

New Addresses.

BISHOP, S. O., 4, Stratford Mansions, South Molton Street, W.
 BURRA, L. T., County Health Office, Aylesbury.
 FARMER, W. H., 50, Broad Street, Ludlow.
 FISHER, A. G. T., 39, Caledonia Place, Clifton, Bristol.
 MAPLES, E. E., 10, Hillside Mansions, Highgate, N. (permanent address).
 PRESTON, F. H., 87, Victoria Street, S.W.
 SHAW, T. CLAYE, 33, Weymouth Street, W. (Tel. 1858 Mayfair.)
 WILLCOCKS, R. W., Royal Waterloo Hospital for Women and Children, Waterloo Road, S.E.
 YETTS, Staff-Surg. W. P., R.N. (retired), British Legation, Peking.

Appointments.

✓ COMPTON, A., F.R.C.S., appointed Hon. Assistant Surgeon to the German Hospital, Dabton.
 ✓ FISHER, A. G. T., M.B., Ch.B., M.R.C.S., L.R.C.P., appointed Demonstrator of Surgical and Applied Anatomy in the University of Bristol.
 ✓ MILLER, T. M., M.R.C.S., L.R.C.P., appointed Surgeon to the s.s. "Imzumbi."
 ✓ WILLCOCKS, R. W., M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the Royal Waterloo Hospital for Women and Children, Waterloo Road, S.E.

Royal Naval Medical Service.

The following appointments have been notified since December 20th, 1912:
 Staff-Surgeon H. B. Hill lent to the "Victory," additional for Physical Training School, for requalifying course, to date January 13th, 1913.
 Surgeon L. Murphy to the "President," additional, for five months' course of instruction at Naval Medical School, to date February 1st, 1913.
 The following appointments have been notified since January 20th, 1913:
 Fleet-Surgeon C. Strickland to the Royal Marine Division, Portsmouth, to date April 1st, 1913.
 Fleet-Surgeon H. Spicer to the "Cornwallis," to date February 4th, 1913.
 Staff-Surgeon N. H. Harris to the "Egmont," for "Proserpine," February 1st, 1913, and to "Proserpine," on commissioning, undated.
 Staff-Surgeon S. Roach to the "Devonshire," to date February 12th, 1913.
 Staff-Surgeon W. C. B. Smith to the "Royal Arthur," for medical charge on voyage home from China.
 Surgeon E. Moxon Brown to the "Good Hope," and for group of ships of the Third Fleet, to date February 1st, 1913.

Royal Army Medical Corps.

Lieut. E. B. Allnut won the Dechaumont Prize in Hygiene at the R.A.M.C. College, Millbank.

Births.

ADAMS.—On February 22nd, at Auckland House, Newbury, Berks., the wife of E. G. Beadon Adams, M.B., F.R.C.S., of a son.
 CORFIELD.—On January 26th, at Beechwood, Upper Tooting, S.W., Beatrice, the wife of Carruthers Corfield, M.R.C.S.(Eng.), L.R.C.P. and L.S.A.(Lond.), of a daughter.
 DIX.—On January 16th, at Hamilton House, Bruton, Somerset, to Charles and Ellen Dix, a daughter.

DYSON.—On February 12th, at 82, Lower Road, Rotherhithe, S.E., the wife of Malcolm Goodworth Dyson, F.R.C.S., of a daughter (Ruth).

HORNER.—On January 31st, the wife of Norman Gerald Horner, M.B. (née Grace Fearon), a son.

JORDAN.—On February 19th, at 11, Bentinck Street, W., to Dr. and Mrs. Alfred C. Jordan, a son.

Marriages.

ADAMS—APPLEYARD.—On February 15th, at St. Marylebone Parish Church, by the Rev. F. R. Holmes, James Wilmot Adams, M.B., B.C.(Cantab.), son of Dr. James Adams, of Chiswick Place, Eastbourne, to Irene, youngest daughter of the late Dr. James Appleyard, of Longford, Tasmania.

HARRISON—ROGERS.—On Thursday, February 20th, at All Saints' Church, Blackheath, Everard Harrison, M.B., B.C.(Cantab.), youngest son of Stockdale Harrison, F.R.I.B.A., Leicester, and Grace Muriel, younger daughter of Colonel Rogers, late Staff Officer of Pensioners.

Deaths.

DYSON.—On February 12th, at 82, Lower Road, Rotherhithe, S.E., Malcolm Goodworth Dyson, F.R.C.S., of pneumonia, aged 45.
 NOON.—On Monday, January 20th, at 30, Devonshire Place, W., Leonard Noon, B.C.(Cantab.), F.R.C.S.(Eng.).
 PRATT.—On February 8th, at Oughthorpe, nr. Sheffield, John Edward Pratt, M.R.C.S., L.R.C.P., aged 32.
 TALBOT.—On February 7th, at Quinton, Saskatchewan, Canada, Thomas Harrison Talbot, younger son of the late John Talbot, of Tillington, Stafford, aged 39.

Acknowledgments.

The Hospital (2), *The Practitioner* (2), *The Medical Review* (2), *The British Journal of Nursing* (8), *The Nursing Times* (8), *The Student* (5), *Guy's Hospital Gazette* (4), *The Middlesex Hospital Journal* (2), *League News*, *New York State Journal of Medicine* (2), *St. Mary's Hospital Gazette*, *Long Island Medical Journal*, *Clinical Excerpts*, *The Stethoscope*, *Charing Cross Hospital Gazette*, *University College Hospital Gazette*, *The Eagle*, *Evans' Journal*, *The St. Thomas's Hospital Gazette*, *L'Echo Médicale du Nord*, *Giornale della Reale Società Italiana d'Igiene*.

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, Smithfield, E.C. The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER W. E. SARGANT, M.R.C.S., 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. Telephone: 1436, Holborn.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD AND SON, *Bartholomew Close*. MESSRS. ADLARD have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 6d. or carriage paid 2s. 3d.—cover included.

St. Bartholomew's Hospital



JOURNAL.

VOL. XX.—No. 7.]

APRIL, 1913.

[PRICE SIXPENCE.]

St. Bartholomew's Hospital Journal,

APRIL 1st, 1913.

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

Calendar.

Tues.,	April 1.—	Mr. Waring on duty.
Wed.,	" 2.—	Examination for D.P.H.(Camb.) begins.
Fri.,	" 4.—	Mr. Eccles on duty.
Mon.,	" 7.—	Final Examination of Society of Apothecaries begins.
Tues.,	" 8.—	Mr. Bailey on duty. Final Examination Conjoint Board (Medicine) begins.
Wed.,	" 9.—	Second Examination of Society of Apothecaries begins.
Thurs.,	" 10.—	Final Examination Conjoint Board (Midwifery) begins.
Fri.,	" 11.—	Sir Anthony Bowlby on duty. Camb. Easter term begins. Final Examination Conjoint Board (Surgery) begins.
Tues.,	" 15.—	Mr. Power on duty. Harvey. First Lecture 1616
Fri.,	" 18.—	Mr. Waring on duty.
Mon.,	" 21.—	Summer Session begins.
Tues.,	" 22.—	Examination for Part II of Second M.B.(Camb.) begins. Mr. Eccles on duty.
Fri.,	" 25.—	Mr. Bailey on duty.
Tues.,	" 29.—	Sir Anthony Bowlby on duty.
Thurs.,	May 1.—	Primary F.R.C.S. begins. Ascension Day.
Fri.,	" 2.—	Mr. D'Arcy Power on duty.

[Owing to retirements from the staff the medical duties are altered. The alterations are not definitely arranged at the time of going to press.]

Editorial Notes.

IT is with some fear and trepidation that we take up the Editorial Pen and seek the Editorial Chair, which have been respectively so ably wielded and filled by the past Editor. Our aim must be to preserve the traditions of the JOURNAL, and we take this opportunity of assuring our readers that all our energy will be devoted to this object, and the furtherance of their several interests.

Mr. Sladden has successfully combined the functions of Editor of the JOURNAL, President of the Abernethian Society, and House Physician. The pages of the JOURNAL for the last six months testify to the efficiency with which he occupied the first of these posts, and we feel sure that our readers will join in thanking Mr. Sladden for his past services to the JOURNAL, and in wishing him every success in the future; we shall always be glad to receive any contributions from his pen.

At the same time we take this opportunity of reminding our readers that contributions are quite as essential to the existence of a journal as is straw to the proverbial brick-maker, and we therefore invite all those who have anything of interest to the Hospital world in process of celebration to commit the same to paper, and to us.

It is with great regret that we have to record this month the resignation of no fewer than three members of the Visiting Staff, to take effect early in April. These are Sir Francis Champneys, Bart., Dr. West, and Dr. Ormerod. In the oft-recurring words of the President of the Abernethian Society, these gentlemen need no introduction, and we feel sure that our readers will agree that their retirement will inflict a considerable loss on the Hospital. We sincerely hope that their resignation will not mean retirement in any complete sense of the word, for we hope to see them all amongst us from time to time; and we feel certain that they never will, or can, sever their connection with a Hospital and School where they have worked and taught for so long.

It should be needless to describe their distinguished

careers; their names and works are familiar to far more than the medical world, and apart from their eminence in their own special branches of medicine they have many other important associations. Sir Francis Champneys has long done, and is still doing, valuable work as Chairman of the Central Midwives Board; he is also President of the Royal Society of Medicine, and a Crown Representative on the General Medical Council. Dr. West has for many years been the Treasurer of the Royal Medical Benevolent Fund. Dr. Ormerod occupies the position of Registrar of the Royal College of Physicians of London. We wish them all the happiness which they have well earned after many years unselfishly devoted to the benefit and welfare of the Hospital and School.

The following notice, which appeared on the screens a short time ago, caused some consternation in certain quarters:

"No student will be signed up for any examination until all his indebtedness to the School, as well as any indebtedness to the St. Bartholomew's Hospital College Catering Company, has been discharged."

This matter was brought up at the general meeting of the Students' Union, and, we believe, is to be discussed again at a subsequent meeting. Meanwhile we refrain from further comment, except to give expression to the thought that there must be many limited liability companies who would wish that they could go and do likewise.

Early on the morning of Saturday, March 15th, a fire broke out in the Abernethian Room. Prompt measures were taken, and in a short time the conflagration was well under control. The resultant damage was: 1 waste-paper basket and contents, part of 1 settee, and the right lower pole of the Students' Union notice-board. It is surmised that the fire was caused by a cigarette-end having found its way into the waste-paper basket. The words, "VOTES FOR WOMEN," which were found chalked up on the scene of the outbreak, were probably of no etiological importance.

Sir Anthony Bowlby, C.M.G., has been appointed civilian member of the Army Medical Advisory Board; also a member of the Advisory Board under the Protection of Animals Act.

Mr. F. Coleman, M.R.C.S., L.R.C.P., L.D.S., has been appointed Lecturer on Dental Materia Medica at the Royal Dental Hospital.

We heartily congratulate Dr. E. A. Cockayne on his appointment as Assistant Physician at the Middlesex Hospital; and Mr. A. W. Stott, M.R.C.P., on his appointment as a Junior Demonstrator of Pathology at this Hospital.

We also congratulate Mr. H. Blakeway, M.S., F.R.C.S.,

who has been appointed Assistant Surgeon to the City of London Truss Society; and Mr. R. I. Mackenzie Wallis, B.A. (Cantab.), on being awarded the Gillson Scholarship in Pathology by the Society of Apothecaries of London.

The following awards have been made:

Kirkes Scholarship and Gold Medal	F. G. A. Smyth.
Junior Scholarship in Anatomy and Physiology	(1) A. Morford. (2) C. M. Titterton.
Treasurer's Prize in Anatomy	A. Morford.
Foster Prize in Anatomy	E. B. Barnes.
Harvey Prize	H. M. C. Macaulay.
Proxime accessit	P. H. Wells.

We are publishing in this issue Mr. E. G. Stanley's paper on "Local Anæsthesia," which he recently read before the Abernethian Society.

On February 27th Mr. E. L. Dobson read a paper before the Abernethian Society, entitled "Three Months with the Red Cross in Montenegro." Mr. Sladden took the chair, and Mr. Dobson recounted in a characteristic way his experiences and adventures at the Rijeka Hospital, Montenegro. The paper was illustrated with photographs shown by the epidiastroscope.

On March 6th, Mr. Blakeway, F.R.C.S., read a paper at a meeting of the Society on "Whitlow." The paper was both interesting and instructive, especially as it dealt very thoroughly with a condition which is so frequently met with, and is one the importance of which is so often not realised.

The Annual General Meeting of the Abernethian Society was held on March 13th. The Secretary read his annual report, and the election of the following officers for the ensuing year was announced:

Presidents: Mr. R. E. Barnsley and Mr. Farrer Thompson.

Vice-President: Mr. R. StL. Brockman.

Secretaries: Mr. G. L. Keynes and Mr. C. W. B. Littlejohn.

Committee men: Mr. F. H. Robbins and Mr. G. Trower.

We think that the following extracts from an article which appeared recently in most of the daily papers may be of clinical interest. They form part of a description by a militant suffragette of forcible feeding as experienced in Holloway Prison:

"Presently I felt a steel instrument being forced against my gums, where I had had two teeth out. I fought against it with all my strength, but, cutting its way into the flesh, it worked its way in, and then they turned a screw which gradually forced my jaws apart. I felt as though I were having my teeth drawn. My quick breaths seemed to come with a low scream, which was growing louder. . . . I was too much agitated to know if the tube went all the way down into my stomach. I was scarcely conscious, except that I was fighting, that my gums were aching, and that I felt I should go mad at

the outrage of the thing. . . . Some days I felt the tube go all the way down into the stomach. It alarmed me and made me feel fearfully sick, especially when it passed midway between the throat and the stomach. Once or twice I think I screamed terribly after it was over, in an uncontrollable sort of way. . . . I was gasping for breath, and suddenly I began to feel the whole of my face tingling, even my nose, as if there were pulses beating in it, and the same with my hands. . . . When struggling and straining against the feeding, and also when being sick, I had acute pain, and felt as if the cords that held my eyes in must snap. The flesh at the sides and under the eyes was exceedingly painful. . . . Suddenly it came into my mind that if any independent doctor could see my eyes and see how my nervous system was shattered the Government could not go on with it any longer. I asked to see the governor and the doctor together, and I sat down in order to be able to talk to them, having walked for twenty-eight hours that I might quiet myself."

This horrifying account, exhibiting as it does many of the characteristics of manifestations which are described in medical works under the heading of "hysteria," reminded us almost immediately of an article by Sir Almonro Wight which was published some months ago in *The Times*, in which it was suggested that the "militancy" exhibited by suffragettes was due to a morbid condition. The above extracts would seem to aid in the support of such a theory, and, considered with some of the more conspicuous actions of this particular type of individual, almost suggest an acute infective condition, in some cases hereditary, the pathology of which might be investigated.

The Pilgrim Doctor.

IN order to discourage the view-point of those younger members of the medical profession who look forward to a future of sordid, hum-drum, unvarying monotony, I would like to cite the following experiences from the diary of a pilgrim doctor, to prove the possibility of exceptions to such an unromantic prospect.

I was appointed surgeon to a pilgrim ship at the beginning of 1912, and we sailed from Liverpool to convey Malay pilgrims returning from Mecca, from Jeddah, in the Red Sea, to Penang, in the Straits Settlements. We arrived off Jeddah, the port of Mecca, on Sunday, January 15th. I awoke to the sound of the anchor being let go, and, in that dreamy, poetic state 'twixt sleep and wakefulness, I arose to my first vision of an Eastern city, lit with the varied colours of the dawn, softly shaded by the mists of morning—Turner out-Turnered indeed! Having had the advantage of a sound Scriptural training in early youth, I was intoxicated, metaphorically speaking, to see spread out before me the actual realisation of my youthful dreams in a perfect semblance of my Sunday-school-book ideals of the "Holy City" or "New Jerusalem." Towers, mosques, domes and minarets, radiant in the golden glory of the morning sun,

high embattled protecting walls—I could almost see the gates of jasper and the mansions of the blessed, and had to pinch myself vigorously into the belief that I was really still in the flesh and not floating gently on the heaving Styx, guided by Charon, the originator of compulsory pilotage.

Distance nowhere lends such enchantment as in the East, and, as we lay a mile off-shore and as I was unable to land, the vision still remains, unshattered by memories of coliform odours and pestilential filth. Sunday, according to a certain orthopædic specialist, being a "day of rest," we toiled not, neither did we spin, all preparations for the reception of our passengers being long since completed. I spent the day in a spirit of thoughtful preparation for the morrow, my conscience having been awakened by a visit from the Dutch shipping agent, who cheerfully informed me that there were several cases of cholera, plague and small-pox amongst the pilgrims ashore, so that a careful examination of those embarking would be essential. My library consisting of *Carter's Medicine*, the *Bart's Pharmacopœia* and *Swettenham's Malay-English Dictionary*, I endeavoured to glean what knowledge I could of the afore-mentioned diseases from the first two, and a comprehensive grasp of the intricacies of the Malay language from the third, especially in respect of such essentials as "Put out your tongue," "Where's the pain," and "Undo your shirt." Unfortunately *Swettenham's Dictionary* was a singularly polite publication, and I could find no reference to those organs referred to in Jeremiah iv. 19, and, consequently, for the whole of the trip I was in a constant state of indecision as to whether *mag. sulph.* or *pil. plumbicæ opio* was really indicated. The fact that I had never seen a single case of smallpox in my life and had no idea which end of a patient to examine for signs of plague serves as a reflection on the completeness of one's medical training on qualification. As the sun rose higher towards its zenith the temperature increased in an exact ratio, and my thermometer showed such high aspirations towards mid-day that I found myself debating whether this really was the New Jerusalem or whether I was in like evil case with the rich man of the Scriptures, who, though in sight of Lazarus on a golden throne, was himself scorching with parched lips in "another place."

With regard to the preparations for the pilgrims, or "Hadjis," as they are called, the fore and aft 'tween decks and holds had been cleaned and garnished and booby hatches fixed for ventilating purposes. On deck wooden structures, like sentry-boxes with doors, were fixed to serve, some as latrines, others as bath-houses. The distinction between them was that the former possessed troughs ending in a shoot leading overboard through which ran a continuous stream of sea-water, while the latter had to be supplied from buckets. We afterwards found that these distinctive marks were not sufficient to impress the Eastern mind, with the result that they indiscriminately bathed in

the latrines and performed other natural exercises in the bath-houses. Those of more hygienic temperament, impressed with the advantages of free aëration, preferred to use the upper decks for these said exercises, with the result that the ship was very soon as sweetly smelling and freshly scented as a wood in spring.

Early on the Monday morning I was awakened with the news that the Arab dhows containing the pilgrims had set off from the shore and were approaching the ship, and I hurriedly dressed and took up my post at the top of the gangway with the chief officer and the purser as supporters. We employed the waiting moments in practising the pronunciation of "*Bōoka sīrāt*"—"Show your ticket"—until we thought we had got it perfect, but we afterwards found, much to our chagrin, that the simple English "ticket" was better understood. The Hadjis are inspected ashore by Turkish officials prior to embarkation, but this investigation must be of the usual farcical Ottoman nature—as after events proved in our case.

The first boat-load to arrive contained the aristocracy of the party, a Sultan, sultanas and various other fruits, notably over-ripe and rotten oranges and bananas which we ruthlessly condemned to a watery grave. The portly Sultan together with his "yash-mak-ed" brides skipped up the ladder like children just let out from school, so delighted were they to reach the ship and safety once more. The privations and hardships endured by these people on their journey would make a harrowing story. Robbed, fleeced, wounded and even murdered by Bedouin Arabs, Mohammedan priests and Turkish boarding-house keepers, half starved, exhausted, and a prey to all manner of foul diseases, they sacrifice themselves for their faith in a way to make us so-called Christians shamefacedly question our consciences. There is something admirable even in futile sacrifice. I saw one son who had carried his father, an ancient patriarch stricken with Beri-beri, on his back all the sixty weary miles of desert waste from Mecca! We saw an example of the inhuman treatment meted out to the pilgrims by the brawny Arab boatmen. A dhow was brought to, not forty yards from the ship, the boatmen refusing to bring her alongside until the wretched passengers, who had already paid through the nose for their passage, stumped up their last cent. They also searched their baggage and belongings, appropriating anything that happened to tickle their fancy.

My examination at the top of the gangway was perforce of a somewhat perfunctory character, though assisted by the chief officer—an acute diagnostician. It consisted of a rapid glance at face and hand, and look at the forearm for any signs of a rash, feeling at the same time for any rise of temperature. They brought all their belongings on their backs—food, fodder, clothing and bedding—and nearly all had tin pannikins containing holy water from the sacred wells of Mecca, and highly prized. As the said water is a favourite medium for the growth of the *Bacillus typhosus*, it had all

to be condemned and thrown overboard—when it could be discovered!

Our method of discovering either babies or water-cans was to punch vigorously all the carried packages, and, by this system of forcible percussion, a differential diagnosis was easily made. A succussion-splash indicated water, and a howl indicated baby. One baby on being unravell'd from its numerous wrappings was found to be covered with smallpox. A consultation was held and the case condemned and sent back to the boat with protesting father and weeping mother. In the rush of the next boat-load they were forgotten, and, unseen by us, they slipped the boat aft, a friend on deck threw a rope, up which they climbed, and they stowed the child, hidden in blankets, in a dark corner of the after-hold. All day the wearisome influx continued, until by evening we came to the last boat load, when we had passed 947 of them altogether—an exhausting day's work even for an old Bart.'s H.S.! Then a full inspection of quarters was made and an attempt to settle them down in families. During this proceeding I accidentally tripped over an apparent bundle of bedding in the darkness of the after-hold, elicited a diagnostic squeal, and discovered the same smallpox baby I had condemned earlier in the day! It was promptly got up and put over the side in a coal-basket with its parents, the spot from which it was taken being scoured with crude carbolic, and all neighbouring goods pitched overboard irrespective of ownership. At length we got under weigh, and retired to sleep the comforting sleep of the utterly fagged!

On the following day the routine work of the voyage commenced, consisting of morning and evening inspections of the whole of the pilgrim band, together with their quarters. Our first effort was a strenuous one: all the various family-parties and fellow-villagers had to be divided up into "messes" and these given different locations or "claims" in the holds in which to pitch their metaphoric tents. These claims were marked out by rows of boxes, bedding, rolled-up mats, babies and other baggage. The numerous ladies of each party were shut off from the gaze of alien eyes in a "holy of holies" formed by a series of vari-coloured curtains hung on strings tied across the holds. Alley-ways for the passage of the inspecting officers had to be forcibly cleared through this nondescript "scrum"—the resulting effect being strongly reminiscent of an Eastern bazaar. During our round of inspection we had to listen, sympathetically or otherwise, to all sorts of complaints and questionings, at the same time making some attempt at medical examination. I found a small pocket electric torch I had with me the most useful instrument of my whole outfit, it proving indispensable for peering into dark corners and for looking closely at skins or throats. We found by experience that we could afford to ignore all who were able to sit up, laugh, talk or answer "*Bagōōs*" ("Very well") to our anxious questionings, but those lying prone were subjected to a more stringent criticism.

Their sensory nervous system was stimulated by a gentle application of the toe-cap, when, if only asleep, they would spring up, giving vent to their reassuring "*Bagōōs*." If ill, however, their movements would be more lethargic and ill-tempered and they had to undergo minute investigation. The difficulties of diagnosis when the patient speaks one language and the doctor another, even with the assistance of an efficient interpreter, have to be experienced to be properly understood. I never before realised the tremendous importance of a correct history, both past and present, of a case.

The Hadjis brought their own food, consisting almost entirely of curry and rice, and did their own cooking in small open wood-fire stoves. Wood for fuel and fresh water doled out twice a day was all with which the ship supplied them. The cooking had to be done on deck, but on several occasions the whole ship's company narrowly escaped asphyxiation from attempts at lighting these wood fires below decks.

At first we had some difficulty in our inspection of the lady members of the party, an insistence on lifting "yash-maks" or veils to see the fair faces beneath being strongly resented by fond husbands, who stood at the entrance to their curtained enclosures shouting "*Harem*" to keep off the desecrating white officials. Our Sultan friend, who had been established in rather-better quarters than the rest, in the fore-cabin, was the only one we allowed a little licence to in this matter. I agreed with him that I would dispense with examining his wives if he promised to let me know should any sickness break out amongst them. On the seventh day out, however, happening to pass through the fore-cabin, I noticed a very offensive post-mortem-like odour emanating from behind the Sultan's curtains. I spoke to him about it but he declared and protested that all was well. I had my suspicions, however, and the smell still persisting on the following day, I got two quarter-masters to hold the struggling Sultan, whilst I proceeded to desecrate the sanctity of his harem. Imagine my feelings when I found the venerable grandmother of the party stretched out in a corner—a decomposing corpse, having already departed this life three days! As three days in a tropical climate have considerable putrefactive effects, we lost no time in consigning the ancient one to the purifying deep.

Their carelessness in respect of health was in contrast to the importance they attached to religious observances. Daily, at sunrise and sunset, an aged priest, of learned and devout aspect with his shaven head and large round spectacles, donned a spotless white robe, spread out his small prayer-mat on the port side of the deck and placed a rude chart of our course on the mat together with a small watch-compass to give him the direction of Mecca. Then, turning towards the assumed direction of the Holy City, he prostrated himself on his mat, banging his venerable fore-

head on the desk to the accompaniment of mournful chantings from the Koran. His example was followed by every member of his flock until the whole ship reverberated with the dirge-like sounds. Services were frequently held also in the holds, and the scene, as viewed through the open hatches above, was like one from the Arabian Nights. In the dim flickering light of two oil-lamps, the tall white-robed figure of the priest standing in a mist of incense rising from glowing charcoal stoves, all around nothing visible save the white eyes of his rapt and devoted hearers, and above all, the weird Eastern chanting of the "Korionic" dirge.

The fatalism of these people makes doctoring almost futile amongst them. "If we are to die we must die," they argue, and "It's no good bothering about curative or preventive measures; it is Kismet." Their sick were hidden in dark corners, wrapped in bedding or clothing to conceal them from the dreaded white doctor's searching eye. No amount of persuasion would succeed in getting them to take any "*ubāt*" or white man's medicine which they feared contained alcohol—the forbidden fruit. As I hadn't a supply of the latest aqueous tinctures on board they were generally justified in their fears. On the 15th we had our first death, a woman suffering from appendicitis, no operative procedure being allowed. A most impressive burial service was held, presided over by the old priest. The friends washed the body and wrapped it in a white winding-sheet, an old fire-bar was attached to the feet, and, to the accompaniment of a discordant chanting, the corpse was lowered over the side by the sailors on rope slings.

"Down to the dark, the utter dark, where the blind white sea-snakes are."

A horrid and depressing sight is a burial at sea, but as, after this, we had fourteen deaths before arriving at Penang, the Hadjis grew weary of these constant ceremonials, and many of the later corpses were cast overboard without a word. "unwept, unhonoured and unsung." With true Eastern optimism they had all come away provided with winding-sheets stowed amongst their baggage, so as to be ready for any little emergency that might arise. To compensate for these casualties we had only one birth on board, but as no male beings are allowed near on these occasions, I have no knowledge of the Malay methods of midwifery, though a hot brick which was urgently sent for during the course of the proceedings evidently had some mysterious office to perform. Our deaths were mostly due to dysentery, heart-failure in beri-beri, and malignant disease, while we had one undiagnosed case which the chief officer said was one of bubonic plague. As the patient died in five hours, I couldn't, even with Dr. Carter's assistance, verify or contradict his statement. On the 26th we found two cases of smallpox in the after-hold, evidently contacts from the case sent ashore at Jeddah. A rough wooden isolation hospital was run up by the ship's carpenter in the place of a swung-out boat on the unused

boat-deck. I decorated it with a large Bart.'s crest picked out in black and white paint and solemnly christened it "St. Bartholomew's Hospital." Our smallpox cases were quickly carried up and stowed in hospital and their "claims" thoroughly "soused" with crude carbolic. A relative was, with considerable difficulty, discovered and stowed in the hospital to wait on the patients, milk and eggs being placed outside the door three times daily. A wooden shoot for excreta was built leading down to the water's edge. The deck below the hospital was shut off with rope entanglements, and there I kept a suit of engineer's overalls and a bucket of disinfectant for use during and after my six-hourly visits to the patients. The next day another two cases were discovered and hurried up to "Bart.'s," and an old gentleman, a brother of one of them, pressed into service as extra nurse. He refused to sleep in hospital, preferring to make his bed on the deck outside, between two of the boats. He spent his days absorbing the milk and eggs intended for the patients and in cooking large quantities of rice for himself, totally neglecting his nursing duties!

The next night the Captain had a nasty shock. He awoke to see a plaster-white scaly face grinning at him through his deck-house window. Roaring for assistance, he rushed out and found that one of the smallpox patients in his delirium had escaped through a small ventilating space in the wall of the hospital, and, wandering round the decks, had lighted on the skipper's cabin as a suitable resting-place. He was carried back by the half-awakened doctor, who had to spend the rest of the night sterilising himself and his clothing. Henceforward a quarter-master was stationed on deck below the hospital night and day, armed with a boat's oar with which to shove back anyone who attempted to escape. One evening I climbed up to "Bart.'s" to give an injection of morphia to one of the patients who was almost maniacal in his delirium. I had to hold him down with my knee on his chest whilst I attempted to inject him. Most of it squirted on to the floor in the struggle, and I was about to descend for a further supply when I was pained and surprised at receiving a severe blow below the belt from the butt end of a stout ash oar, which precipitated me on my back amongst the pustular patients. The door was banged to at the same time with a "No, you don't, you scabby nigger, you'll bloomin' well stay where you are!" My protestations, muffled by the closed door, were taken for the ramblings of delirium, and it was not until the watch was relieved, an hour later, that I succeeded in escaping from my unwholesome prison-house.

It was with a feeling of profound relief that, on the morning of the 30th, we anchored off the quarantine island at Penang and unshipped our sorry crowd of passengers. The smallpox cases were rowed off in one of the ship's boats, "St. Bart.'s" being broken up and consigned to the deep. The rest of the pilgrims went off in large lighters, protesting against their prospective fourteen

days' imprisonment on quarantine island, almost in sight of home. In fact, the police signal had to be run up and the skipper's revolver barrel flashed under their noses before some of them would consent to leave the ship at all.


It was at this stage that one of the sailors rushed up to me with the unwelcome intelligence that one of the pilgrims, an old man, had just succumbed on the after well-deck. As bodies cannot be buried within the harbour limits this would necessitate our keeping the corpse on board and would mean endless quarantine difficulties, so I dashed aft to see if anything could be done. I searched high and low but could find no one, everybody having left save an old fellow peaceably washing himself under a tap. I sent for the sailor to find me his corpse, but, when he arrived at the tap, he stood as though transfixed, with starting eyes and pallid face as he gazed at the innocent-looking old gentleman engaged in his ablutions. When he could find his voice he gasped, "Good God, sir, there it is, under the bloomin' tap a washin' itself! I'll take my oath it was as dead as Nelson five minutes ago and now blowed if it ain't been and resurrected itself!" As the old gentleman, now conscious of the attention he was attracting, jumped on to the ship's side and shinned down a rope into a lighter, this was evidently true, but whether he had had "a touch of the sun," which he had cured with cold water, or whether it really was a modern miracle we were beholding, I never properly discovered.

For the rest of the day sulphur fumes and carbolic odours held regal sway, and we coughed our souls out, filled with relief and joy at being rid of our recent pestilential companions.

I turned in that night tired but happy, my sleep disturbed by realistic visions of a mixture of Dante's Inferno and underground railways, and I awoke to find that the SO₂, pumped into the holds from the Clayton's apparatus, was escaping into my cabin through a crack in the flooring, so my last recollections of the pilgrims end in a sulphurous cloud of smoke!

S. TREVOR DAVIES.

The Doctor in the Balkans.

 E hear, on good authority, that the last reports from Scutari state that all the British doctors in that town are safe. These include E. N. Russell, S. M. Hattersley, and G. S. Stathers.

Sister Matthew has just left for Greece to work for the Red Cross Society at Athens for two months.

By the courtesy of Mr. Etherington-Smith we are enabled to publish the following extracts from a letter from H. C. Baynes, who was in command of the British Red Crescent

Hospital at Constantinople. He has now returned to England:

"At the beginning of the year a fine large hospital, in nine large portable pavilions, was dumped here by the International Sanitary Board, and I was asked to take it on and administer it with my staff. Our other show at Scutari was shutting down about that time, so I was able to get six sisters from there.

"We have got the place running very well now. There are eight wards, with sixteen to eighteen beds in each, and one central block with three compartments, containing dry goods store-room, pharmacy and pathological laboratory, and staff quarters, where one M.O. sleeps, and where we all mess at mid day. We have a large empty house a mile away, where we sleep, dine and breakfast. Besides these blocks there is a large block that we planned and built, which contains the kitchen, provision-stores, quarters for the thirty-six soldiers and *infirmiers*, who act as nurses in the wards, admission-room, wood and charcoal shed, and washing and drying rooms.

"We have made a fine theatre by shutting off the end of one ward, so that we can cope with all the wounded and surgical cases that come our way. There have been no really bad wounds recently—bullet flesh-wounds chiefly.

"I have six sisters, who have just about as much as they can do with the 120 beds, which are kept pretty full all the time. There is a continuous stream of acute dysentery, bronchitis, pneumonia, etc., coming in from the front all the time. There is also an epidemic of typhoid in the town, which keeps me busy at night, as there is no civil doctor in the place. The hospital is running extraordinarily well. Meller runs the dry-goods store, and Barton the cuisine, besides their wards. I have to do all the buying, ordering, paying, and accounts, and keep all the books, admissions, registrar, etc., as well as all the general administrative machinery, and I have two wards as well.

"The whole staff are amazingly keen, and the sisters have worked quite magnificently. There is one Bart.'s sister here—Sister Douglas, who was in Radcliffe some few years ago."

Overdue Quotations.

"Suppose a Person has let slip into the *Trachea* any sharp Instruments, as Nails, &c., we are to Consider, that Two Indications immediately Ensur; to wit, an *Extraneous Body* lodg'd, and a *Violent Cough*, or *Irritation*. The Former would require Expulsion in its Extent, and the Latter Opiates, to allay, and Consequently hinder Expulsion, which are evidently Contrary: If therefore we suppose the Damage, by their Expulsion, would be Superior to the Advantages receiv'd, 'tis safest to Postpone the Expulsion, and only Quiet the Irritation; for 'tis better to live Uncomfortably than not at all."

"If any Child is disturb'd by *Worms*, it would be Preposterous to endeavour to expell them, without first having Calmly decoy'd them into their Destruction; for otherwise they would hide themselves in the *Mucous Coat* of the *Intestines*, erode the *Intestines* themselves, and thus run Riot within us."—A Discourse on Causes and Cures, E. Strother, M.D., 1718.

A Paper on Some of the Uses of Local Anæsthesia in Surgery.

A Paper read before the Abernethian Society, January 23rd, 1913.

By E. GERALD STANLEY, M.S., F.R.C.S.



LOCAL anæsthesia, or analgesia as it should now strictly be termed, for the part is rarely truly anæsthetic, is the condition resulting in a certain portion of the body, small or large, by the injections of chemical substances, whereby operations can be performed painlessly, there being no loss of consciousness or interference with the nervous system in any part other than that locally anæsthetised. This definition, though complete, is rather cumbersome. Briefly put—a small area of the body is rendered analgesic, the central cortex not being poisoned by a general anæsthetic or the vital medullary centres interfered with so far as is compatible with life, which are the conditions often obtaining when general anæsthesia is used. There are three distinct varieties of local analgesia—regional, terminal, and subarachnoid or spinal. It is only with the first two forms that I intend to deal, having had no experience in the last method.

By *terminal anæsthesia* is meant the production of anæsthesia in the area to be operated upon by paralysing the nerve-terminals in the subcutaneous tissues by infiltrating the latter with a local anæsthetic. This is the method that I have most frequently used, and on the whole have found it in every way satisfactory. The nerves, running to the skin in the subcutaneous tissues, are surrounded and soaked with the solution ere they reach the dermis.

Regional anæsthesia, a most valuable means of rendering the part to be operated upon anæsthetic, by some termed "conduction anæsthesia," is brought about by infiltrating with the anæsthetic the main mixed nerve-trunk or trunks supplying the area or the main sensory nerve at some distance above the part. In this way large areas—for instance, the whole hand or foot—may be rendered paralysed and analgesic. The little finger may be amputated painlessly if the ulnar nerve, as it lies behind the internal epicondyle of the humerus, be surrounded by the local anæsthetic, or the thumb, first or second fingers, if the median immediately above the wrist and the musculospiral (radial nerve-trunk) in the musculospiral groove be similarly dealt with. The exact technique, which is very simple, I will deal with later. On one occasion, by perineural injection of the ulnar nerve at the internal condyle and the internal cutaneous above the elbow, I succeeded in giving the patient typical "claw-hand" with complete ulnar and internal cutaneous anæsthesia.

This form of anæsthesia has been termed "conduction," because the sensory or afferent path from the skin to the

cord and cerebrum has been broken or blocked by an injection around a portion of the main nerve-trunk—it is a physiological block.

If you will allow me, I should like to touch upon the history of local anaesthesia, for it carries some interesting points.

The production of an anaesthesia by other means than chloroform and ether or toxæmia dates back to very old times. It was used by the Egyptians, and later in the time of the Roman Empire, and to my mind in a very ingenious way.

Being, of course, excellent anatomists, they conceived the idea of bringing about a nerve-block and so regional anaesthesia by pressure applied to the sensory nerve supplying the part. This was done by means of a knot tied in a leather thong, the latter being looped over the limb, the knot lying over the nerve. The loop was now twisted up by means of a piece of wood passed through the loop, much in the same way that some pernicious first-aid books recommend a tourniquet to be applied and tightened.

Local anaesthesia resulted sure enough, but in many cases was permanent, or lasted months, as did the paralysis, for the nerve conduction was truly broken—the nerve was severely damaged or temporarily destroyed.

This method was even used in the nineteenth century, but so severe damage to the nerve usually resulted that it was soon abandoned.

The application of cold was used for a considerable time to produce a local anaesthesia. A mixture of ice and salt was applied to the part to be operated upon or to the large nerve-trunk above the part—another instance of conduction anaesthesia. When used in the latter way, the freezing process had of necessity to be carried so far that sloughing usually resulted.

An ether spray, and, at the present, a jet of vaporised ethyl chloride is used to freeze the skin and produce a temporary local analgesia. The great disadvantage of these freezing methods is the pain produced in the thawing, and the risk of permanent damage and sloughing of the tissues if applied sufficiently long to anaesthetise a deep-seated nerve, such as the ulnar at the elbow. The resultant analgesia is, of course, sufficiently long only for the briefest procedures.

Modern local anaesthesia commenced with the discovery of cocaine by Einhorn. Since then numerous synthetic products of this drug have been placed on the market, each one claiming less toxicity than its predecessor, to the appearance of novocaine. I do not know that this drug is the latest product; probably it is not, but in my opinion it is superior in every way to all its synthetic brethren.

We now reach the period when local analgesia was attempted by chemicals and drugs.

I will not weary you with the chemistry and pharmacology of cocaine, a most interesting subject nevertheless, or with

the history of the evolution of its synthetic derivatives, but will briefly mention its progress in painless surgery, and it is a curious fact that it was in general surgery that it was last used.

In 1884 Kölliker used a 2 per cent. solution of cocaine to anaesthetise the cornea and conjunctiva. Since then this drug has been used in ophthalmic surgery the world over.

The same applies to rhinological and laryngological practice, in which it was next tried; in throat and nose operations it has an additional advantage to its analgesic action—it renders the mucosa to which it is applied more or less bloodless.

Dental surgeons were the next to realise its uses, and in 1885 Halsted carried out what was probably the first conduction anaesthesia by injecting cocaine in a 20 per cent. solution around the inferior dental and lingual nerves in a case of tooth extraction.

Crile in 1887 performed the first operation in general surgery with conduction anaesthesia. He exposed the anterior crural and sciatic nerves under terminal cocaine anaesthesia, and then injected the same drug into the nerves, and is said to have painlessly amputated the leg through the middle third of the thigh.

It was soon realised that the virtues of cocaine as a local anaesthetic were somewhat overshadowed by its toxic action on the organism, for many cases of poisoning occurred, some fatal. The first signs and symptoms are given as restlessness, giddiness, delirium, with a small, rapid pulse. I have never seen cocaine poisoning.

This stimulated Schleich, a pioneer in local anaesthesia in general surgery, to use very dilute solutions ($\frac{1}{10}$ per cent.) to infiltrate large areas of subcutaneous tissue under pressure, and this method is still widely used.

The value of local analgesia being fully established, chemists and pharmacologists set to work to prepare derivatives of cocaine less toxic to the system than the original drug and also innocuous to the tissues when injected into them. Their efforts produced novocaine, eucaine, stovaine, tropococaine and others.

During the last few months I have put to the test novocaine, eucaine, and even dilute solutions ($\frac{1}{10}$ per cent.) of cocaine (used by the infiltration method of Schleich), and I prefer, and have used systematically during the last six months, novocaine.

I know nothing of the chemistry of this drug other than that it is neutral in solution, very soluble, and precipitated and rendered inert by alkalies, but this last fact compels me now to call your attention to the practical bearing—never allow your needles or syringes to be boiled in the ordinary soda solution used for sterilising instruments.

If you are forced to have your instruments prepared for you by a nurse, this lady will naturally boil your injection instruments with all the others necessary to the operation, and even the little soda solution left in the needle or syringe

is sufficient to precipitate some of your novocaine and render it partially ineffective.

Novocaine is the least toxic of all the synthetic products of cocaine. I have injected as much as 20 c.c. of a 4 per cent. solution into the tissues of a patient without ill-effect, and I do not know of any cases of novocaine poisoning in the literature of the subject.

When injected into the blood-stream in sufficient quantity to produce its pharmacological action, respiration is slowed and the blood-pressure falls, the latter result being due to the action of the drug on the vaso-motor centre; it has no effect directly on the heart.

It is said by authorities to have little local anaesthetic action unless its use is combined with that of adrenalin. This is quite contrary to my experience, for I have several times operated quite painlessly without this addition, on the last occasion removing two tuberculous glands from the neck of a girl, æt. 16 years, without complaint on the patient's part. However this may be, its action is immensely enhanced by using adrenalin in combination with it, and this should always be done.

This leads me, before I go into the practical side of the subject, to the use of solutions of *adrenalin in combination with chemical local anaesthetics*. The uses and properties of supra renal extract were of course discovered after cocaine, their use in combination first being tried in rhinology. Adrenalin was originally injected with cocaine with the idea of it exerting its constricting action on the arterioles and rendering the field of operation more bloodless, which it of course does, but it has a far more important action than this: by constricting the vessels around the area of injection it localises the anaesthetising solution to the part, preventing its absorption, and so restraining it from exercising any toxic action on the system, as well as prolonging its effect and allowing prolonged operations being carried out on the part. This is easily demonstrated by using novocaine solutions with and without the admixture of adrenalin. The anaesthetic action of a 4 per cent. solution of novocaine combined with a few minims of 1 in 10,000 adrenalin lasts from two to six hours. Since, then, the use of adrenalin with a local anaesthetic produces a hæmorrhage, hinders the absorption of the latter and prolongs its action, it should always be employed. Cases of secondary hæmorrhage from the use of adrenalin have been reported, but this rarely occurs even to so small extent as a mere oozing, if solutions of the extract not too concentrated are used.

Whatever solution he used it is absolutely essential that it be more or less isotonic with the blood. As is well known, if a distinctly hypo- or hypertonic saline solution be injected into the skin, very extreme pain is caused and sloughing of the tissues may take place later. If the solution be nearly isotonic a painless wheal is produced without any disturbance of the nutrition of the skin. All local anaesthetics should be absolutely painless when injected into the skin.

I will now consider the *more practical side of the question*, but before dealing with the technique and results of local anaesthesia it is necessary to say something about the sensation of the various tissues and organs in health and disease, especially as regards their pain-conducting fibres.

As regards the skin—the most important structure as far as local anaesthesia goes, for to reach most parts this has to be divided—protopathic sensibility, the sensibility one aims at dulling, is dependent for its realisation upon the integrity, as far as the nerves themselves are concerned, upon fibres running to the cord in pure sensory or mixed nerves, and, as has been explained, these afferent sensations may be blocked at the nerve-endings—terminal anaesthesia—or higher up along the nerve-trunk—regional anaesthesia.

The parietal peritoneum, both of the anterior and posterior abdominal wall, is highly sensitive to pain and to pain only—it cannot be cut or pulled upon with impunity—and is supplied by the last seven intercostal nerves as they run round in the abdominal wall lying between the transversalis and internal oblique muscles after they have left their intercostal spaces. The peritoneal aspect of the diaphragm is probably supplied by the phrenic nerves and is especially sensitive, as is the peritoneum said to be around the foramen of Winslow and lesser sac. The tenth intercostal supplies the abdominal wall in the region of the umbilicus, while the hypogastric branch of the ileo-hypogastric pierces the external oblique aponeurosis just above the external abdominal ring—an important point.

One can make the general statement that all organs, abdominal or pelvic, supplied by the vagus and sympathetic are insensitive. The visceral peritoneum is quite insensitive. While one can handle and operate upon the liver, spleen, stomach, intestines, kidney, ureter, bladder and many other organs without causing pain, having once divided the parietal peritoneum it is essential that they should not be greatly dragged upon; if this is done the sensitive parietal peritoneum of the posterior abdominal wall is stretched and the sensation of pain excited.

The testis is insensitive, as is its clothing, the tunica vaginalis, but the parietal layer of the tunica vaginalis, being, of course, peritoneum, is highly sensitive, as is the cord. The cord and tunica vaginalis owe their sensory innervation to the ileo-inguinal nerve and genital tract of the genito-crural nerve.

The parietal pleura and pericardium are as sensitive as the parietal peritoneum, but the heart and lung have no sensory fibres, as has been proved in operations for emphyema and wounds of the heart conducted under local anaesthesia.

The thyroid gland, trachea, brain, and dura mater are insensitive to pain, while finally, although bone itself possesses no sensation, except where traversed by sensory nerves, the periosteum is highly sensitive.

This fact I have often observed for myself, especially in a case where I attempted to remove a subperiosteal nevus

in a girl, *æt.* 25. All went well till the peritoneum was exposed and excised, when acute pain was felt and at all subsequent manipulations.

The operation had to be abandoned, but in future similar cases, in the light of further knowledge, the pain could be avoided. Generally speaking, sensibility is not altered in disease.

With these preliminary remarks on the sensibility of various parts of the body, I will describe the technique and appliances that I have used during the last eight months with satisfactory results, being quite aware that there are other equally satisfactory means employed by others who have a far larger experience than myself.

After using eucaine and dilute solutions of cocaine I became convinced of the superior virtues of novocaine, and this drug I now use and recommend to those who wish to make use of a local analgesia. Its advantages I have already set forth.

I now use it in two strengths in an approximately isotonic solution of 4 per cent. and 1 per cent.

The 4 per cent. solution I use for perineural injections in conduction anaesthesia, surrounding the nerve with the drug some distance above the region to be anaesthetised. The 1 per cent. solution I always use for infiltrating the subcutaneous tissues along the line of the incision, or to "cut off" nerves supplying the skin in any given area in terminal anaesthesia.

The novocaine may be dissolved in saline solution. If so dissolved the solution must always be raised to the boiling point before use to sterilise it, and further, it soon decomposes when kept; it is unwise to trust a saline solution of novocaine more than a week old.

The dispensary now makes for me a solution of novocaine in what is known as aq. thymol co., the formula of the latter being: Thymol and ol. gaultherie in equal parts in 75 per cent. solution in water. The thymol and oil of wintergreen render the solution antiseptic, abolishing the necessity of boiling before use, and also preserve the solution in an active condition for some time longer than the ordinary saline solution will last—some two or three weeks.

For the injection of the solutions two syringes should be to hand—an ordinary record syringe, holding 20 minims, and a large aspirating syringe. The former can be used in most cases, and if necessary disconnected from the needle, which remains in the tissues, and refilled, while the larger syringe is only necessary when an extensive subcutaneous infiltration has to be carried out.

A variety of needles are necessary, and the ones most generally useful are:

(1) Two or three medium lengthed ordinary hypodermic needles.

(2) A short stout needle of larger calibre than the hypodermic needle.

(3) Two or three long needles, some 5 in. long, some sharp-pointed and others blunt. I have a needle $4\frac{1}{2}$ in. long, blunt at the tip, with the hole on one side just below the end.

The ordinary needles are used for raising the first endermic wheal and smaller subcutaneous infiltrations; the short stout needle for injecting local anaesthetics around large nerves. They are more easily manipulated than a long needle, and the point is more under control, while the long needles are used for long lines of subcutaneous infiltration. In moving glands from the neck, for instance, this needle can be run for its full length of five inches in the subcutaneous tissue along the anterior border of the sterno-mastoid muscle, and if a large syringe is used the area can be infiltrated at one puncture, saving the repeated punctures of a shorter needle. I have several times used this method and found it answer well.

The blunt needle can be used to put the solution round sensory nerves running near important structures, the skin being first pierced by an ordinary surgical needle. This needle finds its use in placing injections round the spermatic cord or into it before operations on the testicle or scrotum or in the region of the thyroid gland. I should like to repeat that needles or syringes should not be boiled in the soda solution of the ordinary steriliser.

The solutions used and the instruments of injection having been described, it remains to say something of the methods.

The method of injection varies according to the variety of anaesthesia used. In producing a terminal anaesthesia, that is to say, paralysing the nerve endings in the skin, I proceed as follows:

The instruments being to hand in a solution of 1 in 80 carbolic acid, the needles and syringes in a tray of sterilised distilled water, and the operation area prepared with acetone and iodine, or according to fancy, the operator with his sterilised but *gloveless* hands fits a small needle to his record syringe, which he fills to one quarter of its capacity with a 1 per cent. solution of novocaine, to which, just previously, 3 or 4 minims of a 1 in 10,000 solution of adrenalin has been added. If, now, it is proposed to make a linear incision, the lowest or most distal point to which the incision is likely to extend is determined, and at that spot the needle is inserted obliquely for a millimetre or so into the skin alone and not deeper, and sufficient of the solution injected to raise a white wheal in the dermis the size of a pea. This is absolutely painless if done correctly. The needle is now withdrawn, and a long sharp needle fitted to the barrel of the syringe and the latter filled.

Through the wheal this needle is now inserted along the subcutaneous tissues, parallel to the skin as far as the incision is required to be made; this procedure is also painless. When the needle has been inserted beneath the skin as far as is required, the piston is compressed and the

solution gradually driven into the subcutaneous tissues as the needle is withdrawn, a track of local anaesthetic being thus left in the wake of the retreating needle. Sufficient solution should be used to leave a track an inch or two broad.

I should like to emphasise the fact that the first prick into the skin is painless, and that once a minim or so of the solution has been put into the dermis, a needle may be inserted through this spot and pushed along under the skin as far as necessary.

The authorities tell us that the maximum of anaesthesia is not reached for half an hour, and that the operator should wait this time to attain the best results, but as a wait of half an hour in the surgical out-patient department is impractical, and being an impatient person, after injecting my solution, I re-sterilise my hands, put on rubber gloves, and, returning to my patient, make the incision at once right down through the subcutaneous tissues without giving the patient any warning. The results are satisfactory—in other words, the operation may commence within five minutes of injecting the solution, and several times I have made my incision immediately I had completed the injection, and that without pain. Before rendering an area anaesthetic by the conduction or regional method the sensory nerve supply to the part must be carefully considered, as must the maximum area likely to be interfered with during the operation, always remembering that there is a considerable overlapping of sensory nerve areas. If this is forgotten and the manipulations encroach on the territory of another nerve the complaints of the patient are apt to embarrass and hinder the surgeon.

It matters not how far above the termination of the nerve the solution is injected; the essential is that the nerve be easily accessible anatomically, and that a point be selected where it pierces deep fascia or preferably lies on bone.

For instance the ulnar nerve as it lies behind the internal humeral condyle or the external popliteal lying on the neck of the fibula are both easily reached on the one hand, the internal cutaneous nerve as it pierces the deep fascia about two inches above the bend of the elbow or the long saphenous nerve just below and to the inner aspect of the knee on the other. Nerves running through or between muscles are very difficult to reach with the needle, the difficulty being in judging the depth of the nerve from the surface.

The exact point where a nerve lies in relation to bone being known, or where it pierces the deep fascia, a sharp needle is passed straight down to this point, the point of the needle impinging on the bone giving the required depth in the one case, experience being the only guide as to depth in the other. If the sheath of the nerve is penetrated the corresponding peripheral sensations help, but it is preferable to put the solution round the nerve; the tension of fluid within the sheath is painful.

The solution is injected first on one side and then on the

other, till a swelling is raised the size of a small walnut. If the nerve lies on deep fascia it is useful to massage the fluid around the area of the nerve.

For perineural injections the stronger 4 per cent. solution should be used after preliminary endermic injection.

Examples of nerves easily reached are:

(1) *On bone*: Intercostal nerves in the rib grooves; ulnar at the elbow; musculo-spiral in the groove in the middle of the arm; external popliteal winding round the neck of the fibula; supra-orbital and supra-trochlear nerves.

(2) *On deep fascia*: Superior cervical nerves at the mid-point of the posterior border of sterno-mastoid; great occipital nerve; internal cutaneous and musculo-cutaneous above the elbow; long saphenous along the posterior border of tibia;

and many others. Sensation is completely lost in a few minutes, and lasts some hours; paralyses also occur in mixed nerves.

The conduction method is of special use in such operations as amputation of fingers, where the ulnar, musculo-spiral and median can all be infiltrated, operations on the neck, where the superior cervical nerves from C. 2, 3, and 4 can all be surrounded by novocaine as they hook round the mid-point of the posterior border of the sterno-mastoid, the long saphenous in varicose vein operations, the ilio-inguinal nerve as it runs along the spermatic cord in testicle and scrotal operations, the scalp nerves in operations on the scalp, and so forth.

Finally, there is the combination of the last two methods, regional and terminal anaesthesia, which is perhaps the most valuable and widely applicable of all. In this way the line of incision is infiltrated, and the smaller sensory nerves above, either through separate punctures or when they are exposed and seen during the operation. A modification of this method is the exposure of the great nerve-trunks by terminal anaesthesia, followed by injections directly into them. In this way the biggest operations can be performed on the limbs, or even face, by injection of the solution into the Gasserian ganglion or main branches of the trigeminal nerve; the nerve is not damaged—merely its conduction broken.

Summing up, then, there are three chief means of producing a local anaesthesia:

(1) *By terminal anaesthesia*. This is carried out either by injecting or infiltrating the line of the incision or by circular subcutaneous injections cutting off the nerve supply. Raise a minute wheal in the skin itself to render subsequent puncture painless, and introduce a long needle under the skin, as far as is required, through the wheal, and as the needle is withdrawn infiltrate the skin.

(2) *Conduction anaesthesia*.—Raise a small endermic wheal as before, and through it pass a short stout needle down to the nerve and place the solution all round it.

(3) *Combined Method.*

Dealing with the *indications and advantages* (into which I have no intention of going fully), a few words of warning are necessary. Local anaesthesia is, as a rule, contra-indicated, but not absolutely so in young children.

The patient's co-operation is necessary to attain success, and it is a most difficult and trying thing to attempt to operate with local anaesthesia in young children who are frightened, not understanding what is being done, for although they feel no pain they retain the sense of pressure, and some other sensation, distinct from pain, which is difficult to define but easily appreciated by those who have tried to operate on them or suffered an operation under local anaesthesia, for the same peculiar feeling is always present. In children who are seriously ill, however, local anaesthesia can be successfully used.

Another unwise procedure is to operate on one's own body under local anaesthesia from whatever point of view, especially if alone and unassisted.

A French physician recently operated upon himself and performed a radical cure for hernia on his own inguinal canal, and I believe his object was to demonstrate the efficiency of his own method of local anaesthesia; in this he was quite successful, but he had an anaesthetist and two surgeons standing by in case of necessity.

With all due deference to the general anaesthetists, I consider it little short of criminal to give a patient with acute intestinal obstruction or general peritonitis and toxæmia a general anaesthetic in the form of chloroform. They have already absorbed as much toxin as they are able to excrete, and to add another in the shape of chloroform weighs down the scales on the wrong side as far as recovery is concerned. Ether is the only general anaesthetic to use, but in this field local anaesthesia has a wide range of utility and should be far more often employed than it is at the present.

In conclusion I should like to illustrate the varied uses of local anaesthesia in surgery by reference to a few cases in which I have used this method.

In a series of fifty cases I have used either regional or terminal anaesthesia or the two in combination. They may be classified as follows:

(1) *Cysts* (8).—All by the method of terminal anaesthesia. These included sebaceous cysts, dermoids, bursæ excisions and ranulae.

(2) *Glands in the neck* (9).—These varied from a removal of a gland for microscopic diagnosis to an extensive dissection. In two cases an extensive dissection was made of the whole anterior triangle, freeing the glands from the internal jugular vein and carotid sheath. One operation lasted thirty-five minutes and the other just an hour.

They were carried out by infiltrating the superficial cervical nerves as they turned round the posterior border of the sterno-mastoid and the line of incision.

In one case, a girl, *æt.* 18, of excitable nature, in which two or three freely movable glands were to be removed from beneath the angle of the jaw, I had to terminate the operation abruptly because she complained of great pain and wept copiously, the last straw being her act in tearing off two pressure-forceps from bleeding points and holding her hand over the wound, refusing to have anything more done. The novocaine may have been stale.

(3) *Three cases of neuroma of nerves*.—In one, three subcutaneous neuromata were removed from the arm, and in another a localised neuro-fibroma the size of a filbert was removed from the trunk of the radial nerve, the latter being intentionally divided during the removal. A terminal anaesthesia with infiltration of the radial when exposed sufficed to render the procedure painless.

(4) *Breast tumours*.—Five tumours were removed from the breast, four fibro-adenomata and one recurrent carcinoma, all painlessly by infiltrating the line of incision.

(5) *Two tendon operations*.—One suture of the dorsal extensor aponeurosis in drop finger, and the other suture of an old divided extensor tendon to the index finger. The patient of the latter case, a young man, *æt.* 25, wept during the whole process, but complained of no pain, and did not attempt to withdraw his hand.

(6) *Three operations for the cure of inguinal hernia*.—These operations were performed on selected cases, and the results were quite satisfactory. The line of skin incision was infiltrated, and the ilio-inguinal nerve, and the spermatic cord after exposure. No pain was experienced.

(7) *Three operations for the radical cure of hydrocele*.—The scrotum was infiltrated, and the ilio-inguinal nerve, the nerve supplying the sensitive tunica vaginalis, higher up in the spermatic cord. The testicle was exposed, the tunica opened, and the sac turned inside out. Each operation took about ten minutes and was free from pain.

(8) *Operations of the thyroid*.—One was performed and an enucleation resection carried out, some of the thyroid being removed with a cystic adenoma. The technique was the same as used in removing glands in the neck, and the patient, a woman, *æt.* 41, felt no pain.

(9) *Miscellaneous cases*, among which was the removal of a semi-membranous bursa, two large lipomata of the abdominal wall, injection of alcohol into the Gasserian ganglion for trigeminal neuralgia, two Trendelenberg's operations with local removal of varicose veins, an epithelioma of the arm, and a large chronic abscess in the region of the wrist-joint on its inner aspect.

In this last case I used pure conduction anaesthesia, infiltrating round the ulnar nerve at the elbow and the internal cutaneous above the elbow, but although the patient had complete loss of ulnar sensation and power, and the same as far as the latter nerve is concerned, the skin over the abscess remained tender to the touch, and the services of an anaesthetist had to be requisitioned.

Seeing that it is possible to operate on the brain painlessly (by infiltrating the skin and periosteum), on the neck, thyroid or larynx, to open the abdomen by infiltrating the intercostal nerves in the rib-grooves and the line of the skin-incision, to perform any operation on the inguinal canal, testicle or scrotum, to amputate a leg or a finger, and all this painlessly, I would suggest that in suitable cases local anaesthesia could be used with advantage to the patient far more extensively than it is at the present time in this hospital, where I believe its use is more or less confined to the surgery and out-patient department.

I fully realise that more might have been said about the actual technique of local anaesthesia, and about the details of the cases in which it has been used, but such "minute" are apt to be boring; also that the subject of this paper does not lend itself to the recitation of anecdotes or sparkling originality—it is too practical; but if your interest in the subject has been revived, and your knowledge perhaps increased, I have succeeded in the purpose of my paper.

Notes on Four Cases of Acute Pancreatic Disease.

THE first two cases occurred during the past six months, and may be of interest in drawing attention to what is even now, despite recent advances in the pathology of pancreatic disease, an obscure condition. They were both duty cases, and both occurred in female subjects. In both the diagnosis of pancreatic disease was not made until the post-mortem examination had taken place. Some excuse might perhaps be offered; the history of the first case suggested nothing but gradually increasing intestinal obstruction, and the patient was sent up by her local doctor with the suggestion that she might have some large intestine new-growth. She was thin, and there was no history of gall-stone colic or past jaundice. The second case was sent to the Hospital with a card marked "Urgent," and beyond that nothing.

CASE 1.—E.R.—*æt.* 65, was admitted under Mr. McAdam Eccles into Harley ward with acute intestinal obstruction.

She gave the following history: Increasing difficulty in getting the bowels opened during the past four months. She had taken increasing quantities of aperients; she had got thinner, but did not take to her bed until November 29th, 1912. She had never suffered from indigestion, there was no history of gall-stone colic, and she never remembered being jaundiced; there was no frequency of micturition.

On November 29th she had a severe attack of pain in the lower part of the abdomen; she pointed to the caecal region, and passed her hand across to the sigmoid flexure. The pain was accompanied with vomiting; the abdomen became distended, and the bowels were not opened. The pain was

less next day, but she vomited once or twice, and the bowels were still not opened. On December 4th she was sent to hospital and the bowels had still not been opened since November 29th, and no wind had been passed.

On examination patient had a pinched expression, the eyes were sunken, the zygomatic processes prominent. Temperature 98° F., pulse 100, respirations 24. The tongue was dry and shrunken.

The heart and lungs were natural.

The abdomen was distended, especially in the lower part on both sides. There was a median furrow half an inch in width extending from the umbilicus to the symphysis pubis. The abdomen moved fairly well except in the caecal region. Here, on palpation, there was marked tenderness and some resistance, but no swelling was felt. Rectal examination revealed nothing; the urine did not give Fehling's reduction.

Operation by Mr. Eccles.—An incision was made over the sigmoid flexure of the colon. The peritoneal cavity was opened; the sigmoid flexure was examined and found natural, likewise the caecum and appendix. The distension was small intestine. Some thin blood-stained purulent matter was found in the left iliac fossa. Another incision was therefore made to the right of the middle line through the right rectus abdominis, and the peritoneum opened. The stomach and duodenum were examined but no perforation was found. A large quantity of thin blood-stained material similar to that in the left iliac fossa was discovered and a drainage-tube was inserted, a counter-opening being made through the right loin in front of the right kidney.

For the first two or three days she did well. The bowels were opened naturally, and the distension was relieved. On December 7th the respirations went up to 40, the pulse-rate to 128, and the temperature to 100° F., and signs of bronchitis appeared at both bases.

Later the breathing became more laboured, and patches of broncho-pneumonia were found in the lungs. She was given the usual remedies for this condition. The wound condition was good and there was free drainage. Suddenly, on December 13th, the heart gave out, just a fortnight after the acute symptoms set in.

The post-mortem examination showed—Lungs: Broncho-pneumonia right lower lobe. Heart: muscle friable.

Abdomen.—Pancreas: Body and tail natural. The head of the pancreas was completely destroyed and converted into a bag of thick purulent material, some of which had escaped into the surrounding tissues. The duct could not be found, and there were no calculi in the abscess-cavity. Gall-bladder: Small, thin-walled; contained numerous cholesterol stones, and thin, yellow, mucoid bile. There was no blockage of the ducts. No calculi were found in the region of the pancreatic duct; the orifice of the pancreatic duct was not found. The stomach and duodenum were natural.

CASE 2. A very fat Polish Jewess; was admitted into Lawrence ward on January 9th in a state of collapse. From the history, which was extremely difficult to get, owing to the small knowledge of English possessed by the husband and patient, and added to this, the moribund condition of the latter, I learnt that she had suffered from abdominal pain, which she spoke of as indigestion, for "some years." She had never been jaundiced, and there was no history of gall-stone colic. The present illness began at 2 p.m. on January 8th, with severe abdominal pain high up on the right side, and vomiting. The pain was stabbing in character, and after an hour or so settled down in the region of the umbilicus. She was given very strong black coffee. She was again seized with violent pain about 8 p.m.; she vomited three or four times, and was so collapsed that a medical man was sent for. He gave her an enema, without result, but some wind was passed. After this she seemed somewhat better, but when seen about mid-day on January 9th by the same medical man, she had not recovered from the primary shock, and so with a card marked "urgent" was sent to the hospital.

When seen in the Surgery she was suffering from severe shock. The temperature was 95°F. The pulse could not be felt at the wrist; at the heart it was 140. Respirations 38, and shallow. The extremities were cold and clammy, the tongue furred, but moist. There was no sign of jaundice.

Abdomen extremely fat; there was no distension; the breathing was thoracic and the abdomen moved scarcely at all. There was slight tenderness over the epigastrium. No free fluid could be made out in either flank. The liver dulness reached from the sixth rib above to the costal margin. The spleen was not enlarged. *Per rectum* nothing abnormal was discovered. *Per vaginam* the uterus was not enlarged and was freely movable; there was no thickening of the tubes.

She was given an enema, without passage of any fecal material; some wind was passed by the rectal tube. I diagnosed perforated gastric or duodenal ulcer.

The usual efforts were made to raise the blood-pressure; pituitary extract, ergotin citrate and intra-venous saline were given without material improvement. The temperature went up to 101°F., but the pulse never returned at the wrist. Just before death a turpentine enema resulted in the passage of a little blood, mixed with a very small quantity of fecal material. The abdomen became more distended but was never very tender; no lump could be felt. She died at 9 a.m. on January 10th.

The post-mortem appearances.—The pancreas was much enlarged, nearly three times its normal size. The head formed a distinct swelling in the region of the duodenum, and was almost completely broken up by hemorrhage. This condition extended through the right half of the organ; the left half was normal. The ducts were patent; there was no blockage at the ampulla of Vater, and no distension. The capsule of the

organ had broken at the upper border, and liberated blood into the retro-peritoneal tissues. There were large areas of fat necrosis in the great omentum. A noticeable feature was the absence of fat in the great omentum of a person who had a superabundance of subcutaneous fat. No fat-necrosis was present in the mesentery. There was blood in the peritoneal cavity. An *ascaris* ten inches in length was lying in the duodenum.

There was a small gall-stone in the gall-bladder. Anaerobic bacilli were found in the heart-blood and also in the intra-peritoneal fluid.

This second case might perhaps have been suspected on account of the profound shock, which was due presumably to the irritation of the large nervous plexuses in the region of the pancreas. This, or severe hemorrhage into the mesentery are the only two acute abdominal conditions producing such extreme shock.

In looking up past cases in the hospital notes I find that the following two almost identical cases were admitted in the year 1907. Both these cases occurred in male subjects.

CASE 3, æt. 25, was admitted with obscure symptoms simulating acute intestinal obstruction without abdominal distension. He was watched by an outside medical man for a week before admission. The note says that the heart's impulse was found transmitted as through a fluid tumour to the anterior abdominal wall, giving the appearance of the heart being just under the anterior abdominal wall. The man died two hours after admission.

Post-mortem.—Patches of fat-necrosis were found in the great omentum, on the posterior surface of the stomach, and on the anterior and posterior surfaces of the pancreas. A retro-peritoneal fluid hæmatoma completely surrounded the second part of the duodenum. The pancreas was enlarged to twice its normal size. There were hæmorrhages into the body, head and tail. The biliary ducts, the liver and the gall-bladder were natural.

CASE 4.—A male, æt. 63. A large swelling was recognised in the upper part of the abdomen. An exploratory laparotomy was performed, and the large swelling reached. The intestines were found to be pushed aside; adhesions were broken down and pus welled up, and free drainage was employed. The patient died.

Post-mortem.—The pancreas: The body and tail were firm; the neck was the seat of an abscess with pultaceous contents. Surrounding the abscess-wall there was a bluish discoloration through the substance of the pancreas. No fat-necrosis was present.

Whether the cases of suppurative pancreatitis start as a localised hæmorrhage into the pancreas, or whether the two conditions are distinct, I do not know. It seems quite reasonable that they may have a common origin. I very much regret that the adrenaline test (*Loewi*) was not tried in either of the first two cases, and would suggest that it might have a trial in all obscure acute abdominal conditions, or in

cases where the recent abdominal symptoms have produced considerable shock.

I am indebted to Mr. McAdam Eccles for permission to publish the notes of the first two cases. C. D. K.

Students' Union.

THE Annual General Meeting of the Students' Union was held in the Abernethian Room on Friday, March 7th. Mr. H. J. Waring, F.R.C.S., the President, was in the chair.

The annual report of the Secretaries was read and adopted. It showed the financial position of the Students' Union to be more satisfactory than it had ever previously been, and that an efficient reserve fund had been established. Many improvements had been made on the Winchmore Hill ground, brick walls having been built along two sides, and three new tennis-courts laid down. The Rowing Club had been revived, but the miniature rifle range had been closed owing to lack of support. Improvements had been made in the distribution of letters within the Hospital, a central postal bureau having been established at the Smithfield gate. The reports of the various clubs were then read.

The following officers were re-appointed for the ensuing year: President, H. J. Waring, F.R.C.S.; Hon. Treasurers, G. E. Gask, F.R.C.S.; R. B. Etherington-Smith, F.R.C.S.

A proposal was carried unanimously that a letter be sent to Mr. Bruce Clarke, thanking him for his great services to the Winchmore Hill ground.

The results of the annual election to the Students' Union Council were then announced as follows:

Constituency A.—F. H. Cunningham, H. J. Bower, C. H. Savory, E. Catford, R. H. Williams.

Constituency B.—C. H. D. Banks, R. H. Maingot.

Constituency C.—C. K. Silvester, N. F. Norman, O. B. Pratt.

Constituency D.—G. Sparrow.

A discussion arose on the action of the School Committee in issuing a notice that men would not be signed up for their examinations until their outstanding debts to the Catering Company were settled. The President ruled that no action could be taken by the Students' Union unless notice of the motion had been given, and it was arranged to hold a special general meeting at a subsequent date to discuss the matter.

The Clubs.

ASSOCIATION FOOTBALL CLUB.

INTER-HOSPITAL CUP.

Semi-final Round.

ST. BARTHOLOMEW'S HOSPITAL v. ST. MARY'S HOSPITAL.

This match was played on Wednesday, February 26th, on the St. Mary's ground at Park Royal, and resulted in a win for St. Bart.'s by 2 goals to 1.

A high wind spoilt the play considerably, but the game was evenly

contested, and the result was in doubt up to the last few minutes. St. Bart.'s kicked off with the wind in their favour, and for the first ten minutes had much the better of the game. At the end of that time Waugh scored the first goal after some good combination among the forwards. After re-starting play became more even, and although St. Bart.'s made several good efforts they were unable to pierce the St. Mary's defence. St. Mary's attacked strongly, and eventually forced a corner which was converted, making the score one all. St. Mary's continued to press, and on several occasions looked like scoring, but the shots were well stopped by Mack in goal. After change of ends St. Bart.'s pressed, and the forwards put in some good shots which were unlucky not to score. The St. Mary's forwards broke away on several occasions, but failed in front of goal. The score remained unchanged until, within a few minutes of time, Wippell made a fine run down the right wing and centred to Waugh, who scored the winning goal.

The Hospital gave a disappointing display, and were rather lucky to win. The backs were rather unsteady and the forwards failed to get together, though Wippell put in some good runs at outside right.

Team:

R. G. Mack (goal); J. W. Stretton, E. G. Dingley (backs); T. B. Bailey, G. D. Jameson, R. H. Maingot (halves); K. D. Atteridge, J. S. Soutter, A. J. Waugh, J. D. McFarland, W. P. Wippell (forwards).

INTER-HOSPITAL CUP.

Final Round.

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

This match was played at Chiswick, and resulted in a win for St. Bartholomew's by 2 goals to 1. The ground was in excellent condition, but good play was spoilt by a very strong cross wind.

The teams were very evenly matched, although St. Thomas's were handicapped by the inability to play one of their best forwards. During the first half play was of a very scrambling nature owing to the difficulty of controlling the ball, due to the high wind. In the second half, however, the passing was very much better, especially among the forwards. Soutter opened the scoring by a splendid long shot, which Cranston could not reach. Shortly after, from a scramble in front of the Bart.'s goal, Walker scored for St. Thomas's. After changing ends the play was very even, and some hard shots were saved by both goal-keepers. McFarland had bad luck in not scoring from a shot which hit the goal-keeper's leg and then went into touch. Within a few minutes from time Waugh dribbled from the corner flag past the St. Thomas's defence, and scored from a seemingly impossible angle.

The game was on the whole very evenly contested and very fast, although so seriously interfered with by the wind.

The following team represented the Hospital: R. G. Mack (goal); E. M. Grace, J. W. Stretton (backs); R. H. Maingot, J. D. Jameson, D. S. Soden (halves); K. D. Atteridge, J. S. Soutter, A. J. Waugh, G. D. McFarland, W. P. Wippell (forwards).

LONDON UNIVERSITY CUP.

Final Round.

ST. BARTHOLOMEW'S HOSPITAL v. LONDON DAY TRAINING COLLEGE.

This match was played on King's College Ground at Wormwood Scrubs under execrable conditions. There was a very strong and gusty wind blowing across the field, made worse by rain. This, coupled with the roughness of the ground, made the ball exceedingly difficult to control. The game also was largely spoilt by the great number of fouls which were given.

Half-way through the first half McFarland scored the first goal with an excellent shot. In the second half a foul was given against the Hospital, and the Day Training College scored from a penalty. Towards the end Maingot scored again from a centre from the left wing. Owing to an error on the part of the referee, five minutes' extra time was played, during which the College obtained their second goal, thus bringing the scores level.

As in the game against St. Thomas's the play was of a very scrambling nature, but the Hospital had had luck in not winning.

The following represented the Hospital:

R. G. Mack (goal); H. Rimington, J. W. Stretton (backs); D. S. Soden, G. D. Jameson, G. M. Cowper (halves); R. H. Maingot, J. D. McFarland, A. J. Waugh, J. S. Soutter, K. D. Atteridge (forwards).

New Addresses.

BILDERBECK, A. C. L. O.S., London Temperance Hospital, Hampstead Road, N.W.
 BURN, S. A., County Hospital, Bedford.
 BURROUGHS, J. H., 14, Albion Road, Stoke Newington, N.
 CUMBERBATCH, E. P., 15, Upper Wimpole Street, W. (Tel. 3620 Mayfair.)
 ELLIS, Surg. G. E., R.N., H.M.S. "Zealandia," Third Battle Squadron, c/o G.P.O.
 HALL, F., 254 Anlaby Road, Hull.
 HENDLEY, Lieut.-Col. A. G., I.M.S., Pitfar, Dollar, N.B.
 HUGGINS, S. P., Highgate, Priory Road, High Wycombe.
 ILLIUS, Capt. J. W., I.M.S., c/o Messrs. T. Cook & Son, Bombay, India.
 KING, Capt. H. H., I.M.S., c/o Messrs. Cox & Co., Bombay.
 LLOYD-JONES, Capt. P. A., R.A.M.C., McGregor Barracks, Aldershot.
 MAW, G. O., County Hospital, Bedford.
 MOLL, J. M., West Koppies Asylum, Pretoria, Transvaal.
 MURPHY, J. J., Box 24, Masweta, Sackletchewan, Canada.
 WILSON, Surg. Cyril, R.N., H.M.S. "Excellent," Portsmouth.

Appointments.

ALDOUS, G. F., F.R.C.S.(Edin.), appointed Consulting Surgeon to the Tavistock Hospital, S. Devon.
 ALMOND, G. IRELY-HUTCHINSON, M.B., B.Ch. (Oxon.), appointed Honorary Pathologist to the Royal Mineral Water Hospital, Bath.
 AUDEN, G. A., M.D., D.P.H. (Cantab.), M.R.C.P. (Lond.), appointed Demonstrator in Public Health and Assistant to the Chair of Hygiene at the Birmingham University.
 BILDERBECK, A. C. L. O.S., M.R.C.S., L.R.C.P., appointed Casualty Officer and Assistant House Surgeon, London Temperance Hospital, Hampstead.
 BRODRIBB, A. W., M.B., B.Ch. (Oxon.), appointed Physician to the East Sussex Hospital, Hastings.
 BURN, S. A., M.R.C.S., L.R.C.P., appointed House-Surgeon, Bedford County Hospital.
 JOYNT, I. W., B.C. (Cantab.), appointed Surgeon to s.s. "Stentor," Blue Funnel Line.
 MAW, G. O., M.R.C.S., L.R.C.P., appointed House-Physician at the County Hospital, Bedford.
 MURRELL, G. F., M.B. (Lond.), appointed Assistant Physician to the Royal Berkshire Hospital.
 STARKEY, M. S. C., M.B., B.C. (Cantab.), M.R.C.S., L.R.C.P., appointed Surgeon to the s.s. "Leicestershire," Bibby Line.

Royal Naval Medical Service.

The following appointments, etc., have been notified since February 20th, 1913:

Staff-Surgeon A. Woolcombe, to the "President," additional, for three months' course of instruction for senior medical officers, at the Royal Naval Medical School, Greenwich, to date April 1st.

Staff Surgeon W. P. Dyer, to the "Bellerophon, on re-commissioning, April 1st, 1913.

Surgeon A. C. Wilson, to the "Excellent," to date February 18th.
 Surgeon R. M. Thursfield, to the "Victory," additional, for disposal, to date March 13th.

The Blane Gold Medal, which was founded by the late Sir Gilbert Blane, and is conferred once every two years on two medical officers of the Navy "for evincing the most distinguished proofs of skill, diligence and learning in the exercise of their professional duties," has been awarded to Fleet-Surgeon Richard C. Munday for the year 1912. The award is made by the Director-General of the Medical Department of the Navy, and the Presidents of the Royal Colleges of Physicians and Surgeons.

Births.

CLARKE.—On March 12th, 1913, at Halwell House, Kingsbridge, the wife of Dr. Henry Clarke, of a daughter.
 GRAY.—On March 5th, at Yew Tree Cottage, West Malling, the wife of Henry Gray, M.R.C.S., L.R.C.P., of a daughter.

Marriages.

BILDERBECK—MILLER.—On March 1st, at St. Saviour's, Walton Street, Sloane Square, by the Vicar, Rev. George Edmundson, A. C. L. Bilderbeck, B.A. (Cantab.), M.R.C.S., L.R.C.P., elder son of Mrs. Bilderbeck, of Clifton, to Josephine Christine, youngest daughter of Mr. and Mrs. Joseph Miller, formerly of "Fairwood," Sydenham Hill.
 KERR—DEARSLY.—On March 15th, at St. Bartholomew's-the-Great, by the Rector, Rev. F. W. Sandwith, M.A., Charles Douglas Kerr, M.B., B.S. (Lond.), son of Charles Kerr, Esq., and Mrs. Kerr, of Truro, Cornwall, to Lina Mary Margaret, daughter of the late Capt. Hanson Dearsly, R.N., and Mrs. Dearsly, Highbury, London.

Deaths.

COLBY.—On March 5th, 1913, from septicæmia, J. G. Ernest Colby, M.A., M.B., B.Ch. (Oxford), F.R.C.S. (Eng.), of Malton, Yorkshire, eldest surviving son of the late William Taylor Colby, M.D., of Malton.
 HARRISON.—On February 23rd, at Eltham, New Zealand, suddenly from blood-poisoning, George Alfred Harrison, Surgeon, aged 46, elder son of Dr. A. J. Harrison, of Clifton, Bristol.
 POIGNAND.—On Sunday, March 2nd, at a nursing home, Malcolm Poignand, M.D., of The Beeches, Walsham-le-Willows, Suffolk, in his 63rd year.
 SAUNDERS.—On the 16th inst., at Tunbridge Wells, George Saunders, C.B., M.D., Deputy-Inspector-General Army Hospitals, in his 90th year.
 VINCENT.—On March 17th, George Vincent, M.D. (Aberdeen) D.P.H. (Cantab.), of Angelsea Road, Ipswich.

Acknowledgments.

London Hospital Gazette, The Hospital, The Practitioner, Long Island Medical Journal, Medical Review, Guy's Hospital Gazette, St. Mary's Hospital Gazette, New York State Journal of Medicine, St. Thomas's Hospital Gazette, Nursing Times, L'Echo Médicale, British Journal of Nursing, Clinical Excerpts, The Eagle, Union Magazine, The Student, Magazine of the London School of Medicine for Women (Royal Free).

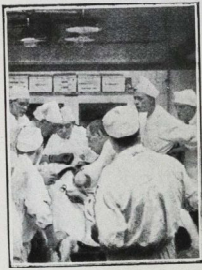
NOTICE.

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, Smithfield, E.C.

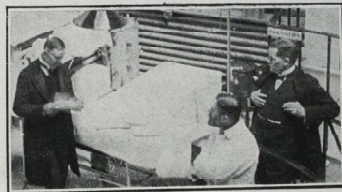
The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER W. E. SARGANT, M.R.C.S., at the Hospital.

All communications, financial or otherwise, relative to Advertisements ONLY, should be addressed to ADVERTISEMENT MANAGER, the Journal Office, St. Bartholomew's Hospital, E.C. Telephone: 1436, Holborn.

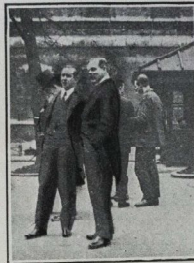
A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD AND SON, Bartholomew Close. MESSRS. ADLARD have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 6d. or carriage paid 2s. 3d.—cover included.



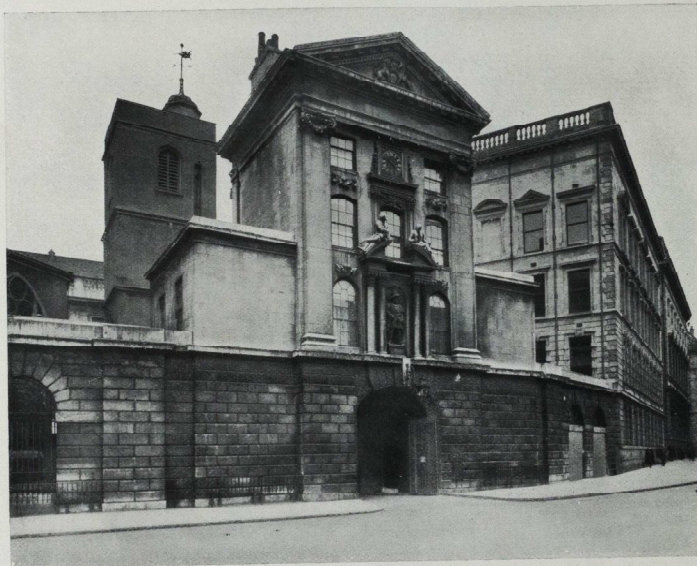
MR. BRUCE CLARKE.



MEDICAL CONSULTATIONS.



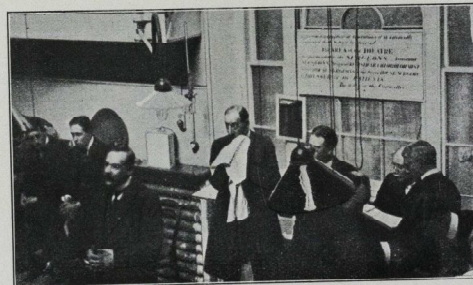
ORTHOPEDICS.



THE SMITHFIELD GATE AND THE NEW PATHOLOGICAL BLOCK.



SURGICAL CONSULTATIONS.



St. Bartholomew's Hospital



JOURNAL.

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St. Bartholomew's Hospital Journal.

MAY 1st, 1913

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

Calendar.

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|-------------|-----|---|
| Thurs., May | 1. | —Primary F.R.C.S. begins.
Ascension Day. |
| Fri., " | 2. | —Dr. Tooth and Mr. D'Arcy Power on duty. |
| Mon., " | 5. | —Examination for M.B., B.S.(Lond.), begins. |
| Tues., " | 6. | —Dr. Garrod and Mr. Waring on duty. |
| Fri., " | 9. | —Dr. Calvert and Mr. McAdam Eccles on duty.
Oxford Easter term ends. |
| Sat., " | 10. | —Oxford Trinity term begins. |
| Sun., " | 11. | —Whit Sunday. |
| Tues., " | 13. | —Dr. Morley Fletcher and Mr. Bailey on duty. |
| Fri., " | 16. | —Dr. Herringham and Sir Anthony Bowly on duty. |
| Mon., " | 19. | —Examination for Matthews Duncan medal. |
| Tues., " | 20. | —Dr. Tooth and Mr. D'Arcy Power on duty. |
| Thurs., " | 22. | —Final F.R.C.S. begins. |
| Fri., " | 23. | —Dr. Garrod and Mr. Waring on duty. |
| Tues., " | 27. | —Dr. Calvert and Mr. McAdam Eccles on duty. |
| Wed., " | 28. | —Examination for Brackenbury Medical Scholarship begins. |
| Thurs., " | 29. | —Examination for Brackenbury Surgical Scholarship begins. |
| Fri., " | 30. | —Dr. Morley Fletcher and Mr. Bailey on duty. |
| Sat., " | 31. | —Sir G. Burrows' Prize.
Skinner Prize. |
| Tues., June | 3. | —Dr. Herringham and Sir Anthony Bowly on duty. |
| Fri., " | 6. | —Dr. Tooth and Mr. D'Arcy Power on duty. |
| Sat., " | 7. | —Applications for the Lawrence Scholarship to be sent in. |

Editorial Notes.

IT is indeed difficult fully to realise, and it is impossible to find adequate words in which to express the enormous loss which the Hospital has sustained in the death of Mr. Etherington Smith. His illness, with all its tragic suddenness, seemed almost incredible in one so full of strenuous vigour, and his death following with such appalling swiftness came as a tremendous shock to all those who knew him.

He was taken severely ill with pneumococcal peritonitis on Thursday, April 17th; an operation was performed in the afternoon, and though everything was done that could be done he died at 8.15 a.m. on the following Saturday.

He was only thirty-six years of age, with a brilliant career before him, and a record which can be described in one word—success. At the time of his death he was Assistant Surgeon to the Hospital and Warden of the College.

In him the JOURNAL has lost one who, as Censor, was always prepared to give his advice and sound practical judgment with that ready kindness which so endeared him to all.

It can be no exaggeration to say that he was one of the most universally loved and respected of those who have ever been associated with this Hospital, and that his death was one of its greatest tragedies.

The funeral took place on Wednesday, April 23rd. The first part of the service was held at St. Bartholomew's the Great, and the interment took place at Putney Vale Cemetery.

The service, which was choral, was conducted by the Chaplain of the Hospital, the Rev. H. S. Close, assisted by the curate, the Rev. R. B. Dand, and the church was filled with relatives and friends, the latter including large numbers of the Governors, staff, nursing staff, and students. A most impressive moment was when the coffin, surmounted by the Cambridge and Leander flags and a laurel wreath, was borne slowly up the aisle by eight bearers—Mr. R. C. Ackland.

Mr. H. G. Boyle, Mr. J. S. Burn, Mr. G. E. Gask, Mr. Gordon Watson, Dr. Horder, Dr. Pritchard, and Dr. Woodwork. In the church, and later at the cemetery, there was a remarkably large gathering of rowing men drawn together to do honour to, perhaps, the finest oarsman the world has ever seen.

After the service the procession set out to Putney, led by a large grey motor hearse. This was followed by the car, which was so familiar an object to all at the Hospital—empty. After this three cars laden within and without with the beautiful and striking wreaths, which had been sent from far and near, and then a long line of cars.

At Putney the coffin was carried to the graveside by six stalwart professional oarsmen, including Bill East, the King's Bargemaster, and Barry, the world's champion.

Finally the coffin was lowered into the grave by four famous Blues, Guy Nickalls, S. D. Muttelbury, J. H. Gibbon, and C. D. Burnell. The Rev. H. S. Close having recited the words of committal the impressive ceremony was ended.

We are pleased to be able to publish the following letter, for which, we are sure, all Bart.'s men will be grateful:

LONDON HOSPITAL,
WHITECHAPEL, E.;
22nd April, 1913.

DEAR MR. HAYES,—The Committee of the London Hospital wish to convey to the Management, to the Staff, and to the School of St. Bartholomew's Hospital their sincere sympathy in the loss St. Bartholomew's has sustained in the death of Mr. Etherington-Smith.

He was well known to many of us here, and to myself particularly, and we can feel therefore for you in your great loss.

I was asked by the House Committee to write to you.

Yours very truly,
SYDNEY HOLLAND,
Chairman.

T. Hayes, Esq.,
St. Bartholomew's Hospital.

The London Hospital also sent a representative to the funeral, Professor William Wright; and the London Hospital College Board sent a wreath.

For these graceful acts of sympathy we must express our deep and sincere gratitude to the London Hospital.

The annual View Day has been fixed for Wednesday, May 14th.

We heartily congratulate Dr. Calvert and Dr. Morley Fletcher on being appointed full physicians to the Hospital, Dr. Griffith on his appointment as Physician-Accoucheur, and Mr. Blakeway to that of Surgical Registrar.

We would like again to express a wish that more old Bart.'s men would become subscribers to the JOURNAL. At times it really does contain interesting matter, and we are always ready for criticism from those misguided persons who do not think we are worth it.

In case any of our readers should not be quite clear on the subject, the proceeds arising from the JOURNAL do not swell the coffers of a company, nor does the Editor grow fat upon them; they form a much needed source of income to the Students' Union.

We are requested to state that the School Committee has decided not to hold a post-graduate vacation class this year. The post-graduate class has been held annually during the long vacation for the past five years, and we understand that the decision of the School Committee does not mean that the class will be discontinued permanently. Owing to the large part which the staff is taking in the International Medical Congress, which is to be held in London during August, it has been found impossible this year to arrange for a post-graduate class, as this involves a considerable amount of preparation, as well as taking up a good deal of the time of those members of the staff who conduct it. We are glad to learn that the course is not to be dropped permanently, as it has proved to be a very popular one among old Bart.'s men and other practitioners desirous of becoming familiar with recent developments in diagnostic methods and new lines of treatment.

The Insurance Act has come to stay, and there can be no doubt that it has rivetted contract practice with all its degrading and derogatory concomitants upon the medical profession. And all this has come about without the consent of those most concerned, for the majority of practitioners have been forced to join the panel utterly unwillingly, chiefly from economical reasons. But the greatest sting of all has been the fact that where, in certain districts, practitioners have decided to remain clear of the panel—a position which they have a perfect right to assume—the Commissioners are actually importing whole-time officers to take the insured persons away from their own doctors, willy nilly.

Can those who accept such posts sink any lower? Is not such conduct closely approaching the "infamous" in a professional sense? It has been hinted that an old Bart.'s man has expressed himself as willing to take such servitude. We can hardly believe it true, but if it is, and he should accept such a post, he will lose the esteem of all his *confères*, past and present, for it would be a deed unworthy of one whose *alma mater* was St. Bartholomew's.

Our learned contemporary, the *British Medical Journal*, of April 12th, has been complaining of our bad Latin in producing *hausti* as the plural of *haustus*. We have searched

the number through for a retaliation in the shape of a split infinitive, or even a false cretic, but, finding none, have to plead as an excuse that our assistant classical sub-editor was out at the War.

We have culled the following specimen of fatuity from the correspondence column of the *Daily Sketch* of April 19th:

"CRAZE FOR OPERATIONS.

"ARE SURGEONS TOO FOND OF USING THE KNIFE?"

"Sir Victor Horsley says that modern surgery is due to vivisection. Are not his own words a strong protest against vivisection? Never in the world's history, I should think, have so many medical murders taken place as since the so-called 'advance' of modern surgery.

"Ask what your friend died of. The reply is generally: 'He died after an operation.' 'Oh, he had an operation.'

"It has been said by a right-minded doctor that the operation for appendicitis should be catalogued among criminal operations. Doubtless the first was performed on a dog. Hundreds have died from it since.

"Can any sensible person think it necessary for enormous numbers of helpless children to be operated on for a harmless thing called adenoids (which nearly all outgrow when let alone), or to have the tonsils God has given them to protect the lungs cut out wholesale, as is done to-day?"

"Sir Victor Horsley's words are true! This wicked craze for operations is due to vivisection as much as it is due to the greed for gain."

Out with that "right-minded doctor."

The following extracts from a recently published appeal in aid of the Hospital should be of interest:

"St. Bartholomew's Hospital is a national institution, alike in its history and in the scope of its benefits, and not merely a local charity. At all periods patients have resorted to it from distant parts of the Kingdom, as well as from the districts near to it, and it often happens that people from all parts of the world are attracted to its charitable doors by the fame of its staff.

"The following selected facts and figures may give some idea of the magnitude of the administrative work of the Hospital:

"Every year on an average 7500 in-patients are admitted into the Hospital, with its 687 beds, and 130,000 out-patients receive the benefit of advice and treatment. The number of patients treated daily averages between 1500 and 1600. It has been calculated that during the last fifty years the Hospital has treated more than 7,000,000 patients. Some 9000 operations are performed annually under anaesthetics.

"The average total expenditure of the Hospital is about £82,000 per annum."

The following are the amounts, used in one year, of some of the principal items; the figures speak for themselves:

Absorbent wool	7 tons
Bandages	984,960 yards
Cod-liver oil	350 gallons
Chloroform	6½ cwt.
Glycerine	4 tons
Bread	110 tons
Milk	70,000 gallons

"The cost of the new out-patient and pathological blocks was met mainly by the generosity of the public, but there remained a debt by way of overdraft from the bank, which was much reduced last year owing to the great liberality of the Governors and other friends of the Hospital. The funds promised and expected during this and next year will, it is hoped, be sufficient to meet the deficiency of income of about £7500, and discharge some of the overdraft at the bank. Every effort is, in the meantime, being made to reduce the expenditure without interfering with the proper treatment of patients.

"It is very encouraging to find that the citizens of London and other friends have shown, by their liberal contributions to the appeal last year, that they are determined that the magnificent work carried on by this institution for the past eight centuries, and now more than ever required, shall not be allowed to suffer.

"The names of friends willing to help in the work will be gratefully received by the—

"Treasurer, the Right Hon. Lord Sandhurst, P.C., C.C.S.I., G.C.I.E.,

"Acting-Treasurer, George Acton Davis, Esq., or by
"Edwin J. Layton, Esq., the Hon. Secretary of the Appeal Department.

Overdue Quotations.

"The Use of this considerable Bowl is one of the numerous Classes of *Phænomena*, that remain unexplained. It has eluded the Searches of the tracing Knife, and the acutest Reason, and continues the Reproach of Anatomists, and the Dishonour of Physicians, while Multitudes of the most eminent Sons of Art have attempted to disclose the great Secret in vain; so that the Capacities of Men have hitherto proved unequal to the difficult Task.

"Most of the old Fathers of Physick made it the Sink of the Body, and assigned to it the Duty of a Sponge to drink up impure Recrements, the melancholy Dregs and Lees of the Blood, without discovering any Conveyance to carry them off. . . . Others that contemplated the Magnitude, the curious Structure, and the Place where it is lodged, refused to debase a Bowl of such Distinction to so low an Office, as that of a meer Scavenger of Nature. . . .

"It is impossible to inspect and contemplate this large Organ, without concluding, that it must have some important Office in the animal Administration, and that it is not a superfluous and impertinent Fungus, or an Error or Sport of Nature; and then it will leave in the Mind no Ground or Reason of doubting, no not the least Hesitation about granting this Conclusion, that the Duty of the Spleen, which is little, if at all, concerned about the Preservation of the Individual, must almost wholly regard the Continuation of the Kind."—*A Treatise of the Spleen and Vapours*, Sir Richard Blackmore, M.D., 1726.

The New Medical and Surgical Lectures and the Epidiascope.

AT the commencement of the new session in October, 1912, two innovations were introduced into our system of lectures. In the first place the medical and surgical lectures are now, throughout the year, given in turn by various members of the Visiting Staff; and secondly, they are illustrated by the epidiascope. Under the former system one or two surgeons and physicians were appointed who lectured throughout the year, and who naturally chose those branches of medicine and surgery with which they were most conversant, since they, of course, found it impossible to cover even briefly the whole ground in either subject. The courses then consisted of a thorough and detailed discussion of only a limited section of medicine or surgery. Since October we have listened to no less than eight lecturers on surgery and four on medicine, each of whom has given us his views on those subjects with which his name is chiefly associated. Undoubtedly this constant change of lecturer and subject has aroused much interest, so that many more of the men who are already "signed up" have been induced to attend the lectures. It is now felt that, though there may not be the opportunity of hearing all the lectures throughout the session, still it may be possible to attend those on a single subject. Formerly men were discouraged from attending a long series of lectures when absence from a few entailed the loss of that connected sequence which is so essential.

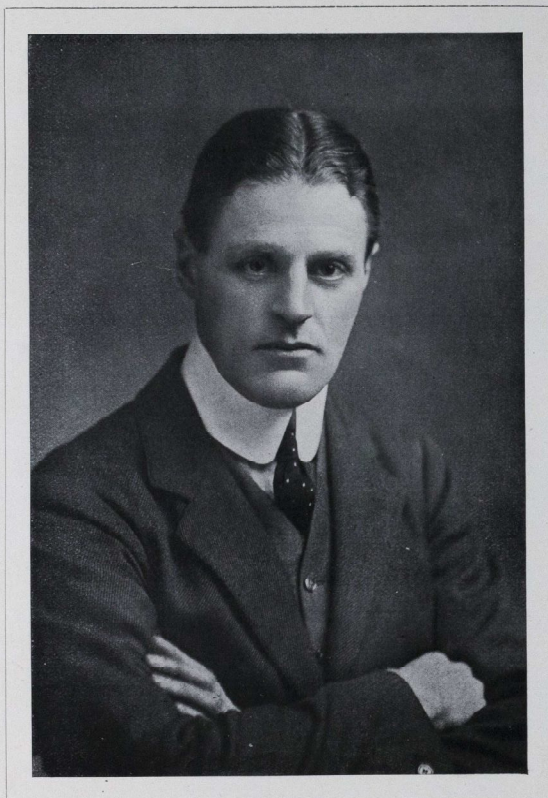
While the students appreciate the shorter series, each lecturer feels his allotted time far too short for what he has to say, a fact that is shown by the plaintive cry of "seeing how limited is the time," which is all too often heard. He has to determine which section of his audience he will consider; whether he will address those who are within the first year of their clinical work, or those who have their "finals" in view. Either he must spend the time primarily on the essentials of his subject, or, assuming that his hearers already know these facts, he must decide to go on to a more detailed and advanced consideration of the matter in hand. Now that so much more ground is covered, and a greater variety of subjects dealt with in these lectures, they should form the student's introduction to the science, and the foundation on which he may build his work. For it seems to be the experience of most students that, during their first year of clinical work, they are still trying to get at grips with their subject. No easy matter! For the branches of each subject seem innumerable, and book-reading at the beginning with little knowledge of the principles is a weariness to the flesh. It is at this period when men are dressing and clerking that they are advised to attend the lectures on medicine and surgery, as it may be difficult later on to find the time. Knowledge is far

more easily acquired, particularly at the commencement of a man's studies, when imparted by word of mouth, and illustrated by personal experience of striking cases than when extracted from books.

It has been easy to see that much time and trouble has been spent on the preparation of the lectures. A lecture should be well prepared, but when the lecturer is a busy surgeon or physician such preparation represents a great self-sacrifice and a burden that must have fallen heavily on the man who lectured for a whole term. It must, therefore, be gratifying to the lecturers to note the increase in the attendance, an increase which clearly shows that the first of the two innovations was thoroughly justified.

The epidiascope has revolutionised the feelings with which one enters the medical and surgical theatre. There, even on the brightest day, one is now sure of a dim religious light in which one's eyes may seek the shrouded form of the epidiascope. It inspires feelings of awe for its beautiful lenses and smoothly working mechanisms, and feelings of pride that it is the first in a London hospital. Its use in showing pictures, photographs and skiagrams is amply demonstrated at every lecture, where the points of each are now explained to the whole class at once. No longer need the harassed student simultaneously write his notes and listen to the explanation of a specimen while examining another, the description of which may be already ten minutes old. In showing specimens from the Museum the epidiascope is not so successful, owing partly to the fact that it is only capable of focussing a single plane, and partly to the effect of the curved jars and often turbid media in which the specimens are mounted.

The instrument, however, is not altogether an unmixed boon. To be plunged in darkness in the middle of a note occasions considerable annoyance, especially when there is thrown upon the screen a simple diagram which would otherwise have been rapidly sketched on the blackboard. Interruption is also caused while the lecturer is compelled to fumble for the light. It would be a simple matter to fit a switch for the room lights beside the epidiascope, and the cost would be small compared to the sum already spent on the instrument. And lastly, there are the interruptions that it causes while men hurry away under its friendly gloom. Surely theirs will be the fate of a certain zoological class at Cambridge. The professor found that men would leave the room at five minutes to ten regardless of whether he had finished or not. One day he held up his hand to detain them, and said: "One moment, gentlemen! I have still a few more pearls to cast."



R. B. ETHERINGTON-SMITH, M.D., F.R.C.S.

"Ethel Smith."

A HUMBLE APPRECIATION.

OTHERS with more authority, with better qualifications than I, will write the last notice of our dead hero. Hundreds there are who knew him, loved him, worshipped him equally with myself, who would gladly share my privilege and relieve their overcharged feelings by adding a few words in his memory. My claim is not merely that nobody could have idolised him more than I; I plead the right of one who was his first house surgeon at this Hospital.

It was in 1910, when owing to the prolonged absence through illness of one of the surgical staff, Mr. Etherington-Smith, then Surgical Registrar, took on the duties of Assistant Surgeon. How well I remember the first board he signed as a member of the staff to discharge a patient from the Hospital. "This is an epoch-making day for you," I said to him, and I thought as I gazed at him, this is the beginning of one of the greatest surgical careers that even our surgical Hospital has ever seen. And this although as a surgeon he had yet to win his spurs at St. Bart.'s; but, superlative in everything he undertook, "Ethel Smith" was marked out for the supremacy he had already demonstrated in other branches of human activity, mental and physical.

We gave him a pretty severe test in his first experiences as Assistant Surgeon at St. Bart.'s, for the wave of heavy "duties" had just reached our "firm" with its crest. I remember one week-end which included, among other emergencies, four perforated gastric ulcers between 7 p.m. Saturday night and 3 p.m. Sunday afternoon. I think there were two acute appendix cases as well during that week-end, and I know that he was simultaneously "on duty" at the West London Hospital!

He has proved his surgical ability over and over again since then, so what would it avail to reiterate how in those first days he amazed and delighted his "firm" by his brilliancy of diagnosis and surgical technique? You could slave for a man like that, and desire no other reward than the personal satisfaction of having done your best for him. He inspired an enthusiasm which turned a confirmed slacker into a keen man, and a worker into a creature who was content to toil day and night if only he might row in the same boat as "Ethel."

I am not ashamed to say that I was well to the fore in a little coterie of hero-worshippers in those days. "Nature was all out to do her best when she made 'Ethel,'" was an apothegm I plumed myself upon originating, and which I loved to repeat on every available opportunity. "Her best" indeed! Tall and straight, perfectly proportioned, a giant, yet with a lissom grace and agility remarkable in so big a man, strikingly handsome,

vigorous, athletic, endowed with an exceptional intellect and with the charming manners which have become proverbial—Nature seemed indeed to have been unsparing in her gifts to produce a very king of men.

It is not for me to write in detail of his athletic deeds. The man who helped to stem the tide of Oxford victories; who sculled to Fawley inside four minutes, and who would have been the finest amateur sculler of the century had he specialised; whose superb stroking and generalship beat an American crew in the final of the Grand after having been badly left at the post; who relinquished his consulting practice to captain the eight which upheld Great Britain's supremacy in Olympic rowing in 1908; he will be the hero of many sagas, yes, the mighty Cambridge Blue will not want for worthy chroniclers. I once contributed an article to the JOURNAL to recall the circumstance that Bart.'s could proudly claim eight rowing Blues among her sons, and in semi-humorous, semi-serious style I recounted the doughty performances of each. But when I came finally to "Ethel Smith," I had perforce to call him to account for the things he had *not* done in the world of rowing! He was to be captain of the Bart.'s eight, and how well I remember the boyish glee with which he helped me to draw up the composition of the boat. Other Cambridge Blues will come to Bart.'s, but none will offer to fill the vacant thwart; they will not have the heart to form a crew without "Ethel."

I have spoken of him as a surgeon and as an athlete, but I cannot trust myself to speak of him as a friend. For then it is that the innumerable acts of kindness surge up in one's memory, and the inadequacy of language becomes maddening. And if hundreds like myself owe so much to him, what must his loss be to those who were nearer to him in their friendship, what must it be to his bereaved family!

Had "Ethel Smith" been a cripple, a duffer at sports, of mediocre intellect, that wonderful charm of his, his own special atmosphere, alone would have endeared him to the hearts of all with whom he came into contact. His never-failing sweet smile and friendly nod (he could never have known in his modesty and simplicity how much these meant to those who looked for them), his little pat on the back, and his words of comfort and encouragement when you were down—what a host of fellows he helped over stiles!

Did anyone ever hear him say an unkind word? The most timid "fresher" was not nervous of speaking to him. The most miserable out-patient wretch never failed to receive the greatest courtesy. The most persistent tow-path tout who, as a rule, would have shivered with fright at the thought of addressing a rowing Blue, would confidently importune the great Leander captain.

I walked by the boat-houses at Putney on the day of his death, where all the flags were at half-mast, and the air of gloom was most marked at this corner of the earth which to him always smiled sweetest of all. "E was a gentleman, 'e was more than a gentleman," was all that "Doggett"

Cobb could say with sobs, and no eulogy could have been more eloquent than that of the poor cockney.

When the news of his illness with its paralyzing suddenness first spread round the Square, one saw men turn white and tremble. There was not a soul in the place who would not have begged to chop wood for his fire, to do anything in his service, the meanest, the most servile acts, something for him. On the Friday we tried to reassure each other with stout assertions, "He can't die, oh, he *can't* die." And even now it does not seem possible that he is gone, for Bart's without "Ethel" is an anomaly.

Only six and thirty years, and how much glory he had crowded into his life! Yet the greatest of his achievements is not for the world at large to appreciate, but only for us who knew him and who realise with almost unbearable intensity what his influence meant to us.

"Ethel," well rowed indeed! You set us a lofty ideal, and we are better men for having known you—but we shall never look upon your like again.

ADOLPHE ABRAHAMAS.

Here indeed was a man. To know him was to love him. Personal beauty he had; physical strength, intellectual ability, and moral courage all were his, gracefully, attractively blended.

He was never self-conscious, yet always confident; an irresistible magnet, sublimely ignorant of his magnetism, an Apollo who knew not vanity.

As an oarsman, he was *nullus secundus*; as an all-round athlete not easily matched.

As a surgeon, he was destined to climb the highest peaks.

In his heart he hid from the world in modesty, but from its depths welled up an ever-flowing flood of generosity and sympathy.

Nihil tetigit, quod non ornavit.

Because the gods loved him, he died young.

He has joined the Immortals, cried "Adsum" in his prime, lest the cares of the world should come to cloud the sunshine of his brief but brilliant career.

He is gone on. For us a blank remains, but for him there are no regrets.

In the treasury of our memories he lives, a priceless heirloom.

Well rowed, Ethel. *Au revoir.*

C. G. W.

"He has outsoared the shadow of our night,
Envy and calumny and hate and pain,
And that unrest which men miscall delight
Can touch him not, and torture not again.
From the contagion of the world's slow stain,
He is secure, and now can never mourn
A heart grown cold, a head grown grey in vain,
Nor, when the spirit's self has ceased to burn,
Will sparkless ashes load an unlamented urn."

Abstracts from a Report upon German and Austrian Methods in Gynaecology and Obstetrics.

By J. BARRIS, M.R.C.P., F.R.C.S.

It is extremely difficult to convey in a short article an adequate idea of this large subject, and I propose therefore to limit these remarks to some abstracts from the more lengthy report recently laid before our Hospital School Committee. This report was based upon a visit of three and a half months' duration to the German and Austrian klinik at Berlin, Dresden, Vienna, Munich, and Freiburg. The chief objects in view were to investigate their organisation, facilities for research work, teaching, and technique, to study any new method and apparatus, and to inspect their hospital buildings. It must be noted that the places visited are those which in their own country are regarded as doing the best work. The standard, therefore, which they represent is above the average in Germany and Austria.

Before I come to details of their organisation and methods it is only right to make acknowledgment of the extreme courtesy and cordiality which was extended to me as a foreigner. No trouble they could take to help the stranger appeared too great, and they were ready to allow one to observe their latest methods. One returned with the feeling that real friendships had been made, and that a friendly welcome will be extended to any other man from our hospital and school who visits them.

In spite of all this kindness my first feeling was one of bewilderment, because the whole conception of the foreign hospital and its organisation are so entirely different from ours. Our hospitals are supported by voluntary charity, theirs are supported by the town and State. The voluntary charity is a noble conception, and one cannot but admire the work our hospitals are doing under this system, and the humane spirit of a nation which makes this possible. But the question is now arising whether the problem of the hospital has not shifted. In the old days the problem was to help and succour a diseased person; the hospitals used to be simply resting-places for sick people, whereby food and rest and treatment were provided. But now it is also the disease itself which claims our attention and has to be fought, and this fight demands costly scientific departments and apparatus. Public charity in our country is enormous, but the demand which our hospitals now make upon this generous public is increasing. The foreign hospitals are not dependent upon subscriptions, and equip themselves out of town and State money.

The objects for which the German klinik is designed may be stated to be three in number—research, teaching,

and healing. Research certainly takes a leading place, but the equipment of the klinik, its organisation and conduct are kind of its three-fold purpose.

ORGANISATION OF THE FOREIGN KLINIKS.

This section contains an account of the buildings, personnel, duties and working of each department, the system of promotion, and private practice.

Each of the towns visited has several well-equipped hospitals. In addition to these there are first-aid stations scattered through the town and a system of medical motor ambulances.

The hospitals may be divided into three groups:

Group i.—University hospitals.

Group ii.—Town hospitals.

Group iii.—Private hospitals.

Group i.—The University Hospital.

Only a limited number of towns have a university hospital, which is used for purposes of scientific advance and of teaching. The university hospital has the power and right to refuse admission to cases which are not considered suitable for teaching purposes; such cases are sent to one of the town hospitals. The university hospital is supported by money granted from the town rates and an additional grant from the State. It does not depend upon charity (although collecting boxes are placed at the entrance of many). Every patient who is admitted must pay or be paid for.

With regard to the admission and payment of patients the system is entirely distinct from ours. They occupy rooms which are named 1st, 2nd and 3rd class.

1st Class.—These are the professor's private patients. He has his patients either within the klinik or in an annexe to the klinik, and not in nursing-homes.

2nd Class.—These are also the professor's private patients who cannot afford the fees for 1st class.

3rd Class.—These are patients who can only afford a nominal fee, or who can afford nothing. The fee is two or three marks a day for room, food and nursing. The doctors' services are free. Those who cannot afford anything are paid for by the town. These patients are "clinical" patients and are used for teaching and research purposes.

The best built and equipped university hospitals of those which were seen are in Vienna under Prof. Schauta and Prof. Wertheim. These university hospitals are splendidly equipped, and contain a very large amount of clinical material. This is because students can only attend at this class of hospital, and so the number of students at each is very large. Thus, at the gynaecological and obstetrical kliniks the number of students is from 250 to 400, and Prof. Schauta and Prof. Wertheim have each 70* gynaecological beds and 250 labour beds* to draw upon.

* About one-third are private.

The preference of the German peasant and artisan for the university hospital is a striking fact. They feel they obtain there the most intelligent treatment and so put up with the scientific spirit with which they are regarded. Whether our poor classes would prove so tolerant is open to misgiving.

A full description of these kliniks will be found in the *History and Description of the Buildings of the New Women's Klinik in Vienna*, by Prof. Schauta. This book also contains many photographs and sectional plans of the buildings.

Group ii.—The Town Hospitals.

These are financed out of the town rates. They are obliged to take in any case that requires treatment. Students do not attend, and they are not used for teaching purposes except to post-graduates and to midwives.

The two best examples of these (which were seen) are the Dresden Hospital under Prof. Kehler, who succeeded Prof. Leopold, and the Virchow Hospital in Berlin. See the *New Royal Women's Hospital at Dresden* by Prof. Leopold.

Group iii.—Private Hospitals.

These are small buildings which are managed privately by some recognised teachers (associate professors and private docents), who have sufficient private means, for purposes of teaching and practice. Prof. Strassman's small hospital in Berlin is an example.

Details of Organisation—Personnel and Duties.

The university klinik is under the sole command of the professor (director), who is practically autocratic in his powers.

Although the gynaecological and obstetrical klinik forms part of the hospital and university as a whole, yet the buildings are separate from those of the other kliniks, e.g. surgical and medical, which are also in separate buildings, but all of them are usually in the same district of the town. The gynaecological and obstetrical department is thus an entirely separate entity. It contains within itself its own operating rooms, sterilisation department, washing and cooking departments, it has also its own pathological and bacteriological laboratories, its own museum, and, further, its own electrical and radium department.

Personnel and duties.—At some of the kliniks there are points of difference from the following account as regards minor details. But taking the good points of each klinik together we have the following:

The Director or Professor in Ordinary holds a very responsible position, for upon his energies the whole management and tone of the klinik largely depend. He is practically autocratic in his powers. His day begins with a tour of inspection of the patients, at which he is accompanied by all his assistants, and at which he receives a report from

them of each preceding day's events. He then lectures, usually every morning. The hour for this varies from 8 a.m. to 12 midday, according to the different professors. Operations follow; private consultations are held in the afternoon, and on four afternoons a week he holds classes on theoretical and practical subjects. He also initiates private research and overlooks the research work his men are doing; and he is university examiner and member of the faculty. He receives about £600 a year from the university. In addition to this he receives 97 per cent. of the fees for his lectures and his examination fees. That is to say, he receives altogether about £1500 a year apart from private practice. He is allowed to do private practice; there is no real restriction made upon the extent of this. He usually lives in a house attached to the klinik, and this is included free. There is no age-limit for retirement; once appointed he may remain on till his death. On retirement he receives a pension of £150 per annum.

The university professor is first and foremost a teacher and stimulator of new work. He does not remain stationary at one place. All his life he has been a wanderer since his student days; he becomes a professor only by the work he produces. This stimulates him to produce new work, and to bring about the new conditions which in turn favour its production, and so modernisation of the hospital and diffusion of ideas follow.

Extraordinary Professors.—These are not members of the klinik, but they are recognised teachers by the university, who are allowed to come to the klinik to give teaching. They exist only at some klinik.

First assistant has the title of *oborvart*, and may rank as a university professor. He represents the chief in his absence, and then takes over the entire management, lectures and operations; he is the person to be consulted at night in cases of difficulty; he accompanies his chief on his rounds, and helps him at the more difficult operations and at demonstrations. All pathological cases of gynaecology and midwifery must be notified to him, and he helps the other assistants by advice in treatment, and manages bad cases himself. He holds private lectures, and may use the material of the klinik for them; and he is engaged upon some research. He is not obliged to sleep in the klinik; his salary is about £75 to £85 a year, and he helps the chief with private cases, and usually undertakes private midwifery cases for the chief outside the klinik, but he is not encouraged to do much private work, and if he has no private practice the chief usually makes him some annual allowance.

It is from this class that professors for other institutions are recruited.

Gynaecological assistant is in charge of the gynaecological station. He must examine all new gynaecological cases; he helps the professor at operations, and is allowed to do

many himself, and, according to his experience, even abdominal operations, when the professor himself does not wish to operate. He oversees the dressings of cases operated upon; he must accompany the professor on his rounds and make a daily report to him, and also a written weekly report; he is helped, as regards notes and minor pathological investigations, by several voluntary assistants (qualified), and students who are medical praktikants (in last year after taking their examination). He is in charge of gynaecological out-patients. In places where these are numerous there is a special assistant for this department. He helps the professor at his lecture, and must have the cases used for the lecture thoroughly worked out. He resides in the klinik, his room is free, but he pays for meals, and he is allowed one night in three free, his place being temporarily taken by an assistant from another department. His salary is from £75 to £85 per annum. He is not allowed to do private practice. He must be unmarried. He may hold coaching classes if he is a recognised teacher (*privat docent*). He must do some original work on his cases.

Labour-room assistants.—There are usually two separate labour-room departments, the one for students and the other for midwives. Each is under a separate assistant. They take it in daily turns to be on duty for new cases. They must see all new cases, and all cases seeking admission at a later date. In the cases of primiparae, these are measured and may come into hospital some weeks before their time, provided they work as servants. Labour-room assistants must be present at all difficult cases; they must accompany the professor on his rounds, and make a daily report to him; assist the professor at his lecture, and have his cases thoroughly worked out for the lecture. They instruct midwives, and they have as helpers several voluntary assistants, and medical praktikants and students, or midwives. They must reside in the klinik, be unmarried, and do no private work, and they must be engaged upon some original work. Fees, £75 to £85 per annum.

Puerperium assistant.—The care of puerperal women is not managed by the assistant in charge of the labour-room, but by a special assistant. He is in charge of lying-in wards, where patients remain about seven days. He examines all outgoing cases, and six weeks later they return for examination. He makes a daily report to the professor, he is helped by several volunteers (qualified) and medical praktikants, and he helps the professor at his lecture. He is engaged in original research, but he cannot do private work, must live in, and must be unmarried. In Vienna there is also a professor who comes once a week to oversee the care of the infants.

Midwifery out-patients.—In Vienna there is no "district." All cases must come into the hospital. Each of the other klinik has a "district." This is under one assistant, or two if large. The assistant is in complete control, and can

do any operative procedure he thinks necessary without referring to the professor, with the exception of Caesarean sections. But he is expected, if possible, to send all serious cases into the klinik.

He must make a daily report to the professor, and he must help the professor at his lecture. He must live in the klinik, be unmarried, and cannot do private work; he must engage in some original research; he is helped by several volunteer doctors, medical praktikants and students. He is referred to in difficulties, and must himself be present at any difficult case.

Visits are made by his helpers for the week after labour on every other day in normal cases, and more often in abnormal.

Gynaecological out-patients.—There may be a special assistant for this department, but more usually it is run by the gynaecological ward assistants or the midwifery district assistant.

The out-patients are seen every afternoon except Saturdays, and of these there are usually about forty new cases a day.

Patients are placed in the lithotomy position round the room behind screens and examined by the assistant, who explains to his helpers. If he is a recognised teacher he may use the out-patients for coaching classes.

Septic department.—There is a separate building for all septic cases, or cases which must be put under observation. Within it there is accommodation for septic cases from the gynaecological wards, septic cases from the puerperal wards, and also a special labour room for cases admitted septic.

This department is in charge of a separate assistant, who does this, and work in the pathological laboratory only.

Anaesthetics.—There is no special department for this, but any assistant, volunteer assistant, or medical praktikant may be asked to give the anaesthetic.

Scientific department.—This includes the following sub-departments, each of which is under the charge of a special assistant if possible.

(1) *Pathological, bacteriological, and chemical pathology department.*—This department is usually under a professor who devotes all his time purely to pathological work. Such professors as a rule have private means, receive a small salary—£100, are not allowed to do private practice, and are engaged in original research. They are helped by volunteer doctors, and laboratory men or women. Their function, as regards the klinik, is to report upon all the material of the klinik with the exception of minor examinations, e.g. blood-counts, which are made by the voluntary doctors of the particular ward.

In addition it is to be noted that the assistants of the various ward stations, e.g. gynaecology and obstetrics, are encouraged to devote themselves for the purpose of their original work to some special subject, e.g. eclampsia, and any material bearing upon these subjects is examined and reported upon by them.

The clerical work of the department is done by the volunteer doctors. Further, if the department cannot for some reason do the work, or in case of some special difficulty, then the work is referred to the associated institutes of the university, i.e. the pathological, the physiological, the sero-therapeutic, and these institutes send back a report free of charge.

(2) *Röntgen rays.*—This department is best organised under Prof. Kronig at Freiburg. There are two assistants, one for diagnostic and one for therapeutic purposes.

(3) *Radium.*—This department is, again, best organised under Prof. Kronig. It consists of four rooms, each containing six beds. It is managed by one assistant, who does nothing else, and two volunteer doctors. The assistant uses the treatment under the direction of the Professor, and must make complete clinical observations, such as blood-counts and haemoglobin examinations on each case.

(4) *Urology.*—Cystoscopic examination and urethral catheterisation is largely employed in the klinik. In so far as diseases of the bladder, ureters and kidneys are dependent upon gynaecological or obstetrical conditions they are regarded as coming within the scope of these subjects. Cystoscopic examinations are undertaken as a matter of routine prior to all operations for carcinoma of the uterus. There is no special assistant for this department, but it is managed by one of the other assistants, usually the gynaecological out-patient assistant.

Private Assistant.—At some klinik the professor has a special assistant for his private patients. If not, they are looked after by the assistant of the gynaecological or labour department according to the nature of the case. The private assistant is not really attached to the klinik, does not live in the klinik, and may have private patients. He is expected to help in the klinik.

Changing of the posts.—The time of changing of the post of assistant to each of the foregoing departments entirely depends upon the wishes of the professor. Prof. Döderlein permits no change until a vacancy occurs by an assistant leaving. At the other klinik the posts are changed either every six months, or yearly; and the assistant may remain ten years.

Volunteer assistants.—These are qualified men who are waiting to come on as assistants, or who work in the klinik for post-graduate experience; others are medical praktikants, or students in their final year.

Each of the departments has several volunteer assistants. They do all the clerical work, and minor pathological work, and manage the cases under the direction of the assistant of the department, and are of great service in lightening the amount of his work.

Post-mortem examinations.—These are not conducted in the Klinik itself. Cases upon which a *post-mortem* is required are sent to the pathological institute of the university, which does all *post-mortem* examinations for every klinik. A

report of the findings is sent to the corresponding klinik. This is a weak spot in their organization.

Registration of notes.—The ward notes and out-patient notes are made by volunteer assistants under the control of the assistant of the department. The registration and indexing of these notes and any clerical work is also done by volunteers. The system of registration is not by card index, and is similar to that in use in Martha ward.

System of promotion.—The student who aims at an academic career must, on becoming qualified, proceed as follows:

He usually spends one year or two years in a pathological institute, in order to make himself proficient, not only in general pathology, but also in some special subject of gynaecology or of obstetrics, which may make him of special use to a klinik.

He then asks the professor, under whom he wishes to work, if he may become a voluntary assistant at his klinik. Whether he is successful in his application or not depends partly on merit and partly on influence, but, as a rule, there is no difficulty in becoming a volunteer assistant. If successful he may be accepted with a view to coming on later as a real (paid) assistant, or he may be accepted, but told he cannot expect to become a real assistant.

He then serves as voluntary assistant until there is a vacancy. The time of waiting is not a fixed one but is usually two years. During his time as voluntary assistant, in addition to his ordinary duties, he qualifies himself especially for use at some particular subject, e.g. eclampsia.

He then becomes a real assistant and is appointed to whatever department in the klinik the professor wishes. No department is regarded as senior to another, and as a general rule these posts are interchangeable at the end of a year. (There are exceptions; e.g. under Dörllein a man holds the post for no fixed time, but according to the wishes of the professor.)

If his work is good the next step is to become privat-docent, i.e. a recognised teacher by the university. This enables him to give private lectures which count towards the signing up of the student, and is of fair monetary value, for the number of university hospitals is limited, there are large numbers of students at each, and these often require private lectures as most of the hospital lectures are overcrowded.

If his work is good and his "arbeits" are good, he may at the end of a further four years (about) receive the title of "überarzt" and become a chief assistant (first assistant). The further title of "professor" may be given him. This is only a title; many überarzts are not professors. Average age for überarzt, thirty-five.

His place in the klinik is now secure, and it is from this class that the professors at other universities, and also at the town hospitals, are recruited when vacancies occur. The method of procedure then is that the Faculty of each

hospital from any part of the country recommends the candidate from their own hospital. A final choice is made by the faculty of the hospital at which the vacancy has occurred.

To become "specialist."—The word has not the same significance as with us. In order to obtain this title a man must spend two years as an assistant in some special subject. He can then retire into practice, and place the words "specialist in," etc., upon his nameplate. The title is much abused, and is used also by men who have not spent this time at a klinik.

In the next number an account will be given of the facilities for original work, and the methods of teaching. The article will be ended by a comparison between the German methods and our own, and some general considerations on the subject.

(To be continued.)

"The Pink Card"; An Episode in Three Acts.

PART I. THE CONTRACT.

MY pink card at last was signed!

It was early closing day, and I had already seen the Hippodrome and the pictures, so for lack of better occupation I took my place in the queue outside the doctor's surgery and awaited the opening of the "early door."

At six o'clock we began to move, and by seven I had reached the sanctum.

The contract signed, I decided at once to taste the "refreshing fruit" Lloyd George had promised me, and to get an order for a free Beecham.

I described my after-dinner sensations last Christmas day. The doctor listened, sharpening his pencil. He inquired my surname, Christian name, friendly society, contributor's number, address, occupation, age and sex, said I was suffering from dyspepsy, shouldn't overeat, and must especially avoid all food beginning with a "p," such as pies, pickles, pastry, pork, plum pudding, pig's trotters, potatoes and pineapple.

I thanked him, and left, taking a copy of the "rules" and a green prescription for the coveted Beecham, though this I found I couldn't obtain that night as it was the chemist's early closing day.

PART II. THE CRIME.

It was now getting late, and I was reminded that I had had a hurried tea before going to the doctor. So I turned in to the hotel near by, and contemplated the menu of the dinner I had so richly earned.

To cut a long story short I did quite well on sausage and mash, beefsteak pudding, plum tart, pickles and cheese returning twice to every course, and finishing with whisky and Perrier, and a glass of mine host's old port in which to drink Lloyd George's health.

PART III. THE CONSEQUENCE.

I may have eaten more than I intended. I know I got my money's worth.

I admit discomfort as I made my way home. Arrived there matters got rapidly worse. Acute dyspepsy the doc. no doubt would have called it, or in vulgar parlance, belly-ache. I was doubled up with pain, convulsed with colic. At last I could stand it no longer, so sent my young brother to summon the doctor.

Whilst awaiting his return I happened to pull out the copy of "Rules for Administration of Medical Benefit." They were as follows:

Conduct of Persons in receipt of Medical Benefit.

An insured person in receipt of medical benefit shall comply with the following rules:

- (a) He shall obey the instructions of the practitioner attending him:
- (b) He shall not conduct himself in a manner which is likely to retard his recovery:
- (c) He shall not make unreasonable demands upon the professional services of the practitioner attending him:
- (d) He shall, whenever his condition permits, attend at the surgery or place of residence of the practitioner attending him on such days and at such hours as may be appointed by the practitioner.
- (e) He shall not summon the practitioner to visit him between the hours of 10 p.m. and 10 a.m., except in cases of serious emergency:
- (f) He shall, when his condition requires a home visit, give notice to the practitioner, if the circumstances of the case permit before 10 a.m. on the day on which the visit is required.
- (g) The notice requiring a home visit must specify, as far as possible, the nature of the complaint, in respect of which the practitioner is summoned.

Here was a facet! Yet worse was to follow. In the next paragraph I read that "any insured person who is guilty of a breach of any of these rules" renders himself liable to a fine of ten shillings, "or in the case of repeated breaches" twenty shillings, and may have his medical benefit suspended "for a period not exceeding one year."

I was in despair!

In my ignorance I appeared to have broken, not one, but every single rule in the list. I might therefore have to pay anything up to one pound, and further, have to continue sticking stamps on my card, throughout the year, though medical "benefit" might be withheld!

I read again the list of rules, and came to the following conclusions:

(a) I had not obeyed the instructions of the practitioner attending me. He had warned me, on account of the dyspepsy, not to overeat. From my recollection of Christmas

day, I felt sure that I must again have eaten more than was necessary to maintain existence.

(b) I had conducted myself in a manner which was likely to retard my recovery.

I recalled the doctor's veto on all food beginning with "p." On referring to the menu I had brought away from the hotel I found I had partaken freely of Potatoes, Pork sausages, beefsteak Pudding, Plum Pie, Pickles, Perrier, and Port! I was a criminal. Surely this series of misdemeanours would render me liable to the twenty-shilling fine plus—happy release!—suspension of medical benefit!

(c) But this was not all. I feared that two "demands upon the professional services of the practitioner" in a single evening might by the committee be deemed unreasonable.

(d) Instead of sending for the doctor I should have ordered a cab, since my condition would have permitted me to be so taken to "the surgery or place of residence of the practitioner."

(e) I had summoned the practitioner between the hours of 10 p.m. and 10 a.m.

(f) I had not given notice "before 10 a.m. on the day on which the visit is required"

(g) And finally I had broken Rule (g), since I had sent no notice specifying "as far as possible the nature of the complaint."

I was in trepidation, expecting every moment, not the doctor, but a couple of policemen with a warrant.

* * *

However, just then the door opened and in walked our old family doctor (who had declined to go on the panel), my young brother having by mistake summoned him instead of the dreaded panel practitioner.

The old doc. soon put me right—no waiting till the chemists opened in the morning, nor any dread formalities or rules.

Also he has promised to say nothing of my crimes.

I am relieved. The nightmare has passed.

My raspberry-coloured card is burnt!

L. B. C.

The String Galvanometer and its use in Cardiac Disorder.

By E. P. CUMBERBATCHE, M.B., M.R.C.P.



THE instruments that have been devised for the study of the mechanism of the heart, the string galvanometer is the most recent. Introduced in 1903 by Einthoven, head of the Institute of Physiology at Leyden, it has proved of great value not only in the study of the normal heart, but also in the investigation of cardiac disease. It is being adopted in many hospitals in this country.

At St. Bartholomew's, one has been in use since May, 1912, the munificent gift of Dr. Drysdale, by whose generosity this costly apparatus has been installed for the purpose of clinical and physiological study.

The string galvanometer studies the mechanism of the heart by a method quite different from the polygraph or sphygmograph. Unlike these instruments, which record pressure changes and volume changes in the veins and arteries, it records the electrical changes which accompany the contraction of the heart, and thus obtains information direct from the cardiac muscle itself.

The string galvanometer differs in principle from the common form of galvanometer in that the magnet is fixed, while the wire conveying the current is movable. The magnet is large and powerful, bent to the form of a U with its poles closely approximated. The wire is a single filament stretched between the poles and parallel with its opposing faces. It is known as the "string" of the galvanometer. It is exceedingly fine, not more than $\frac{1}{10000}$ or $\frac{1}{10000}$ of a millimetre in diameter. It is invisible in ordinary light, and the most delicate balance cannot weigh it. It is made of platinum, or of quartz coated with silver.

When a current traverses the string, the latter is deflected to one side or the other, depending on the direction of the current. The degree of deflection depends upon the strength of the current and the tension of the string.

The movements of the string are very slight when the minute heart-currents traverse it and are invisible to the unaided eye. In order to see them and obtain a record, the string is strongly illuminated by an arc light, and its image, magnified 700 times or more, is received on a moving photographic plate or film. It is necessary to obtain a photographic record because some of the movements of the image are too quick and too small to be followed by the eye.

To bring the heart into electrical connection with the string, the patient's arms, or an arm and a leg (known as the "leads") are immersed in salt solution, each in a separate vessel; from each vessel passes a wire to the galvanometer so as to conduct the current to and from the string. The patients may be in an adjoining room or away in the wards if only wires connect them with the "heart station." Einthoven's laboratory was electrically connected with a hospital three miles away. The patient need not leave his bed or even sit up. It is only necessary to immerse the two limbs in the electrodes and connect these with the wires leading to the "heart-station."

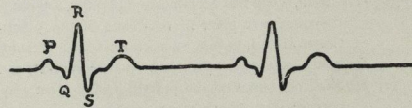
Before using the instrument, sufficient tension is put on the string so that when a millivolt is introduced into the completed circuit, the current produced will deflect the image of the string one centimetre. The image takes up its new position with great quickness, $\frac{1}{1000}$ second if the string is $\frac{1}{1000}$ millimetre in diameter, so that currents of this brief duration are duly recorded. It is in this particular

property—celerity of movement—that the string galvanometer is such a valuable instrument. The capillary electrometer, which was used as far back as 1889 by Waller to obtain electrical records of the heart, is even more sensitive than the string galvanometer, but it cannot exactly follow the currents of the briefest duration.

By standardising the tension of the string the electromotive force corresponding to each movement can be read in the record and different records are thus comparable.

In the string galvanometer we possess an instrument which is extremely sensitive, indicating the minute heart currents, extremely alert, responding with great rapidity, almost without delay or inertia to the rapidly changing heart currents; and quite aperiodic, possessing no independent movements of its own.

The record of the movements of the string is known as an electro-cardiogram. Its exact form varies in detail according to the limbs which lead the current from the heart. And different hearts, even when normal, do not yield precisely similar records, so that the electro-cardiogram may be looked upon as the heart's "autograph." All electro-cardiograms of normal hearts conform to a general type such as is shown in the accompanying diagram.



A group of waves corresponds to each complete heart beat. They were named by Einthoven P, Q, R, S and T. Three of them, P, R and T, are constantly present in all electro-cardiograms of normal hearts. The first, or P-wave is produced by the contraction of the auricle. The remaining waves are produced by the contraction of the ventricle. R is sometimes preceded by a short wave Q, sometimes followed by a short or tall wave S. P is always small; R is tall in height and short in duration, while T is medium in height and the longest of all in duration. Q, R, S and T constitute what is called the ventricular complex. They are all produced by ventricular contraction.

The record provides us with an exact measurement of the duration of auricular systole, of ventricular systole, of diastole of the whole heart, and of the time taken for the impulse to pass from auricle to ventricle. It is particularly in cases showing alteration in the time relations of auricle to ventricle, and in cases of arrhythmia of the whole heart, that the string galvanometer provides an analysis with a certainty and a precision possessed by no other instrument. To give a few examples. In cases of complete heart-block, the electro-cardiogram shows both the auricular complex and the ventricular complex, but one occurs independently of the other, the rate of beat of the auricle being quicker

than that of the ventricle. The rate of beat of each can be accurately measured from the record.

In cases of partial heart-block the auricular complexes are seen, but here and there a ventricular complex is dropped, showing that the impulse from the auricle has failed to reach the ventricle.

In cases of simple depression of conductivity of the auriculo-ventricular bundle, the PR (or PQ) interval is lengthened, and we have, in its measurement, the degree of the depression. In the prolongation of the PR interval we have an early sign (often the only sign) of early disease of the myocardium, for it is unlikely that the auriculo-ventricular bundle alone should be selected for attack. A heart may pass through a first attack of rheumatic fever. Signs of disease of the myocardium will be looked for and may not be found by ordinary clinical methods of examination, or, if found, they may disappear later. Such cases may show, by the length of the PR interval, that the heart-muscle has been damaged. Subsequent attacks may damage it still more, so that physical signs become evident. But the electro-cardiogram, taken during the first attack, may provide us with the "shadow that precedes the coming event."

In the different forms of arrhythmia the electro-cardiogram provides an analysis which yields valuable information regarding their nature.

In cases of auricular fibrillation the P-waves are not seen. In their place are seen a number of small waves closely following one another; they are produced by the incoordinate spasmodic twitches of portions of the "shivering" auricles.

It often happens that the physical signs of the heart are obscured or obliterated by other conditions, such as pulmonary emphysema. In such conditions it may be difficult to obtain physical signs of enlargement of the right side or of the left side, or of the auricles alone. In these cases the electro-cardiogram is often characteristically modified in form.

In many cases the electro-cardiogram cannot at the present time be interpreted. This is particularly the case where the ventricular complex is much altered in form. A record obtained by the writer showed in the same tracing a gradual change in the form of the complex from one type to another. The study of such cases, and of others, by the electro-cardiographic method forms a wide field for research, and it is likely that the use of the string galvanometer will throw light on many of the hitherto unsolved problems of the disordered cardiac mechanism.

Correspondence.

An unstamped letter has been received signed "Average Student." We shall be pleased to publish the same if "Average Student" will send his name and address, not necessarily for publication, but as a guarantee of good faith.

Obituary.

MALCOLM DYSON, F.R.C.S.



MALCOLM DYSON, F.R.C.S., L.R.C.P. Lond., was the son of the Rev. Dr. Dyson. He was educated at Merchant Taylors' School and the Isle of Wight College. On leaving school he first turned his attention to the Stock Exchange; there he found that the office work was not congenial to a man of his literary tastes. He left that pursuit of life for the medical profession, entering at St. Bartholomew's Hospital in 1892, and taking his final F.R.C.S. in 1900. For some time after leaving the hospital he was Medical Officer, and later Senior Assistant at Islington Infirmary.

Dyson next turned his attention to private practice, and finally settled in Rotherhithe about six years ago, where, by his professional ability, energy, and kindly disposition, he soon obtained a large practice. He was Medical Officer to the Borough Council, and also to St. Olave's and St. Saviour's Schools. He was never a man of robust constitution, suffering from emphysema and bronchitis, but his energy and zeal for his profession always came before the consideration of his health. The extra strain of work consequent on the National Insurance Act coming into force brought about his final illness, and he died of pneumonia on February 12th, in his forty-sixth year.

Dyson's end was almost tragic—four hours before he died his wife was confined of a daughter; he has one other child, a son, aged ten years.

A memorial service was held in his parish church at Rotherhithe on February 17th, at the same time that his funeral took place in the quiet country churchyard of Boughton Monchelsea, in Kent, where he had spent a great part of his youth. He had expressed a wish a few days before he died that his body should be laid to rest there.

The large attendance of his friends and patients at the memorial service showed how great was the honour and affection in which he was held by all who knew him.

J. A.

J. G. E. COLBY, M.A., M.B., B.Ch.(Oxon), F.R.C.S. (Eng.), D.P.H.

It is with the deepest regret that I have to record the death of Dr. J. G. E. Colby, at the comparatively early age of 51.

In 1880 he went to Wadham College, Oxford, where he gained an Exhibition in Science, and from there he came to "Bart's." Here he at once showed that he was possessed of more than ordinary ability by gaining the Open Entrance Scholarship in Science, and this was afterwards confirmed by his winning the Junior Scholarship in Anatomy and Physiology and the Brackenbury Scholarship in Surgery.

In recognition of the good work which he had done, he was appointed house surgeon under Mr. Alfred Willett, and later ophthalmic house surgeon under the late Mr. Henry Power. It was whilst he was holding the former of these appointments that, as a dresser, I first knew Colby, and no one could be associated with him for long without appreciating his worth. The skill and kindness he displayed then in the treatment of his patients remained a feature of his after career, and he ever gained the respect and goodwill of all with whom he came in contact.

In those early days there were many of us who thought he was destined to take a conspicuous place in his profession, and, indeed, his abilities were such that he might well have done so, but family reasons called him home. There had been several generations of his name practising at Malton, and in 1890 he felt it was his duty to join his father there.

Although I think sometimes he may have looked with regret to positions which might have been his, occupied by men he would have been fully justified in feeling were, at least, no more than his intellectual equals, yet, in the somewhat narrower field of his choice, Colby proceeded to give of his best. For this he would have taken no credit, for, where his work was concerned, the possibility of doing anything less would never have entered his mind.

Humbly and pretence he hated, and if there was one thing more than another that moved him to righteous indignation it was the thought that anything of the sort should enter into the conduct of a profession for the fair fame of which he had a jealous regard.

His whole-hearted devotion to the interest of his patients was doubtless responsible in part for his undoing; and the hard work of a country practice left him in a condition little able to resist the onslaught of an attack of septicæmia, from which he suffered last summer.

After treatment at Leeds he seemed to be somewhat better, and subsequently went to Colwyn Bay, where, in spite of the efforts of many eminent members of the profession, he died, leaving a wife and young family to mourn his loss, and the world the poorer by his absence from our midst.

K. C. B.

The International Medical Congress.

BART'S will be well represented at the International Congress of Medicine, which is to be held in London from August 6th to 12th. Dr. W. P. Herringham is the General Secretary, and the following is a list, as complete as possible, of Bart's men who are taking part in the different sections:

Anatomy and Embryology.—C. B. Lockwood, F.R.C.S., Christopher Addison, M.D., F.R.C.S., M.P., Alexander Macphail, M.B., C.M., F.F.P.S.

Physiology.—L. E. Shore, M.D., J. S. Edkins, M.B.

General Pathology.—F. W. Andrews, M.D., F.R.C.P., C. Powell White, M.D., F.R.C.S., G. C. Garratt, M.D., J. F. Gaskell, M.B., B.C., M.R.C.P.

Bacteriology and Immunity.—A. G. R. Foulerton, F.R.C.S., M. H. Gordon, M.D., Prof. H. J. Hutchens, D.S.O., M.R.C.S., L.R.C.P.

Therapeutics.—Sir Lauder Brunton (President), James Calvert, M.D., F.R.C.P.

Medicine.—F. de Havilland Hall, M.D., F.R.C.P., Samuel West, M.D., F.R.C.P., A. E. Garrad, M.D., F.R.C.P., F.R.S., H. D. Rolleston, M.D., F.R.C.P.

Surgery.—Prof. Howard Marsh, M.C., F.R.C.S., Prof. H. Gilbert Barling, B.S., F.R.C.S., James Berry, B.S., F.R.C.S., Sir A. A. Bowlby, C.M.G., F.R.C.S., W. Bruce Clarke, F.R.C.S., D'Arcy Power, F.R.C.S.

Subsection A: Orthopaedics.—W. McAdam Eccles, M.S., F.R.C.S., E. Laming Evans, M.D., F.R.C.S., R. C. Elmslie, M.S., F.R.C.S.

Subsection B: Anæsthetics.—Theodore Burriss, M.R.C.S., Richard Gill, M.B., B.S., F.R.C.S.

Obstetrics and Gynaecology.—Sir Francis Champneys, Bt., M.D., F.R.C.P. (President), Albau Doran, F.R.C.S., W. S. A. Griffith, M.D., F.R.C.P., F.R.C.S., G. Drummond Robinson, M.D., F.R.C.P.

Ophthalmology.—E. Clarke, M.D., F. W. Edridge-Green, M.D., F.R.C.S., Lt.-Col. R. H. Elliott, M.D., F.R.C.S., W. H. H. Jessop, M.D., F.R.C.S., Lt.-Col. F. P. Maynard, M.B., F.R.C.S., W. T. Holmes Spicer, M.B., F.R.C.S., J. Elliot Square, F.R.C.S.

Diseases of Children.—E. Cautley, M.D., F.R.C.P., H. Morley Fletcher, M.D., F.R.C.P., L. G. Guthrie, M.D., F.R.C.P.

Neuropathology.—H. Campbell, M.D., F.R.C.P., J. A. Ormerod, M.D., F.R.C.P., H. H. Tooth, C.M.G., M.D., F.R.C.P., F. R. Batten, M.D., F.R.C.P.

Psychiatry.—Robert Jones, M.D., F.R.C.P., Bedford Pierce, M.D., F.R.C.P., W. H. Rivers, M.D., F.R.C.P., F.R.S.

Dermatology.—P. S. Abraham, M.D., F.R.C.S.I., H. G. Adamson, M.D., F.R.C.P., Alfred Eddowes, M.D., A. J. Hall, M.D., F.R.C.P., J. E. McDonagh, F.R.C.S., Henry Waldo, M.D.

Urology.—F. Swinford Edwards, F.R.C.S., R. A. Bickersteth, F.R.C.S.

Rhinology and Laryngology.—J. Dundas Grant, M.D., F.R.C.S., C. A. Parker, F.R.C.S. (Ed.), E. B. Waggett, M.B., B.C., W. D. Harmer, M.C., F.R.C.S.

Otology.—W. J. Horne, M.D., C. Ernest West, F.R.C.S., Sydney Scott, M.S., F.R.C.S.

Hygiene.—Sir George Newman, M.D., F.R.S. (Ed.), G. S. Buchanan, M.D., W. H. Hamer, M.D., D.P.H., F.R.C.P., James Kerr, M.D.

Naval and Military Medicine.—Surgeon-General Sir C. P. Lukis, C.S.I., M.B., F.R.C.S., Director-General, I.M.S., Lt.-Col. Bruce Seton, I.M.S.

Tropical Medicine.—Prof. Sir Ronald Ross, K.C.B., LL.D., F.R.C.S., F.R.S., J. W. W. Stephens, M.D.

Radiology.—W. Deane Butcher, M.R.C.S., H. Lewis Jones, M.D., F.R.C.P., Hugh Walsham, M.D., F.R.C.P., G. A. Prie, M.D.

History of Medicine.—Norman Moore, M.D., F.R.C.P. (President), J. B. Hurry, M.D., J. B. Nias, M.D., J. A. Nixon, M.B., B.C., F.R.C.P.

In connection with the last section the following papers will be read by Bart's men:

Presidential address by Dr. Norman Moore: "The History of Medicine in England."

D'Arcy Power, F.R.C.S.: "The Lesser Writings of John Arderne."

Dr. Lewis Jones: "The History of Electrical Therapeutics."

Dr. Alan Moore: "Diseases of Seamen in the Seventeenth and Eighteenth Centuries."

Dr. Norman Moore: "Early History of St. Bartholomew's Hospital."

The Clubs.

CRICKET PROSPECTS, 1913.

IN the whole the prospects seem fairly bright. All last year's team, with the exception of Bridgman, whose bowling we shall miss, will be available, and we hear of several freshmen who are likely to be a source of added strength. Good batsmen are not wanting, and the bowling should be fairly effective, although it seems likely that the team will still feel the need of a really good fast bowler. Waugh, Grace and Owen are all good "all round" cricketers, and in Williams we possess an excellent wicket-keeper, who is also capable of making runs. The fielding last year was anything but good, several matches being thrown away through dropped catches and slack fielding generally. A great improvement will be looked for this season. It is hoped all freshmen who play cricket will put their names down to do so. A strong fixture list has been arranged, and the Annual Cricket Week will take place in June.

TENNIS PROSPECTS.

The season's prospects are good. A short but good fixture list has been arranged (last year two or three of the opposing teams did not give us a game), and it is hoped that a few more "impromptu" fixtures with scratch sides will be added later on in the term. Southgate, Craven Park, and the Old Millhillians should all be good matches.

Of last year's side, G. S. Stathers, H. W. Scott, G. E. Dyas, R. W. Meller and C. S. Atkin will all still be available, whilst there are rumours of several good freshmen being in existence. It is sincerely hoped that this is the case, as the efforts of the VI in the inter-hospital tournament have been none too satisfactory during the last three years. G. S. Stathers is a rapidly improving player, especially in singles, but he badly needs a good partner in the doubles.

No fixtures have been arranged for the first three weeks of May, and in this time it is hoped to arrange some good practice games.

According to reports the Winchmore Courts should be excellent this season and shortly ready to be put into use.

C. S. A. (Hon. Sec.)

The Bookshelf.

BOOKS RECEIVED FOR REVIEW

- Lectures on Diseases of Children.* By Robert Hutchison, M.D., F.R.C.P. Third edition. (Edward Arnold.) 10s. 6d. net.
- Atroscopic Anatomy.* By Tingle. (Sir Isaac Pitman.) 1s. net.
- The Night Nurse.* By the author of *The Surgeon's Log*. (Chapman & Hall.) 6s.
- Painmann's Pharmacy and Materia Medica for Nurses.* (Grattan.) 2s. 6d.
- Minor Maladies.* By Leonard Williams. Third edition. (Baillière, Tindall & Cox.) 5s.
- Chloride of Lime in Sanitation.* By Hooker. (Chapman and Hall.)

- Manual of Surgical Treatment.* By Cheyne and Burghard. Vol. iv.
- Diagnosis of Bacteria and Blood Parasites.* By E. P. Minett. (Baillière, Tindall & Cox.) 2s. 6d. net.
- Interpretation of Dreams.* Freud. (George Allen.) 15s. net.
- Laboratory Handbook of Bacteriology.* By Abel. Translated by M. H. Gordon, M.D. (Frowde, Hodder & Stoughton.) 5s. net.
- Tuberculin Treatment.* 2nd Edition. By Riviere and Morland. (Frowde, Hodder & Stoughton.) 6s. net.
- Diseases of Children.* By Carrod, Batten and Thursfield. (Arnold.) 30s. net.
- Medical Electricity.* 6th Edition. By Lewis Jones. (H. K. Lewis.) 12s. 6d. net.
- General Pathology.* By Pembrey and Ritchie. (Arnold.) 18s. net.
- Auerbach's "Headache."* (Frowde, Hodder & Stoughton.) 5s. net.

Clinical Lectures.

April to July, 1913.

MEDICINE.

Fridays at 12.45 p.m.

Dr. Tooth	April 25th.
Dr. Fletcher	May 2nd.
Dr. Garrad	" 9th.
Dr. Calvert	" 15th.
Dr. Drysdale	" 23rd.
Dr. Tooth	" 30th.
Dr. Garrad	June 6th.
Dr. Fletcher	" 13th.
Dr. Calvert	" 20th.
Dr. Drysdale	" 27th.

SURGERY

Wednesdays at 12.45 p.m.

Mr. Waring	{ April 30th.
Sir Anthony Bowlby	{ May 7th.
Mr. D'Arcy Power	{ " 14th.
Mr. Bailey	{ " 21st.
Mr. McAdam Eccles	{ " 28th.*
	{ June 4th.
	{ " 11th.
	{ " 18th.
	{ " 25th.†
	{ July 2nd.‡

* "Some Interesting Surgical Mistakes."
 † "The Prevention and Treatment of Traumatic Hernia."
 ‡ "Congenital Hydrocele."

St. Bartholomew's Hospital Women's Guild.

The Annual Meeting will be held at 5 o'clock on View Day, Wednesday, May 14th, in the Great Hall after tea at 4.30.

New Addresses.

- ADAMSON, H. G., 17, Devonshire Place, W. (Tel. 1878 Mayfair.)
- BROWN, A. CARNARVON, "Egden," Hartford Road, Sevenoaks.
- CONNOR, Capt. F. P., I.M.S., c/o Messrs T. Cook & Son, Ludgate Circus, E.C.
- CUMMING, J. H., Faringdon, Berks.
- DOBSON, W. T., Warneford, Leamington and South Warwickshire General Hospital, Leamington.
- DONN, J. C. S., 132, Old Street, E.C.
- GIBSON, A. J., 54, High Street, Brentwood, Essex.
- KERR, C. D., Donnybrook, Western Australia.
- LESCHER, F. G., St. Andrew's Hospital, Dollis Hill, N.W.
- MATTHEWS, Major, E. A. C., I.M.S., Junior Naval and Military Club, Piccadilly, W.
- PARKER, G. D., 207, Ashley Gardens, S.W.
- SCHOLEFIELD, E. H., 4, Berrydene, Ashleigh Road, Barnstable.
- SLADDEN, A. F. S., 292, High Holborn, W.C. (Tel. 383 Holborn.)
- STANSFELD, A. E., 48, Bryanston Street, Portman Square, W. (Tel. Mayfair 22068.)
- SYMES, Capt. A. J., I.M.S., The Manor House, Crediton.

Examinations.

D. D. Brown, of Harrogate, has taken the M.D. (Durh.).
C. Corben has taken the F.R.C.S. (Edin.).
C. F. F. Monat-Biggs has taken the D.T.M. of Liverpool.

UNIVERSITY OF LONDON.

Second Examination for Medical Degrees.

March, 1913.

Part I: *Organic and Applied Chemistry*.—I. J. F. Bull, J. D. Constantin, R. Coyle, D. D. R. Dale, J. L. R. Fortier, N. N. Haysom, W. D. Heywood-Waddington, and J. R. Hume.

Part II: *Anatomy, Physiology and Pharmacology*.—E. B. Barnes, D. A. Blount, R. M. Dannatt, H. H. L. Ellison,* S. C. W. Iredale, S. W. Isaacs, L. G. Le Blanc, H. M. C. Macaulay, R. G. Morgan, and P. H. Wells.

* Distinguished in Physiology.

UNIVERSITY OF CAMBRIDGE.

Degrees.

The following degrees have been conferred: M.D.: P. Hamill, C. W. Hutt, W. B. Wood. M.B. and B.C.: H. M. D. Nicoll.

Appointments.

RIAKEWAY, H. M.S., B.Sc. (Lond.), F.R.C.S., appointed Assistant Surgeon to the City of London Truss Society.

BUTLER, T. HARRISON, M.D. (Oxon.), M.R.C.S., L.R.C.P., appointed Hon. Ophthalmic Surgeon to the Royal Midland Home for Incurables, Leamington Spa.

DOBSON, W. T., M.R.C.S., L.R.C.P., appointed House-Surgeon to the Warneford, Leamington and South Warwickshire General Hospital, Leamington.

LESCHER, F. G., M.R.C.S., L.R.C.P., appointed Resident Medical Officer at St. Andrew's Hospital, Dollis Hill, N.W.

SCHOLEFIELD, E. H., M.B., B.Ch. (Oxon.), appointed Tuberculosis Officer for North Devon.

SIMPSON, G. C. E., M.B., B.C. (Cantab.), F.R.C.S., elected Honorary Surgeon to the David Lewis Northern Hospital, Liverpool.

SLADDEN, A. F. S., Pathologist and Registrar at the Metropolitan Hospital, N.E.

SMITH, E. B., M.B., B.S. (Lond.), D.P.H. (Cantab.), appointed whole-time Medical Officer of Health for the North Essex United Districts.

STACK, E. H. E., M.B. (Cantab.), F.R.C.S., appointed surgeon to the Royal Infirmary, Bristol.

Royal Naval Medical Service.

The following appointments, etc., have been notified since March 20th, 1913:

Surgeon R. Thurstield to the "Astræa," to date April 22nd, 1913.
Staff-Surgeon H. C. Adams has been allowed to withdraw from H.M. Naval Service, with a gratuity, March 19th, 1913.

Acting-Surgeons.—The following have been entered has Acting-Surgeons, and appointed to the "Victory," additional, for course of instruction at Naval Medical School, R.N. College, Greenwich, and at Haslar Hospital, to date April 11th: D. G. Arthur, P. B. Wallis and F. C. Wright.

Births.

NUNN.—On April 7th, at Upper Tooting, the wife of J. H. Francis Nunn, M.R.C.S., L.R.C.P., of a son.

PENNEFATHER.—On April 21st, at Deanhurst, Harrow, the wife of C. Maxwell Pennefather, M.B., B.S., of a daughter.

THOMPSON.—On April 4th, at Tutshill, Chesham, to the wife of Cecil C. B. Thompson, M.R.C.S., L.R.C.P., a daughter.

WHITE.—On March 24th, at Weet Knoll, Bournemouth, the wife of E. H. White, M.B. (Oxon.), of a daughter.

WILLIAMSON.—On April 7th, 1913, at The Limes, Epsom, the wife of John Williamson, M.D., of a son.

Marriages.

GALVAIN—BUTLER.—On April 5th, at Holy Trinity Church, Kensington Gore, by the Rev. W. E. Tourtel, M.A., cousin of the bridegroom, assisted by the Rev. H. P. Coward, M.A., vicar of the parish. Henry J. Gauvain, M.A., B.C. (Cantab), son of the late William Gauvain, His Majesty's Receiver-General of Alderney, to Louisa, eldest daughter of W. Butler, I.M.S. (retired), and granddaughter of the late W. Butler, superintending surgeon (Hyderabad), H.E.I.C.S.

RAMSAY—ILLINGWORTH.—On April 9th, at St. James's Church, Blackburn, by the Rev. W. H. Palmer, Vicar of the parish, Jeffrey Ramsay, M.D., younger son of P. J. Ramsay, J. F., of Cheadle Hulme, Cheshire, to Alice, eldest daughter of Walter Illingworth, of the Woodlands, Blackburn.

RENSHAW—STRAGHAN.—On April 24th, at St. Stephen's, Dulwich, by the Rev. F. White, assisted by the Rev. E. Rae, of Emmanuel, Captain John Allister Renshaw, R.A.M.C., to Rachel Eleanor Mary (Eileen), youngest daughter of Colonel A. Straghan, C.B., late Highland Light Infantry.

Deaths.

ETHERINGTON-SMITH.—On Saturday, April 19th, 1913, at St. Bartholomew's Hospital after a very brief illness, Raymond Broadley Etherington-Smith, M.A., F.R.C.S., Warden of the College and Assistant Surgeon to St. Bartholomew's Hospital, aged 36.

FLETCHER.—On March 30th, 1913, at the Charterhouse, E.C., Alfred Chune Fletcher, aged 58.

HUMPHREYS.—On February 2nd, 1913, at 143, Victoria Dock Road, F. Robert Williams Humphreys, after a long severe illness.

LILLIE.—On April 17th, at a nursing home, suddenly, Cecil Firmin Lillie, M.D., of Salisbury, Rhodesia, South Africa, aged 40.

SAVORY.—On March 27th, at Crouch End, Charles Tozer Savory, M.D., formerly of Canonbury, aged 83.

Acknowledgments.

Guy's Hospital Gazette, The Practitioner, L'Echo Médicale, British Journal of Nursing, Nursing Times, Medical Review, Evans' Journal, The Stethoscope, The Hospital, Long Island Medical Journal, London Hospital Gazette, St. Mary's Hospital Gazette, New York State Journal of Medicine.

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, Smithfield, E.C. The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER W. E. SARGANT, M.R.C.S., 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. Telephone: 1436, Holborn.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD AND SON, Bartholomew Close. MESSRS. ADLARD have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 6d. or carriage paid 2s. 3d.—cover included.

Etherington Smith Memorial.

ST. BARTHOLOMEW'S HOSPITAL, E.C.

May, 1913.

DEAR SIR,

At a meeting held at St. Bartholomew's Hospital on May 1st it was decided to open a Subscription list for a Memorial to the late Mr. R. B. ETHERINGTON SMITH. It is suggested that the Memorial should take the form of providing and endowing separate sick quarters for the use of the Medical, Surgical and Resident Staff, and of providing a suitable Memorial at Cambridge. Etherington Smith's life work was so bound up with St. Bartholomew's that this form of Memorial will doubtless commend itself not only to his colleagues in the profession, but also to the larger body of men who knew and admired him as an oarsman and friend.

Subscriptions will be received by the Hon. Treasurer, Dr. T. W. SHORE, Dean of the Medical School, St. Bartholomew's Hospital.

We are,

Yours, etc.,

ANTHONY A. BOWLBY, C.M.G., Senior Surgeon to St. Bartholomew's Hospital.

W. B. CLOSE, C.U.B.C.

G. ACTON DAVIS, Acting Treasurer to St. Bartholomew's Hospital.

J. H. GIBBON, C.U.B.C.

W. P. HERRINGHAM, Senior Physician to St. Bartholomew's Hospital.

R. C. LEHMANN, C.U.B.C.

HOWARD MARSH, Professor of Surgery, Cambridge.

S. D. MUTTLEBURY, C.U.B.C.

GUY NICKALLS, O.U.B.C.

G. D. ROWE, O.U.B.C.

H. T. STEWARD, Leander Club.

Please add my name to the List of Subscribers to the ETHERINGTON SMITH MEMORIAL FUND. Enclosed I send for £ : :

Name

Address

Date

To Dr. T. W. SHORE,
Dean's Office,
St. Bartholomew's Hospital, E.C.

St. Bartholomew's Hospital



JOURNAL.

Vol. XX.—No. 9.]

JUNE, 1913.

[PRICE SIXPENCE.]

St. Bartholomew's Hospital Journal,

JUNE 1st, 1913.

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

Calendar.

Tues.,	June	3.—	Dr. Herringham and Sir Anthony Bowlby on duty.
Thurs.,	"	5.—	Abernethian Society. Mid-Sessional Address , by Mr. Lockwood.
Fri.,	"	6.—	Dr. Tooth and Mr. D'Arcy Power on duty.
Sat.,	"	7.—	Applications for Lawrence Scholarship to be sent in. St. Bartholomew's Hospital Athletic Sports at Winchmore Hill.
Mon.,	"	9.—	Examination for Matriculation (London) begins.
Tues.,	"	10.—	Dr. Garrod and Mr. Waring on duty.
Fri.,	"	13.—	Dr. Calvert and Mr. McAdam Eccles on duty.
Mon.,	"	16.—	First, Second, and Third Examinations for M.B. (Camb.) begin.
Tues.,	"	17.—	Examination for Part II of Third M.B. (Camb.) begins. Dr. Morley Fletcher and Mr. Bailey on duty.
Wed.,	"	18.—	First and Second Examinations for M.B. (Oxford) begin.
Fri.,	"	20.—	Dr. Herringham and Sir Anthony Bowlby on duty.
Tues.,	"	24.—	Midsummer Day. Cambridge Easter Term ends. Dr. Tooth and Mr. D'Arcy Power on duty.
Thurs.,	"	26.—	Second Examination Conjoint Board begins.
Fri.,	"	27.—	Examination for Shuter Scholarship begins. Dr. Garrod and Mr. Waring on duty.
Tues.,	July	1.—	Dr. Calvert and Mr. McAdam Eccles on duty.

Editorial Notes.

BY the time that these pages meet the public eye May will be out, but, notwithstanding the fact that at the moment of writing it is still with us, we have, contrary to all proverbial advice, cast several clouts, and are engaged in maintaining existence mainly on a fluid diet, in the midst of a meteorological hyperpyrexia.

View Day, which was fortunately fine, took place on May 14th with time-honoured ceremony, the place of the Treasurer, Lord Sandhurst, being taken by the Acting-Treasurer, Mr. Acton Davis. The usual series of questions were followed by the usual answers, with the exception of the Steward's invitation to the patients to address the Governors, which was met with the usual silence, and the usual cheery optimism touching the "probable duration of stay" was shown. We wonder whether any of the numerous visitors took away any of that nice, new green paint on the seats in the Square; there were one or two patches where we obtained definite "pitting," if not fluctuation.

* * *

We have received a copy of the Treasurer's Report for 1912. It shows that the financial position of the Hospital is more favourable than it was a year ago, this fact being largely due to the success of the recent appeal, which produced £21,612 in donations and £5835 in annual subscriptions, very substantially reducing the Hospital's debt to the Bank. No statistics are yet available as to the effect which the National Insurance Act has had on the Hospital expenditure. The report also contains the text of the petition to the King for a charter of incorporation of the Medical School of the Hospital. The petition was the result of the decision of the Governors and Staff that it would be in the best interests of the Medical School that it should be constituted as a separate collegiate corporation, with regulations and provisions for its government.

* * *

Dr. A. E. Garrod, F.R.S., has been elected a member of the Board of the Faculty of Medicine of Oxford University. He has our sincere congratulations.

We heartily congratulate Dr. Langdon Brown and Dr. Thursfield on being appointed Assistant Physicians to the Hospital; Dr. Williamson on his appointment to the post of Physician-Accoucheur with charge of out-patients; and Dr. Barris to that of Assistant Physician-Accoucheur.

We also offer our hearty congratulations to Mr. Girling Ball, F.R.C.S., on his appointment as Assistant Surgeon to the Hospital, and also as Warden of the College.

We regret to note that certain of our subscribers are considerably in arrears with their subscriptions, and we should like to take this opportunity of again reminding them of this. Several circulars have already been sent out, and if subscribers no longer wish to continue their subscriptions, we should at least be glad of the courtesy of a postcard to say so, as the matter is now causing considerable inconvenience.

We have recently received a letter from an old Bart's man in practice near London suggesting the monthly publication in our pages of a time-table showing the times of attendance of the various members of the staff at the Hospital, and the hours at which the various special departments receive out-patients, so that practitioners who wish to send cases up to the Hospital to be seen by any one member of the staff, or to attend some special department, may have some means of knowing the correct time and day. We hope to be able to include such a list in our next issue, and although it may not be possible to repeat it in every number we shall probably be able to publish it at regular intervals, or whenever there have been any changes in the time-table.

The Annual Athletic Sports will take place at Winchmore Hill on Saturday, June 7th. It is hoped that as many Hospital men as possible will enter, and that the rest will be present.

We have been asked to announce that the Past *v.* Present cricket match has been postponed until July 2nd, owing to the number of players being engaged in the Cambridge Final Examination on June 18th.

Any old Bart's men who wish to play are requested to send their names to H. E. G. Boyle, Esq., 16, Upper Wimpole Street, W.

It is proposed to hold a summer concert this year; it will probably take place in the last week of July.

The Midsummer Address of the Abernethian Society will be given by Mr. C. B. Lockwood, F.R.C.S., in the

Medical and Surgical Theatre, on Thursday, June 5th, at 8.30; the subject will be, "Some Things Surgical within our Control."

We wish particularly to draw our readers' attention to the leaflet included with this number of the Journal, relating to the Etherington-Smith memorial. The form which it has been proposed that this should take is the provision and endowment of sick quarters for the medical, surgical and resident staff of the Hospital, and also the provision of a suitable memorial at Cambridge. For further facts we refer our readers to the leaflet in question.

It is hoped that a sum of about £3000 will be realised.

The Prophylaxis of the Vicious Circle.

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THE establishment of a vicious circle constitutes one of the gravest complications with which the physician has to deal. The injurious influence may operate in three directions:

- I. The aggravation of disease.
- II. The destruction of organs.
- III. The termination of life.

It will be interesting to consider some examples of these three forms of injury as a preliminary to a study of the prophylaxis.

I. THE AGGRAVATION OF DISEASE.

One of the commonest maladies in which the aggravating effect of the circle may be observed is neurasthenia, with its self-perpetuating tangle of psychological and physical correlations:

"Many of the components of the vicious circle formed act directly as factors in keeping up the condition—for instance, the insomnia, the constipation, the atonic dyspepsia, the disturbance of the genital functions" (1).

Neurotic dyspepsia, one of the most obstinate manifestations of neurasthenia, will serve as an illustration:

"The influence exerted by the nervous system on all the functions of the stomach has been frequently alluded to. But in neurasthenia the opposite relation holds good, and by a vicious circle which perpetuates and aggravates all such disorders, the stomach reacts on the central nervous system" (2).

Ectropion, associated with eczema of the lower cheek, is another common disorder which is perpetuated by a circle. The disorder may originate in epiphora, which leads to maceration and contraction of the skin of the lower lid. The contraction draws down the eyelid, everts the punctum and thus perpetuates the epiphora:

"The skin, incessantly irritated by the tears flowing over it, contracts more and more, thus establishing a vicious circle which ends in ectropion" (3).

Another illustration is supplied by an attack of oxyurias in children. With this parasitic disease, if measures are taken to prevent fresh infection, recovery may be looked for in from four to six weeks (4). By that time all the ova swallowed on a particular date will have developed into worms and been evacuated *per vias naturales*. There is, however, a risk of the worms crawling out of the anus, setting up irritation, and thus causing the infected child to scratch itself. Fresh ova are thus continually transferred from anus to mouth, and as a result of this circle the stock of parasites may be constantly renewed and prolong the disorder for years.

Incessant irritation is one of the chief causes of the aggravation of crural ulcers. The disorder begins with inflammation and iritability of varicose veins, which lead to scratching, excoriations, hæmorrhages and increased inflammation. The result is a most obstinate lesion, which has indeed been termed the *opprobrium medicinae*.

In the words of Kaposi: "Since the inflammation again tends to maintain and increase the ulceration, we have here an endless *circulus vitiosus*" (5).

Retroversion of the gravid uterus associated with retention of urine owes its maintenance to the action of a circle. The displacement may originate with an unusually distended bladder tilting the uterus back into Douglas's pouch. As a result of this retroversion the cervix presses upon the urethra and produces total retention. Cause and effect thus perpetuate each other.

As Pouliot says: "The retroversion, when once complete, causes such retention of urine as in most cases to establish a vicious circle. The distended bladder pushes the uterus further back. The uterus, being tilted into Douglas's pouch, prevents micturition, and the circle can only be broken by an artificial evacuation of the bladder" (6).

These few examples (7) must suffice to establish our first proposition that circles play a great rôle in the aggravation of morbid processes. The condition is one which *vires acquirit eundo*.

II. THE DESTRUCTION OF ORGANS.

The total destruction of an organ is by no means an unusual result of the circle. Illustrations are often met with in the case of a viscus containing a calculus. Renal lithiasis will serve as a type.

A small aseptic renal calculus may cause but little irritation beyond some hyperæmia and an increased deposit of mucus and salts. Such increase leads to a slow growth of the calculus by the addition of smooth layers of lithic acid which perpetuate the irritation. As a rule, however, the calculus sooner or later provokes active irritation; infective processes supervene; abundance of organic matter is excreted and copious deposits of urates are formed. More or less of urinary stasis is also present. In consequence of these cumulative factors the calculus steadily enlarges and often assumes a rough surface and an angular shape. Hence results more active irritation culminating in calculous pyelitis, with its virulent interactions between calculus and kidney.

The condition has been described by Morris:

"The relation between renal calculi and pyonephrosis is a double one. On the one hand the calculus may be, and frequently is, the cause of the pyonephrosis, but, on the other hand, it may be secondary and arise from the phosphatic deposits of the alkaline urine in the renal cavity" (8).

These irritative processes set up grave changes in both the medullary and cortical tissues of the kidney. Sclerosis, sacculation and destruction steadily progress until at last nothing remains but a shrunken mass of tissue—a mere relic of the original organ.

Similar destructive processes *mutatis mutandis* occur in other organs liable to calculous deposits. Such is the genesis of calculous cystitis, calculous cholecystitis, calculous appendicitis, etc. In all these cases morbid correlations may be established which convert a healthy into a useless organ, which often becomes a source of great danger to the organism.

A second group of destructive circles may be associated with stenosis of efferent ducts and the retention of irritant secretions. The process may be illustrated by purulent otitis media, a disorder which often originates with a simple catarrh, which spreads from the naso-pharynx, and becomes purulent through infection. The associated irritation leads to Eustachian obstruction, to impeded exit, to progressive decomposition and irritation until the tympanum becomes a closed cavity with putrefying contents, which again react on the mucosa.

The destruction of ciliated epithelium by the pus sets up other injurious correlations. During health the movements of the cilia are directed towards the pharynx and assist in clearing the tympanum of epithelial or other detritus. Retained pus, however, destroys this epithelium and

abolishes Nature's scavenging mechanism. Retention thus leads to retention.

Again, the accumulation in the tympanum of inflammatory products exerts pressure on the superficial veins and lymphatics, and thus blocks the natural channels of absorption. Such closure leads to increased accumulation and increased pressure. As a result of all these cumulative factors the middle ear may become filled with putrefying pus, with injurious reciprocity between it and the mucosa. Complete loss of hearing results; in fact, the ear becomes useless and even a source of danger.

Appendicitis presents another common example of these pathological sequences. An appendix is liable to inflame when it has difficulty in discharging its secretions. The retention causes inflammation and stenosis, as a result of which more mucus and bacteria accumulate in the cavity, thus setting up increased inflammation and frequently leading to complete closure of the lumen. The organ may eventually be completely destroyed, and involve grave risk unless removed.

A remarkable example of the destruction of an organ may occur in connection with the brain as a result of chronic hydrocephalus. During health the cerebro-spinal fluid is continually being secreted into the ventricles by the choroid plexus. Thence it escapes into the subarachnoid space by the foramina of Magendie and Luschka (9), the processes of secretion and absorption being adjusted by a self-regulating mechanism.

Various morbid processes, however, such as the deposit of lymph or a new growth, may cause sometimes hypersecretion, and sometimes obstruction in the communicating passages, resulting in an accumulation of fluid in the ventricles. These dilated ventricles may so displace the adjacent parts as to increase the obstruction to which the accumulation of fluid was primarily due. For example, the cerebellum and medulla may be pressed down into the foramen magnum so as to plug that aperture. Such plugging, in turn, increases the accumulation in the ventricles and aggravates the condition. This circle has been described by Taylor:

"Such obstruction alone is doubtless sufficient to produce distension of the ventricles, which in its turn increases the obstruction by further forcing down the plug into the foramen magnum, and it may be said that from this cause hydrocephalus is self-perpetuating" (10).

Or the dilated ventricles (by compressing the membranes of the nerve-roots) may close both lymphatics and veins, which closure in its turn leads to a greater accumulation of fluid (11).

The accumulation of fluid thus brought about as a result of a circle may lead to disastrous consequences, especially in early life, before the sutures have ossified and while the skull and membranes are still yielding. For the

pressure of the fluid stretches the cranial walls and renders them thin and weak, the result being further stretching. Moreover, since tension increases with vascular calibre, the enlarging cavity and the tension reciprocally aggravate each other. Very striking are the associated changes in the brain. The cerebral tissue becomes compressed and thinned owing to the pressure, and eventually may be reduced to a layer only a few mm. thick. All trace of convolutions may be lost, and in the worst cases even the basal ganglia are almost unrecognisable. Mental faculties are largely abolished.

Gonorrhæal ophthalmia may also give rise to destructive changes owing to the action of a circle.

The acute keratitis so often provoked by the virus leads to photophobia and blepharospasm, which cause the irritant secretions to be pent up, sometimes under considerable pressure. The retained secretions in their turn irritate the cornea, and thus perpetuate the blepharospasm and retention. The cornea may undergo extensive ulceration followed by perforation, incarceration of the iris, cicatrization and opacity.

The diminished resistance of the cicatricial tissue now gives rise to a second circle. The cornea bulges, leading to narrowing of the filtration angle and to a rise of intra-ocular pressure. The increased pressure in its turn drives the wall of the staphyloma still further out, and at the same time renders it thinner. The result is disastrous; the eyeball may rupture and atrophy, resulting in total blindness.

III. THE TERMINATION OF LIFE.

The worst result of reciprocally acting morbid correlations is the termination of life. "The wheel is come full circle" (12).

A striking example is met with in apoplexy. Under ordinary conditions the blood-pressure in the cerebral arteries is considerably higher than the intracranial pressure, this being about equal to venous pressure. Cerebral hæmorrhage, however, raises the intracranial pressure to a level approximating to arterial pressure, and in doing so squeezes the blood out of the vaso-motor centres. In their urgent need for blood these centres respond by a tremendous splanchnic vaso-motor constriction, the purpose of which is to force blood to the anæmic centres.

The irony of the situation thus produced is that the increased pressure, although conservative in purpose, is apt to prove destructive by starting the hæmorrhage afresh. A further increase of intracranial pressure then results, and the whole sequence is repeated.

Janeway thus alludes to the circle:

"The rise in blood-pressure during acute cerebral compression is absolutely essential to the preservation of life. On the other hand . . . where the cause of the increased intracranial tension is a hæmorrhage,

the hypertension augments it, so that a vicious circle is established" (13).

The abnormal pressure sometimes causes sudden death by paralysing the cardiac and respiratory centres in the medulla.

If, however, the patient escapes this immediate danger another peril lies ahead. For the over-taxed vaso-motor centre soon gets exhausted and loses its grasp over the splanchnic area, which fills with blood. Hence results cerebral and cardiac anæmia, which leads to further exhaustion of the centre and frequently proves fatal.

To quote Janeway again:

"Complete loss of vaso-motor tone soon leads to death, because the ventricles discharge their contents into the flaccid arteries and receive less and less blood from the relaxed veins. The diminished energy of contraction with diminished ventricular contents completes the vicious circle" (14).

A somewhat similar circle frequently proves fatal in cases of purulent meningitis. The amount of cerebro-spinal fluid is there enormously increased as a result of the bacterial infection of the pia and arachnoid membranes. At the same time the natural channels of absorption are liable to be compressed or blocked owing to the increased pressure or to deposits of fibrin. A further accumulation of fluid then results, and the pressure may rise from the normal of 20-30 mm. Hg. to 150 mm. or even more. The result is a progressive anæmia of the brain and a fatal paralysis of vital nerve centres.

As Milligan says:

"The fatal issue is not due so much to the presence of sepsis as to the direct mechanical effects of increased intracranial pressure" (15).

Another example of a fatal circle may occur in cases of emphysema with perforation into the respiratory passages. For the resulting cough gives rise to an expiratory rise of blood-pressure and a more rapid escape of pus, and *vice versa*.

In severe cases the victim may be choked by pus. "The more the patient coughs, the more profusely the pus streams into the bronchi as a result of the expiratory rise in pressure, and such a vicious circle can only end in death" (16).

An interesting example of two consecutive circles which often prove fatal is presented by tracheal stenosis due to goitre and secondary asphyxia.

When a goitre compresses the trachea and narrows its lumen, any casual effort with its extra requirement of oxygen may call the supplementary respiratory muscles into action with a view to supplying the deficiency. But unfortunately these muscles, as they contract, press the hypertrophied thyroid still further against the trachea, thus diminishing, instead of increasing, the supply of oxygen. The result is still more vigorous muscular action leading to a most urgent dyspnoea and completing the first circle.

A second circle now begins as a result of the obstructed respiratory exchange.

As the venosity of the blood increases, respiratory movements grow more vigorous, blood-pressure rises, and the heart is slowed by the cardio-inhibitory centres in the medulla. Owing to the increased pulmonary obstruction *a fronte*, and the increased supply of blood *a tergo* (due to inspiratory suction movements), the right heart becomes gorged with blood, and eventually dilated and paralysed. This, in turn, leads to further venosity, which poisons the myocardium and tends to further dilatation, until at length the right auricle and ventricle lose all power of contracting.

A similar process also involves the left side; but the progressive and dangerous dilatation of the right side plays the chief rôle, and contributes mainly to the fatal exitus.

Fatal circles are commonly associated with heart disease. Thus we may have one circle involving the heart, and another involving all the great viscera.

The first arises from the fact that the cardiac nutrition is dependent on the cardiac activity, the heart being one of the self-dependent organs of the body. Weakening of the myocardium weakens the coronary circulation, and *vice versa*, and this circle may cause speedy death.

In other cases the failure results from the general venous stasis so common in heart-failure, with its interference with the processes of digestion, sanguification and elimination. The unfortunate myocardium, already embarrassed in its, so to speak, home relations, becomes equally so in its foreign relations. It becomes poisoned by the products of imperfect metabolism, which sap its nutrition and intensify its weakness. Life hangs by a thread which may snap at any moment.

A dangerous circle, often proving lethal, may complicate attacks of toxæmia associated with acute nephritis. The great function of the kidneys is to drain the body of waste products and any toxic matters that may be formed when the body is attacked by disease.

In some attacks of toxæmia, however, the toxins impair the efficiency of this excretory apparatus, and thus cut off their means of escape. The greater the virulence of the toxin, the less may the emunctory be able to get rid of it.

In the words of Adams:

"In this way a vicious circle is set up, as a result of which the condition of the patient goes rapidly from bad to worse" (17).

The fatal issue of toxæmia is frequently due to this circle.

PROPHYLAXIS.

What can be done to avert such a dire calamity as the establishment of a circle?

The first requisite is an intimate acquaintance with the principle of the circle as a pathological process and a

knowledge of its operation in individual disorders. To be forewarned is to be forearmed.

It is a good plan to analyse each circle into its constituent factors, to disentangle, so to speak, the primary lesion *A* from its effects *B* and to study the reaction of *B* on *A*. If this is done, it will frequently be found possible to avert the secondary condition which, when established, will perpetuate and aggravate the first. The development of the circle can then be checked *ab initio*.

The following are a few typical disorders which are liable to be complicated by circles. As the component factors have been described elsewhere (18), it will suffice to enumerate the secondary effects which, if dealt with, will cut short the reciprocally acting process:

Obesity	Insufficient exercise.
Dental caries	Oral sepsis.
Oxyurides	Transference of ova to mouth.
Epiphora	Constant wetting of the cheek.
Eczema	Scratching.
Nasal obstruction	Mouth-breathing.
Impetigo	Auto-inoculation.
Laryngitis	Excessive cough.
Myopia	Undue convergence.
Constipation	Fæcal stasis.
Accumulation of smegma	Balano-posthitis.

In all these cases the prophylaxis of the circle is obvious when once its *modus operandi* is understood.

In another group of cases the prophylactic measures belong to the realm of surgery. The following are a few common examples:

Nephrolithiasis	Growth of calculus.
Otitis media	Accumulation of pus.
Goitre	Stenosis of trachea.
Empyema	Blockage of efferent lymphatics.
Strangulated hernia	Vomiting.
Ascites	Pressure on renal veins.

Early treatment is important in every department of medicine. But it is more important than ever where the establishment of a circle is threatened, since it often presents the only opportunity of wholly eliminating the secondary condition on which the self-perpetuating and self-aggravating process of the circle depends.

Never to be forgotten is the famous aphorism of Ovid: *Principiis obsta*.

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- (12) *King Lear*, V, iii, 174.
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With the Red Crescent at Scutari.

Being the experiences of three Bart.'s men during the siege of Scutari (Albania).

ON October 21st, a few days after the declaration of war by Montenegro against Turkey, I left Victoria for Scutari with Dr. S. M. Hattersley and Mr. G. S. Stathers. We took out two complete field hospitals, which were similar in every way to those of our own R.A.M.C., and were sent out by the Ottoman Red Crescent Society.

Hattersley and Stathers remained for a few days at Trieste, to await the hospital stores which were travelling by "*petit vitesse*," while I went on at once to St. Giovanni di Medua (the port of Scutari) to arrange transport for them. I reached Medua on the 26th, and spent the day smoking cigarettes, drinking Turkish coffee, and speaking bad French with the Turkish officer in charge of the place, which consists of seven houses.

The next day I went on to Scutari in a carriage over twenty miles of the most awful road, escorted by two mounted gendarmes. During the drive I saw nothing of the enemy, but heard the guns at Tarabosh firing at intervals. On arriving I at once paid my respects to the Vali and Commandant, Hassan Riza Bey, and was then directed to the Turkish Military Hospital, where for the first time I saw cases of bullet-wounds arriving.

On October 29th I was awakened at 7 a.m. by heavy rifle fire towards Bardanjolt, about two miles to the north-east of the town. I went out with my servant to see what was going on; on approaching, my servant developed a convenient attack of abdominal pain and would go no further. I pushed on alone but could see neither the enemy's position, nor our own. In crossing a valley I suddenly found myself exposed to a nasty rifle fire, and after several bullets had struck within five yards of me I thought discretion better than valour and ignominiously took cover behind a big rock. After a bit I found some Turkish doctors who were waiting for wounded in rear of

the firing, which was very heavy, and I afterwards went back to the town and helped the Turkish doctors to dress some 200 wounded who had arrived. The confusion, shouting and gesticulations were something wonderful. This first battle of Bardanjolt resulted in the enemy being pushed back from their positions with considerable loss.

On November 2nd Hattersley and Stathers arrived at Medua, but owing to fighting along the road they did not reach Scutari till the 8th, after a very cold and miserable journey with pack horses and on short rations. The last of the hospital stores arrived in Scutari on November 10th by bullock carts.

About November 12th the road was finally shut by the enemy, and from this date till April 23rd we got no authentic news of the outside world, with the exception of three or four Italian newspapers which were smuggled through, concealed in the sole of an Albanian peasant's boot.

We established our hospital in two school-houses and put up 100 beds on trestles. The Turkish military hospital was in a big building which was in course of erection as the Town Hall. If it were not for this building, which held 500 beds, there would have been no place suitable for a big hospital.

On the afternoon of November 13th the Mussulman quarter of the town was bombarded for a couple of hours from the direction of Vraka, which lay to the north-west. We got about 100 shells, but they were not large, and the damage was slight. We also received our first patient, a small boy with his foot very badly lacerated by a fragment of shell. Soon after this we took up our quarters in a house belonging to an Englishman, who had not lived there for fifteen years. He very kindly put his house at the disposal of our society, and we were very comfortable there.

Until the beginning of February things were very slack, and except for a couple of alarms at night, and an occasional shelling of the trenches, there was little fighting. As we found out afterwards this was on account of the armistice, but at the time we heard only rumours of it, and did not believe in its existence. During this period we never had more than twenty cases in our hospital, although we were always worrying the authorities to send us more.

The Governor and Commandant was Hassan Riza Bey, a Turk, who was reputed to be a good soldier and a brave man; he had received his military training in Germany. Essad Pasha was the second in command, and was the chief of the Albanian troops. He had had no military training whatever and had not a high reputation for courage. He was not a Turk, but an Albanian.

The garrison consisted of about 5000 Turkish regulars and 15,000 Albanian troops, reservists and irregulars.

The enemy comprised some 40,000 Montenegrins and 20,000 Serbs.

Hassan Riza Bey and Essad Pasha were always on bad

terms, the former wishing to hold out to the last, and the latter wanting to surrender. When, however, news came that Albania was to be given autonomy these two changed their views. Hassan Riza saw it was useless to hold Albania for Turkey, and Essad Pasha wanted to keep the Montenegrins out of the autonomous Albania. On January 30th, while having tea, just after dusk, we heard three rifle shots close to our house, and learned later that Hassan Riza Bey had been murdered. He had visited Essad Pasha and had left the house to walk across the square to his own house about fifty yards away. Half-way across the square he was shot from behind, the bullet piercing his abdomen. He died about 2 a.m.

During this slack period we naturally had not much to do, and the time passed rather slowly. In the afternoon we usually went for a walk. Being in uniform we were allowed to go out of the town, and we generally visited Bardanjolt and often sat in the trenches and watched the men sniping. Sometimes the bullets came rather closer than we liked; they make a noise like a particularly vicious bee.

The Turkish doctors apparently were very jealous of us, and, though exceedingly polite when we met them, they spread evil reports behind our backs. They said at first that we were not doctors at all, but politicians in disguise; afterwards they said we were doctors, but that we were quite useless and knew nothing. We did not form a high opinion of them as surgeons. In doing any operation, such as an amputation, they poured large quantities of tinct. iodi (10 per cent. and 90 per cent. alcohol) into the wound, which they sewed up to a very slight extent. The result was sloughing of the tissues and sepsis, which they said was due to the tinct. iodi not being strong enough.

On February 7th the big attack began, and lasted till the evening of the 9th. We were awakened at 6 a.m. on the 7th by furious rifle and shell fire from all the positions; a good many shells were fired into the town, and while we were at the hospital in the morning a shell struck the lavatories but failed to explode. As all the wounded were being sent to the Turkish Hospital we walked out north in the afternoon, but owing to the total absence of cover it was impossible to get near the trenches. We stayed with two guns and had a good view of the shell fire. On the way back we were apparently seen by the enemy, for they sent us three shrapnel. The first two went over our heads, and the third burst in front of us, throwing bullets and fragments all around us.

The firing was practically continuous day and night for sixty hours. At 4 p.m. on the 8th the military hospital was full, and they began to send us all the wounded. By midnight we were full up, and had made room on the floors; we took in about 160 wounded, and were hard at it with the dressings. Next day we sent out the less serious cases, and filled up again with the worse ones. From this

date till the end our hospital was practically full. We were greatly handicapped by want of fuel for heating water and paraffin for the lamps, etc. The authorities had taken all these necessities, and it was very difficult to persuade them to give us anything. Under these circumstances, and with the rush of wounded, it was impossible to think of doing any serious operation, such as a laparotomy. Indeed, such operations were seldom indicated, as the "wait and see" method seems to be always the best with gunshot wounds, with the sole exception of cases of hæmorrhage. Many a case in which we would have amputated immediately in our ignorance, had we had time, eventually healed up and left a quite useful limb.

We were also much handicapped by lack of skilled nursing. The Albanian attendants were ignorant and lazy to a degree. I found one man with a large piece of omentum protruding; I removed it and sewed him up, leaving a drain. The same evening I found him walking about the passage. He eventually died of bronchitis and bed-sores. A few Bart.'s nurses would have been worth their weight in gold, or radium.

The wounded were wonderfully plucky. Many of them had neither eaten nor slept for three days, and we could get no rations for them except our own store of condensed milk. They went to sleep immediately they got to bed, being quite worn out.

The result of the three days' fighting was that the enemy took the highest part of Bardanjolt and advanced a considerable distance on Tarabosh. The Servians at Brdica were repulsed with heavy loss. We lost about 2500 wounded and the enemy double this number. I do not know the number of dead.

From February 7th to March 19th the town was bombarded practically every night. They fired as a rule one shell every quarter of an hour or every half hour. On February 27th they started sending us 8-in. shells, which did a lot of damage, knocking a house to bits when they hit it—"Long Tom" at Ladysmith was only a 6-in.)

When we were busy at the hospital we did not mind the shells much, but they were distinctly unpleasant when we were reading or in bed. We could hear them sighing and whistling along for some twenty seconds before they arrived.

On March 12th and 13th we had a really hot bombardment by day. During these two days they sent about 3000 shells into the town, and we had a very unpleasant time walking to and from the hospital, as the shrapnel were bursting everywhere. One shell found its way into our operating room. Altogether our hospital was lit three times, and our house once (in the kitchen). We had also three 8-in. and one 6-in. shell in our garden. We had nine 8-in. shells within fifty yards of our house, to say nothing of the smaller ones.

Towards the end we were on rather short rations. For

six weeks we lived on a little semi-cold mousy rice and a very small piece of extremely tough meat twice a day. We also had two very small loaves of "bread" made out of rice, beans, maize, and goodness knows what else. We were able to buy some cocoa and tea.

The authorities took over all the sheep and cattle, and at the end of the siege they still had a fair number of sheep left. But they gave them out to the troops very sparingly, and gave none to the inhabitants. We had considerable friction with the authorities. We found it quite impossible to get paid for the expenses of the journey; and although, according to our agreement, I was engaged as "principal surgeon" to our hospital, they insisted, in spite of our protests, in placing a Turkish doctor over me. When our agreement terminated on April 11th we ceased work, and on the 19th we received a letter from the principal medical officer giving us "the sack"—this after the term of our agreement had expired!

We were all very disappointed with the surgery of gunshot wounds, and all decided that we would never go into the R.A.M.C. or I.M.S. Very few of the cases needed a major operation, and owing to our very primitive means of sterilisation, etc., we did not feel justified in embarking on any operation that was not absolutely necessary. The majority of wounds caused by the small-bore bullets healed up by first intention, including those through the thorax. A few perforating wounds of the abdomen got well without any symptoms of peritonitis, the only treatment being "nil by mouth." Of bullet-wounds of the brain some cases recovered without symptoms, others with varying degrees of paralysis and aphasia. Some died with hernia cerebri and meningo-encephalitis.

Practically all cases of wounds by shrapnel bullets and fragments of shell were septic. We found the best irrigating fluid to be tinct. iodi, about two drachms to a pint; it cleared up the septic wounds far better than any other antiseptic. Our principal operations were four amputations, one ligation of the femoral artery, one suprapubic cystostomy for calculus. We also revelled in ligaturing weird arteries, such as the superior profunda and dorsalis pedis, for which no directions were to be found in our *Manual of Operative Surgery*! We also got more than enough "Coborn surgery," and became quite expert at retrieving shrapnel bullets from the most unlikely places.

April 20th was Palm Sunday for the orthodox Montenegrins, and it is their custom to fire off their rifles and pistols during mass hour. This year, however, they thought it would be better fun to shell Scutari, so, after a month of quiet in the town we suddenly received some fifty 8-in. shells. After one had carried away a long stretch of our garden wall we concluded that, as we were no longer working, it was a suitable time to go for a country walk! During the night of April 21st they sent a lot of shrapnel into the town, and next day we heard that the place had

surrendered, the Turks to march out with all the honours of war.

On the 23rd we had a visit from a Swiss Red Cross party, who had been with the enemy at Bocksi. On the 24th we paid them a return visit; they gave us a huge meal—bread, butter, jam, sardines, cocoa, etc. Stathers and I afterwards climbed Tarabosh and examined the various positions there; then, hearing that there were English doctors at Zogai, we went on there and found Dr. Goldsmith. Being dead tired after a twenty-mile walk in the hot sun we stayed there for the night and returned next morning in time to see the state-entry of the Montenegrins, and the formalities of the handing-over of the town, of which I got some good photographs. I was anxious to get the photographs home quickly to the newspapers, and seeing a stir in Prince Danilo's steamer we pulled out to her and asked if they would take us up the lake. They said they would be delighted to do so, and we had just time to pack up our things in a hurry. Hattersley had gone off with some others to see some of the enemy's positions, so with some qualms of conscience we left him behind. Prince Danilo and Prince Peter were most kind to us during our journey up the lake; they chatted to us all the way about our experiences inside the town, and best of all they gave us a most splendid supper and opened numerous bottles of champagne. We left *Virbazaar* at midnight and drove through beautiful mountain scenery with a fine moon till 9 a.m., when we reached Cetinje and found some letters awaiting us. After a few hours' delay we continued our drive and reached Cattaro about 9 p.m. Next morning we took an Austrian Lloyd boat to Trieste and found ourselves back in civilisation, somewhat thin, but in excellent health.

E. N. RUSSELL.

The Intra-tracheal Insufflation of Ether for Intra-thoracic Operations.

By H. EDMUND G. BOYLE, M.R.C.S., L.R.C.P.,
Assistant Anæsthetist to St. Bartholomew's Hospital.

AMONGST the recent advances that have been made in anæsthetics the intra-tracheal insufflation of ether fills a long-felt want. In the past surgeons were loth to attempt operations which entailed free opening of both pleural cavities, for fear of double pneumo-thorax, and probably death of the patient, and so these operations were left to those men who were able to use pressure cabinets. But thanks to the work of Meltzer, Auer and Elsberg these cabinets can now be dispensed with, and a safe and satisfactory anæsthesia obtained for intra-thoracic operations, by means of the intra-tracheal insufflation of ether. It has been proved, not only by experiments

on dogs but also in operation on the human subject, that it is possible to maintain respiration without respiratory movement by blowing a continuous stream of air into the trachea at or about its bifurcation; and it has also been proved that it is possible to open both pleural cavities widely, and to maintain life under a safe and satisfactory form of anæsthesia, by blowing in air laden with ether vapour.

The essential features of this method of anæsthesia are:

(1) The passage of a tube down the trachea to a point at or about its bifurcation.

(2) The blowing in of air laden with ether vapour at varying pressures according to the necessities of the case.

Meltzer and Auer state that the size of the tube should be two thirds the lumen of the trachea, and that if this tube is either too wide or too narrow, the lungs easily acquire a slightly cyanotic appearance. This condition, however, can easily be rectified by discontinuing the pressure for a few seconds, which allows of a momentary collapse of the lungs, and restores at once the pink colour. Meltzer and Auer give three essential factors:

(1) The lungs are kept in a continuous respiratory state of distension, which facilitates the exchange of gases.

(2) The fresh air reaches the lowest part of the trachea.

(3) The air escapes by another path (although also through the trachea) than by the one it enters.

This third point Meltzer and Auer lay stress on, since they were the first to use this particular method, and they quote Nagel as having in 1900 maintained the life of curarised pigeons by sending a continuous stream of air through the humerus, which in birds is connected with the air-sacs. In Nagel's birds the air entered at the humerus and left through the trachea.

Dr. Chas. A. Elsberg, of New York, appears to have been the first to apply the results obtained from Meltzer's experimental work on animals to man, and he has produced an apparatus for the intra-tracheal insufflation of ether for operations on the human subject.

Elsberg's apparatus, however, is rather large and complicated, and after seeing it, I determined to devise something simpler and more portable. With the assistance of Mr. Geo. E. Gask—who originally started me on this work—the apparatus that is here portrayed was designed, and it was made for us by Messrs. Mayer & Meltzer.

The apparatus.—Air is driven by means of the bellows *A* through the tap *B* into the larger bottle *C*, which contains hot water, then on through the tap *E* over the surface of the ether in the smaller bottle, and so on through *E*₁ to the catheter *F*. *E*₁ is a reserve tap for oxygen if necessary.

When it is desired to administer air free from ether vapour *E* and *E*₁ are turned off and *G* is turned on.

The manometer *D* shows the pressure under which the air is being driven into the trachea. The catheter is a gum-elastic railroad, size 8-10, according to the case.

The method of administration is as follows: The patient is first anaesthetised with gas and ether, and a fairly deep anaesthesia obtained. It is advisable to have a deep anaesthesia at this time, for if the anaesthesia be "light" the insertion of the catheter into the larynx at any time difficult—becomes well-nigh impossible. The catheter is now passed into the trachea for a distance, in an adult, from the teeth of about 26 cm., the distal end being then at or about the bifurcation of the trachea. Until the administrator has had some practice at passing the catheter, and has become skilled in the procedure, it will be as well to have the anaesthesia maintained with a Junker's inhaler worked by an assistant, as otherwise the patient will probably regain consciousness before the catheter is inserted.

There are various methods of inserting the catheter. Some men advocate the use of direct laryngoscopy, others have specially shaped introduction forceps; but with a little practice one can direct the end of the catheter through the vocal cords with the index finger passed over the epiglottis.

Up to the present the passing of the catheter has been my chief difficulty, but I am convinced that it is merely a matter of practice, for on the occasions when I have used this method on Mr. Harmer's cases, or have been able to obtain his help, I have noticed that he slips the catheter into position with the greatest ease.

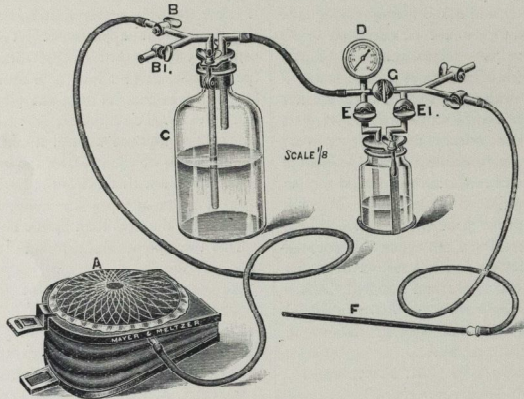
As soon as the catheter is in position the free end is attached to the exit tube of the apparatus and air laden with ether vapour is blown in at a pressure of from 5-15 mm. Hg. This is usually sufficient to maintain anaesthesia, but occasionally the pressure has to be raised to 30-40 mm.; when this is done the respiratory movements almost cease, and the lungs are held in a state of distension. When the high pressure is being employed, it is necessary every three or four minutes rapidly to reduce the pressure to zero. This is easily done by opening up the second exit tap. This manoeuvre allows the lungs to collapse momentarily, and so performs a sort of artificial respiration.

The anaesthesia is light in character, the corneal reflex is usually present, and the patient keeps a good pink colour.

Cyanosis, when it occurs, is usually due to too large a catheter.

The method appears to have the great advantage of safety, for when once it is working we have an almost perfect method of artificial respiration ready for instant use, since, by turning off the ether and blowing air into the trachea, we can aerate the lungs at will, and most effectually. The cases on which I have so far tried this method differ widely. They include a fairly extensive removal of an old empyema sinus, abscess of the lung, empyema, ovariectomy, appendicectomy, removal of breast, submucous resection of the septum nasi, the removal of goitre, cesophagoscopy for removal of an impacted tooth-plate, and others.

Although the method is mainly intended for intra-thoracic operations, I think that it may prove useful for large operations on the thyroid gland. My experience of the method in this type of case is at present limited to ten cases, but the anaesthesia has been so satisfactory that I think that the method is well worthy of a more extended trial.



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Correspondence.

To the Editor of 'The St. Bartholomew's Hospital Journal.'

DEAR SIR.—There are many old Bart.'s men among your readers who will regret the statements made in your recent editorial note with regard to the ethics of those undertaking work in connection with the National Health Insurance Act. Several, at any rate, of us have consistently from the beginning of the movement been strongly in favour of the Act, not only on account of its constructive work for curative medicine, but also for the benefits it ensures for preventative medicine; we feel that it is unnecessary for an editor or editorial committee to endeavour to influence not only the present but also the coming generation of medical men against an institution which is considered by many to be a forward step to secure the welfare of the nation.

I am, yours truly,
AUDI ALTERAM PARTEM.

Abstracts from a Report upon German and Austrian Methods in Gynecology and Obstetrics.

By J. BARRIS, M.R.C.P., F.R.C.S.

(Continued from p. 130.)

Private practice.—Only the head Professor, and sometimes the first assistants are allowed to undertake private practice. The younger men attached to the klinik are content to live on little; they have their rooms provided for them if they are real assistants, receive a small salary and may obtain the title of "privat-docent." Most of the younger men, therefore, have some private means. There is, so far as can be ascertained, no restriction upon the amount of private practice which the professor can undertake. He sees cases in consultation at his private house as a rule in the afternoon, and he may go out to any part of the town or country if required. During his absence his representative (first assistant or sub-professor) takes on his work at the klinik whether it be lecture or operation.

The organisation for doing private work is of a time-saving nature, as the Professor's house is as a rule attached to the klinik, and there is no nursing home system. Private patients are placed in a special part of the klinik itself in the first and second class beds. (Franz at Berlin is an exception to this and runs a private nursing home.)

Private cases requiring operation are operated upon by the professor in the theatre of the klinik. The professor thus has a staff experienced in his method and uses the instruments and apparatus of the klinik. The average fees are about the half of what are charged by a physician of standing in this country.

There is no need for the professor to undertake much private work outside the klinik unless he wishes, for his income is usually ample without much outside work.

FACILITIES FOR ORIGINAL RESEARCH.

The opportunities for original research are very great, and in dealing with the subject the following factors will be considered: (1) the rule of the klinik; (2) monetary aid; (3) large amount of material; (4) large number of helpers; (5) rules for the assistants; (6) treatment of patients; (7) study of current literature; (8) associated departments of the klinik; (9) examinations.

(1) *Rule of the klinik.*—The atmosphere of the klinik is that everyone is engaged in the advance of science. It is expected of every assistant, whether real or voluntary, that he shall undertake some original research. His chances of promotion and his position in the profession depend to a great extent upon the work he does.

The professor himself is often engaged in original work,

or, if not, he initiates such work, and as the whole klinik is under his sole charge he is able to correlate the various departments so that they may produce the best results. It has been objected that much of this work is of small value. But if only one gain results that is reward enough. Nature scatters much seed to produce the fruit.

(2) *Monetary aid.*—Should an assistant be engaged upon an arbeit (original research) which the professor has himself suggested, he may, though this is not easy, be able to secure, through the influence of the professor, some monetary aid for the purpose. This money is drawn from a fund which is granted to the klinik for purposes of research. The fund comes partly from the Government, but mainly from private gifts. If a man wants help from the fund he must sketch out a plan of his work, and apply to the tutor of the fund. A distribution of money is made twice a year. This organisation holds good in Berlin under the kliniks of Prof. Bumm and Prof. Franz, where actual instances of it were seen, i. e. Dr. Zinseer was granted £50 for some work he was undertaking upon eclampsia.

(3) *Amount of material.*—The number of hospitals at each town is relatively not so large as with us. Therefore there is a much larger number of beds and more material at their kliniks. This number is further augmented by the fact that the reputation of the director attracts many from the town hospitals to the university kliniks, and that private patients are included. The numbers are:

	Gynecological beds.	Obstetrical beds.	Deliveries per annum.
Bumm	75	75	3000
Franz	75	90	3500
Kehrer	60	100	3200
Wertheim	60	240	3500
Schauta	60	240	3500
Döderlein	60	250	3500
Amann	90	nil	—
Kronig	45	45	1750

When we further consider that there is only one chief instead of several members of the staff as with us, it will be seen that the amount of experience and material upon which the professor and his assistants have to draw is very large. Thus new methods of procedure and of treatment can be compared in a short space of time.

(4) *Large number of helpers.*—Besides the real assistants of the klinik there are in addition unpaid assistants who are voluntary assistants. These are composed of qualified men who work in the klinik, and also medical praktikants (students in their last year). It is the duty of these volunteers to help the assistants of the various departments under whom they work in note-taking, registration of notes, and all clerical work, dressing of patients, care of non-serious cases, or minor pathological work.

The klinik is able to attract the volunteer doctors, because after two years' work in a special klinik they may go into

practice with the title of specialist, which they put upon their name-plate. In this way they gain post-graduate experience, and also men who hope to become real assistants must usually serve for a time as volunteers.

The real assistants of the klinik are numerous; thus Bumm has 10, Franz 11, and Keller 8. The chief can, therefore, obtain a full working out of his cases from their clinical, pathological, bacteriological and chemical aspects, and in so doing he does not feel he is exacting too much from an overworked staff.

The klinik is able to attract the large number of real assistants because the assistantship serves as the stepping-stone to a professorship, and selection is made from them to vacancies at other universities. They do not therefore depend for a vacancy upon their own klinik only. They also receive a small salary (about £75 a year and their room), and they can use the material of the klinik for their arbeits (papers on original work). They receive the title of "assistant" and a further title after two years of "specialists." These are of advantage in private practice. Also they may receive the title of "Privat-docent," by which they become recognised teachers under the University.

(5) *Rules for the assistants.*—The assistants spend practically the whole of their time and energy in the service of the klinik.

Until the assistant attains the title of "Privat-docent" (a recognised teacher by the University) he is not allowed to hold coaching classes. Assistants are not allowed to engage in private practice. In some klinikens an exception is made in the case of the first assistant. Assistants must be unmarried and must live in the klinik (except first assistant).

(6) *Treatment of the patient.*—The university hospitals have the scientific spirit and have apparently as their aim that they may serve mainly as institutions for scientific advance. The patient's feelings and wishes are relegated to the second place. Before admission the patient must sign a statement that she is willing to undergo any treatment that is thought desirable.

(7) *Current literature.*—A medical journal is allotted to each assistant of the klinik and must study it and prepare abstracts. Once a week the professor meets all the assistants and hears what they have to report from these journals. The subjects are then discussed, and their discussion serves for the adoption of new ideas and methods, and acts as a stimulus for some new research.

(8) *Associated departments of the klinik.*—In Vienna, and in Berlin to a lesser extent, there is a co-operation between the klinik and other departments of the university, such as the Clinical, Physiological and Pathological Institutes. These may be referred to for advice by the klinik if the klinik is itself unable to do a special work, and no payment is required.

In Vienna it is customary to use places like the Physiological, Sero-therapathische, Chemical and Patho-

logical Institutes when the clinical material demands it, and the work cannot for some reason be done at the special pathological department of the klinik itself.

For instance, in a given case the assistant may require a Wassermann, an opsonic index, an X-ray examination, and chemical and physiological tests. He can get these made at these institutes if he wishes. The results when they come back are pasted into the history notes of the patient, and anyone may use a number of these histories as the basis of a scientific article. For clinical work these institutes are made use of in this way.

But if the assistant wishes to do purely experimental work for an "arbeits" (paper) of scientific and not clinical interest, he may still use these institutes, but it is not customary in this case. What he usually does in such a case is to obtain a vacation from the hospital management for the purpose of scientific work. These "scientific vacations" are readily granted for a month or so, and then the writer of the paper goes to the physiological or pathological institutes, etc., and does his work there.

(9) *Examinations.*—There is only one degree throughout Germany. The assistants are not obliged to spend time and energy on higher examinations in order to qualify for higher posts.

TEACHING.

The course necessary to become a medical student is as follows: Four years are spent at a preparatory school from the age of six. Then at ten he joins the "gymnasium" for a further nine years, where he may attend on either the modern or classical side. He then joins the University and becomes a medical student.

The course for qualification takes six years. The first two and a half years are spent in preparation for the first examination. This consists of anatomy, embryology, and histology (this counts five); physiology (counts two); chemistry, physics, zoology, and botany (counts one).

He must spend the next two and a half years (or five semesters) studying theoretical and clinical work in medicine, surgery, gynaecology and obstetrics, eyes, mental disease and hygiene. Of these the teaching of gynaecology and obstetrics only are considered here.

In order to be signed up in gynaecology and obstetrics the student must attend theoretical lectures for one semester before commencing clinical work. These are given by the professor or any recognised teacher, and may be given at the klinik, or at private klinikens, and are held once or twice a week. He must also spend two semesters in his last two and a half years at gynaecology and obstetrics. (But he is allowed to do other subjects, such as surgery and medicine, at the same time.) This includes:

Attendances at the clinical lectures given by the professor. These are compulsory, and no other lectures are recognised.

Where operations are performed in the lecture theatre at the close of the lecture for demonstration purposes he is expected, but not obliged, to attend.

For one semester practical gynaecology in the polyklinik or out-patient department, under the direction of the assistant, or at a private klinik under any recognised teacher.

Attendance twice a week for one semester at a practical midwifery course.

Residence in hospital in order to conduct two (or, at some, four) labours himself; most students do more, under the guidance of the assistant in charge or the sister.

He is not obliged to do the district, but most students do so during their last year.

It is to be noted that the student can take part of his course at different universities; he does not usually take the whole at one single place, and that in order to be signed up he does not attend in the wards, and comes very little into touch with the patients.

The following special features of the teaching will now be described.

Clinical lectures.—These are given by the head professor. All his assistants are expected to be present to assist him if necessary. All students are obliged to attend; the number therefore is large, varying from 250 to 400.

They are held daily in the morning for one hour, in lecture theatres which are large and well equipped, and are provided with washing rooms and anesthetic rooms for operations which may be performed as demonstration cases. Within the theatre are a projectoscope, electrically-worked window-screens for darkening the room, and the multiple mirror system of lighting up the operating area. The best equipped lecture theatre is that at the Vienna klinik.

The actual method of lecturing is as follows: The patient is brought in and her notes are read out by the professor. He then examines. Two men are called out to examine each case. The professor teaches the class through them how to examine the patient. He then discusses the differential diagnosis and treatment. Pathological specimens in illustration of the case are shown and microscopic section shown by lantern.

Usually three or four cases are dealt with in this manner. At the end of the lecture, at some klinikens, some of the cases are operated upon in the lecture theatre for demonstration purposes.

These lectures are purely clinical. No set course is followed during the course, but typical cases covering most of the subject are picked out. The cases are chosen the day before the lecture, and must be thoroughly worked up in every clinical detail for the professor's lecture.

Thus, in his lecture, the German professor has a clinic surcharged with ideas. He does more than make a diagnosis; he goes on to a luminous and comprehensive discussion of the entire topic. This university type of lecture is good, because it is an object-lesson in scientific method.

There is not much regard shown at these lectures for the feelings of the patient. They are brought into the theatre on a table in the lithotomy position with only their head and chest covered, and may remain thus for twenty minutes at a time. When the patient has a tumour or contracted pelvis she is stripped, a towel tied over her face, and is made to walk about the area of the theatre for demonstration purposes. If these points be eliminated these clinical lectures are a most valuable method of teaching.

Out-patients.—This department is managed by the assistant with helpers. The cases are examined in the lithotomy position behind curtains, about four or five at a time. The assistant examines the patient first and explains the case, and then students examine; as many as six students may examine the same case. Private students of the assistant may attend.

Mannikin class.—This is a course in practical midwifery. Models only are used. Four models are in use at a time each under one assistant with about ten students. The assistant must show each man individually the steps in the mechanism of labour and the method of delivery. The student must then demonstrate his ability to deliver. At each class only one subject (such as breech labour) is considered at a time. The course is twice a week for one semester.

These are very practical and instructive classes, and might with advantage be copied for men previous to attending in Elizabeth ward, or to their going upon the district.

When signed up the student can present himself for examination at the end of five years. All parts are taken together. If he fails in only one or two parts those in which he has been successful are excused at the next examination (in Vienna, however, each part can be made a separate examination), but if he fails in three parts or more the whole examination must be taken again. The examination lasts six weeks. It is held twice a year, in March and November. If the candidate fails, however, he may be referred for only six weeks or three months. The examiners are the chiefs of the klinik.

If successful the student is not yet qualified, but he becomes a medicinal praktikant. Now is the time when he begins to come into contact with the patients. He must now do practical work under the supervision of the assistants for one year.

The first four months must be spent at internal medicine; the remaining eight at whatever clinical subject he may choose. This year is spent in watching the clinical work in the wards and in undertaking minor duties in aid of the assistants. Medicinal praktikants do not reside in the hospital except when they are on duty—i. e. one day in three is free.

At the end of the year he receives the title "arzt," and is qualified. There is no examination for this.

Although they are not obliged, 99 per cent. of the men write some thesis, and are examined in three medical subjects, according to the choice of the Medical Faculty at the time. This is in order to gain the title of "doctor." The examination is merely formal, and lasts only five minutes. It is held every fortnight during the semester.

There are no higher examinations. I have purposely omitted from this account any clinical report. This is partly for reasons of space, and partly because the foregoing is of more general interest than are the special details of gynaecological and midwifery methods. But some of these, as, for example, the special apparatus for lighting the operation area, are of great interest and value. Details of this apparatus can be obtained from C. Zeiss' agency in Great Castle Street, Regent Street.

THE MAIN DIFFERENCES BETWEEN THE GERMAN AND OUR METHODS, AND CONDITIONS.

- (1) The division of hospitals into university and town hospitals.
- (2) Each hospital is composed of separate kliniks for separate subjects.
- (3) Each klinik is a complete and separate entity by itself, and has its own special departments for pathology, etc.
- (4) It is supported by the town and university, and not by charity. Every patient who attends as an in-patient must pay.
- (5) Private patients are admitted.
- (6) The better equipment of the klinik for purposes of scientific investigations.
- (7) The better equipment of the lecture theatres.
- (8) The professor can get any new apparatus that he thinks desirable.
- (9) The use of a special system of lighting the operation area.
- (10) The "visiting" staff consists of only one man, the professor, who oversees the whole, and lives at or near the klinik.
- (11) The numerical superiority of the paid assistants, who serve at the klinik for several years, and must devote all their time to the klinik.
- (12) The numerical superiority of voluntary assistants.
- (13) The voluntary assistants lighten the work of the real assistants by doing all the clerical work and the minor pathological work.
- (14) The atmosphere of the scientific spirit in the university 'kliniks' and the greater facilities for original work.
- (15) The lectures are clinical, and the cases used for the lecture are thoroughly worked up for the professor.
- (16) The student need not do all parts of his course at one university.
- (17) There is only one degree.

(18) The men are not selected exclusively from their own hospital in order to fill staff vacancies.

(19) The devoting of special time for purposes of studying the work that is being done at home and abroad.

(20) The hampering conditions of space are not so marked.

(21) The scientific worker is not "confronted with so great an array of popular sentiment and prejudice."

Certain disadvantages resulting from the German system must be considered:

- (1) The limited number of chiefs, for the professor cannot come enough into contact with his patient.
- (2) The absolute autocracy of the professor, for it endangers favouritism among the assistants, and if the head is slack the whole department suffers.
- (3) The large number of students at a klinik, with the result that the teaching is mainly theoretical or by dummea. The students do not come enough into contact with the patients at the lectures, clinics, or in the operating theatres and wards.
- (4) The standard of the general practitioner suffers in consequence.
- (5) The absence of special anaesthetists.
- (6) The nursing department is inferior, but this is now under active re-organisation.
- (7) The want of consideration for the feelings of the patients.

The sum of the matter is this. In general terms it may be said that we are not inferior in our system of practical teaching, management of patients and of nursing. On the other hand, we may learn from them to improve our system of organisation so that we may make more of our present facilities in order to produce scientific advance and original research. We do not lack the men, but our men lack the opportunity.

Obituary.

A. CHUNE FLETCHER, M.R.C.S., L.R.C.P.

THE death of Alfred Chune Fletcher has come as an irreparable loss to a large circle of friends and patients who rightly prized his exceptional skill and unique personality.

He started life as a journalist, and this training doubtless accounted for the lucid and select phraseology which always characterised his written and spoken language.

He entered St. Bartholomew's in 1877, and was House Surgeon to Sir William Savory in 1881. Shortly afterwards he obtained the appointment as Resident Medical Officer to the Charterhouse, which post he held up to his death, gaining and retaining the love, respect, and confidence of

the seventy old gentlemen whose comfort and health he so ably looked after. He was also Medical Officer to the Merchant Taylors' School, the London General Omnibus Company, an Insurance Company, and to the employees of many large city firms. Besides all this he had a very extensive private practice consisting of patients drawn from all classes, some of whom were among the highest in the land.

The herculean task of successfully and thoroughly attending to all these duties was only accomplished by the most carefully arranged methodical habits.

Thoroughness and the closest attention to detail were his watchwords. He had no tolerance for duplicity or superficiality, and loathed any semblance of self-advertisement.

In spite of his busy life he kept himself well abreast of medical and scientific progress, trying any new method or drug with an open judicial mind. Fletcher possessed a quality which in a medical man is so valuable to his patient—he knew what he did not know!

His complete knowledge of human nature and his generous, quiet, sympathetic qualities were always ready to be dispensed to his patients or friends, and many a one has reason to be grateful for making Fletcher his Father Confessor.

How can I describe the special charm of being with him "out of school"? To wander with him through an old town abroad, or through a museum or cathedral, or even an "antique" shop, was a liberal education. His love of the beautiful in art was most infectious. The ornate or florid never appealed to him, but he almost worshipped and made his companions worship some simple beautiful design. And this was but the reflection of his whole character and mind, and this he imparted to others, and those others were the better for it. The world is richer for his life and poorer by his death.

E. C.

Students' Union.

ASPECIAL General Meeting of the Students' Union was held on May 1st, 1913, at 12.30 in the Abernethian Room. Mr. Waring was in the chair and Mr. Gask was also present.

The President referred to the sad loss which the Students' Union had sustained through the death of Mr. Etherington-Smith, who had for some years past acted as Treasurer to the Union.

A vote of condolence with Mr. Etherington-Smith's relatives was passed unanimously.

Mr. Gask then read the Treasurer's financial report, which was adopted.

Mr. Waring then brought forward the Report of the Council of the Students' Union re "Catering." After a free discussion the following resolution was passed with two dissentients:

"That a letter should be sent to the Committee of Medical Officers and Lecturers regretting that the following notice had been issued by them:

"No student will be signed up for any examinations until all his indebtedness to the School as well as any indebtedness to the St.

Bartholomew's Hospital Catering Company has been discharged, and to ask the Committee to rescind this resolution."

A vote of confidence in the motives of the Committee of Medical Officers and Lecturers was proposed and carried unanimously.

A vote of thanks to Mr. Waring for his care and trouble in dealing with the question of "catering" was proposed and carried with acclamation.

The meeting was then adjourned.

J. G. ACKLAND
O. B. PRATT } Hon. Secs.

The Clubs.

ROWING CLUB.

Coxswainless Fours: Bart.'s v. London Hospital. Rowed on Friday, May 23rd, from Putney to Hammermith. The London four led at the start, and after two minutes had gained about one length. Bart.'s then gradually drew level, and near the Crab Tree were leading by a length. A foul then occurred, the London boat touching the Bart.'s rudder. The race was therefore stopped and restarted from this point. Shortly after this the London steering became erratic and a second collision occurred; the race was then awarded to Bart.'s.

The following represented the Hospital:

G. D. East, bow; C. J. Scholtz, 2; C. W. B. Littlejohn, 3 and steering; C. E. Kinderley, stroke.

[Owing to pressure of other matter we have been compelled to hold over the Cricket news, and also several Reviews.]

Notices.

THE ST. BARTHOLOMEW'S HOSPITAL WOMEN'S GUILD.

THE first Annual Meeting of the Guild was held by kind permission of the Treasurers and Almoners, in the Committee Room on View Day, May 14th. After tea in the Great Hall, Lady Sandhurst took the chair in a crowded room. Miss Paget, whom all were glad to welcome to St. Bartholomew's, and the Matron addressed the meeting. Mrs. Toth was unanimously elected Hon. Work Secretary, and Mrs. Acton Davis and Mrs. Ormerod were elected, also unanimously, to serve on the Executive Committee. The Hon. Secretary's, Hon. Work Secretary's and Hon. Treasurer's reports were moved and adopted. The Hon. Secretary of the Guild is Miss Tweed, 45A, Addison Gardens, W.

THE Seventh Decennial Club Dinner will be held on Wednesday, July 2nd. The Hon. Secs. are Sir A. A. Bowlby, C.M.G., F.R.C.S., 25, Manchester Sq., W., and Dr. H. H. Tooth, C.M.G., F.R.C.P., 34, Harley St., W.

The Eighth Decennial Club Dinner will be held on Wednesday, June 25th. The Hon. Secs. are Mr. H. J. Waring, F.R.C.S., 37, Wimpole St., W., and Dr. J. H. Doydale, F.R.C.P., 11, Devonshire Place, W.

The Ninth Decennial Club Dinner will be held on Wednesday, July 2nd, the Hon. Secs. being Mr. R. C. Elmslie, F.R.C.S., 15, Devonshire Place, W., and Dr. C. M. H. Howell, M.B., M.R.C.P., 53, Queen Anne St., W.

ALEXANDRA DAY, JUNE 25TH.

St. Bartholomew's Hospital having been asked to help again in collecting money on Alexandra Day, Mrs. Toth wrote to the chairman, Lady Wilton, pointing out that though the Hospital worked for this object last year, they received no grant from the Fund. Lady Wilton replied saying she had submitted Mrs. Toth's letter to the Executive Committee, and "it was resolved that the promise made by Mrs. Lowerfeld of £500 to St. Bartholomew's Hospital should be redeemed."

In view of this definite promise a committee has been formed and flowers will be sold at the hospital gates as last year.

New Addresses.

ABRAHAMS, A., 1, Welbeck Mansions, Hammersmith, W. Tel. 896, Hammersmith.
 ALMOND, G. H. H., 6, Brock Street, Bath.
 BAYNES, H. G., 30, Victoria Park Square, Bethnal Green, N.E.
 EVANS, D. B., Dousland Grange Sanatorium, Dousland, S. Devon.
 FEILING, A., Bank Chambers, Dorset Street, W.
 HARLAND, W. C. F., 79, Beverley Road, Hull.
 HODGE, W. H. S., Nottingham General Dispensary, Broad Street, Nottingham.
 HOWELL, B. W., Royal Free Hospital, Gray's Inn Road, W.C.
 HUGHES, D. E. J. S., The Branch Dispensary, Hyscon Green, Nottingham.
 JONES, G. P., 11, Grangewood Mansions, Grange Road, S. Norwood.
 LAWRENCE, S. M., Kenley, Gravesend.
 NICOLA, H. M. D., 1, Rotharwick Road, Golders Green, N. W.
 OVEREND, W., 29, Eversfield Place, St. Leonards.
 RANSOM, P. W., Royal Free Hospital, Gray's Inn Road, W.C.
 THOMPSON, W. FRANK, The Infirmary, Stamford, Lincs.
 WHITE, ERNEST, The Hospital, Darlington.

Examinations.

CONJOINT BOARD.

Second Examination

Anatomy and Physiology.—J. E. C. Maguire, B. Whitehead, A. G. Williams, R. H. Maingot, W. E. Wilson, S. J. L. Lindeman.
 The following have now completed the examinations for the Diplomas of M.R.C.S., L.R.C.P.:
 E. L. Dobson, W. A. Kail, H. Y. Mansfield, G. Whittington, J. S. Soutter, W. A. Pocock, S. H. Marcus, J. L. Green, W. H. S. Hodge, R. S. Scott, G. M. Roberts, J. R. Payne, I. L. Waddell, W. C. Spackman, B. J. Brewitt.

Primary F.R.C.S. Examination.

The following have passed the Primary F.R.C.S.:
 C. W. Archer, E. B. Barnes, C. F. Beyers, M. Donaldson, D. W. Hulme, T. H. Just, R. F. Standage, Major I.M.S., C. R. Wright.

UNIVERSITY OF CAMBRIDGE.

The degrees of M.B. and B.C. have been conferred upon T. H. G. Shore.

Appointments.

- ✓ ABRAHAMS, A., M.B., B.C. (Cantab.), appointed Medical Registrar at the London Temperance Hospital.
- ✓ DINGLE, W. A., M.D. (St. And.), appointed Surgeon to P. & O. ss "Medina."
- ✓ DORSON, J. R. B., M.B., B.S. (Lond.), appointed Tuberculosis Officer for the Middlesex County.
- ✓ EVANS, D. B., M.R.C.S., L.R.C.P., appointed Assistant Tuberculosis Physician to the Welsh National Memorial Association.
- ✓ GROVES, E. W. HEY, M.S., F.R.C.S., appointed Honorary Surgeon to the British General Hospital.
- ✓ HODGE, W. H. S., M.R.C.S., L.R.C.P., appointed Assistant Resident Surgeon to the Nottingham General Dispensary.
- ✓ HOWELL, B. W., M.B., B.S. (Lond.), appointed House Surgeon at the Royal Free Hospital, Gray's Inn Road, W.C.
- ✓ RANSOM, P. W., M.R.C.S., L.R.C.P., appointed House Physician at the Royal Free Hospital, Gray's Inn Road, W.C.
- ✓ ROBERTS, W. E., M.R.C.S., L.R.C.P., appointed Surgeon to "H.M.A.S. "Australia."
- ✓ THOMPSON, W. FRANK, M.R.C.S., F.R.C.S., appointed House Surgeon to the Infirmary, Stamford.
- ✓ WHITE, ERNEST, M.B., B.S. (Lond.), appointed House Surgeon to the Hospital, Darlington.

Births.

CANE.—On Wednesday, May 21st, at the Minster Precincts, Peterborough, the wife of Leonard B. Cane, M.D., of a son.
 COLT.—On May 5th, at 12, Bon Accord Square, Aberdeen, the wife of G. Herbert Colt, F.R.C.S., of a daughter.
 GIBBENS.—On April 23rd, at Barking, Essex, to Dr. and Mrs. F. E. Gibbens—a son.
 MAYO.—On April 26th, at Clifton House, Cowes, the wife of Dr. T. A. Mayo, of a daughter.
 PARKER.—On Thursday, March 27th, at Staffa Lodge, Guildford, the wife of Herbert F. Parker, M.D. (Cantab.), of a daughter.
 PRETTY.—On May 17th, 1913, the wife of Kenneth Pretty, of Grafton, of a son.
 SANKEY.—On May 2nd, at 35, St. Giles', Oxford, the wife of Richard H. Sankey, M.B., of a son.

Marriages.

CANDLER—HARDIE.—On April 15th, at Holy Trinity, St. Mary-lebone, by the Rev. W. C. Hardie, brother of the bride, A. Laurence Candler, F.R.C.S. Eng., of Shenley, Barnfield Road, Exeter, to Lottie Kathleen, youngest daughter of Mr. and Mrs. George Hardie, of High Barnet, Hertfordshire.
 COLLYER LOGAN.—On April 30th, 1913, at Belgrave Presbyterian Church, London, S.W., by the Rev. A. N. Mackray, M.A., assisted by the Rev. J. Horace Johnston, B.A., Brice Collyer, M.D. (Lond.), youngest son of Thomas Collyer, Croydon, to Amy Elizabeth, only daughter of Samuel Logan, of Rurki, India.

Death.

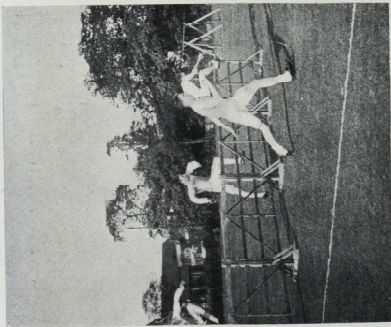
BENTHAM.—On April 27th, at sea, Arthur Bentham, M.B., (Edin.), aged 48.

Acknowledgments.

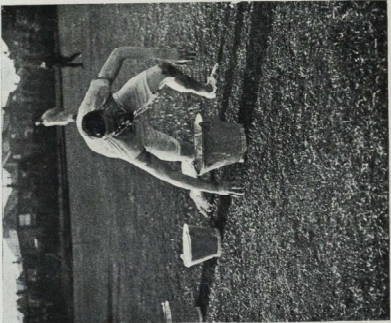
Gay's Hospital Gazette, Charing Cross Hospital Gazette, British Journal of Nursing, Nursing Times, Giornale della R. Società Italiana d'Igiene, The Student, The Hospital, L'Ospedale Maggiore, The Medical Review, University College Magazine, The Practitioner, Annual Report on Public Health and Hospitals of New Zealand, Clinical Excerpts, London Hospital Gazette, St. Mary's Hospital Gazette, Long Island Medical Journal.

NOTICE.

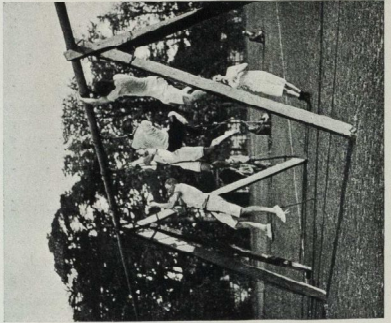
All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, St. Bartholomew's Hospital, Smithfield, E.C.
The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., 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. Telephone: 1436, Holborn.
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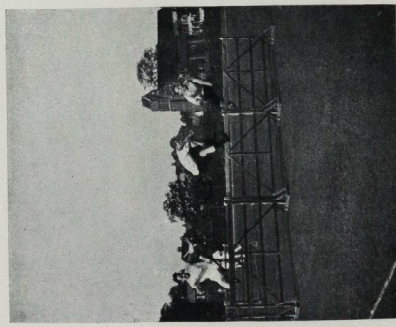
THE HURDLES.



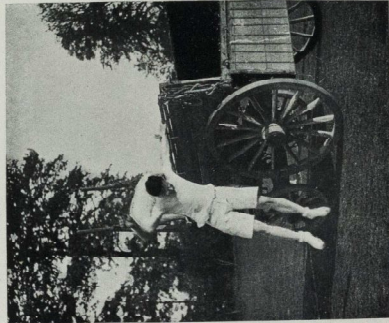
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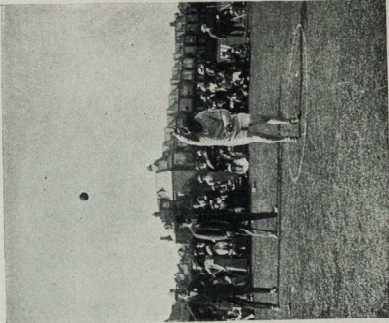
OBSTACLE RACE.



THE HURDLES.



OBSTACLE RACE.



PUTTING THE WEIGHT. H. J. BOWER.

ADAMS & SON, W.P.

Photographs by A. Abrahams, Esq., M.B.

St. Bartholomew's Hospital



JOURNAL.

Vol. XX.—No. 10.]

JULY, 1913.

[PRICE SIXPENCE.]

St. Bartholomew's Hospital Journal,

JULY 1st, 1913.

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

Calendar.

- | | | |
|-------------|-----|---|
| Tues., July | 1. | D.P.H. Conjoint Examination begins.
Second Examination Society of Apothecaries begins.
Final Examination Conjoint Board (Medicine) begins.
Oxford Trinity Term ends.
Dr. Calvert and Mr. McAdam Eccles on duty. |
| Thurs., " | 3. | Final Examination Conjoint Board (Midwifery) begins. |
| Fri., " | 4. | Final Examination Conjoint Board (Surgery) begins.
Dr. Morley Fletcher and Mr. Bailey on duty. |
| Mon., " | 7. | Second Examination Medical Degrees (London), Part II begins.
M.D. and M.S. Examinations (London) begin. |
| Tues., " | 8. | Dr. Herringham and Sir Anthony Bowlby on duty. |
| Wed., " | 9. | First Examination Society of Apothecaries begins. |
| Fri., " | 11. | Junior Scholarship Examination.
Dr. Tooth and Mr. D'Arcy Power on duty. |
| Sat., " | 12. | Summer Session ends. |
| Mon., " | 14. | First Examination for Medical Degrees (London) begins. |
| Tues., " | 15. | First Examination Conjoint Board begins.
Dr. Garrod and Mr. Waring on duty. |
| Thurs., " | 17. | Second Examination for Medical Degrees (London), Part I begins. |
| Fri., " | 18. | Dr. Calvert and Mr. McAdam Eccles on duty. |
| Tues., " | 22. | Dr. Morley Fletcher and Mr. Bailey on duty. |
| Fri., " | 25. | Dr. Herringham and Sir Anthony Bowlby on duty. |
| Tues., " | 29. | Dr. Tooth and Mr. D'Arcy Power on duty. |
| Thurs., " | 31. | Gun Licences expire. |
| Fri., Aug. | 1. | Dr. Garrod and Mr. Waring on duty. |
| Mon., " | 4. | Bank Holiday. |

Editorial Notes.

HERE have for some time past been scenes of a vast activity in the Warden's House. A few weeks ago appeared, and a few days later these were seen to be showing undoubted active movement, a rather unusual phenomenon in these supposed non-motile organisms; one observer has recorded a periodic lateral activity in a plumber, which could in no way be confused with simple Brownian movements. The process seems to have advanced with somewhat unusual celerity, doubtless owing to the warm weather, and as a result of this several layers of paper were stripped up from the underlying tissues. The raw area has recently been covered by new formation, but whether this is reactionary in nature or part of the process it is difficult to decide. The process became gradually more acute, perforations occurring in the wall of the basement on two occasions. These, however, were not followed by any exacerbation of the process, nor did any untoward results follow; it has therefore been suggested that the perforations were the work of anaerobes, and that the actual perforation resulted in a sudden change to a condition incompatible with their existence.

On June 25th the process, which had for a few days been more quiescent, suddenly became acute and almost fulminating in character. This increase in activity coincided almost exactly with the appearance of two large *pantechinica*. These structures appeared to be of the nature of giant-cells. Their appearance resulted in an activity which was so marked, and the accompanying movements so complex, that it became impossible to observe with any accuracy the successive stages of the phenomenon. After the process had subsided, however—and this occurred in a comparatively short time—it could be seen that large masses of new formation had been laid down, and that all foreign matter had been completely extruded.

In other words, the Warden is in possession: long may he reign!

* * *

We most heartily congratulate Mr. Gill and Mr. Gask on their respective marriages, and wish them all possible happiness.

* * *

Bart.'s is to be congratulated on its successes in the last Final F.R.C.S. Examination. Of thirty-two new Fellows admitted no fewer than thirteen were Bart.'s men; their names are as follows, and they have our sincere congratulations: K. J. A. Davis, W. Gemmill, C. D'O. Grange, S. Hoyte, A. E. Iles, J. Kennedy, R. H. Mawhood, D. D. Pincock, F. G. N. Stephens, J. Thompson, J. E. P. Watts, T. E. Hammond, H. H. Broome, Capt. I.M.S.

* * *

Owing to the resignation of Mr. Bruce Clarke from the Council of the Royal College of Surgeons of England a vacancy has been produced, which, it is hoped, will be filled by a representative of this Hospital. Mr. Waring is the only St. Bartholomew's candidate for the election, which takes place on July 3rd. It is hoped that all Fellows from this Hospital will support Mr. Waring, and we urge all those who have not already sent in their papers to do so at the earliest possible moment.

Mr. Waring has our most sincere wishes and hopes for his success.

* * *

We offer our sincere congratulations to Sir C. P. Lukis, K.C.S.I., on his appointment as Honorary Surgeon to the King

* * *

We also congratulate A. L. Moreton on his success in being awarded the London University Medal in the Final M.B. Examination, and on being distinguished in Surgery and Midwifery.

* * *

The following awards have been made:—Brackenbury Scholarship in Medicine, F. G. A. Smyth; Brackenbury Scholarship in Surgery, G. L. Keynes; Willett Medal in Operative Surgery, G. L. Keynes; Walsham Prize, M. N. Perrin; Matthews Duncan Prize, C. D. East; Wix Prize, G. L. Keynes; Burrows Prize and Skynner Prize, F. G. A. Smyth.

* * *

The following appointments have been recently made:

Mr. GIRLING BALL . . .	Demonstrator of Practical Surgery.
Dr. A. E. GOW . . .	Medical Registrar.
Mr. M. DONALDSON . . .	Demonstrator of Midwifery.
Mr. C. D'O. GRANGE } Mr. A. L. MORETON }	Demonstrators of Anatomy.
Mr. J. W. TREYAN } Dr. T. S. LUKIS }	Demonstrators of Physiology.
Mr. R. R. ARMSTRONG . . .	Junior Curator of the Museum.

We offer these gentlemen our heartiest congratulations.

* * *

Ship's Surgeon in a Square Rigger, 1913.

IT does not fall to the lot of many to sign on as a ship's surgeon in these days of steamers. In fact the law does not demand a surgeon unless the ship carries over a certain number of souls—I believe fifty. Fifty years or more ago the sailing ship was the passenger carrier, and, whether by law or not, such as carried passengers nearly always had a surgeon to attend to their medical wants. From custom the term "ship's surgeon" has been handed down, and now applies to all surgeons who sign on in any vessel, whether a ship or a steamer. Just in the same way that the word "ship" stands for any vessel.

As a few extracts from my log, chiefly on the ailments of those voyaging in a modern ship, might be of interest, it occurred to me to jot them down, and submit them to the BART.'S JOURNAL.

I wish it to be clearly understood that my presence aboard this ship was not to satisfy the demands of the law, as our ship's company only totals twenty-nine, and she does not lawfully carry passengers. But I am a passenger, and so, to comply with this law of ours, had to sign on as something to be able to make the voyage at all.

Thus it was that I wandered down to the Board of Trade offices at Limehouse, on January 31st last, together with most of the crew, and signed on as "ship's surgeon" in the full-rigged ship "Monkbarns," 1771 tons, bound for Australia, calling at Buenos Ayres. My pay is one shilling per month as such.

I joined the ship at Northfleet on February 3rd, in the River Thames, where she had loaded 3100 tons of cement for the Argentine.

The Board of Trade regulates what medical comforts a ship shall carry, and no sea captain provides for his crew other than by these regulations. His superiors are then to blame should anything happen to a member of his crew for the want of some drug or appliance that is not in the chest. A book is supplied with this chest which diagnoses and treats the patient when intelligently handled; such intelligence the skipper is supposed to have, for he, of course, is the acting ship's doctor in all ships that carry no surgeon,—any man going up for an English certificate has to pass in first aid. This medicine chest (on this ship) was supplied by contract, and duly passed the inspection of the Board of Trade officials.

A nautical friend of mine warned me that skippers are fond of "playing about with the medicine chest," as he put it. So, unless I was asked, I did not interfere with the skipper's doctoring powers, and even then I consulted him as often as not.

Extracts from Log.

Monday, February 3rd.—Two of crew laid up, owing indirectly to a month's pay in advance. Required rest only. Crew all aboard to-day; look a fairly healthy crowd.

February 4th.—Two who laid up recovered, except for headache. Mate kept them busy all day; he habitually treats most of these cases.

February 8th.—Noticed our steward—a Jamaican, of forty-nine years—had a curious right hand. Shall make inquiries when I know him better.

February 10th.—Towed down Channel (foul weather up to date accounting for our not starting).

February 15th.—Carpenter has a boil on right wrist; refuses to come aft and see skipper; is treating it himself with bread poultices. Found it out when I asked him for wood to make shelves in my cabin; said he would do it in a few days when his wrist was better.

February 17th.—4 p.m. Apprentice came aft with toothache. Has had endless trouble with his teeth; wears two plates. Refused to pull tooth as it's repairable. Carbolised carious places, and gave him pot. permang. mouth-wash and gr. xv of aspirin. Told me that last voyage had aching tooth removed by "chips" with pair of pincers (ship's chest does not run to forceps; brought two pairs, one for upper and one for lower stumps).

8.15. Same apprentice aft again. Promised to remove it if it was not better to-morrow. Skipper told me he was always a nuisance with his teeth. One of crew aft—gonorrhoea. Given pot. permang by skipper.

10 p.m. Discovered I had got pediculi pubis. Started to annihilate same. Applied uny. hyd. from chest.

February 18th.—Steward complained to me of difficulty of micturition. Difficulty of starting. As he also had constipation I gave him pil. cal. col. et hyosc. gr. viij, and cascara (both from my own supply of drugs) for following twelve nights. Apprentice not complaining of tooth to-day. I showed him my forceps, and perhaps he thought better of it.

February 19th.—Mate is a "conscientious objector." Quoted a few statistics, but they made no impression. Had more success in the hunting field—four kills. Shall have to wash my blankets in lieu of baking.

February 20th.—Steward reports that "medicine does me a lot of good."

Apprentice wearing all his teeth again—toothache gone.

February 26th.—Another apprentice (J—) came aft with pain and swelling of left eyelid. Suppurating Meibomian cyst. Opened it with scalpel. Got out about four drops of pus. Washed out with boracic lotion. Applied pad and bandage.

February 27th.—Dressed eye; discharging. Cut corn on bottom of mate's foot. Found it painful walking about on his bare feet.

February 28th.—Dressed eye. Better.

March 1st.—Dressed eye. Nearly well.

March 3rd.—Asked the steward to show me his hand. He has been to Bart.'s for treatment before he came on this voyage, but had to sail before he had had "rubbing and electricity." He has wasting of thenar and hypothenar eminences of right hand, also of interossei, particularly first. He has got a typical *main-en-griffe*.

His eyesight is bad—says that Bart.'s advised him to come in and have his eye and arm seen to, and that he had cataract.

He described the out-patients' department to me, and gave a description (not clear) of the "doctor" who saw him. He evidently went to surgical side and saw Mr. Etherington Smith. (His name is J. White.)

There are three aboard who have Dupuytren's contraction—the skipper, second mate, and steward. This steward would be quite an acquisition at examination times. The skipper's opinion of Dupuytren's contraction—he has no name for it but knows the condition well—is that nearly all sailors past fifty have it in some degree, and quite a number before.

The skipper is a Scotchman of sixty-three, and has been in sailing ships all his life.

The second mate came to me this evening, and after beating about the bush for some time, said he had "dreams nearly every night." I gave him some advice and pot. brom. from my photographic store, there being none in the medicine chest.

March 6th.—Discharged eye-patient, well. 6.30 p.m. Steward complaining of indigestion, gave him a mixture of sodii. bicarb. and aqua menth. pip.

8 p.m. Steward said he was better.

March 7th.—Two new patients: (1) K—, with a skin condition I could not diagnose, had it all the voyage, itched and spread. When I saw him there were small discrete pimples, the tops of which had been scratched off and bled; about the size of pin's head. They covered his abdomen and went down as far as his knees—back and front. The treatment was quite effective—sulphur and vaseline, and a purge internally. (2) A German, "Fritz," had a bubo. Treatment, purge and then a "wait and see policy." (Up to April 12th no further complaint.) History of soft chancre and signs of a sore throat were present.

Second mate has had a cough all the voyage. Went over his chest. Right side, in front and behind, over upper lobe, coarse crepitations. Nothing seen, but creps. felt; nothing else discovered.

Skipper took him over and gave him a mustard plaster to put on his chest. Saw where this had been—red patch over his stomach and liver—either directions were not good, or his knowledge of anatomy is not even elementary.

March 12th.—Skipper having let the second mate's cough carry on without any help, I added sp. æth. nitrosi, ipecac., tinct. camph. co. and aq. CHCl₃, to his apparent relief.

Interesting case of swollen ankles, for which I could not find any cause; came on suddenly, and has got worse, *i. e.* more swollen, since it started two days ago. No means of testing urine other than the albumen one of heat and picric acid. By this there was no albumen, his heart was normal, and, in fact, he was quite a healthy individual as far as I could determine. The solution and the cure were simple, after I asked the skipper what he thought about it. "In the tropics you can walk about the deck when it is wet, but, if you do much of it after they have dried, you will find that quite a number of people get swollen feet; tell him to wear shoes and he will be all right." I did, and he was.

March 13th.—Steward knocked me up at 11 p.m. last night, having had pain on micturition, and passed blood, which he brought in a butter tin to show me; it contained a mixture of blood and urine. Told him not to worry but turn in and I would examine him in the morning.

6.10. Awakened by "assistant surgeon," who said steward was passing blood and felt bad; would I see him?

History. Age 49. No previous attack, except at beginning of this voyage. No gonorrhoea or syphilis: had difficulty past three months: strains and pain on starting act. Blood in clots separate from urine this morning.

P.C.: Bladder full up to umbilicus; with difficulty passed about two pints. *Nil* felt in urethra. *P.R.:* Enlarged elastic prostate. No calculus detected in bladder.

Treatment bed, and bowels opened.

Skipper on this condition says: "I often get similar cases passing through the tropics and do nothing for them—they always get better in a day or two." *N.B.*—This man stopped passing obvious blood in four days, and was doing his work again in six days.

Skipper had another go at second mate; gave him gr. xx of sulphur—dry to be swallowed in that state.

March 14th, Friday.—Steward passing blood.

2 p.m.—Crossed the line. Neptune retinue appear to-morrow, being a more convenient day for ship's company.

March 15th.—Steward better but still passing blood.

Second mate not being popular and having boasted of crossing the line six times without being "neptuned"—to coin a word—was done thoroughly this time, much to his annoyance and the skipper's. The latter, I think, was afraid his sulphur would not be satisfactory on account of mate having swallowed so much of Neptune's medicine. He was sick and coughing badly after it.

March 17th.—Steward got up to-day for a couple of hours.

March 21st: Good Friday.—Second mate and head apprentice had a fight for'ard side of half deck out of sight of skipper. It was a case of six of one and half a dozen of the other, but mate started in and ended by getting a hiding. Injuries on which I was asked to pass an opinion: Mate—Black eye, dislocated thumb, several abrasions. Apprentice—

Abrasion on nose, sprained thumb. Skipper, of course, heard of it and gave them an hour and a half of his mind; nothing further was done.

I did not see the fight, but heard that it was short and sharp; one round of about three minutes, ending by mate being literally sat on and being asked if he would like some more.

March 22nd.—"Chips" showed me his right calf; had an abscess there which had burst; gave him some ical to wash it with and dressings.

Tropical rain; apprentices and self had a wash-down in it; forty-one days out from Gravesend.

March 23rd.—Shark fishing; took our "ground" bait but refused to swallow a hook covered with pork. This occurred between 10 and 1 a.m. last night. Saw two sharks fighting; how it ended I don't know as we left them astern. It was a glorious night with bright moon.

1.20 p.m. Heavy squall, during which one of crew ran a marlin-spike into his finger when aloft; washed and dressed it.

10.30 p.m. Second mate has toothache; two stumps; won't have them out.

March 30th.—Out of tropics to-day. Have been thirty days in them. Total distance travelled 5,400 miles. Average 112½ per day. One of crew aft with enlarged pre-patellar bursa, due to fall. Skipper saw him and painted it with iodine.

March 31st.—A day of squalls, lightning, then a heavy blow—commonly known as a "pampero." They are a characteristic of the River Plata and its neighbourhood. The lightning was fine, and I managed to get one respectable photograph of a flash.

April 1st.—Called up at 7 a.m. to see ship. Was far too sleepy to remember the day was 1st.

April 5th.—Shaved to-day, sixty one days since last.

April 8th.—John Dick, aged 45, said his tongue hurt him and has done so for past six months. History of syphilis, has chronic superficial glossitis, smooth and fissured; he is heavy smoker and drinker when ashore. Gave him some advice which I don't suppose he will follow.

April 10th.—Land light sighted (Polonio).

April 11th.—Land seen. 5.55 p.m. pilot came aboard.

April 12th.—Fine breeze during night in which we did our record speed this trip—13 knots.

Dropped anchor in B.A. Roads, 14 miles from that town.

April 13th.—10.30. Doctor's launch seen visiting the vessels (15) in the roads. At it since 9.15 a.m.

12.30.—Launch alongside. The inspection of ship's company was an absolute farce. The doctor never came aboard, but sat at a table on the poop of the launch; ordered our crew aft, stood up, looked at them for a second or so, sat down. Then asked our skipper aboard. Papers

were inspected and signed, and that concluded the doctor's examination.

I cinematographed the whole business.

I could see that the inspection of the other vessels must have been of the same thoroughness, by the time his craft was alongside. There were 15 vessels scattered over some 3 miles, the whole of which were finished by 12.35—3 hours, 20 minutes.

The launch remained alongside of us till 2.30 p.m. The officials had lunch during the time. I suppose they had time to kill that they might not be back in Buenos Ayres too soon.

April 14th.—I hear there are four of these doctors and they take day about at coming the fourteen miles to the B.A. roads to inspect the crews. I hope the other three are a little more thorough in their work. To-day no doctor came out to the new arrivals, but this is to be accounted for possibly by the gale that is blowing—a pampero.

April 15th.—Our ship dragged her anchor one and a half miles between 2 a.m. and 4, ending up on a mud-bank. From this we got clear at midday. We are still in the roads waiting to get up to B.A., but this wind blows the water out of the river and it has dropped some ten feet in consequence.

April 16th.—Two weeks out from England; no one had a cold and this was so till two days ago when two apprentices developed them. This is characteristic of such voyages as this, so our skipper says. In fact, I had been told so by several sailors previous to starting, and was on the look-out to see what would occur this voyage.

6.15 p.m. Arrived in tow of two tugs at Boca, B.A.

There are several Bart.'s men in B.A.—K. D. Pringle, K. M. Walker and J. Morris, all of whom I hope to meet before I leave for Australia in about a month's time.

DUDLEY STONE.

Clinical Gittings.

No. XX.

By SAMUEL WEST, M.D.

WHEN ARTERIAL TENSION IS HIGH, IT IS NOT ALWAYS WELL TO LOWER IT.

HIGH blood-pressure is often spoken of as if it were a disease of itself requiring urgent treatment, whereas it is but a single symptom, and is often best left untreated.

Its value in diagnosis and its call for treatment varies with the causes upon which it depends. A patient would be best without granular kidneys, but having that disease he should have a high arterial tension. If the tension be low he is not so well, and will not be better until the tension rises again

to the adequate super-normal level. This explains why digitalis may do harm as well as good in granular kidney. If the tension be low, it will raise it and do good; if the tension be already high, it will do harm.

When arterial pressure is measured it is usually the systolic pressure which is determined. This depends chiefly upon the force of the ventricular contraction, and is held to be but little affected by the thickening of the wall of the artery. What it is far more important to know is the diastolic pressure—*i. e.* the more or less constant pressure maintained in the artery between the pulse-beats—and this must necessarily depend greatly upon the condition of the arterial walls.

In estimating these different conditions in the arteries and pulse, there is no apparatus yet invented which is in any way equal to the educated finger.

When the high tension occurs in the course of some general disease, such as granular kidney, the treatment will be in great measure that of the associated disease.

But high arterial tension may occur where there is no granular kidney nor any other obvious cause. The condition is not infrequent, and is met with for the most part in busy, over-busy, energetic, bustling men with much to do, and who do too much—men who work at high pressure. This common metaphor does, indeed, express the fact, for their blood-pressure is actually high. It is probably just because it is high that they are capable of so much, and to reduce it means reduction in their capacity for work.

I have met with patients in whom some casual ailment, which brought them to the doctor, has been referred to this high tension. The high tension has been treated at first by mild drugs and measures, and, when these failed, by more drastic measures, stronger drugs, under-feeding or semi-starvation, and even free bleedings, with disastrous effect upon the general health and little or no effect upon the tension. In fact, the high tension in these cases, though no doubt in itself undesirable, seems to be the normal condition for that individual which alone enables him to retain his mental and physical vigour, for he loses both as soon as the pressure is reduced.

Thus it follows that there are cases of high arterial tension which are best left untreated. This statement is contrary to much of the generally accepted teaching of the day, but it is a statement of fact which has been brought home to me forcibly and not infrequently.

Amoebiasis.

- (1) CEREBRAL ABSCESS SECONDARY TO AMOEBIC ABSCESS OF THE LIVER.
 (2) THE TREATMENT OF LIVER ABSCESS DISCHARGING THROUGH THE LUNG.

By LLEWELLYN PHILLIPS, M.D., F.R.C.P., F.R.C.S.,
 Professor of Medicine in the Egyptian Government School of
 Medicine, and Senior Physician Kasr el Ainy Hospital,
 Cairo.

AMOEBIASIS is a disease of great importance in the tropical and subtropical regions of the globe. Cases of this disease are not infrequently seen also in England in individuals who have returned from residence in our colonies or other foreign countries; therefore I consider the disease is of sufficient importance to be discussed in the pages of a general medical journal quite apart from the general interest of the affection. Besides this, the journal of our Alma Mater circulates far and wide throughout the world in the countries where the disease is endemic.

Two separate conditions are described in this paper, both dependent on the same infection.

- (1) ABSCESS OF THE BRAIN, PRESUMABLY AMOEBIC, SECONDARY TO AMOEBIC DYSENTERY AND LIVER ABSCESS.

In December, 1912, I was asked by my colleague, Mr. Richards, to see a man who had returned that evening from England suffering from severe headache. There was a history of dysentery during the summer of 1912 in Egypt before he went home on leave; this was followed by hepatitis in England; a liver abscess formed, and was opened early in September. His general health improved, and although not quite strong again he was sufficiently well to return to Egypt, but he was supposed to be consumptive. However, at the railway station in London, on getting out of his cab he fainted, and he was taken to the nearest general hospital; he recovered from the fainting attack and proceeded on his journey the same evening. He felt very ill at Marseilles, and rested there a couple of days before embarking. On board the steamer he suffered intensely from headache, and a friend had to assist him in packing and disembarking. He came up straight to Cairo and went immediately into hospital. I saw him the same evening; he was then suffering from intense occipital headache, his temperature, which on admission was 97° F., was then 101° F., and his pulse was 60. He was in such pain that a hypodermic injection of morphia had to be administered, and I postponed a full examination until the next day. In the morning the temperature was still 101° F. and the pulse 56. The headache was very severe. Kernig's sign was present, and there was a *tâche cérébrale*; he also told me

there was some disturbance of vision and he could not see very well, but with the severe pain he could not give a very clear account. The temperature fell that night to 97° F. The next day, he being in the same condition, I made a lumbar puncture and drew off a small quantity of *straw-coloured clear fluid*; this proved to be sterile. I wrote requesting the ophthalmic surgeon to examine and report on the condition of the discs. The same evening he became very delirious, and was kept in bed with difficulty, and died early the next morning, the whole illness lasting some eleven or twelve days from the first cerebral symptoms. An examination of the brain revealed a small cavity in the left occipital lobe. It contained about one to two drachms of semi-purulent thick fluid; the cavity had no definite lining membrane. Unfortunately no microscopic examination was made for amoebæ. The situation of the abscess explained the severe occipital headache and the disturbance of vision. The straw-coloured cerebro spinal fluid was an unexpected finding and somewhat hard to explain.

Dr. Legrand, of Alexandria, has published a paper entitled "Les Abscès dysentériques du Cerveau (Amoebic encephalique)" in *Archives Provinciales de Chirurgie* for January, 1912. In this he refers to forty-five cases in all, in forty-three of which the abscess either accompanied or followed an abscess of the liver; in the other two there was no liver abscess, but in one of them amoebæ were found in the brain. He refers to nine cases in all in which amoebæ have been demonstrated in the cerebral abscess. Of these forty-five cases twenty-six occurred in Egypt. He points out that these so-called cerebral abscesses are not true abscesses but a liquefaction secondary to an amoebic thrombosis with or without hæmorrhage, the fluid often being almost jelly-like and resembling in colour gooseberry jelly, or, if hæmorrhage has taken place, of a reddish or brownish colour. To ordinary methods of examination and culture they are bacteriologically sterile, but he has demonstrated that by anaerobic methods a micrococcus or a streptococcus may occasionally develop, and he rather inclines to the view that a symbiosis of the amoeba with one of these organisms causes the abscess. The amoebæ are found in the wall of the cavity. In fact, anatomically and bacteriologically, there is complete accordance with the so-called dysenteric liver abscess. It would be better, therefore, to devise a new term for these so-called abscesses.

Under ordinary circumstances the liver acts as a filter for the portal circulation and arrests the amoebæ which may have penetrated into the radicles of the portal vein, and the amoebæ which have lodged there may under favourable circumstances produce hepatitis. Some may pass into the vena cava and infect the lung, or the lung may become infected by the opening of a hepatic abscess into its substance. Just as occasionally hepatitis may be engendered by amoebæ without a preceding dysentery, so can occasionally the lung, or very rarely the brain, as in two of the published cases, be infected whilst the liver escapes. Legrand points out

the extreme rarity of cerebral infection, for the cases hitherto noted are but few, whilst hepatitis and liver abscess are common (at least in Egypt).

In three an operation was performed but all ended fatally.

- (2) THE TREATMENT OF LIVER ABSCESS DISCHARGING THROUGH THE LUNG.

Occasionally cases are seen in which an amoebic abscess discharges itself through the respiratory passages; in the majority of them the abscess is primarily seated in the liver, though apparently a primary abscess may occur in the lung. Under the ordinary expectant methods of treatment they continue to discharge for months or years; the patient meanwhile loses his health, and gets thin and anæmic. In a few cases the primary abscess has been localised and drained, but this is a difficult proceeding. But by the use of ipecacuanha, or, better still, its derivative, emetine, a cure may be brought about rapidly, as happened in the following cases.

The first case was that of a sergeant of police, who had been addicted to alcohol for thirty years, and contracted dysentery three months before his admission to hospital; a month later he developed a cough accompanied by whitish expectoration; a fortnight later the sputa became reddish-brown and abundant. A month before admission he complained of pain in the region of the liver. On admission there was tenderness over the hepatic area at the level of the eleventh rib. He was spitting up daily, after admission, about 200 to 350 c.c. reddish-brown purulent sputum (typically that of a liver abscess discharging through the lung). I gave him pure ipecacuanha in a single daily dose of 2 grm. (about 30 gr.); in three days there was a marked diminution of the sputum, in five days the temperature became normal, and in sixteen days he was discharged cured. I see him from time to time on duty in the streets of Cairo, and he tells me the cure has been permanent. The ipecacuanha was continued for several days in the same dose, then gradually diminished.

My second case is still more interesting. He was a middle-aged Egyptian who consulted me this spring on account of a liver abscess, that he had been expectorating for eighteen months, without a single day's intermission. The sputum was the typical reddish-brown purulent material. He had a tender liver and there was dulness at the base of the right lung reaching nearly to the inferior angle of the scapula. He could not sleep with comfort on his right side. I wrote a letter to his usual medical attendant requesting him to give him a daily subcutaneous injection of emetine half a grain at each injection. His doctor brought him up to me ten days later and told me that for the last five days the purulent expectoration had ceased, for the first time for eighteen months. I recommended him to continue the same treatment for a few more

days. Three weeks later he came again to see me. He had remained well and could now sleep with comfort on his right side. The dulness at the right base had partially cleared up, there was no tenderness over the liver and he felt quite well and strong.

Prof. Chauffard also reports a case of a man who developed, as a complication to dysentery, a liver abscess, which he opened through his lung on March 23rd, 1912; he continued to expectorate pus almost continuously until December 21st, when the emetine treatment was commenced. The sputum, which, before treatment, measured daily about 250 c.c., ceased entirely in five days, the base of the lung clearing at the same time. The dose given was 0.04 grm. (about two thirds of a grain) daily for six days.

The value of emetine in amoebic infection is very great, cases of hepatitis in which the liver has been enlarged, painful, and a leucocytosis present, and in which I have used emetine, losing all their pain, fever, and tenderness in a few days and the leucocytosis disappearing. It is also claimed that the period of cure is much shorter than with the use of the ordinary ipecacuanha. This may be so; personally I have been very satisfied with ipecacuanha properly administered, but for ease of administration there is no comparison between the two drugs. I usually combine with the emetine, in cases of hepatitis, a mixture I call the "three soda mixture," viz. a mixture containing the bicarbonate, the sulphate, and the salicylate of soda.

These three cases are very instructive and correspond with each other in all particulars. I consider that in all cases of hepatitis resultant on dysentery, and in all cases of liver abscess in which an operation has been performed, emetine should be given in the attempt to produce what Ehrlich has called "therapia sterilisans magna"—that is to say, to kill off all amoebæ present in the tissues, and prevent the occurrence of such a terrible complication as cerebral abscess.

I think it is clear from the foregoing that our ideas regarding amoebic dysentery must be definitely enlarged, and I think that the term "amoebiasis" is a better name for the disease.

CAIRO:
 June, 1913.

A Case of Complete Heart-block with Stokes-Adams' Symptoms.

By J. H. DRYSDALE, M.D., F.R.C.P., and T. H. G. SHORE, M.B., B.C.

CASES of complete heart-block are sufficiently uncommon for the following notes to be of some interest.

The patient was a man, æt. 57, of sallow complexion and

unhealthy appearance. He was a glass-blower by trade, though he had not actually blown glass for many years.

He complained of loss of breath on exertion, attacks of fainting, and more or less continuous pain in the epigastrium and under the left clavicle. He was admitted to the hospital on two occasions—in September and in December, 1912.

He had been obliged to give up his work two years before the first admission on account of his vision not being so good, and just before that he had his first attack of fainting; he fell while at work and lost consciousness. Prior to that he had noticed nothing amiss. He had had rheumatic fever fourteen years ago; he denied syphilis, though his blood gave a strongly positive Wassermann's reaction.

For three months before his first admission he had been troubled by sensations of tingling "all over," occurring at first two or three times a day, but later increasing in frequency, and lasting from a few minutes to a couple of hours. He also complained greatly of a sensation of "rats gnawing at his head."

He did not lose consciousness again till two months before admission, and again a week later. He could remember nothing he had done which might have brought on the attacks. He was very emphysematous, the emphysema obscuring what appeared to be a hypertrophied heart. The heart-sounds were muffled, but a systolic murmur could be heard at the apex, and later on an additional sound could be made out between the second and first sounds, which was faint, blurred, and best heard near the left side of the sternum. It corresponded in time with the visible venous pulsation in the neck. It was not always audible, and did not always occur at the same point in the cardiac cycle. It was believed to be due to the auricular contraction.

His pulse-rate in August varied between 18 and 40, averaging about 34. In December 16 to 20 was his usual rate, often falling to 12 or 15. The pulse was slow, forcible, full, and very well sustained. The artery was considerably thickened. His blood pressure varied from 180 to 215 mm., his condition being better with the higher pressure. After one of his attacks it rose to 250 mm.

Beyond dyspnoea he had no signs of failure of compensation; he had no albuminuria until a few days before his death. Part, at any rate, of his pain was due to flatulence.

The attacks from which he suffered were of two kinds, differing in severity. Minor faint feelings which were present during both periods of observation consisted of a temporary pallor, and an occasional momentary loss of consciousness, corresponding with the dropping of two or three successive beats from his normal pulse rhythm. Major attacks, or fits of the Stokes-Adams type, were particularly prominent during the second period of admission. There appeared to

be no exciting cause; the pulse would suddenly stop, and at such a time the patient would often say that he felt another attack coming. His face would turn pale, but he would often go on talking for a short time. His respirations deepened and quickened, up to inspiratory apnoea with cyanosis, in about 15 seconds; a little before this he lost consciousness. With the cyanosis the limbs became rigid, the eyes rolled up, the pupils dilated and became inactive to light, and, on one occasion, the corneal reflex was lost. A few clonic spasms often followed at this stage.

The pulseless periods varied from 55 to, on one occasion, 90 seconds. Recovery started with a return of the pulse at the wrist, and this was the first beat audible by stethoscope. Immediately after this the face, previously extremely cyanosed, became flushed, and perspiration broke out; respiration began again, and consciousness returned a few seconds later.

During the whole attack a venous pulse of 40 or 50 was present in the neck. During these attacks the patient never bit his tongue nor passed his urine.

Attacks such as this frequently followed one another in rapid succession, for an hour or more, during the last week of his life. He died suddenly one night, not in an attack, and after having been free from one for an hour.

The only drug that seemed to have any effect on the attacks was adrenalin (1 : 1000) *ix sub cute*.

The case exhibits in an extreme form the results which may follow on the occurrence of heart-block.

When the patient was first seen in the out-patient room in April, 1912, complete dissociation of auricular and ventricular action was already established. His pulse-rate was 32 and practically was never found above that rate afterwards.

From the history it is probable that a high degree of heart-block had existed for some considerable length of time, as shown by the attack of faintness and loss of consciousness two years before. The complete cessation of all symptoms from that time forward up to a period three months before his first admission is probably to be explained by *persistent*, complete block, for the period of *transition* from partial to complete block is nearly always marked by attacks of faintness, syncope, and perhaps convulsions, attacks which may cease when the dissociation is permanently established.

The attacks of faintness, syncope and convulsions, as is well known, are associated with an excessive slowing of the ventricular rate. The cause of this slowing is not known, but from the time when first he came under observation the patient became increasingly subject to such attacks, and during the last few days of life had a constant succession of them. The severity of the attacks depends on the degree of slowing. As a rule when the ventricular rate falls below 20 symptoms appear, but our patient preserved, while in bed, a constant rate of 16, or sometimes 17, and occasion-

ally only 14 for four days without symptoms other than precordial pain. During the longer, isolated intermissions, when convulsions occurred the auricle preserved its common rate of 48. It may be noted that after countless attacks the patient died suddenly during an intermission.

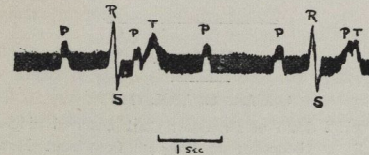


FIG. 1.—TRACING OF ELECTRO-CARDIOGRAM. LEAD II. AURICULAR RATE, 52. VENTRICULAR RATE, 20.

The electro-cardiogram (Fig. 1) was taken with the plate moving at about a quarter of the usual rate. At the time the patient's arterial pulse-rate was about 16 and the jugular about 48 to the minute. The "P" wave, the auricular complex, is seen occurring at regular intervals, sometimes

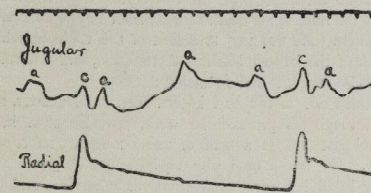


FIG. 2.—POLYGRAPH TRACING—JUGULAR AND RADIAL. TIME MARKER $\frac{1}{2}$ SEC. RADIAL RATE ABOUT 16.

isolated, sometimes falling within and deforming some part or other of the ventricular, R.S.T., complex.

The polygraph curve (Fig. 2) shows, in the jugular curve, the "a" wave, due to the auricular contraction, occurring independently of, and about three times as often as, the "c" wave, which indicates the contraction of the ventricle.

On Sea Fishing.

THE unexpected advent of a few days' warm sunshine seems to have had a most injurious effect on the Editor of this highly respectable and scientific Journal, because just before this number went to press I was seized upon by him in the Square and commanded to write an article of not less than a thousand words on my nautical experiences or on fishing.

I thought my nautical experiences would be much the same as those of any other yachtsman, and that if I wrote

about river fishing the usual statement would be made, namely that the size of the fish is directly proportional to that of the stone jar and its contents, which is, at least to the non-fishing members of the community, an invariable accompaniment of the river fisherman, and so I find myself in Mr. Hobson's position, and sea fishing it must be.

If you think of embarking on the dangerous career of a deep sea fisherman, I would earnestly suggest that you make an excursion from London Bridge to Margate or Ramsgate, on a windy day, by one of the commodious steamers (*vide* advertisement) which ply between these places. Also that you indulge freely in the luxurious lunch which is provided. I tried this on a Bank Holiday and was told that I might eat as much lobster as I could, as many of the other ladies and gents would not require any. Lunch is generally served just beyond Southend, where the sea is beginning to be felt, and if you can reach your destination and return to town by the same boat without experiencing that painful spasm of the upper parts of the recti which in many persons accompanies the process of ground-baiting, you may then begin to think about the next stage of your career, which is that of purchasing the necessary tackle. If, however, you are unsuccessful with the preliminary trip, then my advice to you is the same as Mr. Punch's to those about to marry—"Don't."

With reference to tackle—don't go to a certain gentlemen's business near the Hospital and there invest in an elegant structure made of four pieces of wood nailed together in the form of a square, upon which several yards of highly coloured and very thick string are wound, the string being attached by one end to the square and by the other to a stout piece of wire having a hook at each end and a small weight in the middle; these things were possibly effective in the days when sea fish were unsophisticated, but nowadays the use of such a contrivance would fully deserve the old adage about a worm at one end and a fool at the other.

The thing to do is to go to one of the recognised vendors of fishing tackle, such as Messrs. Carter's of St. John's Street, or Peak's of Gray's Inn Road, and purchase a short sea rod, about 8 ft. long, consisting of two joints which are packed in a canvas rod bag. Notice particularly that the ferrule is double brazed and that the rings are porcelain; these latter should be of the bridge or protected variety, so that, if the rod is used for pier work, they may not be broken by contact with the pier rail. Do not have a brass pulley at the end of the rod; it is very unsatisfactory, and a frequent cause of fouling when one is trying to cast from the pier—have porcelain rings throughout. Next get a Nottingham sea reel, 6 inches in diameter, with an optional check; the revolving part of the reel should have a brass back, and the part in which this turns should also have a brass lining, because when the wood gets wet the reel will probably jamb if you don't. Have nothing to do with line guards

The line should be plaited hemp, properly tanned; it is cheap and does not kink; many people I know use twisted line, but I have lost a good deal of tackle by using it and don't like it.

The actual business part of the tackle remains to be purchased. I always invest in the following, and have found them to be most generally useful.

(1) A paternoster. This may be made entirely of wire or of wire and gut. I take one or two of each because the wire one is very useful for conger and dogfish, which are able to bite through gut with the greatest ease. Each paternoster should have three booms attached in such a way that the pull on the line may be immediately felt. Carter's pattern is an excellent one.

(2) Gut traces: These should have one or more loops in their course and should be about 3ft. long. They are for attaching to the bottom boom of the paternoster, and are intended, when fitted with small hooks, to catch dabs and any other bottom-feeding fish which may be about.

(3) A long trace, 4-5 feet, and a Clement's boom; this is for ledgering for flat fish and is very useful in summer time, when fish which feed a short distance from the bottom are not very plentiful.

(4) Hooks and leads: The hooks should be of three sizes—very small, about the size of small perch hooks, for dabs; larger, about the size of large perch hooks, for whiting; and larger still for cod. It is impossible to give numbers for these hooks, because the sizes which correspond with the numbers vary with the maker, but fortunately the dealers may be relied upon to supply the correct article if dab hooks, whiting hooks and cod hooks respectively are asked for.

Don't forget to get one or two large hooks with long shanks for conger fishing. I think conger is most unpleasant to eat, but it is certainly one of the best sporting fish, and one should always be provided with conger tackle. One must have some piano wire to attach the hook to the bottom boom of the paternoster, and a strong pair of wire-cutting pliers to deal with the wire. The hook should be fitted with two swivels, because the fish has a habit of twirling round as fast as possible when hooked, and will tie one's tackle into the most extraordinary knots it allowed to do so.

The leads should be 6 oz. and 8 oz. The Grip sea lead is an excellent one, and may be used for everything except for conger; in this case a stone tied on with thin string is better, because, since conger feed among rocks, one is liable to be caught up, and then a sharp pull breaks the string and frees the tackle—sometimes.

I find I have already exceeded the space allowed me by the Editor, so that it is impossible for me to give details in this article of the actual fishing, but if the effect of the sun, already alluded to, is maintained, I may possibly be allowed to give further details in another number. If, however, the remainder of the summer should prove unsatisfactory, the following points may be found useful: Don't get cheap

rubbish when buying tackle—there is nothing more annoying than losing a good fish owing to faulty tackle; also, when trying a new place, take a boatman the first time or two, so as to find the best spots; and lastly, remember that sea fish are no fools, and that the finest tackle often means the biggest bag and the best sport. D. W. HUME.

Obituary.

OSCAR CLARK, M.D.

THE death of Dr. Oscar Clark occurred suddenly at Gloucester on June 7th, from heart disease, with which he had been troubled for a few years past. He was 58 years of age.

He was educated at Oxford University and entered St. Bartholomew's Hospital in 1878. In 1881 he obtained the membership of the Royal College of Surgeons, and in 1882 his M.B. degree. He was house-physician under Dr. Gee, and afterwards held the appointment of Resident Clinical Assistant in the City of London Chest Hospital. In 1885 he became associated with the Gloucester Royal Infirmary, and at the time of his death he was Senior Physician to that institution. He was also President of the Gloucestershire Branch of the British Medical Association, and Chairman of the Gloucester District Nursing Society.

He was one of the best known men in Gloucester, not only through his professional work, but also as a keen archaeologist and as a man of marked literary tastes and ability. He was a man who exhibited untiring zeal and energy in all his work, professional or otherwise, and his death, which occurred with tragic suddenness, took place while he was attending Gloucester Gaol, where he had been medical officer since 1885.

SIR JONATHAN HUTCHINSON, F.R.S., F.R.C.S.

It is with much regret that we have to announce the death of Sir Jonathan Hutchinson, at the age of 84, after a short illness.

Sir Jonathan was born in 1828, at Selby, and received the first part of his education at home. At the age of sixteen he became apprenticed to Mr. Caleb Williams, a York surgeon, with whom he remained for six years. At the end of that time, in 1850, he came to London and entered St. Bartholomew's Hospital, where he studied under Sir William Lawrence, and Mr. (afterwards Sir James) Paget. In 1851 he obtained the diploma of M.R.C.S., and then returned to York, as house-surgeon to the York County Hospital. At the end of this appointment he returned to London, to resume his work at St. Bartholomew's Hospital, and also at the Royal London Ophthalmic Hospital, and the Blackfriars Hospital for Diseases of the Skin; at the two latter institutions he was later a member of the staff.

In 1856 he married Jane Pynsent West, daughter of William West, F.R.S., of Leeds. He then gave up his former intention of becoming a medical missionary and settled down to practice in London. He soon began to make his name as a surgeon, and in 1854 he was appointed surgeon to the Metropolitan Free Hospital, and some years later to the London Hospital.

In 1862 he published several important discoveries on the nature of congenital syphilis, and his observations on this subject formed the first important step of advance in medical knowledge of this and other allied conditions. His name has for many years been associated with the study of leprosy, and as early as 1869 he was engaged in research on this subject in Norway.

His professional honours were numerous. In 1865 he obtained the Astley Cooper triennial prize, and a few years later he was elected a Fellow of the Royal Society. He was President of the Third International Congress of Dermatologists, and served on the Royal Commission on Vaccination from 1890 to 1896. In 1908 he was knighted, an honour which on previous occasions he had declined. He was for many years Examiner to the Royal College of Physicians, and was President of the Royal College of Surgeons, having been admitted a Fellow of the College at an early stage of his career.

He was greatly interested in the subject of education, and was a great advocate of the use of museums as a means of instruction.

The Clubs.

THE ATHLETIC CLUB.

THE Annual Sports were held at Winchmore Hill on Saturday, June 7th. This was the first year that Saturday had been chosen for the Sports, and the increased number of competitors and spectators caused the day to be a most successful one. The weather was fine and the ground in good condition.

The following are the results:
100 Yards Race.—H. W. Peterson, 1; C. Kearney, 2.
Throwing the Hammer (Handicap).—J. B. Mudge, 1; C. Kinneir, 2.
120 Yards (Handicap).—J. Braun, 1; C. Kearney, 2.
High Jump (Handicap).—R. G. Mack, 1; W. S. Soden, 2.
One Mile (Handicap).—D. C. James, 1; C. S. Blair, 2; G. D. Banks, 3.

Putting the Weight (Handicap).—J. B. Mudge, 1; H. J. Bower, 2.
440 Yards Race.—H. W. Peterson, 1; M. A. Hafez, 2.
Long Jump (Handicap).—W. S. Soden, 1; R. G. Mack, 2.
Obstacle Race (Cup presented by D'Arcy Power, Esq., F.R.C.S.).—C. H. Banks, 1; J. B. Mudge, 2.
120 Yards Hurdles (Handicap).—G. F. Jukes, 1; C. Biberbeck, 2.

880 Yards (Handicap).—H. W. Peterson, 1; R. White Cooper, 2.
Freshmen's Race (220 yards).—H. W. Peterson, 1.
Inter-firm Relay Race.—The Green Firm were first, and were represented by T. H. Just, G. N. Stathers, C. S. Atkin, G. S. Wells-Cole.

The prizes were kindly distributed by Mrs. D'Arcy Power from the Pavilion steps. H. J. Bower returned thanks on behalf of the Club, Mr. D'Arcy Power replying in a short speech.

The Committee desire to thank the members of the staff and the clerks of the course for the pains they took to make the meeting such a success.

CRICKET CLUB.

ST. BART'S C.C. v. VIRGINIA WATER.

Result—won by 225 runs.

Played at Virginia Water. Having won the toss, Bart's started batting on a slow wicket. From the start runs came freely, and by lunch-time 310 runs had been scored in 2 hours 30 minutes for the loss of only 4 wickets. This was due chiefly to Stretton, who punished the bowling severely, hitting no fewer than 6 sixes. Bower and Mack also hit well, while Owen and Grace gathered their runs by more cautious methods. At the fall of the 5th wicket, a quarter of an hour's play after lunch, the innings was declared closed, leaving Virginia Water 337 runs to get in just over three hours. In two hours the match was over, five of our bowlers, Grace, Owen, McCall, Stretton and Bower, getting 2 wickets each.

SCORES.

ST. BART'S.		VIRGINIA WATER.	
E. M. Grace, c Blaber, b Roles	55	Stinton, c Wells-Cole, b Owen	1
E. G. Dingley, c Blaber, b Roles	12	Kirk, c and b Owen	19
H. J. Bower, b Blaber	32	H. W. Gosling, c Mack, b Grace	4
T. Owen, not out	100	Roles, not out	41
R. G. Mack, c Stinton, b Pond	39	Blaber, b Grace	15
J. W. Stretton, b Pond	91	T. E. Harper, b McCall	7
G. C. Wells-Cole		J. W. Smith, b McCall	0
G. F. Jukes	} Did not bat.	Navier, b Stretton	2
G. Boume		Burswell, c Owen, b Stretton	3
J. B. MacFarland		Pond, b Bower	6
H. D. McCall		Wilkie, b Bower	2
Extras	8	Extras	12
Total (5 wkts.)	337	Total	112

Innings declared closed.

ST. BART'S v. HIGHGATE C.C.

Result—lost by 50 runs

Played at Winchmore Hill. Highgate batted first on a very wet pitch, and play was maintained to the finish of both innings despite frequent showers and much mud. The Highgate captain played a splendid innings of 50 not out, and was the only player on their side who looked anything like scoring, the next highest score to his being 9. Owen was the chief bowling success, getting 7 wickets for 39 runs. The Bart's innings was a procession. Mack and A. R. Dingley were best of a poor lot.

SCORES.

HIGHGATE.		ST. BART'S.	
A. S. Macdonald, b Owen	0	E. G. Dingley, c Boulton, b Walter	5
J. A. Foscroft, b Owen	6	G. F. Jukes, c Dyer, b Walter	0
A. J. Boulton, b Owen	4	R. A. Maingot, run out	4
C. W. Dyer, c Atteridge, b Green	9	R. G. Mack, c Taylor, b Walter	15
J. B. Squire, lbw, b Green	1	T. Owen, c Jack, b Taylor	0
A. Taylor, lbw, b Owen	1	T. E. Osmond, c Jack, b Purnell	3
C. H. Purnell, not out	50	S. L. Green, b Walter	0
F. E. Whitehead, b Owen	1	A. R. Dingley, c Dyer, b Walter	10
D. Jack, c Green, b Osmond	6	G. Boume, b Taylor	1
H. White, b Owen	9	R. Coyte, c Dyer, b Walter	1
H. W. Walter, c A. R. Dingley, b Owen	1	K. D. Atteridge, not out	2
Extras	0	Extras	3
Total	94	Total	44

ST. BART'S v. SOUTHGATE C.C.

Result—lost by 4 wickets.

Played at Winchmore Hill. Batting first, Bart's made a very bad start, losing 3 wickets for 4 runs. Our batsmen seemed troubled by the pace of the wicket, this being the first dry wicket of the season. Haynes brightened the prospects a little and McCall helped considerably later on. With a total of 108 Southgate looked like scoring a very easy victory. Thanks to good bowling by McCall, however, Bart's put up quite a good fight. Bowling up the hill, McCall, showing plenty of pace and good length, secured 5 wickets for 26

runs, 9 of these being no-balls. Milton, scoring 66 for the visitors, was chiefly responsible for their victory.

SCORES.

ST. BART'S.		SOUTHGATE.	
E. M. Grace, c Monk, b Cranfield.....	2	H. A. Milton, b Owen.....	66
E. G. Dingley, c Cranfield, b Milling.....	0	S. M. Chotia, run out.....	0
R. H. Williams, c Monk, b Cranfield.....	16	C. A. Saville, b McCall.....	1
T. Owen, b Cranfield.....	0	L. Niederheitman, c Williams, b Grace.....	2
J. F. Haynes, c Milton, b Milling.....	18	J. A. E. Pescher, c Dingley, b McCall.....	8
J. W. Stretton, b Bashford, G. C. Wells-Cole, c sub, b Milling.....	6	H. L. Saunders, b McCall, Rev. A. M. Bashford, b McCall.....	0
G. F. Luckes, b Milling.....	1	G. W. Cranfield, b McCall, F. W. Milling, b Grace.....	17
C. S. Atkin, b Cranfield.....	0	S. M. Monk, b Stretton.....	17
H. D. McCall, b Bashford, S. L. Green, not out.....	8	E. T. Vint, not out.....	2
Extras.....	29		
Total.....	108	Extras.....	27
		Total.....	175

ST. BART'S v. WANDERERS' C.C.

Result—lost by 8 wickets.

The Wanderers brought a very strong side down to Winchmore Hill on May 24th. The Hospital side was strengthened also by the reappearance of A. J. Waugh, who up to this match had been unable to play. Bart's won the toss and batted first, and thanks to excellent batting by Waugh and Williams, succeeded in reaching a total of 166. The Wanderers had no difficulty at all in beating this. They won, having lost only 2 wickets, and Bart's bowling was quite inadequate to deal with the rest successfully.

SCORES.

ST. BART'S.		WANDERERS.	
A. J. Waugh, b Pretty.....	50	Dr. H. C. Pretty, b McCall	13
E. G. Dingley, b Bradley.....	0	I. C. Stafford, c Owen, b Grace.....	27
H. J. Bower, b Holloway.....	0	B. H. Holloway, c Mack, b Waugh.....	77
R. H. Williams, b Holloway.....	40	L. S. Wells, c Mack, b Stretton.....	92
J. F. Haynes, b Holloway.....	4	P. G. Gale, not out.....	32
K. G. Mack, b Bradley.....	11	J. U. C. Watt, c Dingley, b Stretton.....	7
T. Owen, b Holloway.....	11	A. Sims, not out.....	9
E. M. Grace, c Holloway, b Wells.....	20		
J. W. Stretton, st Brook, b Wells.....	11		
G. C. Wells-Cole, not out.....	5		
H. D. McCall, c Holloway, B. H. Holloway, N. J. c.....	14	Extras.....	30
Extras.....	14		
Total.....	166	Total (5 wickets).....	287

Correspondence.

THE ETHERINGTON-SMITH MEMORIAL.

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

DEAR SIR,—Will you kindly make known to your readers that the subscriptions which have been received and promised for the Etherington-Smith Memorial, including the sum collected by the Leander Club, now amount to a little under £1200.

This sum will probably be sufficient to carry out the structural alterations required to provide the proposed sick quarters but will not supply any permanent endowment.

I desire through you to thank those of your readers who

have already subscribed, and to make an earnest appeal to all who knew Etherington-Smith and have not yet done so to subscribe as liberally as they can to this fund.

Subscriptions should be sent to me, at the Dean's Office, St. Bartholomew's Hospital, E.C.

I am,
Yours faithfully,

T. W. SHORE

(Hon. Treasurer.)

June 23rd, 1913.

A UNIQUE NIGHT CALL.

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

SIR,—I consider the above title is amply justified when one reads the history of this case.

History.—Mr. X—, æt. 56, a publican, seen late on Saturday evening apparently in his normal health, passing the usual "Good-night, doctor."

At 12.30 a.m. of the same night urgent call to see Mr. X—, who had injured his privates. On arriving I found he had completely dissected out his testicles, and they were laid out on a plate for my inspection. I asked him what he had done. His reply was that they hurt him, and he cut them out.

Treatment.—Considering that the cord had shrunk up and the hæmorrhage practically stopped I put in ten silk sutures, packing the cavity with salembroth gauze, the lower end being left open to act as a drain.

After-treatment.—Usual antiseptic lotion and fresh packing every day for the first week. Recovery in one month. Patient able to get about his usual work.

E. RUSSELL RISSEN,
District Medical Officer,
East Ilsley.

The Bookshelf.

We have recently received from the author, Dr. C. F. Hadfield, some interesting facts on ethyl chloride anaesthesia, in the form of a reprint from the *Clinical Journal*, published by the Medical Publishing Co. The first use of ethyl chloride as a general anaesthetic appears to have been in 1847, and its use in this way was later revived accidentally while it was being used as a local anaesthetic for the teeth. The author goes on to state that it may be given with safety to persons in the sitting position, and he is of the opinion that the severity of the after-effects, though more marked than in the case of nitrous oxide, has been exaggerated. It appears to be a useful agent for the rapid induction of anaesthesia as an introduction to ether or chloroform, but is unsuitable for operations of any length. Its great advantage is its portability.

We have also received from the author, J. A. Jennings, a book of *Materia Medica Tables*. It is written purely for examination purposes, and should prove useful to the student, its arrangement being such as to form a valuable and comparatively easy aid to memory; the drugs and their preparations necessary for the Conjoint examination are arranged alphabetically and also in order of the magnitude of dose. The book is published by Grattan, and the price is 1s. 6d.

Mr. H. K. Lewis informs us that Mr. Louis B. Rawling's popular *Landmarks and Surface Markings of the Human Body* has been adopted as the text-book at the McGill University, Montreal; Queen's University, Kingston; Toronto University, Toronto; and the Western University, London, Ont.

BOOKS RECEIVED FOR REVIEW.

Skin Diseases in General Practice. By Haldin Davis. Frowde, Hodder & Stoughton. 13s. net.
Tumours. By Powell White. Constable. 10s. 6d. net.
Manual for Women's Voluntary Aid Detachments. Cabbatt. Second edition. Wright & Sons. 1s. net.

First Aid. Warwick and Tunstall. Eighth edition. Wright & Sons. 1s. paper, 2s. 6d. leather.

Annual Report of the Royal Dental Hospital of London. Bale, Sons & Danielsson. 5s. net.

The Trial and Acquittal of Prof. Carlo Ruata. The National Anti-tubercular League.

Diseases of the Skin. By Walsh (Baillière, Tindall & Cox) 6s. net.

Practical Bacteriology, Microbiology and Serum Therapy. By Besson; translated by H. J. Hutchens. (Longmans, Green & Co.) 35s. net.

Tonic Medication. By H. Lewis Jones, M.D. (H. K. Lewis.) 5s. net.

Clinical Electro-cardiography. By Lewis. (Shaw & Sons.)

Surgical Pathology. By Bowly and Andrews. 6th edition. (Churchill.) 10s. 6d. net.

German-English Dictionary of Medical Terms. By Lang and Meyers. 2nd edition. (Churchill.) 18s. net.

Aids to Surgery. By Cunnings. 3rd edition. (Baillière, Tindall & Cox.) 4s. net.

Acute Adrenal Diseases. By Adams and Cassidy. (Baillière, Tindall & Cox.) 12s. 6d. net.

Livingstone College Year Book.

REVIEWS.

THE PATHOLOGY OF GROWTH. Edited by A. E. BOYCOTT, M.D. Vol. I. TUMOURS. By C. P. WHITE, M.D., F.R.C.S. (London: Constable & Co., 1913.) Price 10s. 6d. net.

The consideration of the origin and nature of tumour formation is a subject which has a special fascination for the histologist. There is so much which can be known about it, and yet when one comes to sum up the total of our knowledge one finds that in essentials the advance which has been made is infinitesimal. Yet advance there is, and a partial of this, the latest volume on the subject, teaches how real it has been of recent years. The labours of many pathologists have gone in modern times chiefly to the freeing of the subject from much of the accretion of imperfectly ascertained facts which clogged and hindered progress, and it is now possible to feel that the knowledge which we have, however scanty, is at least firmly founded on careful experiment and deduction.

The present volume is the first of a series to be edited by Dr. Boycott, the Professor of Pathology in the University of Manchester. Dr. White is, as most Bart's men know, specially well fitted to deal with the subject. He possesses a judicial temperament and a wide knowledge of the work of his predecessors; and, moreover, has that invaluable gift of ordered arrangement and logical sequence which are essential for the writing of a book which is to deal with the outer fringes of the domain of knowledge.

The book begins with two chapters dealing with the modern conceptions of growth, development and regeneration. This introduction is followed by chapters on the classification of tumours and on the special characteristics of the various groups; next comes the consideration of the inter-relationship of the different groups, the question of the origin, the modes of growth, the physiology and biology of tumours, and lastly, a statement of what is certainly known, and still more important at the present stage, of our negative knowledge regarding their causation. The last chapter is occupied with a scheme in which Dr. White attempts to set out the conclusions to which his work has led him—a scheme which we take leave to find somewhat unsatisfying.

The above sketch of the contents will serve to show how thoroughly Dr. White has dealt with his subject, and to recommend it to all pathologists and students who wish to obtain a clear and connected account of the present state of the questions considered. The whole is compressed into a thin volume of little more than 200 pages, and is well illustrated with micro-photographs and drawings. It is, moreover, written in an easy and lucid style, so that the reader is seldom at a loss as regards either the meaning or the reasoning of the argument.

The chief impression left on the mind of the reviewer is the debt of gratitude owed to the experimental methods of research which have been so assiduously pursued in the last ten years as regards carcinoma. These methods have not, perhaps, been as yet fruitful in respect of positive achievement, but they have shown the paths which it is most necessary to follow in the future, and have provided a touchstone by which it is possible to measure the accuracy of our

deductions. At present these methods are almost confined to the study of carcinoma, but it cannot be doubted that in the near future they will be applied to the study of the other forms of new growth. For it is impossible, we think, to read this volume without being convinced that the problems of the origin and causation of sarcoma and carcinoma are not essentially different from those of the so-called "benign" tumours; that is, that the main problem is one of disordered growth, and not of disease introduced by extrinsic parasites.

We said above that the illustrations are good, but we venture to suggest that there are a few which could be bettered, notably fig. 72 and fig. 73. We confidently predict an early second edition, and would urge Dr. White to replace low-power micro-photographs of sections by drawings. Reproductions of specimens of a high magnification are very often better than any drawing, but we do not believe that it is possible to obtain really satisfactory illustrations of low-power magnification, unless there is a selection of the essential features of the overcrowded field, such as is made by a competent pathological artist.

THE NIGHT NURSE. By the author of *The Surgeon's Log*. (Chapman & Hall.) Price 6s.

We always approach novels dealing with "hospital life" with some misgivings, for, whether it is that we are hypercritical of detail, or that the theme is not a suitable one for the novelist, the fact remains that such novels are apt to leave us cold, if not scornful. The book before us has the advantage that the author has already shown his powers and achieved a high degree of fame by his first book, *The Surgeon's Log*, and consequently, in reading *The Night Nurse*, we start with a very strong bias in its favour.

The author shows an intimate knowledge of hospital life, and this, combined with a directness of narrative, and a style which conveys admirably the tale he tells, has given us a novel of merit. Technical detail is not obtruded, but many pages of the book show an accuracy of description which can only be secured by first-hand acquaintance with hospital life.

One or two criticisms, however, we have to offer. Within our experience of hospital patients of patients are never admitted into the theatre, even after the operation, nor do nurses, unless they may be very raw probationers, address residents as "Sir!" But perhaps these things are managed differently in Dublin.

Let any of our readers apprehend that the novelist's powers are devoted entirely to life within hospitals, we hasten to correct this idea, for other aspects of Dublin life, and the primitive conditions of the West of Ireland, both provide material for the author's facile pen.

"FIRST AID" TO THE INJURED AND SICK. By F. J. WARWICK, M.B., R.A.M.C., and A. C. TUNSTALL, M.D., C.M., F.R.C.S., R.A.M.C. Bristol: Wright & Sons. London: Simpkin, Marshall, Hamilton Kent & Co. 8th edition. 1s. net.

Described as an "advanced ambulance hand-book" this work should prove of considerable value, especially to those who have to instruct others in first aid and ambulance work. Anatomy and physiology occupy the first sixty pages, and their more important facts are appropriately dealt with. A useful chapter on the transport of sick and injured by all manner of methods is included. The present edition has been thoroughly revised, and the illustrations improved. The latter, though good, show room for improvement, notably those showing movements of stretcher-bearers, by an excess of dotted lines, and a general diagram of the nervous system which is somewhat misleading.

MANUAL FOR WOMEN'S VOLUNTARY AID DETACHMENTS. By P. C. GABBETT, M.R.C.S. late I.M.S. Bristol: John Wright & Sons. London: Simpkin, Marshall & Co. 2nd edition. 1s. net.

As the writer states, this work is intended to indicate the scope of the duties of voluntary aid detachments in time of war. The author has done this in a very clear and practical manner. Great emphasis is laid on the fact that some training is essential and that nursing cannot be "picked up by instinct"; and that even the knowledge of how to perform artificial respiration, treat snake-bites, and compress the subclavian artery are of no avail without a familiarity with the practical essentials of nursing. Exceedingly complete lists of requirements are given—in fact these are so complete that the only suggestion we can make is an addition to "Field Equipment," in the form of carbide for the acetylene lamp.

ASTONISHING ANATOMY! By "TINGLE." (Sir Isaac Pitman.) 2s. net.

This is a thoroughly amusing book which should appeal to all who have reached "the rooms," or passed beyond the student stage. The illustrations, cleverly selected from a "Stores" catalogue, are extraordinarily funny. Everybody who wants a good laugh should buy this book, and observe "Mr. Winslow entering the lesser sac," and many other gems.

THE TREATMENT OF INFANTILE PARALYSIS. BY OSKAR VULPIUS, translated by A. H. TODD. Baillière, Tindall & Cox, 1912.

We have received a copy of the above work, which presents a very complete consideration of the subject from all points of view.

The introduction deals with the history of the treatment of the disease, and also outlines its symptoms, pathological theories, and medical aspects. This is followed by a general description of the various principles of surgical treatment, instrumental and operative, with accounts of the experimental foundations of the various operations and critical comparisons between them. The second half of the book gives the application of the various methods to deformities and paralyses in the different parts of the body.

The book is well arranged and clearly written, while the illustrations, mostly from photographs, are profuse and well chosen. The translator has succeeded admirably in spite of the obvious difficulties presented by the highly specialised subject and its complicated nomenclature.

BOOKS RECENTLY ADDED TO THE LIBRARY.

The following were presented by Mr. W. Bruce Clarke, F.R.C.S.:
Thompson, Sir Henry, F.R.C.S. Introduction to the Catalogue of the Collection of Calculi of the Bladder, upwards of one thousand in number (besides Foreign Bodies) removed by operation. Lond. 1893.

Thompson, Sir Henry, F.R.C.S. Practical Lithotomy and Lithotomy, or an Inquiry into the best modes of removing Stone from the Bladder. Third Edition. Lond. 1860.

Thompson, Sir Henry, F.R.C.S. The Preventive Treatment of Calculous Disease and the use of Solvent Remedies. Second Edition. Lond. 1876.

Utzmann, Dr. K. On Sterility and Impotence in Man. Translated with notes and additions by Arthur Cooper. Lond. 1887.

v. Volkmann'sche Sammlung kriegschirurgischer Präparate, Abbildungen und Krankengeschichten aus dem Kriege 1870-71 (nebst einigen Präparaten u. s. w. aus früheren Feldzügen). Herausgegeben von der Medizinal-Abtheilung des Königlich Preussischen Kriegsministeriums unter Mitwirkung der Königlich Preussischen Abtheilung des Königlich Bayerischen Kriegsministeriums, der Königlich Sächsischen Sanitäts-Direction und der Militär-medizinal-Abtheilung des Königlich Württembergischen Kriegsministeriums. Mit 53 photo chemigraphischen Tafeln. Berlin 1890.

Watson, Francis S., M.D., assisted by Cunningham, John H., Jr., M.D. Diseases and Surgery of the Genito-Urinary System. Two volumes. Lond. 1909.

Young, Hugh Hampton, M.A., M.D. Abstract. The Results of Prostatectomy.

Deuxième Congrès de l'Association Internationale d'Urologie, Londres le 24-28 juillet, 1911. Procès Verbaux, Rapports et Discussions publiés sous la direction de John G. Pardoe, F.R.C.S. Lond. & Paris 1912.

Quinzième Session de l'Association Française d'Urologie Paris, Octobre, 1911. Procès Verbaux, Mémoires et Discussions publiés sous la direction de M. le Docteur Desnos. Paris, 1912.

Journal d'Urologie Médicale et Chirurgicale. January, 1912-December, 1912 (unbound).

The Illustrated Medical News. Vols. I-V, 1888-89.

The following was presented by Mr. S. H. Badcock:
Nightingale, Florence. Notes on Nursing: What it is, and what it is not. New Edition, revised and enlarged. Lond. 1860.

The following were purchased by the Library Committee:
Cushing, Harvey, M.D. The Pituitary Body and its Disorders. Clinical States produced by Disorders of the Hypophysis Cerebri. An Amplification of the Harvey Lecture for December, 1910. 319 illustrations. Royal Soc. Philadelphia and Lond. (1912).

Guiteras, Ramon, M.D. Urology: The Diseases of the Urinary

Tract in Men and Women. A Book for Practitioners and Students. With 943 illustrations in text and 7 plates. 2 vols. Royal 8vo. New York and Lond. 1912.

Herman, George Ernest, M.B., F.R.C.P.(Lond.), F.R.C.S.(Eng.) Diseases of Women: A Clinical Guide to their Diagnosis and Treatment. Enlarged Edition, revised by the Author, assisted by R. Drummond Maxwell, M.D.(Lond.), F.R.C.S.(Eng.). With 8 colour-plates and 292 figures in the text. Royal 8vo. Lond. 1913.

Hutchison, Robert, M.D., F.R.C.F. Lectures on Diseases of Children. Second Edition. Sixth Impression. Crown 8vo. Lond. 1911.

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Vols. I-XVI. Washington 1886-1895.

Alphabetical List of Abbreviations of Titles of Medical Periodicals employed in the Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. From Volume I to Volume XVI inclusive. Washington 1895.

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Second Series. Vols. I-XVII. Washington 1896-1911.

Keibel, Franz, and Mall, Franklin, P. Manual of Human Embryology. Written by Charles R. Bardeen, Herbert M. Evans, Walter Felix, Otto Gosser, Franz Keibel, Frederic T. Lewis, Warren H. Lewis, J. Playfair McMurich, Franklin P. Mall, Charles S. Minot, Felix Pinkus, Florence R. Sabin, George L. Streeter, Julius Tandler, Emil Zuckerkandl.

Vol. I. With 423 illustrations. Royal 8vo. Philadelphia and Lond. 1910.

Vol. II. With 658 illustrations. Royal 8vo. Philadelphia and Lond. 1912.

Lewis, Thomas, M.D., D.Sc., M.R.C.P. Clinical Disorders of the Heart-Beat: A Handbook for Practitioners and Students. Demy 8vo. Lond. 1912.

Pileher, Paul M., A.M., M.D. Practical Cystoscopy and the Diagnosis of Surgical Diseases of the Kidneys and Urinary Bladder. With 233 illustrations, 29 of them being in colors. Royal 8vo. Philadelphia and Lond. 1911.

Vincent, Swale, M.D.(Lond.), D.Sc.(Edin.), M.R.C.S.(Eng.), L.R.C.P.(Lond.), F.R.S.S.(Edin. and Canada). Internal Secretion and the Ductless Glands. With a Preface by Professor E. A. Schäfer, F.R.S. Illustrated. Demy 8vo. Lond. 1912.

The following were presented by the authors:
Cambridge, P. J., M.D.(Lond.) Glycosuria and Allied Conditions. Medium 8vo. Lond. 1913.

Hurry, Jamieson B., M.A., M.D.(Cantab.). Vicious Circles in Disease. With illustrations. Second and enlarged edition. Medium 8vo. Lond. 1913.

Report of the Pallagra Commission of the State of Illinois November, 1911. Medium 8vo. Springfield, Ill. 1912.

The following were presented by Mr. C. Gordon Watson, F.R.C.S.:
The Archaeological Survey of Nubia. Report for 1907-1908.

Vol. II. Report on the Human Remains by G. Elliot Smith, M.A., M.D., Ch.M., F.R.S., and F. Wood Jones, M.B., B.Sc. Cairo 1910. Plates accompanying Vol. II. Cairo 1910. (Ministry of Finance, Egypt, Survey Department.)

The Bahere Lodge, No. 2546.

THE Installation Meeting of the Bahere Lodge was held in the Great Hall of St. Bartholomew's Hospital on Tuesday, June 17th, when W. Bro. H. Jossé Johnson, P.G.D., installed Bro. Harold Austen as the nineteenth

Master of the Lodge.

W. Bro. Austen appointed the following officers: S.W., Bro. H. E. G. Boyle; J.W.W., Bro. M. J. B. Anderson; Chaplain, Bro. the Rev. H. S. Close; Secretary, W. Bro. Laming Evans; S.D., Bro. Herbert Williams; J.D., Bro. Lewis Jones; and I.G., Bro. W. H. Attlee. W. Bro. Ernest Clarke was re-elected Treasurer.

A very successful dinner was afterwards held at the Imperial Restaurant, Regent Street, at which thirty-eight members and twenty-four guests were present.

W. Bro. Ivimey, P.G.O., was assisted by Bros. Lawrence Legge, Wilfred Essex, and T. C. Sterndale Bennett in providing a musical entertainment.

E. LAMING EVANS.

New Addresses.

BROWN, A. C. "Egdean." Dartford Road, Sevenoaks. (Corrected notice.) Tel. 287 Sevenoaks.

BRIDGMAN, R. O., General Hospital, Toowoomba, Queensland, Australia.

BALDWIN, T. P., Fernhurst, South Mymms, Middlesex.

DAVIS, S. TREVOR, Clare Hall Sanatorium, South Mimms, Middlesex.

GREEN, J. L., Huntingdon County Hospital, Huntingdon.

GREENEY, V. T., Edzel, New Church Road, Hove.

GIBBINS, H. B., 79, Davies Street, W.

HATTERSLEY, S. M., Royal Infirmary, Manchester.

PETERS, C. A., 370, Mountain Street, Montreal, Canada.

PHILLIPS, L. P., 8, Sharia Sulman Pasha, Cairo, Egypt.

PULLING, J. B., Royal Sussex County Hospital, Brighton.

ROSE, F. A., 68, Wimpole St., W. Tel. 3987 Mayfair.

SMITH, E. B., Public Health Office, Baintree.

TAYLOR, C. K., Royal Southern Hospital, Liverpool.

VERRY, G. T., Surg. R.N., H.M.S. "Vernon," Portsmouth.

WEAKLEY, A. L., Royal Eye Hospital, St. George's Circus, Southwark, S.E.

WHITING, E. W., General Dispensary (Branch), Nottingham.

YOUNG, T., Coly House, Colyton, S. Devon.

Examinations.

UNIVERSITY OF LONDON.

Third (M.B., B.S.) Examination for Medical Degrees, May, 1913.

Honours.—A. L. Moreton (University Medal, distinguished in Surgery and Midwifery).

Pass.—L. G. Crossman, R. G. Hill, W. D. Owen, H. R. Prentice, W. C. Spackman.

Supplementary Pass List.—The following candidates have passed in one of the two groups of subjects:

Group I: Medicine, Pathology, Hygiene and Forensic Medicine.—S. G. Papadopoulos, V. D. C. Wakelord.

Group II: Surgery, Midwifery and Diseases of Women.—W. H. Jones, E. W. Whiting.

UNIVERSITY OF OXFORD.

The degree of M.D. was conferred on Mr R. G. Klein.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

May, 1913.

FINAL F.R.C.S.

T. F. Hammond, H. H. Broome, Capt. I.M.S. A. E. Iles, R. H. Mawhood, S. Hoyte, C. D'O. Grange, D. D. Pinnock, J. E. P. Watts, K. J. A. Davis, W. Gemmill, J. Kennedy, F. G. N. Stephens, J. Thompson.

Appointments.

BALL, W. GIRLING, F.R.C.S., appointed Assistant Surgeon to St. Bartholomew's Hospital.

BRIDGMAN, R. O., M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the General Hospital, Toowoomba, Queensland.

DAVIES, S. TREVOR, M.R.C.S., L.R.C.P., appointed Assistant Medical Officer, Clare Hall Sanatorium, South Mimms.

GREEN, J. L., M.R.C.S., L.R.C.P., appointed House Surgeon and House Physician to the Huntingdon County Hospital.

HATTERSLEY, S. M., M.R.C.S., L.R.C.P., appointed House Physician to the Royal Infirmary, Manchester.

MYERS, BERNARD, M.D.(Edin.), M.R.C.P., appointed Physician to the Western General Dispensary, Marylebone Road, N.W.

PULLING, J. B., M.B., B.C.(Cantab.), appointed House Physician to the Royal Sussex County Hospital.

SMITH, E. B., M.B., B.S.(Lond.), D.P.H.(Cantab.), appointed Medical Officer of Health to the North Essex United Districts, Public Health Office, Baintree.

TAYLOR, C. K., M.R.C.S., L.R.C.P., appointed House Physician to the Royal Southern Hospital, Liverpool.

WEAKLEY, A. L., M.B., B.S.(Lond.), appointed Senior House Surgeon and Registrar to the Royal Eye Hospital, Southwark.

WHITING, E. W., M.R.C.S., L.R.C.P., appointed Assistant Resident Surgeon, General Dispensary (Branch), Nottingham.

Royal Naval Medical Service.

The following promotions and appointments, have been notified since May 20th, 1913:

Staff-Surgeons S. Roach, W. K. Hopkins and E. Foliott promoted to the rank of Fleet-Surgeons, May 25th, 1913.

Staff-Surgeon L. Morris to the "Hermione," to date July 3rd, 1913.

Staff-Surgeon A. Woolcombe to the "Talbot," to date July 15th, 1913.

Surgeon L. C. E. Murphy to the "Pembroke" for disposal, to date July 15th, 1913.

Births.

BEDDOW.—On May 31st, at Dorset House, Dorset Square, W., the wife of Harold J. Beddow, M.A., M.R.C.S., L.R.C.P., of a son.

COPE.—On May 24th, the wife of R. Cope, M.R.C.S., at Diaghram, Notts, of a son.

CLARKE.—On May 31st, at Horsham, Sussex, the wife of A. J. Fairlie Clarke, F.R.C.S., of a son.

DUNN.—On June 17th, at The Chestnuts, 2, Copera Copse Road, Beckenham, the wife of H. Percy Dunn, F.R.C.S., of a daughter.

HOTCHKISS.—On June 6th at Mid-Dykebar, Paisley, the wife of R. D. Hotchkiss, M.D., of a daughter.

O'CONNOR.—On May 29th, at Clifden, Murree Hills, Punjab, India, the wife of Captain R. D. O' Connor, R.A.M.C., of a son.

PAIN.—On June 18th, at Montagu House, Leatherhead, Surrey, the wife of Basil H. Pain, M.B., M.R.C.S., of a son.

TOWNSEND.—On June 14th, at Mussoorie, U.P., India, the wife of Captain Reginald S. Townsend, I.M.S., of a son.

Marriages.

BARROW—VINCENT.—On June 18th, at All Saints, Ryde, Richard Murray Barrow, son of J. B. Barrow, Esq., of Aspley Guise, Beds, to Eleanor Mary, daughter of C. G. Vincent, Esq., of Ryde, I.W.

GASK—CROMBIE.—On June 18th, at the Parish Church, Frimley, Surrey, by the Rev. H. Napier Kingdon, M.A., George Ernest Gask, F.R.C.S., youngest son of the late Henry Gask, to Ada Alexander, younger daughter of the late Lieut.-Col. Alexander Crombie, C.B., M.D., I.M.S.

GILL—BOSTOCK.—On June 3rd, at Holy Trinity, Knightsbridge, Richard Gill, M.B., F.R.C.S., to Elizabeth, daughter of the late Surgeon-General J. Ashton Bostock.

LAWRENCE—CLEGG.—At the South U. F. Church, Aylth, on June 17th, by the Rev. John A. Hutton, M.A., and the Rev. James Halburn, St. George's March, Lawrence, M.D. to Margaret Smith, eldest daughter of John Clegg, Clifton, Aylth.

NEEDHAM—NEWMAN.—On May 31st, at St. George's Church, Campden Hill, by the Rev. John Robbins, M.A., Frederick Needham, M.D., of 19, Camden Hill Square, to Helen Millicent Sherwood Newman, daughter of the late William L. Newman, of York.

VOSPER—BAKER.—On May 29th, at Chorley Wood Baptist Church, by the Rev. Simpson Johnson, assisted by the Rev. Guyton and Rev. Hobling, B.A., Sydney Vosper, M.R.C.S., L.R.C.P., to Ellen E. (Ellie) Baker, adopted daughter of Mr. and Mrs. Leonard Barnard of "Hurstleigh," Chorley Wood.

Times of Attendance of the Staff in the Wards and Out-patient Departments.

This Time-table will be Published Quarterly and also whenever there are any Important Alterations.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
Medical Wards	Dr. HERRINGHAM	—	1.30	—	1.30	1.30
	Dr. TOOTH	1.30	1.30	—	1.30	—
	Dr. GARROD	1.30	1.30	—	1.30	1.30
	Dr. CALVERT	1.30	1.30	—	1.30	1.30
	Dr. MORLEY FLETCHER	1.30	1.30	—	1.30	—
Surgical Wards (operating days in heavy type)	Sir A. BOWLBY	—	—	1.30	—	1.30
	Mr. D'ARCY POWER	—	—	—	—	—
	Mr. WARING	1.30	1.30	1.30	1.30	—
	Mr. FICLES	1.30	1.30	—	1.30	1.30
	Mr. BAILEY	1.30	1.30	1.30	1.30	—
Medical Out patients	Dr. DRYSDALE	—	1.30	—	1.30	—
	Dr. HORTON-SMITH HARTLEY	1.30	—	—	1.30	—
	Dr. HORDER	—	—	1.30	—	1.30
	Mr. RAWLING	9	—	—	—	—
	Mr. GASK	—	9	—	—	—
Surgical Out patients	Mr. GORDON WATSON	—	—	—	9	—
	Mr. WILSON	—	—	9	—	9
	Mr. GIRLING BALL	—	—	—	—	9
	Dr. WILLIAMSON	—	1.30	—	1.30	—
	Dr. BARRIS	9	—	—	—	—
Diseases of Women	Dr. MORLEY FLETCHER	9.30	—	—	—	—
	Dr. THURSFIELD	—	—	9.30	—	—
Diseases of Children	Dr. THURSFIELD	1.30	—	—	1.30	—
	Mr. ELSLIE	1.30	—	—	1.30	—
Orthopaedic Department	Mr. HARMER	1.30	—	—	—	—
	Mr. ROSE	—	9.30	—	—	9.30
Throat and Nose Department	Mr. JESSOP	—	1.30	—	—	1.30
	Mr. SPICER	1.30	—	—	1.30	—
Ophthalmic Department	Mr. WEST	1.30	—	—	—	—
	Mr. SCOTT	—	9	—	—	9
Aural Department	Dr. ADAMSON	—	9	—	—	9
	Mr. ACKLAND	—	9	—	—	9
Skin Department	Dr. AUSTEN	—	—	9	—	9
	Mr. COLEMAN	—	—	9	—	9
Dental Department	Mr. FAIRBANK	9	—	—	—	—
	Dr. CUMBERBATCH	1.30	1.30	—	1.30	1.30
Electrical Department	(males)	9.30	9.30	9.30	9.30	9.30
	(women)	1.30	1.30	—	1.30	1.30
Skiagrams	(males)	9.30	9.30	9.30	9.30	9.30
	(women)	1.30	1.30	—	1.30	1.30

Deaths.

CLARK.—On June 7th, suddenly, Oscar William Clark, M.B.(Oxon), M.R.C.S., of St. Luke's House, Gloucester, aged 58.
 ROUGHTON.—On June 10th, at 48, Lauderdale Mansions (late of 38, Queen Anne Street), Edmund Wilkinson Roughton, M.D., F.R.C.S., aged 51 years. Surgeon to the Royal Free Hospital, son of the late Robert Roughton, R.N.

Acknowledgments.

Middlesex Hospital Journal, St. Thomas's Hospital Gazette, Nursing Times, British Journal of Nursing, The Student, The Medical Review, The Practitioner, L'Ospeedale Maggiore, The Hospital, Giornale della R. Società d'Igiene Italiana, Union Magazine, South African Medical Record, London Hospital Gazette, Guy's Hospital Gazette, New York State Journal of Medicine, St. Mary's Hospital Gazette, Long Island Medical Journal.

NOTICE.

All Communications, Articles, Letters, Notices, or Books for review should be forwarded, accompanied by the name of the sender, to the Editor, ST. BARTHOLOMEW'S HOSPITAL JOURNAL, St. Bartholomew's Hospital, Smithfield, E.C. The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., 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. Telephone: 1436, Holborn.

A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD AND SON, Bartholomew Close. MESSRS. ADLARD have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 6d. or carriage paid 2s. 3d.—cover included.

St. Bartholomew's Hospital



JOURNAL.

VOL. XX. No. 11.]

AUGUST, 1913.

[PRICE SIXPENCE.]

St. Bartholomew's Hospital Journal,

AUGUST 1st, 1913.

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

Calendar.

Fri., August	1.—Dr. Garrod and Mr. Waring on duty.
Mon., "	4.—Bank Holiday.
Tues., "	5.—Dr. Calvert and Mr. McAdam Eccles on duty.
Fri., "	8.—Dr. Morley Fletcher and Mr. Bailey on duty.
Tues., "	12.—Dr. Herringham and Sir Anthony Bowlby on duty.
Fri., "	15.—Dr. Tooth and Mr. D'Arcy Power on duty.
Tues., "	19.—Dr. Garrod and Mr. Waring on duty.
Thur., "	21.—St. Bartholomew.
Fri., "	22.—Dr. Calvert and Mr. McAdam Eccles on duty.
Tues., "	26.—Dr. Morley Fletcher and Mr. Bailey on duty.
Fri., "	29.—Dr. Herringham and Sir Anthony Bowlby on duty.

Editorial Notes.

IT falls to our lot to congratulate an old student of Bart's upon an exceptionally noteworthy appointment. We refer to the King's approval of Mr. Robert Bridges, D.Litt., M.B., F.R.C.P., as the new Poet Laureate. Mr. Bridges was a student here in the "sixties," and was afterwards casualty physician. He also held appointments at the Great Northern Hospital and at the Children's Hospital, Great Ormond Street. In 1882 he retired from practice, and his energy since that time has been mainly devoted to literature, with what success his new office is sufficient proof.

That poets "are born and not made" seems to bear more meaning for us than heretofore. We can scarcely imagine

that the anatomical facts and pathological fancies, as demonstrated in their respective departments in the sixties, would be conducive to the growth of sublime dreams and metric ideals. He, who could survive the dissecting rooms and still write poetry, must indeed have been born with his licence to practise poetry written in indelible ink upon indestructible parchment.

Mr. Bridges is a great master of language, and although he is less known to the general public than are some others, there are probably few who understand more than he does the values and philosophy of the English tongue.

His writings are full of dignity and music, and though he cannot be said to write for the public, those of the public who have studied his work find in it a beauty and rhythm, which grows ever upon them, so that they wonder at their previous ignorance, and marvel that so great a light should, for them, have been hid under a bushel.

We hasten to apologise for two errors which occurred in the time-table of attendances of the staff published in the last number. Mr. D'Arcy Power's time should have been:

Wards.—1.30 Tuesdays and Fridays.

Operations.—1.30 Mondays and Thursdays.

The times of attendance of Dr. Griffith in the Gynaecological wards were also omitted; these are as follows:

Martha Ward.—2 p.m. Mondays, Wednesdays and Fridays.

We have to congratulate Dr. Stansfeld on his appointment as demonstrator in pathology (medical) in place of Dr. Gow; and also Dr. Stott, who has been appointed junior demonstrator in the same department in Dr. Stansfeld's place.

We have also to congratulate Mr. J. E. H. Roberts on his appointment as surgical registrar in place of Mr. Ball.

The International Congress of Medicine is taking place during August, and in connection with it a garden party will be held here on Friday, August 8th. We have been

asked to extend an official invitation to all students who may still be in town, and to state that their assistance in showing people over the hospital would be very much appreciated.

* * *

From time to time we have invited Bart's men—both past and present—to put pen to paper, and offer us the result. Such invitations, however, are soon forgotten; we therefore again mention the fact that we should be glad to be able to consider more unsolicited contributions. Interesting happenings are not rare among members of the medical profession, and we feel sure that many matters, diverting and curious, might with advantage be sent to us.

Possibly diffidence causes some to imagine that in attempting to roar like lions they would only succeed in braying like asses. Possibly. But there exists a Publication Committee and an Editor for the purpose of treating such rare forms of aphasia, and their work is done with considerable diplomacy and tact, so that the most modest need not scruple to present his case. Goldsmith has told us that "There are attractions in diffidence above the force of words. A silent address is the genuine eloquence of sincerity." Personally, we can only say that this point of view does not appeal to us.

* * *

Just before going to press we have received a copy of the first annual report of the St. Bartholomew's Hospital Women's Guild, which we shall deal with in our next number.

Lady Sandhurst is the chair man of the Guild, and we must congratulate her and also the other members of the Executive Committee on the work done by their Guild in the past year.

Coming Events

(Cast their shadow before.)

IN Lancashire many old superstitions survive, but a very modern one seems to have arisen, as the following anecdote will demonstrate.

A young fellow called at a certain hospital to interview the H.S.

"A've room for ma mother," he explained.

"Why?" queried the H.S. in astonishment.

"They give 'er the black bottle yesterday, an' we won't 'ave 'er killed."

Pressed further as to his meaning, he stoutly maintained that at a certain stage of sickness patients were "given the black bottle" to kill them off quickly and save further trouble.

"Dawn broke at last! His mother, in a state of collapse, had been given oxygen. Since patients needing this remedy are often in a state which, to say the least of it, is precarious, it is not difficult to see where the superstition arises that "None as has the black bottle ever gets well."

The Cause and Treatment of Traumatic Ventral Hernia.*

By W. McADAM ECCLES, M.S., F.R.C.S.

THE pressure within the abdomen is positive. Make an incision through the abdominal wall, and the omentum and intestines will protrude. Nature has so built up the parietes of the abdomen that, save at the usual hernial regions, protrusions rarely occur, and when they do, they are usually the result of traumatism.

Lesions of the abdominal viscera, although, perhaps, not more uncommon than they were fifty years ago, have come to be dealt with so frequently by operation that traumatic ventral hernia are all too common. A laparotomy may be a brilliant achievement in that it has removed a fatal condition from the patient, but it may leave him with an annoyance, and possibly a danger, which is almost worse than death. This is an uncontrollable traumatic ventral hernia.

CAUSATION OF A TRAUMATIC VENTRAL HERNIA.

The factors which enter into the causation of hernia after laparotomy may be stated to be:

- (1) Improper incisions.
- (2) Faulty technique in the closure of abdominal wounds.
- (3) Sepsis, primary or secondary.
- (4) Increase of intra-abdominal pressure after the closure of the wound.

Let us review these causes seriatim.

(1) *Improper incisions.*—An incision may be an improper one because it has been made in the wrong place, or it may be an improper one because the method of carrying it through has not been right.

The abdominal wall is a very complex structure, consisting of planes of muscles, of aponeurotic areas, and of lines of fibrous tissue.

The oblique muscles have their fibres so arranged that obviously they mutually reinforce one another, while the transversalis muscle fibres lying deep to those of the internal oblique again exercise a restraining force against protrusion of viscera. The rectus abdominis is a most useful muscle, especially associated with the superficial and deep layers of its sheath. The aponeurosis of the external oblique and the fibrous tissue of the rectus sheath are of great value in the prevention and cure of traumatic ventral hernia.

The middle line of the abdomen—the linea alba—is composed of the union of the fibrous tissue forming the

* A Clinical Lecture delivered at St. Bartholomew's Hospital.

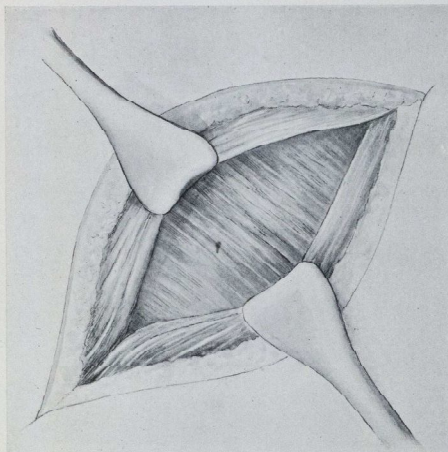


FIG. 1.—TO SHOW INCISION IN RIGHT ILIAC REGION, APONEUROSIS OF EXTERNAL OBLIQUE RETRACTED AND MUSCLE-FIBRES OF INTERNAL OBLIQUE EXPOSED.

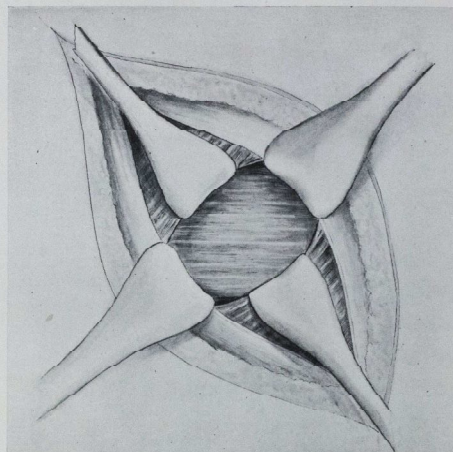


FIG. 2.—TO SHOW MUSCULAR FIBRES OF INTERNAL OBLIQUE RETRACTED, AND THE FIBRES OF TRANSVERSALIS EXPOSED.

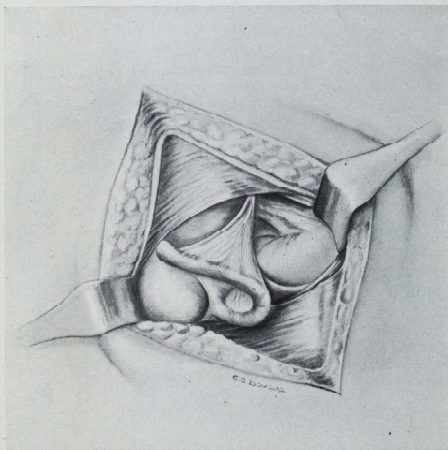


FIG. 3.—TO SHOW VISCERA EXPOSED THROUGH "MUSCLE SPLIT" INCISION IN RIGHT ILIAC REGION.

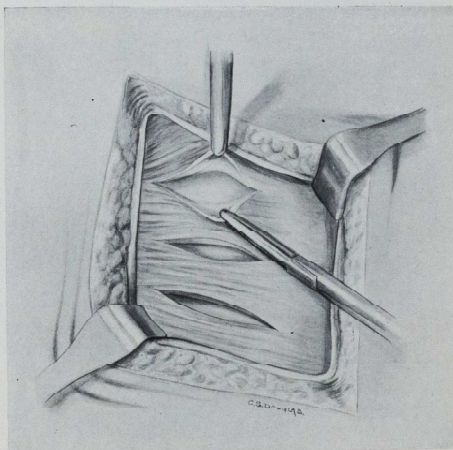


FIG. 4.—TO SHOW HOW SEVERAL SEPARATE SEPARATIONS OF INTERNAL OBLIQUE AND TRANSVERSALIS FIBRES CAN BE USED TO GIVE MORE SPACE FOR DEEPER DISSECTION.

To illustrate Mr. McAdam Eccles' paper on *The Cause and Treatment of Traumatic Ventral Hernia*.

sheath of the two recti. It is broader on the cephalic side of the umbilicus, where the recti muscles tend to diverge somewhat, and narrower between the umbilicus and the symphysis pubis, where the two recti lie very close to one another.

Extending from the tip of the ninth costal cartilage in a curved line downwards to the outer part of the crest of the os pubis is the linea semilunaris, the meeting-place of the ventral aponeurotic edges of the oblique and transversalis muscles. This line is placed considerably further out than is often imagined, being at the level of the umbilicus often as much as $3\frac{1}{2}$ inches distant from that depression in the adult. It must also be remembered that the nerves passing to supply the rectus muscle run into the rectus sheath obliquely across this line.

From these rough recollections of the anatomy of the abdominal wall it will be readily seen that incisions planned to expose the contained viscera may be made—

- (i) Through the middle line, the linea alba.
- (ii) Through the rectus sheath, either displacing the whole breadth of the rectus muscle, or separating the vertical fibres after its sheath has been cut.
- (iii) Through the linea semilunaris.
- (iv) Through the muscular planes of the two obliques and the transversalis.

(v) By a combination of one or more of the foregoing.

Incisions made in the middle line often have the great advantage of more thoroughly exposing the parts to be dealt with than do lateral incisions. But the linea alba, once divided, is probably never again so efficient a barrier against protrusion as it was before its section. However, it cannot be said that an incision in the middle line of the abdomen is an improper incision; its closure, however, may be very faulty.

Incisions through the rectus sheath, with displacement of the enclosed muscular fibres, have much to recommend them, especially in the prophylaxis of traumatic hernia. But there are two serious objections to them, the one that the muscle may be difficult to retract, particularly when it is well developed and the relaxation by the anæsthetic not complete; the other that one or more of the nerves going to the muscle may be damaged if the muscle is displaced towards the middle line.

Splitting the vertical fibres of the rectus itself has little to recommend it and much to condemn it, for not only are the epigastric vessels liable to be troublesome, but it requires both edges of the rectus fibres to be retracted, with a probability that they may be severely bruised if not actually torn. Further sutures will not hold satisfactorily in the edges of the separated muscle-fibres.

Incisions through the linea semilunaris are to be avoided, for they are difficult to close accurately, they almost always damage one or two of the nerves going to supply the rectus muscle, thereby tending to cause atrophy and degeneration

of these segments of the muscle, and passing entirely through fibrous tissue they may not heal too readily. Such incisions may, therefore, be deemed improper ones, and are only to be made in cases of absolute necessity.

Incisions through the two obliques and the transversalis muscle should always, if possible, partake of the nature of "grid-iron" or "muscle-split" incisions (Figs. 1 and 2). To divide the fibres of these muscles across the line of their direction courts the formation of a traumatic ventral hernia. If, after the fibres have been separated and retracted, it becomes necessary to obtain further room, it is best to continue the incision between the transversalis fibres inwards into the rectus sheath, and then pull the rectus towards the middle line rather than divide the fibres of the transversalis or internal oblique across their line of direction (Fig. 3).

Again, if the original separation and retraction of internal oblique and transversalis fibres does not give the surgeon sufficient room for, say, a high appendix, or a low tube, then it is much wiser to make another similar but distinct separation and retraction higher up or lower down than to run the greater risk of a ventral hernia by dividing across the fibres of these muscles (Fig. 4).

Incision, involving a combination of any of the above, may be necessary, but they always have an attached risk of a traumatic ventral hernia, and a risk which may be very great. Such an incision is the inverted Γ -shaped incision for operations upon the bile ducts. Fortunately, a ventral hernia is not so common in the upper third of the rectus as it is in the lower part of the abdomen, the intra-abdominal pressure being less in the former area.

(e) *Faulty technique in the closure of abdominal wounds.*

While an abdominal incision may be quite properly placed and carried through, its closure may be so faulty as to be followed by a ventral hernia. Take an incision in the middle line: it divides the skin, subcutaneous and fibrous tissues and the peritoneum. When its closure has to be brought about, it is generally easy to bring the peritoneum and superjacent connective tissue accurately into apposition, but the fibrous tissue of the linea alba may retract, and when an attempt is made to bring it together there is undue tension. Further, the edges of the fibrous tissue which have to be coapted are not very thick, so that healing is not too sure, even if the suturing is good. It is probably best in these incisions in the middle line to open the sheath of both recti, and to deliberately suture the internal edges of the two muscles together, and then to unite the edges of the superficial sheaths, if possible, by superimposing them (Fig. 5).

A very important point in the prevention of a ventral hernia is the coaptation of peritoneum along the whole length of the abdominal incision. This is often easier if the incision through the serous membrane is made trans-

versely rather than vertically, as, for instance, in the trans-rectal incision for the removal of the appendix.

The material used for buried sutures is a matter of some importance from the prophylaxis of ventral hernia. Personally, I always use fine twist silk, not thicker than No. 1 gauge. Silk is readily rendered aseptic by ordinary boiling, it is easily tied, for its size it is very strong, it remains in the tissues for a very long time, and if aseptic and not too thick is never seen again.

(3) *Sepsis, primary or secondary.*—There is little doubt that sepsis is one of the greatest causes of post-operative hernia.

An abdominal wound may require drainage, and often extensive drainage, on account of the primary sepsis for which the operation was performed. Here the occurrence of a subsequent hernia is often unavoidable.

If such a protrusion occurs as the result of sepsis in a wound which has been completely closed directly after it has been made, then the surgeon should rightly be blamed for its incidence. There was a fault in the asepsis.

(4) *Increase in the intra-abdominal pressure after the closure of the wound.*—A patient may, on account of pulmonary trouble after the anaesthetic, or on account of accumulation of gas in the intestines, have his intra-abdominal pressure so raised as to cause the edges of the abdominal wound to be under such tension that sutures fail and edges separate.

This is an undoubted cause of ventral hernia, but one which ought to be prevented by due care before and after the laparotomy.

THE TREATMENT OF A TRAUMATIC VENTRAL HERNIA.

This is either prophylactic or actual.

Prophylactic treatment.—The facts as related concerning the causation of a traumatic ventral hernia are of themselves sufficiently indicative of the manner in which prophylactic treatment can be carried out.

Here, as in so many other lesions, prevention is greatly to be preferred to cure. There is one other point in the prophylaxis of this complaint, and that is concerning the desirability or not of a patient who has been submitted to laparotomy wearing an abdominal belt or other appliance. There can be little hesitation in saying that where an abdominal wound has been made and closed in a proper manner no external appliance is needed, except under those conditions where the intra-abdominal pressure is likely to be greatly raised.

But there are a considerable number of cases in which some doubt is felt as to whether the abdominal wound has been so closed as to negative any likelihood of a ventral hernia. In such cases the wearing of a well-made and well-fitting abdominal belt, at any rate for the first six months or a year after the operation, may definitely prevent the on-

coming of a hernia. In certain other cases in which the weak spot in the abdominal wall is very localised and more readily supported by a truss than by a belt, the application of a suitable truss is indicated.

Actual treatment.—When a ventral hernia has actually appeared after a laparotomy its treatment must be undertaken promptly, for not only may the protrusion be a source of endless worry to the patient, but it may be a source of positive danger, even to life. The discomfort arises from the pain caused by the passage of viscera into the sac, by the interference with proper digestion, and by the difficulty in obtaining proper action of the bowels. The danger arises from the strangulation of the protruded intestine by the margins of the opening, often small and rigid, through which the bowel has slipped, or by its strangulation under a band of adhesion within the abdomen, but close to the hernial aperture. Strangulation necessitates an immediate operation in most cases.

There are two methods of treatment for a traumatic ventral hernia, and these are palliative and operative.

The palliative treatment of this type of hernia is the application of a suitable truss. As a rule an abdominal belt, even if it has the addition of a pad to fit the precise spot where the protrusion comes, is not sufficient in retaining the hernia. Therefore it is that a properly made truss of the right type becomes necessary. Each case requires to be taken on its own merits, and a truss adapted to its particular requirements has to be devised and adjusted. In a not uncommon class of case, namely, where a hernia occurs through the wound made for an appendix abscess, a truss with a properly fashioned interstitial plate pad will be found to be most serviceable.

In many instances the continuous wearing of such an external help will rid the patient of his discomfort, and will place him in comparative safety, but in all cases in which an operation is not contra-indicated, an attempt should be made to cure the hernia.

Operative treatment.—In deciding upon operative measures for a traumatic ventral hernia several points have to be borne in mind. The first is as to whether there is a fair chance of complete cure by operation. In connection with this the size of the opening, the amount of tissue surrounding it and the conditions of the muscles near are important factors. The second is whether the operation is fairly free from real danger to life. In connection with this it must be remembered that the operation involves the opening of the peritoneal cavity, that nearly always adhesions between omentum or intestine and the sac-wall will be encountered, and that there is the possibility that intestine may have to be resected. With due care and experience in operating but little risk should be run by the patient.

Having determined upon operation, the line of the incision has first to be decided. If the contents of the sac are completely reducible, they should not be reduced until the

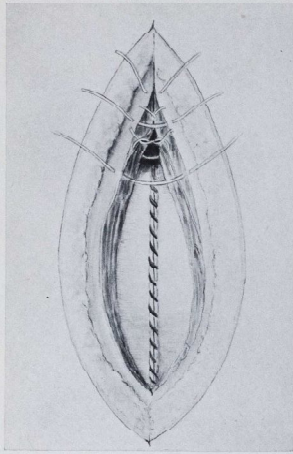


FIG. 5.—To show incision in middle line, and method of closure. Deep suture a continuous one in peritoneum and extra-peritoneal tissue. Intermediate one through edges of both recti and superficial suture through edges of sheath of both recti or the linea alba.

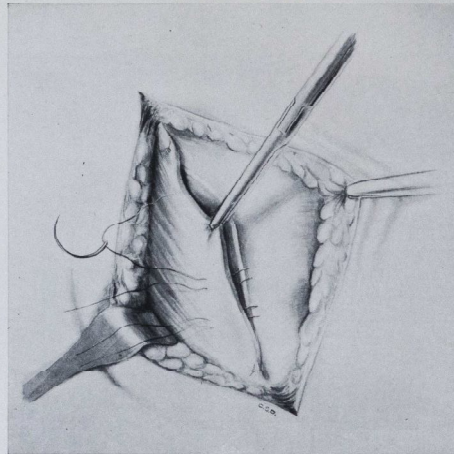


FIG. 6.—To show two layers of muscle and aponeurosis being made to overlap by mattress sutures.

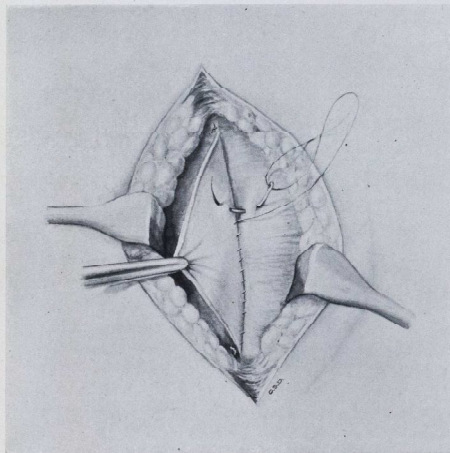


FIG. 7.—To show a continuous suture fixing the deep surface of the superficial flap of aponeurosis.

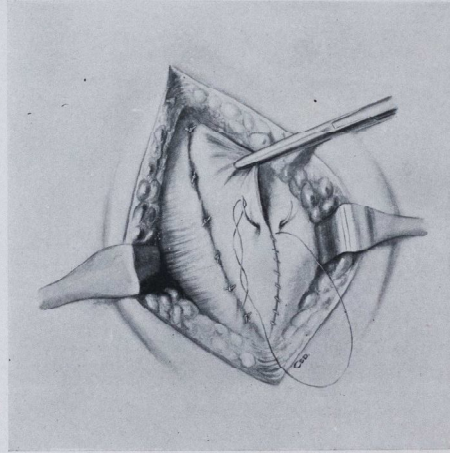


FIG. 8.—To show the final continuous stitch fastening the superficial layer in position.

To illustrate Mr. McAdam Eccles' paper on The Cause and Treatment of Traumatic Ventral Hernia.

position of the incision has been delineated. Generally it is best to make a curved incision around or near the base of the protrusion, gradually deepening it until the peritoneum is reached. In this way any danger of inadvertently damaging adherent viscera will be avoided.

As soon as the interior of the sac has been opened, adhesions should be looked for. These may be between the contained viscera and the sac-wall, or between portions of different viscera themselves within the abdomen. The operator's skill may be sorely taxed in dealing with these adhesions; patience, care and time will have to be expended upon them.

Having freed and reduced the contents of the sac, the superfluous peritoneum is cut away, and the edges of the aperture in the peritoneal wall drawn together with a continuous suture of fine silk.

In some cases this proceeding is quite easy, in others most difficult, partly on account of the peritoneum being very fragile, and partly on account of tension. It may be that interrupted sutures will accomplish the closure more readily than a continuous stitch.

Then comes what is perhaps the most important part of the whole of the proceeding, namely, the overlapping of the tissues forming the muscular and aponeurotic planes of the abdominal wall. It is essential that these tissues should be superimposed, and it is not enough that their edges be merely brought into apposition and sutured together. A little dissecting up of the planes renders the overlapping more easy, but it may be necessary in some instances of a rather large gap to slide, as it were, a flap from an adjacent area over the aperture (Figs. 6, 7 and 8). It is always well to remember that, whereas muscular tissue is highly useful as a protective against a recurrence of the protrusion, it does not hold sutures well, and they are apt to cut out, especially when the muscle is put into action.

Hence, aponeurotic tissue is of great service, and wherever possible it should be brought in front of a muscular plane. If it is possible to get more than one layer of aponeurosis super-imposed, the success of the operation is almost certain.

The operator is sometimes faced with cases in which it is impossible to get the natural tissues of the abdominal wall even to meet at their edges, still less to lie over one another. In such cases the use of silver filigree may be desirable. The action of this material is two-fold. It serves, as it were, as a scaffolding on which the new connective-tissue cells can go to work and form fresh material which fills the gap, and it also acts by its very presence as an effectual barrier against further protrusion. If the filigree is made in the proper manner with fine silver wire, and with two lateral as well as a central backbone, and is introduced carefully without any doubling up and there is complete asepsis, it gives excellent results. It is best to place the filigree on a muscular or aponeurotic plane, but it can be

quite safely laid upon extra-peritoneal tissue, and even upon the surface of exposed intestine. A suitable filigree should always be ready in the steriliser in every case of operation upon a large traumatic ventral hernia.

Biographical Discoveries.

By A. N. ANIAS.

I.

SEBASTIAN IMPETIGO CAROT, who flourished in the earlier part of the seventeenth century, has become famous to the anatomical world as the discoverer of the carotid artery.

He was born in 1632 at the village of Aorta, on the mesial slope of the Pyrenees. His parents were of humble origin, and eked out a somewhat miserable existence by keeping a small wayside inn, and, during the winter, by catching *morbilli* on the slopes of the mountains, which they were able to sell to travellers for a few *glomeruli* apiece.

From a very early age Sebastian displayed a marked leaning towards wider aims and greater ambitions. When only ten years old his fond father discovered him dissecting a certain traveller who had put up at the Carot's inn for the night.

Finding that his early researches were discouraged by his parents, and that the material for them was by no means easy to obtain, the young Carot shortly after this left his home, and for some years, concerning which history is somewhat indefinite as to his movements, he appears to have travelled from place to place, during which time he seems to have accumulated, by degrees and in spite of the police, sufficient money to pursue his studies satisfactorily.

He then attached himself to the school of the famous anatomist Vesalius, who at that time kept a small *foramen** in the Sphenoid, near the north end of the Eustachian canal.

Vesalius at that time was quite a young man, and had only recently been expelled from his native city, Paresis, owing to the opposition of a religious sect, known as the Enzymes. It is believed now that tradition is wrong in stating that it was he who discovered vaseline; it was the invention of the celebrated anatomist's maternal great uncle, Scabies Vesalius, a prominent colloid in attendance on Pope Anaphylaxis III.

Such, however, was the man under whom the young

* Early Flemish for "coaching establishment."

Ed.: Don't believe it.

Author: Nobody asked you to.

Sebastian Carot studied; Carot's advances from this time were rapid, and he quickly gained the confidence and approbation of his master. His numerous and important discoveries will be found in any work on the history of medicine, and this is not the place in which to enter into them in detail. As an anatomist he was the first to discover that there was more in the orbit than met the eye, and as a physiologist he was the first to give a reasonably lucid account of the functions of the third layer of cells in the *cortex hippocampi*. His great anatomical work, *De Arteriis Colli* (Macmillan, 3s. net) is a treasure in many libraries.

In 1657 he married Varicella, the daughter of one Alexander Epistaxis, Stapedius Professor of Conchology at Brznsk, whom he first met in the catacombs at Ozæna. Shortly after his marriage he severed his connection with Vesalius, who had confessed that he could teach him no more, and established a school of anatomy and physiology at Glaucoma, on the banks of the Talipes. He soon acquired a reputation as a teacher; his pupils were numerous, and included, among others, the two Peronei brothers.

His two children, a daughter, Rubella, and a son, Psoriasis, disappeared mysteriously at an early age, and it has been suggested, though probably without foundation, that their father, in an excess of zeal, dissected them.

Carot soon earned the respect and admiration of his fellow-townsmen, and at the time of his death was a man of considerable influence, in spite of certain rumours and suspicions, doubtless unmerited, which were abroad at the time of the loss of his family, and on several occasions later, when the complete disappearance of some of his guests coincided with the arrival of several new pupils. In about the year 1670, though records are uncertain as to the exact date, Carot was arrested and brought before the Podagra, a council of the city fathers, on a charge of conspiring with the Devil.

His arraignment was probably due to the machinations of certain citizens who envied him his success. He successfully defended himself, the trial lasting fifty-three days.

Carot died in 1676, at the phenomenally early age of forty-four. He met his death during the siege of Glaucoma by the Barboryngi, a wild tribe from the north, who were at that time infesting the country; he was laid low while engaged in his studies by an aneurysm, hurled with fatal precision by one of the enemy.

His house, which stands to this day, is situated on the outskirts of the city, close to the famous aqueduct of Sylvius, and is a fine specimen of early Meibomian architecture, enclosing a large and remarkably well preserved central *soloma* or courtyard, somewhat similar to that in the palace of the Nystagni at Chorea.

(To be continued.)

[Not if I know it.—ED.]

Serum Disease.*

By A. E. Gow.

SERUM therapy has its origin in a discovery by Behring in 1890. He found antitoxin in the blood-serum of animals previously inoculated with diphtheria toxin. In the following year Behring and Wernicke, working with this antitoxic serum, found that it had the power, when injected, of conferring immunity on other animals. In 1895 diphtheria antitoxin was introduced into England as a therapeutic agent, and since that time many and various are the disease processes in which sera have been employed for their attempted cure.

The serum may be administered by a variety of routes—subcutaneously, intravenously, into the spinal theca, by the mouth or rectum; or it may be applied locally, as a dressing to an inflamed area or to the throat of a diphtheria "carrier."

When given through a needle, the first injection is followed in about one third of the cases by certain symptoms, which fall roughly into two groups. In the one the symptoms arise some days after the administration of the serum, and, though unpleasant for the patient, are rarely dangerous to life; in the other they are rapid in onset, and not uncommonly proceed to a fatal termination. The condition was termed serum disease by von Pirquet and Schink.

In the majority of the cases in the first group the symptoms appear about the seventh to the tenth day, varying in intensity from a rash with no fever to a sharp general reaction with rash, fever, joint pains, headache and vomiting.

Of 365 patients who were given diphtheria antitoxin in Radcliffe and Isolation, and who lived long enough in the ward after its administration to develop symptoms of serum disease, a rash—the commonest manifestation—appeared in 148, or 40 per cent. On going into these figures more closely, one is struck by the fact that whereas no age or occupation renders the patient immune, a higher proportion and by far the worst examples of rash, arthralgia, adenitis and fever are met with in the case of nurses, house physicians and others "about the place." Thus of forty such people, no less than twenty-eight, or 70 per cent., developed symptoms of the disease. I shall refer to this later on.

The serum derived from some horses causes the symptoms more frequently than does that of others. Thus, in one instance of this series, seven patients were injected with antitoxin derived from the same source, all of whom, except one, developed a rash seven to ten days later, and in four the rash was accompanied by joint-pains.

* A paper read before the Abernethian Society on January 3rd, 1913.

The rash, which may be preceded or accompanied by violent itching of the skin, commonly appears between the seventh and tenth day after the subcutaneous dose of the serum. Occasionally it appears on the fourth day, or very rarely within twenty-four hours. As a rule it is first met with on the front of the abdomen, perhaps spreading later on to the face, arms and legs—chiefly the extensor surfaces of the latter. Generally urticarial in character, it may be erythematous or scarlatiniform, and, especially with an early appearance of the rash, there may be some swelling of the lips and eyelids. The rash commonly persists for three days to a week, then gradually fades, though successive crops are not infrequently seen. Rolleston states that the presence of a serum rash in the course of diphtheria is of good prognostic import.

Fever may accompany the rash. When present the temperature is seldom above 100° F., but exceptionally the thermometer may register 103° in severe cases. The fever generally subsides with the fading of the rash in three days or so. At its height transient albuminuria may be present.

When the rash is fully developed, or a few days later, there may be some pain, often of a fleeting and transient character, in the larger joints—chiefly in the knees, elbows and shoulders. As a rule there is neither redness nor swelling of the affected parts; if the rash has faded before the onset of the arthralgia it may appear again. Pains also in the back and limb muscles may be complained of. The lymphatic glands in the neck, or those draining the area into which the serum was injected, may become enlarged and tender about the same time. This manifestation is apparently always accompanied by fever, but subsides without suppuration.

Some of these points may be illustrated by reference to the case of a former house-physician who, while a student at this hospital, fell a victim to the Klebs Loeffler bacillus. He was given a dose of diphtheria antitoxin on three successive days. On the fourth day after the first injection an urticarial rash appeared on the abdomen, and gradually spread over the body, with well-marked wheals on the legs, till the eleventh day, when it began to fade. On the twelfth day the temperature, which had been subnormal for some time, began to rise, and the cervical glands became painful and swollen. On the fifteenth day severe pain in the back and limb muscles was complained of, and by this time the temperature was 102° F. On the sixteenth day there was pain in all the larger joints, while the rash again appeared on the body. The fever subsided on the eighteenth, but it was not until the twenty-first day that the patient was free from pain.

It rabbits are treated to repeated subcutaneous injections of horse-serum, not necessarily in the same spot, local œdema, brawny swellings and aseptic sloughing may take place at the site of inoculation. This is known as the "Arthus phenomenon," and a similar condition may occur

in man. Dr. Thursfield has kindly allowed me to mention the case of a woman, who was under his care in the Metropolitan Hospital, who showed this condition among other things. The patient was 33 years of age, and was admitted on account of purpura, of unknown cause. On November 11th she was given 25 c.c. of antistreptococcus serum subcutaneously. Her temperature rose to 101° F. the same evening, and it remained about 99° till November 15th, when it rose to 103° by November 17th. She felt well, and the purpura disappeared. The second injection of 25 c.c. had been ordered for the fifth day, but it was not given until the tenth. Three hours after the injection she was seized with violent pain at the site of the inoculation, with erythema, œdema, and intense tenderness of the skin, while at some distance below the point of injection there were macular hæmorrhages; the pulse became feeble and irregular. Later the same evening she was supposed to be dying. The patient had no sleep for forty-eight hours on account of the pain. The œdema and mottling spread during the next few days, so that at its greatest extent it occupied the left half of the trunk, front and back, and a part of the thigh. The general condition was one of extreme weakness, lethargy and anorexia, with fever up to 103° F., though the pulse- and respiration-rates showed no change. On the twelfth day after injection an "abscess," containing chocolate-coloured debris, was opened at the site of injection. Microscopical examination of this material showed it to contain very few pus-cells and no micro-organisms, while cultures yielded no growth. The wound discharged clear serous fluid, and refused to heal until it was packed. The skin over the left half of the abdomen and back remained thickened and œdematous, reddened and hyposensitive for many weeks. She was discharged from the hospital after a stay of five months. One month later she was readmitted with fresh purpura. She was given normal horse-serum by the mouth in doses of 40 c.c. daily for a week. Four weeks after admission, 5 c.c. of antistreptococcus serum was injected subcutaneously; this was followed by fever and a local reaction. A second injection, given forty-eight hours later, produced no such effect. The third injection, on the fifth day, was followed by vomiting, and the fourth by marked œdema at the site of the third. There were three subsequent injections, making seven in all. Twenty days after the third injection an "abscess" was opened at the site containing similar material to the first, and it, like its predecessor, was slow to heal. A local œdematous swelling at the site of subcutaneous inoculation is not uncommonly seen after several injections of serum, appearing in a few hours and often persisting for several days.

Following the intravenous injection of serum a rigor, within half an hour, is no uncommon event, and in such conditions as puerperal septicæmia, where there is already a septic thrombosis of veins, the inoculation may prove the

starting-point of a series of daily rigors, where such have been absent before. There is, however, good experimental evidence to show that the rigor immediately succeeding the introduction of the serum is not dependent on the serum at all, but on the saline with which it is diluted containing a large number of dead or non-pathogenic bacteria. Hence it is claimed that if the saline be freshly prepared immediately before use with recently distilled water, no rigor will follow. I have not seen a rash follow the administration of serum by this route, though joint-pains not infrequently occur. When given by the mouth or applied locally as a dressing no such effects are seen.

Injection of antimeringococcus serum into the spinal theca may be rapidly succeeded by general urticaria, œdema and cyanosis of the face.

But far more serious symptoms than those mentioned above may follow either the subcutaneous or intravenous administration of serum. Though commoner after a second or later injection, they are occasionally encountered after the first, certain persons showing a so-called idiosyncrasy towards serum. Cases have been reported by Roscnau and Anderson among many others; in one, a man, æt. 34, was given a prophylactic dose of 1000 units of diphtheria antitoxin. Within two minutes he was seized with dyspnoea, itching and burning of the skin; the lips, face and neck being swollen and red; he was convulsed and dead in five minutes. Another patient, a man, æt. 52, the subject of asthma and bronchitis, was given 2000 units of antitoxin. He immediately developed pricking sensations in the chest and neck, had violent dyspnoea, and died in five minutes with tonic spasm. It was the occurrence of these cases which led the observers to investigate the subject. But, apart from these fatal cases, symptoms similar in kind but less in degree are not uncommonly encountered. There was a patient of Dr. Adamson's in Radcliffe suffering from a diphtheritic infection of her skin. On March 5th she was given 4000 units of antitoxin; the following day an urticarial rash appeared and persisted for twenty-four hours. Three days later it again developed, with redness of the face, marked swelling of the lips and eyelids and wheals on the shoulders and abdomen. Some twelve weeks later she was given 25 c.c. antistreptococcus serum subcutaneously; this was immediately followed by great general discomfort, collapse, sweating, rapid pulse and dyspnoea lasting for about an hour. There was slight fever and a leucocytosis of 30,000. This latter fact is worthy of note, as in rabbits, in whom these anaphylactic phenomena somewhat closely resemble those in man, a leucopenia is the rule.

This condition of anaphylaxis has been known for a long time, but it is only within recent years that much experimental work has been done at the subject, and the observations correlated. With the multitude of theories which have been advanced by many workers in explanation of the phenomena we need not concern ourselves, but a

brief consideration of some of the facts which have been brought to light may be of interest.

The importance of anaphylactic shock was first forcibly brought home when, in the preparation of antitoxic sera, certain of the animals died after a second or later injection of the toxin.

For the production of the true anaphylactic state, two conditions appear to be necessary: (a) The introduction into the animal body of some foreign substance, either a protein or protein-like compound, which does not normally occur in the body of the animal upon whom the experiment is being performed. I say "does not normally occur in the body" advisedly, for it is possible that the absorption of a protein elaborated in the body as the result of some disease process may act in like manner. This injection is called the "sensitising" dose. It would appear that the proteins of which bacteria are composed are not so efficacious in this respect as those derived from other sources; this, together with the fact that they are seldom given intravenously, may explain the rare occurrence of anaphylactic shock after the administration of vaccines.

(b) A second, the "reacting" or "intoxicating" dose of the same protein, given after an interval of not less than a week, and often two weeks or more after the sensitising dose.

I have mentioned that anaphylaxis is but rarely seen after the injection of a vaccine, and, indeed, until after that sentence was written, I had not heard of a well-marked case. But recently Dr. Andrewes prepared a vaccine for a patient of Mr. Godwin's of Winchester, the first injection of which was followed by most disquieting symptoms. The patient was suffering from peritonitis and septicæmia, consequent upon rupture of the gall-bladder. Dr. Andrewes isolated *B. faecalis alcaligenes* from the blood. This organism is a member of the coli-typhoid group; and it is significant in this connection that it is found much easier to render animals anaphylactic to members of this group than to those of any other class of micro-organisms. In this case a dose of 5 million killed bacilli was given during the fourth week of the patient's illness. Mr. Godwin writes that "it seemed to make him very much worse. It did not increase his temperature, but his pulse-rate increased to 138, and he was crying for more air the whole night, quite different to what he had been before, and complained very much of faintness." He was given oxygen and stimulants, and his general condition seemed better the next morning. Since then the patient has been given smaller doses of the same vaccine, with no untoward result. Here we have a typical picture of anaphylactic shock.

The sensitising dose may be given by a variety of routes. Guinea-pigs may be sensitised, though not with certainty, by feeding on the foreign protein. Richet, to whom we owe the term "anaphylaxis," maintains that if patients are fed upon horse-flesh they invariably get symptoms of serum

disease should they be inoculated with serum at a later date. If this be so, serum disease should have a high incidence among certain of the continental peoples.

A very minute dose of the sensitising protein is all that is required. A guinea-pig has been sensitised with as little as one-millionth of a cubic centimetre of horse-serum. Here may be the explanation of the high incidence of serum disease amongst members of the nursing and resident staffs of this Hospital, for if the first group of cases is to be regarded as a manifestation of anaphylaxis, it is not inconceivable that at some stage of their career they may get traces of horse-serum, either by the mouth or through a small abrasion, which would be quite sufficient to sensitise them against the antitoxic serum given subsequently. It is, however, possible, though I do not for one moment suggest this as the probable source, that our menu may contain certain delicacies prepared unawares from the flesh of the horse!

Within limits the smaller the sensitising dose the more rapid is the development of the anaphylactic state. Von Pirquet states that it is present in the case of serum in man from the fifth to the sixth day, though the full effect is not manifest until the twelfth day. When established it apparently persists for a very long time—in guinea-pigs perhaps for life. But if an animal survive the reacting dose it becomes antianaphylactic, and can with difficulty be sensitised to the same protein again.

My first experience of anaphylactic shock was while helping Dr. Andrewes in his work on the leucocytes. One of the rabbits employed expired shortly after an intravenous dose of *B. coli* vaccine. The animal flopped down in its cage, the respirations became very rapid, there was diarrhoea and apparently paralysis of the hind limbs, followed by convulsions and death. The symptoms were associated with a very marked polynuclear leucopenia of rapid onset. Several of the other rabbits who had been subjected to a similar course of treatment exhibited like symptoms, though less in degree. It is remarkable with what rapidity the symptoms pass off in those animals which recover, for at one time they appear in imminent danger of death, but shortly after are eating their food or walking round the cage as though nothing had happened. The stage of shock in animals is associated with a marked fall in blood pressure and temperature. The blood shows diminished coagulability and complement content. Death takes place from asphyxia, and Dr. Andrewes has demonstrated that the pulmonary capillaries are stuffed with polymorphonuclear leucocytes. As the heart continues to beat long after respiration has ceased, artificial respiration should always be persistently tried in the case of human patients.

This anaphylactic state of hypersensitiveness is a by-product, or possibly a stage in the process of immunisation, though no agreement has yet been reached as to its true character and functions. In the case of certain diffusible substances—such for instance, as alcohol—the cells accus-

tom themselves to living with an increasing concentration of the substance circulating in the body fluids. In time the cells are able to exist and function in a concentration of the substance which, with insufficient training, would act as a fatal poison. An adaptation to the particular poison takes place.

An entirely different form of adaptation is believed to occur in the case of bacterial poisons in the production of immunity. Here the body has to deal with high molecular compounds which cannot be diffused in the cells and fluids like salt solutions. According to Ehrlich's side-chain theory, they are fixed to the cells by arms called receptors which sprout from the cells, and in this manner the toxic effect is averted. Under certain conditions of stimulation these cells become wildly excited, and produce the receptors with such rapidity and in such profusion that there is no room for them all on the cell, and some become crowded off into the serum. Being thus ejected from their birthplace they wander forth—as antitoxin—and unite with the poison at a distance from the cell, so that the toxin is no longer able to harm the cell.

Now, artificial immunity, according to the means by which it is produced, may be either active—if derived as above—or passive. So also a passive anaphylaxis may be produced. Further, the analogy between passive immunity—that is, immunity produced in one animal by injection of the serum of another animal highly immunised—and passive anaphylaxis is very close. If serum from an anaphylactic animal is injected into a normal animal, this animal becomes anaphylactic—that is, it will react to the first dose of sensitising protein. But the animal does not become anaphylactic at once; there is a fixation or latent period of from four to forty-eight hours. Further, the degree of hypersensitiveness goes on increasing for two weeks or so after the injection of the passively sensitising serum; but, like passive immunity, the condition is not of so long duration as when actively conferred. Again, the similarity of the two processes is shown by the fact that if a small amount of the sensitising protein is mixed with the serum of the sensitive animal before the latter is injected, it will no longer convey passive anaphylaxis, though the mixture may lead to the sudden development of anaphylactic shock. Like the immunity reactions, too, this reaction is highly specific. An animal sensitised to horse-serum or to egg albumen, for example, will only react to horse-serum or egg albumen, as the case may be, and not to human serum or red blood cells, etc. Exceptions to this rule are only met with in the case of proteins or sera derived from closely related species, as in agglutination certain group-reactions are found. So also a sensitising dose of serum from an animal which has been sensitised by a particular protein will be inactivated rendered inert—by a minute amount of that same protein only, and by no other. Again, anaphylaxis, like immunity, may be congenital, for the offspring

of a female animal which has been sensitised are in a condition of hypersensitiveness to the sensitising protein; the male parent is apparently not a factor in this transmission. Here may be the possible explanation of the so-called idiosyncrasy to serum, when the anaphylactic phenomena follow a first injection of serum. If this be so, we may expect a marked increase in the incidence of serum disease in the next generation.

With regard to the prevention of anaphylactic shock after the administration of serum, Besredka was the first to point out that an injection given during the incubation stage—that is, within six days after the first dose—would prevent or delay the development of anaphylaxis. Thus a series of injections at short intervals is not followed by ill-effects; and so when serum is employed in the treatment of disease in man, if more than one injection has to be made, it should be given in small doses at short intervals rather than in large doses at periods of a week or more. Besredka has also proved that a very minute dose of the antigen—sensitising protein—insufficient in itself to cause shock, will render the animal immune against a larger dose given subsequently. The rapidity and intensity with which symptoms develop is proportional to the rate of absorption of the serum by the tissues. Symptoms come on most slowly when the serum is given subcutaneously. Hence this route should always be employed rather than the intravenous, especially in those cases where a second injection is being made. A cuti-reaction, carried out with serum in similar fashion to the von Pirquet tuberculin reaction, may prove of value in the detection of hypersensitive patients, and may possibly render them anti-anaphylactic at the same time; but the practical application of this test must be limited, as unfortunately most of the indications for the administration of serum admit of no delay.

Narcosis appears to lessen the intensity of symptoms, so, should an anesthetic be required, and the serum have to be given intravenously, the injection should be made whilst the patient is deeply under its influence. Various drugs, especially the salts of calcium, have been given in the hope of preventing the rash, but with no apparent benefit. The serums which do not produce untoward symptoms when injected into man are found by experiment to be equally toxic to sensitised guinea-pigs as the serums which have caused serious symptoms in man. If the animals from which the antitoxin is prepared fast for twenty-four hours before they are bled, the serum is said to be less toxic than if they have their meals as usual.

Besides this serum disease there is now a long list of spontaneously occurring diseases which, though not induced by injection of albuminous substances, may be manifestations of anaphylaxis, in which the foreign protein gains entrance through the alimentary tract or by some other route. Wolff-Eisner was the first to suggest that hay-fever is due to a hypersensitiveness to pollen albumen. Indi-

viduals with an unstable vaso-motor system are especially predisposed to the more severe forms of hypersensitiveness, and often develop urticaria with the slightest intestinal disorders, septic (albuminous) absorption, etc.

Many of the diseases associated with an eosinophilia may be anaphylactic in origin. Asthma, urticaria, psoriasis, fibrous bronchitis and membranous enteritis are frequently accompanied by a local or general eosinophilia. In all, well-marked vasomotor irritability and disturbance are seen, and in these conditions, particularly in asthma, injections of serum may be followed by alarming results. Indeed, many of the worst cases of serum disease occur in asthmatics, and not a few of the cases of sudden death after serum injection have happened in such persons. Yet some authorities advocate diphtheria antitoxic serums in the treatment of asthma. Urticaria appears in some individuals after taking certain articles of diet, such as shell-fish, pork, strawberries, etc. This urticarial rash is probably anaphylactic in origin, depending on the absorption of a particular protein from the intestine. In normal intestinal digestion albumen is split up and its identity lost, and it is possible that in these persons the particular albumen is not sufficiently broken down by the intestinal ferments, particles of it being absorbed into the circulation. The common urticarial rash of serum disease is a frequent accompaniment of these anaphylaxis-like attacks.

Uremia and eclampsia are regarded by some as manifestations of hypersensitiveness. Gozony and Weisinger found the serum of eclamptic women conferred passive anaphylaxis on guinea pigs, so that they reacted to injections of liquor amnii.

Von Pirquet considers the local and general reactions which follow the administration of tuberculin to be anaphylactic in nature. Certain of the symptoms of tuberculosis—the fever, sleep-sweats, loss of flesh—are attributed to endotoxins liberated from the bodies of the tubercle bacilli during their disintegration in the tissues. The tubercle bacillus is very resistant to this bacteriolytic action, and it is only after the bacillus has been present in the body for some time that the specific lysins are formed. This absence of lysins in normal individuals may explain the fact that small doses of tuberculin give rise to no reaction except in the tuberculous subject, for in the latter only is the bacillus speedily dissolved, with the liberation of its endotoxin, at the site of inoculation.

Clinical Settings.

No. XXI.

By SAMUEL WEST, M.D.

DELIRIUM TREMENS AND TRAUMATIC DELIRIUM

DELIRIUM *e potu* may arise under two different conditions.

In the one the patient has been drinking hard right up to the onset of the attack—has, in fact, drunk himself into it. This is the common "delirium tremens." These attacks are quite compatible during the intervals with temperate or even abstemious habits.

In the other the patient is a constant soaker, never perhaps actually drunk, but also never really sober. He goes on as usual till some sudden shock occurs, such as an accident or an acute illness, and then immediately he becomes delirious. This is often called "traumatic delirium."

The general condition is the same in the two groups. There is in both the same active, busy delirium with hallucinations, due to the same cause, viz. alcoholic excess; but in all other respects the two conditions stand in strong contrast to one another.

In delirium tremens alcohol should be at once cut off, and no sedatives given. The patient should be fed freely, and in two or three days will be convalescent.

In traumatic delirium the patient would not have had the attack except for the accident or illness. Alcohol and sedatives will both be necessary, possibly in considerable amount. The prognosis is very grave, for most of these cases die.

Though both groups are commonly called by the same name, they should be sharply distinguished, and it would be well if they had different names. To emphasize this difference I used to suggest that if one was called "D. T." (delirium tremens), the other should be called "T. D." (traumatic delirium).

In many cases a ready means of distinguishing between the two groups lies in the temperature. In "D. T." the temperature is usually not raised, or not much if at all, whereas in "T. D." the temperature may range high, reaching 103° F. or more. This gives a guiding rule which is useful. If in a case of alcoholic delirium the temperature be raised, it is probably not with "D. T." and its favourable prognosis that we have to deal, but with "T. D." and all its differences of treatment and attendant danger to life.

THE RELATION OF PALPITATION AND TACHYCARDIA TO CARDIAC LESIONS.

It is often stated that long-continued palpitation may lead to cardiac disease, the assumption being that the heart

was healthy prior to the palpitation, and would have remained healthy if it had not been for the palpitation.

In support of this view the association of mitral regurgitation with exophthalmic goitre is the stock instance. This association is robbed of all its value by the frequency with which a history of rheumatic fever is obtained in cases of exophthalmic goitre, a frequency which amounts to 10 or 12 per cent. at least, while, on the other hand, it must not be forgotten that in at least 80 per cent. of the cases of exophthalmic goitre the palpitation may last for years without any sign of organic heart-lesion developing.

Tachycardia is not now so often quoted in support of the statement, for though this affection was originally described as occurring in healthy persons, the general opinion now is that it is itself the result of serious organic disease of the heart, not perhaps obvious for a time, but becoming manifest later.

The "Elizabethan" Style, and how it might have affected Tennyson, had he been up for Midwifery.

On the Management of a Charge complicated by the Fact that Someone has blundered.

- Number = 600
 Distance = 1½ leagues (5632·69 metres).
 Direction = Onward.
 Destination = (i) The Jaws of Death.
 (ii) The Mouth of Hell.

CAUSES OF PREMATURE RETURN AND DIMINUTION IN NUMBERS OF THE 600.

- A. Causes associated with Cossack and Russian.
- a. Disposition of cannon.
 - (i) To right of them.
 - (ii) To left of them.
 - (iii) In front of them.
 - (iv) (subsequent to complete version of the 600.) Behind them.
 - β. Storming.
 - (i) With shot.
 - (ii) With shell.
 - γ. Causes associated with the 600 themselves.
 - Fall of (i) horse.
 - (ii) hero.

Three Golden Rules to be observed in the Management of a Charge.

- (I) Do not make reply.
- (II) Do not reason why.
- (III) Do and die.

Some Notes on a Case of Veronal Poisoning with Recovery.

By B. WHITCHURCH HOWELL, M.B., B.S., M.R.C.S.,
L.R.C.P.

AT 9 p.m., on April 7th, 1913, D. B—, male, æt. 54, took a bottleful of veronal tablets. It was discovered later that 125 gr. had been taken. At 3.30 p.m., April 8th, he was brought by the police to the Royal Free Hospital and admitted.

Condition on admission.—The man was deeply comatose and cyanosed, with stertorous breathing. Temperature, 99.8° F.; pulse, 78; respirations, 24. The pupils were equal and contracted, but reacted to light; the corneal reflex was absent, but the supra-orbital and conjunctival reflexes present. There was some rigidity in all the limbs; the knee-jerks were normal. Pulse strong. Several bullæ on feet and legs containing blood-stained fluid.

Immediate treatment.—The stomach was washed out and some strong coffee left in. An enema was then given to hasten the excretion of the drug, followed by a rectal saline. Ether was ordered, $\mathfrak{m} \text{ xv}$ to be given hypodermically every six hours. Oxygen was not required. Calomel, 5 gr., was administered with some difficulty.

On April 9th the patient was still comatose. Temperature, 102.6; pulse, 104; respirations, 54. The breathing was somewhat stertorous, with grunting expiration, and the cheeks were puffed out. There was a loose cough occasionally, with moist râles at the pulmonary bases. On this account the patient was propped up in bed. There was a marked degree of pyorrhœa; a good deal of mucus collected in the mouth and throat, which required frequent swabbing with antiseptics. An enema was given, with practically no result; rectal saline was not retained. The patient had retention of urine. On catheterisation, $\mathfrak{z} \text{ xvij}$ of urine were withdrawn, 4 to 5 gr. of veronal being present in $\mathfrak{z} \text{ vij}$ of urine. The case was regarded as hopeless.

On April 10th the general condition was unchanged. The patient's limbs were completely flaccid; his cheeks and lips were blown out equally on the two sides during expiration. Temperature, 103°; respirations, 36; pulse, 104 and weaker.

The respiration was less stertorous; the patient had transient attacks of dyspnoea when moved in bed; this was accompanied by pallor, and a very poor, rapid pulse. There was a copious muco-purulent discharge from the mouth, and incontinence of feces. No attempt was made at deglutition, so the patient was fed through an œsophageal tube. He was still comatose. The pupils remained as before, but the corneal reflex was present for a short time in each eye in the morning. There was free sweating, and incontinence of urine. A catheter specimen contained a large amount of albumen.

Treatment.—Feeding by œsophageal tube twice a day with eggs, ij ; milk, half a pint; brandy, $\mathfrak{z} \text{ ss}$; coffee, $\mathfrak{z} \text{ v}$.

At 10 p.m. an extra $\mathfrak{z} \text{ ss}$ of brandy was added to feeds.

On April 11th condition practically unchanged. A good deal of bronchitis was present. Temperature, 103°; pulse, 100; respirations, 36. Fed three times a day through an œsophageal tube with eggs, ij ; milk, 1 pint; brandy, $\mathfrak{z} \text{ j}$; coffee, $\mathfrak{z} \text{ v}$.

On April 12th–13th more conscious; the eyelids flickered several times, and the legs moved once or twice; pharyngeal reflexes were present. The patient grunted and resisted when the œsophageal tube was passed and a gag was necessary. The condition of the mouth was worse. Knee-jerks were not obtained. Bed-sores were threatening, and an erythematous patch appeared over the left olecranon. The bronchitis was still present.

On April 14th the patient was semi-conscious. Corneal and conjunctival reflexes were present. He hiccupped and swallowed occasionally. There was very marked constipation, and so $\mathfrak{z} \text{ j}$ of ext. cascariæ liq. was given before the feed.

On April 15th the patient showed occasional periods of consciousness. He spoke often quite intelligently. He could be fed by the mouth. There was slight hiccup on being moved.

A wide-spread erythematous rash developed over the back, neck, elbows, and slightly on the legs. The patches were small, practically symmetrical and discrete, except over the sacrum, where they were confluent; a few pustules also were present.

On April 16th the patient mumbled a good deal, sometimes irrelevantly. The rash became more extensive and purpuric in places.

On April 18th he was more rational, the mouth was cleaner. There was some parotitis on the left side, probably due to sepsis. The temperature was still raised.

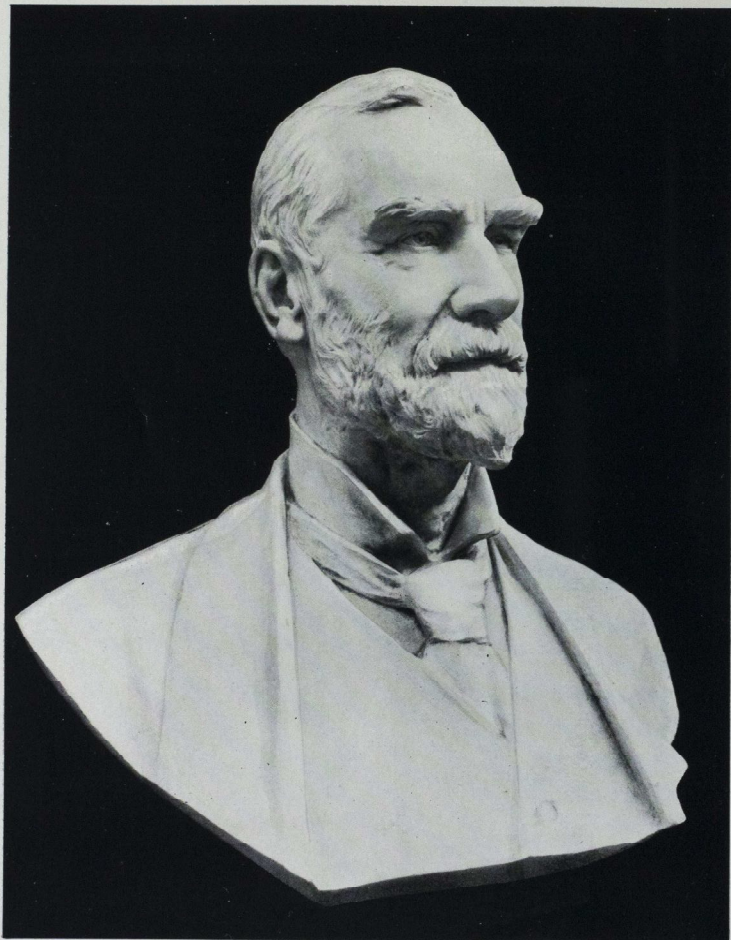
On April 19th the patient was grumpy, but quite rational. The rash had faded.

Convalescence started on April 21st, and on May 5th he was discharged well.

The chief points of interest about the case are:

The large amount of veronal taken; the prolonged coma; the involvement of kidneys without suppression of urine. The various factors militating against recovery, viz. the length of time which elapsed before the patient's arrival at hospital; the nephritis; the ulcerative condition of the mouth; the infection of lungs and parotid; and the constipation.

As regards the amount of veronal taken, the pharmacopœial dose is 5–10 gr. The patient admitted that he took 125 gr., some of which was recovered from the urine. Even two days afterwards, 7 oz. of urine contained 4 to 5 gr.; this would work out at about 35 gr. in the twenty-four hours. Veronal was present in the urine up to the sixth day. The largest fatal dose mentioned in the literature is 100 gr.; the



ALFRED WILLETT, F.R.C.S.

ADLARD & SON, IMPR.

smallest, in an alcoholic patient who died after taking 10 gr. (April, 1913).

The prolonged coma.—The case seems to be unique in that recovery took place after a period of unconsciousness lasting eight days. It was not until the twelfth day that the patient became quite rational. As he was not seen till eighteen hours had elapsed, the chances of his recovery were thought to be very poor.

Suppression of urine with acute necrosis of the kidney-cells generally occurs in fatal cases. In this instance retention only occurred. A large number of casts were present, but no hæmatoporphyrin.

Factors Militating against Recovery.

The patient was not seen by a medical man till eighteen hours after the drug had been taken.

The presence of nephritis: the patient generally dies with acute necrosis of the renal epithelium.

The patient had bad pyorrhœa, and large sloughs had to be removed for some days. This, occurring in an unconscious patient, probably accounted for the bronchio-pneumonia and parotitis.

Constipation, a marked feature in such cases, in this case was remedied with some difficulty by simple and saline enemata and purges through the œsophageal tube.

I am deeply indebted to Dr. Carr for permission to publish this case.

Obituary.

ALFRED WILLETT, F.R.C.S.

It is with the greatest regret that we have to record the death of Mr. Alfred Willett, who passed away on June 20th at his house in Sussex, aged 77.

Alfred Willett was born at Brighton in 1837, his father, Mr. William Catt, and his mother, a daughter of Mr. William Verrall, of Lewes, being both members of well-known Sussex families.

Mr. Nathaniel Baker, now Consulting Surgeon to the Royal Sussex County Hospital, a school fellow of his, says that he was a tall, good-looking boy, undemonstrative, rather determined and argumentative, but a favourite with other boys.

He went to preparatory schools first at Lewes and afterwards at Brighton; later he went to Tonbridge, where he was a fellow-student of Tom Smith, his lifelong friend.

Always fond of country life, gardening, farming, shooting, and especially of horses, he passed through his school life as most boys have done, without any special distinction.

On leaving school he was articled, in accordance with the usual custom, to a Brighton surgeon, Mr. George Lowdell, and soon after began work at the Sussex County Hospital, and was again a fellow-student of Mr. Baker.

He worked hard and was highly thought of for his powers of observation and steady perseverance. He was fond of athletics, and his bout of single-stick with the hospital porter who had been in the Baltic Fleet was long remembered by both of them as well as by his fellow students.

He remained at the Sussex County Hospital for three years, and gained valuable experience in surgery and medicine, being often placed in a position of great responsibility during the absence of the House-Surgeon, which latter condition of affairs has long since become impossible. He entered St. Bartholomew's Hospital in 1857, became House-Surgeon in 1860, was appointed Registrar in 1863, Warden and Assistant Surgeon in 1865, Surgeon 1879, Joint Lecturer in Surgery 1889, and Consulting Surgeon on his resignation in 1901.

Alfred Willett was a fine example of the surgeons of the transitional period. He was trained in the most advanced surgical methods of the time, which methods unconsciously tended to make every wound a perfect incubator for the most pestilent germs, conveyed by the hand of the operator and his old and foul operating coat, and by his instruments, ligatures and sponges, to the wounds he was trying to mend and to the area upon which he was operating.

Willett, Tom Smith and Callender were strenuous in their endeavours to improve matters. Callender for his part used a technique of his own (described in vols. v, ix, xiv of the *Hospital Reports*, and elsewhere, and referred to with admiration by Sir James Paget in his obituary notice in vol. xv). Willett and Tom Smith, however, eagerly studied Lister's methods with an open mind, and without the prejudice which blinded many of the seniors to the new surgery. They saw the first signs of the dawn, and both lived and practised surgery long enough to see the revolution in the technique almost completed, and to take a large part in the saving of life and in the prevention of illness and suffering which accompanied the progressive steps of antiseptic principles and practice.

His work was characterised by his attention to detail, nothing being left to chance. He regarded his duty to the Hospital as paramount. Punctual and methodical himself, he expected everyone working with him to be the same. He was slow and unwilling to find fault, and though sparing of words, his approbation was often expressed in his face; a few words of praise from him were received by his house-surgeons with a pleasure that only a sincere regard and deep affection for him could produce.

Alfred Willett, in his quiet manner, did many things for the Hospital and Medical School, which are known best to those who were his colleagues at the time. He was chiefly instrumental in getting a fifth surgeon and physician appointed, as well as in the appointment of assistant house-surgeons and physicians, and while Treasurer of the School, he, with Mr. Bruce Clarke, secured Winchmore Hill grounds for the Students' Club.

Outside the Hospital Mr. Willett held many high appointments. He was Vice-President of the Royal College of Surgeons; President of the Royal Medical and Chirurgical Society, the premier medical society of London; and he willingly gave his time and services to many charities, but never his name alone.

Mr. Willett was a very silent man, and when he spoke it was often with difficulty and with an almost painfully laborious choosing of his words: yet if one had the patience to watch him at work, it was obvious that he was a great clinical teacher, in spite of his silence. His clinical memory was astonishing, and his diagnostic skill often mystified students, for his decision as to the nature of a case sometimes seemed to come from an inner source of knowledge and from comparison with previous experience without any deliberate consideration of the palpable and audible features of the case in question. He never "scored off" his house-surgeons: if a man had done his best, that was all he asked of him: and no H.S. could ask for more generous backing up, if he got into deep water, than Mr. Willett was wont to give.

As an operator Mr. Willett was very careful, thorough and conscientious. Right to the end of his hospital work he remained always ready to consider and give careful trial to any new method which seemed to promise improved results.

Above all, he was a man: straightforward and honest in the minutest detail, and always kind and considerate. He set himself and others a high standard of duty, and he was without mercy to those who would not hold to it, but he never spared himself nor considered his own convenience or advantage when the Hospital made any call upon him.

Mr. Willett married the only daughter of Sir George Burrows, F.R.S., a distinguished physician to St. Bartholomew's Hospital, and grandson of the great John Abernethy.

A memorial service, quiet and simple, was held in the Hospital church on July 4th, and was attended by a large and representative gathering as a tribute of esteem and admiration to a great and honourable career.

EDMUND WILKINSON ROUGHTON, M.D.,
B.S.(Lond.), F.R.C.S.(Eng.).

It is our painful duty to record the death of Mr. Edmund Wilkinson Roughton at the early age of fifty years.

There is not the slightest doubt that no student yet has ever had such a brilliant career or obtained so many honours as did Mr. Roughton whilst he was at Bart's. He was awarded the Gold Medal with the University Scholarship at the B.S. London University Examination, the Gold Medal in obstetric medicine, and Honours in medicine at the M.B. and the Gold Medal at the M.D.(Lond.) Examination. He was also a Fellow of the Royal College of Surgeons, England.

After qualifying he became in turn house-surgeon,

ophthalmic house-surgeon, resident midwifery assistant, and senior assistant demonstrator of anatomy at St. Bartholomew's Hospital, holding the last-named post for four years.

He afterwards became demonstrator of anatomy, and warden of the college at St. Mary's Hospital for several years. At the time of his death he was surgeon with charge of beds at the Royal Free Hospital and visiting surgeon to the National Dental Hospital.

He was the author of a text-book entitled *General Pathology and Surgery*, and also of *Oral Surgery*, a text-book on diseases of the mouth, as well as a great number of contributions to the medical journals.

He was an extremely careful and skilful operator, and displayed great forethought and resource in any unexpected emergency that might arise. To watch him operate was a pleasure, since he was always so deft, self-possessed and certain. As a teacher he was unequalled, and he possessed the happy manner of lecturing on the most intricate subjects in such a way as to make them appear absurdly simple. He always discussed a subject in his own common-sense but effective language, and this, together with the personal factor, never failed to cause the student to remember it. His aphorisms and golden rules would, if they had been collected, make an excellent small book.

Nature had made him an exceptionally handsome and tall man. His rather brusque, austere manner hid an extremely kind heart, and third-year students invariably revised their views if they had been deceived at first by the former. He was always a candid and sincere friend, and imbued with the deepest sense of honour in all his dealings. His open-minded nature loathed everything mean or underhand.

He will be best known to the outside world by reason of his work on diseases of the mouth, and the splint associated with his name used for Pott's fracture.

His merits deserved greater reward in the way of appointments, and his death, after a painful and lingering illness, has robbed the medical profession of one of its most distinguished members.

A. S. W.

The Summer Concert.

HERE can be no doubt that the Summer Concert has taken its place among the most delightful annual functions of the Hospital, and it must be generally granted that the success of the entertainment on the evening of July 21st exceeded any of recent years.

The Musical Society were fortunate in obtaining the services of Miss Sparrow and Mr. H. A. Gray. The former played Bach's "Aria" and the "Liebes Freud" of Kreisler with the utmost brilliancy, and fully merited the tumultuous applause which greeted her performance. The latter was

equally successful in his rendering of Cyril Scott's "Lotus Land" on the pianoforte.

Nurse Burke sang Alicia Noddham's "Hushen" with the greatest delicacy and sweetness, and Nurses Scrase and With displayed a mastery of technique in their rendering of two violin duets.

The Choral Society contributed six part songs, which were sung with a verve and accuracy eloquent of much careful training and rehearsal. Their performance of German's "The Three Knights" must be singled out for especial praise.

The remainder of the programme rested largely in the capable hands of Messrs. Carte and Catford. The rendering of their solos, "Oh Mistress Mine" (Quilter) and "Border Ballad" (Cowan), was admirable, while Liza Lehmann's duets from Belloc's "Cautionary Tales" were sung with an appreciation of the humour of the incomparable lines which made them irresistible.

Perhaps the *piece de resistance* was reached when, aided and abetted by Mr. Wright in his very best Billingtonian style, they sang the well-known trio, "I am so Proud," from the Mikado.

The enthusiastic appreciation of the audience must have been gratifying to Mr. Hume, who, in addition to conducting the chorus with his usual *aplomb*, bore the responsibility of the organisation, and to whom the success of the evening was largely due.

In the interval refreshments were served in the Square, which was effectively decorated with innumerable fairy lamps.

The Bookshelf.

We have received from the author, Dr. A. C. Jordan, two reprints from the *Proceedings of the Royal Society of Medicine*, on *Gastric Ulcer and Alimentary Toxæmia*. Dr. Jordan was formerly at Bart's and is now Medical Radiographer at Guy's Hospital, and his article on gastric ulcer is illustrated with remarkably clear skiagrams of the abdomen after bismuth meals. Many of these showed a distinct "hour-glass" contraction at the site of the ulcer, a contraction which vanishes under an anæsthetic. His observations have led him to conclude that intestinal stasis is responsible for most cases of gastric ulcer, the stomach being overloaded and dragged down by its own weight and that of the distended transverse colon, producing a strain at the pylorus, which predisposes to ulceration. Dr. Jordan's observations appear to have been very carefully made, and his reasoning clear—factors which are essential, especially as intestinal stasis has of late been held to be the origin of so many and various infirmities of the flesh.

We have also received from the publishers, John Wright, of Bristol, the first number of the *British Journal of Surgery*. This is the first journal in this country devoted entirely to surgery, and is to be issued quarterly. It is under the direction of a strong editorial committee, and the editorial secretary is Mr. Hey Groves of Bristol. We have nothing but praise for the first number, and the Journal should have a great future. It contains 152 quarto pages, the paper is good, the print and illustrations very clear; it contains several papers of great interest, including one by Mr. D'Arcy Power on Gall-stones, advocating earlier operation, and another by Mr. G. E. Gask on a successful case of auto plastic grafting of the fibula into the humerus. We welcome the new journal, and hope to see more of it.

BOOKS RECEIVED FOR REVIEW.

The Student's Handbook of Gynecology. By G. Ernest Herman and R. Drummond Maxwell. Cassell & Co. Second edition. 7s. 6d. net.

Home Health and Domestic Hygiene. By Sir John Collie and C. F. Wightman. Geo. Gill and Sons. 9d. net.

REVIEW.

THE INTERPRETATION OF DREAMS. By Prof. SIGMUND FREUD, LL.D. Translated by A. A. BRILL, Ph.B., M.D. George Allan & Co. Ltd., 1913. Pp. 510.

In this book Prof. Freud has made an attempt to arrive at some knowledge of the subconscious mind by means of the interpretation of dreams.

Some of the interpretations are ingenious, many are silly, while most of them are grossly sexual. In this book the author lays it down that dreams which are conspicuously innocent invariably embody some coarse erotic wish, and acting on this belief he certainly succeeds in giving the harmless nonsense recounted to him by his patients, the most nauseous sexual meaning. The objectionable character of the interpretations is a little relieved by the ludicrous phraseology employed in translating the book into English. We can imagine no worse treatment for a neurotic patient than to have his dreams interpreted as advocated in this book.

A large part of the book does little else but turn fatuity into sensuality.

ADDITIONAL LIST OF BOOKS RECENTLY ADDED TO THE LIBRARY.

Keen, William Williams, M.D., LL.D. *Surgery: its Principles and Practice.* By various Authors.

Vol. VI. *The Newest Surgery.* General Index to complete work, vols. i-vi. With 519 illustrations, 22 of them in colour. Royal 8vo. Philadelphia and Lond. 1913.

The following were presented by the authors.
Chaplin, Arnold, M.D.(Cantab.). *The Illness and Death of Napoleon Bonaparte.* (A Medical Criticism.) With three illustrations. Crown 8vo. Lond. 1913.

Davis, Haldin, M.B., B.Ch., B.A.(Oxon.), F.R.C.S.(Eng.), M.R.C.P. *Skin Diseases in General Practice: their Recognition and Treatment.* Medium 8vo. Lond. 1913.

Garrad, Archibald E., D.M., M.A., F.R.C.P., F.R.S., Batten, Frederick E., M.D., M.A., F.R.C.P., and Thuisfeld, Hugh, D.M., M.A., F.R.C.P. *Editors of Diseases of Children by various Authors.* Illus. Royal 8vo. Lond. 1913.

Hooker, Albert H. *Chloride of Lime in Sanitation.* Demy 8vo. Lond. 1913.

Thorne, Leslie Thorne, M.D., B.S.(Durham), M.R.C.S.(Eng.), L.R.C.P.(Lond.). *The "Naheim" Treatment of Diseases of the Heart and Circulation.* Fourth edition. Crown 8vo. Lond. 1913.

Williams, Francis, H., M.D. *The Roentgen Rays in Medicine and Surgery as an Aid in Diagnosis and as a Therapeutic Agent.* Illus. Medium 8vo. Lond. 1913.

New Addresses.

BURROUGHS, J. H., 14, Albion Road, Stoke Newington.
CARVER, A. E., Birmingham General Dispensary, Tuberculosis Department, 3, Great Charles Street, Birmingham.

DOTTRIDGE, C. A., Overton, Godalming.

GILL, R., 17, Albert Hall Mansions, S.W. Tel. Western 6862.
ILLIUS, Major H. W., I.M.S., c/o Messrs. Cook & Son, Bombay, India.

JONES, E. R., Bryn Cadnant, Menai Bridge, Anglesea.

O'HEA, Staff-Surg. J., R.N., H.M.S. Excellent, Portsmouth.

VICK, R. M., 82, Harley Street, W. Tel. 4948 Mayfair.

WATSON, C. GORDON, 82, Harley Street, W. Tel. 4948 Mayfair.

WAY, Lieut. L. F. K., R.A.M.C., 7, Convent Road, Wynberg, South Africa.

WELLER, C. A., Birmingham General Hospital, Birmingham.

WHITE, C. F. O., The Chantreys, Hastings Road Bexhill-on-Sea, Sussex.

Examinations.

UNIVERSITY OF CAMBRIDGE.

Third Examination.

Part I.—Surgery and Midwifery. New Regulations.—H. A. Bell, E. J. Bradley, E. J. Y. Brash, E. L. Dobson, F. D. Marsh, W. S. Soden.

Part II.—New Regulations.—E. J. Y. Brash, H. Y. Mansfield.

Part I.—Pharmacology and General Pathology. Old Regulations.—R. Hodson, G. O. Maw.

Surgery, Midwifery and Medicine. Old Regulations.—The following have now satisfied the Examiners in all three sections: H. A. Douglas, J. R. Griffith, R. Hodson, G. L. Keynes, M. N. Perrin, W. A. Pocock, A. C. Roxburgh, R. Sherman, G. A. Smythe, A. J. Waugh. The following degrees have been conferred: *M.B.* and *B.C.*: W. A. Pocock. *B.C.*: J. R. Griffith, M. N. Perrin.

UNIVERSITY OF DURHAM.

R. C. Tweedy has taken the M.D. degree of Durham.

Appointments.

HEY, S., M.R.C.S., L.R.C.P., appointed Medical Officer to the Ripon Union Workhouse.

WELLER, C. A., M.R.C.S., L.R.C.P., appointed House-Physician, Birmingham General Hospital.

Royal Naval Medical Service.

The following appointments, etc., have been notified since June 20th, 1913:
Staff-Surgeon John O'Hea to the "Excellent" (temporarily), July 8th, 1913.

Staff Surgeon H. B. Hill to the "Audacious," lent for trials, July 21st, 1913.

Surgeon G. Scott to the "President," additional for five months' course of instruction, to date August 30th (to join Greenwich College).

Surgeon A. C. Wilson has been allowed to withdraw from H.M. Naval Service, with a gratuity, June 22nd, 1913.

Surgeon G. M. Levick has been recommended for special promotion to Fleet-Surgeon, on November 21st, 1913, for services rendered in the Antarctic, subject to his qualifying for promotion to Staff-Surgeon.

Births.

CANE.—On July 10th, at Kirkee, near Poona, India, the wife of Captain Arthur S. Cane, R.A.M.C., of a son.

DICKINS.—On June 17th, at Cowfold, Sussex, the wife of S. J. O. Dickins, M.D., M.R.C.S., L.R.C.P., of a son.

DUDLEV.—On June 23rd, at Caxton, Cambs, the wife of P. Hughes Dudley, M.R.C.S., L.R.C.P., of a son.

JEUWINE.—On July 6th, at 7, Brooklands, Filey, the wife of Captain W. W. Jewwine, I.M.S., of a son.

LANDER.—On June 30th, at Burnham-on-Crouch, the wife of H. D. Lander, M.R.C.S., L.R.C.P., of a daughter.

MCLEAN.—On July 12th, at Bay View, Rushbrook, Co. Cork, Ireland, the wife of W. McLean, M.R.C.S., L.R.C.P. (Lond.), Medical Inspector Board of Trade, of a daughter.

PRINGLE.—On July 13th, at 195, Croydon Road, Anerley, the wife of Ernst George Pringle, M.D., of a daughter.

Marriages.

BRUCE-CLARKE—COX.—On July 6th, at All Saints' Church, Cottenham, Cambs, by the Rev. Harold Peel, of Chesterfield, the Rev. J. F. Cooksey, of Swavesey, the Rev. George Mould (cousin of the bridegroom), Dorset Square, and the Rev. R. P. Moline, Rector of Cottenham, William Robert Bruce-Clarke, only son of William Bruce-Clarke, of Harley Street, London, and the late Mrs. Effie Bruce-Clarke, to Ethel, only daughter of Dr. and Mrs. C. Hayden Cox, of The Limes, Cottenham, Cambs.

DOWNER—BEEBE.—On July 17th, at Christ Church, Westminster, by the Rev. C. R. Bailey, Vicar of Christ Church, Forest Hill, Reginald Lionel Ernest Downer, M.D. (Lond.), of The Firs, Matlock, son of Mr. W. J. Downer, C.B., C.M.G., I.S.O., J.P., and Mrs. Downer, of Newlands, Woking, and Daphne Marguerite, second daughter of Mr. and Mrs. A. Hatton Beebe, of Elvaston, Woking.

SPENCER-PHILLIPS—LYSTER.—On June 7th, at St. Mary's, Great Baddow, Percy Tyrell Spencer-Phillips, M.B., B.Ch. (Oxon.), to Dorothy, elder daughter of A. E. Lyster, M.D., Great Baddow, Essex.

Deaths.

CROSS.—On June 30th, at Calstock, Moss Lane, Pinner, John Cross, M.D. (Camb.), formerly of Regent's Park, London.

GREAT REX.—On June 30th, in a Nursing Home at Stoke-on-Trent, Adolphus Burnell Great Rex, M.D., J.P., for the county of Staffordshire, of Harecastle House, The Avenue, Kidsgrove, Staffordshire, aged 72.

MABERLY.—On July 6th, at Kingsway, Burnham, Somerset, G. F. Maberly, M.R.C.S., in his 90th year.

WILLETT.—On June 30th, at Wyndham Croft, Turner's Hill, Sussex, Alired Willett, F.R.C.S., Consulting Surgeon to St. Bartholomew's Hospital, aged 70.

Acknowledgments.

Giornale della R. Società Italiana d'Igiene, The Practitioner, The Student, Nursing Times, The Stethoscope, British Journal of Nursing, Royal Free Hospital Magazine, University College Hospital Magazine, Annual Report on the Museum of the Royal College of Surgeons, South African Medical Record, Clinical Excerpts, The Hospital, Guy's Hospital Gazette, London Hospital Gazette, St. George's Hospital Gazette.

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, Smithfield, E.C.

The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., 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. Telephone: 1436, Holborn.

A Cover for binding black cloth boards with lettering and King Henry VIII Gateway in gilt can be obtained (price 7s. post free) from MESSRS. ADLARD and SON, Bartholomew Close. MESSRS. ADLARD have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 6d. or carriage paid 2s. 3d.—cover included.

St. Bartholomew's Hospital



JOURNAL.

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SEPTEMBER, 1913.

[PRICE SIXPENCE.]

St. Bartholomew's Hospital Journal,

SEPTEMBER 1st, 1913

"Æquam memento rebus in arduis
Servare mentem."—Horace, Book II, Ode III.

Calendar.

Mon., Sept.	1.—Partridge Shooting begins.
Tues., "	2.—Dr. Tooth and Mr. D'Arcy Power on duty.
Fri., "	5.—Dr. Garrod and Mr. Waring on duty.
Mon., "	8.—Examination for Matriculation (London) begins.
Tues., "	9.—Dr. Calvert and Mr. McAdam Eccles on duty.
Fri., "	12.—Dr. Morley Fletcher and Mr. Bailey on duty.
Tues., "	16.—Dr. Herringham and Sir Anthony Bowlby on duty.
Fri., "	19.—Dr. Tooth and Mr. D'Arcy Power on duty.
Mon., "	22.—Examination for Entrance Scholarship begins. First Examination Conjoint Board begins.
Tues., "	23.—Dr. Garrod and Mr. Waring on duty.
Fri., "	26.—Dr. Calvert and Mr. McAdam Eccles on duty.
Mon., "	29.—Michaelmas Day.
Tues., "	30.—Dr. Morley Fletcher and Mr. Bailey on duty.
Wed., Oct.	1.—Winter Session begins.

Editorial Notes.

HERE are few things more prodigal of time and energy than writing about nothing, and after mature consideration, eight cigarettes, two syphons and a fomentation we find that we have only very narrowly escaped this painful ordeal. We have been saved from entire futility by the recent International Congress. Our pages have already included a statement of the part taken

by Bart's men in the Congress, and the present issue gives some account of the part taken by the Hospital. But we feel that we cannot let this opportunity escape of expressing our admiration for the work done by Dr. Herringham as general secretary of the Congress. The work entailed was tremendous, and thanks often absent or a minus quantity. We heartily congratulate him on his success, and feel sure that he must be glad his secretarial work is over.

At the moment of writing there is the usual autumnal emptiness about the Hospital, and a strong atmosphere of "locum." The Square is a comparatively unfrequented spot, the rooms an empty void, untenanted save by some forlorn and forgotten trapezius, the Abernethian room a desert, and consequently there is not much going on. Theatre A no longer exists, having at last fallen a prey to the housebreaker, and the painter has made his abode in Abernethy. In Theatre A, formerly and rightly called the Old Theatre, with its gallery and dress circle, we have lost a landmark in the surgery of the Hospital, and incidentally the dust of ages. It was a pity that some opulent American could not have been persuaded to buy it up for transportation to the States. Another relic has also disappeared in the old fireplaces in Abernethy—almost the last of their kind.

We offer our sincere and hearty congratulations to Mr. Blakeway and Dr. Stansfeld on their respective marriages. We wish them all possible happiness.

We hasten to correct an error in our last issue. The first figure in Plate I of the illustrations of Mr. McAdam Eccles article became, in the hands of the printer, rotated through a right angle, resulting in a corresponding displacement of the internal oblique. The direction of the incision should, of course, have been parallel to that in Fig. 2.

The Significance of Ocular Palsies.

By G. VINEY, M.D.(Lond.), F.R.C.S.

PERSISTENT diplopia, of sudden onset, in an adult who has previously enjoyed binocular and stereoscopic vision, is a serious handicap in any occupation, and sufficiently annoying to cause the individual so affected to seek medical advice at an early date; consequently, unlike many other symptoms of disease which arise insidiously and do not cause the same amount of discomfort, diplopia is a condition usually observed within a short time of its occurrence, and this fact alone throws a certain responsibility upon the medical adviser.

Perhaps no other single symptom demands greater respect than this one, occurring, as it frequently does, as an isolated sign in an apparently otherwise healthy subject; for it must be regarded, until proved to the contrary, as the forerunner of the most serious organic nervous disease, and just as a hemiplegia or wrist-drop demands a thorough examination not merely of the nervous system but of the entire individual, so ought we to approach and endeavour to find the meaning of an isolated ocular palsy.

The remarks here made are intended to refer more particularly to cases which are unaccompanied by obvious signs of organic disease, either locally in the orbit or in other parts of the body.

Ocular palsies have always been regarded, and rightly so, as one of the most valuable signs in distinguishing functional from organic disease, for it is now generally admitted that no true paralysis of any eye-muscle ever occurs in functional disease such as hysteria, though they may be very closely simulated by muscular spasm, e.g. ptosis in hysteria is caused by spasm of the orbicularis palpebrarum.

Disseminated sclerosis occurring, as it does, in young females, has to be diagnosed from functional disease, and ocular palsies are among the early manifestations of the former grave disease and so afford an easy distinction; similarly, much help is obtained in differentiating two such diseases as myasthenia gravis and neurasthenia.

Many isolated palsies occur in non-syphilitic subjects and get perfectly well in the course of two or three months; for want of a better name they have been called "rheumatic," and it is interesting to note that in three cases recorded by Sir William Gowers there had been a previous history of Bell's palsy, the origin of which is equally obscure; these cases are probably toxic in origin, the lesion being either a central or a peripheral one, the latter being especially true of cases occurring in diabetics, and these readily recover when the glycosuria is treated on ordinary principles.

Unfortunately, we can take no safe guide in distinguishing these "simple" palsies from the more serious group occurring in certain grave affections of the nervous system,

from the extent or duration of the squint, for on the one hand we may find in parasymphilitic disease variable, isolated and temporary palsies; on the other hand, the simple cases may last many months and may even remain permanently.

Intra-ocular palsies occur in three main forms:

(1) The Argyll-Robertson pupil: This, regarded as a single isolated phenomenon, is supposed to be diagnostic of parasymphilitic disease, and in the large majority of cases this is true, yet it is well to bear in mind that cases undoubtedly occur in which syphilis is not in the picture, for they are found in cases of apical lesions of the lungs and in some aneurysms; they also occur in lesions of the optic thalamus and third ventricle; the latter fact may be of some value in deciding the advisability of operation in cerebral tumour, for if there is no light reflex the tumour must be inaccessible to surgery.

The Argyll-Robertson pupil may be unilateral and may precede by years the onset of tabes or general paralysis.

(2) In cerebro-spinal syphilis it is usual to get a complete reflex immobility of the pupil with loss of accommodation, true Argyll-Robertson pupil being much rarer than in the parasymphilitic nerve diseases.

(3) Paralysis of accommodation alone, with normal pupil reactions, is usually due either to diphtheria or influenza.

Ophthalmoplegia interna invariably indicates a nuclear lesion, and the prognosis, except in the last group, is bad. Isolated palsies of the eye may be classified as follows:

(a) *Toxic*.—The poison may be exogenous, e.g. alcohol, lead; or endogenous—syphilis, diphteria, diabetes.

The prognosis in these cases is universally good.

(b) *Premontory*.—Usually nuclear and indicative of some organic nerve disease, in the young adult either disseminated sclerosis or myasthenia gravis, in older people either tabes, general paralysis, or progressive bulbar paralysis; these palsies are frequently slight and intermittent in character, and may precede other symptoms by months or even years.

In this group also must be placed the sudden palsies occurring in the course of arterio-sclerosis, and due to small localised cerebral thromboses or hæmorrhages.

The prognostic significance of this group of palsies is always grave.

(c) *Traumatic*.—The external rectus is the muscle most commonly affected, and it results from injury to the sixth nerve by a fracture at the apex of the petrous bone; the inferior oblique is also sometimes picked out by a fracture passing through the floor of the orbit, but isolated paralysis of this muscle is never seen apart from traumatism.

Two points must be emphasised in regard to this class: in the first place they may appear some weeks after the original injury, and secondly, they hardly ever get well.

(d) *Anomalous*.—Ocular palsies do not always indicate a grave prognosis, even if they can be excluded from the "toxic" group.

Occasionally one sees eye palsies in young chlorotic females, and these may even accompany double optic neuritis, yet no serious intracranial mischief exists, and complete recovery ensues when iron is administered.

Again, in the course of chronic otitis media which may be causing no other symptoms, one sometimes finds a sixth nerve paralysis accompanied by optic neuritis, a condition which would apparently justify intracranial exploration, yet these cases recover without surgical interference. The paralysis has been explained in two ways: either a reflex action on the sixth nerve from the vestibular nerve acting through Deiter's nucleus, or by a direct extension of the inflammatory process from air-cells in the apex of the petrous bone to the overlying sixth nerve; the latter theory seems the more intelligible.

At Sea in the "Pylorus."

By PAUL BO'LD.

WHEN novices make their bow to Neptune many things happen which they would fain confine to the limits of the ocean. Hence it is kinder that the ship and her crew should upon occasion remain *incognito*. The present is such an occasion. Past hours and present powers did not enable the voyagers to show an intimate acquaintanceship with the art of primitive life.

There are few better ways of obtaining a thorough holiday, and at the same time developing self-reliance and quickness of decision, than by cruising in a small yacht without the pampering aid of seamen, stewards, or cooks; and the month of August sees year by year an increasing number of thus-minded Englishmen. May the short narrative here set forth stimulate others to go and do likewise.

There was but little difficulty in allocating to each of the four members of the expedition his sphere of influence. There was only one qualified medical man on board, and he perforce became ship's surgeon and cook. The purser had been a mathematician previous to his medical career; it became his duty to keep the accounts of the ship. As this duty occupied but little of his time he was given the posts of steward and mate as well. The boatswain was chosen on account of his powerful whistling capacity and of his deep penetrating voice; he was magnificent when he piped "all hands aloft," and swung the rope's end upon the last man up the shrouds. He also acted as honorary cabin-boy. The skipper, having spent a good many months of his life in trawling over these seas, found no great difficulty in obtaining this post, though it is doubtful whether he was always quite happy, considering the fact that no member of the crew knew a marlinespike from a burgee.

The *Pylorus* is a cutter of some 12 tons burthen. At 12 noon upon August 1st the crew boarded her at the port of Burnham-on-Crouch, with no fixed plans, and with imaginations running strongly upon *mal de mer*.

Under the surgeon's instructions the whole crew were dosed with a much-advertised sea sick remedy before setting sail.

At 12.15 p.m. the anchor was weighed.

At 12.30 p.m., the skipper, being engaged in a discourse on the art of sailing, succeeded in illustrating one of his points by thrusting the nose of the *Pylorus* deeply into a hidden mud-bank. Of course it was then discovered that the kedge anchor had been left behind. Now a kedge anchor is often the only instrument by which a boat may be removed from a succulent mud-bank, unless one wait for the tide to fall and rise again. They waited for this natural process to take place. They waited till midnight. And the sea-sick remedy was an unqualified success!

Did the crew sleep soundly till morning? Not a bit of it. In the darkness, with mud-be-sprinkled decks, with mud-be-spattered clothing and with mutinous references to the skipper, they toiled to get the boat into the stream once more, lest perchance she should settle for yet another period upon the lazy mud.

About seven miles was covered before the anchor was again dropped and the *Pylorus* brought to rest in the mouth of the river Crouch.

Early on the following morning sails were once more set, and Harwich, *via* Brightlingsea, was the port determined upon.

The skipper handed the tiller to the purser (acting as mate), but the mate (acting as purser) promptly put the *Pylorus* aground on the banks just outside the river mouth. Three several times did he repeat this manoeuvre, but fortunately on each occasion the combined efforts of crew, wind and tide succeeded in getting her off without the need of the absent kedge anchor. Thereafter there was always a delightful uncertainty when the tiller was in the hands of the mate (acting as purser), for he divined land beneath the water with more certainty than any water-diviner ever discovered water beneath the land. Up to the last day he kept up his reputation as a mud-diviner. Not, of course, that he was alone in his prowess; the skipper ran him a good second, especially when trying to feel his way with the lead in the middle of the night; but none was so patiently persistent or so persistently patient as the mate in the land-finding business. It may have been that, knowing there would be no *mal de mer* while the *Pylorus* rested on an even keel, he sought this method of prevention as being more certain in its effects than the much-advertised sea-sick remedy.

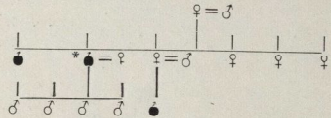
In spite of crew, mud-banks, and adverse winds the *Pylorus* made Brightlingsea, Harwich and Felixstowe within three days. In accordance with the usual practice of the

It is curious the number of cases in whom no relevant history can be obtained. The accompanying genealogical tree is in direct opposition to the generally accepted fact that the hæmorrhagic diathesis is transmitted to the males by the females. In this case the disease was first observed in a male and was transmitted by him to his offspring.

The following cases serve to illustrate most of the manifestations.

H. H.—, æt. 41, admitted at 1 a.m. with a swelling, 5 in. by 4 in., apparently in the right rectus sheath. This swelling had appeared as the result of the patient turning round suddenly.

He gave a past history of severe and long-continued bleeding from accidental wounds, and of large subcutaneous hæmorrhages following inadequate injury.



* The patient, æt. 41.

On admission he had the signs and symptoms of surgical shock, his temperature and pulse were irregularly raised, and remained so until the effusion was almost completely absorbed.

The swelling gradually increased in size and became subcutaneous, ultimately spreading round the trunk as high as the umbilicus, and reaching down by the inguinal ligaments to the scrotum and perineum.

The treatment consisted in administration of opium and ice packs, and on the third day 20 c.c. normal horse-serum were injected into the most prominent part of the swelling, with the desired result.

H. F.—, admitted for swelling of right knee-joint. Gave a history of swelling left knee-joint, which was diagnosed as acute synovitis and aspirated. Died for some days, and temperature 102° F.; bleeding after teeth extraction and from small wounds. Frequent hæmorrhages into joints.

Family history.—One brother died of hæmophilia.

On admission, right knee-joint swollen; skin pigmented over joint. Right knee hotter than left; fluid in joint. Articular ends of the bones of the knee-joint enlarged with lipping of the cartilages; synovial membrane thickened; wasting of thigh and leg muscles; right movements, active and passive, limited.

Left knee- and elbow-joints.—Deformity, lipping of cartilages and wasting of muscles. Temperature, pulse and respiration normal.

Examination of blood.—Differential count normal; coagulation period rapid.

This case shows how repeated hæmorrhage into a joint brings about permanent changes similar to those seen in osteo-arthritis.

H. G.—, æt. 12. February 20th, 1913. Admitted for pain and swelling right knee-joint of three weeks' duration.

No history of injury. He stated that he had had very large bruises resulting from blows, which had been lanced and had continued to bleed for some days after.

No family history of hæmophilia.

On admission he held right lower extremity in a position of flexion at hip- and knee-joints. The bony prominences about the knee were obliterated, and the skin over it showed slight bluish discoloration. It was hot, tender; fluid in joint; passive movements limited and painful; angle of deformity 130°. Temperature 102° F., pulse 120. These remained irregularly raised for seven days. Patient was treated with double inclined plane and weight extension.

That too great care cannot be exercised in the diagnosis of some of these patients is evident from the cases quoted above. Some of these gave a history of painful swellings of joints or under the skin following trivial injuries, which had been diagnosed as inflammatory and incised with unsatisfactory results.

I think the difficulty in diagnosis results partly from the acute aspect of the lesion and partly from the septic temperature which so often accompanies it.

This rise in temperature is probably due to the absorption of some body—possibly fibrin ferment—from the effused blood. The work done on this disease has not served to throw much light on its pathology.

That it is due to some defect in the capillaries or in the constitution of the blood itself would seem to be a reasonable hypothesis. But as yet no marked abnormality has been found in either. It has been suggested that the capillaries in these cases have thinner walls than normal, but this has not been satisfactorily demonstrated.

As regards the blood, the differential and white counts are normal. The red blood-count is that of a simple anemia if it shows any change.

The coagulation period is normal.

Some things Surgical within our Control.

By C. BARRETT LOCKWOOD, F.R.C.S.

Being the Midsummer Address delivered before the Abernethian Society, St. Bartholomew's Hospital, on Thursday, June 5th, 1913.

MR. CHAIRMAN, ladies and gentlemen,—I am very happy, Sir, to be with you again. To me it was a horrid wrench to have to part from you. The teaching which I was called upon to do in this Hospital was the great pleasure of my life, and it is the part of my work which I intensely miss.

But, Sir, after all, it is something to feel well and

energetic again, for without health there cannot be any happiness.

It behoves all of us, at the very beginning, to think out what things surgical are in our control, and what things surgical are not in our control. If we have thought the matter out and have come to the conclusion that certain things are within our own control, then there is a chance of our controlling them; but if we have never thought that problem out there will be no control, and no direction of things within our control. Our own thoughts, our own education, our own actions, our own conduct, the organisation and the management of our cases are things under our control. Our education is of use to enable us to continue to educate ourselves, above all things in seeing and in thinking. How many see without thinking! The dresser whom I found in rather animated conflict with a man who had rather long curly locks, and who said his name was Aaron, had not been thinking when he insisted on being told what his Christian name was. The questions which are asked of the patients by the unthinking often lead to curious replies. We had in this Hospital, many years ago, a physician for whom I always had the deepest feelings of respect and admiration—Dr. Patrick Black. He was a handsome man, and of dignified presence and courteous manners. He had an extraordinary faculty for divining what was about to happen to the patients under his charge. Had Dr. Black looked at me and given what the physicians call "a gloomy prognosis," I should have made my will as soon as possible. But he had excellent common-sense ways of ascertaining the condition of the patients. One of the questions he always put was, "How did you come to the Hospital?" If the patient walked to the Hospital, Dr. Patrick Black formed a rather favourable opinion of him. If he walked to the Hospital, Dr. Black said, "Well, how did you go to the ward? Did you walk upstairs?" If he walked to the Hospital and walked upstairs, Dr. Black did not think that man was very bad. But if he was brought to the Hospital in a cab, the cab making a financial strain on the resources of the family, and if, after that, he was carried upstairs on a stretcher, Dr. Patrick Black would form a rather gloomy view of that poor wretch's future. I think my old friend Vernon Cuthbert must have been trying to work Dr. Black's system when, one day, he asked a gentleman in the surgery, "How did you come here?" The man said, "Eh?" The question was repeated in crescendo, "How did you come here?" "Oh, yes," came the answer, "I am very fond of beer," and I have little doubt that that was true. When we see these patients who come to the Hospital, how little some of us think. I have dealt, of course, with great numbers of them, and the thing that has impressed my mind most is their bravery. I have hardly ever met with a person whom I should call a coward. If I were asked to say who are the bravest, I think I should say the Scotch, and next the inhabitants of the north of England.

But they are all, from beginning to end, brave people. How well-conducted they are, and how nice their conduct often is. An old man from Maidstone was in the Hospital and had an operation performed; and every year he writes a letter and sends a basket of "white heart" cherries to the surgeon who performed the operation.

Then it often occurs to me that we do not think very seriously when we interrogate patients concerning their history. Of course there is a personal history, which is usually correct. Then there is what is called the family history, which is often a very obscure matter indeed. Part of my scanty leisure is occupied in going through the records of the various operations I have performed and am performing; and amongst the operations which I have performed for tumours of the breast—which number about 200—I have only once operated for cancer of the breast on both mother and daughter. I once operated upon a mother and upon her daughter for innocent tumours of the breast. But when you come to think about it you will realise that the information which these people can give about the tumours which their relatives have had must be of the most inaccurate and hearsay nature. I remember that once one of my patients informed me that a relative of hers had been operated upon for cancer of the breast, and she also had herself a tumour of the breast. I found, on investigation, that I had myself performed the operation on the relative, and that the tumour which her sister had was merely inflammatory—a mastitis. Again, the names of patients are exceedingly interesting, and often give you a clue which is not without some kind of value.

The ages of patients, too, sometimes will throw a certain light upon their case. I have referred to the fact that I have been looking up the records of my cases of tumours of the breast; and out of a very large number, perhaps 200, of various kinds of course, I have only once operated upon a female over the age of fifty years for an innocent tumour of the breast, and she was fifty-two years of age; and even in that case the histology of the tumour was a little doubtful. She has been kept under observation, but after four years I am informed that she is well. Still, I shall be interested to see what happens. Mr. Adams, who I see is here to-night, has very kindly gone over the various breast cases in the Hospital records, and he tells me that during five years he has been able to find only five cases of innocent tumour in which the patient's age was over fifty. I think—I am speaking from memory—one of them was of inflammatory nature, and the others were so-called fibrocystic adenomata.

The occupations, too, of patients are sometimes unthinkingly written on the boards. The occupations may have a profound influence on your train of thought. Car-drivers are a curious race of people. A brewer's drayman, for instance, might be quite an inappropriate person for an operation of expediency. I can recall very few instances in which I have refused to do operations of expediency for

patients in the hospitals, and I recall very clearly that one of them was a brewer's drayman. But it is necessary to think and be observant always to know what the meaning of an occupation is. For instance, supposing a man is a car-driver and says that he drives "minerals," I suppose most people would know that that meant that he drove loads of soda-water, lemonade, and things of that sort; but they might not know that that man was greatly addicted to the consumption of ardent spirits. I believe that when they take their minerals to the public-house, they are presented with a certain amount of ardent spirits, to mix with their minerals I suppose. And I recollect often seeing a man driving a soda-water van in Mortimer Street who had large diffuse lipomata at the back of his neck, indicative of an enormous consumption of alcohol. I once operated upon a patient with diffuse lipomata, but I did not then know that those with diffuse lipomata were alcoholics. There was a reason for removing these fatty tumours from the back of the neck because he was a clerk, and his employers had refused to employ him because of his deformity. But I was always very sorry that it had been done. He recovered from the rather severe operation, during which he, of course, bled a good deal, and, of course, as an alcoholic, he suffered greatly from shock. But that pushed him over the cliff; he never really recuperated from that proceeding, and he did not live more than half a year. So when you ask a patient his occupation it is important to have the intention in your mind of thinking what bearing that occupation has upon his disease, and upon what you propose to do for that disease. Talking of car-drivers reminds me that we have always in the wards rather nice little boys who call themselves "van-guards." They are small boys who are put on the backs of vans to prevent the inhabitants of the East End from purloining the contents. These little boys make faces at the people passing, and not infrequently they fall off and get concussion, and are brought to the hospital. One of these youths was asked what he was. He replied, "A van-guard." The next question was "Does your old man"—the person who drives the van is 'the old man'—"Does your old man run over many dogs and children?" The boy said "'e don't run over mo'n he can 'elp." "Then how did you get your leg broken?" A look of extreme disgust came over the boy's face as he said, "'e run over me."

I always think that clerks are interesting people. When such a man is asked his occupation he almost invariably pronounces it with a sound like "work." I expect that was right in the fifteenth century, but to-day the pronunciation "clerk" prevails. I always look upon the person who calls himself a clerk as a rather heroic individual, because if you go into matters with him you will find that he is probably keeping himself respectable and adorning himself with—I will not say purple and fine linen, but perhaps with a frock coat and white shirt, and supporting a wife and a

numerous family, on very limited means. But they are not all models of good conduct. A person who said he was a clerk was obviously of alcoholic habits, and he was asked "What do you do? Address envelopes?" He said "Yes." "How many do you address a day?" "800." "What do you get for it?" "Fourpence a hundred." "You live at the Rowton Buildings?" "Yes." "What time are you finished?" "About eight." "And after that, you go and have a drink and drink it all up?" "Yes." He was quite candid. The next question was not devoid of interest. It was, "Why did you take to drink?" The reply was, "Domestic."

I have referred already to the histories which you elicit from people, and told you how full of fallacy those histories are and must be. They are mere hearsay evidence, and the hearsay evidence of ignorant people; they are not founded upon the objective, because if the person says, "My mother died of cancer of the inside," she is not prepared to produce the section for you to see. But there are two matters of family history which are of the very greatest interest. What countless thousands of family histories have been written down by dressers and others in the wards of this hospital, yet do you know anybody who has ever made use of them? I can only tell you one instance: a late teacher of mine, a learned and most charming man, Dr. Wickham Legge, used family histories, and showed—I believe he was the first to show—how that curious disease hemophilia ran through a family, transmitted by females, who never bled unduly, to males who did bleed.

I would mention that family history about cancer is a most dubious matter. You must get a family history of cancer if you ask for it. After the age of thirty-five it is computed that one man in every eleven will die of cancer. And then after thirty-five it is computed that one woman in every eight—I have even seen it put that one in seven—will die of it. What a high proportion! Of course you must get a family history of cancer if you ask for it. But I think that when you are asking for family histories it would be as right and proper to obtain negative family histories. I know a family in which, forty-five years ago, one of the females died of cancer of the breast. She had sisters, but none of them died of cancer; she has had numerous nieces, but none of them died of cancer; she has had numerous grand nieces, but none of them have died of cancer. That must be exceptional. Still, negative evidence might as well be sought for as positive. But we shall never get any further, I am afraid, by seeking amongst the families of human beings. But great light has been thrown on the history and our knowledge of that horrible disease, cancer, by the work which has been done by Dr. Bashford and others for the Imperial Cancer Research, and it is embodied in their scientific reports, more particularly in their third scientific report, from which I obtained the figures which I have just given you. Their work is done upon mice.

Cancer is a disease not only of man, but of all vertebrate animals, and mice are specially subject to cancer. The life of a mouse is about two years, and when a mouse is three months old it is almost ready to undertake the cares and anxieties of a family. At the age of six months mice begin to have cancer, and in considerable proportion. You may ask, "What bearing has this got upon heredity?" It has got a very great bearing, because this has been found that, taking a number of mice, the proportion of cancer in the offspring of the healthy mice is the same as the proportion of cancer in the offspring of cancerous mice. Cancer can be implanted into mice. By mating cancerous mice with cancerous mice, the constitutional predisposition to cancer may be enormously enhanced, and it is possible I think from my reading of the work, that in that way the predisposition to cancer may be slightly increased. But even that is doubtful. So the admirable work which has been done by Dr. Bashford and others on the cancer of mice shows, I think conclusively, that cancer is not a hereditary disease. They have shown a great deal more than that, because one of the first questions a patient will ask who has been near one who had cancer is, "Is it catching?" It has been conclusively shown that cancer is not a contagious disease, nor an infectious disease. It is not necessary for me to tell you how easily that is ascertained by grouping cancerous mice together, and putting healthy ones among them, when it is found that they do not acquire cancer.

Again, there are many other interesting points with regard to that disease which have been ascertained. But I will leave it to you, and advise you very strongly to study those very laborious reports.

One other point has been ascertained—one of very vast importance. Dr. Bashford has clearly shown, I think, that cancer is a local disease. If cancer is a local disease, then it is under our surgical control. On clinical grounds I should have thought cancer was a local disease. All the cancers of the breast which are examined at a sufficiently early stage show, I think clearly, that there is a local predisposing cause, namely, mastitis. When a person has a cancer of one breast and that is removed, that patient may be well long afterwards. So patients who have recently been brought under observation have been well after a period of eleven years, or even twelve years. But now a curious thing happens: they sometimes get cancer in the other breast. Here is a question which every patient asks you. After a cancer has been dealt with in one breast the victim is certain to turn round and ask, "Shall I get one in the other breast?" I think I can answer that question, not over a very large number of cases; but out of 134 patients on whom I have operated for cancer of the breast, no less than eight or nine have had cancer in the other breast. That is a proportion of one in twenty—a very high proportion. When cancer comes in the other breast, it is not necessarily of the same kind as that in the first breast.

Sometimes the second is colloid cancer; sometimes, instead of being ordinary scirrhus, it may be spheroidal-celled cancer. This is the point I am trying to make: A person has cancer of one breast, and has that removed. There is no recurrence on that side, but eleven years later there is cancer in the other breast of a different type. What has happened during the interval? Surely nothing has been going on during those eleven years. That second cancer is a new cancer formed again in the mammary gland. When cancer is first formed it is, I believe, one of the things within our surgical control. But there are certain conditions which must be fulfilled in order that it should be within our control. And the first is this: That that cancer should be confined to the mammary gland.

I have not a large number of cases, but I have now eight or ten patients whose carcinoma was known to be confined to the mammary gland. There was none in the lymphatic glands, and all those patients are alive, and after considerable intervals. One patient had a carcinoma of the left breast, which was confined to the mammary gland, and that was dealt with by the complete operation. She remained well for two years, when a minute lump appeared in the other breast. That, too, was carcinoma confined to the mammary gland. She is now known to be perfectly well seven years after the first operation and five years after the second operation. Again, if a carcinoma is confined to the locality in which it began, or is spreading into the subcutaneous tissue but has not yet spread into the lymphatic system, then that cancer is within our control. All the cases I can find in which those conditions were fulfilled are alive and well, and have lived for considerable periods after their operation. So I cannot help thinking I am justified in arguing that a cancer when it is beginning is within our surgical control. Observe the point—"beginning." How are we to know it is beginning? Very easily. Do not trust any small tumour of the breast, even if the patient happens to be only twenty-eight or twenty-nine years of age—and those are the youngest I have met with cancer in; but remove that tumour, or look at it and examine it there and then, and it will be within your surgical control to do the complete operation for the extirpation of that tumour. I said the complete operation, but there is an incomplete operation which, I regret to say, is yet frequently performed. That incomplete operation consists of removing a portion of skin, mammary gland and fascia over the pectoralis major and the lower axillary contents. I have been able to trace the number of patients who had had the incomplete operation performed. Many years ago I did it, before the year 1894. I have had to do it within the last year or two, but under special conditions. But when I came to trace and look up my records of the patients who had had this incomplete operation performed, I have not been able to discover one in which the cancer did not recur,

and the recurrence almost invariably took place in the axilla, and then spread up into the neck. It also presumably recurred in the scar and in the subcutaneous tissue, and in the pectoralis major muscle which was left behind. It is within your control not to do that incomplete operation. If, as in a poor lady, the conditions are so embarrassing that the complete operation cannot be done, it may be justifiable to do the incomplete one. At the age of fifty nine, a woman who had had very grave congenital heart disease all her life found a tumour in her left breast. She was cyanosed, and had a very intermittent pulse, and was very breathless. So it was a question what ought to be done for her. Death from cancer was inevitable; death from her heart condition or from the operation was not inevitable. So the anaesthetist undertook to give her the anaesthetic for twenty-five minutes, which he did very well, giving chloroform through oxygen. A physician undertook the care of her after the operation. The operation was performed, but not quite as an operation of the incomplete form usually is, because the time sufficed for the division of the pectorals and for the removal of the lymphatics right up to the clavicle; enough time has not yet elapsed to know what the result will be; nevertheless, her chances are almost as good as those of the patient who has had the complete operation performed.

The results of operations after the cancer has been allowed to get into the lymphatic system are quite different; and for the simple reason that when once the cancer-cells have passed from the original growth to the lymph-glands, in the lymph-vessels, no one can quite tell which way they have gone. For instance, they may have passed into the mediastinum. A cancer which we thought was of very favourable type because it contained much fibrous tissue was operated on, and it was thought at the time that there was no invasion of lymphatics at all. Two years passed, three years passed, and the patient was well. At four years the voice became peculiar, and after a time it became clear that she had got a growth in the mediastinum. Ultimately she died, without having had a recurrence at the site of her operation, nor at the neck, but with growths in the mediastinum and in the skeleton. So I cannot help thinking that that growth must have passed along the lymphatics straight into the glands of the mediastinum. I said we thought it was a favourable type because it contained much fibrous tissue. I do not know what the term "favourable type" may mean; but cancer is cancer whatever it is made up of, whether it has much fibrous tissue, or very many cells, or whether the cells be colloid or not; it is cancer, and it will run very much the same course. In fact some of my best results have been in patients who have had spheroidal-celled cancers, the cells of which are supposed to spread faster than others; but I am now sceptical about that. But cancer may spread in other directions; it may spread straight up into the lymphatic below the clavicle, along the course of the axillary vein. Do

you know that our ideas of the anatomy of the lymphatics are very complicated? I used not to have—and perhaps I have not now—a very clear and precise notion of the course of the lymphatics; but it has dawned upon my mind that the course of the lymphatics is the course of the veins. And in operating for carcinoma—taking the instance of the breast—the guide to the lymphatics is the veins, and I think, on the whole, that all the smaller veins are better removed with the lymphatics in the vicinity. But when you come to big veins like the axillary, it is a matter of dissecting the tissue along the course of that vein, from beginning to end. There is another curious notion which people have about the course of lymphatics. By reading books on the lymphatics, all have led me to suppose that the authors thought the lymphatics followed the veins; the axillary lymphatics go along the course of the axillary vein, but they seem to have an obsession that they go along the course of the lower edge of that vein; but if you watch during the course of operations, you find that the lymphatics go all along the course of the vein—below, above, in front, behind. I want you to think for a minute what it means by the lymphatics going above. Those which go below the axillary vein are dealt with at the operation; they go underneath the clavicle, through the upper aperture of the thorax, along the right thoracic duct. But in the case of the lymphatics which go along the upper part of the course of the great axillary vein, what becomes of them? This is what becomes of them. I have done the complete operation at least 134 times. Call it the complete operation. You know it only consists of removal of the pectorals, and extirpation of all the lymphatics. It is curious, but patients never die of that operation; but two who had the incomplete operation died. The complete operation seems to be borne extraordinarily well. I ask you to trace up the lymphatics above the axillary veins and see what happens to them. After the complete operation there is seldom a recurrence in the scar or skin or subcutaneous tissue. There are no recurrences in the axilla itself; that obviously can be dealt with even if the lymphatics there have carcinoma in them. But the recurrences which have taken place in my patients have taken place in the neck and in the interior of the body—the thorax, and, perhaps, the abdomen. Now, in what part of the neck? They often took place in the outer angle of the posterior triangle of the neck, and behind the outer end of the clavicle; but when you recall what I have already said about the course of the lymphatics along the axillary vein, not only below, not only in front, but behind and above, you have only to take your mind's eye along the course of the upper part of the axillary vein, and you pass in behind the outer end of the clavicle into the outer part of the posterior triangle of the neck. Clearly, if that is so, it is a point of great importance in these complete operations, and it is a matter within your control. The only question in my mind

is this; whether to get those lymphatics completely within your control, for which it may be necessary in some cases—not in all—to divide the clavicle and extirpate the retro-clavicular glands.

I mentioned a while ago another surgical disease which is a scourge, not only to man, but, I believe, to nearly all the other vertebrates, and that is tubercle. I once calculated the number of tuberculous patients at one time in my surgical wards, and I found that at least 20 to 25 per cent. of the patients in the wards were tuberculous. What a huge proportion! And further, you are aware that the deaths from tubercle in this country amount to a very big total. Thank goodness, with the spread of knowledge they are becoming less. I believe that 70,000 people died of tubercle last year. Our minds cannot deal with numbers like 70,000, at all events mine cannot. But when I think of a town which contains 70,000 inhabitants, like Reading, and all its inhabitants swept off the face of the earth in one year, it conveys in some degree the horrible mortality caused by tubercle. And yet, when you think about it, tubercle is within our control. If nobody with tubercle was allowed to emit the bacilli, if places used by the tuberculous were disinfected, and if—though I am not saying it would be right to do so—we could segregate those with tubercle in the infectious or contagious forms, surely it would be as certain to die off the face of the land as that dreadful scourge of the middle ages did when the people were segregated. I can take you to a village fifty miles from where we are and show you, far outside the village, upon a hill, the leper-house, where the lepers used to be segregated. And perhaps I might take you to the church and show you the squint through which they were allowed to look at the service which was going on.

I have tried to tell you a few things within our control, but what I have really been trying to do is to instil a principle into your minds, and it is this: that we ought all so to think out the things which are in our control or not in our control. Some of the things which are not in our control are the thoughts of the patients under our charge; and I suspect that if we could only learn them they would be very singular. I believe the sisters and nurses could give you some information which would make your hair stand on end. Boys are most extraordinary creatures if you know what is at the back of their minds. One day a boy who was having his dressing performed, cried out: and the boy in the next bed said, "Yes, that's right, give him beans." I remember two boys discussing their dinners. One boy said, "What er you got?" "Oh, I've got fish; what have you got?" The other boy, with triumph, said, "I've got a chop." So the fish boy said, "Oh, well, you needn't brag, you are getting thinner and thinner every day." Another curious thing about boys is their extreme callousness to the suffering which goes on around them. I have already referred to the "Give him beans boy." At

St. Thomas's Home they have a corridor, with rooms on either side, and patients can often see what is going on over the way. When the father of a little fellow, who had been there, came to see me, I asked him if the boy had been comfortable, and he said, "Oh, yes, I think he liked it." I said, "Boys are very odd things, and I daresay he derived a certain amount of pleasure from it." "Yes, now you mention it, I think it must be so. One day, when I got up to go, he said 'Father, can't you stay a little longer?' I said, 'No, I must go.' He said 'I wish you could wait a little longer; you see that man over there, he has been sick all night, and I think he is going to be sick again.'" Patients whom you would not think were in any way sentimental are saturated with sentimentalism. One beautiful day in July, in the afternoon, I was looking up some notes in one of the wards, and in one bed there was a man of enormous proportions, so that the bedclothes looked as if they had an elephant beneath them. After a while I heard a gruff voice come from this bed, speaking to a man over the way, "It's a lovely die Number 'ight," and Number Eight said "Yes." Then the elephantine gentleman said, "Wouldn't it be nice to be on the water in a nice little yacht with some nice gels a rowin' of you along?" One reflected that a gentleman of these proportions would almost need an Atlantic liner.

Some Notes on the State of Otology in 1730.

By ARCHER RYLAND.

THE science of otology is by no means an essentially modern science.

Treatises devoted exclusively to this branch of surgery, however, are comparatively rare at any date previous to the latter half of the eighteenth century.

Diseases of the ear, and the surgery of the ear, although usually mentioned in the old comprehensive works on surgery, are referred to in but a scanty manner and are rapidly dismissed.

The old authors seemed to approach with feelings amounting almost to a guilty sense of irreverent curiosity the secrets of the special senses, and seemed to shrink from the responsibility of applying their monstrous concoctions to the cure of parts so mysterious in their action and so little understood.

The early years of the eighteenth century are not without renowned and eminent names in association with the science of otology.

Rivinus was still professor at Leipsic. Vieussens was at work upon the ear while recording his discoveries on the anatomy of the brain, but the great Valsalva was leaving far behind this rival, whose descriptions are said by Linck

to be so mysterious that his contemporaries could not understand them.

The achievements of this great and gifted investigator are well known.

Lincke begins his account of the progress of otology with a lament that the science did not engage a greater share of the genius of Antoine Marie Valsalva. His contributions to the science of otology were unrivalled. He recognised ankylosis of the base of the stapes as a cause of deafness. He gave us the Valsalvan method of inflating the middle ear. He proved that the cavity of the tympanum is connected with the cells of the mastoid process. He showed that stoppage of the Eustachian tube is often a cause of deafness. His whole work constitutes a marvellous advance upon what Kossa calls the "disgusting empiricism of the centuries before."

Antonio Scarpa, the Secretary of the octogenarian Morgagni, devoted a great part of his labours, which he carried on well into the nineteenth century, to elucidating the anatomy of the ear. He is said to have described with great exactness the ossicular labyrinth, the membranous labyrinth, and the expansion of the acoustic nerve.

The nineteenth century is rich in names, but the object of the present paper is intended more to show something of the state of otological science before such intellects as Monro, Schrapnell, Toynebe, Politzer, Cotti, Deiters and Hirtl came upon the scene.

One of the earliest of the eighteenth century works on this subject, a work evolved from a sound and scientific basis, and devoted wholly to otology, is a little book written about the year 1730 by M. Du Verney, member of the Royal Academy of Sciences, and Professor of Surgery in the Royal Physick Garden of Paris. The description there given of the ear, and of the several parts thereof, and their respective uses, is altogether admirable, both in its method and its conclusions.

It cannot, however, be said that the author's consideration of the diseases of the ear, and of their appropriate cure, merits in any degree the same praise. Here, again, are the old absurdities that lie at the root of so much of the scientific work of those days: the old servile homage to ancient authority, the old solemn interogation of ridiculous theories, and the old reluctance to cast those theories aside.

Let it not be supposed, however, that the present volume, villainously pranked though it be with ancient epithets, is a mere recapitulation of ancient follies. The striking fact with regard to many of these old volumes is not how ludicrously the author fails, is not how painfully he struggles again and again through labyrinthine paths of prejudice and error, but how frequently he hovers above the threshold of truth. Argument follows observation, comments often irrelevant are made, deductions too often reposing upon the ground of unreasoned prejudice are brought forward, and yet the writer is perpetually hovering in the region of truth, and is

advancing as it were by strange and irresponsible steps to great conclusions.

The structure of the organ of hearing is first dealt with. In this section the author admits his debt to the physical essays of Perrault. It is, however, obvious that the former investigator had gone over the whole ground of the anatomy of the ear, and states only that which from the authority of his own research he can maintain to be true. Each description of the various portions of the organ of hearing, as far as it goes, is given with a surprising accuracy. In almost every instance the account given is incomplete, but it is seldom erroneous.

The external ear is described as having two muscles and their respective actions are dealt with at some length. The blood supply of the pinna is followed out in a series of excellent plates with a special notice of that branch "which passes over the fore part of the ear and is perceived to beat at the temples, and which is commonly opened for great pains in the head." The mastoid cells are the cavernulae of the processus mammillaris. The description of a fourth ossicle must be regarded as an instance, not of our author's account falling short of the truth, but of his imagination outrunning it.

It is interesting to note that at this date the ossicles are described as being covered with peristomium. This statement is in direct contradiction to the teaching of Valsalva. It appears that Ruysch, of Amsterdam, was the first to correct Valsalva in this, and that Du Verney has merely verified Ruysch's discovery.

The aditus, the Eustachian tube, and the attic were portions of the auditory apparatus, not clearly related in the minds of our scientific forefathers to a known pathological process. These parts therefore received no fixed or definite terminology. Hence the varying, tentative and hesitating phrases which are used in the description of these structures. The aditus is the passage which penetrates into the cavernulae of the processus mammillaris. The attic is the cavity at the top of the tympanum, and the Eustachian tube, in language that reminds us strongly of the cramped and uncomfortable phraseology of a medico-legal witness, is "that passage which goes from the ear to the palate."

"The tympanum has five remarkable things in it, two passages, two fenestrae, four small bones, three muscles, and the branch of a nerve." The description given to each part, even when that part has no existence, is in every case admirable.

"The aqueduct" (Eustachian tube) "makes room for the filth and other extraneous humours, which are often gathered in the inside of the tympanum. The pharyngeal orifice is so placed that a large quantity of air inspired through the nose must enter the aqueduct."

The confusion which existed at this date, and doubtless for many years afterwards, as to the identity of the seventh cranial nerve, and its relation to the auditory and trigeminal

nerves, led to the establishment, but, perhaps, not to the general acceptance of, theories somewhat startling in their nature.

The auditory nerve was described as being composed of two branches—an upper and a lower. The former, the larger of the two, was termed the "portio mollis," and eventually lost itself in the organ of hearing. The latter branch, which passed out of the cranium (at the stylo-mastoid foramen) was the portio dura (seventh cranial nerve). The communications existing between some terminal branches of the portio dura with certain branches of the trigeminal, a nerve then associated in the minds of certain anatomists with the phenomenon of vocalisation, were at this time well known. As a result of these observations and of the theory held with regard to the nature of the trigeminal nerve, the following curious theory arose:

"It is by the communication of the auditory nerves with those of the voice that the sympathy between the voice and the hearing is caused."

"By the communication of the portio dura of the auditory nerve, with the branches of the fifth pair which are distributed to the parts, which serve to form and to modulate the voice, the communication which there is between the hearing and speech is commonly explained. Some say that the vibrations of the nerves of the ear, being communicated to the nerves of the fifth pair, causes the spirits which flow from the brain into these nerves which proceed to the parts which form the voice, to dispose the muscles in such a manner, that answering the impression which the voice hath made in the brain, they are put in a method of forming a voice quite like it. And this reason is alleged for men and birds exciting one another to sing. But everyone does not agree in the effects of all these communications."

As to the chorda tympani, Du Verney probably shared the opinion of the majority of otologists at this date with regard to its functions. The general opinion seems to have been that it was distributed to the intra-tympanic muscles and to the ossicles. It was also supposed that the nerve "might cause some sound in communicating its agitations to the membrana tympani in the same manner as a cord put upon the skin of a drum."

The writings of M. Mariote are, no doubt, the source of much that was known at this time about the uses of the various parts of the ear. Much of this knowledge is sound, well based, and in line with scientific anatomy. Some of it, but by far the lesser part, is weak, ill-founded, and sometimes wilfully erroneous.

The external ear was regarded as a "natural trumpet, whose neat and smooth cavity serves to amass the sound." The obliquity of the auditory passage is noticed as a mechanism of defence for the drum, and the wax as a mechanism of defence against invasion by insects and filth.

Of the muscles of the external ear, probably only two at this date were known. "Their motion," says Du Verney,

"is very obscure, but they seem to be designed for the contraction and dilation of the concha, according to the force or weakness of the undulations of the air."

A consideration of the function of the tympanic membrane is worthy of a full quotation, not only on account of the soundness of the views expressed, but also for the clearness and elegance of its statement. "We may, I say, assert that the membrane of the tympanum conforms in some manner to the different dispositions of the sonorous bodies in its different states of tension and relaxation, and it we may be allowed the expression, puts on their character; as for example, it is extended for acute tones, because in this state of tension, it is more capable of quick vibrations, but on the contrary it is relaxed for grave tones, because it being thus relaxed it is better disposed for slower undulations, and lastly it rises and falls in a thousand different ways as the different ideas of the different noises and sounds. I confess it is hard to conceive how this is performed; they are mechanical motions which are imperceptible, the nature and causes of which are difficult to explain. Much is said of the implanted air of the tympanum and of its capability of agitating the labyrinth independently of the ossicular chain."

The author, however, concludes that pulsations are communicated by means of the ossicular chain to the stapes, whose vibration shakes the os petrosum.

It is interesting to note that the intra-tympanic air was known to be in free communication with the aditus and the Eustachian tube, which furnished and continually renewed from the nostrils and not from the lungs the air of the tympanum.

The old arguments in favour of the semicircular canals as a portion of the immediate organ of hearing are probably well known. They may be briefly stated as follows:

1. (a) These canals are found in birds and in fishes.
- (b) These creatures have no cochlea.
- (c) Nevertheless they hear.
- (d) It is therefore certain that these canals are the immediate organ of hearing in birds and fishes.
2. (a) Ramifications from a portion of the portio mollis extend into filaments which line these canals.
- (b) Nobody disputes that the portio mollis conveys sound impressions.
3. A semicircular canal is in shape essentially a double trumpet. The broad vestibular end may be regarded as a wide trumpet adapted for bass tones, while the narrow ends, uniting in the curve of the canal, may be regarded as constituting a narrow trumpet adapted for high tones. We may therefore argue from structure and say that "these canals receive the different characters of tones as well as the lamina spiralis, and that the impression of sounds must be increased and strengthened in these convoluted paths."

(To be continued.)

The International Medical Congress.

IN Friday, August 8th, special arrangements were made at the Hospital for the entertainment and edification of the members of the Congress.

At 8.30 a.m. the theatres were busy, and some sixty visitors were present to watch Mr. D'Arcy Power and Mr. Eccles operate. The former, assisted by Mr. Gask, performed a gastro-enterostomy and a radical operation for hernia. Mr. Eccles, assisted by Mr. Wilson, removed a goitre and operated on a case of hernia. The anaesthetic for Mr. Eccles' first case was given by Mr. Boyle, who used the intra-tracheal method.

Later in the day a distinguished gathering of English and foreign visitors to the Congress was entertained to lunch in the Great Hall at the invitation of the medical officers and lecturers of the Hospital. The lunch was a great success, sixty eight being present. The guests included Prof. Lucas Championnière, of Paris; G. M. R. Prof. v. Muller, of Munich; Prof. Dollinger, of Buda-Pesth; Prof. Waldeyer; Prof. P. Heger (who recently published the Bronté letters); Prof. Hartmann, Prof. Sudhoff, Prof. Fuchs, Prof. Kronig, Prof. v. Noorden, Surgeon-General A. May (Director-General of the Navy Medical Service); Sir Pardey Lukis (Director-General of the Indian Medical Service); Sir Clifford Allbutt, and Mr. Acton Davis (the Acting Treasurer).

Dr. Herringham, the General Secretary of the Congress, was in the chair. The President of the Congress, Sir Thomas Barlow, was unfortunately unable to be present, owing to his having to preside at Prof. Ehrlich's address elsewhere.

After lunch, the chairman, in a brief speech, proposed the health of the guests. The toast was replied to by Prof. Waldeyer, Prof. Paul Heger and Prof. Dollinger; the latter then proposed the health of Dr. Herringham in a short but witty speech in English. Dr. Herringham then replied. An autograph book was circulated in which the signatures of those present were collected.

In the afternoon a garden party was held. Some 300 guests were present, and visitors were invited to inspect the wards, the out-patient and special departments, the pathological department—which, for the occasion was dignified by the name of "The Pathological Institute"—the Dispensary, Library and Museum. Demonstrations of cases were also held in the out-patient and special departments. In the museum a selection of pathological specimens of special interest was exhibited, and some interesting historical books and prints were on view in the Library.

Among the distinguished persons present were Prof. Janeway; Prof. Comby, of Paris; Prof. Falta, of Vienna; Prof. Harvey Cushing, and Prof. Adami. Tea and refreshments were served in the Square, and the weather was fortunately fine.

St. Bartholomew's Hospital Women's Guild.

By Mrs. NORMAN MOORE.

IN response to the Editor's kind suggestion this short account of the St. Bartholomew's Women's Guild is written. The Guild is still in its youth, for it is not yet two years since it was inaugurated at a meeting in the Great Hall, at which Lord Sandhurst presided. Its objects are summed up in three sentences:

(a) To provide clothes for the use of poor patients in the wards.

(b) To provide clothes for necessitous patients on their discharge from the Hospital.

(c) To take up any other work in connection with the Hospital which from time to time may commend itself to a general meeting, with the sanction and approval of the Treasurer and Almoners.

Discussion has occasionally arisen as to whether the Guild was founded to help the Hospital or the patients; but as imagination fails to picture the one without the other, it may be laid down that to help St. Bartholomew's will safely cover both propositions.

The first Annual Meeting was held last View Day. Lady Sandhurst, the Chairman of the Executive Committee, who constantly furthers in every way the welfare of the Guild, took the chair in a crowded room. The reports then read showed a membership of 363 (since increased). Mrs. Tooth, the Hon. Work Secretary, reported that 1200 new garments had been sent to the Hospital. Ladies willing to undertake to make garments for use in the wards are asked to write for patterns and materials to the Hon. Work Secretary, as it is essential that such clothes should be uniform. It is greatly hoped that all who do such needlework will also send a subscription towards the cost of the stuffs. Some members send money alone; some prefer to make clothes, or to send clothes that have been worn, but are in good condition, for the use of necessitous patients on leaving for convalescent homes, to which they must go, tidy, or for their own homes, though care is necessary in helping in this way. While there is no written rule on the subject, the Committee being anxious to exclude none willing to help, a usually accepted *minimum* subscription is 2s. 6d., though happily many members send us much larger sums, and no limit whatever is placed on the maximum!

£105 were spent in the year on linen, blankets, down-pillows, and new clothes. The pillows were greatly appreciated by the patients. To be enabled to make the grant to the linen-room was an especial satisfaction, for, in the words of the Report, "we feel that we have hereby given to those responsible for carrying on the work of the Hospital an earnest, however small, of our desire to help them."

The Guild came late into existence. Other hospitals were already in the field, and had secured much help and interest. The Guild has therefore to make up lost way. Some 370 members by no means satisfies our ambitions. It is true that we have seven branches, of whose help we are deeply sensible. We should like to be able to follow up patients; we should like to make further grants to the Hospital funds; we should like to provide more clothes. But our *settled* income is less than £90, and our actual powers are therefore small. Not so are our potential powers, if all who have associations with St. Bartholomew's will help by asking their friends to join us.

Branches are formed with the co-operation of the Executive Committee, some member of which would gladly visit any prospective branch to help with its formation if desired.

Hon. Treasurer.—Mrs. Jessop, 73, Harley Street, W.

Hon. Secretary.—Miss Tweed, 45a, Addison Gardens, W.

Hon. Work Secretary.—Mrs. Tooth, The Matron's Office, St. Bartholomew's Hospital, E.C.

Obituary.

W. B. R. STOWER.

IN the death of W. B. R. Stower many Bart's men feel the loss of a friend. And the comparative rapidity of his last illness and death, at a time when many of his closest relatives and friends were away on their holidays, makes the tragedy all the greater.

Those who knew him well can testify to the good stuff that was in "George," as he was called. Cheerful, generous, open and trustworthy, he was the ideal friend and companion.

He was a musician of far more than the average amateur talent. But so modest was he of his accomplishments that many of his best friends were for a long while unaware that he ever touched a piano. His singing and his accompanying were much in demand, and his aid in the wards at Christmas time was invaluable.

He was a keen and popular member of the London Scottish, and his singing was a constant feature of their smokers and dinners. His loss is felt among their ranks as much as it is at Hospital.

He was a thorough sportsman and played Rucker regularly for several seasons. Last year he captained the third XV.

But it is impossible to coldly catalogue the virtues and accomplishments of one so recently among us; and, however complete the list, it can give no sort of impression of the individual charm of the man. The best testimony to him is to be found in the large number of friends that he made, and the irreparable loss that they feel at his untimely death.

New Addresses.

MAWHOOD, R. H., "Chalcots," Ascot.
 ROWORTH, A. T., Montebello, Blackrock, Co. Dublin.
 CURRIE, JOHN, Calabar, Nigeria.
 WHITEHEAD, F. E., West African Medical Staff, Sierra Leone, W. Africa.
 MITTER, R. K., Lieut. Col., I.M.S., c/o Messrs. Grindlay & Co., Whitehall, S.W.
 SLADDEN, A. F. S., 1, Park Road, Regent's Park, N.W.
 BARROW, R. M., Bank of Montreal, Edmonton, Alberta, Canada.
 DOWNER, R. L. E., Westmains, Matlock.
 RECKLESS, P., 5, Hounsfield Road, Sheffield.
 O'CONNOR, F. W., London School of Tropical Medicine, Albert Dock, E.
 EVANS, D. B., Bush House, Llanybyther, S. Wales.
 AMSLER, M., Eton Court House, Eton. (Tel. 345 Windsor.)

Examinations.

UNIVERSITY OF CAMBRIDGE.

A. Abrahams has taken the M.D. (Cantab.) (Thesis).

Diploma in Tropical Medicine and Hygiene.

C. Noel Davis, F. W. O'Connor.

ROYAL COLLEGE OF PHYSICIANS.

T. S. Lukis was admitted a Member of the College, having passed the required examinations.

UNIVERSITY OF LONDON.

First Examination for Medical Degrees.

J. E. A. Bouchard, G. Bourne, H. J. C. Churchill, L. A. R. Gaud, J. Gay, E. H. Glenny, H. C. C. Joyce, L. K. Ledger, P. T. Liang, J. P. Ross, C. M. Titterton.

Second Examination for Medical Degrees.

Part I: Organic and Applied Chemistry.—P. S. Clarke, P. N. Cook, R. C. Davenport, G. Day, A. Murford, B. H. Pidcock, A. A. Thiel.

Part II: Anatomy, Physiology and Pharmacology.—K. D. Atteridge, C. V. Boland, A. R. Dingley, C. E. Heath, N. H. Hill, W. R. White-Cooper.

M.D. Examination.

Branch I: Medicine.—T. K. Boney, A. R. Fearnley.

Branch V: State Medicine.—N. H. Walker.

Branch VI: Tropical Medicine.—C. Noel Davis.

CONJOINT BOARD.

July, 1913.

First Examination.

Chemistry.—F. E. G. Watson, A. H. Samy.

Physics.—F. E. G. Watson, D. R. Thomas.

Elementary Biology.—G. Miller.

Practical Pharmacy.—F. E. G. Watson, G. C. Fairchild, M. T. G. Clegg, C. F. Cobb, S. G. Dunn, A. J. C. Eland, P. G. Horsburgh, K. E. Shellshear, D. R. Thomas, A. N. Garrod.

Second Examination.

Anatomy and Physiology.—D. H. Derry, I. M. Banerji, H. E. P. Yorke, C. S. J. Kearney.

Third Examination.

Medicine, Surgery and Midwifery.—The following have completed the examinations for the diplomas of M.R.C.S. and L.R.C.P.: J. M. Curé, M. N. Ferrin, J. W. Fygon, T. B. Vail, E. A. Brock, H. L. Cronk, A. M. Humphry, J. R. Griffith, D. L. Spence, L. R. Shore, G. L. Keynes, W. S. Soden, C. D. Jameson.

The Diploma in Public Health of the College of Physicians and Surgeons was granted to S. E. Gill.

SOCIETY OF APOTHECARIES.

July, 1913.

The Diploma of the Society was granted to S. H. Andrews.

The following candidates passed the examination conducted by the

SCHOOL OF TROPICAL MEDICINE:

With distinction.—C. Noel Davis.

Pass.—J. M. Curé, C. E. F. Moutat Biggs.

Appointments.

- ✓ CATES, H. J., M.D.(Lond.), D.P.H.(Cantab), appointed M.O.H. for the County Borough of St. Helens.
 CLINDENING, F. T. D., M.R.C.S., L.R.C.P., appointed M.O. to O.S.S. "Jasen," sailing for China and Korea.
 ✓ O'CONNOR, F. W., M.R.C.S., L.R.C.P., D.T.M. & H.(Cantab.), appointed Demonstrator at the London School of Tropical Medicine.
 ✓ WHALE, H. L., M.D.(Cantab.), F.R.C.S., appointed Surgeon (Ear, Nose and Throat) to the London Temperance Hospital and to the Woolwich Cottage Hospital.

Royal Naval Medical Service.

The following appointments, etc., have been notified since July 20th, 1913:

- Fleet-Surgeon W. K. Hopkins to the "Vivid" for trials of "Fearless," August 9th, 1913.
 Fleet-Surgeon H. Spicer to the "Invincible," August 11th, 1913.
 Staff-Surgeon J. O'Hea to the "Hermes," additional for the Isle of Grain Flying School, August 11th, 1913.
 Staff-Surgeon W. C. B. Smith to the "London," August 30th, 1913.
 Surgeon L. C. E. Murphy to the Royal Marine Division, Chatham, August 30th, 1913.
 Surgeon G. B. Scott to the "President," additional for five months' course of instruction at R.N. College, Greenwich, August 30th, 1913.
 Surgeon H. B. Hill to the "Wildfire," for R.N. Barracks and Dockyard, Sheerness, August 30th, 1913.
 The Polar Silver Medal, with clasp inscribed "Antarctic, 1910-1913," has been granted to Surgeon G. M. Levick.

Births.

- ALMOND.—On August 14th, at 6, Brock Street, Bath, the wife of G. Hely-Hutchinson Almond, M.A., B.M.B.Ch.(Oxon), M.R.C.S.(Eng.), L.R.C.P.(Lond.), of a son.
 CANE.—On July 10th, at Kirkee, near Poona, India, the wife of Captain Arthur S. Cane, R.A.M.C., of a son.
 HARRIS.—On Sunday, June 20th, at 28, Carlton Crescent, Southampton, the wife of H. G. Harris, M.D., of a daughter.
 HILL.—On June 11th, at the Union Medical College, Peking, the wife of R. A. P. Hill, M.D., D.P.H., of a son.
 O'CONNOR.—On August 14th, at 72, Boyne Road, Lewisham, S.E., the wife of F. W. O'Connor, M.R.C.S.—a son.
 TREWBY.—On June 6th, at 11, Bentinck Street, Cavendish Square, W., to Mr. and Mrs. J. F. Trewby—a son.
 WOODWARK.—On July 31st, at 38, Queen Anne Street, Cavendish Square, W., to Dr. and Mrs. Stanley Woodwark—a son.

Marriages.

- MAWHOOD—PEEL.—On July 23rd, at St. Paul's Church, Bedford, by the Rev. C. F. Farrar, M.A., Headmaster of Elston School, assisted by the Vicar, the Rev. Jocelyn Speck, M.A., Reginald Hawksworth Mawhood, M.B., B.C., F.R.C.S., of Chalcots, Ascot, son of Mr. and Mrs. John Mawhood, of Oak Mount, Sheffield, to Phyllis, eldest daughter of the late Mr. E. Lennox Peel and Mrs. Peel, of St. Andrew's Road, Bedford.
 STURDEE—PINE-COFFIN.—On July 9th, at Holy Trinity Church, Exmouth, Edwin Lawrence, only son of Rev. E. J. and Mrs. Sturdee, of the Vicarage, Bova Edge, Stoke-on-Trent, to Norma, daughter of Mr. and Mrs. C. E. Pine-Coffin, of Seacroft, Exmouth.

Deaths.

- BENNETT-POWELL.—On July 17th, at the Vale of Clwyd Sanatorium, N. Wales, Norman Bennett-Powell, M.R.C.S., L.R.C.P., formerly of Margate, aged 34.
 HODGSON.—On the 25th July, at 166, Peckham Rye, Robert Hugh Hodgson, M.D., L.R.C.P.(Edin.), M.R.C.S.(Eng.), ex-Vice-President British Gynaecological Society, son of the late Captain C. G. Hodgson, Grenadier Guards, and grandson of Field-Marshal Studholme Hodgson.
 NOKE.—On the 12th August, at Northampton, Frank Herbert Noke, M.B., D.P.H., late captain R.A.M.C., younger and only surviving son of the late Edward Noke, of 13, Springfield Place, Bath, aged 35.

Acknowledgments.

St. Mary's Hospital Gazette, New York State Journal of Medicine, Charing Cross Hospital Gazette, Nursing Times, British Journal of Nursing, Middlesex Hospital Journal, The Solicitors' Journal, The Lancet, Guy's Hospital Gazette, The Hospital.

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, Smithfield, E.C.
 The Annual Subscription to the Journal is 5s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., 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. Telephone: 1436, Holborn.
 A Cover for binding (black cloth boards with lettering and King Henry VIII Gateway in gilt) can be obtained (price 1s. post free) from MESSRS. ADLARD AND SON, Bartholomew Close. MESSRS. ADLARD have arranged to do the binding, with cut and sprinkled edges, at a cost of 1s. 6d. or carriage paid 2s. 3d.—cover included.

