Lewis, B. S., Morgan, C. J., Russell, B. F. B., Snell, V. C., Symonds, J. W. C., Vaughan, H. B. D., Warren, C. B. M., West, J. H., Williams, H. M., Woods, T. G. R.

CHANGES OF ADDRESS.

DALE, D. D. R., *ex*-Lloyds Bank, Cairo, Egypt.
HUNT, C. L., Sutherland Lodge, 221, Unthank Road, Norwich. (Tel. Eaton 402.)
ROCHE, A. F., 140, Harley Street, W. 1. (Tel. Welbeck 2720.)
ROLLESTON, Sir HUMPHRY, Bart., Martins, Haslemere, Surrey. (Tel. Haslemere 647.)
STRUGNELL, Surg.-Cdr. L. F., R.N., S.M.O.'s Residence, R.M. Barracks, Stonehouse, Plymouth.
WHITBY, H. A. MORTON, 5, Great Marlborough Street, W. 1. (Tel. Gerrard 6372.)

APPOINTMENT.

HENSMAN, J. S., B.Ch.(Cantab.), M.R.C.S., L.R.C.P., appointed Honorary Anæsthetist, Hospital of St. John and St. Elizabeth.

BIRTHS.

CANE.—On November 15th, 1932, at Reepham, Norfolk, to Marjorie (*née* Perkins), wife of Dr. Maurice H. Cane—a sixth daughter.
CAPENER.—On November 13th, 1932, at Exeter, to Marion, wife of Norman Capener, F.R.C.S.—a daughter.
DICKS.—On November 18th, 1932, at "Stonefield," Blackheath, to Maud, wife of Dr. Henry V. Dicks—a daughter.
FELLS.—On September 14th, 1932, at Bristol, to Rosalind, wife of Dr. Roy R. Fells—a daughter.
FISHER.—On November 15th, 1932, to Barbara, wife of Surgeon Lieut.-Cdr. H. Holdrich Fisher, R.N., of 25, The Avenue W. 4—a son.
GOSSE.—On October 14th, 1932, in London, to Irene, wife of Philip Gosse—a daughter.
HOLDEN TINCKER.—On November 4th, 1932, at Painswick, Glos., to Kathleen (*née* Bates), wife of R. W. Holden Tincker—a daughter (Margaret Eleanor).
OAKLEY WHITE.—On September 2nd, 1932, at Green Trees, Bassett, Southampton, to Alice (*née* Tait), wife of Dr. Herbert Oakley White—a son.
RHODES.—On October 30th, 1932, to Kathleen, wife of Richard L. Rhodes, B.Chir., M.R.C.S., L.R.C.P.—a daughter.
SCOTT.—On November 23rd, 1932, at 27, Welbeck Street, W. 1, to Betty (*née* Cairns), wife of Philip G. Scott, B.Ch., M.R.C.S., L.R.C.P., of 103, Canfield Gardens, N.W. 6—a daughter.
TISDALL.—On November 8th, 1932, at Westfield, Harrow-on-the-Hill, to Christina (*née* Corkran), wife of Dr. Oliver R. Tisdall—a son.

MARRIAGES.

PETTY—KNOX.—On November 9th, 1932, at Wolborough Church, Newton Abbot, by the Bishop of Plymouth, assisted by the Rev. H. J. Petty and the Rev. C. A. W. Russell, Gerald Fitzmaurice, only son of the Rev. H. J. and Mrs. Petty, of Tor Vicarage, Torquay, to Edith Stuart, second daughter of Lt.-Col. Sir Hamish and the late Mrs. Knox, of Grimspound, Newton Abbot.
SEYMOUR-ISAACS—MACKENZIE.—On September 26th, 1932, at Glasnevin Church, Dublin, by the Rev. R. Archdale Byrn, Hubert Neville, third and only surviving son of the late Rev. H. Seymour-Isaacs, M.A., first Vicar of St. Saviour's, Alexandra Park, N., and Jamaica, and Mrs. Seymour-Isaacs, 43, Wynnstay Gardens, W. 8, to Leanora Milne, younger daughter of the late R. Anderson Mackenzie and Mrs. Mackenzie, 38, Cremore Road, Dublin.

DEATHS.

BROWNLOW.—On November 5th, 1932, Harry Lurgan Brownlow, F.R.C.S., son of the late Captain Arthur Brownlow, R.N., C.B., of Shirley, Henley-on-Thames, aged 64.
CLARKE.—On November 22nd, 1932, at 44, Bryanston Court, W. 1, Ernest Clarke, C.V.O., M.D., F.R.C.S., of 149, Harley Street, aged 75.
COVENTON.—On September 11th, 1932, at The Grey House, Silverhill Park, St. Leonards-on-Sea, Charles Arthur Coventon, M.R.C.S., L.R.C.P., Knight of Grace of the Order of St. John of Jerusalem, aged 82.
CROSS.—On November 7th, 1932, after a long illness, at Shackleford House, Petersfield, Dr. Robert George Cross, aged 69.
GARDNER-MEDWIN.—On November 11th, 1932, suddenly, after an operation in London, Frank Medwin Gardner-Medwin, M.R.C.S., L.R.C.P., of "Angorfa," St. Asaph, N. Wales.
GRANT JOHNSTON.—On November 17th, 1932, at a nursing home, following an operation for acute appendicitis, Captain J. Grant-Johnston (Johnnie), of 54, Bouverie Road West, Folkestone.
GROOM.—On November 18th, 1932, at 6, Woolton Road, Garston, Liverpool, Henry Thomas Groom, L.R.C.P., son of John Russell Groom, aged 76.
HENDLEY.—On September 18th, 1932, at Perth, Lieut.-Col. Arthur Gervase Hendley, I.M.S.(retired), third son of the late Surgeon-General John Hendley, C.B., aged 66.
HUSBAND.—On July 4th, 1932, Henry Aubrey Husband, F.R.C.S.E., of Green Vale, Manchester, Jamaica, aged 88.
POWELL.—On November 1st, 1932, suddenly, at Bilton, Herbert Edward Powell, M.R.C.S., L.R.C.P.
PROSSER.—On November 5th, 1932, at Stafford House, Monmouth, Dr. T. G. Prosser, O.B.E., aged 76.

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 7*s.* 6*d., 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.

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CALENDAR.

Tues., Jan. 3.—Sir Thomas Horder and Sir Charles Gordon-Watson on duty.
Fri., ,, 6.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Sat., ,, 7.—Rugby Match *v.* Harlequins. Home.
Association Match *v.* Old Wykehamists. Home.
Hockey Match *v.* Guy's Hospital. Home.
Mon., ,, 9.—Special Subjects : Clinical Lecture by Dr. Cumberbatch.
Tues., ,, 10.—Dr. Gow and Mr. Girling Ball on duty.
Fri., ,, 13.—Dr. George Graham and Mr. Roberts on duty.
Sat., ,, 14.—Rugby Match *v.* Rosslyn Park. Away.
Association Match *v.* Old Westminsters. Home.
Hockey Match *v.* Sittingbourne. Away.
Mon., ,, 16.—Special Subjects : Clinical Lecture by Mr. Elmslie.
Tues., ,, 17.—Prof. Fraser and Prof. Gask on duty.
Wed., ,, 18.—Surgery : Clinical Lecture by Sir Charles Gordon-Watson.
Thurs., ,, 19.—**Abernethian Society : Mid-Sessional Address by Sir John Weir, "Homœopathy : An Explanation of Its Principles."**
Last day for receiving matter for the February issue of the Journal.
Fri., ,, 20.—Medicine : Clinical Lecture by Dr. Gow.
Sir Thomas Horder and Sir Charles Gordon-Watson on duty.
Sat., ,, 21.—Rugby Match *v.* Coventry. Away.
Association Match *v.* Old Bradfieldians. Home.
Hockey Match *v.* Woolwich Garrison. Home.
Mon., ,, 23.—Special Subjects : Clinical Lecture by Mr. T. H. Just.
Tues., ,, 24.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Wed., ,, 25.—Surgery : Clinical Lecture by Mr. Just.
Hockey Match *v.* Shoeburyness G. Away.
Fri., ,, 27.—Medicine : Clinical Lecture by Dr. Graham.
Dr. Gow and Mr. Girling Ball on duty.
Sat., ,, 28.—Rugby Match *v.* Bridgewater Albion. Away.
Association Match *v.* Keble College, Oxford. Home.
Hockey Match *v.* R.N. & R.M. Away.
Mon., ,, 30.—Special Subjects : Clinical Lecture by Mr. Scott.
Tues., ,, 31.—Rugby Cup Tie *v.* King's College Hospital.
Dr. George Graham and Mr. Roberts on duty.

EDITORIAL.

CHRISTMAS passed with its usual solemnity in Hospital, but owing to the multiplicity of events our mind is still blank as to what really occurred. We remember carving the ward turkey, singing carols, drinking sister's sherry, seeing the Shows, and receiving a present from a Christmas tree ; the rest is, however, blank. Christmas Day itself, being a Sunday, was given up to feasting and somnolence, but Boxing Day was the time appointed for merriment and Ward Shows. We publish elsewhere an account of the afternoon's proceedings, and can testify as to their high quality, since several of our abdominal cases burst their stitches and had to be resutured. It was certainly a merry Christmas.

The past year has been marked by the launching of the appeal for the rebuilding of the Medical College and adoption of the Merchant Taylors' site ; it has also seen many changes, among which the retirement of our Senior Physician and Surgeon will be felt with sorrow by all Bart.'s men. We wish them both long health and much happiness in their years of retirement from the active Staff of this Hospital.

Before it is too late we wish all our readers a very prosperous New Year.

* * *

The issue of a new *British Pharmacopœia* (the sixth) is an event of prime importance to all concerned in the practice of medicine and pharmacy. Eighteen years is a comparatively long chapter in the history of modern medicine, and it is not surprising that the British Pharmacopœia, 1932, reflects progression in many directions when compared with its predecessor of 1914. The list of deletions comprises no less than 357 articles, while 128 new drugs and preparations become official for the first time ; these include insulin and pituitary extract. Alterations have been made in composition

and strength of many preparations, while the nomenclature and doses have been changed in other instances; particular attention is drawn to thyroideum, which has four synonyms—thyroideum siccum, dry thyroid, thyroid extract and thyroid gland; it is most important to note that the new B.P. thyroideum has no fresh gland equivalent. Additional standards for many of the crude vegetable drugs have been introduced, and the chemical tests for establishing the purity and identity of pharmacopœial substances are extended. Doses are given in metric and imperial measures.

* * *

At the recent examination for the Fellowship held at the College of Surgeons, no less than twenty-two of the successful candidates had attended the class held at this Hospital. We have been asked to announce that as there are only a few vacancies left for the next course, which commences on February 9th, the Sub-Dean would be pleased if all Bart.'s men who wish to attend this course would communicate with him as soon as possible. Delay often means disappointment.

* * *

Dr. Robert Hutchison will address the Abernethian Society on Thursday, February 23rd, when he has promised to read a paper on "Medicine in Horace Walpole's letters". Dr. Nabarro, of the Hospital for Sick Children, will also give a lecture to the Society on "Congenital Syphilis" during February; the date will be announced later.

* * *

We draw attention to an article which we publish entitled "The Common Cold Wins the First Round". It will be remembered that some time ago Drs. Andrewes and Oakley commenced a series of experiments to establish the validity of Prof. Dochez's findings in regard to the infective properties of certain filtrates from nasal washings in patients with colds. They hoped at the time to be able to establish a cold virus and throw light on the baffling problem of the cure of the common cold, but unfortunately their results have been disappointing so far. We would like to thank on their behalf all the human guinea-pigs who so nobly helped them in their efforts to follow up this line of investigation.

* * *

We remind our readers that the first round of the Hospital Rugger Cup will be played at Richmond on January 31st, when we meet King's.

* * *

St. Bartholomew's Hospital Alpine Club.

The Club has recently completed the second year of its existence, and judging by the activities of its members and by the good attendance at its meetings, it can now be regarded as a vital organization. Now this vitality depends to a very large extent upon the activity and enthusiasm of its younger members, an activity which is well backed and fostered by the Club's officers. It is for this reason that we are particularly anxious to hear of any potential new members that there may be amongst newcomers to the Hospital.

The objects of the Club are: (1) To hold three meetings throughout the year, at which members dine together and have an opportunity of hearing papers read on subjects of mountaineering, ski-ing, or exploring interest. (2) To organize Club meets both at home and in the Alps. The Club has already held one meet in N. Wales.

It is hoped that we shall be able to organize others in the coming year.

Any person who is interested in the Club should communicate with the secretaries, R. G. Orr (Ski-ing), C. B. M. Warren (Mountaineering).

As we go to press the tragic news has reached us of the death of Miss Barnard, Sister Dalziel of Wooler, on December 29th, after an illness lasting only two days. Miss Barnard, who was twenty-eight, succeeded Miss Powell recently as sister of the renamed Hope ward, but she had already made herself much beloved by the patients and those who had the pleasure of working with her in the ward.

We offer our most sincere sympathy to her relations and many friends in their great sorrow.

Stop Press.

Our hearty congratulations to the new Baron.

* * *

Sir Percival Horton-Smith Hartley, C.V.O., M.D., F.R.C.P.

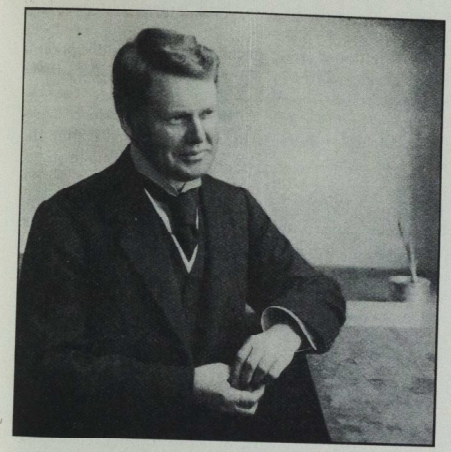
"Honour a Physician with the honour due unto him, for the uses which ye may have of him: for the Lord created him."—*Ecclesiasticus*, xxxviii, 1.

The retirement of Sir Percival Hartley comes as a real sorrow. His inspiring personality, great sense of humour and brilliant lecturing leave a gap which it would seem impossible to fill.

It may be safely said that in all its history, our Hospital has never had a lecturer with a pleasanter delivery. The easy flow of perfect English made every sentence Sir Percival spoke a joy to listen to. He was a master of the rhetorical question; a typical sentence which occurred in one of his lectures is: "And, gentlemen, who was Dover? Was he a distinguished physician? Was he a Fellow of the College? Gentlemen, he was neither, he was a buccaneer who sailed to the Spanish Main . . ."

At a time when many physicians seem to rely so largely on the Laboratory, Sir Percival remained symbolic of the dignity of clinical medicine. No one who has served under him in any capacity can have failed to have benefited from watching him examine and talk to a patient. Perhaps his most noticeable clinical gift is his marvellous percussion note; he is able to make slight differences of pitch apparent to the most uninitiated of his clerks.

As regards his patients, no matter whether they came from Bromley-by-Bow or from Stow-on-the-Wold, Sir Percival could immediately give details of the history



Sir Percival Horton-Smith Hartley.

and geography of the locality, winning at once their confidence and esteem.

The quill pen, the "Golden Book", cucurbitulæ and hirudines will long be remembered, and to those of us who had the honour of being associated with him for a time, he will always remain a very happy memory of all that is best in medicine.

A man so obviously filled with the joy of living cannot be imagined on the retired list; one feels sure that he has many years of active practice before him, and that he will add further laurels to his already most distinguished career, and in this future, it must cheer him to know that he has won the sincere affection and respect of all who came into contact with him at St. Bartholomew's.

R. E. M. F.

* * *

Mr. L. Bathe Rawling.

Mr. Rawling, whose retirement at the end of 1932 is generally deplored, was educated at Clifton, and came to Bart.'s *viâ* Caius College, Cambridge. He qualified in 1896, obtained the Brackenbury Surgical Scholarship, and having dressed for Alfred Willett and Harrison Cripps, became their house surgeon, and then Junior Demonstrator of Anatomy. He took the F.R.C.S. in 1900, and was Jacksonian Prizeman in 1902 with an essay on Fractures of the Skull, in 1904 he was appointed Assistant Surgeon, being assistant in turn to D'Arcy Power, Bruce Clarke, Lockwood and Bowlby. On the retirement of the last of these he became full Surgeon.

Meanwhile, in 1914 and the years immediately succeeding, he had been O.C. Surgical Division of the 34th General Hospital, had gone to the East, and had also been attached to the 1st and 4th London General Hospitals.

His special interest in cranial surgery was reflected in his being surgeon for about ten years to the West End Hospital for Nervous Diseases, and in the contribution of various neurological articles, and of a book on the Surgery of the Skull and Brain.

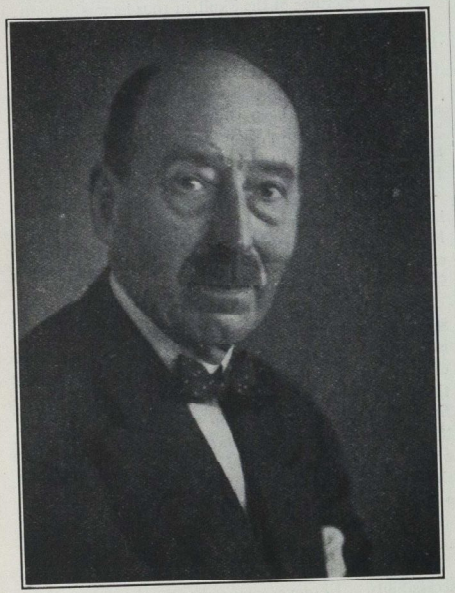
Three times Hunterian Professor at the College of Surgeons, his close association with anatomy, and especially with its surgical aspects, led to the publication of the famous *Landmarks and Surface Markings* (one of the anatomical "best-sellers"), and, more recently, of *Stepping Stones to Surgery*, in which he had the able help of Mrs. Rawling with the illustrations. When the present writer was engaged in a hopeless struggle with that student's nightmare, the pelvic fascia, Mr. Rawling greatly cheered him by confessing his own difficulties with it. His honesty in this, as in all things, was exemplary.

Another of L.B.R.'s characteristics is his kindly accessibility. He never succumbed to the illusion that cold aloofness signified dignity and distinction. His warm humanity took critical, but tolerant, note of the humblest dresser, and was always available to furnish encouragement, help and advice. His memory of those who had so passed through his hands was searchingly accurate.

As a teacher he was "first-class", being distinguished for common-sense and clinical flair, while his rounds were always enjoyable, and punctuated by some delightfully half-absent-minded remark, such as the well-known reference to "Duchesses' prostates", or "the teaching handed down to us from posterity"! The employment of a handkerchief to do duty for the great omentum is typical of his desire for clarity of demonstration.

As surgeons, others might profess to be more scientific

and technical, yet few had more courage than that required to put radon seeds into the pituitary fossa. He always held stedfastly to sane views, as when gastrectomy and colopexy were being boomed, and one of the most valuable lessons learned from him was to recommend, when in doubt, not a complicated abdominal operation, but paraffin and a belt. His final touchstone in deciding treatment was to view the matter as if he himself were the patient.



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MR. RAWLING.

A nickname is a token of affectionate familiarity, and Mr. Rawling is well provided for in this respect, for, from a certain inco-ordinate rapidity of movement and a nervous habit of running his thumb and fingers up and down the lapels of his coat, he is known to thousands of Bart.'s men and nurses as "Jumpy". He retires, youthful in spirit, manner and even looks, and whether or not he ever achieves his ambition of engaging in deep-sea fishing off New Zealand, we wish him long health and happiness in the comparative leisure which awaits him. We say "comparative", for L.B.R. would never be idle. "Vale!"

A. E. R.

ROUND THE SHOWS, 1932.

THE fact that the Christmas Shows had their origin in "The Students of this House" out of the kindness of their hearts while endeavouring to enliven the lives of "the sick poor who have not sought the relief of the charity in vain" has long since been forgotten, so that one cannot judge their excellence or otherwise upon this standard. It is hard, also, to fix a standard from amongst the mixed but appreciative audiences who flocked from ward to ward, for what one section found good another found poor, but the volume of applause remained remarkably constant throughout all the shows.

The "posters" were, on the whole, rather disappointing, showing as they did considerable artistic ability but a lack of the usual Staff leg-pulling, the exception being the unit "Crazy Week", which is reproduced here. It must be an innovation to find the names of members of the Student body upon these posters.

The Third Rait-Show suffered, as the Residents necessarily must suffer, from imperfect rehearsals. The painful waiting in darkness to the accompaniment of whispers and runnings behind closed screens only served to give us more time to digest the excellent fare which was served. Firstly there was Bill Hargreaves at the piano who was his usual acrobatic self; then Sam and his concertina, with the melancholy visage of a true performer and the whole realm of music from which to choose, played a selection of old favourites which could not have been bettered. The "Horse" in narrow confines of space managed to perform some remarkable evolutions, while "Tom the Conjuror", with surgical dexterity, was able to deceive at least one pair of eyes. Further talent came forth in a chorus, quartette and sketch. The performance of the latter did not appear to prophesy the warding of its principal later in the day with flu.

Furber's Foreign Bodies were disappointing considering the galaxy which had gathered itself together; in fact that was its main fault—they were all principals, and did not act as a background for Furber. The three choruses were excellent, and the sketch "Crossed Wires", in which a man ringing up Bart.'s to ask after his wife gets connected to a mechanic answering an inquiry about a smashed car, was amusing and polished. The two old ladies of Threadneedle Street probably produced more laughs than any other item in all the Shows.

Harold's Harlequins might almost be named "Hadfield's Harlequins", since his hand showed itself with obvious clarity throughout. The opening chorus, "In Old Vienna", which merged into "After the Ball is Over", was sung with true Christmas feeling. The sketch was a collection of funny ideas strung together in rather a meaningless manner. The *pièce de resistance*—the Scotch Reels—with pipe accompaniments, was spoilt only by the fact that Hadfield, who was a fine exponent of this dance, showed up the mediocrity of those who accompanied him. The show finished with "Good-night Ladies", sung in perfect harmony—a fitting climax to a well-rehearsed production.

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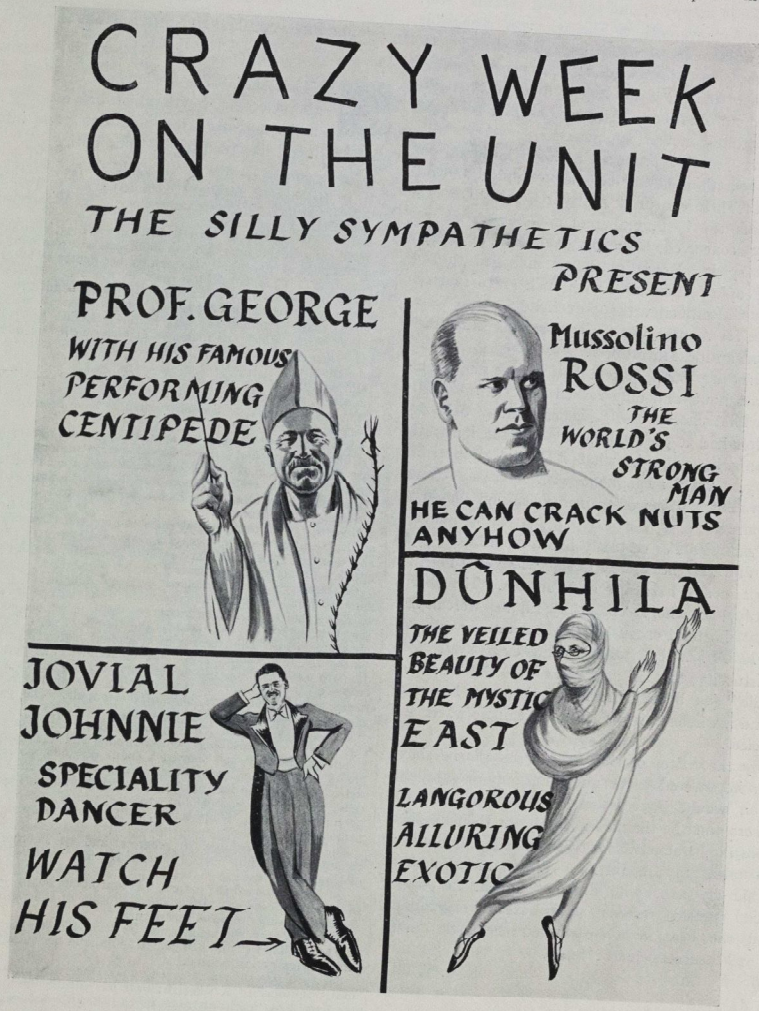


The Light Blue Masquerade was a triumph in production; there was no waiting, and the password seemed to be "Make it snappy", and snappy it certainly was. We raise our hat reverently to Ellis, who was responsible for it. The choruses were well sung, and the solo voices, although not opera singers, made their words audible. The success of the show was largely due to a first-rate pianist, and our old friend, "The Song of the Bad Egg", received its time-honoured applause.

The Green Jumpers produced a show that was, *par excellence*, something of the old school—topical and full of energy. Their chorus, "Aint-yer Coming Out To-night", was the best number of any Show, and was excellently conceived, amusing, and full of hearty Christmas spirit. How the chorus managed to sing "Crazy People" and dance with such gusto fourteen times in an afternoon without overloading their sugar catabolism for months will for ever remain a mystery. Barber was an ideal introducer.

The Unit Crazy Week, despite its title, was remarkably sober throughout, and only roused itself to full jollity with the final chorus, the "Nigger Sunday School". The sketch had a good plot, but was too long; the gentleman who sang, in what is technically termed croon-way, down a megaphone with *sotto voce* chorus in background, had a well-trained voice and should be heard again.

The Yellow Yo-Yos certainly had a magnificent style of dress, and were headed by Green, who made both an amusing and novel *compère* as Mandarin. The chorus sang lustily, but rather mechanically, till they were at last roused by the final chorus of the Executioner adapted from *The Mikado*. Erschardi played a ptah with great virtuosity, but the star turns were the "Parsons of Puddle" (we believe Prothero has missed his vocation), and a wireless play with most realistic water and other noises.

Finally the writer of this had to see all the shows whether he wanted to or not, but a more enjoyable afternoon would have been hard to imagine. The performers must be thanked not only for their kindness in appearing, but also for the amazing amount of trouble taken in preparation. We thank also those admirable die-hards who did not appear in person, but who pulled screens, distributed programmes, guarded the beer or even worked the little things which make success out of chaos.

R. C. T. L.

PRIMARY MALIGNANT INTRA-THORACIC GROWTHS.*

By SIR PERCIVAL HORTON-SMITH HARTLEY, C.V.O., M.D., F.R.C.P.

GENTLEMEN,—The following case of intra-thoracic new-growth which has recently come under my care offers points of great interest, which I should like to bring to your notice.

The patient, Mrs. M. F—, æt. 27, housewife (ex-school teacher), lived at Hethe, near Bicester, Oxon. Her habits, past history and family history were quite satisfactory. Her Wassermann and Sigma reactions were negative.

Her history was that she was well until August, 1931, when she began to have pains in the arms and the shoulders, and also in the back. She continued at home, and was seen by her doctor and treated for rheumatism. In September the pain in the arm still continued, and she found herself somewhat breathless, and inclined to cyanosis on stooping. During October these symptoms became worse.

On October 25th she was sent to the Radcliffe Infirmary and X-rayed; after which she remained at home until December 28th, 1931, when she was admitted into St. Bartholomew's (Luke Ward), under my care.

On admission she was short of breath, her face somewhat cyanosed; there was a little cough, but no phlegm. The swelling of the face and neck, which were stated to have been present, had disappeared.

I was away at the time of her admission, and did not see her then, but physical signs and X-rays showed a large tumour in the upper part of the chest above the heart, extending on each side as far as the mid-clavicular region. There was also a little fluid at the right base. The X-ray film, which I now show you, reveals very clearly the shadow of the tumour.

Deep X-ray therapy was at once commenced (December 29th), and was continued daily, except Sundays, until January 18th, 1932; and then again from February 15th to the 19th, the X-rays being applied anteriorly and posteriorly on successive days.

On January 13th I examined her, and found her in distress, suffering from orthopnœa, and with fluid in the right pleura extending to above the clavicle. The heart was displaced, the apex being in the fifth space, ⅝ in. outside the nipple line. Exploratory puncture yielded fluid, serous in character, and with a cell-count containing 80% polymorphs. Gas-replacement was performed on January 15th by Dr. Hilton, 2½ pints of clear serous fluid being removed, and replaced by 350 c.c. of air, the fluid level now only rising to the level of the angle of the scapula. The patient was then comfortable, and able to lie down.

On January 23rd an X-ray picture showed that the shadow of the growth was shrinking. On February 2nd the blood picture, which on admission had showed a count of 5,680,000 reds, hæmoglobin 77%, whites 7600, now showed some diminution of the red cells and of the hæmoglobin. The count was as follows: Red cells, 4,600,000; hæmoglobin, 70%; whites, 6000; including polymorphs, 69%; lymphocytes, 25%; large lymphocytes, 4%; eosinophils, 2%.

The patient continued to progress, and on February 9th the tumour was found, on X-ray examination, to have practically disappeared.

On February 23rd the patient was sent home, having wonderfully improved. There was still a small effusion at the right base, but the chest in other respects was natural.

On April 22nd she again came up from Bicester for inspection. She was feeling well and had gained 6½ lb., and her chest on physical examination proved normal.

On April 25th she was X-rayed by Dr. Dudley Stone, who reported that "the opacity at the right base has entirely disappeared, and the lungs look practically normal". Under the influence of X-rays the large tumour in the chest had thus completely disappeared, and we were hopeful that the good result would endure.

* Two clinical lectures delivered at St. Bartholomew's Hospital on October 21st and November 4th, 1932.

But this was not to be, for on June 3rd she returned to the Hospital with her chest still free from all signs of disease, but with a secondary growth over the seventh right rib in the mid-axillary line. This consisted of an oval swelling, 2 in. long and 1 in. broad, attached to the deeper structures, but not to the skin. The liver was found also greatly enlarged, and on palpation showed several umbilicated nodules. The spleen was also enlarged, extending 2½ in. below the ribs. A portion of the tumour in the right axilla was removed, and on microscopical examination proved to be a small round-celled sarcoma, infiltrating the adjacent striped muscle.

Not long after admission the patient commenced vomiting, and her feet became œdematous. She died on June 19th, 1932, after an illness which had lasted ten months.

At the post-mortem examination a straw-coloured effusion was found in each pleuræ. No evidence of growth could be seen in the lungs or pleura. In the superior and anterior mediastinum there was, however, a small, highly fibrotic growth, measuring 1½ in. from above downwards and 1½ in. from side to side. In its thickest part it was 1 in. deep. The growth was hard and white, and in it there were certain circular areas of necrosis. The bronchi were not involved. The liver was of great size, weighing 166 oz. and occupied by a large mass of growth, arranged in oval nodes, varying in size from ½ to 2 in. The surface of many was umbilicated. The spleen was somewhat enlarged, and contained numerous small circular hæmorrhagic deposits of secondary growth. The kidneys showed a few deposits, and the right suprarenal one small mass of growth. A similar single deposit was present also in the thyroid, the left ovary, and in the red marrow of the right femur. A few glands infiltrated with growth were found along the anterior surface of the abdominal aorta.

Dr. Cullinan's microscopical examination of the growth, removed at the post-mortem, confirmed the results obtained by bioscopy, and showed that it was sarcomatous in nature.

Such, then, are the facts in connection with this interesting case of primary intrathoracic new-growth.

Let us now consider in more detail the salient features of this grave malady.

Incidence.—There can be little doubt that the condition has been becoming of late years much more frequent. In the twelve months during which I was house physician to Dr. Gee, 1893–94, only one single case occurred in his wards, and now it is no uncommon event to see two cases in the same ward at the same time.

My personal experience is confirmed by the careful statistics collected by Drs. Maxwell and Nicholson (1) from the records of this Hospital from 1867 to 1928, which show that the incidence has as a fact been considerably increasing of late years. This is not due to any increase in the frequency of malignant growths in itself, though this probably has occurred. But our statistics show that taking malignant growths as a whole, the percentage of primary intrathoracic new-growths to all forms of growth has, of late, increased materially, rising from 3·5% in 1889 to 1893, to 14·15% in 1924 to 1928.

The cause of this increasing frequency is difficult to explain. The incidence of the disease is not connected in England with any definite occupation, though I may refer, in passing, to the large number of cases of primary intrathoracic new-growths occurring among the Schneeberg miners in Saxony. The report of the Saxon Cancer Commission (2) (1922), dealing with this matter, showed that out of 154 cases investigated by them over a period of three years, 21 died during the 3¼ years of observation, and in 13 of these (62%) carcinoma of the lung was found at the autopsy. The chief products of the mines are bismuth, arsenic and cobalt, and the radium-content of the rocks is stated to be higher than normal. It is possible that this latter is a factor in the high incidence of intrathoracic new-growth noticed among these miners.

Other possible ætiological factors have been suggested, such as exposure to the exhaust-gases of motor-cars, emanations from tar sprayed on the roads, and the smoking and inhalation of tobacco, which has increased so greatly in both sexes of late years. There is, however, no definite evidence to associate any of these causes with the malady. If such a connection exists, the disease should soon become much more common in women than it is now, the malady at the present time being three times as common in males as in females.

Age.—The statistics from St. Bartholomew's show that the disease may occur at any age, from childhood to advanced age. It is, however, rare below 20 and above 70, and occurs with greatest frequency between the ages of 40 and 55. Of 203 cases, 87, or 45%, occurred within this period.

Sex.—Statistics from all sources show that the disease predominates in the male. The collection of 60 cases made by Dr. MacBean Ross (3) at Brompton gave the proportion of males to females as 2·15 to 1. In 175 cases collected by Duguid (4), of Manchester, the proportion was 6·3 to 1. At St. Bartholomew's Drs. Maxwell and Nicholson showed that of 204 cases males were affected in 154, females in 50 only, giving a proportion of 3 to 1.

The nature of the growth: Histology.—Primary intrathoracic new-growths fifty years ago were regarded, in nearly all cases, as examples of encephaloid cancer. In the early years of the present century a change of view occurred, and it became the custom to regard them as sarcomata, of the nature especially of lymphosarcoma. Since 1926, however, following the work of W. G. Barnard (5), opinion has changed, and now nearly all primary malignant growths within the chest are believed to be carcinomatous in nature, and in the majority of cases examples of bronchial carcinoma. The observations of Dr. Maxwell (6) would suggest that taking such carcinomata together, about half are histologically of the columnar or squamous varieties; the other half are composed of small oval cells, to which the name of "oat-cells" has been given.

The fact that the histological picture differs so much—now columnar cells, now squamous, and now "oat-cells" predominating—is perhaps to be explained by the origination of the columnar and "oat-celled" tumours

from cells in different layers of the bronchial mucous membrane. The squamous-celled tumours, on the other hand, may be explained as a reversion to embryonic type; for it will be remembered that in the embryo the primitive "lung bud" springs from the floor of the embryonic pharynx, and thus the respiratory mucous membrane is originally derived from stratified epithelium. Prof. Kettle, however, points out to me that it is not uncommon in cases of bronchitis to find patches of squamous epithelium taking the place of the normal bronchial mucous membrane—possibly a protective mechanism and that if carcinoma should originate in such a situation it would be of the squamous character.

The great bulk of primary malignant intrathoracic growths, probably about 90%, must thus be considered as carcinomatous in nature. A few—perhaps 8%—arising in the mediastinal glands are, however, sarcomatous, as in the case which I have related to you. We must always also bear in mind the possibility of the growth being of the nature of lymphadenoma (Hodgkin's disease), even though there may be no enlargement of the external glands to suggest such a condition. This is of great importance, seeing that for a time, at least, such lymphadenomatous growths are amenable to X-ray treatment.

Lastly, we must remember that a few cases (certainly not more than 2%) of primary intrathoracic growth may originate in the pleura.

Site of origin in bronchus.—If the majority of cases of primary intrathoracic growth are thus of the nature of bronchial carcinoma, we must now ask ourselves in what portion of the bronchial tree they arise. The answer is that their point of origin is for the most part in the main bronchus, not far from the bifurcation.

In 183 cases at this Hospital collected by Dr. Maxwell (6) the site of origin was as follows:

	Right.	Left.
Main bronchus . . .	54	59
Upper ,, . . .	21	15
Middle ,, . . .	2	..
Lower ,, . . .	16	16
	—	—
	93	90

Thus of 183 cases, in 113 (61·8%) the growth arose in the main bronchus, the sides being affected similarly.

The growth, which thus starts in the bronchus, may, in a few cases, remain localized at the site of origin, and the physical signs produced are then largely the result of atelectasis. It is, however, more common for the growth to extend into the lung or into the mediastinal glands, both being as a rule markedly infiltrated. In the lungs the growth spreads along the bronchi, following the peribronchial lymphatics, producing an appearance resembling the fingers of the out-stretched hand.

The specimens in the bottles, which I show you, illustrate well the large size to which these growths may attain and their general appearance. Within the chest the growth may infiltrate the pericardium, sometimes forming a large cuirass, covering the anterior aspect of the heart. It may also extend into the heart itself.

Secondary growths occurring in more distant organs, and especially in the abdomen, are common. The following is the order of frequency with which they are met: The abdominal glands, the liver, the suprarenals, the kidneys and the pancreas. Sometimes growths are met with in the brain, rarely in the spleen and spinal cord.

Clinical varieties. From a clinical point of view, cases of primary intrathoracic new-growth may be conveniently divided into three groups, according as they show:

(1) Marked physical signs in the chest:

(2) Signs of pressure:

though the two are not infrequently combined.

(3) A third group consists of those cases in which the malady shows itself by a primary pleural effusion, occurring, as a rule, without pyrexia, the patient presenting himself merely on account of increasing shortness of breath. In such cases the possibility of intrathoracic new-growth should always be suspected, and the more so if there has been any history, not necessarily recent, of any surgical operation which might suggest such a condition.

The case of Mrs. M. F— which I have related to you is an example of the first group. The second clinical variety is excellently represented by another patient, A. C—, recently under my care.* In this case there were very few physical signs in the chest, but on admission left sympathetic paralysis, with slight ptosis and papillary changes was present, so that a diagnosis of intrathoracic tumour could be hazarded on first seeing the patient. He developed later some difficulty in swallowing. A little later on paralysis of the left phrenic was observed, and later still of the left recurrent laryngeal nerve, causing weak voice and "bovine" cough.

Signs of pressure.—It will be helpful, I think, if we pause now to consider in some detail what are the signs of pressure which we should look for, and what are the parts most liable to be compressed.

(1) *Veins and arteries.*—It is quite common for the superior vena cava to become compressed by growths within the chest, leading to œdema of the face and arms, and to cyanosis. Enlargement of the veins, both above and below the clavicle, often also follows, the blood from the superior vena cava endeavouring to find an entrance to the radicles of the inferior vena cava, and in this way back to the heart. In such cases the flow of blood in the enlarged veins is always downwards.

The *arteries* more rarely show signs of compression. Indeed it is noticeable at the post mortem that they may be completely surrounded by growth, yet, owing to their thicker walls and elastic character, they have shown no signs of constriction during life. Sometimes, however, one pulse, commonly the left, will be found weaker than the other, and more important still, *delayed*. Care must be taken not to attach too much importance to mere inequality of the pulses, since, owing to abnormal anatomical distribution of the vessels, one radial pulse is not uncommonly smaller than the other.

(2) *Trachea and bronchi.*—Compression upon these structures leads to dyspnœa, stridor and brassy cough. The dyspnœa is apt to come on in attacks, thick mucus tending to diminish still further an already constricted lumen. The stridor, chiefly inspiratory, is often not marked, but consists, as it were, of a slight crowing sound at the end of inspiration. The cough is peculiar, of a loud "brassy" character, and must be carefully distinguished from the "bovine" cough produced by pressure on the recurrent laryngeal nerve. The voice remains natural.

(3) *The œsophagus.*—Some degree of dysphagia is not uncommon, generally from pressure of enlarged glands from without, the growth but rarely extending into the œsophagus itself. It is curious, however, to notice how much the œsophagus may be found stretched post-mortem by a growth, without any evidence of dysphagia during life.

(4) *Nerves.*—The following nerves may undergo compression, and produce signs and symptoms which are of the utmost importance in diagnosis.

(a) *The sympathetic.*—There result from paralysis of this nerve (i) *slight ptosis*, the ocular slit on the affected side, usually the left, being diminished owing to paralysis of the unstriped fibres in the lids (Müller's muscle), which are controlled by the sympathetic. (ii) *Enophthalmos:* This is often but little marked, but when present the eyeball is seen to have receded, owing to paralysis of the unstriped fibres—also described by Müller, and also controlled by the sympathetic—which bridge the spheno-maxillary fissure, and which, when contracted, cause the eyeball to protrude. (iii) *Unequal pupils:* The pupil on the affected side becomes smaller than that on the other side, and fails to react. This is due to the unopposed action of the third nerve, when the dilating effect of the sympathetic is cut off.

(b) *The recurrent laryngeal nerve.*—This nerve is not infrequently affected, the compression leading at first to "abductor paralysis" of the cord, from destruction of the abductor fibres in the nerve. As a result the affected cord lies in the middle line. On phonation the cords can still meet, and the voice and cough are but little affected. The condition, therefore, can only be conclusively demonstrated by the laryngoscope.

This stage passes into the next, that of "complete paralysis" of the cord. The left cord now moves away from the middle line into the cadaveric position, in which it is difficult or impossible for the healthy cord to meet it. Weak voice and "bovine" cough, in which the explosive character is lacking, accordingly result.

Compression of the vagus, if it occurs, seems to produce but few symptoms, though sometimes severe paroxysms of cough, suggesting whooping-cough, may apparently result from such irritation.

(c) *The phrenic nerve.*—Increasing frequency of X-ray examination has demonstrated that in cases of intrathoracic new-growth it is not uncommon for the phrenic nerve to become involved. In such cases the diaphragm on the affected side is raised and motionless. As a rule no symptoms follow, though rarely uncontrollable hiccough has been known to result.

We must not forget that the signs of pressure, which we have been considering, do not necessarily point to growth, but indicate merely some intrathoracic tumour. They may thus equally result from aneurysm. In this case, however, we should look for that accentuation of the aortic second sound and for the "diastolic shock", which are so closely associated with aneurysm of the ascending or transverse arch of the aorta, and for tracheal tugging.

Duration of the disease.—In cases such as we are considering we can rarely hope for cure, and the question is rather how long the malady may last from the onset of its first symptom. Of 60 cases collected by Dr. J. N. MacBean Ross (3) at Brompton, the minimum duration of life was found to be two months, the maximum one year and eight months, and the average duration seven and a half months. Rarely cases last longer, and I have known one live for over three years.

Diagnosis.—I do not propose to-day to consider this subject in detail. But with regard to modern methods of diagnosis, I must emphasize the importance of the *X-rays*. They will often reveal an unusual shadow, which, in the absence of other abnormalities, may suggest the presence of a growth. It is not common for a definite tumour, with defined outline, to be seen—the edge being more often obscured and merged in the surrounding shadow cast by the collapsed and inflamed lung.

* The clinical notes were given in more detail in the lecture.

With regard to *lipiodol*, it is interesting to note that when injected into the trachea, it is seen by the X-rays not to penetrate the growth, owing to the blocking of the corresponding bronchus. But such inability to penetrate is not diagnostic, for the same phenomenon is observed in other conditions such as abscess of the lung.

In doubtful cases, *bronchoscopy*, which can be performed without an anæsthetic, should be undertaken and may be very helpful. If the growth is in one of the larger bronchi, it can often be seen, and a piece cut off for microscopical examination will reveal the nature and character of the growth.

Treatment.—In the cases under discussion, medicinal treatment can be palliative only, but if we are able to give relief, we are accomplishing much. I believe it is wise to give, first of all, a course of potassium iodide and mercury: in the presence of a spirochætal infection it may do good. But it is for the relief of pain and grave attacks of dyspnœa that our help is chiefly sought, and for the latter a medicine consisting of 5 gr. of sodium iodide and 10 gr. of chloral hydrate, every 4 or 6 hours, is often valuable, the chloral relieving the spasm of the tubes, and the sodium iodide tending to liquefy the viscid secretion which is closing the orifice, thus aiding expulsion. But in such attacks, morphia, and if a change is desirable, omnopon, should be given in doses sufficient to obtain relief. And it should be noted that in certain cases of urgent dyspnœa in which the above remedies have failed, a hypodermic injection of cocaine is stated to be sometimes effectual.

X-ray therapy.—The results obtained by this line of treatment in cases of intrathoracic new-growth have been, I regret to say, disappointing; and I believe the truth to be that cases of bronchial carcinoma, which constitute, as we have seen, the bulk of primary malignant intra-thoracic growths, are unaffected by the rays. It is possible, however, that the sarcomatous cases, which constitute perhaps 8% of all cases, may be influenced beneficially. In the patient whose history I have related to you the immediate effect was marvellous. We know also that tumours of lymphadenomatous nature react favourably to X-ray therapy.

In this connection I desire to draw your attention to the investigations of Drs. Chandler and Potter (7), who observed the effects of X-ray treatment in 56 cases. In 55 they concluded that life was not prolonged, and that, except in a few cases, no amelioration of symptoms resulted; indeed, they thought that in some cases the symptoms were aggravated. In one instance, however, a cure was effected, and the case is so important that I will give you a brief statement of the facts:

The patient was a woman, a clerk, æt. 25, who was treated in this hospital under Sir Thomas Horder and Dr. Gow.

In April, 1923, she suffered from right pleural effusion, for which she was aspirated four times. In July her left arm began to swell. On admission to St. Bartholomew's in August, 1923, she was found to have enlarged glands, and dilated veins, on both sides of the neck; the left arm was swollen, and there were signs of bilateral pleural effusion. X-rays showed a large tumour the size of a cricket-ball, with definite edges, at the root of the left lung. Paracentesis was performed, two pints of serous fluid being removed from each pleura. A gland was also removed from the right supra-clavicular fossa, and on August 28th Sir Bernard Spilsbury reported that "the appearances were those of endothelial sarcoma, such as are found in new-growths of the mediastinum". On August 24th X-ray treatment was commenced, and continued daily for 12 days. From October 22nd to October 29th this treatment was repeated. Intravenous injections of neo-kharsivan and later of collosal selenium were also given. On December 4th she was discharged *in statu quo*.

On January 2nd, 1924, she was readmitted, and the tumour on X-ray examination (by Dr. Dudley Stone) was found to have disappeared, though there was still fluid at both bases. On January 8th further X-ray treatment was given to the glands in the left side of the neck for five successive days. On April 10th there were no signs of recurrence of the tumour, but still a little fluid at the right base. On May 5th, 1925, Dr. Finzi reported that he would now "pass this skiagram as practically normal, with the exception of a few dilated bronchi on both sides". In March, 1927, the patient was in excellent health, and the skiagram was still normal. In order to bring the case up to date, Dr. Chandler, at my request, kindly communicated with her doctor, and on October 13th, 1932, he wrote me that she was still perfectly well.

This is a case of extraordinary interest, as being apparently a well-authenticated case of primary intra-thoracic sarcoma, which has been cured by X-ray treatment.

It would appear, therefore, that certain cases of intra-thoracic sarcoma are amenable to X-ray therapy. I believe therefore that, whenever a case is diagnosed as one of primary malignant intra thoracic growth, the right treatment is to prescribe a course of deep X-rays in the hope that the case may prove to be one, not of carcinoma, but of sarcoma, and thus possibly responsive to this method of treatment. As I have already pointed out, cases of lymphadenoma will also greatly benefit.

Radium treatment.—If X-rays do no good in a given case, can radium do more?

Experience would appear to show that radium given in very large doses, as a "bomb", though it may relieve pain, is not capable of causing disappearance of the growth. Nor does the application of radium as an external plaque, applied directly to the chest-wall, do more. Given in this way it may indeed cause some reduction in the swelling, if the growth has already penetrated to the surface and is thus superficial; and it may undoubtedly give considerable relief to pain. If radium is to be given, the best results, as Mr. Tudor Edwards (8), my colleague at Brompton, shows, are obtained by performing a thoracotomy, and implanting the radon seeds, some twenty in number, directly into the growth by means of an introducer. As this is withdrawn, the needle-track is coagulated by the diathermic current, to prevent the escape and possible transplantation of tumour-cells. As a result of such treatment the tumour sometimes shrinks and its shadow becomes less dense; but after a time the growth is only too apt to again advance.

Surgical treatment.—Excision of the tumour can only be considered in isolated cases, in which the growth is localized, and important structures not already involved. Mr. Tudor Edwards (9) has, however, recorded at least two cases in which excision has been successfully performed. In one case a woman, æt. 48, was found on admission to Brompton to have a tumour involving the base of the right lower lobe. Exploration, in December, 1928, showed the tumour to be localized in the lung, and without involvement of the mediastinal glands. The lower lobe of the lung containing the tumour was removed, and except for a subacute dilatation of the stomach, convalescence was uninterrupted. This patient was alive, and free from symptoms, 1 year and 8 months after the operation. In order to bring the case up to date I asked Mr. Tudor Edwards as to her present condition, and he kindly informs me that on August 22nd last she was perfectly well and in good health, 3 years and 8 months after the operation.

The second case is equally remarkable. In this case a woman, æt. 27, had suffered from hæmoptysis, and had been treated for some months for phthisis. X-ray examination revealed a bilobed tumour in the upper lobe of the left lung. Exploratory thoracotomy on January 8th, 1930, showed the tumour, which was about the size of a tangerine orange, to be lying within an enormously distended bronchus, to which it was attached by a broad base. This base was excised with the tumour, and in spite of some hæmorrhage from the lobar artery, the patient made a good recovery. The history of this patient also Mr. Tudor Edwards has kindly brought up to date, and he tells me that on August 22nd of this year she was well and symptomless, 2 years and 7 months after the operation.

In considering the question of operation, we must always remember also that the growth may possibly prove not to be malignant, as suspected, but of a more benign character, and therefore more amenable to surgical treatment. Such growths in the mediastinum consist of intrathoracic goitres—the form most commonly met with—of dermoids and teratomata, and more rarely of fibromata. In the lung hydatids are occasionally met with in England; in Australia and New Zealand they are common. If taken in time these tumours are all amenable to surgical treatment; and it has more than once occurred, when an exploratory thoracotomy has been performed, that the growth, thought to be malignant, has proved to be a dermoid or teratoma, and has been successfully removed by operation.

REFERENCES.

(1) MAXWELL and NICHOLSON.—*St. Bartholomew's Hospital Reports*, 1929, lxii, p. 204.

(2) DAVIDSON, MAURICE.—*Cancer of the Lung*. London, 1930, p. 37.

(3) ROSS, J. N. MACBEAN.—*Edinburgh Med. Journ.*, December, 1914.

(4) DUGUID, J. B.—*Lancet*, 1927, ii, p. 111.

(5) BARNARD, W. G.—"The Nature of the 'Oat-celled Sarcoma' of the Mediastinum," *Journ. Path. and Bact.*, 1926, xxix, p. 241.

(6) MAXWELL, JAMES.—*Journ. Path. and Bact.*, 1930, xxxiii, p. 233.

(7) CHANDLER, F. G., AND POTTER, C. T.—*Lancet*, September 17th, 1927, p. 596.

(8) TUDOR EDWARDS, A.—*Brit. Med. Journ.*, May 7th, 1932.

(9) *Idem.*—*Ibid.*, January 24th, 1931.

KELSTON: A VILLAGE IN SOMERSET.*

YOU may well wonder why I should detain you with a paper bearing such a title as this, for Kelston is a village which contains only 250 people, children included, and consists chiefly of a few farmers and their labourers. It lies between Bath and Bristol on the upper Bath Road four miles from that city, and possesses a small station on the Midland line from Bath to Bristol, from which there leads no real pathway to the village some mile away. It was once lovely, but the loss of the young squire Lieut. Inigo-Jones in the Great War, following as it did immediately upon the death of his father, the General, have caused great changes.

Strange to say it has been a village somewhat concerned with the medical profession. Sir Cæsar Hawkins, Surgeon to King George I and II, purchased the property from the Haringtons in 1759, and his son Charles was one of the early Masters of the College of Surgeons and was born at Kelston. In the Rectory, my own birthplace, when stripping an old paper from the walls of one of the rooms, we found some of the names of the children of a rector of the parish from 1788–1806. This rector was Mr. Edward Hawkins, a younger son of Sir John, and his large family included Cæsar Henry Hawkins, who became President of the Royal College of Surgeons and was a Fellow of the Royal

* A paper read to the Osler Club on Friday, November 18th, 1932.

Society, and Dr. Francis Hawkins, who was Censor and Registrar to the Royal College of Physicians, and Physician to the household of King William IV and Queen Victoria.

In another house at Kelston, now destroyed, lived Dr. Edward Harington, a well-known Bath physician about 1730, and his still more distinguished nephew, Dr. Henry Harington, even more noted for his musical ability than his medical skill, was a famous physician in Bath and its Mayor in 1798, and was born at the great mansion in Kelston.

Kelston Rectory provides one of the most curious coincidences in the history of medicine. Dr. Francis Hawkins and I were both sons of rectors of Kelston; he was one of some ten children, and I the centre of eleven. He had a distinguished brother who was Provost of Oriel, and I have a brother Bursar and Tutor of University College, Oxford, and until last year the Public Orator. Both he and I were Censors of the College of Physicians and both wrote on rheumatism and heart disease!

Somerset is a fertile country. One of the Haringtons had twenty children and I have mentioned other examples. When, then, in the modern advance to human perfection any here may grow over-fervent on birth control, let him think of this country village, and what it has done for medicine and surgery, general culture, music, humour and eloquence.

Dr. Henry Harington was the last of the family to be baptized at Kelston, and lived to see his noble home, possibly the largest Elizabethan mansion in Somerset, ruthlessly destroyed by Sir Cæsar Hawkins in 1765. There is, I believe, no drawing or picture of this great house in existence, but the finding of a worn survey of the parish by Thorpe in 1742, and a long study of the site and its surroundings by my family, have led us to believe it must have had, when approached from the front, some such appearance as is indicated in this drawing by one of my sisters.

The early life-history of a little rustic village lies mostly in its graves, and these are but mounds of earth, but my father in his *Kelston Memoranda* did much to rescue his village from oblivion.

The parish before the dissolution of the monasteries belonged to the Abbess of Shaftesbury in Dorset, who possessed much property in Somerset and Wiltshire, and I believe she kept at Kelston an Almoner and Cook, and there are a tithe barn, and other monastic buildings in the parish. With the dissolution Kelston suddenly became more or less famous. King Henry VIII was the prime mover, for he produced not only the dissolution, but a love-child named Ethelreda or Awdry Malte, which daughter he attached for protection and paternity to a wealthy merchant-tailor—John Malte. For which in return he gave him much property. John Malte and the King died within a few months of one another.

At this time, living at Stepney, and possibly himself in business, was a certain John Harington, descended from the once famous but then mostly ruined family of the Haringtons of Brierley in Yorkshire, who came to grief after the battle of Towton.

This gentleman married Awdry Malte, who brought with her amongst other possessions in her dowry the parish of Kelston, seized by Henry from the Abbess of Shaftesbury.

Thus the Haringtons came to Kelston, and this John Harington began the building of the great house, it is said after a design of Barozzi, the famous Italian architect.

Awdry died, leaving a daughter, Hester. Then—how or when I do not know—John Harington came into touch with the Princess Elizabeth and married again, this time one of her Maids of Honour, Isabel Markham, and both of them shared with the Princess her captivity in the Tower. John Harington paid a heavy fine of £1000 before he was liberated. He was musical, and composed the Black Sanctus, the monks' hymn to St. Satan, greatly to the annoyance of Bishop Gardiner, and also sonnets, and regulations as to the management of his household made in 1552. These were twenty-one in number and I quote two—numbers 10 and 16. No. 10, item, "if any man breake a glasse hee shall aunswer the price thereof out of his wages; and if it bee not known who broke it the buttler shall pay for it on paine of twelve pence". No. 16, item, "that none toy with the maids on payment 4d.". They give some measure of the relative value attached to the frailty of glass and man in those days. He died in London, and was buried at St. Gregory's in 1582 wealthy and much considered by Queen Elizabeth.

His eldest son by Isabel Markham was Sir John Harington, Knight, of Kelston, but I think it is not known where he was born, though the date which is given is 1561. My father, who was many years Rector of Kelston and an authority upon the family of Harington, believed that Sir John was born in London, for there is no record at Kelston and the records of that date are good. We must remember, too, that the great house, whick took, I believe, fifteen years to build, was not finished in his father's lifetime, and that the boy was a godson of Queen Elizabeth. It is said that she gave him at his christening a golden bowl. Unfortunately this treasure was lost with other Harington plate at the siege and surrender of Bristol Castle, where it had been sent for safety. If there had been a date and place inscribed on this basin they are lost to us.

We know from the inquest on his father's death in 1582 that he was twenty-one or upwards, and when a Fellow-Commoner at Cambridge in 1578 he was seventeen.

I would mention in passing that Sir John Harington was knighted by the Earl of Essex in Ireland, much to the annoyance of the Queen, who was grievously disturbed by the results of that disastrous expedition, but in 1603 he was also made Knight of the Bath by James I. I mention this because it is evident from a study of his life that the Queen in spite of her friendship did him little material service, and was, one believes, more truly devoted to his parents.

At the time of his birth he was most fortunately situated as the son of a wealthy and honoured gentleman greatly in the royal favour, but he was terribly extravagant, and spent much money over his house, at court, in lawsuits, and in his attempts to win back the estates of his great Brierley ancestors. He possessed a house in Bath, and another beautiful one, St. Katherine's Court, near Bath, now the home of the Strutts. He sold this in his lifetime, and some have said this was done to make good the cost of entertaining Queen Elizabeth at Kelston when she made her progress to Bath. But it is doubtful whether she ever visited Kelston, and Mr. Emanuel Green, in the *Field Club Magazine*, proved it to be a fallacy, although a very large and old oak tree, still standing, is, as so often happens, supposed to have been planted by the Queen. He was at school at Eton and later went to Cambridge, and came under the influence of the famous Dr. Still, Bishop of Bath and Wells.

Sir John had a charming personality, as is well attested by the fact that he was nicknamed by such great ones as Queen Elizabeth and Lord Burleigh "Boye Jacke", and later in the Calendar of State papers in 1593 it is written home from Ireland, "Essex had made many knights, among them Sir Ajax Harington"

His mature life was spent in twofold fashion: in haunting the court of Queen Elizabeth and to a lesser extent that of King James I, and in fleeing for his life from the Court to his "oves and boves" at Kelston to join his wife, "sweet Mall". "Sweet Mall" was a Miss Mary Rogers, daughter of Sir George Rogers, of Cannington, Somerset. At Kelston he wrote poetry, translated the "Orlando Furioso", superintended the building of his house, invented a water-closet, helped in the repair of the Bath Abbey, designed a lantern as a present to King James, wrote the *Metamorphosis of Ajax* and other interesting papers and many letters, including one to Mr. Isaac Newton upon the harmonic ratios, waiting there until it was once more safe to venture back to London.

We all know the story of how he translated a racy canto (No. 28), of "Orlando Furioso" and sent it to some of the ladies of the Court, through whom it fell into the hands of Queen Elizabeth; of her anger at not getting the first bite at the cherry; of his disgrace, and his ultimate forgiveness on sending her a translation of the whole poem. The title-page of that book must always be interesting if only because there is an engraving of a dog, possibly his famous dog "Bunge".

My interest naturally lies with his Kelston rather than his Court life, much of the latter of which is to be found in that strange assortment collected partly by Dr. Henry Harington, and partly by the Rev. Henry Harington—called *Nugæ Antiquæ*. I should like to take you some fine summer evening down the so-called Church Road past the site of Dr. Edward Harington's house, now replaced by a Victorian building with a tower and flagstaff, and show you the old rectory, once so lovely, now by stress of building alterations to me so cold and bare. Then lead you to where we found the site of the old mansion, and point out Sir John's bowling-green and his bathing-place and the remains of his Italian garden, and the spot where he placed his famous fountain, under which he would dine in the summer days. I should also like to show you where once stood the great avenue of trees leading to his summer-house on the brow of the hill overlooking the Somerset Avon, upon the site of which now stands the heavy Georgian mansion built by Wood for Sir Cæsar Hawkins.

I would also point out to you what I believe to be the ruins of his famous "privie", now a rock-garden, and discuss with you as to how he entered his house in the olden days with his horses and retinue, when the roads between Bath and Bristol were utterly foundered, and Queen Elizabeth at Bath was so annoyed by the state of the pitching of the streets and the open sewer that she ordered the cause of "the stink" to be removed.

He was a good and kindly man for those stern days; thus we find him writing,* "My man Ralphe hath stolen two cheeses from my dairy-house, I wishe he were chokede herewyth and yet the fellow hathe five childerne. I will not sue him if he repenthe and amendethe".

He loved "Sweet Mall", and we have this interesting note about her and the Queen: "The Queene did once aske my wife in merrie sorte, how she kepte my goodewyll and love, which I did alwayes mayntaine to be trulie goode towardes her and my children? My Mall, in wise and discreete manner, tolde her Highness, she had confidence in her husbandes understandings and courage, well founded on her own stedfastness not to offend or thwart, but to cherishe and obey, hereby did

* *Nugæ Antiquæ.*

persuade her husbande of her own affections, and in so doinge did commande his. Go to, go to, Mistresse, saithe the Queene, you arc wisely bente I finde; after such sorte do I keepe the good wyll of all my husbandes, my good people, for if they did not reste assuredc of some specyal love towarde them, they woud not readilie yeilde me suche goode obedience." Sir John's comment is: "This deserves notinge, as being bothe wise and pleascaunte".

Sir John had a brother Francis who married Joan Bailie of Kelston, and there is good evidence that they were a friendly family, but I have no knowledge of the life of his half-sister Hester, the child of Awdry Malte.

He lived at Kelston for a considerable time on end from 1591 to 1599, and finished the Ariosto translation in 1591 and the *Metamorphosis of Ajax* in 1596. A licence was refused for this book, but it was published by Field, the publisher of the Ariosto, and was twice reprinted in a few months, and a later edition was published without the name of the printer. Shortly afterwards, if not at once, followed the "Anatomie"—then an Apologie, and lastly in 1596, printed for Thomas Gubbins, came "The Ulysses upon Ajax," probably written by Harington, though I think this is disputed, and the pamphlet considered inferior, and it is certainly, if possible, coarser than the others.

Putting aside altogether the coarseness of these papers as a mere sign of the times, I look upon them as of much practical importance and by far his most valuable work. Some months ago a doctor came up to me and remarked, "I understand you are an authority on water closets". Well! I am not an authority upon them at all, but from the evidence of the Harington writings at Kelston, I am led to believe he did this country a great service. Unfortunately in these pamphlets he mixed together a practical if unpleasant subject with attacks upon his various enemies at Court, and for a supposed insult to the Earl of Leicester all but found himself in the Star Chamber. But it should certainly be realized that he converted most influential people to the use of the water-closet, including Queen Elizabeth herself. No mean accomplishment!

I should like to read you the opening letter to the *Metamorphosis* by a friend who writes asking to visit Sir John, also a small fragment of the answer to this letter, because they are interesting as throwing a little light upon Kelston in Sir John's time, and also in showing how exasperating his type of humour can prove to be to a local historian. I should also like to read you a brief account of Sir John's views on the nature of the building which was to contain what he calls "his sweete and savorie pan" and his description of this interesting device.

Before so doing, however, I must guard myself, as in Elizabethan days, by using the word "save-reverence". This is the letter:*

"Sir,

"I have heard much of your house, of your pictures, of your walks, of your ponds, and of your two boats, that came one by land and the other by sea from London-bridge, and met both at Bath-bridge; all which, God willing (if I live another summer), I will come of purpose to see; as also a swimming place, where, if one may believe your brother Francis, Diana will bathe her, and Acteon see her without horns. But to deal plainly with you, there be three special things that I have heard much boasted of, and therefore would willingliest see. The one a fountain standing on pillars, like that in Ariosto under which you may dine and sup; the second a shooting close, with a twelve score mark to every point of the card, in which I hear you have hit a mark that many shoot at; namely to make a barren stony land fruitful with a little cost, the third is a think that I cannot name well without save-reverence. Though if it be so sweet and so cleanly as I hear, it is wrong to it to use save-reverence; for one told me it is as sweet as my parlour; and I would think discourtesy, one should say, save-reverence my parlour. But if I might entreat you (as you partly promised at your last being here) to set down the manner of it in writing, so plain as our gross wits here may understand it, or to cause your man, M. Combe (who I understand can paint prettily) make a draught or plot hereof to be well conceived you should make many of your friends much beholding to you, and perhaps you might cause reformation in many houses that you wish well unto, that will think no scorn to follow your good example. Nay, to tell you my opinion seriously, if you have so easy, so cheap and so infallible a way for avoiding such annoyances in great houses, you may not only pleasure many great persons, but do her Majesty good service in her palace of Greenwich, and other stately houses that are oft annoyed with such savours, as where many mouths be fed can hardly be avoided. Also you might be a great benefactor to the City of London, and all other populous towns, who stand in great need of such conveyances. But all my fear is, that your pen having been inured to so high discourse, of dances, of knights, of arms, of loves delight, will now disdain to take so base a subject, of vaults, of sinks, privies, and draughts to write. But herein let a public benefit expel a private bashfulness; and if you must now and then break the rules *de slovilitate morum*, with some of these homely words, you see I have broken the ice to you; and you know the old saying, pens may blot, but they cannot blush. And as old Tarlton was wont to say, this same excellent word save-reverence, makes it all mannerly. Once this I dare assure you, if you can but tell a homely tale of this in prose, as cleanly as you have told in verse a bawdy tale or two in Orlando mannerly, it may pass among the sourest censurers very currently. And I thus expecting your answer hereto, at your convenient leisure, I commit you to God this of 1596.

"Your loving cousin,
"φιλοστιλπνος."

This is part of the answer:

"My Good Cousin, If you have heard so well of my poor house with the appurtenances, it were to be wished for preservation of your better conceit thereof, that you would not see them at all, they will seem to you so far short of the report; for I do compare my buildings and my writings together; in which, though the common sort think there is some worth and wit, yet the graver censors do find many faults and follies: and no marvel; for he that builds and has gathered little, and written and has read little, must needs be a bad builder and a worse writer. But as where you are disposed, either in the way of praise or of play, to extol so much the basest room of my house, as though you preferred it afore the best, your commendation is not much unlike his courtesy, that being invited by a crabbed favoured host to a neat house, did spit in his host's face, because it was the foulest part of the house.

"But, such as I have you shall be welcome to; and if I may know when you will begin your progress, I will pray my brother to be your guide; who will direct your jests in such sort as first, you shall come by a fine house that lacks a mistress; then to a fair house that mourns for a master; from whence by a straight way called the force-way, you shall come to a town that is more than a town, where

* *Metamorphosis of Ajax.*

be the waters that be more than waters. But from thence you shall pass down a stream that seems to be no stream, by cornfields that seem no fields, down a street no street, in at a gate no gate, over a bridge no bridge, into a court no court, where if I be not at home, you shall find perhaps a fool no fool."

Now as to Sir John's views upon the nature of his peculiar building:*

"Marry, Sir, my privie shall be a round (one of the five regular bodies in geometry). Built like the Tower of Babel and upon vaults too, well tarrass'd after the finest fashion; now for the tunnel, I mean to raise it in the midst, provided that divers doors and windows shall be made on every side, that if ever so little wind blow (if a man be weather wise) he shall be able to empty his belly without diseasing his nose: et fiet, say I (Like the old end of a doctor's bill)."

And now I allude to his original invention of a "sweete and savourie pan" for Kelston house and his entire command over it. He writes:

"Though I called myself an Admiral by metaphor for the water works yet I assure you this devise of mine requires not a sea of water, but a cistern, not a whole Thames full, but half tunne full, to keep all sweet and savourie. For I will undertake from the peasant's cottage to the princes Pallaces, twice so much quantity as is spent or drank in the house will serve the turne. And the devise is so little cumbersome, as it is rather a pleasure than a pain; a matter so slight, that it will seeme at the first incredible, so sure, that you will find it at all times infallible. For it doth avoid all the annoyances that can be imagined, the sight, the savour, and the cold; which last to weak bodies, is oft more hurtful than both the other, where the house stand over the brooks or vaults daily cleansed with water. And not to hold you too long in suspense the devyse is this. You shall make a false bottom to that privie that you are annoyed with either of lead or stone, the which bottom shall have a sluce of brass to let out all the filth, which if it be close plastered all about it, and renced with water as oft as occasions serve, but specially at noon and night, will keep your privie as sweete as your parlour, perhaps sweeter too, if Quale and Quando be not kept out."

Now I can dispense with "save-reverence" and return to Kelston and the Kelston House.

The only account I know of the house is the one given by a Dr. Pocock, who was touring round Bath on foot, and crossing the Avon, came over to Kelston in 1764. The Harington's had left in 1759 or thereabouts and the mansion was partially demolished. The record is far too scanty, but even if it had been more complete, I think the surroundings must have been much altered since Sir John's day. For his son John left the house to his own wife Dionysia Ley, daughter of the first Earl of Marlborough, for her lifetime, and she outlived him for twenty years, but resided chiefly in London and Bath. When, in turn, her son John, who had crossed the river to live at Corston, returned with a family which reached to twenty, he never made good the dilapidations that had been incurred through the absence of his mother from the mansion.

This is what Dr. Pocock says: "Another day I went on the south of the river (Avon) and I crossed two miles from the town to the other side. A mile and a half from this is Kelston. Kelston was the estate of John Harington who built a noble single house here of the design of Barozzi of Vignola. There is a handsome Doric door case to it, with niches in front, divided by Ionic pillars; and at the back of the house is a doorcase, if I mistake not, with an Ionic entableture, and a broken pediment with a vase in the middle, which is not judged to be in good taste, but it is in other respects a fine doorcase.

"There are two grand chimney-pieces—one in the Corinthian order, the other a bad execution of a kind of Tuscan, with a bas-relief of a king and people about him, and a tower as with men on it, under it (the bas-relief) is this inscription: Psalme cv. The windows are the large kind divided into several compartments. There is a grand room both below and above in which are these chimney-pieces; within them are two smaller rooms divided in two by cage-work, to which are closets in the (? one) tower. The staircase is in the other tower, the floors of which are of solid timber. The room up two pair of stairs seems to have been designed for a gallery; so that the sleeping rooms seem to have been in the tower. The house is all hewn stone, but of the towers only the coigns and window frames. A wing joined on each side to it of stables and kitchen offices. They are pulling all down to build a house in a very fine situation on the hill over it. Mr. Hawkins the surgeon having bought the estate."*

A rude tradition of the grandeur of Kelston house alone remained in 1865 amongst the oldest villagers, who remembered to have heard their grandsires speak of it, themselves being now fully eighty years of age. They said that the solidity of the walls was so great that they had to be broken and torn up bit by bit with iron tools.

This account of Dr. Pocock and the much faded survey map of the parish dated 1742, for a sight of which I was indebted to the late Rev. Ralph Inigo-Jones, are all I possess upon this subject. One piece of the larger tower remains, I believe, as a part of the wall of the churchyard, and there were steps down from this into what I think was the bathing-pool. One day I pulled out a piece of the moulding of an Elizabethan window from this wall. On the bowling-green, all unknowing, I made in my boyhood fifties in rustic cricket matches, but now most of it is an extension of the churchyard. One chimney-piece, the second mentioned by Dr. Pocock, was placed by Col. Inigo-Jones, who was Squire after the Hawkinses, in a stable, and is now built into the old dower-house. The only piece left of the mansion.

You may have read last year in the *Times* a correspondence about underground passages.

There is one at Kelston. A beautifully built chamber the size of a small room lies underground close to the site of the larger tower of the house, and from thence

* *Metamorphosis of Ajax.*

* "Dr. Pocock's Tour," M.S. (Additional MSS. Brit. Mus., No. 14260, *f.* 213.)

you can walk underneath the whole breadth of the churchyard, and at the exit there are steps leading out of it upward through the churchyard wall. There is also another passage from the chamber in the opposite direction, but it is not built in the same perfect fashion. It runs under the mansion toward the Italian fountain, but rapidly becomes too small even to wriggle along.

I can offer no explanation of the meaning of the larger passage, but the steps at its further end seem to make it unlikely that it was a mere drain. The smaller one may I think have carried the water away from the fountain and be of later date.

I now come to the famous lantern that Sir John sent to King James I. May I remind you that Sir John was taken from his quiet Kelston to go to Ireland with Essex, and his report on the expedition is to be found in *Nugæ Antiquæ*? On his return, no longer "Boye Jacke", but Sir John Harington, he incurred the Queen's great displeasure, and not daring to help his friend Essex, rushed back home in terror of his life.

From a letter written to Sweet Mall in 1602 we learn that he was forgiven, and I quote a few pathetic sentences of the dying Queen.

Of that critical interview with her Sir John writes: "I was not unheedful to feed her humours and reade some verses, whereat she smilede once and was pleased to saie, when thou dost feele creeping tyme at thye gate these fooleries will please thee lesse; I am past my relishe for such matters, thou seest my bodilie meat dothe not suite me well, I have eaten but one ill tasted cake since yesterday".* It is a wonderful picture this of the feebleness of the superficial, when confronted with grave reality. Before her death and in spite of all his protestations of affection—and I believe Sir John did like the Queen—he was busy making a lantern for James VI of Scotland. "It was in December 1602 having time on his hands at Kelston and whilst amusing himself with mechanical inventions, Sir John let his thoughts run as it would seem to his future prospects and the coming king, and he planned this lantern as a suitable introduction of his name and varied talents to his notice. He would fain present the king in embryo, and while still staying at 'Hallyruid' palace with a costly lantern a kind of policeman's lantern by anticipation that would turn on and off its light." This lantern was made of gold, silver, brass and iron. The top was a crown of pure gold which served as a cover to a perfume pan. Within there was a shield of embossed silver to give a reflection to the light. On the inside was the sun, moon, and seven stars, and on the outside the story of the birth and passion of Christ as it had been written by a king of the Scots, David II. There was also inscribed in Latin this sentence: "Lord remember me when Thou comest into thy Kingdom".*

Beyond the historic letter of acceptance by King James I of England, I never learned anything more of this gift until last year, when I saw in a catalogue of Messrs. Dobell a holograph manuscript of Sir John's, which contained his epigrams, and also gave an account and a coloured illustration of this lantern. With that courtesy and kindliness I have met with from many booksellers they allowed the lantern to be photographed for me, and I have also a coloured representation made for me by my sister. I suppose it is nearly fifty years since with my father I began to touch the Harington problem, and at last by the merest chance I obtained this treasure for my books.

King James materially did more for Sir John than did his godmother, for he granted him the advowson of the church St. Nicholas, which Elizabeth never did, but the Knight was never at home in the King's Court. He was getting ill and old with gout, and if the Court of Elizabeth was coarse, it was at least sparkling, while that of King James was sottish and its master pedantic.

True it is that the King had long converse with Sir John, and gravely asked him "If he did trulie understand why the Devil did work more with anceint women than others?" To which Sir John replied "That we were taught hereof in Scripture that the Devil walketh in dry places". It was, however, plain that Sir John thought the king a bore, and his Court drunken and in turn the Court passed him by.

His health continued to fail, and in 1608 he lost his favourite doggie Bunge, who carried notes for him from Kelston to Greenwich and back. He writes thus to Prince Henry:† "As we traveled towards the Bathe he 'Bunge' leapede on my horses necke, and was more earneste in fawninge and courting my notice, than what I had observed for some time back: and after my chiding his disturbing my passinge forwards he gave me some glances of such affection as moved me to cajole him: but alas! he crept suddenly into a thorny brake and died in a short time." The portrait of this famous dog is in the possession of the present family.

Life, as we know, is but another name for sadness, and so we find poor old Sir John writing:‡ "I have spente my time, my fortune and almost my honestie to buy false hope, false friends, and shallow praise. Oh, that I could boaste with chaunter David 'in te speravi domine'". He died at Kelston in 1612, and is buried

* *Nugæ Antiquæ.*

* *Kelston Memoranda*, Rev. F. J. Poynton.
† *Nugæ Antiquæ.*
‡ *Ibid.*

there in the chancel of St. Nicholas. Sweet Mall outlived him a few years and was also buried at Kelston.

It is a strange irony of fate that recently the Bath Corporation have made a sewage farm the other side of the Avon nearly opposite to Kelston, and when the wind blows in one direction a horrible stench comes across, and one can almost see Sir John once again facing this noisome problem.

There is much more that I could tell you of the Haringtons and Kelston, but already too long I have detained you with a communication that disappoints much as do the volumes of *Nugæ Antiquæ*. I must also perhaps in spite of save-reverence apologize for dwelling too long on the famous privy, but my reason was to call attention to the real importance of Sir John's work, and in passing to show you imperfectly how a tiny country village may take its part in the nation's history.

F. J. POYNTON.

MRS. DWIGGINS.

THE narration which follows is intended to help and guide any young man about to engage in country practice.

When I was a student at Bart.'s the teaching of materia medica was, to say the least of it, indifferent, but the examination itself was held by College men in high esteem. Firstly, no one had ever been known to be ploughed for it; and secondly, it could be taken whenever the candidate chose. Thus this examination possessed a peculiar value all of its own—something like the "Joker" in a pack of playing-cards. Imagine for one moment that you found yourself in that distressing position of not having passed an examination for eighteen months or even a couple of years. If you lived at home, you were not so very sure "there is no place like home." There was apt to be a sense of estrangement at times, most noticeable at the family breakfast table. Also a quite unnecessary body, styling itself the Discipline Committee, had recently come into being. The writer of this article had the honour to be the first guest invited to appear before that august if somewhat meddlesome assembly, presided over by Dr., as he was then, Wilmot Herringham. It was at such times of difficulty that the "Joker" was played, and a family, fond but fed-up, was gratified by the success of their dear boy in passing the examination in materia medica with flying colours.

My reason for thus harping on this particular part of the curriculum will soon be apparent. In those days we were given no practical instruction in the dispensing of drugs. Dr. Jimmie Calvert, the kindliest Warden who ever took a fatherly interest in his charges, delivered a short course of lectures. He intoned them in a dreary sing-song voice which promoted slumber. Well do I remember one afternoon, when attending one of his lectures, being waked up by a hard prod in the ribs by my neighbour on the back bench, to hear Dr. Calvert chanting, "Syrupus ferri phosphatis cum quinina et strychnina all very interesting isn't it Philip Gosse", to my great embarrassment, and to the hilarious joy of the rest of the audience.

The other part of our preparation consisted of committing to memory certain bawdy rhymes, and also in retiring in couples to the top balcony of the Museum. In one corner there was a collection of old drugs, evaporated liquids in bottles, jars of crystals, and various desiccated vegetables and other therapeutic odds and ends.

The game was played, and may still be played for all I know, as follows:

Both players put down a penny. Then one handed the other a bottle or jar. His opponent was allowed to look, shake, taste, in fact do anything he liked except read the label; and after due consideration he had a shot at naming it. If wrong he lost his penny; if right he had to give the correct dose, and not till then might he take up both the pennies.

Then the questioner became the questioned, and so the game went on until it was time to go to the "White Horse."*

As to practical dispensing, as I say, there was none, and no student dared go near the Dispensary.

After a considerable number of years of close study in surgery, medicine and gynæcology, the College examiners were at last persuaded that I was a fit subject for qualification, and I procured a six months' appointment as H.S. at a small provincial hospital.

Directly afterwards, without ever doing a "locum," I set up in practice in a secluded village in the New Forest. There was no other doctor in the place, which was a happy hunting-ground for some half a dozen practitioners from different villages five or six miles away.

For some while nothing happened, except that one or two misguided persons, no doubt crazed by pain, called to have their teeth extracted.

Then one day, as I happened to be building an aviary in my garden, the maid came to tell me a child had called to ask that I should go at once to see Mrs. Dwiggins.

I knew my opportunity had come.

Mrs. Dwiggins was the wife of the man who kept the

* Off Little Brittain, not the "White Hart."—ED.

principal village shop. He was also a sidesman in the church, and altogether the most important man in the place.

At his shop was sold bacon, boots, blotting-paper, ready-made clothes, groceries, various agricultural instruments, sweets in big stoppered bottles—in fact, almost everything the local inhabitants could want.

Dwiggins's shop was also the centre for local gossip, news and general scandal—not unlike the Fountain in the Hospital Square.

It lay in the power of Mr. or Mrs. Dwiggins to make or break the reputation of a new doctor. My maid, a dull girl and new to service in a doctor's house, had most stupidly let the child messenger go without trying to ascertain what sort of illness Mrs. Dwiggins was suffering from; so that I arrived at the house with nothing to help me in my diagnosis.

On entering the best parlour I found a large, pink, full-bodied woman sitting in an arm-chair by the fire, surrounded by her family and more intimate female friends, who were not going to miss the treat. After an examination, mostly oral, and the application of the stethoscope to one coyly exposed square inch of Mrs. Dwiggins' chest-wall, I retired, giving instructions that the medicine should be called for in an hour's time.

Hurrying home to my new and well-supplied dispensary, I got to work. Various authorities were consulted, many prescriptions looked up; but my mind kept harking back to pulv. glycyrrhizæ co. Why this was I do not know, but the fact remains. The liquorice powder I had in stock was made according to the Prussian Pharmacopœia; again I don't know why, but it was before the war. Now I knew better than to give Mrs. Dwiggins plain liquorice powder, because I happened to know they sold it over the counter of their shop, and might recognize it.

So I decided to make a mixture.

Into an 8 oz. bottle I put, after carefully weighing it in my nice new scales, a full dose of the Prussian powder. Then I thought I would disguise it with one of the flavouring essences of which the traveller had persuaded me to lay in a large stock. So into the bottle went a generous helping of syrup of orange blossom. Wishing my medicine to be particularly nice and sweet I next added an ounce or two of glycerine, and filled up the bottle with water from the tap.

By the time the label had been written and the bottle corked and wrapped in paper and sealing-wax, the hour had gone and the child arrived for the medicine and took it away.

Next morning, just as I was wondering if I was expected to call again on my patient, and if I did whether they would think I was over-doing it, the same child came running to the house and said breathlessly, "Please will the doctor come at once to Mrs. Dwiggins?"

I will confess that I went cold all over.

Had I missed a strangulated hernia, an acute appendix, pneumonia? Why had I not had the courage of mind to clear the room of superfluous onlookers and insisted on a thorough examination of the patient in bed? On arriving at the house I was ushered into the same parlour, and one glance was enough to tell me something was wrong. Not only was there a feeling of hostility amongst the bystanders, but there was something odd about the walls and ceiling.

Mr. Dwiggins then cleared his throat and said, "Doctor, will you please explain the meaning of that?" and pointed to the ceiling. I looked up, and there and on the walls were numerous brown splashes.

I made no reply, for I did not know what the stains meant.

Mr. Dwiggins soon enlightened me. It seemed that half an hour previously, while serving a customer with a pair of bootlaces, he heard a loud noise in the parlour. Leaving his customer alone in the shop, he had rushed in to find Mrs. Dwiggins in a faint and the ceiling and walls covered with brown splashes.

My bottle of medicine had blown up!

And there I stood, with the Dwiggins family and friends all round, waiting for my explanation.

I can assure my readers that the position for me was far from pleasant. I had not an earthly idea why my bottle of medicine had burst. I had never before heard of such a thing happening, and certainly Dr. Calvert had never told us that bottles of medicine could burst. If he had, his lectures would have been better attended and more closely followed. Yet something had to be done about it, and done soon. That I knew only too well.

But whatever was I to say? I recognized, too, that I was face to face with that one great moment that comes in the lives of each one of us, when a decision, a word even, may make or break our careers.

Then the old instinct of the much-harrowed-by-examiners came back to me: that longing to postpone making an answer to a question, in the fond but usually barren hope that the right answer will be vouchsafed.

At last, with the sole object of gaining time, I broke the awful silence by asking the stupid question, "Where was the bottle when it happened?"

"Standing on the mantlepiece," replied Mr. Dwiggins, as much as to say, "Where else would a bottle of medicine stand?"

A pause: and I saw light, escape, honour.

"What," I asked, "Do you mean to tell me that you placed a bottle of medicine on that mantlepiece with that great fire burning? No wonder it burst."

I was saved! Mr. Dwiggins turned upon Mrs. Dwiggins and upbraided her for being so stupid as to place a bottle of medicine near the fire, and reminded her how often he had warned her against that very thing.

As Mr. Dwiggins saw me off from the house he said he hoped I would call again next day, and added, "I'm a believer in good strong medicines myself, doctor".

When I got home I made exhaustive inquiries into the books on the subject, and apparently pulv. glycyrrhizæ co. when mixed with glycerine and brought to a certain temperature is apt to make an explosive mixture in a closed bottle.

But Dr. Calvert never told us anything about that.

PHILIP GOSSE.

SOME ASPECTS OF KETOGENIC DIET IN RELATION TO URINARY INFECTION.

RECURRENT and persistent infections of the urinary tract, especially those of the bladder and renal pelves, are frequently so resistant to treatment as to be the cause of protracted ill-health on the part of the patient and anxiety to the medical attendant.

The introduction of a ketogenic diet has added considerably to the study and treatment of this difficult condition, but at the same time there are many cases which derive little or no benefit from it, it is this latter type of case which is of particular interest, and where ultimate success depends so largely upon the co-operation of the dietitian and the urologist; the investigations necessary in many of these cases being of such a nature that specialized skill is often required both in the investigation and interpretation of the urological findings.

When considering those conditions which are liable to predispose to, or aggravate, an infection of the urinary tract, they may be divided conveniently into two main groups—(1) dynamic or neuro-muscular, (2) static or mechanical.

(1) *The neuro-muscular causes* are frequently overlooked unless specially considered, as in such examples as *congenital hydro-ureter* with congenital hydronephrosis; often a similar condition is seen affecting the neuro-muscular mechanism of the bladder.

Muscular atony of neurogenic origin, as in such cases as spina bifida, cerebro-spinal syphilis, anterior poliomyelitis, etc.

(2) *Mechanical causes.*—This group is so large that its enumeration would cover almost every branch of urology; there are, however, several common causes which are well known, and for which careful search should be made before commencing a ketogenic diet:

(*a*) Calculi in the urinary tract.

(*b*) Obstruction to the flow of urine due to extrinsic causes, such as fibrosis or abnormal anatomical structures causing a kinking of the ureter.

(*c*) Abnormalities of the renal pelvis, especially a dependent lower calyx.

It is obvious that accurate diagnosis is essential before commencing dietetic treatment, and it is impossible to put too much stress upon the necessity of certain fundamental investigations of the urinary tract; including the urine, plain X-rays of the urinary tract, pyelography and ureterography, and cystoscopy.

Not infrequently one is tempted, during the course of investigating urinary cases, to omit one or more of the fundamental examinations, and later there is reason to regret this; before commencing to treat cases by diet, it is wise in any doubtful case to have carried out such investigations as will remove from one's mind any doubts as to the freedom of the urinary tract from any cause liable to retard or prevent the curative process.

Pyelography, as being a simple investigation, has come into prominence during the last two or three years with the introduction of the intravenous method, the advantages of which are facility of carrying it out and the absence of undue discomfort to the patient (cystoscopy being necessary for the previous form of instrumental pyelography).

In all cases of intravenous pyelography an examination, by a ureterogram, should also be made of the lower and upper ends of the ureter; it is here that so many cases show an abnormality, easily overlooked, but which is sufficient to bring about a failure in treatment by the ketogenic diet.

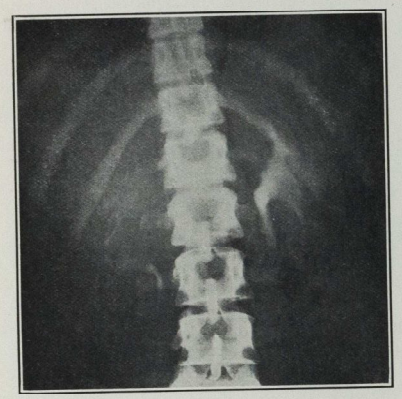
In children it is not uncommon for small stones to be present which, although not demonstrated by X-rays, show evidence of their presence by the obstruction caused, *e.g.* a hydronephrosis only demonstrated, in the early stage, by a pyelogram.

Intravenous pyelography, on the other hand, must never be taken as being universally applicable as a substitute for a retrograde or instrumental pyelogram, the latter often demonstrating abnormalities, indicative of pathological changes, which are not shown by an intravenous pyelogram; an omission to perform an instrumental pyelogram, in cases where the intravenous method is doubtful in its interpretation, may again be a cause of error in selection of those cases suitable for dietetic treatment.

With the advent of intravenous pyelography these cases of urinary infection are less commonly seen by the

surgeon for cystoscopy and instrumental pyelography, the cystoscopic findings being thus sometimes omitted.

Much valuable information is often to be gathered from an accurate knowledge of the interior of the bladder, the ureteric orifices and posterior urethra; early tuberculous disease of a kidney is a well-known example,



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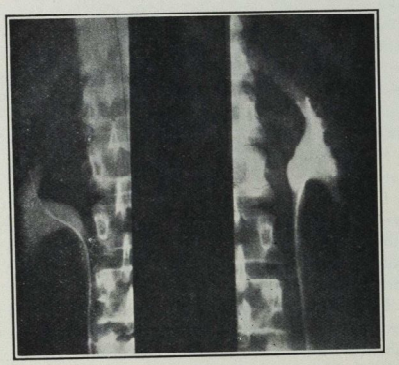


MRS. E—.

while less common is the case of a diverticulum of the bladder, diagnosed at cystoscopy, while the intravenous cystogram may have revealed no abnormality.

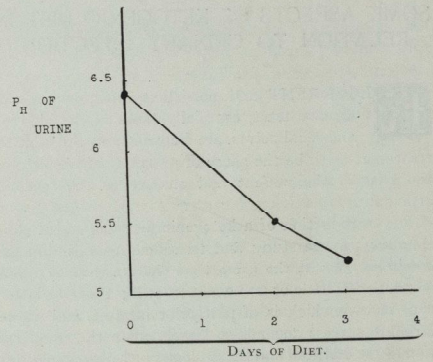
Thus the cystoscope as a valuable aid in diagnosis and investigation must always be borne in mind when cases are resistant to treatment by a ketogenic diet.

The pH of the urine is interesting when observed during treatment: several observers have noted that although in most cases the pH falls and remains down, in others it remains comparatively unaffected, or, after a temporary fall, rises in spite of raising the fat-carbohydrate ratio.

Insufficient is known at present to discuss this fact, but as it has occurred in several cases where there is obstruction, the observation would appear worthy of further investigation.

Briefly, treatment of these cases where some abnormality exists in the urinary tract depends essentially in removing or rectifying the abnormality causing or aggravating the urinary infection.

In the static or mechanical group of cases the aim is to remove the obstruction, *e.g.* a stone, or to rectify the pathological static condition as in the case of anomalies of the renal pelvis.



In the dynamic type of case the aim is to restore the normal neuro-muscular working as by the operation of pre-sacral neurectomy.

After all attempts have been made to restore the urinary tract to its normal anatomical condition—then a ketogenic diet has every opportunity of bringing about the successful and often dramatic cures which we know occur in many cases of urinary infection.

The following cases are of interest in illustrating some of the preceding points:

Mrs. E—, æt. 32, housewife.

March 2nd, 1932: Onset of symptoms of right-sided pyelitis; there was no increased frequency of micturition. Temperature 100°, pulse 100.

Previous history of a similar attack three months ago. Temperature became normal after twenty-four hours.

Urine contained a few pus-cells—3 per ⅛ in. field and a profuse growth of *Bacillus coli communis*.

X-rays of urinary tract.—No abnormality seen.

Ureteric catheterization showed bilateral pyelitis.

Intravenous and instrumental pyelography was performed (see skiagrams), the essential points being the regularity of contour and the absence of any kinking or obstruction to the ureters; the *ureterograms* were normal.

The ketogenic diet was commenced and the chart shows the changes in pH.

Urine, March 18th, 1932 (before diet): Pus 2–5 per ⅛ in. field; *B. coli* ++; on fourth day of diet yielded only 13,000 organisms per c.c. The diet was unfortunately not continued after the ninth day; on the twelfth day there were large numbers of *B. coli* in the urine.

The patient was discharged April 17th, 1932, having very mild symptoms; on December 14th, 1932, the urine was sterile, contained no pus-cells, and the patient had been free of symptoms for the last four months.

Mrs. B—, æt. 32, machinist.

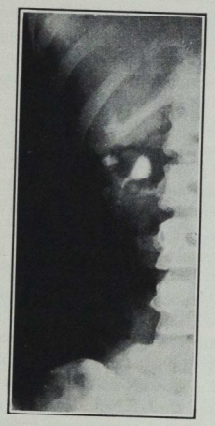
Admitted March 14th, 1932, with a history of two years' recurrent infection of the urine.

X-rays of urinary tract.—No abnormality seen.

Cystoscopy.—Bladder natural.

Ureteric catheterization.—Right-sided infection.

Intravenous pyelography showed a filling defect of the pelvi-ureteral junction on the right side.



MRS. B—. RIGHT.

Right instrumental pyelogram.—Ureteric catheter would not pass into the renal pelvis. On distension with 20 c.c. there appeared a hydronephrosis of the pelvic type with a marked filling defect of the pelvic ureteral junction; there was no hydro-ureter.

Urine.—Pus-cells 4–5 per ⅛-in. field. Profuse growth of *Bacillus coli communis*.

The ketogenic diet was given to the patient, the resultant changes in the pH of the urine being shown in the chart.

The urine remained heavily infected.

In view of the appearance of the right renal pelvis this was explored by Mr. Girling Ball on April 22nd, 1932.

Operation.—The pelvis was dilated; the ureter was bound down to the lower edge of the pelvis by adhesions, causing marked kinking. The ureter was freed and nephropexy performed. Discharged May 24th, 1932; urine still infected.

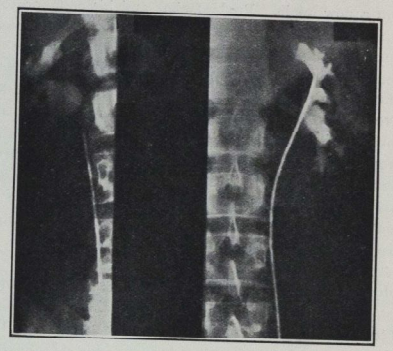
The patient is now quite free from symptoms, and on November 17th, 1932, the urine contained no pus and was sterile.

In these cases the diet was in the ratio of 2 to 1 fat to carbohydrate and protein combined—later the ratio was raised to 3 to 1.

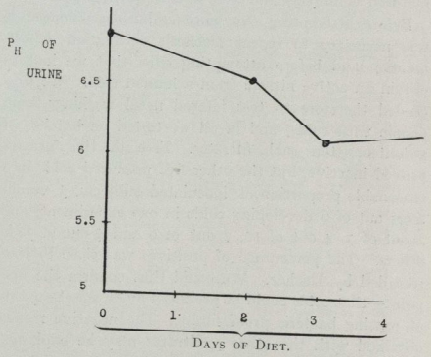
Taking an average diet of 3119 calories containing 410·7 grm. carbohydrate, 83·8 protein and 118·6 of fat, the ketogenic diet was maintained at 2118 calories, thus giving 43·1 grm. carbohydrate, 50·5 protein and 186·5 of fat for a 2 to 1 ratio, and 203 grm. of fat and 68 (carbohydrate + protein) for a 3 to 1 ratio.

These ratios are here worked out as a gramme ratio, not, as is sometimes used, a ketogenic-antiketogenic ratio.

The clinical observations upon these and other similar cases can in no way serve as a complete explanation of



MRS. B—.



the phenomena taking place in certain patients under treatment by a ketogenic diet for infections of the urinary tract; it is, however, hoped that they will be of assistance to those who are as yet unacquainted with this form of treatment, and may add in a small way to the observations of those who are experienced in the bacteriological and bio-chemical reactions concerned.

In conclusion, I wish to express my gratitude to Mr. Girling Ball for his kind permission to investigate and publish these cases.

W. E. UNDERWOOD.

THE COMMON COLD WINS THE FIRST ROUND.

RATHER more than a year ago we raised in your columns the question, "Why dod't dogtors do subthig aboud codes id der dose"?* The baffling problem of the cause and cure of colds offered at that time a prospect of being profitably attacked from a new angle. Prof. Dochez and his collaborators in New York had lately reported that they could infect chimpanzees and human volunteers with filtrates of nasal washings from patients with colds; there was thus support for the view that at any rate some colds were due to a filterable virus. Furthermore they announced that they had succeeded in cultivating this virus in a medium containing minced chicken embryo and kept under strictly anaërobic conditions. We felt that if this could be confirmed, it might be possible to gain a lot of new information about colds and the cold virus.

Accordingly we appealed to Bart.'s students to volunteer as "laboratory animals" on whom we could test our cultures, since chimpanzees, the only susceptible animal other than man, were not available. The response was magnificent; we at once obtained a hundred volunteers and were able to go right ahead.

Before attempting our more ambitious schemes, it was necessary to repeat Dochez's cultivation experiments; and before attempting even that we had to obtain an active filtrate from a human cold. We proceeded therefore to test filtered nasal washings from people with colds, and in all we tested on batches of volunteers ten such filtrates. Five of the filtrates proved inactive, but the other five produced colds in a reasonable proportion of inoculated subjects, 3 volunteers out of 6 developing colds in one experiment, and 2 out of 7, 4 out of 10, 2 out of 6 and 4 out of 7 in others. The percentage of positives was close to that recorded by Dochez. We could thus confirm the first point—that colds could be produced by an agent capable of passing bacteria-proof filters. The negative results obtained with the other 5 filtrates may be explained either by supposing that some colds are not produced by a filterable virus, or that in 5 instances we did not obtain our virus in sufficient quantity to produce any infection.

With the three most favourable filtrates we made cultures in Dochez's chick-embryo medium. We carried these on for a varying number of subcultures and then tested them; but, alas, our results were entirely negative. Twenty-four students inoculated with cultures from these three colds remained in exasperatingly blooming health.

We informed Prof. Dochez of our failure to infect Bart.'s students with cultures, although they were fully as susceptible to primary filtrates as were American volunteers. He could not explain our results. At the beginning of August he came over from New York in the "Bremen," having rigged up an incubator in his cabin in order that he might bring cultures over with the minimum of disturbance. Other cultures he brought over in the special chamber in which the "Bremen" cools its beer. He felt confident that the virus, some of which had proved active shortly before he sailed, should have survived the journey. The day after he landed 3 strains of virus were tested by Dochez himself on 7 Bart.'s students and 4 first subcultures from two of them were tested on 6 more. Not one of the men turned a hair; there was not even a flicker on their ciliated epithelia.

Now a remarkable feature of Dochez's cultivation work had been this: that chimpanzees and human volunteers had proved equally susceptible to his primary filtrates of cold nose-washings, but only his human volunteers could be infected with his culture-virus; the chimpanzees were quite resistant. So naturally wags came forth and pointed out that the Bart.'s student (at least in his reaction to culture-virus) differed from the American citizen and resembled the chimpanzee. Anyway, despite these negative results, we carried on one of the American strains for 15 subcultures or at any rate went through the motions of carrying it on, for we had no evidence that a virus was present at all. And then, before Dochez took it back to America to see whether or no it had survived its travels, and would still infect Americans, we tested it on 22 more volunteers in three lots. Seven of these volunteers were farm-hands at Mill, and the remainder Bart.'s students. Four of them developed colds, 2 farm hands and 2 students—and 1 further student acquired a sore throat. We felt that 4 out of 22 wasn't enough to be very convincing, and we were particularly doubtful as to whether we had produced infection with a virus in our cultures, in that these last tests were performed in late September and early October at a time when a crop of winter colds was appearing, and every other passenger in the tubes had a cough or a sneeze.

We hear from Dochez that the culture, back on its native heath, couldn't do more than produce 1 doubtful cold in 3 inoculated volunteers. So the whole affair is left at present in a rather unsatisfactory position. We cannot infect English volunteers with cultures from English cold virus, nor can we convince ourselves that American cultures do much better. And since we cannot cultivate the virus, we can't start to do all the other exciting things we planned last year. We do not feel at all that we have disproved Dochez's claim to have cultivated a cold virus; we have merely failed to confirm it, which is a different story. We are writing this now because we feel that the many students who co operated with us will wish to know, and are entitled to know what the upshot of it all has been. We are sorry that the results are so disappointing, and that we are unlikely to be receiving a Nobel Prize which we could share with them, but we wish to take the opportunity of thanking them all for their keen and willing co-operation.

C. H. ANDREWES.
W. G. OAKLEY.

P.S.—At the tibe of writig this, wud of us has a foul code in der dose. Why dod't dogtors do subthig about it? It's a scaddal. The professiod oughd to be ashabed of itself.

* *St. Bartholomew's Hospital Journal*, November, 1931, pp. 28–30.

STUDENTS' UNION.

RUGBY FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* DEVONPORT SERVICES.

Played on Saturday, November 26th, at Devonport. Lost, 6—14.

The weather for this game was good, but the condition of the ground was not, a thick layer of glutinous mud covering the whole field. In spite of this the handling of both sets of backs was excellent, and the result of the game doubtful until the last ten minutes.

The only try of a very even first half was scored when Walsham picked up a loose ball and ran through to touch down. It was not converted (0—3).

The second half started off as well as the first and, though Bart.'s were not attacking so often, our defence held out against the vigorous onslaught of the Services, except for one brief but ghastly spell when they scored three tries in rapid succession, one of which was converted (6—14). The Hospital replied with some remarkably good forward rushes and strong attacks outside, and if the game had lasted longer, might easily have got even. As it was, two tries were scored, and so ended a very fast and enjoyable game, notable especially for Pirie's magnificent exhibition as a wing forward.

Team.—C. R. Morison (*back*); J. D. Powell, L. M. Curtiss, C. A. Fairlie-Clarke, J. G. Nel (*three-quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper, E. M. Darmady, B. S. Lewis, R. Mundy, J. W. Cope, F. H. Masina, E. E. Harris, A. H. Pirie (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* R.N.E.C., KEYHAM.

Played on Monday, November 28th, at Keynam. Won 11—8.

The ground was in far better condition than the Rectory ground. Bart.'s were not at full strength, but played magnificently throughout. Masina had to hook, as neither Darmady, Patterson nor Harvey were available, and he did well in securing the ball more often than his opposite number. Consequently the Hospital outsides had plenty of the ball and made full use of it, being unlucky not to score more often.

During the first half Bart.'s scored once, when Kingdon cut through and touched down behind the posts, Pirie converting. Keyham also scored through Kirkby, so the Hospital led 5—3 at half-time. In the second half play was even, but two penalty goals were kicked by Pirie and Morison, the latter's being a magnificent drop-kick from a long way out (11—3). The College scored with another try by Kirkby, which Fulljames converted (11—8). Such was a pleasant ending to a very pleasant week-end.

Team.—C. R. Morison (*back*); J. G. Nel, L. M. Curtiss, A. H. Pirie, C. A. Fairlie-Clarke (*three-quarters*); J. T. C. Taylor, J. R. Kingdon (*halves*); B. S. Lewis, R. Mundy, F. H. Masina, E. E. Harris, A. H. Grant, F. J. S. Baker, D. W. Moynagh, A. N. Other (*forwards*).

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

Played on Saturday, December 3rd, at Rugby. Lost 11—14.

This was, perhaps, the most unlucky game this year, for though Rugby appeared to be anything but a good side, the Hospital were quite unable to stop their scoring from the most unlikely positions. Bart.'s started with a fine try by Nel, who ran half the length of the field up the touch-line, selling dummies to everybody who cared to take them.

We continued to do most of the attacking, but they scored a try, which they converted, and later a penalty, and so led at half-time by 8—5.

Immediately after the re-start Harvey finished a magnificent piece of dribbling by scoring far out; so we were 8 all with the hill to help us. They scored twice more and then we attacked continually, but only got one more try by Fairlie-Clarke, none of these four tries being converted.

Team.—C. R. Morison (*back*); J. G. Nel, L. M. Curtiss, C. A. Fairlie-Clarke, J. D. Powell (*three-quarters*); J. T. C. Taylor, J. R. Kingdon (*halves*); W. M. Capper, B. S. Lewis, J. M. Jackson, R. Mundy, J. D. Wilson, K. J. Harvey, D. W. Moynagh, F. H. Masina (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* R.M.A., WOOLWICH.

Played on Wednesday, December 7th, at Winchmore Hill.

On a heavy ground Bart.'s were forced to include seven "A" XV players, and at the outset both teams were inclined to be ragged, play being largely confined to our half of the field. Superior line-out work enabled the heavily built "Shop" backs to indulge in several rounds of passing, but the tackling by the Bart.'s centres showed improvement upon that of previous games, and a quarter of an hour had elapsed before a good movement ended in the Woolwich left wing scoring far out (0—3). This setback can hardly be said to have roused Bart.'s, the pack still showing few signs of settling down, while the handling of most of the forwards with the exception of Capper and Harvey was execrable. At last a good run by Capper took play to the "Shop" half, and following neat combination between F. J. Beilby and J. D. Powell, L. M. Curtiss ran over, for Capper to kick a goal (5—3).

The Hospital now showed all-round improvement, the forwards livening up considerably, though still being far from homogeneous, and from a quick heel D. A. Prothero, who had been giving a most promising exhibition on his first appearance for the 1st XV, darted away from the base of the scrum to score an excellent try between the posts. Capper converted (10—3). Bart.'s went further ahead before half-time, when Beilby scored a try which Capper again converted.

Half-time: Bart.'s 15, R.M.A. 3.

Within seven minutes of the re-start Woolwich reduced the lead; their forwards dribbled the ball into the Bart.'s "25", and a quick heel enabled W. T. Sedgwick at fly-half to race through for a good try. The kick failed (16—6). The "Shop" were very unlucky not to reduce the deficit still further shortly afterwards, when they dribbled the ball over the Bart.'s line and appeared to touch down, only for a drop-out to be awarded. Some good touch-finding by Prothero, Beilby and Powell took play to the R.M.A. half, and in the space of five minutes the Hospital lost three striking opportunities of scoring, once following a brilliant run by J. G. Nel, which was wasted by the final pass being dropped on the line, and twice through the utter refusal of a centre to give the ball to Powell when the latter was unmarked with a clear run in before him. Consequently the only addition to our score in this half came a few minutes from the end, when Capper kicked a good penalty goal from far out.

This may seem a rather over-critical report considering that we included seven "A" team players, but though that fact may well explain the lack of cohesion, it is no excuse at all for the bad handling of the forwards, and the lack of knowledge of how and when to give a pass which was apparent in certain individuals, both forward and back.

Of our pack, Capper, Mundy and Harvey were the best (the last named is now getting back into his last year's form), while of the backs Prothero and Beilby combined very well, and Fairlie-Clarke was sound in the centre, and probably the best of the three-quarters, Nel being too prone to kick when he might well have outpaced the R.M.A., and Powell being marked out by Fate for starvation from the point of view of receiving passes.

Result: St. Bartholomew's Hospital 4 goals (1 penalty) (18 pts.); R.M.A., Woolwich, 2 tries (6 pts.).

Team.—C. W. John (*back*); J. G. Nel, G. A. Fairlie-Clarke, L. M. Curtiss, J. D. Powell (*three-quarters*); F. J. Beilby, D. A. Prothero (*halves*); W. M. Capper (capt.), R. Mundy, K. J. Harvey, A. T. Blair, F. H. Masina, D. W. Moynagh, E. E. Harris, J. F. S. Baker (*forwards*).

ASSOCIATION FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* LANCING OLD BOYS.

Played on Saturday, November 19th, at Winchmore Hill. Lost, 3—0.

The somewhat heavy deficit in goals suggests that the Lancing Old Boys had matters all their own way. For spells they certainly did score at a most disconcerting rate, but never were they allowed to keep up a prolonged attack. Their goals came mostly as a result of quick movements with clean passing. Their finishing was efficient and they seldom threw away an opportunity of scoring. Their whole forward line was up with every attack, and this, together with their positioning, was the chief factor in their superiority during the first half.

The state of the ground was poor, thick in mud, and showing far too little grass. It appeared that defence would have all the advantages over attack, and yet half-time came with the Old Boys leading by 6—0. Two of these goals were due to feeble attempts at clearing, the ball travelling to the feet of the opposing inside forwards. The other four were all due to our half-backs failing to get back quick enough when once their opposite numbers had eluded them. This fault was rectified in the second half, when the defence tightened up its marking, quickened its tackling and generally played much better.

Soon after half-time Wheeler scored, following a mishandling by their goalkeeper. It was a most excusable mistake on such a day, and emphasized Wenger's consistently good handling of a very slippery ball. Not one of the nine was through any fault of the goal-keeper's, and there were many very good saves. Wenger also contrived to crush any of their forwards who were rash enough to come into contact with him.

The game took a turn for the better, Dransfield and then Shackman scoring good goals. For long periods the Hospital were playing better football than the opposition, but the defence weakened again towards the end, the Lancing Old Boys adding two more plausible and one lucky goal to their total. For all that it was a thoroughly good game.

Team.—R. A. L. Wenger (*goal*); J. Shields, A. H. Hunt (*backs*); J. D. Ogilvie, J. W. B. Waring, W. M. Maidlow (*halves*); P. Brownlees, F. E. Wheeler, R. Shackman, C. M. Dransfield, H. A. Pearce (*forwards*).

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

Played on Saturday, December 3rd, at Honor Oak. Lost, 1—2.

This game was a very good demonstration of the Hospital's capacity for getting the upper hand in all branches of the game except the scoring of goals. The Guy's defence was in a state of perpetual activity during the first twenty minutes of the game, when Wheeler scored. Guy's retaliated towards the end of the first half, but they deserved to have been well beaten by that time. The second half was conspicuous for the lack of constructive play by the Bart.'s halves. The forwards were served up with a lot of airy flying kicks that gave the opposing defence ample time to get into position and so cope adequately with the movements that developed. On other occasions they were so slow in opening up the game that again the Guy's defence had the advantage. Guy's scored again about twenty minutes from the end. They were not a good side and we should have trounced them.

Team.—R. A. L. Wenger (*goal*); J. Shields, A. H. Hunt (*backs*); D. R. S. Howell, J. W. B. Waring, W. M. Maidlow (*halves*); P. Brownlees, F. E. Wheeler, R. Shackman, C. M. Dransfield, R. C. Dolly (*forwards*).

Owing to pressure of space, other reports Book Reviews, etc., have been held over till February.—ED.

EXAMINATIONS, ETC.

University of London.

Third (M.B., B.S.) Examination for Medical Degrees, November, 1932.

Honours.—Blackburne, J. R. (*d*), Francis, A. E. (*a*).

(*d*) Distinction in Surgery.
(*a*) Distinction in Medicine.

Pass.—Angel, R. E., Blumovitch, H., Burke, S., Croft, D. F. L., Edwards, H. G., Evans, E. S., Gilbert, R. G., Great Rex, J. B., Hiscock, L. A., Hosford, M. D. C., MacVine, J. S., Marshall, S. F., Roberts, L. O., Thompson, V. C.

Supplementary Pass List.

Group I.—Capper, W. M., Dexter, L., Snell, V. C.

Group II.—Cartwright, W. H., Crabb, D. R., Day, L. F., Mac Farlane, R. G., Magnus, H. A., Silverstein, H., Williams, H. M.

CHANGES OF ADDRESS.

DALE, W. C., Adeoyo Hospital, Ibadan, Nigeria, West Africa.
GAISFORD, W. F., 29, Rodney Street, Liverpool.
GREEN, L. E., 71, Leigh Road, Eastleigh, Hants.
KEMBLE, J., 128, Harley Street, W. 1. (Tel. Welbeck 3474.)
LANDOR, J. V., General Hospital, Johore Bahru, Malaya. (Amended.)
OWEN, H. B., Pendarves House, Tolver Place, Penzance. (Tel. Penzance 424.)
REES, E. R., 50, Park Lane, Wembley.
SINCLAIR, C. G., Downside, King Henry's Road, Lewes, Sussex. (Tel. Lewes 12.)
TAIT, C. B. V., 106, Harley Street, W. 1. (Tel. Welbeck 3525.)

APPOINTMENT.

BETT, W. R., M.R.C.S., L.R.C.P., appointed Resident Medical Officer, The Princess Elizabeth of York Hospital for Children, Shadwell, E. 1.

BIRTHS.

BROCKMAN.—On November 30th, 1932, at 27, Welbeck Street, to Barbara (*née* Smith), wife of E. P. Brockman, F.R.C.S.—twins (boy and girl).

CONNOR.—On December 9th, 1932, at 27, Welbeck Street, W. 1, to Grace, wife of Colonel Sir Frank Connor, Indian Medical Service—a son.

COUCHMAN.—On December 15th, 1932, at Buryfield, Upton-on-Severn, to Doris, wife of Hugh J. Couchman, M.B., B.Ch.—a son.

GOODWIN.—On December 11th, 1932, at 27, Welbeck Street, W. 1, to Sheelah (*née* McLean) and T. S. Goodwin, M.D.—a son.

MARRIAGES.

COLEMAN—DARELL-BROWN.—On December 23rd, 1932, at St. Peter's Church, Cranley Gardens, Stanley Maurice, son of Dr. Maurice Coleman, of Reading, to Crystal, only daughter of the late Major H. F. Darell-Brown, 52nd Light Infantry.

GILKES—HODGE.—On December 17th, 1932, at St. Paul's Church, Broken Hill, N. Rhodesia, Humphrey, son of the late Rev. A. Gilkes (Headmaster, Dulwich College) and Mrs. Gilkes, to Peggie, only daughter of Mr. and Mrs. R. H. Hodge, of Larkhill, Egerton, Kent.

HEATH—HALL.—On November 26th, 1932, at SS. Nicholas and Faith Church, Saltash, Walter Ernest Heath, Surgeon-Commander R.N., to Dorothy Kenley, elder daughter of Mr. and Mrs. Kenley Hall, The Towers, Saltash, Cornwall.

DEATHS.

ADAMS.—On December 1st, 1932, at Worthing, Charles Edmund Adams, M.R.C.S., L.S.A., of Silver Beech, Campbell Road, Croydon.

HATFIELD.—On December 15th, 1932, at a nursing home, after a long illness, William Henry Hatfield, M.R.C.S., L.R.C.P., of 16, Park Road, Forest Hill, aged 80.

WINDER.—On December 8th, 1932, at Reading, of double pneumonia, Lt.-Col. Maurice Guy Winder, D.S.O., R.A.M.C. (retired), aged 56 years.

NOTICE.

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

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. XL.—No. 5.] FEBRUARY 1ST, 1933. PRICE NINEPENCE.

CALENDAR.

Wed., Feb. 1.—Surgery: Clinical Lecture by Mr. Girling Ball.
Fri., ,, 3.—Medicine: Clinical Lecture by Dr. Gow. Prof. Fraser and Prof. Gask on duty.
Sat., ,, 4.—Rugby Match *v.* Pontypool. Home. Association Match *v.* Downing College, Cambridge. Home. Hockey Match *v.* R.M.C. Sandhurst.
Mon., ,, 6.—Special Subjects: Clinical Lecture by Mr. Bedford Russell.
Tues., ,, 7.—Lord Horder and Sir Charles Gordon-Watson on duty.
Wed., ,, 8.—Surgery: Clinical Lecture by Sir Charles Gordon-Watson.
Fri., ,, 10.—Medicine: Clinical Lecture by Lord Horder. Dr. Hinds Howell and Mr. Harold Wilson on duty.
Sat., ,, 11.—Rugby Match *v.* Exeter. Away. Association Match *v.* Old Aldenhamians. Home. Hockey Match *v.* Seaford College. Away.
Mon., ,, 13.—Special Subjects: Clinical Lecture by Mr. Elmslie.
Tues., ,, 14. Dr. Gow and Mr. Girling Ball on duty.
Wed., ,, 15.—Surgery: Clinical Lecture by Mr. Roberts.
Thurs., ,, 16.—2nd round Inter-Hospital Rugby Cup.
Fri., ,, 17.—Medicine: Clinical Lecture by Dr. Hinds Howell. Dr. George Graham and Mr. Roberts on duty.
Sat., ,, 18.—Rugby Match *v.* Old Paulines. Home. Association Match *v.* Old Cholmeleians. Home. Hockey Match *v.* Mill Hill. Away.
Mon., ,, 20.—Special Subjects: Clinical Lecture by Mr. Bedford Russell.
Last day for receiving matter for the March issue of the Journal.
Tues., ,, 21.—Prof. Fraser and Prof. Gask on duty.
Wed., ,, 22.—Surgery: Clinical Lecture by Mr. Girling Ball.
Thurs., ,, 23.—**Abernethian Society: "Medicine in Horace Walpole's Letters," by Dr. Robert Hutchinson.**
Fri., ,, 24.—Medicine: Clinical Lecture by Lord Horder. Lord Horder and Sir Charles Gordon-Watson on duty.
Sat., ,, 25. Rugby Match *v.* Old Leysians. Away. Association Match *v.* St. Mary's Hospital. Away. Hockey Match *v.* Staff College. Away.
Mon., ,, 27.—Special Subjects: Clinical Lecture by Mr. Higgs.
Tues., ,, 28.—Dr. Hinds Howell and Mr. Harold Wilson on duty. Semi-final Inter-Hospital Rugby Cup.

EDITORIAL.

THE New Year has already made history at Bart.'s. Every Bart.'s man, as he read the New Year's Honours list in his newspaper, must have felt an even greater pride than usual in his Hospital when he found the name of the Senior Physician in the highest peaks of that list. Lord Horder of Ashford has for many years brought increasing honours to the Alma Mater as a teacher and clinician second to none; he now has attained still greater honour—he is the first peer to be a member of the active Staff. We hope that amongst the multitude of felicitations which he has received, these our editorial congratulations, on behalf of all readers of the JOURNAL and members of the Hospital Staff, may give him some particle of additional pleasure.

* * *

It is important that all who are concerned with the appeal for the Medical College should be constantly informed of the latest developments in the great effort to raise funds for the proposed scheme. The Dean writes:

MY DEAR MR. EDITOR,

A public appeal for funds on behalf of the Medical College will be launched next month. It has been our deliberate policy to delay such an appeal in order that Bart.'s men might first be able to show that they were willing to help themselves. As was to be expected, the private appeal has brought us substantial assistance from lay sources, but it is with some pride that we are able, in opening our public appeal, to show a sum of over £60,000 which is the approximate total of the money already collected or promised, and the value of a building in our possession. More especially, of course,

are we proud of the effort which Bart.'s men themselves have made, for they have subscribed about half this sum, and donations from them are still coming in. There are, however, many Bart.'s men who have not yet subscribed—a fact which, we think, may be attributed to a variety of causes. In some cases it is due to an imperfect appreciation of the facts, in others to a feeling that small donations would be of no use, and in others to a belief that the scheme is so large as to be infeasible.

We have now, therefore, inaugurated a new system whereby it is hoped to bring together all the Bart.'s men in a county, so that the whole plan can be explained to them by some person who has a full appreciation of its significance. Where this system is already in force, a selected secretary in the county has persuaded one of his colleagues to call a meeting in a centrally-placed town. The attendance at the meeting has in each case been satisfactory. The best method of obtaining funds in the county, whether by individual or by collective donations, has been discussed, and the agreed proposals have, after the meeting, been circulated to all old Bart.'s men in the county. In some instances it has been decided that the county as a whole should attempt to raise a certain sum of money; in others that each individual should try to collect some definite amount. The monies are sent direct to me, and I (without naming the individual sums subscribed) report each month to the secretary the total sum raised and the number of subscribers. The counties in which this system is already working are Oxford, Devon, Somerset, Worcester, Wiltshire, and it is, I hope, shortly to be started in Berkshire. The results have been good. The difficulty is to find in each county someone willing to undertake the duties of secretary, though these are not arduous. Offers will, I hope, come to me now that the scheme has been propounded.

If this publicity has done nothing more, it has helped materially in advertising our earnest wish that every Bart.'s man's name may be on the list of subscribers, however small his subscription may be. It has helped some to appreciate how essential the scheme is for the future welfare of our College. And it has shown that we, the organizers of the scheme, are so determined to bring it to a successful issue that we refuse to think of failure.

There is one more effort to which I must allude, namely, that which the students themselves have made. The fact that they have in small donations already sent me nearly £300 speaks for itself, and is very greatly appreciated. It will be a grand achievement if this sum can be raised to £500 and, as the secretaries of the Students' Union tell me that there are a large number of promises still to be fulfilled, I feel sure it can be.

Some permanent memorial in the new College to commemorate the efforts of students of these days will be a fine stimulus to the students of days to come.

Next month I hope to give in some detail a tabulated statement showing how the money has been obtained. It will have to be a description in massed figures, for a promise has been given that, so far as Bart.'s men are concerned, no subscription list will be published.

Yours sincerely,

W. GIRLING BALL,

Dean of the Medical College.

* * *

ELECTION FOR THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

We are informed that Sir Charles Gordon-Watson will be our only candidate this year for the Council of the Royal College of Surgeons.

It will be remembered that last year Sir Charles, after serving eight years on the Council, failed to be re-elected.

We sincerely hope that all Bart.'s Fellows will do their utmost to secure his re-election this time.

It must be a very long time since Bart.'s was represented on the Council by only one member of the active Staff, as at present. We hope that this deficiency will be remedied next July, and that Sir Charles will be returned at the head of the poll.

* * *

The ravages of influenza and other illnesses have wrought havoc with the organization of the Nursing and Medical Staff. It is surely an unique occurrence to have no less than three of the Visiting Surgical Staff on the sick list at the same time, but we hope a speedy recovery will enable them to return to their duties, in which they are at the present sorely missed.

* * *

A year ago a Library was organized for the Hospital by the Red Cross Hospital Libraries Association, and staffed by voluntary librarians, who visit the wards weekly to supply the patients with a free service of books.

Books have been given by the Red Cross, and the Hon. Librarians themselves have collected many, but additions to the Library are constantly wanted. Thrillers, novels, history, travel, science, all are asked for, and so long as they are not too out of date, are eagerly read. More standard works, such as Dickens, Hardy and Jane Austen are also wanted. A book you read two years ago is very useful in the Hospital. If you sit and look at its cover for another ten years, unless it is a masterpiece, it is no use to you and no use to the Hospital either, so send it along to some grateful patient now. Will everybody please look through their shelves with a critical eye, and send all that they discard to Mrs. McKenny Hughes, Hon. Red Cross Librarian, St. Bartholomew's Hospital, E.C. 1?

* * *

We have been asked to announce that the Jubilee Dinner of the Amateur Dramatic Society will be held at the Holborn Restaurant on Tuesday, February 28th. Will any members, past or present, who wish to attend please communicate with the Secretary, S. J. Hadfield, as it is impossible to send personal invitations to all?

* * *

The Warden requests us to state that the closing date for applications for House Appointments in May is 12 noon, Saturday, February 11th, 1933.

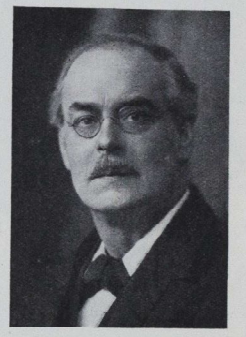
OBITUARIES.

RICHARD GILL, F.R.C.S.(ENG.).

"Mr. Gill, who was for thirty-five years administrator of anæsthetics at St. Bartholomew's Hospital, and had been living in retirement since 1916, died at Shaftesbury on January 13th, after a short illness.

"Born in 1856, Richard Gill gained the Preliminary Scientific Exhibition at St. Bartholomew's Hospital in October, 1874. He went on to win most of the other scholarships open to him, and at the University of London took many honours in succession at the final B.Sc. in 1878, M.B. in 1879, and B.S. in 1880. He was admitted a Fellow of the Royal College of Surgeons of England in 1881, having passed the necessary examinations before he had attained the legal age of twenty-five, and without presenting himself for the diploma of M.R.C.S. After being House Physician at the Great Northern Hospital he became House Surgeon to Sir William Savory at St. Bartholomew's Hospital, being the last to serve without an assistant house surgeon and to have a 'take in' lasting a whole week. In 1881 he was appointed assistant chloroformist to Joseph Mills, the first whole time Anæsthetist to the Hospital, succeeding him in 1893, when he was appointed Chief Chloroformist; the title of his appointment was soon changed to Administrator of Anæsthetics and Demonstrator of Anæsthetics in the Medical School. He resigned both positions in 1916, when he was elected a Governor of the Hospital.

"As an anæsthetist Richard Gill devoted his whole working life to St. Bartholomew's Hospital. He was an extremely fine administrator; it was an education in itself to see him give chloroform in a long and difficult abdominal operation. Requiring only a drop-bottle and a small square of lint he would produce perfect anæsthesia and relaxation with a minimum quantity of the drug. He was equally successful with gas and ether administered with Clover's apparatus or by means of a small bag. As an anæsthetist he insisted that the patient should be watched carefully during the whole period of administration, and emphasized the necessity of considering him as an individual rather than as a machine to be kept in a state of insensibility. He practised the axiom which he taught that automatic breathing is the true sign of anæsthesia. As a teacher he was excellent; as a lecturer he was difficult to follow



and was unable to hold his audience, for his brain worked faster than his tongue. It happened from time to time when he was lecturing that he would pause, and after a longer or shorter interval would continue some sentences ahead of where he had stopped, leaving his hearers to fill up the gap for themselves. At the beginning of the war he was attached as Anæsthetist to the First London General Hospital with the rank of Captain R.A.M.C. (T.), but found himself unable to adapt himself to military discipline.

"A colleague writes: 'In early life Gill had a remarkable power of assimilating facts which he could rapidly reproduce on paper, and he thus made an admirable examinee. Of this faculty he made little use in after life. He was wholly without ambition, and was content to lead the placid life of a philosopher when he might have enjoyed the stirring existence of a surgeon in the active practice of his profession. Averse from society and somewhat of a recluse, he was but little known even to the men of his own generation. The few who knew

him became his staunch friends, for they recognized his strict integrity and his entire absence of self-assertion.' "

We are indebted to the Editor of the *Lancet* for permission to reproduce this account and photograph.

Mr. Gill married Elizabeth Ann Bostock, daughter of Deputy Surgeon-General John Ashton Bostock, C.B., Honorary Surgeon to Queen Victoria and Chevalier of the Legion of Honour, and of the Scots Fusilier Guards.

MISS MARY BARNARD.

The death on December 29th of Miss Mary Barnard (Sister of Dalziel of Wooler Ward) at the age of 28, as briefly intimated in our last month's JOURNAL, has removed from the life of this Hospital one of its youngest and keenest members.

Beginning her training in November, 1925, she obtained her Final Certificate in October, 1928, and completed her fourth year as Staff Nurse in Luke Ward.

The next months were spent attached to the Private Staff, and in April, 1930, she obtained her midwifery certificate at Queen Charlotte's Hospital, returning here to Elizabeth Ward as Midwife.

She was appointed Night Sister in January, 1931, which office she held until August 21st, 1932, when she became Sister of Dalziel of Wooler Ward.

Her quiet efficiency, cheerful and happy disposition and her love of sport (for she was an excellent tennis player) had won for her throughout her varied career a host of friends.

It was particularly sad that Miss Barnard should be cut off in two days with influenzal pneumonia from the Hospital she so much loved, and with such a promising career in front of her.

The greatest sympathy is felt for her parents and their very united family.

"THE CROOKED BILLET."

"COME tell me how you live," I cried, "and what it is you do", the *Lancet* has asked for the last few months, but had anyone arrived at the Great Hall in the middle of January, they would not have recognized in the players there, future John Lydgates or Martin Arrowsmiths.

With the exception of two delightful lapses it seems to be the habit of the Amateur Dramatic Society to select for their play one of weak plot and no literary merit, and the *Crooked Billet* followed the rule; however, as is also their habit, they lavished some really excellent acting on it, and the result was a most enjoyable evening.

The plot, for those who did not see the piece, was the usual one of the master crook meeting the master detective, and this was coupled with all the usual impedimenta of shootings, innumerable doorways, drugged wine, bombs, blood and ciphers (it is always a pleasure to know that the classics are taught so thoroughly in stageland that the most curious unseens are easily construed). By the end of the second act the play was done and the crook was foiled, but it was only ten fifteen, so a further act had to be supplied, and this might have been prolonged indefinitely, for it merely consisted in one of the detective's gang being foolish and the crook getting the upper hand; then the position was reversed, and so on until at last the handcuffs were applied and the curtain fell.

But for all that the first two acts were good, and the actors made them better. There were thrills in plenty. The last part of the first act in particular, when one watched Guy Merrow almost drinking a glass of drugged sherry for twenty minutes, and at last it is spilt and he finds a drop of blood on his hand from the ceiling!

The audience thoroughly enjoyed it all and cheered and clapped whenever the villain was foiled, though I do feel that they might have given him a hiss when he succeeded.

But to become more particular: The laurels must be given to the ladies, John Nunn and Stanhope Furber. Eilidh Hadfield as the landlady of the Crooked Billet was a joy the whole time she was on the stage; her characterization was perfect, and it was a pity she disappeared from the scene so early. Joy Coombe as the arch-detective's daughter played her part, which was an unresponsive one, with restraint, and the way she allowed herself to be carried upstairs head downwards might have made many a professional jealous.

John Nunn was the arch crook and was perfect. It is impossible to analyse his performance in detail, but every gesture and intonation was in symphony, and the portrayal of middle age is not an easy matter.

To Stanhope Furber double credit is due, for not only did he produce the play (and very excellently too), but took the not inconsiderable part of the arch-detective's son.

He obviously delighted the audience, and rightly; they cheered when he said he thought he could knock down a pasteboard door; they cheered when he reappeared having knocked out most of the gang; they cheered when his Latin was so good; one can only say that he behaved as though the whole thing was real, and not a matter of "overture and beginners please", up stages and prompters, and that is a real achievement.

Anthony Hinds-Howell as the clever secret service man had the largest part and he played it well, but his youth was against him, and he gave one the impression of the clever English public schoolboy come to unravel the mystery rather than the war-hardened spy-foiler.

Eric Jewesbury as the potman got from his part more than was in it, but some credit for his startling and splendid entry must go to the stage-manager, John Barnard, for had the service hatch stuck where would he have been? But in addition he has a superb arm for finding hats.

Harold Rodgers was an American gangster with trousers and a bow-tie which must have come from the home of the racketeers, but his accent was not so certain, and occasionally wavered into Middlesborgian.

Stephen Hadfield was the arch-detective and played with conviction, and Roger Gilbert took full advantage of the comicality that a village constable must always be.

Rowland Taylor and Maurice Hosford were two of the crooks' gang, and bludgeoned and looked mysterious to their hearts' content.

During the intervals the Musical Society played, and better than I have ever heard before. Surely they should no longer hide their instruments under the Dramatic Society's cloak, but come out into the open and give us a concert. It would be well attended I am sure.

T. O. T. H.

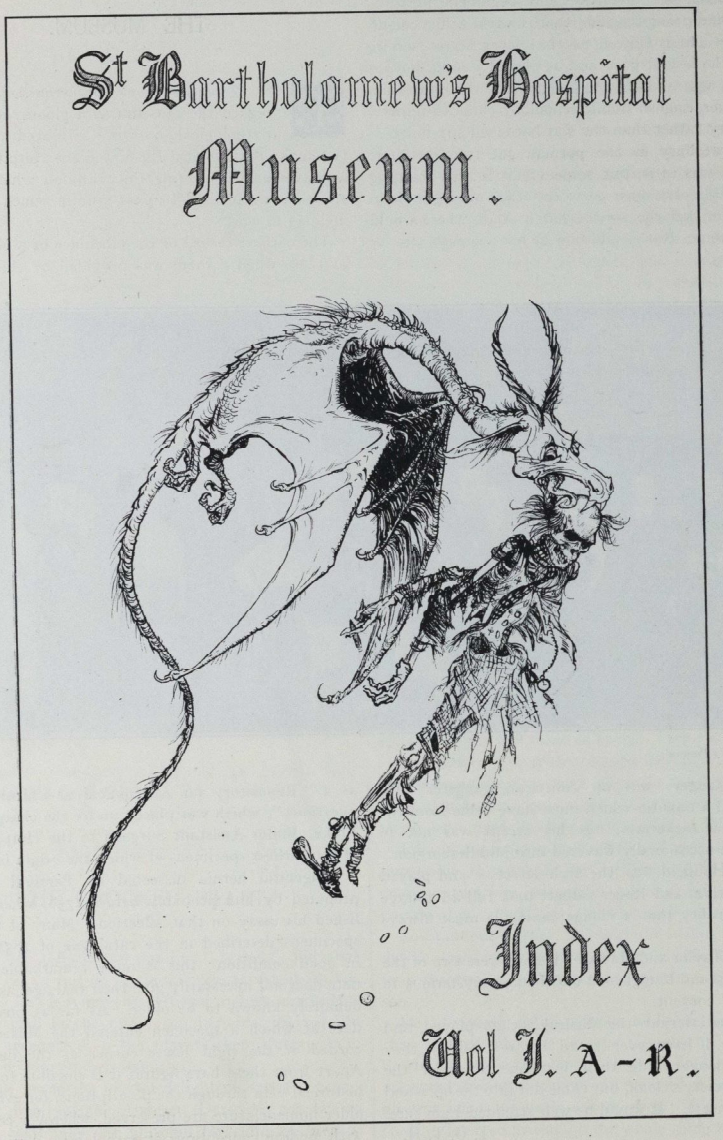
§

THE MUSEUM.

THE average student, unfortunately, tends to regard the Museum as a gloomy sepulchre of pathological horrors. Situated as it is between the Pathological Block and the Hospital, it forms a convenient connecting link through which so many students are pleased to pass, but in which so few are inclined to work.

The earliest record of the existence of a Museum was in 1726, when a room was provided by the Governors as a "Repository for Anatomical or Chirurgical Preparations", which was placed under the charge of John Freke, Junior Assistant Surgeon to the Hospital. One of the earliest specimens of which the origin is known is a congenital hernia dissected by Percival Pott and prepared by him probably before 1756, when he published his essay on that affection. Many of the oldest specimens described in the catalogue of 1831 are still in good condition; this is more remarkable, for this date does not necessarily give their real age, as some are definitely known to be older. As far as possible, the date at which a specimen entered the Museum is recorded at the right lower corner of the description. Apart from these bare figures it is possible to trace an historical vein through the descriptions, for evidences of older nomenclature are preserved, wherever compatible with modern conceptions of pathology. Again, the age

Photo by Panora's.



of a specimen can be fairly accurately traced by its appearance, the faded white specimens being examples of an early stage in the evolution of museum technique, and comparing very unfavourably with the natural appearance seen in recent preparations. There is every reason to believe that this comparatively new process is a lasting one.

The anatomical plan of arrangement which is adopted in the main Museum is obviously open to criticism and has many disadvantages, but when one considers the size of the collection, it is apparent that it is the best scheme.

Apart from its size, due largely to reduplication of specimens, the Museum must be admitted to have certain faults which militate against learning pathology easily. Firstly, too many specimens illustrating rare conditions are preserved; secondly, specimens illustrating common conditions and fundamental pathological principles are in a minority; and thirdly, to obtain a comprehensive view of any disease, such as tubercle, it is necessary to waste much time wandering from section to section.

An attempt to obviate some of these disadvantages has been made, and is seen in the formation of the Teaching Collection housed on the ground floor of the Museum. Although this collection only appeared complete with catalogues last summer, the work of previous curators is apparent. This collection, at present, consists of six series, each bearing an alphabetical denomination. The component specimens have been drawn from two sources:

(*a*) Typical specimens borrowed from the main Museum.

(*b*) New specimens obtained from the operating theatres and post-mortem room.

All the specimens in this collection have the letters "T.C.", together with a series letter and a number, printed in red, where specimens have been temporarily withdrawn from the main Museum; the original number, printed in black, is preserved. A separate catalogue is provided for each series, and the loose-leaf type has been adopted to allow the addition of new specimens. The descriptions in the catalogues follow the form used in the main Museum, with the exception that X-ray photographs and other additional material are added wherever possible.

The six series already started cover some of the most important aspects of pathology.

Series A.—Specimens illustrating the results of obstruction to hollow viscera.

This series, as yet incomplete, contains excellent specimens illustrating the results of obstruction in the urinary tract.

Series B.—Specimens illustrating the effects of certain vascular disturbances.

This series could be enormous, but only common illustrative specimens have been selected.

Series C.—Specimens illustrating tuberculosis.

This series is one of the best, as practically every gross tuberculous lesion is included, particularly good specimens being those of massive tubercle in the ileo-cæcal region, genital tubercle in the male and those illustrating miliary tubercle.

Series D.—Specimens illustrating innocent new-growths.

This series is incomplete still; a point of interest is that there are very few typical examples of innocent neoplasms in the Museum. In fact, the specimen of a lipoma in this series is the only one in the whole Museum which could be regarded as fairly typical.

Series E.—Specimens illustrating malignant growths and their methods of spread.

This series includes many beautiful specimens, the preservation of the colour in those of sarcoma of bone being particularly good.

Series F.—Specimens illustrating syphilis.

In this series it has been necessary to draw largely from the main collection, and there is little hope of getting new specimens showing syphilitic bone lesions. These latter specimens have been mounted in glass jars in such a way that careless handling can only inflict the minimum trauma.

As time progresses, other series illustrating such conditions as repair, common acute infections, lymphadenoma, etc., will be added.

Finally, it is essential that the Museum be further improved, for a sound knowledge of pathology is the best basis on which to build the whole of one's clinical knowledge. There is great fascination in taking down a new specimen, diagnosing the condition, and then

THE HOSPITAL MUSEUM DRAWING.

This drawing was made about 1900 by Arthur Rackham, when the late Sir Frederick Andrewes was preparing a new Museum Catalogue, which was afterwards destroyed and only the cover preserved. It was drawn about the time when Mr. Rackham was illustrating *Grimm's Fairy Tales*. "The dragon", he said, "was that sort of dragon", and will doubtless be recognized by his many admirers.

We are indebted to Lady Andrewes for allowing us to gain access to this magnificent drawing, which we hope will some day hang in the Hospital Museum; we would also like to thank Mr. Rackham for his permission to reproduce it.

weaving a complete story around the crude pathological facts. It is hoped that many more specimens illustrating common pathological conditions will be sent by all possible to the Museum, and as the art of preparing a really good specimen is known to few, therefore, however curious or impatient you may be, always send specimens intact. H. B.-W.

SOME ASPECTS OF BLOOD GROUPS, BLOOD DONORS, AND BLOOD TRANSFUSION.

NOMENCLATURE OF THE BLOOD GROUPS.

THE four blood groups were first described by Jansky in 1907, but owing to the obscure and inaccessible nature of the publication, his findings passed relatively unnoticed until Moss, in America in 1910, reported a similar number of groups. The greater publicity given to Moss's classification led to it taking precedence in English, American and French literature. There is, however, some liability to confusion arising owing to the universal donor, Group 4 in the Moss terminology being classed as Group 1 in the Jansky, and the universal recipient, Group 1 in the Moss being known as Group 4 in the Jansky. Groups 2 and 3 are identical in the two classifications. To obviate the risks attendant on the above the International nomenclature was introduced, and it is the most helpful in visualizing the phenomena of iso-agglutination. Two substances known as A and B agglutinogens are assumed to be associated with the corpuscles, and two corresponding agglutinins, α and β, with the serum. Interaction between an agglutinogen in the corpuscles and its corresponding agglutinin in a serum causes clumping of the corpuscles or agglutination; it follows from this that an agglutinogen and its corresponding agglutinin cannot exist together in the same blood.

The accompanying table shows the correspondence between the four groups on the three nomenclatures described:

Moss.	Jansky.	International. Corpuscle agglutinogens.	International. Serum agglutinins.
1	4	AB	0 (universal recipient).
2	2	A	β
3	3	B	α
4	1	0 (universal donor)	$\alpha\beta$

CHOICE OF DONORS.

The remarks with reference to this apply mainly to the general recruiting of new members for the London Blood Transfusion Service, but are also applicable to individual cases. Age, provided the subject is healthy, does not matter within wide limits; from experience the minimum should be 18 years, and the maximum, in the case of a new donor, 65 years. It is important that prospective members be examined physically—early apical tuberculosis, a pleural effusion or valvular heart disease previously unrecognized may thus be detected. The hæmoglobin in the case of a city dweller should not be below 94%; this should be verified in pale people, but the latter are not necessarily anæmic. Transmissible diseases such as syphilis and malaria must be excluded; in addition it has been shown recently that a donor, the subject of protein sensitive conditions, such as asthma, urticaria, hay-fever, etc., may transmit this sensitivity in his blood to a patient, and it is important therefore in questioning a new donor on his previous health to pay attention to this type of affection. Exceptional physique is not necessary, the average sized individual in normal health being quite suitable. The elbow veins, on which the ease of withdrawal of blood depends, must be seen or felt without difficulty. Donors with very small veins or veins which are invisible and cannot be palpated are best not accepted. Donation of blood by women during a menstrual period causes no untoward effects provided the latter is normal. The general health of some 400 new prospective members of the London Blood Transfusion Service seen during the past year is of a very satisfactory standard. Refusals on account of transmissible diseases, poor physique, anæmia, inadequate veins, etc., amount only to about 3%.

The group of a donor is usually decided by testing his blood against stock Group 2 and 3 sera, but in cases presenting any difficulty, and as a routine for service donors, it is wise, as a confirmatory check, to test the donor's serum against known Group 2 and 3 corpuscles.

If possible, the donor and recipient should be of the same group; a direct test for compatibility between the donor's corpuscles and a drop of the patient's serum should also be a routine measure. This precludes any untoward reaction from the presence of so-called sub-groups undetected in a grouping with stock sera. Except in cases of emergency, Group 4* donors, although of the universal type, are best used only for Group 4 patients. When used for Groups 1, 2 or 3, the serum of the introduced blood is as a rule so diluted in the patient's circulation that the α and β agglutinins are reduced

* The group numbers in this paper refer to the Moss classification.

to too low a concentration to cause any agglutinative reaction with A or B corpuscles. Occasionally, however, a Group 4 donor is met with in which one or both of the α and β agglutinins are present in high concentration (titre of 1 in 100, or 1 in 125). If the α agglutinin is alone very high—the more usual finding—such a Group 4 may cause a reaction when used for a Group 1 or 2 patient, but not for a Group 3. Such a reaction—fever, rigors, tachycardia, pain in the chest, etc.—may, although there is no actual evidence of hæmolysis, be so serious in a critically ill patient as to turn the balance against recovery.

When the above points are more widely recognized, the practical result, as far as the London Blood Transfusion Service is concerned, should be that the convenient "Universal" Group 4 donor is only asked for a Group 4 patient or an acute emergency case, where place or time factor does not allow grouping to be carried out. In the past, with some institutions, Group 4 donors have been requested indiscriminately, and this has led to a serious shortage of them for important acute emergency transfusions.

TREATMENT OF DONORS.

The majority of donors serving the London hospitals are members of a voluntary association—the London Blood Transfusion Service. If the latter, which supplies over 2000 donors a year, without fee or expense, is to be maintained on a voluntary basis, every effort must be made not to antagonize these donors by any lack of skill, courtesy or general consideration; they are held by motives of pure altruism, and the vast majority have no personal interest in either the patient or institution served. Furthermore, owing to misleading articles in the general press, most of them are subject to strong pressure from relatives, colleagues and employers to abandon their "dangerous" hobby. A single unfortunate experience is frequently followed by the loss of, not only the donor, but a group of his colleagues, and each becomes in the future a centre of opposition to the service. Occasional exposure of the arm veins by cutting down has, in the past, put donors to great inconvenience and interfered with their work, and has done incalculable harm to the service; it is now entirely prohibited.

Arrangements should be made by which a donor is received at a hospital and conducted to the ward or theatre where he is required, without waiting. If, for unforeseen reasons, the transfusion is delayed, an explanation can be given at once.

The removal of the blood should not take place with the patient in view, and care must be taken to avoid distressing donors, many of whom are of a hypersensitive nature, by unpleasant sights. The donor should lie down for half an hour after withdrawal of his blood, refreshment or at least tea or coffee should invariably be offered, and he should then be shown off the premises with a word or two of courteous acknowledgment.

THE WITHDRAWAL OF BLOOD FROM A DONOR.

The donor should be lying prone on a bed, couch or table with the selected arm supported on a pad or pillow. Withdrawal should never be attempted in the sitting position, as faintness may result. Iodine is to be avoided as a skin antiseptic; some donors are sensitive to it, and its application to their skin results in an irritating superficial burn; applied on gauze to normal skin for some length of time, it may produce the same effect. Ether is the safer antiseptic. The veins over the front of the elbow are made to become full and prominent by fixing the band of a blood-pressure apparatus around the upper arm and inflating to a pressure of 60–70 mm. mercury, which is sufficient to stop venous return from the limb, but does not prevent blood entering *viâ* the arteries. Previous immersion of the limb in a hot-water arm-bath may be helpful in a difficult case. A small intradermal injection of 2% novocaine is given at the site of intended puncture of the selected vein, and about two minutes allowed for the local anæsthetic to act. A tiny nick is then made in the skin with the point of a scalpel, and the French's or Jubé needle pushed through this into the vein and the blood collected in the usual way. The tiny nick is about the same length as that of the puncture, when the needle is pushed directly through the skin; it heals very rapidly and causes no inconvenience, and is not to be confused with a deliberate incision of cutting down.

The rubber tubing attached to the French's needle should be of relatively wide bore (diameter $\frac{1}{8}$ in.), interrupted by a short glass tubing connection near the needle, serving as a window. These needles, the points of which must be constantly sharpened, are best stored in sterile liquid paraffin, and should be, together with the tubing, washed through with sterile normal saline preparatory to use.

The secret of obtaining a satisfactory volume of blood from a donor, quickly and without difficulty, is to get a good and rapid flow through the needle and tubing; the promotion of this is helped by giving the donor a roller bandage or other suitable object on which he can open and close his hand about once a minute. The liability of clot formation is then reduced to a minimum.

THE EFFECT OF TRANSFUSIONS ON DONORS.

During the past twelve months an examination of over 80 members of the London service who have served 10 times or over has been carried out. The result of this has shown that, provided there is an adequate interval between services, in no case has any harmful result on health accrued. The minimum safe interval between donations of the average quantity of blood given (400–700 c.c.) appears to be 3 months for men and 4 months for women.

Different individuals may serve at shorter periods than these without any resulting anæmia, but, speaking generally, the 3–4 months' interval is the one to be aimed at. Quite a number of these donors have stated that their health has been improved by service, and none have suffered from an increase of minor ailments, such as coughs, colds, sore throats, influenza, etc., which coincide with a lowered degree of bodily resistance. The majority have increased in weight, and this agrees with observations made in America.

Some have suffered temporary faintness and giddiness as an immediate *sequela* of the transfusion, when they have attempted to resume the upright posture too soon after service; an interval of at least half an hour should elapse.

From observations on donors immediately prior to and at intervals after transfusion, it has been found that the average drop in hæmoglobin percentage after giving a quantity of blood of 400–600 c.c. is from 8–12%. This drop is not immediate, but occurs over the succeeding 3 or 4 days. It is made up of actual hæmoglobin loss plus dilution of the blood by tissue fluids to bring the blood volume back to normal. Fat, plethoric donors dilute more rapidly than thin ones, and hence the hæmoglobin drop in the former is more rapid; at the same time they make up their blood volume in a shorter period, and as a rule have less tendency to any immediate symptoms. The time taken for the hæmoglobin to return to its former normal figure is usually from 7–14 days; during this period it is at a sufficiently high level to give no symptoms of anæmia. Any lag in the re-establishment of the hæmoglobin figure is best treated by the administration of iron, *e. g.* as Blaud's pills, and the addition of liver and kidney occasionally to the diet. Such treatment, however, except when a donor has served within the minimum period recommended, is but very rarely required.

THE TECHNIQUE OF GROUPING.

An opal glass plate is the best medium on which to carry out blood grouping; it is preferable to white porcelain, as the porous surface of the latter, when seen, especially under magnification with a lens, through the agitated mixture of red cells and grouping serum is apt to cause an appearance of fine agglutination. Plain glass microscope slides do not allow of the macroscopic features being so easily recognized, and examination for the presence or absence of agglutination under the microscope is practically never required. The plate should be warmed immediately prior to use by running hot water from a tap over its surface, which is then wiped dry. A drop of each of the group sera is placed on it in areas labelled with a grease pencil, and a small drop of the blood to be grouped transferred to and mixed with each of the stock sera with a platinum loop. The amount of blood added should be sufficient to colour the mixture pink, but not deep red; with the former proportions it is easier to recognize finer degrees of agglutination. The platinum loop must be heated and cooled between each addition. The plate is gently agitated so as to mix the red cells and sera, and, provided the latter are potent, agglutination, if it is going to occur, will show macroscopically within 2 minutes. The aid of a small hand lens of about × 10 magnification is sometimes helpful. Re-examination of the plate after the sera and cells have been standing for some time, *e. g.* 10 minutes, may suggest false agglutination, owing to partial drying and rouleaux formation, in a previously negative result. No significance should be attached to such findings. Determination of a group with a relatively fresh oxalated or citrated specimen of blood is quite satisfactory.

STOCK GROUPING SERA.

It is the β agglutinin in Type 2 serum and the α in Type 3 that are used in test grouping. Groups 2 and 3 individuals vary a great deal in the strength in which one or other of these agglutinins are present in their serum, and in preparing stock grouping sera it is advisable to use only those in which the agglutinin concentration is such that it acts in a dilution of not less than 1 in 50, *i.e.* titre of 1 in 50. For the London Service, two donors, a Group 2 and a Group 3, whose sera when fresh has the high titre of 1 in 100 for the β and α agglutinins respectively, are reserved exclusively for the supply of grouping sera. The same is now in use in this Hospital. The sera gradually deteriorate in strength, but will keep potent in a cool dark chamber or preferably in an ice-box for 9–12 months. No preservative is necessary, but sterility must be maintained. The titre of such stock is tested from time to time before putting further batches into circulation.

If a serum of low titre (1 in 5, 1 in 10) when fresh is used it may, on keeping, become so weak in the α or β agglutinin content that it will no longer clump A or B, *i.e.* Group 2 or 3 corpuscles; if the Group 3 serum has gone off, Group 2 corpuscles will be classed as Group 4 in type. Should the quality of the stock sera be uncertain, confirmation or otherwise of the group of an individual may be obtained by testing his own serum against known Group 2 and 3 corpuscles.

A white precipitate of protein is liable to appear in the phials of grouping sera on keeping, but is not associated with any deterioration in titre of agglutinin content.

BLOOD GROUPS.

As regards the establishment of the blood groups, the agglutinogens are present in the corpuscles at birth, whereas the agglutinins in the serum are but rarely developed until the 18th month. Blood groups, like the colour of the hair or of the eyes, are inherited from the parents on the Mendelian principle. An A or B agglutinogen never appears in a child unless it was present in at least one of the parents; conversely, when neither parent has a particular agglutinogen, none of the children will have it.

Can the blood groups change? It is generally accepted that when once the blood group of an individual is established it remains constant during life, and the writer has not yet met with a donor of the London Blood Transfusion Service originally grouped by himself who has subsequently changed his type. Nevertheless, cases have occurred in the Service of a donor acting successfully as a Group 4 to Group 4 patients, and then, owing to some suspicion of incompatibility, being re-grouped and found to be a Group 2 or 3. Such donors were probably mis-grouped in the first place, and it is possible that marked reactions did not occur in their earlier transfusions because the particular Group 4 patients served had only a weak α or β agglutinin titre in their serum. Any possibility of a change in blood group in an individual would preclude their use in medico-legal problems, although at present they are not accepted as evidence in this country.

Sub-groups are rare, and the postulation of an additional pair of agglutination elements C and c is still *sub judice*. The important practical point is that their presence need not be feared if a direct test is carried out as a routine bewteen donor's corpuscles and recipient's serum.

AUTO-AGGLUTINATION AND "COLD" AGGLUTINATION.

These are always associated. The patient's serum agglutinates his own corpuscles at room and lower temperatures, and also the corpuscles from a compatible group donor. If the temperature at which the test is carried out is increased, the degree of agglutination becomes characteristically less marked and tends to disappear at 37° C.

The presence of these agglutinins which act only in the cold is by far the commonest cause of incompatibility of a patient's serum and corpuscles of a donor, which, according to the grouping of each, should be acceptable. The patients exhibiting this phenomenon have usually a high grade of anæmia, and the incidence of liver disease in them is high.

Occasionally auto-agglutination may be so marked that it is impossible at room temperature to carry out a red blood count on the patient, owing to clumping of the cells into masses in the hæmocytometer pipette. This can be overcome by keeping the latter, the diluting fluid and counting chamber at 37° C. or slightly above throughout.

"Cold" agglutination is easily recognized by carrying out the grouping test between the patient's serum and donor's corpuscles on an opal glass plate, cooled under the cold water tap, and then on one that has been warmed up to 37° C. in an incubator. The plate is held inside the latter during the mixing stage.

If clumping is present with the cold plate and absent or markedly diminished at 37° C., the phenomenon is one of "cold" agglutination. Confirmation is obtained by getting a similar result with the patient's own corpuscles.

The presence of "cold" agglutinins in a patient's blood need not contra-indicate transfusion from a compatible group donor. It is essential, however, to keep the temperature of the transfused blood at body heat or just above throughout the procedure. Even with this precaution, however, the patient may have a reaction usually within half an hour of concluding the transfusion. The symptoms of this—collapse, pain in the chest, restlessness and dyspnœa—are best controlled by morphia and adrenalin hypodermically.

It may be that minor degrees of "cold" agglutination occur with greater frequency than hitherto recognized, and that if the transfused blood in ordinary cases is carefully kept at body temperature throughout the operation, the slight reactions in these patients may be reduced in incidence or excluded.

HÆMOGLOBIN ESTIMATIONS IN TRANSFUSED PATIENTS.

In patients transfused for the treatment of acute hæmorrhage, the hæmoglobin should be estimated immediately prior to the transfusion and daily during the following 3 or 4 days. This is especially of importance in cases of gastric or duodenal hæmorrhage. From the blood volume of the patient which can be calculated from the body-weight—and the number of grammes hæmoglobin per 100 c.c. blood corresponding to the

hæmoglobin percentage, it is possible to calculate roughly how much the patient's hæmoglobin percentage should be raised by transfusion of a known volume of blood. If this increase does not result, it may mean that the patient is still bleeding, or had not made up his blood volume at the time of the transfusion and has been diluting since. In either case a further transfusion is indicated.

The thanks of the writer are due to Mr. Keynes, Dr. Canti and Dr. Graham for helpful discussion on some of the points mentioned in this paper, and also to Mr. P. L. Oliver, Secretary of the London Blood Transfusion Service, for his co-operation in the work done in association with the latter.

H. F. BREWER,
M.O. to the London Blood Transfusion Service.

THE TREATMENT OF HÆMORRHAGE AFTER EXTRACTION OF TEETH.

ALVEOLAR hæmorrhage may be :

(1) Primary, which occurs at the time of extraction.

(2) Intermediate, coming on some hours afterwards, usually during the night, and due to rise in local blood-pressure.

(3) Secondary, which is the result of sepsis, causing ulceration or sloughing of the walls of blood-vessels, and does not occur until at least a week after the operation, and is exceedingly rare after the extraction of teeth.

The usual type of hæmorrhage the medical man is called upon to treat is intermediate hæmorrhage. The patient presents himself as a general rule with a blood-stained handkerchief, a mouthful of blood, and a history of having had a tooth out a few hours previously.

There are four essential procedures for the treatment of intermediate or secondary hæmorrhage :

(*a*) Wash. (*c*) Cleanse.
(*b*) Localize. (*d*) Compress.

The patient is given hot hydrogen peroxide to wash out the mouth, as hot as can be borne. This is followed by irrigation of the socket with hydrogen peroxide in a water syringe. This usually controls the hæmorrhage sufficiently for an examination to be made to see (1) whether the bleeding emanates from the gum or from the socket; (2) whether the blood shows any tendency to coagulate. If it does coagulate, the hæmorrhage is probably due to some condition preventing the contraction of the vessels, and if it does not coagulate, it is probably due to some defect in the formation of fibrin.

If the hæmorrhage is from the gum, any torn vessels that may be the cause of it should be compressed or twisted. When a vessel is only partially divided it should be completely severed so that contraction can take place. For slight bleeding a pad of lint may be used with pressure to arrest it. If the gum is torn, a horsehair stitch should be used from one side of the socket to the other so as to compress the gum and also retain the clot in the socket.

If the hæmorrhage is from the socket, it should be freed from all clot, syringed with cold water, dried, and then packed with a strip of gauze soaked in turpentine. Where a multi-rooted tooth has been extracted, each root socket should be packed with the same continuous piece of gauze so as to facilitate removal. A plug of lint is then placed over all and kept in position by the antagonizing teeth. A piece of dental composition may be used with advantage instead of lint. This is softened in hot water, placed in the mouth, and then bitten upon, but not completely through. This is then removed, and chilled in cold water. When it is quite hard it is replaced in the mouth and pressure brought to bear by the antagonizing teeth. To facilitate pressure on this, a four-tailed bandage should be applied. A piece of folded paper is placed over the hair, the bandage tied over this and then the paper removed. This prevents hairs being tied up with the bandage.

If in spite of this treatment the bleeding still continues, hæmoplastin should be injected into the gum on each side of the socket and pressure maintained as before. It should be borne in mind that it may take an hour or two to stop the bleeding and the patient should be reassured. If the socket is properly plugged and the composition fits down well on to the plug the quantity of blood lost cannot be very great. When the bleeding stops the bandage and composition may be removed, but the plug should be left in for 24 hours and then removed by a dental surgeon.

If the blood does not show any tendency to coagulate, the routine treatment should be carried out and hæmoplastin injected. In obstinate cases where there is still bleeding, a blood transfusion should be carried out and the local treatment repeated. The pressure is maintained by the composition, and a space is provided on the opposite side of the mouth through which food can be taken.

The general advice given to the patient, although apparently trivial, is very important, and should never be omitted. The patient should go home quietly, have the minimum exertion, adopt the sitting position and use a high pillow at night. Feeding should be carried out through a bent tube and all food should be cold. Constipation should be avoided and no alcohol should be taken.

J. DRAPER CAMBROOK.

DENTAL MISADVENTURES.

IN a recent communication to the JOURNAL I ventured to criticize the way in which practical dispensing of drugs is, or was, taught at Bart.'s; and demonstrated by the example of a certain Mrs. Dwiggins what difficulties such neglect was liable to bring young practitioners to.

Another example of this deficiency in teaching the technique of dispensing is met with when the young doctor comes to wrap up a bottle of medicine for one of his better-off patients.

Those who have never tried will be astonished to discover how difficult it is to wrap up neatly a medicine bottle in white paper with red sealing wax. The bottle in immaculate and smooth white cover as handed over the counter by the chemist looks a simple affair, but is in fact a work of art. In my humble opinion this art should be taught to students at the hospitals.

To some of my readers it may appear of little importance how a bottle is wrapped up, but let me assure them that future patients will be much more concerned with the appearance, taste and colour of his medicine than with the contents of the bottle, however skilfully they may have been dispensed.

I should like to see an 8-oz. bottle wrapped up by any one of the senior physicians at Bart.'s. In fact I will go to the length of offering a prize to be competed for by the whole Medical Staff at the Hospital, to become the property of the one who turns out the most neatly wrapped bottle, with only two applications of sealing-wax.

While I am on this subject of ill-preparation of young practitioners I should like to say something about the important matters of fees.

This applies mostly to men who "squat" and have had no previous experience of private practice. After a man has done a "*locum*" he has got a pretty shrewd idea what to charge his patients, but if he has not he will find himself in many a fix.

My first patient was a bricklayer who came to my surgery to have a tooth extracted. This operation having been successfully performed he asked me what the charge was. I had not the faintest idea; thought five shillings seemed a lot, decided on half-a-crown, but at the last moment weakly asked for one and sixpence. The man produced half-a-crown which, he said, he had always been charged before, and did not mind a bit having to wait while my household was searched for the shilling change. I had an old Bart.'s friend stopping with me at the time, and we agreed that so important an event as my first fee should not pass unhonoured.

Scarcely had the patient left the surgery than my friend and I, with the eighteen-pence, hurried down to "The Bewley Arms" to celebrate the occasion.

It was in the middle of the morning so we were sure to have the place to ourselves. On entering the private bar we were not a little disconcerted to find my patient had arrived there before us, and was holding his jaw in one hand while conversing with Mr. Peacock, the publican. For this dilemma I was not prepared; nor do I know what a Harley Street dentist does in a similar situation. The only thing which occurred to me was to invite the man to join us in a drink.

He accepted without hesitation—in fact I think he had never been treated so handsomely by a dentist before, both over the matter of the fee or the refreshment afterwards.

He was at liberty to call for any kind of drink he liked, and I remember feeling at the time that his choice of "a stiff brandy" was a trifle wanting in tact, for it seemed to cast a certain reflection on my skill and lightness of touch as a tooth-drawer.

This matter of dental extractions was an endless source of annoyance to me. People persisted in coming to me to have their molars drawn.

At first I took this to be a compliment to my skill, but was disillusioned when I learned that my popularity was owing to the low fee I charged, the news of which had quickly spread throughout the surrounding district, and attracted many unwelcome customers from farms and hamlets far and wide.

Gradually I developed two classes of extraction, with appropriate scale of charges. There was the ordinary extraction—a pretty ghastly affair—at one and sixpence; and there was, for cowards or the better off, the "painless" extraction, the fee for which was half-a-crown. The latter was largely a matter of chance. Sometimes the thing worked, but at others the benefit derived from the outlay of the extra shilling was less apparent.

I well remember one such "painless" extraction, causing my whole house to reverberate with cries of anguish. When all was over the patient said to me, but without malice, "Gawd, doctor, if that's the painless what in 'ells the other like?" For this painless operation I used a powerful metal syringe, but sometimes as you squirted the mixture into the gum, small fountains of it gushed forth from other parts of the alveolus. These cases never seemed to become properly anæsthetized.

I must admit that very occasionally, when the result had been particularly deplorable, I was shamed into returning the "painless" shilling, but this happened in only the most glaring cases.

How I got to hate those extractions! In spite of all

I could do to prevent it, I became, before long, the most sought-after dental operator in the whole New Forest.

Before passing on to other fields of clinical interest I will recount one very awkward situation in which I became involved. The affair goes against myself, both as a dentist and as a man of truth and honour, but I will make a full confession.

One day a father, mother and aunt arrived at my surgery bringing with them a dear little girl suffering with severe toothache. In one of her upper molars the family and I could see a hole. This was to be an ordinary extraction, because as I explained to the family, the teeth of little children having small roots, came out with scarcely any pain or difficulty. In full view of the relations—which was a mistake to begin with—I took firm hold of the tooth and pulled. It seemed curiously tenacious. Further pulls and leverings, but still nothing followed beyond shrieks of distress from the poor little girl.

At last, driven to desperation, with the child's head held firmly under my left arm I gave one mighty heave and a wrench and out came the tooth. In triumph I held it aloft. But lo! and behold there were *two* molars in the grip of the forceps! As in the case of Mrs. Dwiggins and the medicine bottle, here was a situation.

This was to be a confession, so nothing shall be withheld.

I explained to the somewhat surprised parents that I had resolved in this particular case that it was necessary to extract the neighbouring tooth as well, and to save their little girl having two separate extractions, I had extracted both at once.

I am not proud of this incident nor of the lie I told, but wish to hide nothing, and so hope, by this full but belated confession, to ease a conscience which has bothered me for many a year.

The extraordinary moral of this unpalatable story is that the child's family, instead of suing me for this gross act of malpractice, as I deserved, became staunch friends and patients.

PHILIP GOSSE.

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The British Journal of Nursing—The Nursing Times—The Caduceus—Charing Cross Hospital Gazette—Guy's Hospital Gazette—Hermes—Magazine of the London Royal Free Hospital—Middlesex Hospital Journal—The Queen's Medical Magazine—Royal Dental Hospital Magazine—St. Mary's Hospital Gazette—St. Thomas's Hospital Gazette—The Student—Sydney University Medical Journal—University College Hospital Magazine—University of Leeds Medical Society Magazine—University of Toronto Medical Journal—The Clinical Journal—East African Medical Journal—The General Practitioner—The Hospital—Bulletins et Mémoires de la Société Médecine de Paris—L'Echo Médical du Nord—The Medical Forum—Medical Times and Long Island Medical Journal—Post-Graduate Medical Journal—The Quarterly Journal of the Research Defence Society—Reale Società Italiana D'Igiene—Revue Belge des Sciences Médicales—The Leprosy Review.

A GLIMPSE OF MEDICAL WORK IN SOVIET RUSSIA.

MEDICINE and politics have seldom had much in common, and one recalls, for instance, how, in the early days of the late war, Sir William Osler was writing to his friend, Paul Ehrlich, through the American Ambassador in Berlin to see if it would be possible to arrange for the manufacture of salvarsan in the United States under Ehrlich's direction. In Russia to-day, however, all science is harnessed to the political movement of the country, and it is not so very long since a distinguished professor of physics was dismissed from his post, because not only did he neglect to introduce sufficient communist theory into his lectures, but moreover he actually had the audacity to state that he did not see that physics had got anything to do with politics. Frogs' sciatic-gastrocnemius preparations—surely the most unlikely agents of political propaganda—are employed to emphasize the existence of life without mind and to deny the existence of the soul. In an anti-God museum which I visited in Leningrad a large red banner proclaimed that "The Struggle for Developing Science is the Struggle Against Religion". The purely materialistic and mechanistic outlook on life in Soviet Russia is naturally to some extent favoured by Pavlov's work on conditioned reflexes, and his name, wherever one goes, is mentioned with great respect. "One day's work of Pavlov is worth a week's labour by six engineers" remarked a communist in Leningrad. Medical and scientific work, however, do not yet attract as many recruits as do the factories, the electrical plants and the heavy industries, into the building up of which Soviet Russia has been throwing her greatest energy during the past four years. Although there is a shortage of medical students, a very large number of women are entering the profession, and at a hospital in Moscow to which I went they formed half of the staff, while at another in Leningrad they formed two-thirds of a staff of 150. The First and Second Medical Schools of Moscow have respectively 60% and 70% of women students.

The period of medical training in Russia lasts for five years; clinical teaching begins in the third year, and this teaching is described as being more practical than theoretical. Students receive two months' holiday a year, and although lecture attendance is very strict, there are no examinations in the medical curriculum. The proportion of working-class students in the medical institutes increases every year, and even workers of peasant origin now constitute about a quarter of the medical students. Owing to the scarcity of medical personnel a new plan has recently been evolved in order to speed up the process of producing specialists. Under this system students must decide from the beginning of their medical training what branch of medicine they propose to take up. There are four possible Faculties: (1) For practitioners (with branches in medicine, surgery and dentistry); (2) for medical officers of health (having branches in epidemiology, factory control, nutrition, kitchen control, building advice, etc.); (3) for maternity and child welfare services; and (4) for physical culture. Hygiene training is given in every Faculty, and great emphasis is laid upon preventative medicine. Since Soviet Russia is concentrating to such an extent upon rapidly becoming a great industrial country, much importance is attached to the work done by those medical officers of health whose business it is to give advice about the construction of public buildings and factories, and to attend to the health of the workers inhabiting them. Nearly all factories have their own kitchens and restaurants, and the doctor in charge of public kitchens has to be able to prepare his own meals, and is required to undergo a fifty hours' course in the art of cooking. At the institutes for post-graduate training a limited amount of shuffling of unsuitable specialists is still possible, so that a specialist who finds that he has completely mistaken his vocation in the kitchen can, with a little difficulty, turn his attention, say, to physical culture and *vice versa*.

In order to prevent doctors from becoming a distinct class, medical students are expected to spend an hour each evening in the ordinary workers' clubs and often they give lectures there. This is said to be good training for both students and workers, and helps to unite both classes together. Doctors on collective farms and similar organizations belong to a compound trade union, which governs the interests of the whole concern and is composed of many different types of workers. A special medical workers' trade union also exists; this was at first not actively supported, but owing to the preferential treatment given by the State to union members a large proportion of the profession are now enrolled. A certain number of doctors are also members of the Communist Party, but this again is not entirely popular, for the reason that the Communist Party, which possesses about two million members, admitted only after a probationary period, is a very strictly disciplined group. The members are pledged to the service of the State, and although they form, to some extent, the *élite* of the U.S.S.R., the majority of medical men are unwilling to be ordered to some out-of-the-way district, or to carry out work in which they may not be particularly interested.

Every doctor in Russia has an official six-hour day during which he is working for a public institute. But after his six hours, for which he receives regular payment, he is perfectly entitled to practise on his own without restrictions as to fees. If he is off duty when one of his patients from the State Hospital is ill, the case is seen by a colleague, and he himself visits it next day. Many doctors, nevertheless, appear to have a very nominal six-hour day of State medical work and, as specialists and research workers, are entitled to spend plenty of time working according to their own plans and carrying on a private practice. Liberal government grants are made to research, and such workers are among the very few in Russia to whom facilities may be given for travelling abroad.

There are said to be 20,000 doctors in the U.S.S.R., which means that there is one medical man approximately to every 8000 of the population. In the United Kingdom there is one doctor to about every 800 of the population. The need for medical men in Russia is very urgent, and it will be interesting to see to what extent the present system of attempting to produce rapidly trained specialists is successful.

Hospital accommodation, though still inadequate, is very rapidly increasing. Some thousands of new beds have been made available during the last few years, and the Five Year Plan provides that the total number of beds must increase to 200,000. How far this aim is being achieved I cannot say, but I certainly saw several new hospitals, dispensaries and sanatoriums. In Moscow a friend and myself rang up one of the new hospitals and asked if we might be shown round. The hospital was the Kremlinskaya Bolnitza, situated near the Kremlin, and learning that we would be welcome, we went there immediately. On entering we found a very handsome marble hall with chairs and tables for waiting, a porter's office and a lift. We were then shown in to see the Medical Director, a man in the fifties, wearing a white coat and drinking some Russian tea or "chai". It was just after 4 o'clock and the staff appeared to be about to go home. The Director spoke to us in French, and gave us white coats to wear during our tour of inspection. A French lady-doctor escorted us round, and from point to point various Russian doctors joined us to explain different workings of the hospital. Some of the doctors spoke German, while others spoke in Russian, which was translated into French. All the doctors were very courteous and friendly, and all seemed thoroughly interested and contented in their work. This particular hospital, built just after the Revolution, was constructed in what they call the "modernized way"—namely with almost all the patients in private wards, on the lines of a nursing home. Some of the rooms contained two

beds and a few three. Altogether there were some 120 beds. We saw patients in all types of rooms, and they looked well cared for, all the rooms being very light and clean. Treatment in the hospital is given free, although only by continued questioning did one learn that beds were only available for certain privileged classes—namely those who, by mental or physical skill, are the most valuable workers of the State. We first were shown the X-ray rooms, equipped with German apparatus; we entered the developing rooms, and saw several negatives of hearts, skulls, teeth and so on. Bathrooms, with electric and paraffin baths, showers, and two or three rooms full of massage machines from Wiesbaden were also shown to us. Most of the apparatus of the hospital had been installed only a year or two ago. We went into two operating theatres, which were of the most modern type, although the arrangements for taking patients in and out and the provision of small side-rooms seemed rather inadequate. Chloroform they told me was never used, and ether seldom. Nearly all their operations were performed with local anæsthetics, and even these were dispensed with where possible. A room for giving ultra-violet ray treatment was shown us, and also further special departments, including theatres for urino-genital, otological and dental cases. There was a special room for giving hormone treatment, and on the top floor was a big solarium with large windows in the form of a semicircle. There were also many open-air balconies. Visiting hours for relatives were from 6 till 8 p.m. daily, and there were plenty of nurses, but no students here. The whole place gave the impression of a well-equipped modern hospital, although signs of any great activity seemed rather strangely absent. This, no doubt, could be accounted for by the time of day.

It is the preventative aspect of medicine which is regarded as the most important in Russia and, just outside Leningrad, I visited a prophylactorium, or institute of preventative medicine, which controls a district containing ten hospitals and ninety thousand people. It keeps observation upon the health of all the people in the district, and can supply information and help to the dependent hospitals. The medical staff spend part of their time in the hospital itself and part attending private houses, each doctor being allotted two or three streets, where he has to visit each family at least once a month. At the hospital a "family passport" is compiled; this consists of notes about the health of all the members of the family and can be referred to whenever necessary. No child can join a school without being examined first at the prophylactorium, and special schools are in existence for the mentally backward. The building was large, clean and airy, the cleanliness indeed contrasting with what one had seen elsewhere in Leningrad. There were corridors with doctors' consulting-rooms leading off from them, and special departments as found in all large general hospitals. The physico-therapy department was very well equipped, and the bathroom was most magnificent with hot and cold showers, sprays, baths, Turkish baths, hoses, steam baths and much expensive apparatus—again from Germany. There is said to be a great scarcity of soap in Russia, but this is answered by the claim that it is only because Russia is now using ten times as much soap as at any time in her history! Lenin's portrait and bust were prominent in this building, as everywhere in the U.S.S.R., and in the nervous department propagandist posters against alcoholism were hung round the walls. There were diagrams of hobnail livers, etc., and little models depicted the catastrophes resulting from alcohol in the home, the street and the factory. A final picture illustrated a sufferer from D.T. being terrorized by devils and evil faces at night.

The preventative side of the work is also carried out in the form of compulsory lectures for housewives on health matters, both at the prophylactorium and in their homes. We were shown a room used, as our interpreter unfortunately remarked, "for preventing the health of children". A large hollow revolving wheel was being erected, around the circumference of which were slots where lighted pictures were to be inserted. These would show "How to clean your teeth", "How to wash", etc., to illustrate health lectures to children. The visitors' book at this prophylactorium was filled with congratulatory comments from doctors of all countries who had been impressed by this example of the carrying out of modern methods of preventative medicine. One would like to have seen all the departments actually working, since at the time we were there the building seemed deserted but for a few stray patients. It also seems likely that so far it is unique of its kind, although similar institutes elsewhere are naturally hoped for in the future.

The Soviet Government has, to a large extent, given up its attempts to revolutionize all the old people, and modern Russia is largely a country of youth. It is estimated that more than a third of the inhabitants have been born since the Revolution, and to them and to the infants and their mothers the government is giving the best health services within its power. Within the last ten years the infant mortality-rate has declined throughout the Soviet Union by 30%, and the maternal mortality-rate also shows a great decrease. In Moscow the infant death-rate, which stood at 270 per 1000 in 1913, had been reduced to 120 per 1000 in 1928–9.

Although the figure is still high, one cannot help being struck by the care which is bestowed upon the children. The grown ups often look worn and drab, but the children are a strange contrast of gaiety, and are generally of good physique. They are offered seats in the trams, and whenever there is a food shortage it is they who suffer last. Ordinarily the adults rarely see butter or milk, but these and other foods are specially obtainable for the children. Certified milk is to be had at Government milk kitchens on presentation of a doctor's certificate by the mother. In the summer months as many as possible of the children in the towns are sent out by the Government into country homes, but it would seem that at present the proportion who go is small. I visited a home for weakly children in the "Children's Village" just outside Leningrad. To this home are sent children (over 100 in all) between the ages of 5 and 15 who have been recommended by the school doctor as needing sun and air. This particular building was formerly a duke's home, and the children were running about in the garden, clad in the minimum of clothing. The whole place was spotlessly clean, and the drinking-water was the best that I tasted in Russia. Animal pictures and communist propaganda decorated the walls. The day's programme included compulsory bathing in the lake before breakfast, a certain amount of studying, two "silent hours" after lunch and plenty of outdoor exercise. The principle of the home was stated to be "hygiene, not medicines". At collective farms, factories, universities and parks of culture and rest there are *crèches* and kindergartens where I was able to see the children being attended to. The *crèches* play an important educative part, and the mothers are shown how the children ought to be clothed and looked after. All children have to be brought to the *crèche* thoroughly washed—("children with fleas are sent home")—and are supposed to be fed at home only on food prescribed by the *crèche* dietitian. At present the system is in a very early stage since, even in Moscow, only about 10% of the small children attend a *crèche*.

No less amount of attention is paid to the mothers than to the children. At "Points of Medical Consultation", of which there are over 40 in Moscow, advice is given to women early in pregnancy, and a home visitor calls to give her practical hints about the home arrangements. The Museums of Mother and Child hold regular meetings for expectant mothers, and give a great deal of instruction. Pregnancy certificates exempting the holders from standing in queues and so on are also issued. Moreover, for two months, both before and after the birth of her child, the mother receives a complete holiday from her work on full wages. Abortion is legalized, and therefore controlled, but it is discouraged. A doctor at one of the hospitals told me that a large number of women who are physically and economically capable of adding to their family are successfully dissuaded from undergoing the operation. Contraception is regarded as a means of combating the prevalence of abortions, and at the points of consultation information on birth control is given by a qualified doctor or nurse. On the whole, however, large families are encouraged, and since the rationing of food and room-space and the remission of rent and taxes varies with the size of the family, there is no economic disadvantage in many children. Anæsthetics are rarely used in obstetrical cases, and never in normal ones.

Health propaganda is carried out on a large scale, and one sees many coloured posters illustrating the proper care of children and the fundamentals of hygiene. Vaccination against smallpox, diphtheria and scarlet fever is also strongly urged. Even in a play which I saw acted in Moscow the evils of contaminated water-supply were dwelt on. The whole of this health propaganda is bound up with a great deal of communist cant, the authors of which seem to be politically narrow-minded to a degree that is almost pathological. Following the ways of other workers in the communist state, special brigades of doctors and nurses have been formed in order to carry out intensive campaigns of work. These brigades, 2000 of which were said to be sent out in 1930, go to the collective farms and country districts. Each brigade consists usually of a doctor, a surgical assistant and a nurse, who organize first-aid stations and dispensaries, and give talks on various aspects of medical aid and preventative work to peasants, whose ideas on such subjects are very rudimentary. The brigades also call meetings of all the village soviets on the collective farm to discuss questions relating to the sanitary condition of the village and to personal hygiene.

The living conditions of the majority of Russians, so far as one can judge, are deplorably low compared with Western standards. At the wayside railway-stations the peasants are often very dirty and afflicted with sores, while the foodstuffs which they offer are frankly repulsive. In the towns overcrowding is very bad, and in Moscow it is almost impossible to obtain a room, let alone a house. Most families occupy a single room, and since the population of Moscow and Leningrad have more than doubled themselves since the Revolution, overcrowding has not been diminishing. The food shortage is also acute, but to suggest that the Russian worker is miserable and starving would be far from the truth. In the parks of rest and culture there is ample opportunity for recreation in the form of football, tennis, net-ball, athletics, bathing, boating and other sports, all of which I watched. On one particular day

the Moscow Derby, complete with totalisator, drew enthusiastic crowds. Concerts, theatres and cinemas are also freely patronized. Moreover, in spite of the bad housing, bad food and poor sanitation, one cannot help being struck by the very good physique of the people in general. Exceptions are naturally met with, but the population of Leningrad, which is one of the most depressing of towns, seemed certainly a stronger-looking lot than might be seen in an East London district. The Russian workers have been brought up under conditions of perpetual hardship, and are, therefore, not unwilling to submit to minor discomforts, and to a diet which Major Yeats-Brown says "would cause an immediate mutiny in any English prison", so long as they feel that the present is but a prelude to the new era in which Russia will be a prosperous and self-supporting industrial country. The existing *régime* has given them hope—a sensation which they have rarely felt before—and upon that foundation of hope much enthusiasm has been built. To make any comparison of living conditions and health services to-day with those of Czarist times is, of course, an impossibility without a wide knowledge of both periods, but that the Soviet Government is paying very marked attention to improving the national standard of health there is not a shadow of doubt. Pre-war Russia had the second highest death-rate in Europe, and it was not until 1918 that State Health Insurance was introduced. The general death-rate, which during 1910–1913 stood at 27 per thousand, had been reduced by 1928 to 21 per thousand, while that of Moscow alone had fallen from 23 to 13. To-day the main task is to overcome ignorance, superstition and unhygienic habits, all of which are firmly rooted in most of the older generation. State expenditure on health services increases annually, and the work of preventative medicine shows signs of gradually establishing itself throughout the country.

In this inadequate account I have tried to give some mental picture of what medical work in Russia at the present moment is like. My own contact with it has been of the most fleeting kind, although, such as it was, it was a glimpse which belied most expectations. That Soviet Russia is cultivating a completely new outlook on life is plain enough, but that ideals in medicine are unalterable is at least a source of consolation.

E. C. O. JEWESBURY.

ABERNETHIAN SOCIETY.

The Winter Sessional Meeting of the Society was held in the Medical and Surgical Theatre on Thursday, January 19th, when Sir John Weir read a paper entitled, "Homœopathy: Its Principles Explained".

The PRESIDENT, Mr. J. M. JACKSON, welcomed Sir John as the greatest living authority on homœopathy, and said he was sure that his audience that night, for the most part, held a very nebulous conception of the principles of homœopathy, and for this reason were especially looking forward to this paper.

The doctrines of homœopathy, said Sir JOHN WEIR, first saw the light of day when Samuel Hahnemann—born in 1755—announced the now famous first law of homœopathy, "Similia, similibus curentur", a phrase he had found while translating a book attributed to Hippocrates.

The discovery that led to this announcement was the result of chance, for distrusting another writer's account of the pharmacological action of Peruvian bark, he decided to try its effect on himself, and, to his amazement, the drug gave him an ague. Quinine, in fact, both caused and cured an ague!

This led him to perform experiment after experiment over a period of fifty years on himself and a small but devoted band of adherents; the results of these "provings", as they were termed, were incorporated in his *Materia Medica Pura*, which to-day remains little altered as the text-book of the homœopath. These pharmacological experiments, carried out as they were on healthy humans, were, in Sir John's opinion, of far greater value than any performed on animals, or even upon the unfortunate diseased human.

From this careful compilation of the actions of thousands of drugs it is now possible to select that drug, poisoning with which causes similar symptoms to those from which the patient suffers. The speaker gave many examples of the drugs employed, amongst which a few stand out for their very unexpected application—cystitis treated with cantharides, vomiting and purging by arsenic, scarlet fever by belladonna, and so on. It was pointed out that mental conditions responded well to homœopathic remedies, and Oxford men might note that a certain distinguished Cambridge stroke of recent years, troubled with "nerves" on the eve of the Boat Race, was successfully treated with silver nitrate, the recognized drug for this complaint.

This, then, was the first law. The second law of homœopathy may be called the law of the small dose.

It was found that when using minute quantities of a drug, decreasing the size of the dose by dilution enhances the action of the drug—an effect somewhat analogous to that of ionization of dilute solutions, though the scientific explanation is not attempted. The term "dilution" was replaced by that of "potency", and the 30th dilution (one much employed) became the 30th potency.

The speaker emphasized the fact that diseased tissue is a thousand times more sensitive to the specific drug than healthy tissue, and that in homœopathic practice the drug is not curing, but rather stimulating the tissues to overcome the toxic agent—in fact, the foundation of antigen therapy in modern medicine.

The audience were naturally interested to hear how Sir John started his career as a homœopathist, for he impressed on us that he was a Scot of Scots and as canny as any, so his story of the miraculous cure of a chronic septic condition wrought on him by a homœopathist when orthodox medicine had failed could not but surprise us.

Dr. CULLINAN, proposing a vote of thanks, drew attention to the fact that quite apart from the founding of homœopathy, Hahnemann had earned a debt of gratitude from the world in rescuing medicine from the school that had apparently forgotten Hippocrates, for such were the recognized therapeutics of the day that it came to be said "that the patient of the homœopath died of his disease, but the patient of the allopath died of the cure".

Mr. WYNNE THOMAS ably seconded the vote of thanks, and said he had been the victim of homœopathic administration all his life. Whether the matter was for congratulation was not for him to decide.

The meeting was then adjourned.

STUDENTS' UNION.

RUGBY FOOTBALL CLUB.

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

Played on Saturday, December 10th, at Northampton.

To be the unwilling writer of a report on this game is nothing short of a penance, and those who do not wish to have their blood curdled by the tale of Bart.'s worst exhibition of the season should turn hurriedly to the report of the subsequent game *v.* Old Paulines. Writing after having witnessed both games, it seems hard to believe that one team could, in the space of eight days, give two such vastly different displays.

The ground at Franklin's Gardens was in better condition than is usually the case in December, and the home team were without such stalwarts as Treen, Coley, Harris, Matthews, Longland, Weston and York, while Bart.'s lacked the services of Kingdon and Morison.

For the first twenty minutes play was confined to the Hospital half, though good line-out work by R. Mundy and W. M. Capper enabled our three-quarters to indulge in some passing movements, which, however, seldom looked dangerous. L. M. Curtiss on several occasions tried to straighten out the attack by running hard and straight, but received no support at all. The wing forwards were particularly to blame in this respect, for had they backed up the man with the ball, movements which came to an untimely end might well have been carried on. Indeed, practically the whole pack seemed inclined, once a back had the ball, to pull up, just wait to see how far he would get by himself and then trot up to the next scrum.

One realizes fully that much energy is expended in the scrums when holding a heavy pack, but some of our forwards must realize that there are other duties besides breaking up from one scrum and jogging along to the next. This was all the more bitter to behold when one recalls short passing movements in which both backs and forwards joined last season with such success, particularly against Otley and Redruth.

However, Northampton's only score of the first half was a try by King, and we must thank stout tackling by Taylor, Curtiss, Fairlie-Clarke, John and Wilson for the fact that the points against us were not increased by half-time.

Half-time: Northampton, 3; Bart.'s, 0.

After the interval the Northampton forwards definitely took command. Few clubs can be so fortunate in the matter of their reserves. While C. Slow, at stand-off half, took passes from all angles and set his backs going very frequently, Garratt crossed soon after half-time and Baillon converted (0—8). For the next ten minutes Bart.'s put in their best work of the game, and a good run by Capper, who throughout showed excellent form in the open, led to J. G. Nel scoring a good unconverted try. The Hospital might well have drawn level soon afterwards, for first Nel made a great run, beating five or six men, only for Harvey to be held up on the line, and then a clever burst by Taylor, who all through tried his hardest to carve out openings, enabled Curtiss to get away, but his final pass, a perfectly good one, was dropped when a try seemed certain.

This seemed to take all the spirit out of Bart.'s, and time and again the "Saints'" forwards dribbled the ball for thirty or forty yards, and the tackling and falling of the Hospital pack, which had been poor throughout the game, now became conspicuous by its complete absence. A dropped goal by Slow and tries by King and Mayers rewarded Northampton before the end.

A good dribble by J. D. Wilson and A. T. Blair brought relief to Bart.'s just before the end.

C. W. John at full-back went down splendidly to check rushes, and in this was an example to the rest; his kicks, though not lengthy, always found touch. Curtiss played quite well in the centre, but Fairlie-Clarke's usually good handling seemed to have deserted him in this match. The defence of both wing three-quarters was woefully bad—no amount of spectacular running can make amends for slackness in defence. J. T. C. Taylor got through a great deal of work and often threatened danger, but was poorly supported, while of the forwards, Capper, Harvey and Mundy were the best.

Result: Northampton, 2 goals (1 dropped), 3 tries (18 pts.); Bart.'s, 1 try (3 pts.).

Team. C. W. John (*back*); J. G. Nel, G. A. Fairlie Clarke, L. M. Curtiss, J. D. Powell (*three-quarters*); F. J. Beilby, J. T. C. Taylor (*halves*); W. M. Capper (capt.), J. M. Jackson, R. Mundy, J. D. Wilson, K. J. Harvey, E. M. Darmady, F. J. S. Baker, A. T. Blair (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD PAULINES.

Played on Saturday, December 17th. Away. Won, 28—8.

Conditions were good for this game and Bart.'s made the most of them, both the forwards and outsides showing up well. Taylor was in his best form and Harvey's hooking was distinctly good, so that the outsides had plenty of opportunities.

The Hospital started the scoring with Curtiss cutting through, leaving the full back standing, and touching down under the posts. This was converted by Capper, who, in all, converted five of the six tries. They replied with a try by Jankel, but Curtiss scored again after a fine break-away by Taylor, and later Wilson scored.

After half-time Wilson scored again, after charging down a kick by the full-back, and later Youngman got over following a fine run from his own "25". The Old Paulines got one more try, and the game finished soon after Youngman had scored a second.

It was not an easy victory by any means, all the tries being the result of hard work by all concerned, the combination on the left wing being very good indeed. Morison at back was as steady as usual and saved his side a great deal of work by his strong kicking, while the forwards must be congratulated on their low packing and the advantage they gained thereby.

Team.—C. R. Morison (*back*); J. G. Nel, F. J. Beilby, L. M. Curtiss, J. G. Youngman (*three-quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper, B. S. Lewis, R. Mundy, J. M. Jackson, J. D. Wilson, K. J. Harvey, D. W. Moynagh, F. H. Masina (*forwards*).

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

Played at Winchmore Hill on Saturday, December 31st.

The ground was muddy and both sides were very depleted, Moseley being the harder hit. The two teams, however, provided an interesting struggle, in which any deficiency in the finer points of the game was more than made up for by the keenness of the play and the hearty tackling. Bart.'s attacked from the start and, with the pack obtaining the ball frequently from the tight scrums, D. A. Prothero, who again gave a most promising display at scrum-half, was able to give his outsides plenty of chances. Of these the "makeshift" back division made quite good use for the first twenty minutes. Only five minutes elapsed when a good passing movement ended in J. G. Youngman giving J. D. Wilson an inside pass, for the latter to cross the try line, only to be recalled for a forward pass. Nothing daunted, another good run by the three quarters gave J. G. Nel the opportunity to show his speed and put in an excellent cross-kick, which found three of our forwards ready and waiting, and it was the ubiquitous Wilson who gathered it and scored. C. R. Morison converted (5—0).

Maintaining strong pressure, the Hospital should have gone still further ahead, for with our forwards still heeling the ball regularly, first R. M. Kirkwood, who, by the way, gave his best exhibition for some time, tried a drop at goal, which missed by inches, and then J. R. Kingdon sent the ball over the bar, only for us to discover in the midst of our jubilation that it was a punt. About ten minutes from half-time Moseley rallied, and play was transferred to the Bart.'s half, where our backs put in some sound tackling. Both A. L. Williams and J. P. Harris threatened danger at times, but J. D. Powell, playing in an unaccustomed position at full back, dealt with all difficult situations with his usual *sang-froid*, and sent the visitors back with some well-judged kicks to touch.

The final incident of the first half was an effort by F. Grindlay to place a penalty goal for Moseley.

Half-time: Bart.'s 5, Moseley 0.

After the interval Bart.'s showed none of the ascendancy of the first half, play being generally of an even nature, with Moseley a trifle the more aggressive. The game during this period, though never dull, was rather featureless, apart from an occasional dash by Nel or Williams, good work by Powell and Wright, the rival full-backs, and one hard-kicking rush by J. M. Jackson and C. R. Jenkins, which transferred play from our line to half-way. The longer the game went on the more often did the Moseley forwards secure the ball from the scrums, for J. W. Hasluck to make great efforts to save the game for his side. One try only did the visitors secure, but it was richly deserved, and it was scored by Williams darting over in the corner, following a scrum five yards from our line. The comment must be made that a short "blind-side" try such as this is almost inexcusable, for the "blind side" wing forward (particularly), the scrum-half and the wing three-quarter of the defending side should always be fully prepared to nip such a movement in the bud. Grindlay made a good but unsuccessful attempt to convert (5—3).

The final whistle blew very shortly afterwards to end an excellently contested game, played in the typical "Barts.–Moseley" spirit. The pleasure of the game was greatly enhanced both for players and spectators by the admirable refereeing of Mr. J. G. Bott.

Our team, on the whole, gave a creditable display. E. M. Darmady kept his pack together very well, and the experienced trio Darmady, Jenkins and Jackson did invaluable work in tight and loose scrums. R. S. Hunt showed promise; apart from hooking quite well he showed that rare attribute, intelligence in the open. D. W. Moynagh set an example by the way he went down to forward rushes, but would improve still further if he could display more virility in his play, while Wilson was very good in attack. The whole pack, however, did well. The outsides have already received their meed of praise where deserved, but for his own benefit it must again be pointed out to our right wing that he must tighten up his defence. He held Manley, by far the most dangerous of the visitors' backs, well in the first half, only entirely to destroy the good impression thus created during the second.

Result: St. Bartholomew's Hospital, 1 goal (5 pts.); Moseley, 1 try (3 pts.).

Team.—J. D. Powell (*back*); J. G. Nel, R. M. Kirkwood, C. R. Morison, J. G. Youngman (*three-quarters*); J. R. Kingdon, D. A. Prothero (*halves*); E. M. Darmady (capt.), J. M. Jackson, R. Mundy, J. D. Wilson, D. W. Moynagh, C. R. Jenkins, J. W. Cope, R. S. Hunt (*forwards*).

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

Played at Winchmore Hill on a very heavy ground. Both sides lacked the services of their captains and their usual full-backs. The Harlequins won the toss and played towards the Pavilion end, but with the Hospital forwards settling down immediately, play was largely confined to the visitors' half in the opening stages. Five minutes only had passed when an excellent heel from a loose scrum gave J. T. C. Taylor the ball; he darted round the blind side and, dodging several opponents, scored a fine try between the posts. To the dismay of the Hospital supporters the kick only rose a foot off the ground. Surely it was an error of judgment to give it to a player who had not previously had one shot at conversion this season (3—0). For the next quarter of an hour the exchanges took place mainly in mid-field, where both packs engaged in a fierce battle. The visit of the Harlequins to Winchmore Hill almost always rouses the Bart.'s forwards to put splendid vigour into their play, and with their opponents not slow to respond, a mighty struggle resulted. From the loose scrums the ball came out as much on one side as the other, but in the tight, N. McGrath, the Yorkshire hooker, obtained more of the ball than Harvey, though the latter was by no means outclassed in this department. However, weakness at scrum-half prevented the Harlequin backs from gaining much advantage from this superiority, though it was from a three-quarter movement that the visitors took the lead, when good work by J. R. Cole and J. E. Hutton gave J. R. Anderson the chance to score. J. D. Ronald converted with a very good kick (3—5). Nothing daunted, the Bart.'s forwards put in some excellent rushes, but when they were checked and got the ball out to the backs, hopes of a try from that quarter looked indeed remote. Poor handling and judgment in the centre and at stand-off half meant that if and when J. G. Nel and J. G. Youngman did receive the ball, a hasty kick to touch before being jumped on by several opponents was the best they could hope for. Despairing of scoring by orthodox methods the pack took the ball to the 'Quins line with a concerted dribble, and J. G. Youngman darted up to secure the touch-down. The kick failed (6—5).

Half-time: Bart.'s 6, Harlequins 5.

The second half was largely a repetition of the first from the point of view of methods employed and faults apparent, though two excellent single-handed dribbles by A. H. Pirie brought variety into the game. Although the ball was now coming out rather more frequently to the Harlequin backs, our forwards were unremitting in their endeavours, and excellently led by E. M. Darmady, put forth full effort during the whole 70 minutes of play, and gave easily their best performance of the season.

Meanwhile the backs tackled stoutly, particularly Nel, who showed much improvement in this respect, while C. M. Dransfield, making his first appearance, put in some useful kicks at full-back. But what Bart.'s badly needed was someone behind the scrum to rest our forwards' legs with well-judged kicks to touch. It was very hard to see our pack, having heeled the ball, toiling back to scrum round it again, following a dropped pass outside. Practice in the art of punting should not be despised by some of the Hospital's younger backs; the player who overdoes kicking is a pest, but a centre who literally never finds touch more than half a dozen times a season is only three-quarters of a player.

It was a faulty clearance by a Bart.'s back which gave J. S. K. Reeve the easiest of chances to score and give the Harlequins the lead ten minutes from the close (6—8). Far from being rattled by this misfortune Bart.'s stormed the opposing goal-line in the closing stages, both Wilson and Kingdon being unlucky not to score, and consequently it was mortifying to see the visitors transfer play from their five-yard line right to our goal, where D. B. Willis was awarded a try (6—11). "No-side" followed immediately. It was a very well contested game to watch, and one from which Bart.'s emerged with credit, the forwards particularly giving a magnificent display. Where all were good, to mention names would be invidious. With regard to the outsides the above criticisms may appear harsh, but it would be foolish to condone faulty execution of some of the elementary principles of the game. However, let us end by recalling in opposition to this debit account Taylor's delightful try, Nel's defensive work, and Dransfield's promising display.

Result: St. Bartholomew's Hospital, 2 tries (6 pts.); Harlequins, 1 goal, 2 tries (11 pts.).

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

ASSOCIATION FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD BRENTWOODS.

Played on Saturday, December 10th, at Brentwood. Lost, 1—3.

The conditions for this game were deplorable, a light ball travelling on the wings of an icy wind that blew straight down the field. The Hospital played against this during the first half and could do little better in the way of attacking than an occasional raid. An Old Brentwood put Shields out of the game with a broken nose, and during the disorganization of the defence which followed that incident a goal was scored against the Hospital. Another was added before half-time.

With the light failing rapidly in the second half the defence indulged in long passes that sailed down the length of the field in an attempt to take the ball into the Old Brentwoods' goal mouth. Many promising movements were executed by the forwards before Brownlees scored. It was then dark. However, the game continued for another quarter of an hour, and the Old Brentwoods managed to score another goal without being noticed!

Team.—R. A. L. Wenger (*goal*); J. Shields, A. H. Hunt (*backs*), J. D. Ogilvie, J. W. B. Waring, W. M. Maidlow (*halves*); R. C. Dolly, F. E. Wheeler, R. Shackman, P. Brownlees, H. A. Pearce (*forwards*).

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

Played on Saturday, December 17th, at Barnes. Drawn, 4—4.

The Hospital opened strongly and were soon rewarded by a goal by Wheeler, following a good movement on the right wing. After this Harrods' played much better and made good use of their fast left wing. The ground was full-sized, and consequently larger than most that we are accustomed to playing on. It was some time before we realized the effect that this had on the play. Our long passing was weak, and this was made more noticeable because the forwards were lying too far up the field. The opposing half-backs were able to intercept these passes and open up the game well for their forwards. Again the slowness of our half-backs in getting back in defence after missing their man was shown up, and the backs were left with far more than their share of covering and marking. Harrods' attacked for a great deal of the first half, and were leading 2—1 when Dransfield equalized just before the interval.

During the second half we did much better in all respects, and it was unfortunate that we could only draw. Wheeler and Shackman both scored splendid goals, completing movements in which the ball was passed between the whole forward line. Dolly, who played a greatly improved game on the right wing, hit the crossbar with a hard shot just before the end. Considering that we were not at full strength, the play on the whole was very satisfactory.

Team.—R. A. L. Wenger (*goal*); J. Shields, A. H. Hunt (*backs*); W. A. Owen, D. R. S. Howell, W. M. Maidlow (*halves*); R. C. Dolly, R. Shackman, F. E. Wheeler, C. M. Dransfield, H. A. Pearce (*forwards*).

HOCKEY CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* SURBITON 2ND XI.

Played on Saturday, December 3rd. Won. 4—1.

A fine afternoon saw the Bart.'s forwards playing better than they have played for several weeks.

After the first five minutes, when the Hospital were on the defensive, Bart.'s attacked, and maintained that attitude throughout the first half.

Blackburn was getting some good through passes to his wing-man, and following an attack from that quarter, Hindley passed to the former, who, steadying the ball, scored with a high flick (1—0).

Play being resumed, Bart.'s still attacked, and Glandon-Williams quickly scored off a centre from his left wing (2—0). A third goal was scored, again by Glandon-Williams, after a good piece of solo dribbling (3—0). The score stood thus till half-time.

Play, however, after the interval was more even, and witnessed some desperate work from the defence, Thorne-Thorne especially shining, and getting some beautiful passes through to the opposite inside forward.

Surbiton notwithstanding scored their one goal—a first-time shot, leaving Crosse no chance (3—1).

Heaseman, however, replied beautifully after a pass from Lockett (4—1). With the forwards rather degenerating under the influence of a rather difficult umpire, there was no further score.

Team. J. Crosse (*goal*); W. A. Oliver, C. Fletcher (*backs*); L. Taylor, G. T. Hindley, B. Thorne-Thorne (*halves*); E. W. Burstal, L. Heaseman, G. Glandon-Williams, J. Blackburn, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* R.N. COLLEGE, GREENWICH.

Played on Saturday, December 10th. Lost, 2—1.

The ground was too bumpy to allow accurate dribbling, but the cold was certainly conducive to hard play.

The first half saw the Bart.'s forwards getting together well and doing most of the attacking. Soon a short corner was awarded to the Hospital, from which Hindley sent a very hard shot crashing through a packed goal (1—0). On play being resumed the College got going well and certainly tested Hindley and Wright; the latter, playing his first game this season, proved he hadn't forgotten the art of long clearances to his forwards. However, in spite of dour defence, the R.N.C., attacking through their left wing, scored with a high flick-shot (1—1). On looking back on the matches of this season it is extraordinary to see that quite 60% of the goals scored against Crosse have come through this shot. Our forwards might well remember this when themselves in a *mêlée* within the circle.

After half-time the first twenty minutes saw Bart.'s in difficulties, a period which resulted in the second goal being scored against us (1—2). An inside forward's job is no sinecure, but a fatal lack of tackling back was apparent. Many times must the defence have anathematized the former, who waited about far up the field without any chance of taking a pass from their backs or halves.

The last ten minutes, however, saw some improvement, with Heaseman working as hard as he has ever worked. Blackburn had very hard luck with a first-time shot which sailed over the cross-bar. Taylor also contributed his fair share, but unavailingly. The whistle blew for time with no further score.

Team.—J. Crosse (*goal*); P. M. Wright, G. T. Hindley (*backs*); C. Fletcher, V. C. Snell, B. Thorne-Thorne (*halves*); E. C. Smythe, L. Taylor, L. Heaseman, J. Blackburn, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD FELSTEDIANS.

Played on Saturday, December 17th. Lost, 6—3.

The first few minutes saw Bart.'s pressing and unfortunate in not scoring. After this initial advantage, though, the Old Felstedians attacked hard and fairly soon scored through their inside left (0—1).

It was extraordinary that throughout the game Bart.'s apparently had the advantage, but the Old Felstedians took their opportunities better, and through several quick forward movements scored twice more (0—3). Glandon-Williams, while in our opponents' circle during one of our many attacks, hurt his knee, which rather disorganized the forward line. Blackburn, too, strained his wrist, and it was not surprising that the Old Felstedians scored again before half-time (0—4).

After the interval, with two changes of position Bart.'s did better, and quickly scored through Blackburn, who was now on the left wing (1—4). Play being resumed again the Old Felstedians' territory was raided successfully, a movement between Lockett, Hill and Glandon-Williams leading to the latter scoring (2—4). Our opponents, however, retaliated with two goals (2—6). It was now Lockett's turn to score off a through pass from Glandon-Williams (3—6). Play now certainly grew more heated, and after some ten minutes the whistle blew to end a rather rough game.

Team.—J. Crosse (*goal*); P. M. Wright, V. C. Snell (*backs*); E. Fallows, G. T. Hindley, D. Thorne-Thorne (*halves*); E. W. Smythe, P. J. Hill, A. Glandon-Williams, J. Blackburn, J. M. Lockett (*forwards*)

RIFLE CLUB.

The Inter-Hospitals Miniature Rifle League has been started, six hospitals having joined, and the first two rounds have been shot off. The interest and personal factor involved in the shoulder-to-shoulder matches have been a welcome change from the rather frigid atmosphere of the postal matches to which we are accustomed. Both matches were won, and a further shoulder-to-shoulder match against the City Police resulted also in a win by 8 points.

In the City of London Rifle League we have not been as successful, only two matches having been won so far this season.

Competitions for the Bell Medal and the newspaper certificates have proved very popular. The Bell Medal was won by J. E. Underwood with an average of 98·8 for his best five scores of the season, second place being tied for by W. H. Cartwright and P. G. F. Harvey with 98.2.

The newspaper certificates were awarded as follows:

The *Times* Certificate: K. F. Stephens. Score, 98.
The *Daily Telegraph* Certificate: J. Shackleton Bailey. Score, 98.
The *Sunday Times* Certificate: J. E. Underwood. Score, 97.
The *Daily Mail* Certificate: W. A. Owen. Score, 99 (after tie, 97).

Competitions for spoons under handicap conditions were won by: G. C. Brentnall, D. O. Davies, W. A. Owen, K. F. Stephens and D. M. J. Dean.

It is hoped to arrange a Staff *v.* Students match early in the New Year.

The Lady Ludlow and Sir Holburt Waring Cups will be competed for during next term.

Inter Hospitals League. 1st Round.

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

Shot on November 25th. Home. Won by 26 points.

Our opponents were handicapped by the fact that they have only a 15-yards' range, and had not recently shot at 25 yards. We held the lead from the start and were soon well ahead.

Scores:

St. Bartholomew's.		St. George's.	
W. H. Cartwright	99	K. Gibson	94
J. E. Underwood	98	C. Hamilton Turner	94
J. S. Bailey	97	C. J. S. Wooley	93
B. P. Armstrong	96	J. Beynon	93
D. O. Davies	95	M. S. Good	92
P. G. F. Harvey	94	A. H. Charles	87
Totals	579		553

2nd Round.

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

Shot on December 9th. Home. Won by 5 points.

Guy's, who have no miniature range and do not run a regular team, were rather an unknown quantity, and under the circumstances put up a remarkably good score. The range had produced, for the occasion, a temperature even higher than usual, and the atmosphere was polluted by the invasion of strange smells from the Dispensary. The shooting was very even, and the result of the match was in the balance to the last.

Scores:

St. Bartholomew's.		Guy's.	
G. C. Brentnall	98	C. Boswell	100
W. H. Cartwright	97	R. F. Parfitt	97
J. S. Bailey	97	D. W. Harvey	96
W. A. Owen	97	A. W. Turner	95
J. E. Underwood	96	C. L. Stephens	93
D. O. Davies	93	R. A. Johnson	92
Totals	580		575

FIVES CLUB.

The Fives Club have played three matches—*v.* St. Mary's Hospital, *v.* Alleyn Old Boys and *v.* Old Blues.

In the first we were without our captain, W. H. Gabb, but managed to put up a sufficiently good show to beat a somewhat depleted Mary's IV by 8 points; the match was remarkable for the number of games which reached game-ball all, no less than five such scores being recorded.

Friday, December 2nd. Scores:

E. Harris and R. T. Gabb beat R. Wright and R. Richmond, 19—14, 15—19, beat H. Cockburn and C. Squire, 12—15, 19—15.

J. R. Kingdon and W. A. Oliver beat R. Wright and R. Richmond, 13—15, 15—8, beat H. Cockburn and C. Squire, 15—9, 14—19.

Result: Won by 8 points.

On Wednesday, December 7th, the Bart.'s IV, who were without J. R. Kingdon and W. Oliver, played the Alleyn Old Boys. W. H. Gabb and W. M. Maidlow lost to their first pair by 2 points, but beat their second pair by 12 points. R. T. Gabb and G. Oppenheimer lost to the first pair 10—15, 12—15, and to the second pair 12—15, 12—15. This enabled the Alleyn Old Boys to win by the narrow margin of 4 points.

January 11th, 1933. Bart.'s were again without their two best players, and Millage, the Old Blues' captain, played in both their pairs. With their 1st pair both the Bart.'s pairs were very evenly matched; their 2nd pair was rather too good for us, and beating both Bart.'s pairs rather easily, ensured a win of a very enjoyable game for the Old Blues.

Scores: E. Harris and C. W. John *v.* Pearce and K. Millage, 12—15, 15—12; *v.* Farnes and Millage, 3—15, 5—15.

J. D. Wilson and J. R. Kingdon *v.* Pearce and K. Millage, 12—15, 14—16; *v.* Farnes and Millage, 8—15, 1—15.

This opportunity may be taken to point out that already three matches have had to be scratched owing to lack of players. A good deal more keenness all round is obviously called for.

UNITED HOSPITALS SAILING CLUB.

The Annual General Meeting of the Club was held at the end of last term, when the subscription was fixed at 10s. per annum.

The most important business discussed was in connection with the proposed new club-house. Plans for a building were displayed, and it was unanimously decided to continue with the scheme for its realization. To this end each of the eight hospitals belonging to the Club is expected to raise £50, as their share in the capital expense. This has already been guaranteed in the case of some of the other hospitals.

The club-house will be in an excellent situation overlooking the sea-wall, and will provide sleeping accommodation of upward of 25 members, as well as changing room, lockers, and a drying room for clothes and sails. The building will include a fairly large dining room, and meals will be provided at low rates. The whole scheme provides advantages which are unparalleled among yacht clubs, having regard to the fact that the annual subscription is only 10s. per annum.

It is hoped that members will co-operate in the raising of the sum which St. Bartholomew's Hospital is expected to raise.

The programme of racing for the coming season is now being discussed, and will shortly be available. Anyone who joins the Club is assured of good sport at Burnham, and if they cannot already sail, an excellent opportunity to learn is provided. For those who already sail a long list of races gives the chance of obtaining still further sport of a fascinating nature, that has only to be indulged in to be appreciated.

Any member of the Students' Union is eligible for membership at any time; there is no entry fee. Present members are reminded that their subscriptions are due before April 1st.

W. H. CARTWRIGHT, *Hon. Sec.*

GOLF CLUB.

The Annual General Meeting of the Golf Club was held on November 11th, with the President, Dr. Graham, in the Chair.

A summary of events during the 1932 season was given:

It was stated that Bart. won three matches and lost one during the last year.

The Girling Ball Cup was won by C. M. Carr.

The Hospital Cup was won by J. R. Robertson.

The Staff and Students' Foursomes was won by Dr. Roxburgh and H. D. White.

The Staff *v.* Students' match was halved.

Then followed the election of officers for the 1933 season:

President: DR. GRAHAM.
Vice-President: DR. ROXBURGH.
Captain: J. WILSON.
Hon. Secretary: J. M. ROBINS.
Committee: J. R. Robertson, R. J. Gordon-Williams, W. Wilson, R. B. Halford, C. M. Carr.

A. R. Cutlack was elected as representative to the Bart.'s G.S.

It was duly recorded that the following members of the Club have recently become qualified: W. Wilson, J. N. Groves, H. D. White, A. R. Cutlack, J. A. Nunn. J. M. R.

CORRESPONDENCE.

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

Sir,—I was much interested in the article on Common Colds in your last number. Evidently one of the authors has inherited his interest in the subject.

At a meeting of the Abernethian Society—I think in 1888—the subject for discussion was "The Treatment of a Common Cold". During the discussion Fred. Andrewes rose, and speaking with the authority of the Senior Physician's H.P. and the humour that his son evidently shares, said:

"Gentlemen, I have found the following prescription very useful in these conditions:

"Recipe:

Spiritûs vini Gallici, uncias duo;
Liquoris Sodii Effervescentis, quantum sufficit.
Misce fiat haustus, statim sumendus et repetatur dosis si opus sit."

The advice was received by the audience with enthusiasm.

Yours etc.,
G. H. R. HOLDEN, M.D.

St. Kilda,
8, Bath Road,
Reading;
January 8th, 1933.

REVIEWS.

A SHORT PRACTICE OF SURGERY: VOL. II. By R. J. MCNEILL LOVE, M.S., F.R.C.S., and HAMILTON BAILEY, F.R.C.S. Pp. 474. 349 illustrations. Price 20s.

The second volume of this work has been awaited with interest, and it continues the high standard of teaching which characterized the first part.

There is included in the new volume a very comprehensive survey of the diseases of the abdominal part of the alimentary canal and of the parts closely associated with it, in so far as they concern the surgeon. The work deals only with *modern* methods of treatment, and we are glad to note the absence of many of the obsolete procedures which have swelled the pages of our text-books of the past.

Successive chapters deal with surgical affections of the head, spine and thorax, and they cover with remarkable completeness the more important aspects of the diseases of these parts. We do not quite see why a chapter on tumours should appear so near the end of the work. This would appear to have been better placed in the earlier part of vol. i.

The final section, dealing with infections of the hand, is most valuable in view of the great loss of efficiency and the cost to the community which is traceable to septic conditions of the upper extremity.

The illustrations, especially the photographs, are very good, and save much explanation in the text. The book is well turned out and constitutes a valuable ally, both to the student who is up for his final examinations, and to the practitioner who has passed the last hurdle of his course.

A COMPANION TO MANUALS OF PRACTICAL ANATOMY. By E. B. JAMIESON, M.D. Third edition. (Humphrey Milford, Oxford University Press, 1932.) Pp. xxxv + 654. Price 12s. 6d. net.

This "great little book" has been completely revised in this edition. It will be welcomed by everyone who, in the near future, expects to have judgment passed on an all too short, eighteen months' study of a vast subject. Though styled a mere "companion", it is in fact more detailed a description than many of the larger "manuals".

Alterations have been made throughout, and certain sections, notably the Central Nervous System, have been rewritten. This has entailed the addition of about a hundred pages to the text, but the barely noticeable increase in bulk—it might still be termed "pocket"—has been overbalanced by the weight of new information and added clarity imparted. The book remains a masterpiece of condensed description. The new terminology is used, as in the previous editions.

Beautifully produced with the excellence that is now almost expected of its publishers, it seems a pity that it should be destined to be soiled with the cadaveric grease of the dissecting-rooms.

AN INTRODUCTION TO PHARMACOLOGY AND THERAPEUTICS. By J. A. GUNN, M.A., M.D., D.Sc., F.R.C.P. Third edition. (Humphrey Milford, Oxford University Press, 1932.) Pp. viii + 237.

The popularity of this almost indispensable little summary is shown by the fact that there have been three editions in the last four years. The present one follows the publication of the British Pharmacopœia, 1932, and the main alterations have been those to comply with the new issue. These include a useful section on antitoxins and active immunization.

As an introduction and general survey of the subject, the book ably fulfils its author's purpose. It is very useful for revision, but, of course, it cannot replace the larger illustrated text-books with all their experimental evidence, which is quite rightly omitted in this.

MATERIA MEDICA: PHARMACY, PHARMACOLOGY AND THERAPEUTICS. By WILLIAM HALE-WHITE, K.B.E., M.D.(Lond.), M.D.(Dub.), LL.D.(Ed.). Revised by A. H. DOUTHWAITE, M.D., F.R.C.P. Twenty-first edition. (London: J. & A. Churchill, 1932.) Pp. x + 547. Price 10s. 6d. net.

This popular little book has reached yet another edition, and has appeared simultaneously with the *British Pharmacopœia* for 1932. Its present size is somewhat larger than that of previous editions, but the general conformity remains unaltered. The arrangement of the book has been widely changed, so that it is now divided into two parts, one relating to substances used for their local action, such as antiseptics and purgatives, the other to substances used for their action after absorption.

The 128 additions to the official work have been included, also abrodil, uroselectan, nirvanol, lipiodol, iodiophthalein and such unofficial drugs. Of the omissions from the new *British Pharmacopœia* many have been deleted, but a few preparations of established use have maintained their position. The revised size does not prevent this book fitting into the pocket or make it heavier to carry.

A SYNOPSIS OF SURGICAL ANATOMY. By ALEXANDER LEE MCGREGOR, M.Ch., F.R.C.S. With Foreword by Sir HAROLD J. STILES. (Bristol: John Wright & Sons, Ltd., 1932.) Pp. xiv + 609. Price 17s. 6d. net.

Mr. McGregor has very definitely supplied a "long-felt want." He has succeeded in combining surgery and anatomy, and presenting it in a most clear and palatable form. So many previous text-books of surgical anatomy have attempted to cover the entire field of anatomy and surgery in one small volume, with the result that the book is "neither flesh, fowl, nor good red herring."

The author has departed entirely from the usual arrangement, and his division of the book into two parts—the anatomy of the normal and the anatomy of the abnormal—is an entirely original and valuable departure from custom.

Although the book is larger than most students taking the qualifying examinations of the Colleges would have time to read, each subject is presented as a separate and complete essay which can be read by itself so that the book can be used as a work of reference. The book is very fully illustrated with simple black and white diagrams which are easy to commit to memory, and ably assist in explanation of the text. Not only will it be valuable to the student of surgery, but much of it will be of great value to the student in his second year, and will help to bridge the gulf between his preclinical and clinical work, by helping him to understand the practical application of the excessive number of isolated facts he is called upon to memorize. No claim has been made that this book is complete, but it is exceedingly difficult to think of any anatomical facts of practical importance that have not been very adequately dealt with.

We are sure the book will have a very wide sale among students and teachers of the subject alike.

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

BEATTIE, W. JOHN H. M., F.R.C.S. "Three Fatal Cases of Pulmonary Embolism in Relation to Pregnancy." *Lancet*, November 19th, 1932.

BURKE, G. T., M.D., M.R.C.P., I.M.S. (and STOTT, H., M.D., M.R.C.P., I.M.S.). "A Case of Syphilis (Gummata) of the Heart." *British Medical Journal*, October 29th, 1932.

CHANDLER, F. G., M.D., F.R.C.P. "Adhesion Cutting, with Special Reference to the Uses and Limitations of Diathermy, and the Use of Separate or Combined Endoscope and Operating Instrument." *Tubercle*, November, 1932.

CLARK, A., M.R.C.P. *See* Graham, Clark & Roberton.

DUNDAS-GRANT, Sir JAMES, K.B.E., M.D., F.R.C.S. "Treatment of Laryngeal Tuberculosis." *Lancet*, November 5th, 1932.

*GARROD, LAWRENCE P., M.B., M.R.C.P. "Recent Developments in Immunotherapy." *Practitioner*, October, 1932.

GOSSE, PHILIP, M.D. *The History of Piracy*. London: Longmans, Green & Co., 1932.

GRAHAM, GEORGE, M.D., F.R.C.P., CLARK, A., M.R.C.P., and ROBERTON, H. E. W., M.B. "High Carbohydrate Diet in Treatment of Diabetes Mellitus." *Lancet*, November 5th, 1932.

HAMMOND, T. E., F.R.C.S. "Frequency of Micturition and its Treatment." *Clinical Journal*, November 16th, 1932.

HARMER, W. DOUGLAS, M.C., F.R.C.S. *The Relative Value of Radiotherapy in the Treatment of Cancer of the Upper Air-Passages*. (London: John Murray, 1932.)

HARRISON, G. A., B.A., M.D. "A Modification of Barberio's Test for Human Seminal Stains." *Lancet*, October 29th, 1932.

HOWELL, C. M. HINDS, M.D., F.R.C.P. "Ocular Manifestations of Lesions of the Fifth Nerve." *British Medical Journal*, October 29th, 1932.

MOORE, R. FOSTER, O.B.E., F.R.C.S. "Ocular Manifestations of Lesions of the Fifth Nerve." *British Medical Journal*, October 29th, 1932.

MORLOCK, H. V., M.R.C.P. (A. J. SCOTT PINCHIN, F.R.C.P., and H.V.M.). "The Bronchoscope in the Treatment of Pulmonary Suppuration." *Lancet*, September 17th, 1932.

——— "Chronic Pulmonary Suppuration and its Treatment by Bronchoscopy." *Tubercle*, September, 1932.

NEWMAN, Sir GEORGE, K.C.B., M.D., F.R.C.P. "The Private Practitioner and Preventive Medicine." *British Medical Journal*, July 30th, 1932.

——— "The Debt of Preventive Medicine to Harvey and the College of Physicians." *Lancet*, October 22nd, 1932.

NIXON, J. A., C.M.G., M.D., F.R.C.P. "Albuminuria in Pregnancy." *Bristol Medico-Chirurgical Journal*, Autumn, 1932.

OKELL, C. C., M.B., F.R.C.P. "Attenuation and Prevention of Measles." *British Medical Journal*, August 27th, 1932.

——— (and HART, P. D'ARCY, M.R.C.P.). "A Simple Apparatus for Venesection." *Lancet*, September 3rd, 1932.

PATERSON, HERBERT J., C.B.E., M.Ch., M.D., F.R.C.S. "A Symposium on Acute Intestinal Obstruction." *British Medical Journal*, September 17th, 1932.

PHILLIPS, RALPH, M.S. *See* Woollard and Phillips.

POWER, Sir D'ARCY, K.B.E., F.R.C.S. "St. Bartholomew's Hospital 1880–1930." The Seventh Finlayson Memorial Lecture, delivered in the Faculty Hall, Glasgow, on April 21st, 1932. *Glasgow Medical Journal*, August, 1932.

——— "Some Bygone Operations in Surgery. X. A Case of Strangulated Umbilical Hernia: Queen Croadne of Anspach" (concluded). *British Journal of Surgery*, October, 1932.

RAWLING, L. BATHE, F.R.C.S. "Spinal Tumour seen on Direct X-ray Examination without Lipiodol." *British Journal of Surgery*, October, 1932.

ROBERTON, HENRY E. W., M.A., M.B., B.Ch. *See* Graham, Clark and Roberton.

ROBERTSON, H. D., M.R.C.S. *See* Beattie and Robertson. (*See* November, 1932, Journal.)
ROLLESTON, Sir HUMPHRY, Bart., G.C.V.O., K.C.B., M.D., F.R.C.P. "Cambridge Men and Dermatology." *British Journal of Dermatology and Syphilis*, August–September, 1932.
ROXBURGH, A. C., M.D., F.R.C.P. *Common Skin Diseases*. London: H. K. Lewis, 1932.
SHAW, WILFRED, M.D., B.Ch., F.R.C.S., F.C.O.G. "The Management of Cases of Abortion." *Practitioner*, April, 1932.
STONE, G. KENNETH, D.M., M.R.C.P. "A Serological Study of Yeasts." *Rose Research on Lymphadenoma*. Bristol: John Wright & Sons, 1932.
STUART-LOW, W., F.R.C.S. "Nasal Catarrh." *Prescriber*, November, 1932.
VICK, REGINALD, F.R.C.S., "Statistics of Acute Intestinal Obstruction." *British Medical Journal*, September 17th, 1932.
WALKER, KENNETH M., O.B.E., F.R.C.S. "The Sequelæ of Prostatectomy." *British Medical Journal*, July 30th, 1932.
——— Editor of *Preparation for Marriage*. A handbook issued under the auspices of the British Social Hygiene Council. London: Jonathan Cape, 1932.
——— "Renal Pain." *Clinical Journal*, October 5th, 1932.
WATKYN-THOMAS, P. W., F.R.C.S., and YATES, A. LOWNDES, F.R.C.S. *The Principles and Practice of Otology*. London: H. K. Lewis & Co., 1932.
WHARRY, H. MORTIMER, F.R.C.S. "The Prescription of Electric Hearing Aids of the Pocket Type." *Practitioner*, November, 1932.
WOOD, W. BURTON, M.A., M.D., M.R.C.P. "What is Wrong With the Medical Curriculum?" *Lancet*, August 13th, 1932.
——— "The Early Diagnosis of Pulmonary Tuberculosis." *Clinical Journal*, September 14th, 1932.
WOOLLARD, H. H., M.D., and PHILLIPS, R., M.S. "The Distribution of Sympathetic Fibres in the Extremities." *Journal of Anatomy*, October, 1932.
YATES, A. LOWNDES, M.C., M.D., F.R.C.S. *See* Watkyn-Thomas and Yates.
——— "The Complications of the Common Cold as they Affect the Ear, Nose and Throat." *Practitioner*, November, 1932.

* We regret that in our November, 1932, issue the paper entitled "Recent Developments in Immunotherapy," *Practitioner*, October, 1932, was credited to Sir Archibald Garrod, instead of to Dr. L. P. Garrod.

EXAMINATIONS, ETC.

University of Cambridge.

Third Examination for Medical and Surgical Degrees, December, 1932.

Part I.—Berry, W. T. C., Ghey, P. H. R., Graham-Campbell, R. W., Hadfield, S. J., Lumsden, K., Morel, M. P., Richards, P. J., Richards, W. F., Wilson, J.

Part II.—Birdsall, S. E., Bradbury, E., Campbell, J. W., Dahne, S. F. L., Gawne, D. W. C., Knight, H. V., Mandow, G. A., Mears, A. R. R., Morrell, F. H., Pawson, E. B., Roper, R. D., Shepherd, F. W., Warren, C. B. M., Wedd, G. D., White, H. D.

University of London.

M.D. Examination, December, 1932.

Branch I. Medicine.—Greenwood, W. Pickup.

First Examination for Medical Degrees, December, 1932.

Pass.—Bacon, A. H., Brown, K. C., Burnham Slipper, C. N., Carey, C. J., Dunn, J. R., Foster, L., Foster, W. B., Frewen, W. K., Gillett, J. K., Goodrich, B. H., Harrison, R. J., Hill, P. G., Jack, A. H., Jamieson, J. G., Thomson, A. H., Waring, J. W. B.

CHANGES OF ADDRESS.

CAPENER, N. L., 33, Southernhay West, Exeter. (Tel. 4692.)
HEATH, C. J., 53, York Terrace, N.W. 1.
HIGGS, S. L., 7, Wimpole Street, W. 1. (Tel. Langham 2266.)
OGLE-SKAN, H. W., 141, Lapwing Lane, Didsbury, Manchester.
SCOTT-BROWN, W. G., 86, Harley Street, W. 1. (Tel. Langham 1742.)

APPOINTMENTS.

BELL, ARTHUR C., F.R.C.S., appointed Out-Patient Surgeon to the Chelsea Hospital for Women.
SHARP, B. BUCKLEY, M.D., M.R.C.P., appointed Physician to Out-Patients at the Evelina Hospital.
SPACKMAN, Lt.-Col. W. C., I.M.S., M.D., B.S.(Lond.), F.R.C.S.(Ed.), M.C.O.G., appointed Professor of Midwifery and Gynæcology, Grant Medical College, Bombay.

BIRTHS.

BARNES.—On January 8th, 1933, at 27, Welbeck Street, W. 1. to Nellie Winifred (*née* Lobb), wife of F. G. L. Barnes, M.B., B.S. (Lond.), of Horton, Epsom—a son.
COLLYNS.—On January 2nd, 1933, at Dulverton, to Rachel, wife of Dr. P. C. Collyns—a daughter.
EDELSTEN.—On January 19th, 1933, at a nursing home, Chertsey, to Peggy (*née* Milsome), wife of Dr. Geoffrey Edelsten, The Hollies, Chertsey—a son (stillborn).
ELLIS.—On January 9th, 1933, at The Poplars, Bourton, Dorset, to Gladys Mary, wife of Dr. George E. Ellis—a son.
GREEN.—On January 8th, 1933, at 40, Bromley Common, Kent, to Margaret (*née* Walsh), wife of Dr. H. F. Green—a son.
HANCOCK.—On January 19th, 1933, at 19, Bentinck Street, to Estelle (*née* Derouet), wife of Dr. F. R. Thompson Hancock, of Stoke Mandeville, Bucks—a daughter.
KING.—On December 25th, 1932, to Moira (*née* Atteridge), wife of J. F. Lascelles King, M.B., B.S., of 32, Chepstow Place, W. 2—a son (Stephen John).
KRIGE.—On December 30th, 1932, at Standerton, East Transvaal, to Aileen, wife of Dr. F. C. Krige—a daughter.
WHITING.—On January 12th, 1933, at 96, Melford Road, Sudbury, Suffolk, to Elwina May (*née* Smith), wife of Dr. J. S. Whiting—a son.

MARRIAGES.

LITTLE—GEORGE.—On January 24th, 1933, at St. John's Presbyterian Church, Forest Hill, London, George Sinclair Ross Little, youngest son of the late Mr. David Little and Mrs. Little, of Cardiff, to Megan, eldest daughter of Mr. and Mrs. J. Evans George, of Forest Hill.
PRICE—STEVENS.—On January 7th, 1933, at Holy Trinity Church, Brompton, Major Robert Bernard Price, R.A.M.C., second son of Mr. E. H. Price, of Beckenham, to Daphne, only daughter of Mr. H. Stevens, of Herne Bay.

DEATHS.

BIRD.—On January 15th, 1933, very suddenly, at Cooksditch, Faversham, Kent, Martin Wright Kidman Bird, F.R.C.S.(Eng.), aged 43.
COLBY.—On January 20th, 1933, suddenly, Francis Edward Albert Colby, F.R.C.S.
COVEY.—On December 26th, 1932, Edward Alan Rustat Covey, L.R.C.P., L.R.C.S., L.S.A., of Linden Grove, Shirley Road, Southampton, aged 65.
GILL.—On January 13th, 1933, suddenly, at Shaftesbury, Richard Gill, M.D., B.Sc., F.R.C.S., of 17, Albert Hall Mansions, S.W. 7.
HADWEN.—On December 27th, 1932, at Gloucester, Walter Robert Hadwen, M.D.(St. And.), M.R.C.S., L.R.C.P., aged 78.
HIND.—On January 10th, 1933, at 152, Rivermead Court, S.W. 6, Alfred Ernest Hind, F.R.C.S., of Portland House, Jersey, aged 72.

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. XL.—No. 6.] MARCH 1ST, 1933. PRICE NINEPENCE.

CALENDAR.

Fri., Mar 3.—Dr. Gow and Mr. Girling Ball on duty.
Sat., ,, 4.—Rugby Match *v.* Halifax. Home.
Association Match *v.* Balliol College, Oxford. Away.
Hockey Match *v.* Reading University. Away.
Mon., ,, 6.—Special Subjects: Clinical Lecture by Mr. Bedford Russell.
Tues., ,, 7.—Dr. George Graham and Mr. Roberts on duty.
Wed., ,, 8.—Surgery: Clinical Lecture by Mr. Harold Wilson.
Hockey Match *v.* K.C.H.A. Home.
Fri., ,, 10.—Medicine: Clinical Lecture by Dr. George Graham.
Prof. Fraser and Prof. Gask on duty.
Sat., ,, 11.—Rugby Match *v.* London Irish. Home.
Association Match *v.* Old Foresters. Away.
Hockey Match *v.* St. Lawrence. Away.
Mon., ,, 13.—Special Subjects: Clinical Lecture by Mr. Just.
Tues., ,, 14.—Lord Horder and Sir C. Gordon Watson on duty.
Wed., ,, 15.—**Final Inter-Hospital Rugby Cup. Bart.'s *v.* Guy's.**
Fri., ,, 17.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Sat., ,, 18.—Rugby Match *v.* Old Haileyburians. Home.
Association Match *v.* Casuals. Home.
Hockey Match *v.* Oxford Occasionals.
Mon., ,, 20.—**Last day for receiving matter for the April issue of the Journal.**
Tues., ,, 21.—Dr. Gow and Mr. Girling Ball on duty.
Fri., ,, 24.—Dr. George Graham and Mr. Roberts on duty.
Sat., ,, 25.—Rugby Match *v.* Torquay Athletic. Away.
Association Match *v.* Brighton Old Grammarians. Home.
Hockey Match *v.* Gravesend. Home.
Mon., ,, 27.—Rugby Match *v.* Redruth. Away.
Tues., ,, 28.—Rugby Match *v.* Falmouth. Away.
Prof. Fraser and Prof. Gask on duty.

EDITORIAL.

GENERATIONS come and pass, but each leaves some traces of its ambitions and accomplishments. The present generation of Bart.'s men will be remembered for all time, since they will have achieved one of the greatest events in the many centuries of history at St. Bartholomew's—the establishment of a Medical College with adequate equipment.

In our last issue we promised to publish a list of massed figures showing the present position of the appeal for funds; and the Dean has kindly supplied this. He writes:

22nd February, 1933.

MY DEAR MR. EDITOR,

I promised last month to give you some indication of the results of the College Appeal up to the present time, so that they might be known to Bart.'s men throughout the country.

Attached you will find a list of the amounts received and promised. Subscribers who are Bart.'s men are not shown individually, but under their respective counties. The figures in brackets are the numbers of Bart.'s subscribers in each.

In the counties of Devon, Somerset and Wiltshire, Worcestershire and Oxford there is an organization amongst the old Bart.'s men, and it is clear that where such an organization exists and is at work the number of subscribers has considerably increased. We are anxious, therefore, to see more of these local units established, and I should be glad to have the names of old Bart.'s men who are willing to act as local secretaries in their own counties.

In addition to the sums shown we have other sums available, amounting to about £7000, giving, with the value of the Harvey Laboratories (£20,000), a total approximating £60,000.

I do most earnestly ask those who have not yet subscribed to do so now, for the time is ripe for us to begin negotiations. The larger the sum that we can subscribe ourselves, the greater will be the force of our appeal to the general public when we ask them to help us. This we are about to do. The fact that old Bart.'s men have subscribed so generously cannot fail to be a very great stimulus to others.

Yours sincerely,
W. GIRLING BALL,
Dean of the Medical College.

COLLEGE APPEAL FUND.

	£	s.	d.	
Staff	11,884	5	9	(65)
Demonstrators	1,492	10	0	(63)
Students	266	1	6	(225)
Old Bart.'s men:				
Bedfordshire	5	10	6	(2)
Berkshire	73	14	0	(9)
Buckinghamshire	43	13	0	(6)
Cambridgeshire	149	14	0	(9)
Cheshire	1	1	0	(1)
Cornwall	20	0	0	(4)
Cumberland	5	0	0	(1)
Derbyshire	2	2	0	(1)
Devonshire	333	13	0	(27)
Dorset	9	4	0	(4)
Durham	15	5	0	(2)
Essex	214	14	0	(8)
Gloucestershire	108	13	0	(6)
Hampshire	284	19	0	(21)
Herefordshire	5	0	0	(1)
Hertfordshire	27	0	0	(5)
Isle of Wight	22	2	0	(2)
Kent	331	17	0	(24)
Lancashire	13	8	0	(4)
Leicestershire	73	2	0	(3)
Lincolnshire	25	4	0	(5)
Middlesex	263	0	0	(6)
Norfolk	118	13	0	(11)
Northamptonshire	53	3	0	(3)
Northumberland	101	1	0	(2)
Oxfordshire	148	13	0	(9)
Shropshire	23	2	0	(5)
Somersetshire	318	12	0	(13)
Staffordshire	61	11	0	(3)
Suffolk	247	1	0	(13)
Surrey	293	19	0	(24)
Sussex	188	2	0	(23)
Warwickshire	144	7	0	(9)
Wiltshire	82	6	0	(8)
Worcestershire	119	3	0	(12)
Yorkshire	212	13	0	(8)
Wales	62	12	0	(4)
London	2,164	4	8	(83)
Channel Islands	10	0	0	(1)
Abroad	22	10	0	(5)
South Africa	206	0	0	(6)
Canada	75	0	0	(3)
East Africa	2	2	0	(1)
West Africa	140	5	0	(4)
India	100	0	0	(1)
Syria	2	2	0	(1)
U.S.A.	5	0	0	(1)
Ireland	13	13	0	(2)
North Africa	1	0	0	(1)
Malay States	6	0	0	(2)
China	12	2	0	(2)
France	50	0	0	(1)
Trinidad	20	0	0	(1)
West Indies	2	0	0	(1)
Services	392	10	0	(14)
*Others	15,032	12	6	(79)
	£30,702	11	11	

*These figures include:	£	s.	d.
University of London	5000	0	0
Unilever Bros.	500	0	0
League of St. Bartholomew's Nurses	25	0	0
The Executors of the late Alfred de Rothschild, Esq.	2000	0	0
Rahere Lodge	105	0	0
Corporation of the City	1000	0	0
Fishmongers' Company	262	10	0
Mercers' Company	1000	0	0
Ironmongers' Company	100	0	0

* * *

We learn that Mr. J. E. H. Roberts has been granted six months' leave of absence, and that Mr. Reginald M. Vick has been appointed to take charge of his firm while he is away. Mr. J. P. Hosford has been elected temporary Assistant Surgeon.

* * *

We have to congratulate Mr. R. S. Corbett on his election to the post of Assistant Surgeon to the Hospital.

* * *

We should also like to congratulate Mr. H. B. Stallard on being awarded the Gifford Edmonds Prize, of 1932, for his essay on "Radiant Energy as a Pathogenic and Therapeutic Agent in Ophthalmic Disorders".

* * *

THE TENTH DECENNIAL CLUB.

We have been asked to announce that the Annual Dinner of the Tenth Decennial Club will be held at the Langham Hotel on Friday, May 5th, 1933. Dr. F. H. Robbins will be in the chair. Will any members requiring further information please apply to one or other of the Secretaries, Mr. Reginald M. Vick or Dr. Arnold W. Stott.

* * *

The past month has been one of exceptional activity for the members of the Rugger Club. By defeating King's, St. Thomas's, and finally the London Hospital in the semi-final, the 1st XV have qualified to meet Guy's once again in the final on March 15th. There appears to be every chance that the old tradition of being narrowly defeated by Guy's in the final will be broken.

During the season the Rugger Club picks up many supporters among the laity, and its latest achievement is to usurp that well-known Devonian Uncle Tom Cobley. We would refer our readers to the account of the game against Exeter in the match reports, and we would thank Mr. Cobley for his telegram before the St. Thomas's Cup Match. We should like to repeat his good wishes to the Club in regard to the final: "Best O luck to 'ee my dears".

* * *

THE SPREAD OF INFECTION.

MOST of the diseases with which we deal are produced by micro-organisms, and in most cases these have recently reached the patient from some other human or animal body. But how often can we trace their actual source, and how often do we know by what means transmission has taken place? Except in the "infectious"* fevers, the spread of which takes place with extreme facility among susceptible individuals, and has therefore to be studied and controlled by concerted measures, we must confess that we can rarely point to the source of an infection; nor can we expect always to be able to do so in the individual case; but to know more about the less familiar paths by which infection is spread may have its uses in prevention.

It must not, of course, be assumed that complete isolation from any source of infection is a good general ideal. On the other hand, the doctrine that exposure to infection is desirable in order to secure immunity, although perhaps true in some directions, can be most perniciously misapplied. That we should inhale or swallow a certain number of bacteria of certain kinds may be a good thing; some of us acquire immunity to diphtheria, for instance, without ever developing this disease in a recognizable form, but the advantage to be gained by exposing oneself to catarrhal infections, which appear to confer no lasting immunity, septic infections, infectious conjunctivitis, or ringworm, to take a few random examples, is, to say the least, dubious. It is necessary to say this because some people, on being told that there are risks of infection in quite commonplace circumstances, either pooh-pooh the idea, or accept the risk as actually beneficial on the basis already indicated. It is almost always unsafe to court random immunization; the fallacy of the method is its uncontrolled dosage, and the proposition that immunity can so be obtained at all is tenable in the case of few infections only.

The conditions under which infection may spread depend upon two principal factors, of which one is the resistance of the micro-organism to unfavourable influences outside the body. The source of a case of anthrax may be a sheepskin which has been brought from the other side of the world; at the other extreme is venereal disease, which, owing to the fortunate susceptibility of the organisms concerned to external influences, can rarely be conveyed except by intimate contact. Assuming that survival outside the body is possible, its duration may be determined by conditions of temperature, moisture, and available protective or nutritive matter. Thus there are types of external environment adapted to the needs of different bacteria. The other factor concerned is, of course, the possibility and extent of contamination of suitable external media from existing cases of disease. Before considering some of the more neglected aspects of this matter, it will be convenient to summarize the more important of the well-recognized paths by which infection is conveyed, with the chief diseases concerned.

Dust: Conveys anthrax and tubercle; other respiratory tract infections doubtful (viability in any case short); skin dust infective in smallpox, etc.

Soil: Of chief importance as harbouring spores of the Clostridia (causing tetanus and gas gangrene).

Water: Enteric and dysentery groups first and foremost. Various parasites (bilharzia, hookworm).

Food: Exclusive of milk, which demands separate mention, food of various kinds is a vehicle chiefly for the enteric and food-poisoning groups of bacteria; source of infection a human carrier, flies, occasionally mice, rats, or the animal itself from which meat is derived.

Milk: Diseases conveyed are either those of the cow (tuberculosis, undulant fever), or those of the milker (enteric); in some cases (diphtheria, scarlet fever and other streptococcal infections) the milker may be the ultimate source, but the direct one a lesion of the teat or udder.

Insects, etc.: Distinguish accidental conveyance, as by flies, from infective bites (plague, malaria, yellow fever, filariasis, and many other "tropical" diseases). In this category may be placed dog-bites as the source of rabies.

"*Droplet*" *or* "*spray*" *infection:* The common mode of conveyance of all respiratory tract infections, from a cold to pneumonia, and including diphtheria, tuberculosis and most of the specific fevers, cerebro-spinal fever, poliomyelitis.

"*Fomites*", *i.e.* clothes or anything which has been exposed to infection from a patient: undoubtedly dangerous in cases of smallpox; usually regarded as requiring sterilization after diphtheria, scarlet fever, etc.

This list, which does not pretend to be complete, raises several general questions of interest. What, for instance, is the real danger of fomites? Is it really necessary to subject a child's books and toys to damaging processes of sterilization after an infectious illness? The best authenticated recent example of the spread of infection by such means involved diphtheria and a common stock of penholders, which were doubtless chewed by their victims, and hence occupy a rather

* There is confusion in the use of this and other terms. It seems reasonable to restrict the adjective "infectious" to the readily communicable specific fevers, and "contagious" to diseases conveyed by actual contact; "infective" embraces all diseases due to micro-organisms, irrespective of their mode of transmission.

special position. What is the relative importance of dust and droplet infection in producing tuberculosis of the lungs? Millions of notices forbid spitting, but few, if any, unprotected coughing. The trend of modern opinion is to regard droplet infection as of much the greater importance, and the phthisical patient as a person who should associate with others only under open-air conditions or the nearest equivalent obtainable. Our knowledge of bacterial spread by this means owes much to the work of Dr. Gordon, who studied it in no less a place than the House of Commons, after many members had been laid low by an epidemic of influenza. He was able to trace salivary streptococci ejected by speakers on the Treasury Bench first to the Ladies' Gallery and thence to almost every part of the House; the existence of a current of air following this route was subsequently confirmed by smoke tests. By reciting Shakespeare in what is now our Morbid Histology Laboratory, after gargling with a culture of *B. prodigiosus* (the red colonies of which make it easily recognizable in culture), he recovered this organism in large numbers from an audience of agar plates immediately before him; in small numbers also from plates exposed in the furthest corner of the room. The meaning of these experiments is that invisible particles of infected secretion are most numerous, and therefore most dangerous, in the immediate neighbourhood of the speaker (or cougher or sneezer), but that they may be carried in smaller numbers to considerable distances. This mode of spread conveys more diseases, and will repay more attention, than any other.

We may now come to some vehicles of infection which are less generally recognized; they afford, perhaps, more food for speculation than facts.

The hands: That septic infection may be conveyed from patient to patient by the imperfectly "sterilized" skin of doctor or nurse is unfortunately incontestable. To shake hands with a person suffering from a "streaming" cold may be literally to wet your hand with his nasal secretion—certainly to infect it heavily unless he uses multitudes of paper handkerchiefs; notice how often you touch your lips or nose with the hand and you will understand how easily the infection is conveyed to its destination. A photograph of the Lower House of Convocation which appeared in an evening paper last March showed five out of eight clerics in the picture with a hand rubbing, scratching or pressing on some part of the face, usually the mouth. Have the courage to refuse to shake hands with people who have colds, and to tell them to keep their pestilential secretions to themselves. Infection *viâ* the hands may be more remote, some other intermediate vehicle being concerned. An enteritis attacking students at a certain hospital was proved to have been conveyed by the door-handle of a ward, which was infected by the hands of nurses conveying excreta to a "bathroom" outside it. Anything handled by large numbers of people is a potential source of infection; the wearing of gloves is an important hygienic safeguard in many circumstances.

Washing utensils: Outbreaks of conjunctivitis are due almost invariably to infection by this means, particularly when a common stock of towels is used; less common, but more serious, is the transmission of gonorrhœa, an occasional catastrophe in the wards of children's hospitals of which this appears to be the explanation. How far the ordinary wash-basin or bath should be mistrusted is doubtful; Dr. Gordon's observation that used bath-water contains anything up to 100,000 living skin staphylococci per c.c. is at least somewhat forbidding. But this picture pales before the conditions obtaining in the less hygienic type of swimming-bath, where water eventually burdened with so much organic matter as almost to constitute a culture medium is profusely contaminated with the nasal secretions of hundreds of spluttering bathers. Apart from conjunctivitis, enteric fever and even gonorrhœa, which have occasionally been known to be conveyed by swimming-bath water, upper respiratory tract infections are naturally its principal danger, and their peculiar liability to be complicated by otitis media is well known. However unpleasant chlorine or copper sulphate may seem, we are general use except in baths where a free and continuous flow of water is maintained would prevent a large amount of illness.

It is arguable that public drinking fountains, such as that at the corner of Giltspur Street and Holborn Viaduct, should be abolished. There is no doubt that drinking vessels can convey infection, and the methods of cleaning and handling glasses in places where large quantities of fluid are consumed will sometimes not bear inspection. Vincent's angina, a good example of a disease in which the source of infection is rarely known in sporadic cases, has been spread in epidemic form by this means. Perhaps, however, we are nearing the point where caution borders on obsession. If you allow your imagination full play, even your hairdresser may fill you with misgivings; he may pride himself on a hairbrush sterilized for each customer in formalin vapour, but what about his scissors, his clippers, and last, but not least, his hands?

We may turn finally from methods of transmission generally to the problem of one particular disease, perhaps the most dangerous of those in which the source of infection is often unknown. Acute streptococcal sepsis occasionally follows trifling injury, such as a scratch or insect-bite, in quite healthy people; hardly a week passes without a newspaper report of an inquest on such a case. How are virulent streptococci conveyed to these lesions? To this question there is at present no answer. It is just conceivable that the infection may sometimes be endogenous; it would be interesting to know how many victims of these septic accidents are tonsillar carriers of streptococci. The infection might be conveyed by the instrument which inflicted the injury; this is conceivable in the case of a mosquito, if she (all biting mosquitoes being females) has recently pitched on someone's patch of impetigo, hardly conceivable in the case of a rusty nail. What seems, in our ignorance, more probable is that the victim's skin has been infected, usually before the injury, by actual contact with some other individual, and streptococci highly virulent to another person may lurk in lesions as insignificant as impetigo, a whitlow, or a running ear. So far the attempts which have been made really to trace the source of these infections have been confined chiefly to cases of sepsis in the puerperium, and increasing importance is being attached to droplet infection from tonsillar and nasal carriers of streptococci, who may be in attendance on the patient. A bacteriological overhaul of the entire environment of patients developing acute streptococcal sepsis in connection with skin injuries has yet to be undertaken; until this has been done (perhaps even after it) the source of these infections will remain often unknown.

L. P. G.

A CASE OF SPONTANEOUS HYPOGLYCÆMIA.

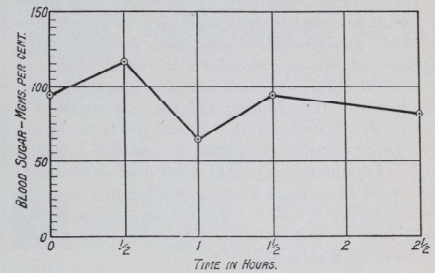
THE following case is placed on record because it affords a typical example of a condition which is probably commoner than is generally supposed, and which can be readily recognized if only the possibility of its presence be borne in mind.

RECORD OF THE CASE.

L. M. T—, æt. 22, female, a cinema attendant, came to the Out-Patient Department of the Royal Chest Hospital on September 2nd, 1932, complaining of "fainting attacks". She had experienced these attacks for the past two years, and on account of a family history of tuberculosis she had been referred to a tuberculous dispensary, where she had been informed that there was no evidence of any tuberculous disease; in addition she had attended a general hospital, where it was stated that she was not anæmic and that her heart was normal. In spite of these assurances the attacks persisted, and at times seriously interfered with her work.

The history which she volunteered was very suggestive, and the following description is taken practically verbatim from her own account:

The attacks began gradually when she was about 20 years of age and occurred at irregular intervals. Sometimes there might be no attacks for a period of several months; at other times they might occur once or twice daily for a week or more. She was not aware of any circumstances which predisposed to attacks, with the exception that they always appeared to occur between one and two hours after a meal. The average duration of the attacks was about ten minutes. The first manifestation was "hot sweats" accompanied by a sinking feeling "as if she were hungry"; she then felt



SUGAR TOLERANCE CURVE.

faint and experienced a sensation of trembling. There was never any loss of consciousness nor convulsions as far as could be ascertained, and the attacks passed off gradually when she rested. The patient herself associated the occurrence of the attacks with the taking of food, and she was not aware of any method by which she could obtain relief. It is indeed curious that although she felt hungry during the attack she did not take any food to cut it short, so strongly was she impressed by the relationship of her symptoms to an antecedent meal.

She had not lost weight recently and had not suffered from any previous illness of importance.

As already noted, there was a family history of phthisis.

On examination she was rather a thin girl, but no physical signs of disease could be found.

There was no abdominal tumour palpable. The blood-pressure was 125/80, the pulse 80, and the urine normal.

A provisional diagnosis of spontaneous hypoglycæmia was made, and this was confirmed by the sugar tolerance

curve, which is reproduced herewith. Although the fasting blood-sugar is normal at 95 mgrm. %, the maximum figure half an hour after the ingestion of 50 grm. of glucose is only 116 mgrm., and this is succeeded by a sharp fall to 65 mgrm. at the end of an hour. Although not an extreme example of the condition, the curve is sufficiently abnormal to place the diagnosis beyond doubt.

Subsequent history.—The patient was advised to carry barley-sugar or chocolate for consumption as soon as premonitary symptoms made their appearance, and for the last four months she has been able easily to control her symptoms.

COMMENT.

The train of symptoms which results from hypoglycæmia has only been recognized since the introduction of insulin as a therapeutic substance; previously a few isolated instances were recorded as incidental occurrences in cases of disease of certain endocrine glands, of which the pancreas, the pituitary and the suprarenals were the chief. A study of the clinical effects of insulin overdosage, however, has made it clear that a similar series of symptoms may often result from an abnormal fall in the blood-sugar level, apart altogether from the administration of insulin. Many observations have now been recorded, and the whole subject has recently been reviewed by Wauchope (1).

The symptoms which may result from hypoglycæmia are very diverse, although most of these appear to result from disturbances of the nervous system, the variations resulting from the involvement of different nerve centres. Nevertheless, it appears that the symptom-complex remains approximately the same in any particular individual. The following are the symptoms of which the patient most commonly complains, and for a more detailed account of the subject reference should be made to the paper quoted above.

Most commonly the attack commences with a sensation of profound general weakness, most marked in the epigastrium, and to some extent approximating to a feeling of intense hunger; there is no actual pain. This is usually followed after an interval of a few minutes by sensations of heat, sweating, visual disturbances somewhat similar to the prodromata of migraine, and a feeling of general unsteadiness accompanied by a fine tremor; mental concentration becomes temporarily difficult or impossible. The milder attacks, such as those occurring in the patient described above, usually retrogress from this stage, but in more severe cases lack of co-ordination may supervene, and may affect different levels of the central nervous system.

Disorders of speech are common, such as slowness of speech and difficulty in choosing words. Diplopia may occur but it is rare. In addition there may be difficulty in the co-ordination of limb movements, so that during the attacks the patient is unable to perform customary complex co-ordinated movements of the hands and fingers. The disability caused in the case of those engaged in clerical work or in occupations which demand fully co-ordinated movements is therefore considerable, for movements become clumsy and uncertain, and it is impossible to compensate for this by a voluntary increase in mental concentration upon the work in hand.

The mentality is affected at times, although the disturbance is usually slight. Irritability, slowness of thought and understanding, depression, drowsiness and an inclination to give random answers; in the more severe cases stupor and even coma may occur, although this is rare apart from cases of insulin overdosage. Convulsions have also been described.

Physical examination of the patient is negative as a rule, the only fairly constant finding being an extensor plantar response in cases of hypoglycæmic coma. This is a useful clinical point in the differentiation of hypoglycæmic from diabetic coma in patients who are having large doses of insulin, in which cases it is not always possible to await the result of a blood-sugar estimation.

With regard to the level of the blood-sugar at which symptoms may occur there are many conflicting reports, and it seems that there must be considerable variation in individual cases. On the whole it would appear that in non-diabetic subjects symptoms most commonly begin when the blood-sugar falls below 70 mgrm. %, although cases have been reported which showed symptoms with blood-sugar between 80 and 90 mgrm., and in some cases, especially in children, the blood-sugar may be as low as 50 mgrm. in the absence of symptoms. In cases where diabetes has been present for a considerable time the tissues appear to become accustomed to a raised blood sugar level, and hypoglycæmic symptoms may occur in such after a fall which is not sufficiently great to bring the blood-sugar down to the normal level. Payne and Poulton (2) have reported the case of a diabetic in whom a fall from 320 to 280 mgrm. % invariably caused the appearance of symptoms.

It is clear that hypoglycæmia may result from a variety of causes, and the following classification, which is adopted from Wauchope's paper, affords an adequate summary:

1. *Excess of insulin.*—The most obvious cause is overdose as a result of therapeutic injections, and the nature of the symptoms is usually self-evident. In addition, over-secretion of insulin may occur in certain cases of pancreatic tumour. Recently, Cairns and Tanner (3) have described a case of adenoma of the islets of Langerhans, in which the symptoms were those of hypoglycæmia. The majority of the cases of this type in the literature have been due to innocent tumour, but a few cases of slowly-growing carcinoma are also on record. The last group of cases coming under this heading are due to so-called "functional hyperinsulinism", and the case recorded here appears to be of this nature. Pathologically there is no abnormality to be found, and it is presumed that the symptoms are due to a functional over-activity of the islet tissue. It is probable that insulin secretion varies from time to time in many individuals, and in these cases there is a simple temporary excess, without any pathological significance so far as is known; in fact occasional mild hypoglycæmic attacks have probably been experienced by the majority of normal people.

2. *Lack of opposing secretions.*—Insulin is known to be counteracted by adrenalin, pituitrin and possibly thyroxin, and there is therefore a tendency for the blood-sugar to be low in Addison's disease, tumour of the pituitary gland interfering with the function of the pars posterior and in myxœdema.

3. *Lack of glycogen.*—Depletion of the glycogen reserve as a result of starvation, chronic liver disease and general wasting disease are obvious predisposing causes. In addition excessive glucose loss such as may occur in renal glycosuria and lactation are also stated to give rise to the condition.

4. *Interference with the regulating centre.*—Wauchope states that nervous disease affecting the pons and over-action of the vagus are possible causes.

The first essential for correct treatment is recognition of the significance of the symptoms, which is quite simple and readily confirmed if only the possibility be considered. If the condition be due to disturbance of the endocrine glandular balance, attempts must be made to correct this; if there be an obvious cause elsewhere, this must be dealt with. We are left, therefore, with the idiopathic cases and also a very difficult differential diagnosis—that of tumour of the islets of Langerhans. Although there are as yet few case-records, it would appear that the differentiation can only be made on the progress of the case, for the majority of the tumours described have been much too small to be palpable. It may be assumed that if the patient becomes steadily worse and the attacks no longer respond readily to glucose, then tumour is probably present, in which case laparotomy should be performed. Successful cases have been reported by several writers, the references to which may be found in the papers already quoted.

The distinguishing point about the cases of hypoglycæmia due to functional over-activity of the islets is the ready response to the administration of glucose. A cup of strong sweet coffee or a piece of barley-sugar will abort an attack within a few minutes and no further treatment is necessary. Although the attacks usually commence in childhood, they may persist into adult life, yet so long as their nature is realized and the patient is aware of what is necessary to control the symptoms, there need be no disturbance of the ordinary mode of life.

REFERENCES.

(1) WAUCHOPE, G.—*Quart. Journ. Med.*, 1933, xxvi, p. 117.

(2) PAYNE, W. W., and POULTON, E. P.—*Proc. Roy. Soc. Med.*, 1928, xxi, ii, p. 251.

(3) CAIRNS, R. McD., and TANNER, S. E. *Brit. Med. Journ.*, 1933, i, p. 8.

JAMES MAXWELL.

FEES.

I HAVE commented before on the vexing question of fees, but must crave permission to return for a moment to this important subject.

Many of my patients belonged to families the head of which earned only thirteen or fourteen shillings a week, the average wage of a farm labourer before the war. One might have attended one of the children of such a family for several weeks, paid numerous visits, and supplied quantities of medicine.

Charging only the modest sum of half-a-crown for one visit and medicine, the bill soon mounted up. How was a man with a wife and perhaps five children to pay a doctor's bill for thirty shillings?

My house was a new one, which I had built. In my study was a large open grate, but in the evenings I felt that there was something lacking. Then one day it occurred to me what that something was. I had just finished attending a long case of illness in the cottage of some nice but exceedingly poor foresters. They lived in a two-roomed mud and wattle cottage, with the usual open fireplace where a turf fire smouldered day and night. Round this there lived in the crevices of the walls innumerable crickets, which kept up an almost continual chirping song. This was exactly what my study lacked.

Now these poor people owed me, at the very lowest, a pound, which I knew they would contrive somehow

to pay, and which would inflict real hardship on them all.

So the next time I was round that way I called in on Mrs. Kitcher and struck a bargain. I told her that instead of paying me twenty shillings she could send me twenty healthy crickets. Mrs. Kitcher showed not the least surprise, but treated the matter as though it was quite an ordinary transaction between patient and doctor.

The following morning a grubby little girl was sitting in my out-patient room, holding a small cardboard box on her lap. As soon as the other patients had been got rid of, we together opened the box in my study and liberated the crickets. She was a business-like little girl, for she made me count the crickets as they emerged, which was a difficult matter, as the moment the lid was raised they darted out in all directions. As she was so business-like I felt I should be the same, so when she left my house she took home with her one of my printed receipts, filled up as follows:

"Received of Mrs. Tom Kitcher,
For Professional Attendance and Medicine,
Twenty Crickets,
With thanks,
PHILIP GOSSE."

This was not by any means the only case where my fees were paid in kind. I have been paid in firewood, turf, eggs, and other forms of primitive barter.

One confinement—the rock-bottom fee for these was one guinea—was paid in honey, taken out of straw skips, and lovely deep brown heather honey it was.

Had I ever sold my practice—as a matter of fact it was filched in the war—what a puzzling time the assessors would have had valuing my takings, as all these payments in kind were duly entered in the cash receipt book.

When I started to practise there was no State Insurance and therefore no panel. Each doctor was left to make his own bargain with the secretaries of the local clubs. Perhaps I am exaggerating when I speak of making a bargain. It was rather a case of take it or leave it.

The clubs paid six shillings a head per year for all members, which sum was to cover the cost of all visits, medicine and treatment. The only thing to be said in favour of this arrangement was the entire absence of all book-keeping; no reports had to be written and no tiresome committee asked questions.

Most doctors took the clubs for the sake of getting, as patients, the families of the club members. I tried hard to make a stand against the giving of certificates for nothing, I insisted on being paid a fee of two-and-sixpence whenever the club secretary demanded a special written certificate over and above the ordinary printed slip.

One day a club patient who was off work and under treatment came to tell me that his club secretary wanted a statement in writing giving the exact nature of his illness. I sent back word that my fee for a special certificate was half-a-crown. The secretary maintained I was compelled to give the information for nothing. This wrangle went on for some time, until one day the patient, a very decent man, came to me with half-a-crown in his hand, to say he would pay it himself as the club refused him his sick benefit without the certificate giving the name of his disability.

I forget now what he was suffering from, but I wrote out a report as follows:

"To certify that Mr. J. Renyard is suffering from peri-salpingo-oophoritis.
"(Signed) ————"

A few days later I ran across the secretary in the village street, and he came up to me and said in a knowing way, "Thank you doctor for that report, though I thought all along that his illness was something of that sort".

When the first news of the suggested Insurance Act with its medical benefits and panel of doctors reached us, it was received with unanimous and strong disapproval. All the doctors in practice in the Forest met together and passed resolutions, refusing ever to accept the degrading terms offered by the Government. Our dignity as medical men would be outraged, and we declared by voice and in writing we would stand together, shoulder to shoulder, like soldiers, and starve rather than consent to such ignominy.

Message after message reached us from the British Medical Association urging us to stand fast, and to remember they were behind us, and if we kept a united front we should win the great fight.

Rumours began to spread that outside doctors were going to be sent by the Government to take on the new medical services at places where the local doctors refused to go on the panel.

Then one evening a doctor telephoned to me to say that he had heard on the very best authority that Mr. Lloyd George had sent a Scotch doctor to Lymington, who had arrived there that very day in an omnibus with drawn blinds.

The rumour of the imported Scotch doctor broke us, and there was an ignominious last-hour rush to get our names upon the panel before it closed.

As a matter of fact the panel proved a blessing for all concerned, patient and doctor.

The capitation fee was much higher than that paid by the old clubs, and in districts like mine, which entailed long journeys by road, the doctor was paid at a considerably higher rate. The only drawback to it was that records had to be kept, giving the name, age, sex and address of each patient, with the number of visits paid and the medicines supplied to each.

Most of us took no notice of this rule, and yet received our cheques with gratifying punctuality at the end of the first quarter. But at the following quarter no cheque arrived, and in reply to my expostulation to headquarters, I was informed that I should get no money until I sent my completed records for the preceding six months' work.

As I had kept none and wanted the cheque very badly, there was nothing else to do but make some out.

So after dinner that night I got down to it, and filled in a vast number of sheets with the names of every panel patient I thought I could remember having treated, with suitable crosses or lines to indicate domiciliary calls or visits to my surgery. When I had made out what seemed to me enough of these to meet the requirements, I posted them off, and received my cheque by return.

But the matter did not end there. Not long afterwards a letter of thanks reached me from the local secretary to say that he had been instructed to write and inform me that at headquarters my meticulous and conscientious care of my insured patients was much appreciated, and that they hoped the example I had set would be followed by the other doctors in my area.

It seemed that, according to the statistics, I had visited my patients at a rate of 300% higher than any of my colleagues.

This would not have mattered very much if unfortunately the secretary had not held me up to the other doctors as a paragon and urged them to do likewise, which in no way increased my popularity—as a newcomer—with my fellow-practitioners. After this I fell into line and gradually brought down my numbers of visits to coincide with the rest.

PHILIP GOSSE.

ACKNOWLEDGMENTS.

The British Journal of Nursing—The Nursing Times—The Caduceus—The Guy's Hospital Gazette—The London Hospital Gazette—The King's College Hospital Gazette—The McGill Medical Undergraduate Journal—The Middlesex Hospital Journal—The St. Mary's Hospital Gazette—The St. Thomas's Hospital Gazette—The Student—The University of Leeds Medical Society Magazine—The Hospital—Bulletins et Mémoires de la Société de Médecine de Paris—L'Echo Médical du Nord—The East African Medical Journal—The Medical Times and Long Island Medical Journal—The Post-graduate Medical Journal—Reale Società Italiana D'Igiene—La Revue Belge de Sciences Médicales.

THE ORIGIN OF THE STUDENTS' UNION.

THERE was an interesting article by W. G. Richards in the November number of the JOURNAL on the "Birth of the Students' Union and Journal" in the "early nineties". It must have struck some of those who read it, however, that what he really described was the origin of "The Amalgamated Clubs" and not of the Students' Union at all. The Union was not born until 1904, twelve or more years later, but the two organizations sprang independently from the same source, namely, the students themselves. Perhaps it may not be uninteresting to give some account here of the early days of the more ambitious successor to the Amalgamated Clubs.

Reading what Richards writes it is hardly possible to imagine now the state of affairs before the Clubs were united. All credit to him and the other men who put the scheme into action. Those who came up to Bart.'s right at the end of last century found everything working smoothly, the Clubs regularly and adequately financed, and the fine grounds at Winchmore Hill. Yet there was something lacking in the arrangement, as must have been clear to each succeeding secretary. The money was collected by the School, the ground was there, and members of the Staff, as ever, were always ready with their time and money to help and advise. But the amalgamation was inadequate. The secretaries of the various clubs met perhaps once a year, and there must have been general meetings, but their enthusiasm has not left any lasting impression. Our outlook, apart from the Abernethian Society, was entirely limited to athletics; there was no real students' body, and those outside the different teams or clubs took little or no interest in the students' activities. Our only recreation rooms (the Abernethian Room and the Smoking Room) were underground and gloomy beyond words, and other accommodation in College and School was inadequate.

About that time, however (1903–4), there was an Oxford man at Hospital, A. H. Hogarth, or "Archie" as most of us knew him, perhaps the best known student of his time, certainly one of the best loved. "Archie"—alas! he died during the War—would assuredly be writing in my place, and much more gracefully, for he was practical, yet a dreamer, a fighter for lost causes, a defender of the unfortunate (did he not spend many hours a week in some East End boys' club?), a diplomat with a silvery tongue and a wonderful smile—something of a revolutionary.

Soon Hogarth beat us students up out of our lethargy, assured us of our importance to the Hospital, scoffed at our lack of union and strength. Why had we no

representative body? How could we make known our desires to the authorities? They were going to pull down the College; what were we going to do about it? We should organize ourselves and unite for the common good.

There must have been a meeting of students, at which a commission of three was appointed. Details are forgotten but, shortly, Hogarth, S. E. Crawford and myself, representing the older Universities, the Colleges and the University of London, were hard at work on a plan. Crawford was a New Zealander (Richards reminds us that Borcherd, who did most to organize the Clubs, was a South African), dignified, even clerical in appearance, with a wonderful bass voice. Numberless were the meetings we had, at first in Hogarth's rooms in the College, later in Charterhouse Square, where he moved later. How he drove us and drew us! Myself right willingly, for the need was clear, while at intervals the "wisdom of the Colleges" boomed forth out of a cloud of smoke upon us.

I still have some of the notes and drafts which we made. In planning the future Union three principal aims were kept in view—representation of the Student body, promotion of social intercourse and common interests, absorption of the loosely-knit Clubs. As to the first of these, there is a memorandum which is not without interest at this moment, when a fresh scene in the history of the Medical School is opening, it is headed, "The Importance of Students to the Hospital", and reads as follows:

> "A. Opinions of Authorities." (These include Sir William Church, the then Senior Physician, the Treasurer of St. Thomas's, authorities at Guy's, Mr. Sydney Holland of the London [the late Lord Knutsford], the Resident Staff.)
>
> "B. The influence of the Medical School upon the efficiency of the Hospital Practice (see Dr. Horder's report). 1. Research work. 2. The Hospital Staff (resident and permanent) is elected from the Students. 3. The Students' presence is a constant stimulus (see Dr. Herringham's statement.)
>
> "C. Details of work done by Students which must otherwise be done by paid servants:—1. 500 surgical casualty new cases weekly. 2. Dressings in surgical wards. 3. Routine work in medical wards. 4. Extern midwifery department (nearly 2000 cases annually).
>
> "D. Financial value of the Medical School to Hospital; about £10,000 per annum. It is computed that the Hospital has the services of 200 unpaid servants a year from it.

There follows a statement of "The Necessity of Providing Suitable Accommodation for Students" as an "obvious consequence". That the existing arrangements were out of date and inadequate was shown by the fact that "many men from Oxford and Cambridge" preferred to go to other schools, and by the opinions of "present Students and old Bart.'s men." Then, "Suggestions as to the Accommodation necessary":

"1. A Residential College for 50 men". For it many advantages were claimed but only two can be quoted here: "It is an advantage to have a number of senior Students in residence and at hand in case of emergencies. This also encourages the Students to learn their work practically". And again, "A Residential College very materially helps to promote *esprit de corps* among the Students and to maintain the reputation of the Hospital". "2. A Dining Hall to seat 200. 3. A Reading Room . . . it should be at least as well furnished as most of the Public Reading Rooms in London, above ground and well ventilated (!) . . . 5. A cloak room with 500 or 600 lockers. . . . These would obviate attendants. A fee of 5/- should pay for their fixing and upkeep. 6. Lavatories and closets on principles of hygiene as closely as possible in accordance with the teaching of the Hospital (!). 7. Suitable accommodation for Extern Midwifery Clerks. . . . 9. Provision for recreation and exercise, *e.g.* Bath, Fives Courts, etc. 10. A common Entrance Hall for notices, letters, etc., with commissionaire on duty." And the conclusion: "It is urged that the *whole* of the above accommodation is really necessary to the maintenance of the position that the Hospital at present holds among the hospitals of the world". Lastly it is recommended that the whole accommodation "should be together in one building and close at hand", and it was suggested that it should be considered "*at the present time*" because "1. There are available sites near the Hospital. 2. Land in the City is increasing in value. 3. There will be more room for Hospital buildings". This was written nearly thirty years ago and holds with even greater force to-day, when the accommodation for students is compared with that of other London medical schools.

From the consideration of such weighty principles as these we went on to draw up "A Suggested Constitution and Laws of a St. Bartholomew's Hospital Students' Union". These were finally presented at a mass meeting of students, "largely attended and enthusiastic throughout", the JOURNAL said, on February 11th, 1904. The Amalgamated Clubs were dissolved and the Union formed with the object, as the rules still state, of "(*a*) the promotion of social intercourse and unity of interests among its members; (*b*) the incorporation of those Clubs and Societies which constituted

The Amalgamated Clubs . . . ". Dr. Herringham was the first President, and the first Vice-President (a student's post) was naturally Hogarth. It is a pity that the names of Vice-Presidents as well as of Presidents are not given in the *Hand-book* of the Union, if only to keep Hogarth's memory green. Then followed the election of the Council. "Messrs. H. J. Gauvain and W. G. Loughborough" were elected secretaries and, in the frequent meetings which followed, the Council discussed many and varied subjects. The very first, to our lasting credit, were "hair and clothes brushes, combs, etc., in the cloakroom" and "cocoanut matting for the Library". Could anything have been more admirable? Hygiene and study! Then, Freshmen, the furnishing and ventilation of the Abernethian and Smoking Rooms, Sunday tennis, a research room for students, dispensing classes, catering, entertainments, accommodation at "McKenzie's", finance, Hospital colours, The Abernethian Society, the JOURNAL, the suggestion book—that "the conduits in the lavatory should be kept in working order"—bicycle accommodation, a list of Bart.'s men in practice, bicycles again, and that "accommodation might be provided by the erection of a shed near the chemical laboratory". Then the last entry to which I have access: "Mr. Gauvain laid information before the Council concerning the forthcoming visit of the King and Queen to the Hospital". This refers to the laying of the foundation of the new buildings (those south of the Library) by King Edward in 1904. Will 1933 see the students of to-day preparing to welcome another Royal visitor?

This short account of the origin and early weeks of the Students' Union takes us into the past. More than a quarter of a century has gone by, but that is a short spell in the history of St. Bartholomew's. Has it been a success, and done more or less than was expected? The increase in its activities shows that it has been progressive. What of the future? The best wish that Past and Present can offer is that it should ever play a real part in the life of Bart.'s men, of the College, and of the Hospital itself.

A. R. NELIGAN.

AN EARLY ACCOUNT OF VACCINATION. 1763.

AN ACCOUNT OF THE INOCULATION OF MY NEPHEW BASIL WOOD FOR THE SMALL POX.

Sept 5th 1763. My sister Hannah Wood, Baby, and Elizabeth Harding her servant went to Mrs Crosfield in Park Street where they had the second floor consisting of a dining room, bed-chamber and light closet, which overlooked the Duke of Cumberlands' garden and for which they paid 25/- a week.

Wed 7th. Mr James Burgess apothecary gave him some purging physick made of powdered Rhubarb and Magnesia Alb; the child was 3 years old the Aug: before so the quantity was in proportion to his age. I suppose 10 grs Rhubarb, 5 Magnesia, ? what else.

Sat 10th. He had another dose of the same powder which purged him 3 times.

Thur 15th. He had another dose.

Friday 23rd. He took another dose which purged him rather more than the others, he went 4 or 5 times.

N.B. These powders caused him to make a good deal of water, I imagine there was something else beside Magnesia and Rhubarb, perhaps a little Nitre.

Sunday 25th. He was inoculated in each arm above the elbow, the place where they usually cut issues, by Mr Middleton, the Surgeon, with matter taken from an inoculated patient whose Father and Mother were esteemed healthy; *N.B.*—From Sept 5th the day he came into the house to the day he was inoculated he was not permitted to stir out of the apartment, or to sit with a window open, he lived chiefly on light pudding, turnips or potatoes, eat a little meat as lamb now and then, but for 3 or 4 days before he was inoculated Mr Burgess forbid him eating meat, he drank Beer.

Sat Oct 1st. The 7th day from his inoculation he began to droop, grew heavy and fractious, and slept in the day; was hott, feverish and restless in the night, went to bed on Sunday in the day.

Oct 2nd. The pustules began to appear that day he was very hott and feverish, but drank a great deal of Balm tea, near 2 quarts in the day and night. He was inclined to sweat a good deal all day his head sweat a good deal.

Mon Oct 3rd. He was hott, very feverish and fractious and restless, some more pustules appeared, he would neither eat or drink much that day, he had a very good night.

Tues Oct 4th. Near all the pustules were out, he grew more cheerful eat and drank, rosted apple, Barley water or Balm tea. Was very fractious and restless at times, complained of his arms.

Wed Oct 5th. He was fractious and restless, more pustules appeared and he had a very restless bad night.

Thur Oct 6th. He was fractious and uneasy but played with his playthings a little, and had a very good night. Mr Burgess sent him a Draught a little composing.

Frid Oct 7th. The pustules filled finely, he slept a good deal in the day, eat heartily of bread pudding, and drank some Barley water and Wine for his dinner.

Oct 8th & 9th. The pustules began to turn, were all

turned on his face, he complained of being very sore, they being a sore sort.

Oct 10th. They were some very full & fine on his hands and legs, about the size of pea in general but some very large on his legs, 2 or 3 having as it were grown together.

Tues Oct 11 They were all turned.

Oct 13th. He was taken up and dressed for the first time. he having lain in bed from Sat Oct 1st. Only was taken up generally once a day & wrapt up very warm in a blanket whilst his bed was made, it was then warmed and he put into it again, but this was contrary to Mr Burgess' orders, who would not have had him taken up at all till this day during the whole time. He at times was extreemly cross and fractious, he lay in bed in a thin calico waistcoat over his shirt all the time.

Frid Oct 14th. He took a dose of Magnesia & Rhubarb.

Oct 16, 17, 18. He run about the rooms & was at times very cross & at other times very chearful & merry. His arms kept running & he scratched his leg & made it sore & run a little.

Wed Oct 19th. He took physick again.

Thur Oct 20th. He was out airing.

Frid Oct 21st. He went out airing in a coach.

Sat Oct 22nd. He took physick again.

Mon Oct 24th. He came home to Richmond in the Reading coach.

It will be remembered that Jenner did not publish his famous quarto, *An Inquiry into the Causes and Effects of the Variolæ Vaccinæ, a Disease Discovered in Some of the Western Counties of England*, till 1798. The above account is part of a letter sent to us from Devon by Dr. J. C. Dixcy, and reproduced by his kind permission.

STUDENTS' UNION.

RUGBY FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* ROSSLYN PARK.

Played at the Old Deer Park on January 14th in fine weather.

Owing to the late arrival of Taylor, the Hospital were forced to play with fourteen men for the first ten minutes. However, with J. D. Wilson deputizing very ably at the base of the scrum, things went smoothly for Bart.'s, and it was consequently no surprise when a well-executed round of passing gave J. G. Nel the chance to run 40 yards and score a good try (3—0). For the first quarter of an hour or so the Hospital pack secured a good share of the ball from the tight scrums, but from then onwards it appeared to be coming out far more frequently to Woodhouse than to Taylor. After twenty minutes Rosslyn Park drew level, when S. J. Lidgate placed a penalty goal awarded for a scrum infringement. It may not be out of place here to mention the fact that it behoves both front-row forwards and scrum-half to be particularly scrupulous and cautious in the region of their own "25" in the oncoming cup-ties.

From now until the interval Rosslyn Park seldom appeared likely to cross our line, whereas on several occasions the Hospital threatened danger, and once, indeed, looked certain to score when J. R. Kingdon cut through from the halfway line, but with only five yards to go and no one in front of him he elected to pass and the chance was lost. The Bart.'s back division was displaying more cohesion in attack and accuracy in passing than it has for a long time, and it was only sound defensive work by the Park that prevented a score. The absence of the menace of dropped passes in the centre which has been such a handicap to our progress this season meant that J. G. Nel and J. G. Youngman received more of the ball than usual, and though the latter was well marked by E. J. Unwin, the Sandhurst captain, Nel put in some good runs.

Half-time: Bart.'s, 3; Rosslyn Park, 3.

For quite twenty minutes of the second half play was mainly situated in midfield, where the rival packs were engaged in a robust struggle. The Park forwards, though good on the whole, did not appear to be quite the virile force of the past few seasons; no doubt they needed the splendid leadership of P. T. Cooper, who was unable to get away from St. George's for this match, to rouse them to greater efforts. The Hospital forwards were, meanwhile, giving a very good account of themselves, though their display had neither the solidity nor the dash of the previous week. R. Mundy, W. M. Capper, E. M. Darmady and J. M. Jackson were always hard at it in the forefront of the fray, but it is pleasant to state that for the past few weeks it has been most difficult to pick out forwards for commendation in a pack where all are doing so well.

The incidents of note in this half were chiefly contained in the closing quarter of an hour, for, firstly, the Park looked certain to go ahead when, with one of our centres caught in a loose scrum, their three-quarters started an attack, but faulty passing neutralized a good opportunity and play was rapidly transferred to the other end, where A. H. Pirie gave Kingdon the chance to score between the posts. The kick failed (6—3). At this juncture the home team were unlucky enough to lose R. B. Skinner with a damaged shoulder, and Bart.'s having once taken the lead proceeded to intensify their grip on the game. With ten minutes to go, I. N. Blusger cut through well, punted ahead, and gathering the ball on the rebound, scored a good try. W. M. Capper converted (11—3). The final score came from a movement started by Capper and carried on by Blusger, which enabled Nel to score between the posts. This goal-kick was the third between the posts which has been missed in our last two games! There was no more scoring before "no-side". With regard to our backs, Pirie and Blusger were commendably steady in the centre, and never attempted to do too much, while Pirie kicked judiciously in the closing stages. Kingdon played quite his best game of the season, while Nel was also good. Youngman, though unable to elude his speedy opponent, never let Unwin himself get far.

There is just one criticism which springs to mind. Ground was lost several times through disinclination to fall on the ball in the vicinity of the scrum.

Result: St. Bartholomew's Hospital, 1 goal, 3 tries (14 pts.); Rosslyn Park, 1 penalty goal (3 pts.).

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

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

Played at Coventry on January 21st. Lost, 6—11.

The weather was fine, but the ground rather on the hard side for the game at Coundon Road on January 21st. Each side was forced to make two changes, Bart.'s being without R. Mundy and J. G. Nel, while G. W. Harriman and A. Walker were absent from the Coventry XV. In spite of the fact that the Midlanders make a point of opening in virile fashion, Bart.'s were the first to attack, and might well have scored in the opening minutes with a little luck. However, we had to be content with a five-yards' scrum, from which the home team heeled, and F. P. Davies, a Welsh schoolboy international, deputizing for Harriman, made ground before passing to A. J. Rowley, and a good movement in which backs and forwards joined carried play to the Hospital "25". From the ensuing scrum the Coventry three-quarters combined well, and W. E. Lole, the full back, coming up outside the wing gave them a man over, but the final pass went astray. Two good kicks by C. R. Morison, who had previously looked a trifle shaky under pressure, took play to half-way, where some robust exchanges took place during the next few minutes. Coventry, however, thanks to their marked superiority in obtaining the ball from tight scrums and lines out, soon resumed the attack, and both Hayward and Davies cut through well, but each time good tackling by I. N. Blusger and A. H. Pirie brought them down. Maintaining strong pressure "Cov." went ahead after 25 minutes' play, when T. P. Mayo, travelling at top speed, took a difficult pass with one hand and sent in Davies for a try which Hayward could not convert. Bart.'s were quick to reply, and good work by J. T. C. Taylor and J. R. Kingdon enabled Blusger to cut through cleverly and transfer play to the home "25". Obtaining the ball from the scrum, Hayward hesitated, and being well tackled by Pirie, a loose maul took place; Bart.'s heeled, and a beautifully timed pass from Taylor to Capper sent the latter away, and he in his turn handed it on to L. M. Curtiss, who dived over in the corner (3—3).

On two occasions in the five minutes remaining before half-time Bart.'s looked like scoring again, once when Curtiss made a strong dash, only to be well tackled by Oakley, and again when E. M. Darmady led a strong attack, which was only checked a few yards from the Coventry line.

Half-time: Coventry, 3; Bart.'s, 3.

Though in the first half few had been the occasions upon which the Hospital had secured the ball in the tight scrums, yet after the interval it was still more of a rarity to see the ball heeled to Taylor. This was the more distressing when it was noted that in straight shoving our eight quite held their own with the extremely powerful Coventry scrummagers. Consequently, though the co-ordination between A. Gascoigne and R. S. Roberts is a most difficult factor to overcome, one is led to the conclusion that our own inferiority in the art of hooking was to no small extent contributory to the home team's overwhelming mastery in this phase of the game. Thus, with the Midlanders' outsides constantly in possession, it meant that the Hospital backs had to perform prodigies in defence, while themselves getting few chances of opening up an attack. The defensive work of Taylor, Kingdon, Pirie and Blusger was splendid and never slackened for one moment, nor did the wings allow their opposite numbers much scope, while the forwards did all they could to make amends for their inability to get the ball in the tight by putting in some excellent work in the loose, with Darmady, Capper, Jackson and Wilson the leading spirits.

It was not until 20 minutes of the second half had elapsed that Coventry took the lead. One of our forwards, perhaps a shade unjustly, was penalized for not playing the ball, and Hayward kicked an easy goal (3—6). Within five minutes this lead was increased by a very good try: Gascoigne broke away on his own from the scrum, and smartly backed up by A. J. Rowley (in the manner in which all good wing-forwards should support their scrum half), passed to him for Mayo to receive the ball in his turn and score between the posts. Hayward converted (3—11).

Bart.'s were by no means done with, and Curtiss, who looked much more at home on the wing than in the centre, put in two beautiful runs—Yes! That adjective most aptly describes them—which were only prevented from ending in tries by the luck of the bounce. However, score we did, for Wilson dribbled the ball to half-way from the "25", and Kingdon, with two lusty soccer kicks, sent it past Lole for I. G. Youngman to dash up and score (6—11). "No-side" followed shortly after.

This was an excellently contested game, from which Bart.'s emerged with much credit. Considering that eighteen months have elapsed since Coventry last suffered defeat at Coundon Road, to score try for try with them there is a most creditable performance.

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

Hospital Cup. 1st Round.

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

Played on Tuesday, January 31st, at Richmond.

To the general satisfaction a rapid thaw made Richmond Athletic Ground playable for this match, though it was naturally in a very heavy state. Both sides were at full strength.

Bart.'s settled down from the start, and at the end of three minutes took the lead with an excellent try. A swift pass from J. T. C. Taylor sent J. R. Kingdon away, and accurate passing left I. N. Blusger in possession; the latter, seeing that his wing man was being crowded out, made a very well-timed cut-through before passing to J. G. Nel, who ran speedily for 40 yards to end up between the posts. However, descending rapidly from the sublime to the ridiculous, a sorry mess was made of the place-kick. No team can afford to squander points by execrable goal kicking as Bart.'s have been doing of late. (3—0).

King's were forced to continue on the defensive, although their forwards were able to secure the ball from the scrums quite frequently. The "cup-tie spirit" seemed to be bringing out extra speed from our players, both Nel and Taylor being prominent for following up punts and tackling the King's full-back before he could get his kick in. However, a long touch-finder by E. H. Lassen gave his side a temporary respite, and play remained at half-way for a short time before a concerted rush by the Bart.'s forwards took the ball back to the King's "25". From a set scrum we heeled and Nel made a good dash for the line, only a fine tackle by G. R. Steed preventing him from scoring. Now followed what might well be described as J. T. C. Taylor's best quarter of an hour of the season. It opened with a splendid breakaway from a scrum on the half-way line, and in that seemingly simple manner which marks Taylor at his best, he darted through the defence, and, drawing the full-back, gave a well-judged pass to J. D. Wilson, who ran very well to score far out. The kick failed (6—0). Wilson deserves full marks for the way in which he finished off Taylor's clever work. In fact these first two tries can stand comparison with any scored in cup ties of the past five years. There followed three more "steal-aways" from the base of the scrum by Taylor, which, had they received any support at all, might well have led to two more tries.

Weathering the storm, King's were rallied by G. A. Barker and A. B. Stokes and began to fight back. Their forwards were now obtaining possession from the majority of the scrums, but weakness in the centre prevented them from breaking through. However, a forward dribble took play to the Bart.'s line, where B. S. Lewis saved, only for Stokes to secure the ball from the ensuing maul and force his way over on the blind side. The kick failed (6—3).

King's attacked again from the kick-off, but some long kicks by C. R. Morison returned the ball into their half, and the two concluding incidents of the half were a long run by L. M. Curtiss and another burst by Taylor; both, however, were unsupported and came to nothing.

Half-time: Bart.'s, 6; King's, 3.

Whereas the opening forty minutes had been full of incident, the second half proved rather featureless. Play rested chiefly amongst the forwards, and generally took place somewhere between the King's "25" and the half-way line. It was disconcerting to see King's heeling the ball so frequently from the scrums, but though H. S. Mellows seemed to find his way past Kingdon several times, the good defensive work of Blusger, Pirie, Lewis and Wilson prevented our opponents from looking very dangerous. It seemed to the observer that since Bart.'s main scoring force lay in two fast wing three-quarters it was a mistaken policy to keep the ball among the forwards. It is always very difficult to score by forward play alone, especially when opposed to a hard-working and robust pack like that of King's. No doubt, however, it was our difficulty in hooking the ball which dictated this plan of campaign. Both sides indulged in some spirited concerted dribbles which foundered on plucky defensive work. On two occasions a trio of King's forwards reached Morison, and the cool way in which he gathered the heavy ball and put in a good kick to touch filled one with confidence. Blusger also revealed hitherto unsuspected powers of defensive kicking, which extricated us from some awkward situations when we held a bare three points lead. Our opponents did not really appear likely to cross the Bart.'s line in spite of these occasional attacks, and six minutes from the end good work by our forwards placed the issue beyond doubt. W. M. Capper punted ahead, and while the King's full-back fumbled with the greasy ball, three forwards followed up well and sprang on him, the ball went loose, and D. W. Moynagh tapped it over the line and fell on it for a try. The difficult kick failed (9—3). In a final effort to score King's had a chance of placing a penalty goal from an easy position but failed to take advantage of it.

Apart from the fact that we were again beaten for possession in the scrums, this was a satisfactory opening to our Cup season. The outsides were quite sound and, with fewer chances, always superior to their opponents, while the forwards played a good game against a fine bustling pack. Darmady, Jackson, Capper and Wilson gave the best all-round displays, while Lewis was invaluable in defence. Moynagh also deserves mention for a much improved display. The whole XV, however, gave a good account of themselves, though, of course, considerable tightening up will be necessary before we can begin to fancy our chances of bringing the Cup back from the South bank of the Thames.

Team.—C. R. Morison (*back*); J. G. Nel, I. N. Blusger, A. H.

Pirie, L. M. Curtiss (*three quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper (capt.), E. M. Darmady, K. J. Harvey, B. S. Lewis, J. M. Jackson, R. Mundy, J. D. Wilson, D. W. Moynagh (*forwards*).

Hospital Cup. 2nd Round.

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

The conditions were good for this match at Richmond on Thursday, February 16th, but the play never reached a high standard, and had it not been for the fact that it was a Cup-tie the game would have done little to arouse the enthusiasm of the spectators. While on the subject of onlookers it may be mentioned that, judging by the overwhelming preponderance of vocal encouragement which St. Thomas's received, Bart.'s men had not shown their usual patriotism in turning up to support their team. Losing the toss, W. M. Capper started the game with a model long kick-off, which landed in the corner of the "25" and might well have caused Thomas's trouble, but a careless forward had crossed the half-way line too early and a scrum in the centre resulted. Though play for the first ten minutes was chiefly in the Thomas's half, it was ominous to see the manner in which their pack secured the ball in the tight scrums and sent it back to Luffman with splendidly clean heeling. Fortunately for Bart.'s, the opposing scrum-half was not sending out his usual accurate passes to B. M. Goldsworthy, and consequently the Thomas's outsides profited little from their scrummagers' efforts. When Bart.'s secured the ball, J. R. Kingdon, very sensibly realizing the danger that lay in the long kicking of C. J. Pearson, entirely curbed his propensity to indulge in the short punt and did his best to get his three-quarters under way. However, Blusger's handling did not prove as good as usual, while Pirie took an early opportunity of putting Pearson's kicking powers to the test with a short punt into his hands. The Thomas's full-back returned thanks and the ball into the Bart.'s half. Our opponents now set up a strong attack and their backs received plenty of chances to combine; their handling, however, was none too sound, nor did the Bart.'s defenders, chiefly Kingdon, Taylor, Lewis, Pirie and Blusger, allow them any room to move in. A good run by L. M. Curtiss and a kick to touch by R. S. Hunt took play back to the Thomas's "25", and, following a miskick by a defender, E. M. Darmady made a mark. His resultant drop-kick was a good one, but passed outside the upright. Long touch-finders forced Bart.'s back on the defensive, and three penalty kicks in rapid succession gave Thomas's opportunities of taking the lead, but none of them were very good efforts. However, two clever breaks-away from the scrum by P. S. Luffman ought definitely to have led up to tries, but from the first a forward knocked on a simple pass, while the second failed to achieve fruition chiefly because of "neck or nothing" tactics employed by a defender, which, if not exactly legal, were certainly effective!

For the remainder of the first half Bart.'s did but little attacking. The pack, with one or two notable exceptions, appeared strangely ragged and lifeless. At times Darmady seemed to be waging a lonely battle against odds in the loose mauls, while the concerted shove at the moment the ball was put into the scrum, so essential if the ball is to be hooked *and* heeled, was noticeably lacking. Consequently J. T. C. Taylor received few chances of sending his backs away. Half-time: St. Thomas's, 0; Bart.'s, 0.

Bart.'s started the second half in much more lively fashion and play was confined to the opposing "25" for a space. Then good kicks by Goldsworthy and Pearson transferred it to half-way again. Outstanding incidents were few and far between; not so knocks-on, the tightly blown ball appearing difficult to handle. This meant that scrums were frequent, and with Thomas's obtaining the ball more from these and the Bart.'s defenders bowling them over every time before they could get very far, a position of stalemate existed.

Fifteen minutes from the end Blusger found touch well in the Thomas's "25", a loose scrum formed following the line-out, and Taylor, securing the ball from this, feinted to go round the "blind side", only to throw a long pass over the scrum to Kingdon, who ran hard and straight before passing to Pirie, who quickly handed on to Blusger, for the last-named to score near the posts. W. M. Capper converted (5—0). This was a really good try, excellently conceived and carried out. An elusive run by J. G. Nel down the centre of the field followed soon after, but Pearson just managed to bring off a tackle to save the situation, and, with ten minutes left for play, W. M. Capper received a deep gash on the head which forced him to leave the field. As so often happens in a case like this, the Bart.'s pack with only seven men, seemed to do better than they had with the full complement, and backed up by Taylor's invaluable touch-kicking the game looked fairly safe. However, Thomas's had one golden opportunity of scoring when Goldsworthy broke through, but Maisey, with a clear run in, dropped Holtan's pass. Shortly afterwards the end came with Bart.'s attacking strongly.

Before making final references to the Bart.'s team, one must congratulate the well-balanced St. Thomas's team on an excellent display. Regarding the game impartially, no one could really state that a draw would have flattered them. The combined play of their pack was the outstanding feature, more especially when compared with the rather patchy work of our forwards.

E. M. Darmady and D. W. Moynagh were the hardest workers in our eight, while B. S. Lewis was the rock, albeit a very mobile one, upon which many of the Thomas's attacks foundered. The Bart.'s backs were naturally handicapped by our inability to obtain a good share of the ball from scrums and lines out, but can rest content in the knowledge that the only try of the match was an extremely good one. J. T. C. Taylor extricated Bart's from many threatening situations, while J. R. Kingdon, though not perhaps pleasing to the casual onlooker, played a splendid game for his side. He took some difficult passes well, while his touch-kicking was safe and well judged. A. H. Pirie appeared to be the soundest of the three-quarters.

Result.—St. Bartholomew's Hospital, 1 goal (5 pts.); St. Thomas's Hospital, *nil.*

Team.—C. R. Morison (*back*); J. G. Nel, I. N. Blusger, A. H. Pirie, L. M. Curtiss (*three-quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper (capt.), E. M. Darmady, B. S. Lewis, J. M. Jackson, R. Mundy, J. D. Wilson, D. W. Moynagh, R. S. Hunt. (*forwards*). J. R. R. J.

"A" XV RESULTS.

Saturday, November 19th, *v.* Old Millhillians "A", at Headstone Lane. Lost, 0—8.

Friday, November 25th, *v.* Old Dowegians, at Winchmore Hill. Won, 28—0.

Wednesday, November 30th, *v.* Military College of Science, at Woolwich. Won, 16—0.

Saturday, December 3rd, *v.* Southend, at Winchmore Hill. Won, 11—6.

Saturday, December 10th, *v.* Harlequins' "A", at Winchmore Hill. Drawn, 11—11.

December 17th, *v.* Hongkong and Shanghai Bank, at Winchmore Hill. Won, 38—3.

January 7th, *v.* Southend, at Southend. Drawn, 3—3.

January 14th, *v.* Rosslyn Park "A", at Winchmore Hill. Lost, 0—3.

January 18th (Wednesday), *v.* Military College of Science, at Winchmore Hill. Won, 35—3.

January 25th (Wednesday), *v.* Duke of Wellington's Regt. Away. Scratched.

February 4th, *v.* Toc H. Away. Lost, 0—3.

February 8th (Wednesday), *v.* Royal Naval College "A". Home. Won, 16—6.

February 18th, *v.* Eastbourne College. Away. Won, 22—12.

February 25th, *v.* Barclays Bank. Home. Draw, 0—0.

1st Round Junior Cup.

February 22nd, *v.* King's College Hospital. Away. Won, 9—0.

L. H. B.

BART.'S *v.* EXETER.*

Played on Saturday, February 11th, at Exeter.

Won, 14—3.

Mr. Thomas Cobley's Views.

"T'was a praper vine day and with a dry ball us thought us would zee they vellers drowing the ball about and, law my deür, zo un did and reckon 'twas a poor tale vur Ex'tur. They doctor vellers wur zight tu gude vur us poor soles. Reckon they Lunnon chaps knaw a thing or twu 'bout vuteball. Vurst was wan, then was t'other, drowed thiccy ball all awver t'pläce, and danged if 'twadn't one o' they 'ospital vellers cort ball every time. Them Ex'tur vellers 'ardly knawed which way tu luke.

Veller called Nel (zilly name vur man, id'nt ut ?) tuke ball from lüse-scrum, vull-back Waller rinned into 'un, but couldn't stop 'ee and 'er creeped over line like püssy-cat. Capper kicked un vine, but 'twant no gude. 'Twant long avore Taylor sträke off and passed to Curtiss, but passun veller, Waights, caught 'ee and drowded 'un awver. But did'n vinish theur, vur, vrum line-out ball come over to zame master Nel (zilly name vur man, id'nt ut ?) and damme if 'er didn score again. Kick wadn't no gude this time, neither.

LIKE A LONG-DOG.

Next time, zame veller Taylor sträke off again vrum a lüse-scrum and rinned over line like a long-dog. Whatever vore did'un let thiccy veller Capper kick 'un vore? 'Ee cudn't du nort with 'ut. They Ex'tur vellers 'adnt dun nort till now and them was gettin' praper flummoxed, but with Wise and t'others push'en un along dribbled to 'Ospital twenty-vive. But zune as they got theür Curtiss made beäudivul run—was passun veller vlinged un into touch. Vrom line-out Capper tuke ball over 'is 'aid and drowded 'un out to Mundy, who scored. Capper kicked a goal—and 'igh time tu.

Then Master Nel (zilly name vur man, id'nt ut ?) rinned backwards and vorwards, but 'er didn't du no gude, zo 'er tried to drop goal, but that didn't du no gude either—just tired 'un out. Spose Ex'tur thort t'was time they did a bit—they 'ad'nt 'ardly ticked ball—and Evans and Wise—same veller—kicked 'un along. Vinally packed of 'em scrambled over. Referee pick'd 'un oft, wun by wun, and damme it 'twadn't Thomas pin top o' ball. Waller kick'un pretty near to Digby's, but 'twasn't no goal.

PASSUN WAIGHTS.

They 'ospital vellers wur mortal clever and Ex'tur chaps was zymily vair dazed. Zecond half—wot diffrunt tale. Ex'tur backs cort 'ospital attack by marking close, and, lor! they did sling un down quick. Passun Waights dribbled 'arf way long vield, but t'other vellers thort was to be collection and didn't come along wid 'un. Next, 'ospital veller called Blusger (can't even pronounce 'ee—tis'nt seemly) bruk dru and 'twas long time avore anyone catched 'ee. He thort 'twas time master Rew knocked 'em about a bit and zure nuff 'er did. 'Ee rinned along line, kickd 'un ahead, with Evans helping 'im, and volleied. And zo game went on backwards and vorwards—but neither wun of them couldn't do nort no more.

'Ospital vellers was on top vore lüse-scrummaging and lines out, and backs in vurst 'arf wur giv'un more chances nor wot they'ull get next Thursday. Ex'tur vellers thort Capper, Mundy and Hunt wur praper nuisance—never out of mischief. That theur Taylor was mortal juggler with ball and Ex'tur vorwards vound 'twasn't no gude pushing is vace in mud. Kingdon didn't want to du tu much 'isself and sent ball out to three-quarters beautiful, and Nel (zilly name vur man, id'nt ut ?) rinned about like a mortal eel—Ex'tur vellers never tiched 'ee.

NORT IN ATTACK.

Vur Ex'tur, Thomas (wot scored), Evans and Wise was hellers to wurk, but vorwards couldn't get ball from lüse-scrums and they poor three-quarters vouldn't do nort in attack. "Get around Ex'tur", us zaid, "get yur butes over ball, I tell 'ee". But er wouldn't du ut.

Arter game us zeed Tom Kelly and Jack Rushmere ('im wot carries bottle and sponge) and reckon us talked about this yur vuteball down to Devon—Mills, Willy Davies, Jimmy Peters, Frank Sellick, Jago, and all the rest of they lads; and us knaws where tu go to veel the great heart of Rugby beatin', us knaws."

Teams.—Exeter: S. Waller (*back*); R. G. Rew, A. W. V. Roberts, D. G. Matthew, Rev. K. L. Waights (*three-quarters*); R. Yendell, K. Wreford (*halves*); T. White, E. P. Thomas, W. A. Knowles, L. E. O. Evans, A. H. Davies, H. R. Pape, Colin Paul, A. H. Wise (*forwards*).

St. Bart.'s: C. R. Morison (*back*); J. G. Nel, I. N. Blusger, A. H. Pirie, L. M. Curtiss (*three-quarters*); J. R. Kingdon, J. T. C. Taylor (*halves*); W. M. Capper, E. M. Darmady, B. S. Lewis, J. M. Jackson, R. Mundy, J. W. Cope, D. W. Moynagh, R. S. Hunt (*forwards*).

Referee: Mr. W. J. Harding, Newton Abbot.

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ASSOCIATION FOOTBALL CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD WYKEHAMISTS.

Played on Saturday, January 7th, at Winchmore Hill. Lost, 2—4.

With five of the 1st XI away, we could not be expected to do more than we did against the Old Wykehamists. The game opened with a long spell of defence, from which we were lucky to emerge without the opposition scoring. A very fine goal was then scored by Wheeler, completing a good move down the centre of the field. The state of the ground, however, almost banished accurate play, and the rest of the first half was limited to rather scrappy football in the midfield mire.

The second half opened with a series of successful movements by the Old Wykehamists, who found the defence out of position and lethargic. Shields played very well, the conditions under foot apparently suiting his style of play admirably. Our first half lead of 1—0 was soon changed into a deficit of 1—4 before we again showed our feet above mud. Towards the end we got the upper hand and Shackman scored a good goal.

Team.—R. A. L. Wenger (*goal*); J. Shields, G. Herbert (*backs*); W. A. Owen, A. H. Hunt, W. M. Maidlow (*halves*); R. C. Dolly, R. Shackman, F. E. Wheeler, P. Telfer, L. McAskie (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD WESTMINSTERS.

Played on Saturday, January 14th, at Winchmore Hill. Lost, 0—3.

The Old Westminsters opened strongly, but failed to make use of an advantage to score. The defence soon settled down and then there was little to choose between the two sides. Wheeler headed a goal from a pass by Shackman, but the goal was disallowed, and half-time came without a score. Dolly did some good work on the left wing, but the forwards had few good openings. At the other end Wenger saved well several times.

The fog then became thicker and muffled the second half badly. The Old Westminsters soon scored following a move down their left wing. The Hospital often took the ball into the opponents' goal-mouth, but finished badly, and Westminster increased their lead following a scramble in front of our goal. They then conceded two corners, but managed to regain the upper hand and scored again, following a good run by the left wing. For the rest of the game we were largely on the defence, but there was no further score.

Team.—R. A. L. Wenger (*goal*); P. J. Hardie, J. Shields (*backs*); J. D. Ogilvie, R. E. Owlett, W. M. Maidlow (*halves*); A. W. Langford, P. Brownlees, F. E. Wheeler, R. Shackman, R. C. Dolly (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD BRADFIELDIANS.

Played on Saturday, January 21st, at Winchmore Hill. Won, 3—1.

From the very beginning of this game the Hospital set the pace. Defending the Pavilion end, constructive attacks were repeatedly launched on the Old Boys' goal. Pearce scored with a good shot into the corner of the net, and Langford soon added another from an excellent pass by Maidlow. Three more good opportunities were missed before half-time, giving us a lead of only 2—0. Bradfield then improved but we continued to have the better of matters. Shackman scored. Our lead was reduced some time before the end, and then both the defences had the upper hand in the remainder of a heavy game.

Team.—R. A. L. Wenger (*goal*); J. Shields, A. H. Hunt (*backs*); J. W. B. Waring, D. R. S. Howell, W. M. Maidlow (*halves*); A. W. Langford, F. E. Wheeler, H. A. Pearce, R. Shackman, R. C. Dolly (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD OLAVIANS.

Played on Saturday, February 4th, at Winchmore Hill. Won, 8—2.

An exceedingly one sided game, with the Hospital forwards on the top of their form and a weakened defence managing effectively. The ground was very heavy, but that did not seem to have any effect on the speed with which our forwards carried out their attacks. Goals were scored by Pearce (?), Wheeler (2), Shackman, Langford, Dolly and Howell, the Old Olavians contributing their two immediately before and after half-time. Oranges were taken with the score at 3—1, and it was very encouraging to see five goals added in little over half an hour.

Team.—R. A. L. Wenger (*goal*); J. Shields, G. Herbert (*backs*); J. W. B. Waring, D. R. S. Howell, W. M. Maidlow (*halves*); A. W. Langford, F. E. Wheeler, H. A. Pearce, R. Shackman, R. C. Dolly (*forwards*).

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

1st Round of the Inter-Hospital Cup.

Played at Winchmore Hill on Thursday, February 2nd. Lost, 1—2.

Confident of victory, and with admirable encouragement from the form shown during the two preceding games, it was bitterly disappointing to be put out in the first round. The ground was at its very worst, with a lake of thick slush up the middle. It was immediately obvious that long passes to the wings were going to be the only tactics of any value, and that any attempt at short passing would be defeated by the mud alone. Mary's opened with

a vigorous attack, but did not look really dangerous. We soon settled down, and appeared much the better side for some minutes, when Dransfield had the misfortune to damage a thigh muscle. One effective wing was thus put out of action, and Mary's were left with an extra man in defence.

The game then became muddled. Mary's broke through on their right wing, the movement resulting in a goal. Both goals then had some very narrow escapes: Wenger smothered one drive admirably.

After the change of ends Bart.'s still failed to get together. Dolly on the left wing was plied with innumerable passes and on the whole played very well. But very seldom did he get rid of the ball early enough, being up against a strong and fast defence. The extra man that Mary's had was usually given plenty of time to get well back, and they were seldom in any real danger. So often, too, Dolly's centres, excellent as centres, landed behind the inside forwards, and became so embedded in the mud that it was useless to expect a goal from them. Mary's scored a goal of dubious character, which was decidedly lucky in any case. Bart's then at last began to hold them in their own half of the field. Dransfield, hobbling in from the wing to a scramble in their goal mouth, scored. On two or three further occasions we came within inches of levelling the scores, but the final whistle went with the ball once more well down in our half of the field.

Team.—R. A. L. Wenger (*goal*); J. Shields, P. J. Hardie (*backs*); A. H. Hunt, J. W. B. Waring, W. M. Maidlow (*halves*); C. M. Dransfield, F. E. Wheeler, H. A. Pearce, R. Shackman, R. C. Dolly (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD ALDENHAMIANS.

Played on Saturday, February 11th, at Winchmore Hill. Lost, 1—3.

Aldenham, fielding a good side, looked as if they were going to win handsomely during the first few minutes of the game. However, we soon began finding each other with our passes, and took the game into their half of the field. Play was then very even, and Wheeler opened the scoring. Aldenham soon replied. During the second half they quickly added two more. The Hospital defence then settled down well and gave the forwards much better opportunities. Play became robust, with Bart.'s showing up well, but failing to score.

Team.—R. A. L. Wenger (*goal*); J. Shields, A. H. Hunt (*backs*); J. D. Ogilvie, R. E. Owlett, W. M. Maidlow (*halves*); A. W. Langford, F. E. Wheeler, H. A. Pearce, R. Shackman, R. C. Dolly (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* OLD CHOLMELEIANS.

Played on Saturday, February 18th, at Winchmore Hill. Lost, 2—4.

The Old Cholmeleians won because of their better finishing, but the Hospital did not show up unfavourably. The Old Boys opened well and scored two goals early on. Our forwards then got together. A short passing movement up the centre of the field left Shackman in a good position to lob the ball into the goal-mouth, and Wheeler headed a sparkling goal. The second half was well contested, but the O.C.'s managed to increase their lead to 4—1. Both were clean shorts from far out, which Wenger failed to reach. Brown, who puts vigour with little skill into his play, scored for the Hospital.

Team.—R. A. L. Wenger (*goal*); J. Shields, A. H. Hunt (*backs*); J. W. B. Waring, R. E. Owlett, W. M. Maidlow (*halves*); R. C. Dolly, R. Shackman, E. E. Brown, F. E. Wheeler, G. R. Royston (*forwards*).

HOCKEY CLUB.

ST. BARTHOLOMEW'S HOSPITAL *v.* WOOLWICH GARRISON.

Saturday, January 21st.

Little can be said of this game. Bart.'s were definitely superior, and for the first half the Garrison played without a goal-keeper. The opposition, or lack of it, therefore failed to demonstrate the hoped-for quality of our much altered forward line. Glandon-Williams has left us, leaving a gap which has been filled by Martin, changing from the centre-half position. On the other hand, Hinds Howell is now available and has taken the inside-right position, while Heasman has changed to inside left. Snell has moved to centre half.

Play was very scrappy and entirely confined to the Garrison half. Martin quickly scored, and was followed by Hinds Howell, Blackburn and Heasman. Half time saw the score at 5—0.

After the interval Crosse changed to the Garrison side, and even then, playing ten men and without any attempt to defend our goal, Bart.'s continually pressed. Goals were further added by Hinds Howell and Martin, Crosse having a very much more energetic time.

The whistle for time went with the score at 9—0 (Hinds-Howell 4, Martin 3, Heasman 1, Blackburn 1).

Team.—J. Crosse (*goal*); P. Wright, G. T. Hindley (*backs*); P. G. Smith, E. Fowler, B. Thorne-Thorne (*halves*); G. Blackburn, A. Hinds Howell, K. W. Martin, L. Heasman, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* MILL HILL SCHOOL.

Saturday, February 18th.

Again the Hospital had an easy win over a none too strong School side. The previous week they had beaten Seaford College 6—1, and now they beat Mill Hill by 7 goals to 1.

The game was played on a very bumpy and difficult pitch, and for both sides accurate dribbling and passing was impossible. The most to suffer seemed to be the School backs, who were often robbed by fast-moving Hospital forwards.

Very early on Bart.'s opened the score through Heasman, soon to be followed by Hinds Howell, Lockett and Martin. Our forwards were showing much better form than that of several weeks ago, especially in the hard following up of shots, and the prospects seem bright for our next cup match.

After half-time Mill Hill shaped rather better, and through one rush managed to score. But the whole second half saw Bart.'s pressing and it was unlucky that we only added three goals to our score.

The final result stood at 7—1.

Team.—S. Clarke (*goal*); P. M. Wright, G. T. Hindley (*backs*); V. C. Snell, E. Fowler, B. Thorne-Thorne (*halves*); P. Hill, A. Hinds Howell, K. W. Martin, L. Heasman, J. M. Lockett (*forwards*).

ST. BARTHOLOMEW'S HOSPITAL *v.* R.N. AND R.M., CHATHAM.

Saturday, January 28th.

The pitch was iron-hard, but being very smooth played very fast and reasonably surely. The game was thus, contrary to all expectations, both energetic and enjoyable.

Bart.'s pressed from the start, especially Heasman and Martin combining very well, and a goal was scored through Blackburn before our opponents had time to settle down (1—0).

Still with our defence getting a fairly easy time, a corner was forced and Martin scored with a hard shot (2—0). At times it was difficult not to mis-hit owing to the ground, but when hit the ball travelled very fast over the frozen surface. The R.N. and R.M. were now, however, getting together well and were giving Crosse some work, especially through a fast and clever centre forward. Their efforts were not to be rewarded till after half-time, and in the meantime Heasman scored through some good combining inside forward play (3—0).

After half-time the order of play was reversed, the R.N. and R.M. doing most of the attacking and ultimately succeeding in scoring with a hard, head high shot.

Bart.'s looked dangerous only once or twice during this half, though two efforts through Heasman and Blackburn were only frustrated through some very good work by the opposing goal-keeper.

Won: 3 goals to 1.

Team.—J. Crosse (*goal*); P. M. Wright, G. T. Hindley (*backs*); V. C. Snell, E. Fowler, B. Thorne-Thorne (*halves*); R. Hill, G. Blackburn, K. W. Martin, L. Heasman, J. M. Lockett (*forwards*).

RIFLE CLUB.

Other Matches.

ST. BARTHOLOMEW'S HOSPITAL *v.* CITY POLICE.

Shot on December 2nd. Home. Won by 8 points.

Scores:

ST. BARTHOLOMEW'S.		CITY POLICE.	
J. S. Bailey	100	R. A. Shiers	99
W. A. Owen	99	S. Waissen	98
K. F. Stephens	98	J. Davies	97
W. H. Cartwright	96	F. G. Nash	95
J. E. Underwood	95	C. Smith	92
D. O. Davies	93	T. Cattle	92
Totals	581		573

"A" TEAM.

City of London Rifle League.

November 14th *v.* Cornwall House: Bart.'s, 579; Cornwall House, 584. Lost by 5 points.

November 21st *v.* Great Western Railway: Bart.'s, 581; G.W.R., 581. Drawn.

December 5th *v.* Britannia: Bart.'s, 582; Britannia, 567. Won by 15 points.

December 12th, *v.* "T" Division Police. Lost. St. Bart.'s, 583; "T" Div. Police, 585.

December 19th *v.* Barclays Bank. Lost. St. Bart.'s, 581; Barclays Bank, 587.

January 6th, *v.* Brentham "B". Lost. St. Bart.'s, 582, Brentham "B", 584.

January 9th, *v.* Standard Telephones, Hendon. Lost. St. Bart.'s, 582; Standard Telephones, Hendon, 586.

"B" TEAM.

The "B" team has done well and their scores have been steadily increasing, culminating on November 28th with a record score of 583, beating last year's "A" team record by one point.

November 14th *v.* Dunlop "B": Bart.'s "B", 569; Dunlop "B", 567. Won by 2 points.

November 21st *v.* Slinfold "B". Bart.'s "B", 571, Slinfold "B", 576. Lost by 5 points.

November 28th *v.* Aquarius "B": Bart.'s "B", 583; Aquarius "B", 569. Won by 14 points.

Scores: K. Sugden 98, J. Dalziel 97, D. M. J. Dean 97, G. C. Brentnall 97, L. R. Leask 97, K. F. Stephens 97, D. R. Syred 95, A. G. Cunningham 92.

CORRESPONDENCE.

THE MUSEUM.

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

SIR,—I have read with much interest the article on the Museum in this month's JOURNAL. The Museum has been added to and re-catalogued beyond all knowledge and, with the exception of the College of Surgeons', I venture to say is second to none in the land. Pathology, I think all will agree, is only learnt in the post-mortem room and the Museum, and the average student is bewildered when he enters the Museum, with the galleries filled with pickled specimens and the catalogues describing them.

What I much missed when returning a few months ago was the old Surgical Pathology Book, which was in vogue when I was a student, written by the late Mr. W. Walsham, and which passed through many editions, and edited by many men, the last editor, as far as I remember, being Mr. Paterson. This book gave a description, short, concise and accurate, of all surgical conditions, commencing with atrophy and hypertrophy, illustrating such by referring the reader to one or two pickled specimens and accurately describing them, and then only referring to all others by the number on the bottles. By this means, I venture to suggest that any student or post-graduate can learn his pathology with a sense of security to face any examiner. I should like to hear that some enthusiastic member of the Assistant Staff or Curator or Surgical Clinical Assistant wrote another such book, as I feel that not only would it be an asset to students and post-graduates, but of pecuniary benefit to the author. I feel sure that one or two senior members of the Surgical Staff will well remember the book I refer to, as they, like myself, were brought up with it and learnt their pathology from it.

Yours very truly,

16, The Crescent, H. G. PINKER.
Plymouth;
February 12th, 1933.

DENTAL MISADVENTURES.

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

DEAR SIR,—Dr. Philip Gosse's charming story, concerning the extraction of the healthy tooth as well as a diseased one, reminds me of a similar incident which happened many years ago. While I was a House Surgeon at another hospital I had to assist the Dental Surgeon two mornings a week, and by dint of much practice became quite proficient in the art of extracting teeth. One afternoon I was asked by a fellow House Surgeon to see a girl with bad toothache. A lower premolar was much decayed, and was obviously the cause of the pain. The crown broke at once, but with the help of root forceps I removed, not only the root, but also the healthy first molar. I was much disturbed, but fortunately remembered the story which the Senior Dental Surgeon had told the class when I was a first-time dresser in the Surgery:

Once upon a time he had set out to remove the lower molar from the daughter of one of the hospital officials. A gag was inserted between the front teeth (very bad praxis) and gas administered. Unfortunately she struggled and clenched her teeth violently, and when the mask was removed an upper incisor shot out on the sanded floor of the old Surgery. It was hastily picked up, washed and re inserted into the socket. It was then tied to the adjacent teeth with silk, and the decayed molar removed. Some difficulty was experienced in explaining to the young lady why she should have so much pain in the upper jaw when a lower molar had been removed. The incisor took root, and the lady never knew what had happened.

While my patient was rinsing out her mouth I washed the tooth under the tap. Then I looked at the mouth under the pretext of seeing how the bleeding was getting on, and inserted the healthy molar into the socket, pushing it firmly home.

There my story ends, as the girl never came back to denounce me as a "sorry bungler". GEORGE GRAHAM.

The Medical College,
St. Bartholomew's Hospital, E.C. 1;
February 22nd, 1933.

REVIEWS.

COMMON SKIN DISEASES. By A. C. ROXBURGH, M.D., B.Ch., F.R.C.P. (London: H. K. Lewis & Co., Ltd. [General Practice Series], 1932.) Pp. xxx + 322. 8 coloured plates. 110 illustrations. Price 18s.

Books on skin diseases are apt to assume gigantic proportions, or else, with a few exceptions, to contain merely a bald and unattractive synopsis of dermatology poorly illustrated. There was a real need for such a book as this, and a more suitable author could not have been selected. Dr. Roxburgh's reputation as a teacher stands second to none at St. Bartholomew's. His clinical clerks, to whom this book is dedicated, will value it as a means of supplementing or replacing their all too scattered notes taken in the lecture-room or in the Skin Department—notes often sought for in vain when the examination is near. As a book for students this one is unrivalled, containing as it does Dr. Roxburgh's scheme for preliminary diagnosis and many of his familiar aphorisms. The style is delightful and makes the book very pleasant reading; the descriptions are lucid and brief. It is a relief to escape the usual introductory chapters on anatomy and physiology, and to be launched by the author *in medias res* in the first chapter. Differential diagnosis is stressed throughout the book. We are taught a system of accurate, systematic and detailed observation. Distribution, configuration, type, colour, shape, edge, surface and consistency must be observed in skin lesions. If the diagnosis is still in doubt, we are urged to jot down in parallel columns the points for and against each possible diagnosis. "Incidentally", says the author, "this is an excellent method of deciding between two courses of action in life generally".

Treatment is very fully dealt with. Welcome details are given of the method of preparing such things as starch and boric poultices. Dr. Roxburgh maintains a healthy scepticism in considering the merits of many fashionable drugs. The value of vaccines, protein shock, gold preparations, etc., is estimated in restrained terms. Stress is laid on the treatment which the general practitioner can himself perform. Details are given of carbon dioxide snow and ultra-violet light methods, but X-rays and radium are only outlined, the indications only being fully given. The injection treatment of varicose veins is referred to, but no contra-indications are mentioned. In this section fuller details would be welcome.

The book is exceptionally well illustrated, and the colour photograph reproductions are beautiful. We would suggest that future editions might include a picture of the microscopic appearances of the various pathogenic fungi, since this form of investigation is well within the reach of the general practitioner.

Dr. Roxburgh's book can be recommended with confidence to students and practitioners as being the best of the short books on skin diseases we have yet seen.

DISEASES OF THE SKIN. By R. W. MACKENNA, M.A., M.D., B.Ch. (Edin.). Third edition. Revised by R. M. B. MACKENNA, M.A., M.D., B.Ch.(Camb.), M.R.C.P.(Lond.), M.R.C.S.(Eng.). (London: Baillière, Tindall & Cox.) Pp. x + 506. 45 coloured plates. 149 illustrations. Price 25s. net.

To succeed, a text-book on dermatology requires a clear description of the various diseases, scientifically classified and profusely illustrated, together with a variety in treatment that would meet the frequent and often inexplicable failures that occur in dealing with diseases of the skin.

The book under review ably fulfils these requirements. It is arranged on an ætiological basis, with each chapter systematically divided in the usual way—definition, ætiology, symptoms, course, complications, pathology, diagnosis, prognosis and treatment.

The illustrations are excellent, especially the colour plates, which are of a very high standard, spoilt perhaps by an inconsistent attempt to conceal identity. This is obtained by a "blacking-out" of the eyes with a variety of shapes that often gives a most grotesque appearance to the patient. There are a large number of formulæ, and the treatment of the various conditions is quite up-to-date. As a whole the book is rather too bulky for the student, but would certainly make a useful work of reference.

The new edition differs from the previous one chiefly in the addition of many new coloured plates, and the revision of several minor points to meet present-day requirements.

BROMPTON HOSPITAL REPORTS. Volume I. (Gale & Polden, Ltd., 1932.) Pp. 144. Price 2s. 6d. net.

This volume is intended to be the first of a series which it is hoped to publish at yearly intervals, in order to constitute a record of the investigations carried out at the hospital. It consists of a collection of fifteen papers by the members of the medical and surgical staff of the hospital and by others working in its various departments. With one exception, these have recently appeared in the various medical journals so that detailed comment is unnecessary. The first three articles are by Sir James Dundas-Grant, on Tuberculosis of the Larynx, The Nasal Element in Spasmodic Asthma, and on Shortening the Uvula for the Cure of Cough; then follows a triology by Dorothy J. Dow and W. E. Lloyd on Tuberculosis in Childhood, the mortality and incidence of the condition and the results of the Mantoux test in comparison with chest radiograms being exhaustively discussed. R. C. Wingfield contributes some well-considered remarks on the Problem of the Child in the Tuberculous Household, F. H. Young discusses Chronic Non-Tuberculous Infection of the Lungs in Children, and Mansell and Atkin contribute studies of the Action of Sanocrysin in Tuberculosis. The surgical aspect is represented by two papers from Tudor Edwards on the surgical treatment of intrathoracic new-growths and a method of maintaining negative pressure drainage in empyema, both being of the high standard which is associated with this author's name. In addition there are articles on a malignant tumour of the thymus, bronchial carcinoma, and the intra laryngeal introduction of lipiodol by Fenton's method. The provision of a brief index would assist in reference to individual papers.

The volume represents a new departure in hospital reports in that it is frankly a collection of reprints of varying standards of merit, and in its present form it is likely to appeal to a limited circle drawn chiefly from the immediate supporters of the hospital. It will be necessary to await the publication of further volumes of this series before judging the success of the present venture, for it remains to be seen whether the scientific output of the staff of a special hospital will be sufficient to support an annual publication which can maintain the standard set by this initial volume.

DISEASES OF THE HEART. By Sir THOMAS LEWIS. (London: Macmillan & Co.) Pp. 287. Price 12s. 6d. net.

Sir Thomas Lewis has set himself the formidable task of confining within the space of three hundred pages a simple, up-to-date, and yet comprehensive account of the common diseases of the heart.

The difficulty of such an undertaking would never be realized by reading his latest book.

The author's remarkably clear perception of the fundamental principles of heart disease is only equalled by the simplicity with which he expresses them, and, taken together, these two qualities constitute the outstanding features of the book. At the very beginning, the problem in every case of heart disease is defined in the form of two questions: Has the heart the capacity to do the work demanded of it when the body is at rest, and what is the condition of the heart's reserves? These questions, the author maintains throughout, can be answered in almost all cases by simple interrogations and by bedside signs, and constitute the essentials to sound prognosis and treatment.

The arrangement is original, and adds emphasis to the importance of these two questions by placing heart failure at the beginning of the book, and following this with chapters on cardiac ischæmia, coronary thrombosis and angina pectoris. A strong plea is made for a clearer recognition of the early pre-congestive stages of failure, characterized by the all-important symptom of breathlessness of effort. In the same connection emphasis is laid on raised venous pressure as an early sign and on the value of venesection in treatment. In considering coronary thrombosis and angina a careful history is shown to be essential to accurate diagnosis, and, in the latter condition, the degree of effort required to produce symptoms is stressed.

The description of the cardiac irregularities is similar to, but briefer than that already familiar to all who have read *Clinical Disorders of the Heart-beat*, by the same author.

In the account of valvular disease and infections of the heart which follows, the original conception is never lost sight of, and prevents any tendency to exaggerate the importance of purely mechanical defects.

Useful chapters on heart disease in relation to child-bearing, anæsthetics and operations are included, and the book ends with a general consideration of diagnosis, prognosis and treatment, which shows the author to possess a knowledge of the practical management of patients far beyond the limits of his subject.

Diseases of the Heart is not an advanced study of cardiac disease, and theory finds little place in it, but there must be few so well versed in the subject that they will not glean much valuable information and advice from its pages.

THE PRINCIPLES AND PRACTICE OF OTOLOGY. By F. W. WATKYN-THOMAS, F.R.C.S., B.Ch.(Cantab.), and A. LOWNDES YATES, M.C., M.D., F.R.C.S.(Edin.). (London: H. K. Lewis & Co., Ltd.) Pp. xii + 555. 199 figs. Price 25s. net.

This is a book written for the "general practitioner-surgeon" and "candidates for the D.L.O. and other higher degrees". While all interested in otology will find this book stimulating, it would be wiser for students to master the more conventional works first; then, having satisfied the examiners, they will be the better able to appreciate the very considerable thought and research the authors have devoted to the book.

Both authors are members of the Committee of the Section of Otology of the Royal Society of Medicine appointed to consider the tests of hearing; their conclusions are embodied in the appropriate chapters. Deafness is viewed from a fresh angle and the various aids to hearing are well discussed. The chapters on infection of the ear are more orthodox, and the subject is treated in detail.

The phrasing in places offends a possibly over-sensitive ear, and the omission of a list of illustrations is noticed, but without regret. Responsible persons should no longer refer to Arnold's nerve as the "auricular branch of the vagus" (p. 13); it is hard enough to remember facts. The book is marred by many misprints and small errors: for example, a picture of an apparently normal ear-drum is entitled "Diseases of the Ear" (p. 16), and the treatment advocated for lateral sinus thrombosis seems to be ligature of the *external* jugular vein (p. 450).

GRAY'S ANATOMY. Edited by T. B. JOHNSTON, M.B., Ch.B., Twenty-fifth edition. (London: Longmans, Green & Co.) Pp. xiv + 1478. Price 42s. net.

It is seventy-four years since *Gray's Anatomy* was first published, and it is a remarkable testament to the book that fresh editions have been found necessary every three or four years since its origin in 1858.

The task of keeping it popular and up to date has been in the hands of only four men in all those years, and the numerous editions it has passed through in each of their hands is a further testimony to the efficiency of their work.

Mr. T. B. Johnson has undertaken the stupendous task of rewriting section by section the entire work.

The section upon Embryology has been entirely revised and much modern matter added, the result being that it is the most clear and concise account of the subject available—entirely enough for the

Primary Fellowship examination. The clarity of the illustrations has doubtless been an important factor in minimizing the text.

The neurological section was revised for the previous edition and remains excellent, although it seems a pity that the extra-cranial courses of the cranial nerves have not been dealt with more fully. The account of the lymphatics of the body, which are of such paramount importance to the student, still remains unnecessarily incomprehensible.

It seems a pity that the surgical anatomy is retained—at least in its present form. For the most part these sections consist of smatterings of signs, symptoms and treatment, evading the anatomical factors concerned.

Although the illustrations have been increased with great advantage, we are sorry that many of the line drawings have been replaced by "washed" ones.

We feel certain, though, that this edition will continue the success of the work, and that perhaps in future editions there will be time for consideration for details such as those mentioned above.

ULTRA-VIOLET THERAPY. By AUSTIN FURNISS.

This volume gives a comprehensive review of ultra-violet therapy. The subject is discussed with reference to the groups of diseases in which it is of use. We feel that judicious use is necessary of these important therapeutic agents; for example in the case of mastoiditis the author states "radiant heat is the treatment of choice in the acute stage; if treatment is commenced early enough operation may not be necessary". In this group of cases many are lost through delayed operation. The value of ultra-violet light in diseases of the skin is fully discussed. The illustrations are good and the book is well written. The author has made an important contribution to therapy, and the book can be recommended as a valuable reference on the subject.

TREATMENT OF FRACTURES IN GENERAL PRACTICE. By W. H. OGILVIE.

To compress a discussion on the treatment of fractures into the compass of 180 pages is a feat deserving praise. This addition, composed of two volumes, is a valuable one to the series of Pocket Monographs on Practical Medicine. Such a work is essential for those who wish to retain in their memory the salient features of the treatment of all the important fractures. The author has presented us with a work which will live in the memory. The figures have been well chosen, and the illustrations of simple substitutes for costly apparatus are valuable. The book is written on practical lines. We feel the work will be valuable not only to those in practice, but to students who wish to consolidate their knowledge of fractures prior to examination.

SAFEGUARDS IN COMPILING A CERTIFICATE FOR THE INSANE. By HORACE B. HILL, M.R.C.P. (London: A. H. Stockwell, Ltd.) Pp. 31. Price 2s. 6d. net.

There is always present in the mind of the qualified practitioner a vague dread of a possible conflict with the Law in open court, when every step of his procedure is ruthlessly examined, and he is faced with the prospect of heavy damages for a minor error of judgment. In no case is this danger more conspicuous than in the certification of the insane. To safeguard him this little book has been prepared.

Essentially, it is a list of seventeen questions, careful attention to which would avoid all the many pitfalls to be met with in filling in the certificates. The questions are all excellent in principle, some of them naturally a trifle obvious. A very practical item is the inclusion of the list on pages detachable for reference. There are also sound definitions of the various shades of mental aberration.

The book would be extremely useful to everyone whose work lies in the way of the type of case referred to.

HINTS TO THE YOUNG PRACTITIONER. By G. FRANCIS SMITH, M.R.C.S., L.R.C.P., Consulting Surgeon, Peace Memorial Hospital, Watford. (London: Oxford University Press, 1932.) Pp. 156. Price 5s. net.

"Grau, teurer Freund, ist Alle Theorie,
Und grün des Lebens goldner Baum."

This little book, which can be read through of an evening, is freshly and simply written, and its print and paper are good. Though much of the matter is trivial, much of it is wise, and the outlook is always helpful. The material has not been arranged with uniform care; there is some repetition and overlapping, and the style, despite its commendable simplicity, in places lacks polish. Had, on the other hand, the work been revised more thoroughly, it might have lost its pleasant atmosphere of naturalness in the process. The author, who has been in practice for forty-six years, deals interestingly with such subjects as fractures, whitlows, anæsthetics, midwifery, inquests, holidays, etc. The early difficulties which strew the path of the young practitioner are emphasized, but never magnified.

For these hard times the price of the book is not high, and many practitioners and senior students will be glad to see it on their shelves.

AIDS TO GYNÆCOLOGY. By RICHARD E. TOTTENHAM, M.D., F.C.O.G. Eighth edition. (London: Baillière, Tindall & Cox, 1932.) Pp. vii + 214. Figs. 53. Price 3s. 6d.

When a book has reached its eighth edition it may be said to have established itself in the current literature. A new edition, therefore, calls for a notice rather than a review.

To those unfamiliar with the scope of the work it may briefly be explained that it deals with the anatomy, pathology, diseases and treatment of the female genital organs. Print and paper are good, and the illustrations—drawings and photographs—are for the most part clear and helpful. There is a useful index. The book has increased in size by eighty-six pages—a matter for regret. The information is unevenly distributed; some sections are scanty, others lavishly verbose. Endometriomata are discussed all too briefly, the causes of pruritus are too few, the section on urethral caruncle is inadequate, no age-figure is given for sarcomata of the uterus, lipiodol is misspelt on p. 146, and numerous other disappointments await the optimistic reader. The additional matter contains, among others, a discussion of the use of radium in the treatment of malignant disease, with a brief description of the technique.

CATECHISM SERIES. CHEMISTRY, Pt. I, pp. 72 (published in two parts). ANATOMY, Pt. I, pp. 80; by C. R. WHITTAKER, F.R.C.S.E., F.R.S.E. (in six parts); fourth edition. MATERIA MEDICA, Pts. I, II, III, pp. 80 each; by D. M. MACDONALD, M.D., D.P.H., F.R.C.P.E.; fourth edition. (Edinburgh: E. & S. Livingstone.) Price 1s. 6d. net each part.

Chemistry.—This member of a useful series, though not as helpful as its companions, gives a good outline of typical questions, with answers that are possibly too concise for instruction and too inadequate for revision. It would be useful as a periodic test of the first-year student's knowledge.

Anatomy.—The greatest objection to previous editions has been the adherence to the Old Nomenclature. It has been removed by the conversion of the present one to the B.N.A. Illustrations have been omitted on economic grounds, probably wisely. Perusal of the books will now prove extremely helpful as a preliminary to a *viva*.

Materia Medica.—Revised according to the new edition of the *British Pharmacopœia*, this edition is a concise and instructive aid to the study, not only of materia medica, but also of pharmacology.

A table of contents or an index would considerably enhance its value, but there is, however, a valuable synopsis of the changes in the new B.P.

DISEASES OF THE EYE. By ANDREW RUGG-GUNN, M.B.(Edin.), F.R.C.S.(Eng.). (London: William Heinemann, Ltd.) Pp. xii + 188. 8 plates. 21 figures. Price 12s. 6d. net.

Another book of the "Practitioner's Series", this is written to meet the needs of ordinary practice and represents "the indispensable minimum of ophthalmological knowledge required by the general practitioner".

As such it is inadequate for the student requiring a text-book on the subject, but is a useful epitome of the commoner ocular conditions and their treatment. The classification is anatomical; each account is prefixed by a summary of the normal and morbid histology of the part. Special attention is paid to treatment, both in general principle and in detailed method. The most modern ideas are incorporated, as shown by the accounts of diet in acute conjunctivitis and of the use of contact glasses in refractive errors.

Illustrations are sparse, the plates excellent. There is one execrable line drawing of a head with an eye bandage; otherwise the figures in the text are quite useful. There is an excellent appendix of ophthalmic materia medica.

EXAMINATIONS, ETC.

University of Oxford.

The following Degrees have been conferred :

B.M.—Jenkins, J. E., Robertson, J. R.

University of Cambridge.

The following Degrees have been conferred :

M.D.—Ainsworth-Davis, J. C.
M.B.—Masina, M. H.
B.Chir.—Bradbury, E., Mandow, G. A., Morrell, F. H., Pawson, E. B., Roper, R. D., Shepherd, F. W., Wedd, G. D.

Royal College of Physicians.

The following have been admitted **Members** :

Kersley, G. D., Prowse, C. B., Scott, R. B., Varley, J. F.

Royal College of Surgeons.

The Diploma of **Fellow** has been conferred on the following :

Allinson, S. W., d'Abreu, A. L., Bastow, J., Bharucha, D. R., Dalal, R. P., Forrester-Wood, W. R., Gissane, W. C., Harrison, J. O., Hollis, G. J., Jones, P., Keogh, C. A., Knight, G. C., MacMahon, J. S., Money, R. A., Morgan, F. P., Patel, C. S., Pinker, H. G., Roberts, N. W., Ross, L. N., Strong, E. C. N., Trevor, D., Vartan, C. K.

The following were successful at the Examination for the **Primary Fellowship** :

Davies, H. L. G., Kelsall, A. R., Marr, J. A. S., Radcliffe, F., Rodgers, H. W., Tubbs, O. S.

Royal Colleges of Physicians and Surgeons.

The following Diplomas have been granted :

D.P.H.—Brunyate, W. D. T., Willoughby, H. M.
D.T.M. &H.—Lakshmanan, C. K.
D.P.M.—Gilsenan, B. M. C.

British College of Obstetricians and Gynæcologists.

The following has been admitted a **Fellow** : Lane-Roberts, C.

Conjoint Examination Board.

Pre-Medical Examination, January, 1933.

Chemistry.—Cane, C. S., MacKelvie, K. C., Richards, G. A., Schenker, A. W., Stoker, G. E.
Physics.—Clunies-Ross, W. G. F., Joyce, J. B., MacKelvie, K. C., Richards, G. A., Schenker, A. W., Stoker, G. E., Taylor, L. R., Williams, W. R.
Biology.—Cane, C. S., Hall, W. S., Richards, G. A.

First Professional Examination, January, 1933.

Anatomy.—Beizer, L. S., Cole, M. J., Hopkins, I. T., Hughes, T. E., Jonescu, P., Jopling, W. H., Mundy, R., Prewer, K. R., Schiller, M.
Physiology.—Jonescu, P., Jopling, W. H., Mundy, R., Ottley, M. F. B., Prewer, R. R., Weston, C.
Pharmacology.—Jonescu, P., Libertson, W., Mullick, S., Waks, W., Wolfe, H. L.

Final Examination, January, 1933.

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

Bennett, R., Bentley, J. G., Chakravarty, N. P., Dawson, D. J., Harvey, P. G. F., Hilmy, A., Kettlewell, H. B. D., Lawn, J. A. E., Lown, J. F., McOwan, B. M., Morgan, G. R., Morrison, R. J. G., Norsworthy, L. R., Pawson, E. B., Ransome, G. A., Robertson, J. R., Roper, R. D., Shepherd, F. W., Turner, R. E. S., Winslow, V. F. F.

L.M.S.S.A.

Primary Examination, January, 1933.

Anatomy and Physiology.—Kennedy, A. B.

Final Examination, December, 1932.

Forensic Medicine.—Van Rooyen, J. A.

CHANGES OF ADDRESS.

DEIGHTON, T. D., 13, Royal Crescent, Cheltenham, Gloucestershire. (Tel. 4515.)
RICHARDSON, G. B., "The Hollies", Alverton, Penzance.

APPOINTMENTS.

DEIGHTON, T. D., M.S., appointed Surgeon in Charge of Ear, Nose and Throat Department, Cheltenham Hospital.
VISICK, A. H., M.B., B.S., F.R.C.S., appointed Surgical Specialist, Military Hospital, York.

BIRTHS.

FORD.—On February 8th, 1933, at 1, The Golfs, Eastbourne, to Audrey and Dr. J. Norman C. Ford—a daughter.
FRANKLIN.—On February 26th, 1933, to Ethel Alice Franklin (*née* Adamson), wife of Dr. K. J. Franklin, 13, Banbury Road, Oxford—a son (Robert Lester) (survived only three hours).
HATTERSLEY.—On January 28th, 1933, at Farnham, Surrey, to Vera, wife of Major S. M. Hattersley, R.A.M.C.—a son.
HEATH.—On February 17th, 1933, to Peggy (*née* Allan), wife of Dr. W. Heath, of The Beeches, Longton, Staffs—a son.
HORNIBROOK.—On February 12th, 1933, at Gerrard's Cross, to Margaret, wife of H. Nevill Hornibrook, M.B.—a son.
HOSFORD.—On January 28th, 1933, at "Cairnton", Stormont Road, Highgate, to Nora (*née* Randall), wife of R. W. P. Hosford, F.R.C.S.—a son.
LLOYD.—On January 25th, 1933, at 19, Dentinck Street, W. 1, to Olive, wife of W. Ernest Lloyd, M.D.—a son.
LYNN.—On January 25th, 1933, in London, to Margery, wife of Lieut.-Col. Rigby Lynn, D.S.O., I.M.S.—a son.
RADCLIFFE.—On February 23rd, 1933, at Wivenhoe, to Muriel, wife of Walter Radcliffe, M.B.—a son.
WELLS.—On February 1st, 1933, at Havenfield, Great Missenden, to Rhona, wife of Dr. Arthur Q. Wells—a son.

MARRIAGES.

CORBETT—ROBINSON.—On February 22nd, 1933, at St. Mark's Church, North Audley Street, W., Rupert Shelton Corbett, M.Chir., F.R.C.S., to Olive Gordon Robinson.
HODGKINSON—KNOX.—On February 9th, 1933, at Wolborough Church, Newton Abbot, Hubert Lloyd Hodgkinson, only son of the Rev. and Mrs. Hodgkinson, to Mary Stuart, eldest daughter of Lieut.-Col. Sir Hamish Knox, O.B.E., and the late Mrs. Knox.
KERSLEY—YEOMANS.—On February 1st, 1933, at Woolbeding Church, Midhurst, Dr. George Durant Kersley, M.R.C.P., son of the late Mr. H. G. Kersley, J.P., and of Mrs. Kersley, of Bath, to Mary Ada Roper Yeomans, of Midhurst, Sussex.

DEATHS.

BLACK JONES.—On January 27th, 1933, at Penderi, Creigiau, Cardiff, William Black Jones, M.D., J.P., formerly of Builth Wells, aged 68.
CURRIE.—On January 28th, 1933, John Currie, M.D., J.P., of The Cleave, Cawsand, near Plymouth, eldest son of the late John Currie, M.D., of Totnes and Taunton.
EICHHOLZ.—On February 6th, 1933, at 26, North End House, W. 14, Alfred Eichholz, C.B.E., M.D., aged 63.
MARTIN.—On January 28th, 1933, at 30, George Road, Edgbaston Birmingham, Christopher Martin, M.B., C.M., F.R.C.S., elder son of the late Christopher Martin and Harriet Martin, of Stockton-on-Tees.
SIMPSON.—On February 11th, 1933, at Southend-on-Sea, after a short illness, Harry Ernest Simpson, L.M.S.S.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.

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St. Bartholomew's Hospital Journal.

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

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CALENDAR.

Tues., April 4.—Dr. Hinds Howell and Mr. Harold Wilson on duty.
Fri., ,, 7.—Dr. Gow and Mr. Girling Ball on duty.
Sat. ,, 8.—**Inter-Firm Seven-Aside Tournament at Winchmore Hill.**
Tues., ,, 11.—Dr. Graham and Mr. Roberts on duty.
Fri., ,, 14.—Prof. Fraser and Prof. Gask on duty.
Sun., ,, 16.—**Easter Day.**
Mon., ,, 17.—**Bank Holiday.**
Tues., ,, 18.—Rugby match *v.* Bristol. Away
Lord Horder and Sir C. Gordon Watson on duty.
Wed., ,, 19.—**Last day for receiving matter for the May issue of the Journal.**
Fri., ,, 21. Dr. Hinds Howell and Mr. Harold Wilson on duty.
Mon., ,, 24.—Special subjects : Clinical Lecture by Dr. Cumberbatch.
Tues., ,, 25.—Dr. Gow and Mr. Girling Ball on duty.
Wed., ,, 26.—Surgery : Clinical Lecture by Mr. Vick.
Fri., ,, 28.—Dr. Graham and Mr. Roberts on duty.

EDITORIAL.

THE origin of the Hospital Arms has been found to be far from clear, and the suggestion put forward in Sir Norman Moore's *History of the Hospital*, that they were adopted from the private Arms of John Wakeryng, Master of the Hospital in the second quarter of the fifteenth century, is incorrect. It seems a great pity, moreover, that the Hospital a Royal foundation—should use Arms of which the origin is so unsatisfactory and obscure, when for four hundred years the Hospital and Priory of St. Bartholomew were under one head, the Prior. Futhermore, while Rahere's tomb has an angel carved at his feet holding up prominently a shield of the Priory Arms, *i.e.* two royal leopards and golden crowns with scarlet background, there is no representation of the present Hospital Arms on it. The assumption is that both institutions had the same Arms originally, and that it was not till some later date that the Hospital adopted separate Bearings.

From the translations of some of the early documents of the Hospital it is obvious that the Master had on appointment to swear fidelity to the Prior, and one early Prior laid a solemn curse on anyone who should try to separate the Hospital from the Priory. In view of all this it has been proposed that the Hospital should have a Coat of Arms which would do more justice to its ancient history; the new Arms would quarter the Priory and present Hospital Arms as shown on the coloured reproduction enclosed, and supporters, *e.g.* a nun and monk, have been added. The scarlet and gold of the first and fourth quarters contrast admirably with the silver and black of the second and third, and the whole design is a delightful synthesis of the history of the Hospital.

To alter the present Arms is an undertaking which should be performed with forethought and caution; it will no doubt meet opposition, but there are many points in the light of recent findings which would favour such an alteration.

The interest which has been stimulated in this subject has been largely due to Dr. Mervyn Gordon and the Rouge Croix; we are deeply grateful to them both for pointing out these new facts, which have been so long overlooked. The expense incurred in reproducing the coloured plate has been met by private subscribers, who desire to remain anonymous, and we have to thank them for making this reproduction possible.

We should like to point out that before the proposed design can be adopted by the Hospital a certain sum of money would have to be paid to the College of Arms for its registration.