

	PAGE		PAGE
House physicians, appointments, 80; regulations as to pathological work ...	60	Rahere Lodge, meetings ...	14, 48, 63, 96, 111, 144, 192
Hunt, Dr. E. H., case of lipoma of knee, 121; ruptured femoral artery and vein, 174; chronic ulcers of leg ...	182	Retention of urine, clinical lecture by Mr. W. H. Cripps ...	152
Idiosyncrasy to drugs (iodoform and cocaine applied externally), three cases, by Mr. E. W. G. Masterman ...	43	Reviews: Memoirs and Letters of James Paget, edited by Stephen Paget, 14; Elements of Practical Medicine, by Dr. A. H. Carter, 32; Disorders of Assimilation, Digestion, etc., by Sir Lauder Brunton, 78; Selected Essays and Addresses, by Sir James Paget, 78; Illustrated Medical Dictionary, by Dr. Newman Dorland, 79; Handbook of Public Health, by Dr. J. Orr, 79; First Aid to the Wounded and Sick, by F. C. Warwick and A. C. Tunstall, 79; Syllabus of Lectures to Nurses, by Dr. A. Davidson, 80; Syphilis and other Venereal Diseases, by H. De Meric, 80; Contributions to Practical Medicine, by Sir J. Sawyer, 95; Surgical Diseases of the Kidney and Ureter, by H. Morris, 109; Outlines of Gynaecological Pathology and Morbid Anatomy, by Dr. C. H. Roberts, 110; Human Embryology and Morphology, by Dr. Arthur Keith, 111; Manual of Surgical Treatment, by W. W. Cheyne and F. F. Burghard, 111; Medical Lectures and Aphorisms, by Dr. Gee, 126; Elementary Text-book of Zoology, by Dr. A. T. Masterman, 127; Gibson and Russell's Physical Diagnosis, revised by Dr. F. D. Boyd, 127; Clinical Methods, by Dr. Hutchison and H. Rainy, 127; Text-book of Physics, by R. A. Lehfeldt, 143; Diseases of Organs of Respiration, by Dr. West, 158; Impressions of a Doctor in Khaki, by Dr. Fremantle, 159; Practical Medical Electricity, by Dr. Dawson Turner, 176; The Practitioner's Guide, by Messrs. Carr, Pick, A. Doran, and A. Duncan, 191; Aids to Practical Dispensing, by C. T. S. Thompson, 191; Manual of Surgery, by Rose and Carless, 192; Notes on Medicine, by W. D. Woodburn, 192; Handbook of Surface Anatomy and Landmarks, by B. C. A. Windle ...	192
Intussusception, diagnosis, prognosis, and treatment of, by Mr. W. D. Harmer ...	81	Rhodes and Scott, Drs., two cases of hæmorrhage treated successfully by supra-renal extract ...	25
Jessop, Mr. W. H., lecture on ophthalmic treatment and therapeutics ...	119, 134	Robbs, Dr. C. H. D., two cases of internal tumour with unusual symptoms ...	85
Junior staff appointments ...	64, 160	Rodent ulcer, clinical lecture by Mr. Butlin ...	1
Lament, a (verses) ...	27	Rundle, Mr. H., notes of holiday in and impressions of Spain ...	166
Larynx, post-diphtheritic stenosis of, cured by thyrotomy, by Dr. F. H. Parker ...	121	Sale, Mr. J. C., fatal case of bleeding from nose and gums ...	104
Last survivor, the (verses) ...	139	Scott, Dr. S. R., case of severe internal hæmorrhage with swelling of salivary glands during intra-venous injection ...	121
Learning of medicine, on the, by Dr. S. West ...	49	Skrimshanking, the noble art of, by Mr. G. E. Cathcart ...	171
Linacre and Caius, notice of, by Dr. J. A. Nixon ...	50	Smithfield letters, collected by John Street Road ...	169, 185
Lipoma of knee, case of, by Dr. E. H. Hunt ...	121	Snapshots in modern practice (facts) ...	93
Lowe, Mr. G., case of opium poisoning ...	26	Strangulated femoral hernia, operation for, without anaesthetics, in woman aged eighty-two, by Dr. M. L. Hepburn ...	8
Lumleian Lectures, foundation of, in 1582 ...	57	Students' Christian Association of St. Bart's Hospital ...	96
Marsh, Mr. H., on bonesetters and displacements of tendons	113	Summer concert ...	154
Masterman, Mr. E. W. G., gunshot wound of urethra, Cock's operation, 9; three cases of idiosyncrasy to drugs (iodoform and cocaine) applied externally ...	43	Surgical teaching and technique in United States, impressions of, by Mr. F. K. Wessels ...	136
Meningitis, unusual case of, by Mr. H. H. Weir ...	185	Talbot, Dr. E., modern treatment of pulmonary tuberculosis ...	21
Middle ear, treatment of chronic suppurative disease of, by complete mastoid operation, by Mr. A. E. Cumberbatch ...	118	Traumatic hæmorrhax, case of, by Messrs. Hay and Worthington ...	103
Mistakes, a batch of, by a G.P. ...	178	Tubercular meningitis, clinical lecture, by Dr. Gee ...	132
Nasal and air passages, affections of, in congenital and tertiary syphilis, clinical lecture by Mr. Bowly ...	161	Ulcers, chronic, of the leg, by Mr. E. H. Hunt ...	182
Neave, Mr. S., a point in the theory of emphysema ...	181	Ungrateful patient (verses), by Galen—up to date ...	92
Negligence, law of, in relation to medical men, by Mr. S. B. Atkinson ...	70	Urine, analysis of, with special reference to that of fever, by Dr. G. C. Garratt ...	44
Netley, prizes gained at, by St. Bart's men ...	59	Vernon, Bowater John, memorial tablet (illustration) ...	137
New productions: Petanelle ...	32	View Day, May 14th, 1902 ...	123
Nixon, Dr. J. A., evolution of the English medical school ...	38, 53	Weak hearts, clinical lecture by Dr. Gee ...	34
Note-taking, hints on, by Dr. S. West ...	54	Weir, Mr. H. H., unusual case of meningitis ...	185
Obituary: Alfred Coleman, 188; F. W. Gale, 189; H. S. Ward, 189; T. J. Ware, 174; A. N. Weir ...	105	Wessels, Mr. F. K., impressions of surgical teaching and technique in United States ...	136
Obstetric medicine and surgery, some pages from ancient history of, by Dr. F. H. Champneys ...	65, 89	West, Dr. S., on the learning of medicine ...	49
Operation wounds, changes in procedure in treatment of, at St. Bart's Hospital, between 1857 and 1901, by Mr. A. Willett ...	4	Willett, Mr. A., historical review of changes in procedure in treatment of operation wounds in St. Bart's Hospital between 1857 and 1901, 4; resignation of ...	27
Ophthalmic treatment and therapeutics, by Mr. W. H. Jessop ...	119, 134	Winter Session, 1901-2, entries at Medical School ...	10
Opium poisoning, case of, by Mr. G. Lowe ...	26	Wyllys, Mr. W., pulmonary tuberculosis in father and son cured by development of uric-acidæmia ...	45
Paget, Sir J., address by Stephen Paget ...	17	— modern treatment of, by Dr. E. Talbot ...	21
Paralysis agitans treated by hyoscyamin sulphate, by Dr. W. P. Herringham ...	177		
Parisian humour, quotation from Practitioner ...	93		
Parker, Dr. H. F., advantages of ethyl chloride as a general anæsthetic, 27, 173; case of post-diphtheritic stenosis of the larynx, cured by thyrotomy ...	121		
Pathological department, the ...	97		
— inquiries in hospital wards, new provisions for ...	60		
Paton, Mr. E. P., two instructive cases of appendicitis ...	42		
Perforating gastric ulcer in two sisters, by Dr. W. L. Pethybridge ...	58		
Pictou, Mr. L. J., on chlorosis, 85, 98; cerebral thrombosis in a pregnant woman caused by antifibrin ("headache powders") ...	103		
Placenta prævia, case of, by Mr. G. Holt ...	136		
President, installation of Prince of Wales as ...	33		
Pulmonary tuberculosis in father and son, cured by development of uric-acidæmia, by Mr. W. Wyllys ...	45		

St. Bartholomew's Hospital



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St. Bartholomew's Hospital Journal,

OCTOBER, 1901.

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

A Clinical Lecture on Rodent Ulcer.

By H. T. BUTLIN, F.R.C.S., D.C.L., delivered 13th November, 1901.

(Reported by S. R. SCOTT, M.B.LOND.)

GENTLEMEN, I propose to-day to give what may be termed a "house lecture," referring to a case in the Hospital and under treatment, therefore of interest to those who attend my practice in the wards, but not intended for publication.

Here is a man with a "rodent ulcer" below the left eye.

It has eaten in much more deeply below the inner canthus, but it extends outwards almost to the margin of the orbit, and the lower lid is already a little everted by the adjacent disease. Where the ulcer is not covered with scab it is nodular and without granulations. In some places the margin of the disease is raised and hard. But there is scarcely anything which would attract attention as new growth.

To compare with it, here is a man with an ulcer of the cheek, which is surrounded with heaped-up tissue, and which is probably due to one of the infective diseases.

When I first came up to the Hospital the teaching as regards rodent ulcer was very different from what it is at the present time. We were still under the influence of the teaching of Sir James Paget.

In the last edition of his book on pathology which he himself edited ('Lectures on Surgical Pathology,' 1853, p. 452), Sir James Paget pressed it very hard indeed that rodent ulcer was not itself truly cancerous, but only allied to cancer.

He distinguished rodent ulcer from the ordinary skin cancer, and says, "I have examined very carefully six of these ulcers, removed by excision, and have never seen in or near them a structure resembling those of epithelial or any other form of cancer. . . . Thus the anatomical distinction between this disease and cancer is evident, and they are equally different in pathology; the rodent ulcer, so far as it has yet been observed, is never attended by similar disease in the lymphatics or any other part, and if completely removed or destroyed it does not recur."

One wonders very much that such an observer should have overlooked the microscopic structure of rodent ulcer so much as not to find any structural resemblance to cancer.

But I feel sure he looked to find the characteristic structure of epithelioma. The blocks of cells which are common in rodent cancer I suspect he took to be altered sebaceous or other cutaneous glands.

Had he recognised the cancerous nature of rodent ulcer,

I feel sure he would not have said of this disease that if completely removed or destroyed it would not recur.

For he belonged to the school of humoral pathologists, and believed that cancer was a disease due to a morbid condition in the blood, and appeared in tissues which were predisposed to it.

He was hopeless of any cure of cancer, however large an operation was performed.

When men of such repute as Sir James Paget express an opinion, even though it be founded upon erroneous observation, it carries such weight as to be generally accepted as the truth.

It is only by the repeated efforts of men of less repute that the error is corrected, and the real truth is recognised and made known.

The credit of having discovered and maintained the true nature of rodent ulcer is due to Thiersch ('Der Epithelialkrebs,' 1865), to Charles Moore ('Rodent Cancer,' 1867), and to Collins Warren ('The Anatomy and Development of Rodent Ulcers,' 1872).

At the present time it is so generally admitted that almost the only question which is still disputed is the exact layer of epithelium from which the cancer originates.

Those interested in all that pertains to the pathology of the disease I would refer to a series of papers published in the forty-fifth volume of the 'Pathological Transactions' (1894). There various views on the exact origin of the disease are expressed and justified.

In our own School we believe that rodent ulcer originates in the epithelium of the hair-follicles. How near the truth this may prove to be we cannot at present say.

Even as far back as the time of Sir Benjamin Brodie it was recognised that rodent cancer, as we now call it, may begin as a prominence in the skin with flat glazed surface, having small vessels upon it, and not as an ulcer.

The parts which are most frequently attacked are the face, above the line of the mouth, particularly the region of the nose and eyelids; but the disease may occur on the scalp, neck, and various parts of the body.

For many years this little nodule or plaque may remain about the same size or become a little larger.

Its first appearance is comparatively early in life—from twenty to thirty, or thirty to forty years of age. For five or six years or more it may undergo very little alteration, but sooner or later it becomes irritated in some way, such as by shaving or by the use of the towel, or with the finger-nail the surface may be removed, leaving a sore place which bleeds a little, and on which a dry crust forms.

It may be that in a few days it is again irritated, and the little crust of dried blood is removed, causing it to bleed again.

This may go on for years, until at length an ulcer is established with slightly raised border, and slightly, if ever so slightly, indurated base.

Sir James Paget pointed out that destruction is the main feature of rodent ulcer, and that there is no new growth; but we know now that there is always some new growth, and that the disease may sometimes form a tumour of considerable bulk.

Nowadays it is recognised that the induration around the edges and in the base of the ulcer always contains new growth, which invades all the adjacent tissues, and usually early ulcerates.

All know the terrible damage it may do, but we seldom meet in the present day with the fearful and horrible disfigurements caused by the disease which were to be seen years ago.

The ulcer slowly and continuously enlarges and deepens, destroying true skin, the subcutaneous tissue, the muscles, fasciæ, periosteum, until it reaches the bone itself. Nor is its progress here arrested. The bones of the nose, the orbit, and the cheek are slowly destroyed, and the disease may make its way into the cavities at the base of the skull and into the interior of the skull, and so reach the membranes of the brain.

From the margin of the orbit it may reach to and destroy the eye, and spread across the bridge of the nose to the opposite orbit. From the orbit it may creep down the lachrymal canal and to the interior of the nose, or may break down the bony and cartilaginous barriers, and so enter the nasal cavities.

Every surgeon is familiar with the awful ravages of the advanced disease, the vast chasm which is formed in the very centre of the face, the destruction of the nose and of one or both eyes, in the worst cases.

Everyone must realise the importance of eradicating the disease early before it has attained the very advanced stages.

I feel sure that nine tenths of the failures of operation for rodent ulcer are made because men are afraid of removing a sufficiently wide area of surrounding apparently healthy tissue for fear of the disfigurement which may result. The one fact to be borne in mind is that, if it recurs, it will produce infinitely more disfigurement than even the widest operation for its removal, and the difficulty of dealing with recurrent cancer is far greater, and far less likely to be followed by permanent success, than when the primary disease is treated.

There is one peculiarity which rodent ulcer exhibits, and in which it differs from epithelioma.

It is that the former sometimes skins over, and appears to heal. But I cannot say it ever completely heals in this way. For I have convinced myself, by microscopic examination, that the essential structure of the cancerous disease exists and flourishes beneath the scar just as it does in those parts in which the ulcer has not skinned over.

The new-formed skin by-and-by may break down, and ulcerate again, as if it had never healed; so that the mere

covering of the ulcer with skin is no proof that the ulcer is cured.

Although rodent cancer is said never to affect lymphatic glands, I have seen a case of rodent ulcer in which the lymphatic glands were affected. I did not, however, examine the glands, and cannot say what they contained.

When glandular disease is associated with rodent ulcer, we are in the habit of saying that the rodent cancer has been transformed into epithelioma. I am not at all sure how far we are justified in this opinion.

A patient of mine, an officer of high rank in the Engineers, had a rodent ulcer of the face. Being anxious to gain a certain position, he would not permit himself to be laid up, lest this should spoil his chance. During several years, therefore, he was treated with various caustic applications. Valuable time was lost, and when at last he consented to operation the disease had progressed to a formidable extent, although it still bore all the characters of rodent cancer.

The lymphatic glands beneath the jaw became enlarged, and masses of disease like cords extended from the substance of the cheek to the submaxillary region. He died many months later, but I had no opportunity of examining the glands.

My object in this lecture was not so much to speak of the pathology of rodent cancer as of its treatment.

For a number of years I have been in the habit of freely removing rodent cancer, but occasionally I have destroyed it with a caustic.

Of various caustics I have employed Vienna paste with good success. Vienna paste consists of equal parts of caustic potash and caustic lime, well powdered and mixed, and made into a paste, at the time of using, with absolute alcohol. This paste is applied to the surface of the ulcer and to the skin around for a distance of one third to one half inch outside the area of induration. The skin beyond is protected by the use of strapping. A hole the size of the area to be destroyed is cut in a piece of strapping, which is firmly fixed down in place to protect the surrounding integument from damage.

The paste is kept on for ten minutes or a quarter of an hour, when the whole thickness of the skin and with it the ulcer has usually been completely destroyed.

As this treatment is particularly painful, an injection of morphia ($\frac{1}{4}$ to $\frac{1}{2}$ gr.) is usually given a few minutes before the application is made.

If a second application is needed, the ulcer being deeper, Bougard's paste is more efficient. For the composition of Bougard's paste I would refer you to 'St. Bartholomew's Hospital Reports,' vol. xxiii, 1887, page 57.

An instance in which caustic might be useful would be that of a very aged person, say eighty-five or ninety years old, who had, or whose friends had, a fixed presentiment

that a general anæsthetic and the knife would prove fatal to him.

The slough caused by the application takes two or three weeks to separate, and it may be two or three months before the part is healed.

For years I have been in the practice of removing the disease with the knife, and I have made for myself several rules in doing so.

In the first place, I carry the incision one third of an inch, or even half an inch outside the ulcer. In Collins Warren's book referred to, he lays down that the disease only extends one line from the edge of the ulcer. However true this may be of many rodent cancers, it would not be safe to rely too much upon it, and it is far better to cut too wide than too near the indurated edge.

In the second place, I do not perform a plastic operation unless to lessen or avoid some special disfigurement, such as eversion of the lower eyelid or distortion of the nose.

Even in dealing with a rodent cancer on the side of the nose, provided it is not close to the eye, I do not perform a plastic operation.

Some years ago I removed a rodent ulcer from the side of the nose of a particularly handsome young lady, and it was necessary to cut down upon and bare the nasal bone and cartilage. At the time I was uncertain whether or not to do a plastic operation, taking the flap from the cheek. I was afterwards glad I did not do so, for the wound granulated with so little resulting disfigurement, that at the present time all that can be seen is a white and only very slight depression on the side of the nose.

Plastic operations by raising flaps are often disappointing, because the flap is rarely on exactly the same level as the surrounding skin, and the outline of the flap remains always too clearly defined. They answer, however, admirably in preventing eversion of the eyelid and similar troubles.

If the disease invades the orbit, the lachrymal canal, the nasal cavities, or the antrum of Highmore, it is very difficult to follow; hence in these advanced cases one cannot be so sure of success, and recurrence is frequent.

I would again repeat that half-hearted applications of caustics or use of the knife can do no good, and often I feel sure do a great deal of harm. I cannot agree with those who say that the disease usually, sooner or later, recurs. It is my experience to see cases operated upon ten, twelve, and fifteen years ago, with no signs of recurrence.

I am now trying for the first time a new form of treatment—the Röntgen rays. Dr. Hugh Walsham is applying it to the patient you have just seen, and I am watching the experiment with great interest. I am told that the ulcer in this case will probably require twelve to fourteen sittings of ten to fifteen minutes each. I understand that under this treatment even extensive rodent cancers have completely skinned over. If this ulcer

skins over, I shall remove a portion of the subjacent tissue for microscopical examination, to see whether the cancer structure is still present or not. If it is still present I shall have but little confidence in the permanence of the healing.

At present we know really very little about this new treatment. We should like to know if it acts by directly destroying the ulcer, or whether by producing a peripheral neuritis, or in some other way. If by producing a peripheral neuritis, it seems to me conceivable that in a certain number of cases we may have to treat large areas of ulceration, obstinate and very painful, produced by the inflammation of the nerves.

Until we have seen more of this new treatment of rodent cancer, we are unable to say—

1. Whether there is complete destruction of the growth.
2. Whether the scar tissue is free from disease.
3. Whether the disfigurement is decidedly less than that left by a successful operation.
4. Whether the "cures" are as lasting and as permanent as those which result from operations with the knife.

A Historical Review of Changes in Procedure in the Treatment of Operation Wounds at St. Bartholomew's Hospital between 1857 and 1901.

Being the Sessional Opening Address delivered on Thursday, October 10th, 1901,

By A. WILLETT, Esq., F.R.C.S.



R. PRESIDENT and Members of the Abernethian Society, Ladies and Gentlemen.—When honoured by the request that I would deliver the Inaugural Address of this session's proceedings, I naturally cast about in my mind for a subject fitting the occasion, which whilst to me almost valedictory, is to some of you an inaugural address on the commencement of your careers at St. Bartholomew's Hospital, an institution as venerated as it is ancient; indeed, its antiquity has been happily emphasised by a statement of Dr. Norman Moore's, "That it is quite conceivable, and indeed quite possible, that warriors who fought at the Battle of Hastings in 1066 might, soon after the foundation of this Hospital in 1121, and in their old age, have become inmates, and even have died within the walls of these historic buildings."

To all such, then, as are here for the first time, on behalf of the Abernethian Society I bid a cordial greeting, and I feel sure that as time rolls on you will take a part in upholding and safeguarding its traditions, which are to assist in your own professional education by your own work and in your own ways. I also venture to say that if any of you who have just entered at this Hospital are feeling somewhat forlorn in new surroundings, or somewhat lost in the vastness of this great metropolis, you will soon find that St. Bartholomew's is a little world of its own, and trust me, not a bad little world either; in which you will soon fall into line and take a legitimate pride in being one of her alumni, for I promise you that you may be very

happy here, and, as everybody does, grow deeply attached to your *alma mater*.

The subject, then, which I have selected for my address to you this evening is "An Historic Review of Changes in Procedure in the Treatment of Operation Wounds at St. Bartholomew's Hospital between 1857 and 1901." This period of forty-four years comprises my personal recollection of the affairs of this Hospital, and I hope that one aspect of its old-time history may not be regarded as without pleasurable interest. My theme, indeed, will not be that of "temporis laudator acti," but rather of "tempora mutantur, nos et mutamur in illis," and I am confident that when you realise the truly marvellous changes that have taken place in surgery during this period, changes to which no other word than "a revolution" is applicable, you will adopt that motto which has ever animated our profession, "Spero meliora," which means that there is no finality to our knowledge, and that as to-day's position in this respect is better than yesterday's, so to-day's will be and must be bettered by to-morrow's.

It may not, and probably will not, be your lot to witness such a radical change in any branch of medicine as I have witnessed in the treatment of wounds, under that comprehensive term "antiseptic surgery," a method evolved by the genius, amounting to inspiration, of Lord Lister, whose philosophic spirit, perseverance, and indomitable courage carried him through trials and difficulties of all sorts, through opposition, rebuffs, and temporary failures in the success of his anticipated results, to find eventually his views universally acclaimed, and he himself proclaimed as the man who has done more for the protection of the health and the saving of life of his afflicted fellow-creatures than any other man in the history of medicine; for this revolution in surgery has deprived operative surgery of its terrors, and indeed, in many classes of operations, has robbed death of its victims, and yet this change may be stated in few words, which while telling the simple fact, fail to do justice to its magnitude and wide-reaching effects. They are no more and no less than these, viz. the conversion of the normal healing of wounds made by the surgeon at operations from that known as "union by second intention" or union after the consecutive processes of suppuration, granulation, and cicatrisation, with all the attendant dangers under old-time measures of incurring pyæmia and other forms of blood poisoning, into the normal healing by "first intention," or the immediate adhesion of opposed divided surfaces, thereby effectively preventing the attendant dangers just mentioned.

In this respect I shall surprise many of you by the statement that only once before the era of antiseptic surgery did I witness a capital operation wound unite by first intention; it was regarded as a surprise, and no one could understand how it had happened; the case was one of amputation of the thigh for disease of the knee-joint in a delicate girl of about ten. The operation was performed about the year 1850, in the Brighton Hospital, where at the time I was a resident pupil.

I do not wish to mislead you with assuming that no kind of operation wounds healed by "first intention" in the pre-Listerian days, for almost all strictly subcutaneous wounds, e.g. tenotomy, punctured wounds, did close at once; so also did many wounds of the face, e.g. hare-lip wounds, and even the common scalp wounds in the surgery often healed without trouble, but in all operation wounds there was never anything like certainty in their healing, nor was surprise felt when they suppurated, whilst, as I stated, capital operation wounds invariably suppurated; indeed, as you will learn directly, they were made to. When I come to tell you something of the ways in which operative surgery was conducted and of the surroundings of patients, you will be astounded by the statement that, as regards results to life, such operations as in those days were considered necessary and justifiable were attended by very fair success. This statement I will establish by a brief reference to figures, which are instructive, of the operative surgery of the early years of the period under consideration. I have taken them from the Surgical Statistical Report for 1863, being the first year in which returns were compiled. By way of contrast I give corresponding figures from the Report for 1899, with some additional figures from this latter year's Report enumerating operations *non* fairly common, but which in 1863 were either unknown procedures, or if known, were very generally held to be unjustifiable.

In the first place let me state the total number of the operations performed in the two years. In 1863 417 patients were submitted to operation with a mortality of 64, whilst in 1899 the operations amounted to 2446 with 175 deaths. Thus the number of operations have increased six-fold since 1863, whilst the deaths are three times as many. The number of deaths after operation at the present time at first blush seems to give cause for surprise, but this feeling is at

once removed by the fact that no less than 116 of these deaths followed upon classes of operations the propriety of which was unrecognised in 1863, and that the true mortality for comparison is 59 deaths in 1899 against 64 in 1863. The 116 deaths which I have deducted comprise 9 after operations on the larynx, 12 after tracheotomy for diphtheria, 7 after resection of part of a rib for empyema, 14 after trephining for mastoid disease, 6 for operations on the kidney, 48 after abdominal section in cases of obstruction and other diseases of the intestines, 16 acute appendix operations, and four unclassified. Thus it is evident that in these 116 deaths operations were undertaken for diseases which would inevitably have proved fatal if left to take their course, and in which all that can be urged is that operation failed to save life.

The character and scope of operative surgery since the Listerian era, and the extent which it has now reached, is abundantly shown by the mere statement that in the return for 1863 one looks in vain for information upon such "every-day" operations as for instance: Removal of varicose veins, whilst in 1899 there were 79 operations without a death. Likewise—Radical cure of hernia in 1899 there were 180 operations without a death.

Abdominal section in 1899 there were 157 operations with 78 deaths. Appendix abscess in 1899 there were 80 operations with 16 deaths. Appendicectomy in 1899 there were 36 operations without a death. Operations on the kidney in 1899 there were 41 operations with 7 deaths.

Resection of rib in empyema in 1899 there were 43 operations with 7 deaths. Osteotomy and osteoclasia in 1899 there were 33 operations without a death.

Many other operations, such as suture of divided nerves and tendons, on the nerves and air-passages, wiring patella for fractures, inguinal colotomy, excision of rectum, hysterectomy, and the various abdominal operations, e.g. in the gall-bladder. Lastly, I must not omit adenoids, which, as you know, are far more frequently operated upon in the special patient department for diseases of the throat, where, I am told, there are often to the tune of ten or twelve operations in an afternoon. These figures may seem rather a digression from my subject, but I felt they would serve to emphasise the wholly extraordinary amount of work taken place in operative surgery in the last forty years more eloquently than any general statement I could offer.

Now for a few comparative figures in classes of operation that fairly admit of comparison—

	1863.	D.	1899.	D.
Capital amputations	31	10	34	4
Hæmiorrhomy for strangulation	31	19	44	6
Cancer of the breast	15	2	91	3
Non-malignant tumour of the breast 3	2	1	35	—
Cancer of the tongue	2	—	16	2
Other malignant tumours	11	—	41	—
Other non-malignant tumours	37	1	110	—
Excision of joints	—	—	5	—
" hip	—	—	—	—
" knee	1	—	12	—
" shoulder	—	—	—	—
" wrist	—	—	—	—
Excision of bones	9	2	29	2
Ovariectomy	1	1	62	10

Before enlarging on the special subject of my address, and in order to render you in some measure informed on old-time surgical practice in this hospital, I will place before you a brief survey of how matters were conducted when I was a dresser.

Each surgeon had a special "box carrier" attached to him, whose duty it was to attend his surgeon on his rounds of the wards, always carrying the well-known square-shaped box of instruments in ordinary use, and also boxes of various kinds of catheters. When any instrument was required, the surgeon called out, "Box carrier, give me a scalpel," and the like. This individual, with dirty hands, would grope about for the required instrument, ligature, etc. Moreover he was charged with the custody and cleaning of all the instruments.

Systematic case-taking by dressers was not practised in the surgical wards until 1880, although the clinical clerks in the medical wards had been trained in regular note-taking for fully thirty years previously, and the only board at the head of each patient's bed was the pale-tinted blue medicine and diet paper. Again I may mention that the clinical thermometer was not introduced until about the year 1863. At first and for some years it was hardly anything more

than a toy, physicians and surgeons alike relying entirely upon the character of the pulse, and the sensation of heat of the patient's hands or body as complete indication of the amount of febrile disturbance. Only after repeated convincing evidence of the unreliability of such tests, by proofs afforded by the thermometer, was this infallible test of the body temperature taken into favour, until gradually it has come to be regarded as a sign more important than any other. Temperature charts have not, I think, been in use in the surgical wards for more than twenty years.

A few words on the dieting of patients and the drugs given. Every patient on full diet had one pint of table beer given him or her at dinner. This beer, commonly called "swipes," was not greatly appreciated, and if patients were well conducted the sister would often ask to have stout ordered in its place. At the time I am speaking of the medical treatment of acute diseases had just been revolutionised. The antiphlogistic regimen, consisting of "blood-letting," blistering, salivating with mercury purging, and a diet of water gruel had died out, and the pendulum had swung full in the opposite direction, and the "support the strength" school had full sway. Mr. Skey was its apostle at this hospital; he was wont to inculcate that bark and opium were the only drugs of any value, and that the low vitality of his patients necessitated wine and brandy in large quantities; but speaking generally drugs were not used much more in the surgical wards than now. Three grains of potassium iodide was regarded as a full dose and one never saw this drug exhibited in doses of twenty to thirty, or sometimes even of sixty to ninety grains, as we now too infrequently employ.

There were but three surgeons until 1854, and even after that date, when there were four, each surgeon had a great many more beds than the surgeons of to-day; for instance the late Sir William Lawrence had the whole of Rahere as his men's accident ward, and the whole of Henry for ordinary surgical diseases for men. The front ward of "Lawrence," at that time called "Queen," was his women's accident ward, whilst he had the whole of President for women in addition. Then he was entitled to three or four beds in Lucas and two or three in Abernethy, for these two wards, being close to the operating theatre, it was thought right that each surgeon should have beds in them for emergency operations, strangulated hernia and the like. But besides all these beds, Sir William Lawrence, and equally each of the four surgeons, had thirteen beds in Magdalen and six or seven in Lazarus. Magdalen formed the wards now called Charity and Paget, whilst Lazarus has now become "Coburn." There was no thought then of separating cases which we now term "septic" from the other patients, indeed it was no unusual circumstance, and gave rise to no comment, to find in one of the ordinary surgical wards a patient with cystitis in a bed next to one who had undergone amputation of the thigh, and then next to the latter a patient with pyæmia after operation.

The nursing arrangements were primitive! The staff of each ward comprised a sister and three nurses. The sister in some instances had been a nurse, and being found capable and intelligent had been most properly promoted, for at least she had had some years' experience of hospital life, and often such proved admirable sisters. But other sisters had come absolutely fresh to hospital life, owing their appointment to interest, and not infrequently because they were relations of existing sisters, whilst, if tradition is correct, one sister came straight from being a housekeeper to an alderman, whilst another, a Sister Hope, an historical yet excellent sister, had previously, as a patient, had her thigh amputated in the hospital. The nurses were "inter se" of equal rank, sharing the entire work of the ward between them, and were on night duty one night in three; they came to the service of the hospital without previous experience, and often remained until worn out; they retired on a pension, and they were mostly of Dickens' Mrs. Gamp type.

In the year 1837 the senior surgeons were all near the end of their tether, for they and two of the assistant surgeons resigned office in the course of the next ten years—Sir William Lawrence in 1865, at the age of eighty-two, whilst Mr. Skey, who was the first surgeon to come under the age-retirement rule of the hospital, and Mr. Wormald, did not attain to the position of full surgeon until they were approaching sixty. I mention these facts, because I think they tend to show that from men so senior it was scarcely to be expected that they would start any investigation into the healing of wounds. Indeed, when asked about changes in hospital life, they told of the improvements they had witnessed and taken their part in bringing about since their young day, such as the practical abolition of hospital gangrene and of sloughing phagedæna as epidemic scourges in surgical wards.

Lord Lister first expounded his views in 1872. He coined the term

antiseptic surgery—on which I shall have something to tell you later—to express his views on the line surgeons ought to follow; hence you will understand that in taking you back to old-time surgery I am telling you of a state of things when our present-day knowledge was undreamt of.

Having in some measure prepared you by reference to the condition of things prevalent nearly fifty years ago, I propose to go now a little more into detail into the actual procedure at operations. As an example let me assume that a patient with destructive disease of the knee-joint had been admitted into the hospital, and that amputation had been decided upon. The preliminary preparations comprised merely a warm bath, if the patient's local condition permitted, or, if not, then such washing of the patient's body-surface as was practicable—locally only shaving the thigh was thought requisite—and in this condition, with just whatever dressing on as had been used—frequently a poultice or water-dressing over the knee—the patient would be brought into the theatre and be placed on the amputating table to be put to sleep. The anesthetic used in those days was chloroform. I should have added that, as at present, patients were kept without food for some hours, also that the time would be Saturday afternoon, which was the only operating day in the week, the surgeons operating according to seniority, and rarely would any period for the entire surgical staff to be present throughout operations. Chloroform was administered practically, as at present, on lint, or by some on a towel folded into a cone. There was but a single anesthetist: the two first appointed were assistant physicians to the hospitals, and wardens of the college, the late Drs. Black and Martin.

The instruments required for the operation would be taken out of their respective cases or drawers, laid on a tray, covered by a towel, and taken straight into the theatre for use.

For ligatures and sutures plain dry white silk on reels, in various sizes, and just as they were received from the manufactory, were used, portions being cut off in lengths by the house surgeon, and needles threaded before operation. As to sponges, the sisters of Lucas and Abernethy wards attended all operations. It is quite a modern innovation for the sister of the ward to accompany her own patients to the theatre. The two sisters mentioned had each her bag of sponges, which she would turn out into a basin of water ready for service, and they would be used at all operations indiscriminately, and after operations were over the sponges would be cleaned by repeated washing in hot water, dried, and replaced in the bag, ready for use when wanted. Comment on the abominations, as we should now regard these sponges, is surely superfluous.

Now I turn to the surgeon and his staff, viz. his assistant surgeon, house surgeon, and dressers. On entering the operating theatre the surgeon and assistant surgeon went straight to the first cupboard on the right, under the raised area for students, which is still existing. From pegs in this cupboard they took down and put on their operating coats, closely buttoning up to protect shirt, collars, and under garments. I must give you some description of these operating coats, and candidly, I feel you will have much difficulty in admitting it to be quite authentic, but I vouch for its strict accuracy.

To begin with, the coat itself, usually an old frock coat, had always seen good service, and presented a very delapidated appearance; nevertheless as an operating coat it would last the surgeon for many a year, possibly even during his hospital career, and for all this time these coats were seldom brushed and never cleaned, becoming, of course, thickly begrimed with old blood-stains, pus, and masses of all kinds. One would have expected these coats to become offensive, but I am bound to state such was not the case. This coat cupboard always smelt wholesome. I verily believe that these gory coats—I speak from personal experience,—marking the operator, and presenting evidence of having seen much hospital service, were a source of legitimate pride and satisfaction to the wearer, for they were always very reluctantly discarded at the request of the then Sister Abernethy for a newer one; "No! no! Sister," the surgeon would reply, "This coat will last me a good while longer."

These operating coats were worn by all the surgical staff, until at least the year 1880, when gradually, one by one, the surgeons, awakening to the fact what filthily unsanitary things they were wearing, abandoned them for the modern washing aprons or gowns.

My recollection happily does not go back to the days before chloroform, so let us assume our patient to be under its influence, and the surgeon prepared to commence the operation, the limb being exposed, and the patient placed in a convenient position with a

tourniquet over the femoral artery. At this point many of my hearers will be wondering why I have omitted to mention such necessary steps as washing hands, cleansing the skin of the patient's thigh; but the fact is that neither the surgeon nor any of his assistants would, as a matter of routine, have washed their hands; and did not do so unless obviously dirty, or unless they had just come straight from the post-mortem or dissecting-rooms.

The merely manipulative steps of the operation were much the same then as now, except that in amputation cases either the "double flap by transfexion," or the "circular" operations were by preference adopted. We may then assume the limb to be removed, and the stage of securing the bleeding vessels to commence. The divided arteries would be seized with Assilini's catch-forceps, for "pressure forceps" were not introduced until the "seventies." All vessels, as taken up, would be tied with the plain silk ligatures I have already described, and one end cut off, while the other would be brought out of the wounds, so that in the end there might be from one dozen to two dozen ligatures brought out through the wound, where they remained until they "dropped," as the phrase went, meaning that each ligature, having ulcerated through the vessel, was lying loose and could now be drawn out. Curiously, an entirely false conclusion was prevalent as to the necessary changes in the process of separation of a ligature, and this in one operation, viz. in ovariotomy, delayed for years the adoption of intra-peritoneal ligature of the pedicle. For the teaching was that everything on the distal side of a ligature sloughed; hence to ligature the pedicle in ovariotomy was held to be certainly followed by the death of the patient, in consequence of mortification of the end of the pedicle; thus for fifteen years or so the pedicle in ovariotomy was always either brought outside the abdominal wound and secured with a "clamp," or divided by a cautery iron to prevent bleeding, and then dropped back.

After this digression I must take you back to the final closing of our amputation stump. When bleeding had been arrested and the tourniquet removed, the wound, after being sponged over with plain warm water, would be sewn up with interrupted silk sutures, the long end of the ligatures being brought out and arranged between the sutures. The immediate covering dressing varied, but at the date under consideration "water dressing" was in common use, i.e. three or four layers of wet lint, over which came a layer of oiled silk or gutta-percha tissue, this again covered with a layer of cotton wool and secured by a bandage. The patient was now returned to the ward.

You will, I imagine, be in anxious expectation as to the fate of this patient; but as the figures I have quoted show, a large majority of even major operations recovered, and the after-progress would be much after this wise. The first dressing would be made at the end of two days as a rule, a feverish condition of the patient being the indication, and great was the satisfaction of the surgeon if fairly active manifestations of local inflammation were present, whilst should even a few drops of pus be seen issuing between the edges his satisfaction was all the greater; in short, union by second intention was expected, indeed one may say it was pre-ordained, although unwittingly. The signs of its onset were welcomed as evidence that the early dangers of "blood poisoning" were passed. Well then, after pronouncing his content with the patient's condition, the surgeon would order a suture here and there to be removed, and the stump to be enveloped in a lined or bread poultice to promote suppuration. Henceforth poultices would be changed three times a day, and continued for three or four weeks in cases doing well, but often for two or three months in others; the remaining sutures being cut day by day, two or three at a time. Much attention was necessary to retain the opposing edges of the stump in apposition. The dresser would have day by day to adjust long strips of plaster for this purpose. Poultices were in constant use, and the number made daily in a ward would astonish you. Thirty would be no unusual amount, and I may remark, by the way, that poultice-making was brought to a fine art, for it had to be of consistency, that the mass could be spread out over a layer of tow, and yet not be so thin as to pass or be pressed through the tow; moreover there can be no question that to patient's sensations a well-made poultice was most comforting.

In most operation wounds there was more or less sloughing of subcutaneous tissue, and not infrequently of some portion of skin. Poulticing went on until all sloughs had been cast off and granulations were seen cropping up, then, the acuter manifestations of inflammation having passed away, resin ointment on lint strapping and bandage would be substituted, and if all went well the patient's convalescence would be established in about six weeks to two months after operation.

Round about the tenth day was regarded quite superstitiously, and yet in point of fact quite rightly, as the critical time with a patient. The surgeon would often inquire of the house surgeon or dresser if expression—how well such a patient was doing. "Ah wait, it does not do to crow until the tenth day." It was certainly most remarkable how, when a patient after operation was apparently progressing well, suddenly, and without warning he would be seized with a severe rigor, followed by profuse sweating; then he would sleep, and on awaking the patient would declare he was quite well, but a peculiar sunken expression and rapid feeble pulse told the experienced eye of a surgeon or a sister that he was the victim of acute pyæmia. In less than forty-eight hours probably another rigor came on, and now, perhaps, he would complain of pain in some joint, which would be found hot, swollen, and tender, with at first a bright vivid blush, passing into a dull red, and probably with sharp pleuritic cough, and then quick shallow respirations. Rigors would return with greater frequency, the patient commonly dying about the sixth day. Well-nigh every patient with pulmonary symptoms died, but if the pyæmic infection was confined to joints or areolar tissue, the disease tended to become chronic, and a small proportion struggled through their pyæmia. It is noteworthy that not every joint attacked required to have pus evacuated, for occasionally joints were successively attacked, as in rheumatic fever, and pus would only be let out from one or two. Pyæmia such as I have described was more frequent than acute septicæmia, and different to the fatal pyæmias after operation of these days were pyæmia occurred much more commonly in amputations and operations on bones, e.g. resection of joints, than after removal of tumours; on the other hand, erysipelas occurred most frequently in the latter class of operation.

For another matter in these pyæmic cases one lesion was found with remarkable constancy, viz.—a breaking-down thrombus in the main vein of the limb.

Secondary hæmorrhage before the advent of Lord Lister's teaching was as a complication of operative surgery of far too frequent occurrence, particularly after those operations in which large arteries had been tied, both after amputation and in continuity. This mishap is not to be wondered at, seeing that the silk ligature had to cause ulceration through all the arterial coats before its separation or "fall" took place, this process moreover going on in freely suppurating wounds.

Pyæmia and erysipelas were practically endemic in the surgical wards, for when either of these affections attacked a patient his continued presence in the ward was not objected to, neither was it conceived that he would be a source of special risk to other patients, the view held being apparently that, as patients had the benefit of the hospital, so they must equally take whatever risks came in their way.

For some years before 1872 an unrest and a feeling of dissatisfaction at the evils attendant upon operation cases became very general amongst British surgeons, and in this and other hospitals various experimental changes in the after-treatment of wounds were tried; for instance, at one time, in Sir James Paget's wards, all dressing, the stump being merely slung, and a dish being put under irrigation of wounds was tried; but when Chassaignac's invention of the rubber drainage-tube was announced, wounds were closed and drained, unless this plan better results were attained.

But the first serious attempt to direct the attention of surgeons to the evils, and the peril to other patients of the then existing state of hospital wards was made by Professor Simpson in 1860. He published an article on "Hospitalism." He condemned hospitals as charnel-houses, as death-traps; he maintained that surgical wards reeked with pestilential emanations which infected patient after patient through the agency of their wounds. We now recognize how true and right he was in both respects. The professional conscience was deeply stirred by this attack, for it was asserted that greater in his home, especially if his home was in the country, than in a hospital ward. Simpson held that "union by first intention" was practically, as well as theoretically, attainable, and as a step in that direction he advocated the practice of acupressure as a method for arresting hæmorrhage from arteries cut in operations, thereby doing away altogether with silk ligatures, the evils of which, as then used, were evident to many. Acupressure, how-

ever, did not prove convenient, and it was superseded by "torsion."

The late Mr. Callender employed both, and besides for years in dressing he would not allow a wound to be touched with anything but a camel-hair brush kept in a tube of carbolic oil in the medicinal cink rack at the head of each patient's bed. Again improved results followed, but no certainty of primary union was attained in his practice.

My record of events brings me to the era of Lord Lister's discoveries. To formulate his position he asked this question: "Why, if a healthy man sustains a simple fracture of the leg, does he invariably recover without any local complications, such as suppuration, or any general disturbance of his health, as a pyæxia, whilst if the fracture be compound these complications almost as invariably occur, and as their result he may often lose his limb, whilst his life even is put in great jeopardy? And again, 'Why, in like manner, do subcutaneous operations for the most part heal without complication, whilst, in open wounds, suppuration always occurs, and erysipelas and pyæmia scourge our wards?' What is the cause of these differences? And if we answer the presence of air in the wounded tissues, again he asked, 'What is there in the air that should excite the process of suppuration, and thus cause union by secondary intention?' If the reply be again impurities always present in the air, intensified in large towns, and rendered infinitely more harmful where wounded are congregated in a hospital surgical ward, 'Why,' he asked, finally, 'cannot these admitted baneful influences be met work out, and the system and practice of antiseptic surgery to-day present a review of Lord Lister's work, extending over very many years in slowly elaborating the practical measures required to bring the antiseptic system to its present state of perfection. Suffice it to say that, despite of unexpected mishaps, of partial failures, and of ungenerous criticism, he never lost faith in the doctrine he had proclaimed; but steadfastly keeping in view the object he had set himself to accomplish, he pondered over the causes of partial non-success, and he experimented again and again, and finally elaborated his process, until at length the whole world has adopted the principles he enunciated, and has profited by the process he has brought to such perfection."

My task is to record the alterations in procedure at this hospital, and these will be conveniently grouped as follows.

- (1) The preparatory measures adopted before operation, which comprise (a) the patient; (b) the surgeons and those assisting at operations; (c) the instruments and appliances to be used at operations.
- (2) The alterations made in the conduct of an operation.
- (3) Those made in the after-treatment of the patient, and in aid of union of his wound by first intention.

The ideal state of things is such perfect cleanliness of persons, viz. of those who take any part in the operation, whether of those who will come into actual contact with the wounds or of nurses who handle sponges, basins, dressings, that no one of these persons can infect a patient's wound.

Then, again, such perfect purity in all materials, including under this term instruments, ligatures, sutures, sponges and dressings, is required that they shall be absolutely free from any substances which could infect the wound; and lastly, after operation, to protect the wound from becoming infected from outside sources. The difficulty, however, lies not in saying what comprises the ideal condition, but in working up to it, i.e. in devising measures which shall be capable of ready application, and stand the test of every-day work.

As regards the preparatory measures, bearing in mind what has just been stated, I resume the narration of events. Many changes came at once; thorough and systematic washing of hands and nails in all those in any way engaged at the operation, thorough cleansing of the patient's skin and of hair at the site of operation became matters of routine. Sponges for a time went greatly out of use, so general was the belief that their indiscriminate use in operations made them a dangerous source of infection, whilst, for the time, no reliable plan of making them surgically clean had been worked out. When required in abdominal operations, entirely new sponges, freed, of course, from all coarse sand, etc., and which had then for many days been kept in carbolic lotion, 1 in 20, would be used, but never used a second time. In the place of sponges cotton-wool tabs were much used in ordinary operations; they could be boiled and then put into carbolic lotion. They are very fairly efficient substitutes, and are destroyed after use. To-day the difficulties attend-

ing the thorough disinfection and cleaning of sponges has been overcome, and they are in general use again. As I have previously stated, the surgeons' operating coats gradually went out of use, and some sort of washable linen sterilised apron or gown took their place.

Silk soaked in strong carbolic solution, or prepared catgut kept in carbolic oil were at first recommended for ligatures, both ends being cut short. But some samples of catgut occasionally turning out to be septic, and this, taken in conjunction with the facts that catgut cannot be sterilised by boiling, and that to make it aseptic and present by chemical reagents is, to say the least, a prolonged and difficult matter, has led to the nearly total abandonment of catgut for silk, which, as this latter material bears boiling once well, and will keep in one-twentieth solution of carbolic for a week or two, has come into very general use. The only objection to silk is the occasional occurrence of suture abscess, indicating, it must be admitted, that either the silk had not been rendered sterile, or that it had become infected in the wound. Kangaroo-tail tendon has been, and is, much employed for ligatures in special cases, such, for instance, as ligature of a main artery in continuity. Silver wire was for a long time employed as a material for sutures. It was supplanted by catgut on the ground that such sutures would drop off, the buried loop being absorbed, which, I may add, rarely occurred. Aseptic silk was for many years in general use. At the present date silkworm-gut, as used in "fly fishing," is the favourite material. Being smooth and highly polished it does not irritate, and only undergoes change in the tissues very slowly.

It is a custom with some operators to test the aseptic state of all persons' skins and of all materials mentioned, to which list dressing would be added, by bacteriological cultivations. Instruments were, in the early years of antiseptic surgery, placed simply in carbolic lotion (one in twenty to one in sixty), but to render their asepticity beyond question they are now invariably boiled before and after use.

Under the second heading, viz. alterations made in the conduct of operations, looked at narrowly there would seem not much to be said, for, as I stated in the earlier part of this address, the actual manipulations are much the same now as they were forty years ago in the same class of operation, but nevertheless to the close observer a very real change has been wrought by and through the agency of the antiseptic system: more especially is this seen in the later stages of an operation. The principles, as well as the strict practice of aseptic surgery, fix the attention of the operator to every detail, hence, however simple the operation, it is performed more thoroughly and more carefully. In the next place the knowledge, that once the operation is successfully accomplished, the after well-doing of the patients' wound is assured in all operations of expediency, enables a surgeon, on the one hand, to extend the area of the operation far beyond what was formerly thought justifiable. This is noticed chiefly, no doubt, in operations for malignant disease, yet it is equally noticeable in such operations as herniotomy for the relief of acute strangulation. Formerly the operation was completed as soon as the intestine had been returned, but now thickened omentum is removed, the sac separated and cut away, the operation being completed as for radical cure.

On the other hand, this certainty of the well-doing of wounds has opened out a vast field for the intervention of the surgeon. It is unnecessary I should go through the list of operations, which were not even dreamt of in former days. But bearing upon this I may quote a saying of Sir William Lawrence's, who, when lecturing, dismissed the consideration of the surgery of the kidney in these caustic words, "Thank God, gentlemen, the kidney is out of the reach of the surgeon." But these great changes were rendered possible by the invention of antiseptic surgery, and have been gradually brought about by the perfecting of its technique.

Since the early days of antiseptic surgery a noteworthy change has been made, for whereas formerly every wound was drained by rubber tubes or some modification, it is now comparatively rarely that even quite large wounds are drained, so perfect is the healing process.

But of all the changes that have taken place in operative surgery none seem more striking than that under the third heading, viz. the alterations in the after-treatment of wounds. The febrile stage of forty years ago has been abrogated, and the prolonged suppuration, constant poulticing, and disturbance of wounds which followed, the frequent association of erysipelas, pyæmia, and secondary hæmorrhage, are all things of the past. In their place we find our patients, as soon as they have got over the first few hours of pain and discomfort, lie placidly and contentedly during the healing stage, their wounds untouched often for a week, then when dressed

they are found healed, sutures are removed, and the patient pronounced convalescent. This result is the crowning-point of the revolution in the practice effected by the discovery of antiseptic surgery, and no wonder that the whole world unites in offering grateful homage to Lord Lister.

Mr. President, my task is completed, and I now thank you, one and all, for the kind attention you have accorded me. My record of the changes I have witnessed in operative surgery during the last forty-four years has, I fear, seemed somewhat fragmentary and disjointed, but embracing so many topics it could not well be otherwise.

One other point seems to need a word of explanation. I have had to tell much of the past. I felt I could only do this appropriately by adopting the phraseology of those times, and that it would have been out of place to use words and terms in constant use now, but which were then unknown.

Operation for Strangulated Femoral Hernia, and removal of a portion of Omentum, in a Woman aged 82 years and 11 months without anaesthetics—Recovery.

By MALCOLM L. HEBBURN, M.D., F.R.C.S., Surgeon to the Lowestoft Hospital.



VENTURE to record the following case, not from any special feature of novelty or rarity, but because in these days, when anaesthetics are so skillfully administered, one is not often placed in the position of the pre-anaesthetic days, and therefore can hardly realise what can be done in an emergency without either general or local anaesthesia.

I have no doubt there are many similar cases which have occurred to other practitioners, and I think, if they were recorded, they might encourage some of us junior men, who know little of operative interference without anaesthetics, to feel that there are possibilities which we had almost ceased to expect.

On February 1st, 1901, at 6.15 a.m., I was called to Mrs. L., aged 82 years and 11 months, who had been operated on twelve years ago for left strangulated femoral hernia, because her rupture had "come down" and she was "unable to get it back." She had worn a truss for several years, and I had been called to her once or twice on previous occasions when she had any difficulty in reducing the swelling.

I found her in great abdominal pain, chiefly referable to the umbilicus, and the hernia was about twice as large as usual, and extremely tense. There was no vomiting, the bowels had acted naturally the previous morning, but her general condition was very critical; her breathing was laboured, she had an anxious expression, her face, usually a fresh colour, was ashy grey, and her pulse scarcely perceptible at the wrist. These symptoms had existed since between 3 and 4 a.m. I sent for my junior partner, Dr. Hutchinson, asking him to bring the anaesthetic, and in the interval I attempted the reduction of the hernia, which I had always been able to accomplish before. However, this time I was unsuccessful, and her condition became so alarming that I felt there was no time to be lost if her life was to be saved, so I determined to operate without delay, before the arrival of my partner. This I proceeded to do with the traditional candle (not fixed in the neck of a bottle this time!) and the traditional old woman by the bedside to help (or look on, as the case might be).

I made the usual incision over the swelling, which the patient seemed to feel slightly, and, being a thin subject, I soon got down to the sac. Having opened this, I let out some dark-coloured fluid, and found about six inches of small intestine strangulated with some omentum, which was adherent to the sac. The former, though discoloured, was of a character quite capable of returning, so I attempted to reduce again by taxis, but without success. I then incised the

neck of the sac, which gave me a little trouble, as I had only an ordinary scalpel with me, and therefore was afraid of wounding the gut. I was then able to reduce the intestine easily, and there remained a large piece of omentum to deal with, which I left until the arrival of my partner.

Her symptoms were immediately relieved after reduction of the gut, though she was extremely collapsed. However, we proceeded to tie in sections and remove about five inches or so of omentum, and left the stump to block up the crural canal.

She seemed to feel very little of the operation except the skin incision. I then sewed up the opening in the sac in a very rough manner, owing to the patient's condition, and closing the wound with silkworm-gut sutures. I dressed it with iodoform gauze. There was naturally a good deal of collapse after the operation, which I treated in the usual way, though I did not give her any strychnine or morphia.

On returning about three hours later I found she had had some sleep, was fairly comfortable, her pulse 90 and stronger. Temperature was subnormal.

In four hours' time I found her a little better, though she complained of some pain in the upper part of her stomach, which I attributed to flatulence. I ordered her some Liq. Opii Sed. combined with carminatives, to be taken every four hours if necessary. The same evening she was free from pain and comfortable; pulse 108 and temperature subnormal.

The next morning I found she had passed a fair night, but about 8 a.m. had been sick, bringing up some nourishment and medicine, and she still felt some nausea. I satisfied myself that this sickness was due rather to some atonic dyspepsia than anything connected with the hernia, so, in order to keep her alimentary canal quiet, I gave her a hypodermic injection, consisting of strychnine sulphide, $\frac{1}{10}$ gr., atropine, $\frac{1}{10}$ gr., and morphia sulphate, $\frac{1}{2}$ gr. This was at 10.30 a.m., and at 3.15 p.m., when I saw her again, she was lying in a comatose condition, with stertorous breathing and contracted pupils, from which I could not rouse her. This I attributed afterwards to the effect of the morphia, though at the time I thought she was dying, and gave a very unfavourable prognosis.

In the evening at 9 p.m. she had considerably revived and had taken some nourishment. From this point she gradually improved. The greatest trouble I had was with her atonic dyspepsia, which caused her to wake up often in the early morning with pain in the upper part of the abdomen, with distension of the stomach, and palpitation, which improved on bringing up flatus. Her bowels also were difficult to move at first, as she obstinately refused to have an enema administered; but I gave her small doses of saline frequently, with the result that they were well moved at 1 a.m. on the sixth day, with great benefit to her indigestion.

The wound healed by first intention, and the dressing was left off on the ninth day. By March 1st she was sitting up and taking her food well, with a good action of the bowels every other day, which was her usual custom; and I am glad to say that she is now as well as ever.

I regard the success of this case as due to two causes:

1. Securing the case early.
 2. The non-employment of a general anaesthetic.
- My previous knowledge of the size of the hernia helped me to make a rapid diagnosis, even in the absence of vomiting; had I waited I am sure the patient would have died. Had I also subjected her to the shock of a general anaesthetic I think, in all probability, this alone would have produced the same result.

I consider I was justified in my decision by the condition of the fluid in the sac, the condition of the gut, the failure to reduce the bowel when freely exposed, and the immediate relief of acute symptoms after reduction. The unreasonableness of the public towards medical men, and to operating in particular, was well exemplified also in this case; for although the "traditional old woman" above referred to appeared to be grateful for her recovery, when she saw the patient improving day by day she began to express doubts as to whether the operation was necessary after all. Had she died during the operation, no doubt it would have been due to my interference; and had I left her to die without an attempt to save her, I should have been asked why I did not operate like "the other doctor" did before.

I may as well mention, for the encouragement (?) of enterprising surgeons about to engage in general practice, that in consequence of some of the above logical reasoning on the part of my "traditional" assistant, I am no longer the medical attendant of the old lady; and no language appears strong enough in which to abuse me for my mismanagement and want of attention to her mistress.

Gun-shot Wound of Urethra.—"Cock's Operation."

By E. W. GURNEY MASTERMAN, F.R.C.S.



HE operation known as "Cock's operation" is, I believe, no favourite at "Bart's," and while there I neither saw it done nor heard it recommended. The following case may be of interest to "Bart's" men, as one in which I believe this operation proved the best, if not the only one.

A—, a Moslem, native of Hebron, aged about forty, was sent to me, May 11th, by Dr. Paterson of Hebron, with a bullet injury of the urethra.

The patient gave a very confused account of himself, saying that he had been accidentally shot ten days (it is evident it was much longer, probably as many weeks) before coming to me. On admission to our hospital he was found to have a wound (the point of entrance of bullet) in the left groin, in the line of Poupart's ligament, at about the junction of the outer two thirds with the inner one third; the opening was only large enough to admit a probe. The wound of exit was to the inner side of the right buttock. There was also a small wound in the perineum made by a Bedouin Sheik, who had attempted to let out the urine that way by application of a red-hot iron; this was almost healed. The patient was in a pitiable condition, all the urine and great quantities of pus passing out drop by drop from the wounds of entrance and exit, especially the former; he was soaked with foul-smelling urine. His temperature was hectic, running up from normal or near normal to 102° or 103° every evening.

The wounds were probed with negative result, and several attempts were made with various catheters to re-establish the proper channel; but all in vain.

On May 25th the patient was put under chloroform with the intention of my doing a "Wheelhouse," if possible; when, however, the urethra was opened out in the usual way, not the smallest trace of a passage towards the bladder could be found with the finest probe; the membranous urethra was entirely occluded by scar tissue, the bullet having passed either right across it or close to it. A double-bladed Cock's knife, ready for such an emergency, was taken, and thrust straight inwards to the prostatic urethra with complete success, a finger in the rectum being used as a guide. A large gum-elastic catheter was then passed through the penile urethra, and *via* the wound into the bladder, and tied in. When at subsequent times attempts were made to pass catheters they were never successful except by passing the instrument out at the wound and in again. I am unaware if this is a common experience after "Cock's operation," but it is a great drawback. Finally the man had to pass all his urine, as he does now, by the perineum. On the other hand, he soon obtained complete control over it as soon as the tied-in catheters were removed.

Unfortunately this first operation did not give him entire relief, as it was hoped; his hectic temperature continued, and some urine and much pus continued to come from the upper sinus.

Accordingly on June 21st this sinus was laid open under chloroform and a finger introduced. It was found that the pubic bone had been pierced by the bullet, leaving a circular hole near the lower border, and several sequestra were felt with the tip of the finger deep down in the abscess cavity. These were seized with some difficulty with sequestrum forceps, and the cavity thoroughly irrigated.

The improvement following this second operation was immediate; the upper wound rapidly closed; all pain disappeared; temperature became normal, and patient rapidly gained flesh.

In the middle of July the patient insisted on leaving the hospital, being unwilling to submit to any further effort to restore the urethra.

He is now quite well, except that it bothers him a good deal that his semen, during coitus, escapes by the perineal wound; otherwise all his functions are normal.

This experience of Cock's operation has led me to think it a most valuable one for such exceptional cases as this, and for the operation the special double-bladed "Cock's" knife seems to me far superior to an ordinary single-bladed one, such as one uses in lateral lithotomy.

JERUSALEM, SYRIA;
October 4th, 1901.

Notes.

THE entry of new students at the beginning of the Winter Session, 1901-2, shows that, although there has been a marked decrease in all the medical schools, we still maintain our relative position, and that our entry has not materially varied from that of last year.

The total numbers are 140, of which 84 are for the full curriculum, and 56 for special courses, including the Preliminary Scientific Class.

We give below the entries for the past five years.

Year.	Full course.	Special, including preliminary scientific course.	Total.
1896	84	81	165
1897	97	91	188
1898	100	89	189
1899	115	69	184
1900	87	55	142
1901	84	56	140

The next largest entries among the London schools is that of Guy's, with 68 for the full curriculum, the London Hospital coming third with 64. All other schools are below 50 for the full course. In London only two schools show an increase on the 1900 entry, St. Thomas's being one more and King's two more than last year.

In the provinces Cambridge University alone has a larger entry than Bart's, the same number of medical students (115) having entered as in 1900, and even in this case we are doubtful whether the number should be compared with our full entry of 140, or that of 84 for the full curriculum.

One fact at least stands out, that while the entry is still affected by those causes which have led to a general reduction in the number of medical students registering in 1901, yet we maintain our usual relative level.

DR. CLAYE SHAW has resigned the post of Medical Superintendent at the Middlesex County Asylum, Banstead.

MR. L. B. RAWLING, F.R.C.S., has been appointed Assistant Surgeon to the German Hospital.

MR. E. W. BREWERTON, F.R.C.S., has been appointed Assistant Surgeon to the Royal Westminster Ophthalmic Hospital.

J. L. SHRUBSALL, M.A., M.B.Cantab., and EUSTACE TALBOT, M.A., M.B.Cantab., have been admitted Members of the Royal College of Physicians.

A NEW series of lectures has been instituted this session; the assistant physicians and surgeons in charge of the

various special departments now deliver lectures in their several subjects on Mondays at 1 p.m. in rotation. We welcome gladly this extension of teaching by clinical lectures as a valuable addition to the practical instruction at the Hospital.

A NEW departure in the course of lectures by Dr. Claye Shaw on Psychological Medicine has commenced this session, a series of demonstrations on this subject being given by Dr. Horder at the close of the lectures.

ONCE more Bart's is to be congratulated on the successes in London University M.B. finals, six men having been placed in the First Division out of thirteen candidates.

FAR be it from us to venture to disagree with the scientific basis of phantoms and spooks propounded by Sir Lauder Brunton in his lecture before the Medico-Psychological Society, but it wounds us sorely to think that our best family ghost, our only claim to "blue blood," may have so unromantic an origin as "a fit in the surgery, sir!"

THE Rugby XV have started the season in great form; so far they have an unbeaten record—long may it remain so. It would be no unwise thing, too, if the Inter-hospital Cup were to find a resting-place on the Library table; to the Cup itself the surroundings would be strangely unfamiliar.

WE hear that the V.M.S.C. ball was an even greater triumph than usual. We must congratulate most heartily those who were responsible for its organisation. Complaints have, however, reached the editorial ear that the fair sex showed an undue preference for one corps, which shall be nameless. To would-be recruits who are undecided what corps to join we will send the name (under cover) on receipt of our usual fee for "a written opinion."

THE Government is opening up a fresh sphere of work for civil surgeons in South Africa. Applications are now invited from medical men to work in the Boer concentration camps. The rate of pay offered is twenty-five shillings a day all found.

THE City Coroner has caused much heart-searching in "quarters" by deciding that medical witnesses are to be present throughout the inquest until their evidence has been given; still this consolation remains, the Coroner's Court might be two miles away.

IN our report of Dr. Gee's Clinical Lecture last month the name "Cotunio" was printed for "Cotugno." We take the opportunity of correcting the error.

Amalgamated Clubs.

RUGBY FOOTBALL CLUB.

OFFICERS 1901-2.

President.—A. Bowly, Esq., C.M.G., F.R.C.S.
 Vice-Presidents.—J. S. Sloane, Esq., F.R.C.S.; W. F. Bennett, Esq., M.R.C.S., L.R.C.P.; H. J. W. Wells, Esq., M.R.C.S., L.R.C.P.; H. C. Adams, Esq., M.R.C.S., L.R.C.P.
 Captain 1st XV.—A. O'Neill.
 Vice-Captain.—H. E. Stanger-Leathes.
 Hon. Secretary.—H. E. Stanger-Leathes.
 Assistant Hon. Secretary.—C. H. Cross.
 Captain 2nd XV.—W. H. Scott.
 Committee.—L. R. Tosswill, A. R. Neligan, H. T. Wilson, F. Harvey, B. N. Ash, W. H. Hamilton, R. M. Miller, J. Corbin.

1ST XV FIXTURES.

Date.	Opponents.	Ground.
Oct. 12	London Irish	Herne Hill.
" 19	Park House	Winchmore Hill.
" 26	Marlborough Nomads	Surbiton.
Nov. 2	Croydon	Croydon.
" 6	R.I.E.C.	Cooper's Hill.
" 9	Upper Clapton	Winchmore Hill.
" 20	Rosslyn Park	Richmond.
" 23	Harlequins	Wandsworth.
" 30	Old Leysians	Winchmore Hill.
Dec. 4	R.M.A.	Woolwich.
" 11	R.N.C.	Winchmore Hill.
" 14	Streatham	Streatham.
1902.		
Jan. 11	Lennox	Stamford Bridge.
" 15	Royal Engineers	Chatham.
" 18	Catford Bridge	Winchmore Hill.
" 25	Bedford	Bedford.
" 29	Rosslyn Park	Winchmore Hill.
Feb. 1	Northampton	Northampton.
" 15	Portsmouth	Portsmouth.
March 1	Old Leysians	Eltham.

There is also a strong list of 2nd XV fixtures.

ST. BART'S v. LONDON IRISH.

Played at Herne Hill, October 12th, 1901. This match, the first on the hospital fixture list, resulted in a very good game, and eventually the hospital was left victorious by a goal (dropped) and a try, or 7 points to nil.

Both teams were fairly well represented, and a good game was anticipated. The Hospital, who have the whole of last year's cup-tie team, and some promising "freshers" to choose from, ought to be able to put fairly representative teams into the field for their ordinary matches, and with a little more confidence in themselves, and a good understanding between the front and back divisions, which, unfortunately, was lacking last year, they have every chance of a successful season.

O'Neill won the toss, and the Irish kicked off, Corbin returning well into touch, then the Irish forwards made a rush, which was well stopped by Neligan. The Hospital forwards were beginning to settle down, and it was seen that the packs were well matched. Bart's were working well, and gradually took the ball down the field, aided by a good dribble by N. M. Wilson; however, the Irish captain got possession, and breaking through the hospital defence, carried the game into the visitors' half. It did not remain here long, as the Hospital forwards, using their feet well, with a series of short rushes, brought the ball back to the Irish "25." A strong attack was made on the home goal, which was unsuccessful for some time. From a scrum Stanger-Leathes came away, and, with a good dribble, carried it to the goal line, and the ball bouncing off him to H. T. Wilson, the latter was able to score the first points for the Hospital. Stone's kick at goal failed.

The Irish dropped out, and following up well, were able to keep the play in mid-field. The Hospital halves were not playing together, and the Irish were enabled to carry the game into the visitors' "25." A penalty kick was unsuccessful, and Corbin was able to find touch well down the line. The Irish came back again, and were attacking strong, when Drury and Marshall brought off

two neat collars, and Stone relieved with a good kick. The game went on outside the Hospital "25," and became rather ragged about this time. A O'Neill was prominent in heading some rushes, being well backed up by Tosswill. There seemed to be a lack of proper combination amongst the remainder of the forwards, and the Irish had no difficulty in stopping individual efforts. The Irish again came back, and must have scored but for some mistakes in handling the ball. Half time came with the Irish pressing.

The game had so far been very well contested, and there was nothing to choose between the two teams. Bart's were leading by 3 points to nil. O'Neill kicked off, and it was well followed up, the Irishman being tackled before he was able to get in his kick. The Bart's forwards were now working well together, and time after time, getting control over the ball, were heeling out neatly; many small rounds of passing were witnessed, but the Irish tackled well. The visiting forwards were next prominent with a beautiful combined rush, and the Irish goal line was in danger. A Corbin was seen to mark his man very well two or three times, and Tosswill was prominent out of touch. The game was still raging in the home "25" when Magee got the ball and raced down the field, and would have scored but for Singh's pace, who caught him up and forced him to pass, which was, however, not accepted, and thus the Irishmen lost another chance of scoring.

Magee's run was the best of the game. After this excitement Bart's were soon to best advantage, and the forwards and backs were working well together. The ball was swiftly carried to the Irish "25," and the Hospital made repeated efforts to score without success. From a scrum on the "25" line the ball came out well, and N. M. Wilson passing to Drury, and he to Stone, enabled the last named to drop a neat goal. After this play was chiefly confined to mid-field. About six minutes from the end N. M. Wilson was hurt, and had to retire. The Irish pressed for a short time, then Stone was prominent with a good run, and eventually the whistle blew "no side," when play was in mid-field.

The Hospital forwards shaped very well in the second half, and the kicking, especially of Stone and Corbin, was of high order.

T. O'Neill at half was very safe, but had few chances of showing up.

K. S. Singh at three-quarters appeared to be nervous, but towards the end of the game brought off some excellent collars, and when he holds his passes better, with his turn of speed, ought to make a good wing three-quarter. Teams:

St. Bart's Hoop.—E. S. Marshall (back); D. M. Stone, J. Corbin, G. D. Drury, K. S. Singh (three-quarters); T. O'Neill and N. M. Wilson (halves); A. O'Neill, L. R. Tosswill, H. T. Wilson, A. R. Neligan, H. E. Stanger-Leathes, C. R. Hoskyn, T. A. Izard, A. Ryland (forwards).

London Irish.—R. T. Quane (back); V. H. Woodley, A. T. Watson, F. S. Forde, J. Hehir (three-quarters); G. Sloane, L. M. Magee (Captain) (halves); G. C. Walsh, T. Otway-Ruthven, A. F. G. Moran, B. C. Casey, J. N. Walsh, C. L. Townsend, J. J. Rahilly, M. F. Kelly (forwards).

ST. BART'S HOSPITAL v. PARK HOUSE.

This match was played at Winchmore Hill on October 10th. The Hospital, although without A. O'Neill, Ash, Stone, and Neligan, won by two goals (one penalty) and one try to nil. In the first half, although Bart's had somewhat the best of the game, the only score was a fine penalty goal by Wilson. In the second half of the game the Hospital played up much better, and Wilson, picking up from a loose rush, soon scored a try, which he failed to convert. Soon after this Hamilton, getting possession from a line-out, scored another try, which Wilson easily converted. After this Park House looked dangerous, but relief soon came, and the whistle blew with play in mid-field. Bart's turning as stated above.

For the Hospital, the forwards, although O'Neill was greatly missed, played a good game throughout, Tosswill and Wilson being especially prominent; and T. O'Neill and Hamilton played well at half. H. B. Owen made a promising debut in the three-quarter line, which combined much better than in the first match, but there is still room for improvement. Team:

St. Bart's.—E. S. Marshall (back); K. S. Singh, J. Corbin, H. B. Owen, G. D. Drury (three-quarters); W. H. Hamilton and T. O'Neill (halves); L. R. Tosswill, H. T. Wilson, H. E. Stanger-Leathes, A. Ryland, J. Morris, R. M. Miller, T. A. Izard, C. R. Hoskyn (forwards).

Referee: Mr. G. B. Harris (L.R.U.S.R.); Touch-judge: J. Cleveland.

ST. BART'S HOSPITAL v. MARLBOROUGH NOMADS.

The Hospital team travelled down to Surbiton for this match on October 26th, but on arrival there the fog was found to be so thick that play was out of the question, so the match was abandoned.

Teams:

St. Bart's Hospital.—E. S. Marshall (back); D. M. Stone, J. Corbin, H. B. Owen, G. D. Drury (three-quarters); W. H. Hamilton and T. O'Neill (halves); L. K. Tosswill, H. T. Wilson, H. E. Stanger-Leathes, J. Morris, A. Ryland, R. M. Miller, T. A. Izard, C. R. Hoskyn.

Marlborough Nomads.—J. R. Godson (back); A. W. Porter, F. A. Mily, N. C. Phillips, J. L. A. Cock (three-quarters); G. L. Soames and E. C. Hughes (halves); E. C. Galloway, B. A. Howard, G. H. Adam, L. E. Reeves, T. S. Foster, H. E. Parker, W. G. Munsee, and W. P. Johnstone (forwards).

Referee: Mr. E. V. Gardiner (L.R.U.S.R.).

"A" TEAM.

ST. BART'S v. OLD CHARLTONIANS.

At Winchmore Hill, October 12th. Won 1 goal (5 points) to 1 try (3 points); try for Hospital gained by Ash.

ST. BART'S v. PARK HOUSE "A."

At Kidbrooke, October 19th. Won 3 goals (15 points) to 1 goal 1 try (8 points); tries for Hospital gained by Wilson, Plews, and Cross.

ST. BART'S v. UPPER CLAPTON "A."

At Winchmore Hill, October 26th. Won 2 tries (6 points) to 1 try (3 points); tries for Hospital gained by Brewer and Haines.

ST. BART'S v. CROYDON "A."

At Winchmore Hill, November 2nd. Lost 2 goals 3 tries (19 points) to 1 try (3 points); try for Hospital gained by Haines.

ST. BART'S v. CENTRAL TECHNICAL COLLEGE.

At Acton, November 9th. Won 3 goals 4 tries (27 points) to a try (3 points); tries for Hospital by Haines (2), Wilson (3), Plews (1), Kindrew (1).

ASSOCIATION FOOTBALL CLUB.

PAST v. PRESENT.

Played at Winchmore Hill, Wednesday, October 9th. Result, Present 3, Past 1.

The game started by both sides being two men short. Soon after the start some good passing by the insides enabled O'Brien to get through and score. Then the other men arrived, and the two teams soon got well together. The defence on both sides was too strong for the forwards. At half time the score was 2 to 1, Ward and O'Brien scoring for their respective sides.

In the second half the game slackened, and only one goal was scored by a good shot from Griffin. For the Past V. G. Ward and L. Orton were the best, while C. O'Brien and W. S. Nealar played well for the Present. Teams:

Past.—(Goal) T. Holtby; (backs) L. Orton, J. R. Lloyd; (half-backs) W. Jones, T. Taylor, F. Jackson; (forwards) H. N. Marrett, V. G. Ward, K. S. Singh, A. N. Other, L. Gréne.

Present.—(Goal) J. Griffin; (backs) W. S. Nealar, G. B. Scott; (half-backs) H. B. Scott, V. C. Upton, N. E. Waterfield; (forwards) G. B. Griffin, C. LeBrocq, C. W. O'Brien, A. H. Hogarth, T. Kilby.

ST. BART'S v. R.M.A.

Played at Woolwich, Wednesday, October 23rd. Result, St. Bart's 2, R.M.A. 1.

The game started with a lot of play in mid-field, Bart's, if anything, having slightly the better of the exchanges. Then their right wing took the ball down, and ended up with a good shot, which Griffin just succeeded in saving, but their centre forward scored immediately afterwards.

Soon after O'Brien scored for Bart's, and just before half-time Honiball added one more. In the second half no more goals were scored. For the R.M.A. the centre forward and right back were best, while Nealar, O'Brien, and Jones played well for Bart's.

Same team as against R.I.E.C.

ST. BART'S v. R.I.E.C.

At Cooper's Hill. Result, R.I.E.C. 4, St. Bart's 3. This proved to be one of the best games we have had. The R.I.E.C. scored first, and then each side scored alternately till the final score was reached. Farr played well for the R.I.E.C. The halves played a sound game for the Hospital. Team: (Goal) J. Griffin; (backs) W. S. Nealar, J. R. Lloyd; (half-backs) W. Jones, V. C. Upton, N. E. Waterfield; (forwards) G. B. Griffin, R. C. Berryman, C. O'Brien, W. Honiball, T. Kilby.

ST. BART'S v. OLD CRANLEIGHANS.

Played at Winchmore Hill, November 2nd. Result, Bart's 4, Old Cranleighans 3.

Bart's started off well, and scored 4 goals in the first half; then the forwards seemed to collapse for the rest of the game. In the last half the Old Cranleighans scored 3 goals. Team: (Goal) J. Griffin; (backs) W. S. Nealar, J. R. Lloyd; (half-backs) W. Jones, V. C. Upton, N. E. Waterfield; (forwards) G. B. Griffin, A. H. Hogarth, C. O'Brien, R. Berryman, T. Kilby.

ST. BART'S v. CASUALS.

The Casuals brought up a very strong team, and were far too good for Bart's. C. Drake and V. G. Ward played very well for the visitors, W. S. Nealar played well for St. Bart's.

Result, Casuals 7, Bart's 1. Team: (Goal) J. Griffin; (backs) W. S. Nealar, J. R. Lloyd; (half-backs) W. Jones, V. C. Upton, N. E. Waterfield; (forwards) G. B. Griffin, C. E. A. Armitage, C. O'Brien, A. H. Hogarth, T. Kilby.

HOCKEY.

ST. BART'S "A" v. BLACKHEATH SCHOOL.

This match was played at Blackheath on October 30th, and resulted in an easy win for the Hospital by 6 goals to nil. Goals by Adams (3), Grant, Fowler, and Hallows. Team: Phillips, Sowerby, Scott, Adam, Wright, Fowler, Grant, Jendwine, G. H. Adam, Hanbury, Hallows.

ST. BART'S v. UXBRIDGE.

This game was decided at Uxbridge on November 2nd, and after a fast game resulted in an easy win for the Hospital by 6 goals to one. Play was very even at first, but then the visitors' combination amongst the forwards improved, and goals were scored by Beckett, Sale, and Gray, the home team scoring once. During the second half of the game Bart's were again seen to advantage, and three more goals were scored by Fowler, Wilmot, and Hallows. L. Orton at back played well. Team: Orton, Phillips, A. N. Other (backs); Fowler, Wright, and Adam (halves); Gray, Wilmot, Beckett, Sale, Hallows (forwards).

ST. BART'S v. ST. ALBANS.

We met St. Albans on their own ground on November 9th, and the game resulted in a win for St. Albans by 6 goals to 1. During the first quarter of an hour we pressed them, the forwards playing well together, and Beckett dribbling the ball up the field scored one goal. The play then became more even until Boys shot their first goal. In the second half they pressed us most of the time, their forwards showing excellent combination. The Hospital was represented by: Sowerby, Phillips, Fowler (backs); Murphy, Hill, Adam (halves); Gray, Graham, Beckett, Jendwine, Hallows.

ST. BART'S v. R.M.A.

This match was played at Woolwich on November 13th, and resulted in a win for the R.M.A. by 7 goals to 3. Although the game was won by such a margin it was very even. Raikes and Beckett made several excellent shots at goal, but each time their goal-keeper managed to save. Our forwards played well together. Goals by Hallows, Beckett, and Raikes. Team: Cross, Fowler, Sowerby (backs); A. N. Other, H. B. Hill, (halves); H. Gray, G. H. Adam, Beckett, Raikes, Hallows (forwards).

UNITED HOSPITALS' HARE AND HOUNDS.

This club, which had of late years almost died out of existence, has suddenly sprung once more into favour, especially at this Hospital, where we have some good cross-country runners.

The programme for the season, although still open to changes, is this—

December 7th.—Six-miles match with Wellington College at Wellington.

December 21st.—Eight-miles match with the Woodside A.C. January 18th.—Five-miles race with the Ranelagh Harriers at Putney.

February 8th.—Inter-Hospital ten miles race to be run either at Epping Forest or at Blackheath.

February 21st.—A six miles match with Dublin University at Dublin.

Matches with the Thames Hare and Hounds and the Blackheath Harriers are also being arranged.

Unless we have very hard luck, as happened last year, and lose most of our best men just before the race, we ought to win the Inter-Hospital Cup fairly easily, as J. G. Gibb, who won the ten miles this spring, and the Inter-Hospital three miles for us, is almost certain to be first man in again, while H. Barnett, S. F. Lister, G. M. Levick, A. C. Wilson, P. Gosse, T. Bates, and others are running twice a week now, so ought to be pretty fit by the time the team is chosen to run for the United Hospitals' Hare and Hounds.

Abernethian Society.

SESSION 1901—1902.

OFFICERS.

Presidents.—W. S. Danks, F. C. Shruballs.
Vice-Presidents.—N. E. Waterfield, N. Maclaren.
Treasurer.—Norman Moore.
Hon. Secretaries.—H. J. Slade, T. J. Faulder.
Additional Committeemen.—A. R. Nelligan, V. C. Upton.

THE opening meeting of the session was held on October 10th, in the Anatomical Theatre. Mr. Danks in the chair supported by the Committee. Mr. Willett read a paper, styled "A Historical Review of Changes of Procedure in the Treatment of Operation Wounds at St. Bartholomew's Hospital, 1857—1901." The paper, which is reported in full, elicited loud applause from an interested house.

The chairman having made an appropriate speech, a vote of thanks to Mr. Willett was proposed by Mr. Bull, seconded by Mr. Gask, the former being inspired by Mr. Willett's hint that his address was "valued to some," the latter by Mr. Willett's long connection with the Abernethian Society as its Treasurer. Their proposal was carried *uno animo*. A goodly number of the nursing staff were present.

The second meeting of the session was held on October 17th, Mr. Danks in the chair. Mr. Talbot read a paper on "The Modern Treatment of Pulmonary Tuberculosis."

The curability of the disease was a modern conception, for which Laennec with his stethoscope, and Koch with his microscope paved the way, early diagnosis being thereby rendered possible. For "real cure" early diagnosis was essential, and this was often extremely difficult to make. The author then described a typical "early" case, with possible lines of treatment. Financial considerations permitting these were three—(i) climatic, (ii) sanatorium, (iii) a combination of the two.

For most cases he considered that a "dry cold" climate, such as that of the high Swiss valleys, was best.

He described in detail the routine of the modern sanatorium. The salient points were,—abundant food and fresh air in all cases; rest and exercise arranged to suit individuals, everything being regulated by the doctor, whose chief guide was the temperature chart. He discussed the use of drugs, and considered the effects of creosote, etc., and formalin, upon local lesions. He deprecated the loose use of the word "cure," and postulated at least two clear years of freedom from ominous symptoms.

The propriety of recommending the special treatments to patients was discussed, and the dilemma attending the doctor illustrated by the somewhat lugubrious aphorism, that the only thing a physician can be certain of in giving a definite diagnosis of chronic tuberculosis is that he will be wrong.

A sea voyage was a perilous prescription from the conditions thereof.

In reference to the poorer classes the author gave his experiences at the Chest Hospital. There were two main difficulties in the way of adequate treatment—(i) the impossibility of getting hold of "early" cases, (ii) difficulty in retaining them. The result was a mere patching up, rarely a "cure."

The paper concluded with a summary of the main points elucidated.

A clinical evening was held on October 24th, Mr. Shruballs presiding.

Mr. Pridham showed a case of periosteal nodes in a child *æt.* 6, the left humerus, right radius and ulna, and both tibiae being affected. There was a history of snuffles and of some rash, and the disease had appeared somewhat suddenly. There were no other signs of congenital syphilis, and mercury produced no effect. The case was debated by Messrs. Shruballs, Bull, Tweedy, and Littler-Jones.

Mr. Niall showed a case of a woman, *æt.* 49, a widow, who had a large fluid swelling in the left hypochondrium and left lumbar region. The swelling was connected with the left lobe of the liver; the right lobe was not enlarged. It was of twelve months' duration, and had increased lately. There was no pain; no blood had been passed, and the bowels were regular. There was also dulness behind, reaching up to the inferior angle of the left scapula, which might possibly be an independent tumour of the spleen. The case had previously been taken for carcinoma of the liver.

Mr. Shruballs showed a case of intractable skin disease, a boy *æt.* 8, who had extensive papular eruption with intense itching. He also showed a microscopic section of a papule, stating that it suggested Hebra's prurigo. Treatment for a possible parasite *foveæ et origo mali* was advocated by Mr. Littler-Jones, opposed by Mr. Pridham. Mr. Picton pointed out the virtue of baths followed by inunction (statum) of oil.

Mr. Pridham showed a case of spastic ataxia, a man *æt.* 38. He gave a very lucid account of the disease and of the diagnosis. The spastic part of the disease was not muscular atrophy; this was explained by improvement in the patient's condition.

Mr. Picton showed a case of miliary tuberculosis in an ex-dragoon, *æt.* 28, who had seen six years in India. The adductor muscles were first attacked; the onset of the disease was acute, and there had been recurrent attacks of wasting. He was in favour of its being peripheral neuritis, induced, possibly, by intoxication from some tropical disease. A keen debate followed, Messrs. Shruballs, Izard, Pridham, Niall, Tweedy, and Picton taking part.

Mr. Scholberg showed specimens, micro- and macroscopic, of tubercle of the meninges of the brain and pons, also a specimen of hæmorrhagic pancreatitis.

Mr. Bull showed specimens of supernumerary auricle and umbilical papilloma.

Mr. E. Shaw brought four microscopic specimens of his own.
(i) Carcinoma and fibro-adenoma of breast.
(ii) Process of absorption of silk ligature.
(iii) Vermiform appendix containing oxyuris vermicularis.
(iv) Oxyuris vermicularis from the same appendix.

He also showed a specimen of phagocytosis, showing removal of red blood-cells by leucocyte, lent by Dr. Andrewes.

PROGRAMME OF THE SESSION.

1901.	Author's Name.	Subject of Paper.
June 27,—	Dr. Ormerod	The History of our Special Departments.
Oct. 10,—	Mr. Willett, F.R.C.S.	An Historical Review of Changes in procedure in the Treatment of Operation Wounds at St. Bartholomew's Hospital between 1857 and 1901.
" 17,—	Mr. E. Talbot, M.B.	The Modern Treatment of Pulmonary Tuberculosis.
" 24,—		Discussions, Clinical and Pathological.

Oct. 31.—Mr. G. V. Bull, M.B.	Some Forms of Cirrhosis in Children.
Nov. 7.—Mr. J. A. Nixon, M.B. ...	The Evolution of the Medical School.
" 14.—Mr. G. E. Gask, F.R.C.S.	The Dangers and Difficulties in Minor Surgical Operations.
" 21.—.....	Discussions, Clinical and Pathological.
" 28.—Mr. F. A. Bainbridge, M.B., B.Sc., M.R.C.P.	Some Neuroses in Children.
Dec. 5.—Mr. S. B. Atkinson, LL.M., B.Sc.	The Law of Negligence in its Relation to Medical Men.
" 12.—Mr. S. R. Scott, M.B. ...	
1902.	
Jan. 9.—Dr. Champneys	Some Pages from the Ancient History of Obstetric Medicine and Surgery.
" 16.—Mr. C. E. West, M.R.C.S., L.R.C.P.	Some Innocent Tumours of the Breast.
" 23.—.....	Discussions, Clinical and Pathological.
" 30.—Mr. Lidler-Jones, M.R.C.S., L.R.C.P.	Concerning Arthritis.
Feb. 6.—Mr. W. D. Harmer, M.C., F.R.C.S.	The Diagnosis, Prognosis, and Treatment of Intussusception.
" 13.—Dr. Clive Rivière	Tuberculosis in Children.
" 20.—.....	Discussions, Clinical and Pathological.
" 27.—Mr. M. H. Gordon, M.A., M.B.	The Bacteriology of Scarlatina.
Mar. 6.—Mr. L. J. Pictou, M.B. ...	Chlorosis.
" 13.—.....	Discussions, Clinical and Pathological.
" 20.—.....	Annual General Meeting.

Cambridge Graduates' Club of St. Bartholomew's Hospital.



HE twenty-sixth annual dinner of this club was held at Frascati's on Wednesday, November 13th, Dr. E. G. Browne (Pembroke College, University Lecturer on Persian) being in the Chair.

After the usual loyal toasts the Chairman proposed the toast of the Club. He gave a most interesting account of his sojourn in Persia, and of the primitive state of medicine in that country. He gave an account of the reasons that made him give up the practice of medicine to study Persian. He gave the Persian definition of a poet as one who made the great appear small and the small appear great, and so the small embarked on great enterprises, and as he had been called upon to take the Chair the Secretary must be regarded as a poet, as it was attended by ten or twelve at most, to address so large a gathering of the guests, which was supported by Lieut.-Colonel Keogh, R.A.M.C., Mr. Kemp, K.C., the Secretary of the Royal Society, and Dr. Herringham, of Oxford.

Lieut. Colonel Keogh spoke of the new organisation of the R.A.M.C. He complained that the medical profession had not taken that interest in the Service which they had the right to expect; they argued that the army should make it a good thing and they would get good men; but he maintained that if they got the good men they would make it a good thing. In future promotion was to go more by professional merit and not by mere seniority. Qualified men would no longer be subjected to the indignity of a students' examination at Netley, except in clinical medicine and clinical surgery, that the lieutenants would be required to learn only those military matters that belonged to the rank immediately above them, and so

on, and not all *en masse*, as at present. He paid a great tribute to those who had come forward as civil surgeons in a time of national emergency, several of whom were present that evening.

Mr. Kemp, K.C., in a witty speech, expressed surprise that a company of medical men should drink anybody's health. Dr. Rolleston proposed the Chairman's health, which was replied to, and the Chairman proposed the health of the Secretaries (Dr. Fletcher and Dr. Horton Smith), by whose energies the Club was kept going, and they both replied.

About eighty sat down to dinner, and during the evening there were several songs, and a most enjoyable evening was spent.

The Rahere Lodge, No. 2546.



MEETING of the Rahere Lodge, No. 2546, was held on October 8th, at Frascati's Restaurant, Oxford Street, W. W. Bro. Phineas S. Abraham, M.D., W.M., being in the chair. Bro. Whitaker was raised to the degree of Master Mason, while Bros. Keown and Scott were passed to the Second Degree. Mr. Arthur J. Edge, M.B. (Lond.), M.R.C.S., L.R.C.P., was initiated into Freemasonry, and Bro. T. B. Carlyon, M.R.C.S., L.R.C.P., M.M., St. George's Lodge, No. 125, was unanimously elected a member of the Lodge. The brethren and a number of guests afterwards dined together.

Review.

MEMOIRS AND LETTERS OF JAMES PAGET, edited by STEPHEN PAGET. Longmans, Green, and Co. Price 12s. 6d. Pp. 429, illustrated.

That the life of Sir James Paget should be preserved to the world is, to any Bart.'s man, not a matter for comment, and we feel no introduction or recommendation from us is necessary for this work, which is in the main an autobiography from the ready pen of Sir James. The book is no mere catalogue of the doings and sayings of one man, but is a complete history and commentary on manners and customs in the medical profession during sixty years, chronicled by one who was as expert in observing as he was fluent and precise in describing; and herein lies its value; the professional life of Sir James Paget was to a certain extent public property, and any biographer, however able, must have merely repeated a great deal of what was already well known. He had been too much in the eye of the public and of the hospital for his attainments and personality to pass unknown, but there were chapters in his life, telling, maybe, of his early struggles with poverty, of his fight against influence in high places, and of his final triumph over what to us may now seem indefensible customs, which could only be made known in an autobiography. And these pages in his life are the most valuable; they show us the process which moulds a great mind.

Of the courage of those days of waiting from 1836 to 1843, hardly expecting to defeat vested interests and reach the goal of his ambition, the staff of Bart.'s, yet loth to retire from a contest for which, with all his modesty, he knew himself peculiarly fitted, the biographer treats at some length, but the interest never flags; this is perhaps the best chapter in the book.

The impatience which Sir James evinced for any form of private tuition deprived him of one of the more profitable ways of bridging the gap, yet there is no doubt that it was this very fact that enhanced so greatly his value as a teacher or observer, for he spent those years immediately following his qualification in writing, and for his writing extensive and varied reading was necessary,—that "fine confused feeding" which John Brown encourages as being the key to the "old manly intellectual and literary culture of the days of Sydenham and Arbuthnot, Heberden and Gregory." To the day of his death no man set a finer example of this "manly intellectual and literary culture" than did Sir James Paget.

It is surprising to read, knowing, as we do, to what a height he cultivated the faculty of clinical observation, that during these seven years he was hardly ever in a hospital ward, and had no opportunity for clinical study.

Promotion when it came, in 1843, did not promise to lead to anything more permanent, in fact it was the inclusion of physiology in the curriculum, a subject of which the rest of the candidates were profoundly ignorant, that gave Paget his opportunity, and opened to him the higher appointments on the hospital staff.

Then followed the revival, or perhaps the foundation of the Hospital Medical School, which previously had sunk to its lowest ebb, its very existence being threatened by the private schools, of which the Aldersgate and Windmill Street are perhaps the best-known examples. His progress from this time forward was slow but steady. As a lecturer he achieved a well-deserved reputation, which will linger in the Hospital for many a long year, while as a surgeon his fame is so well established that neither these nor any other memoirs can enhance it.

But we prize the book, not so much for the mere record of the life and doings of one of our greatest surgeons, but for the insight it offers to his personality, and the knowledge it gives of the man himself; throughout its pages it is not Sir James Paget the talented student, the eminent pathologist, the gifted lecturer, or the able surgeon, it is the man whom we knew, whose character is so fully described in the memoirs, that we cannot refrain from quoting it at length: "He had done more than can be told in these twenty-eight years (*i. e.* from the date of his appointment as Lecturer on Physiology and Warden of the College to the time of his resigning the post of Surgeon in 1871) for the Hospital. He had never ceased working for it; and the present greatness of the School is due, in a

very high degree, to him. He brought to it not only his love of work, but also a mind free from envy, hatred, malice, and all uncharitableness, and a determination not to quarrel with anybody, to 'think of things to the exclusion of persons,' to make his work his one claim on the Hospital, and to be paid in more work. But if he had brought no more than this he would not have obtained his profound influence over the students. He had other gifts that kept him from being hard or formidable—light-hearted enjoyment of small pleasures, blank indifference to small hardships, infinite courtesy, love of home life and hospitality, generosity with his money, and a chivalrous disregard of his health. It was this union in him of an austere will with an emotional temperament that drew younger men to him. He was, indeed, more emotional than men knew. If this account of his life is to have any real value it must record that aspect of his nature which he seldom showed to the world. Everybody remembers him as a great surgeon and pathologist, an eloquent speaker, a man of science, strong-willed, and reticent. But those who were always with him saw the wonder of the sensitive side of his nature, his keen enjoyment of a good laugh or a day's holiday, his love of music, his miserable depression in illness, his life of prayer, his many acts of charity, and how he would break down, sometimes, over words that touched him, and how, on rare occasions, he would flare up over something brutal or imbecile said or done. The beauty of his spiritual life came just of this working together of the will and incalculable emotions in him, and it was for his whole nature, not for his strong will alone, that the students almost worshipped him."

Mr. Stephen Paget's task in editing these memoirs was no easy one, to amplify the autobiography of so ready a writer as Sir James called for unusual delicacy and skill, yet the attempt has been completely successful; Mr. Paget has let his father tell the story of his own life, and the details of his early career are allowed to stand as he set them forth; there is no attempt made to add anything adulatory to the account which Sir James Paget, with modest self-confidence, gives of his disappointments and successes.

Yet those traits in a man's character which an autobiography must of necessity fail to bring out the editor has preserved for a grateful posterity. The letters at the end of the volume add not a little to its value and interest; apart from the light they throw on various phases in Paget's life, they stand out as models in an age when the refinements of letter writing—lucidity, conciseness, and elegance of expression—bid fair to be lost.

To Bart.'s men this life of Sir James Paget, edited by the sympathetic hand of his son, who was exceptionally fitted to undertake the work, will prove an engrossing book; while, to the world at large, whether lay or medical, it is a valuable addition to biographical literature.

Calendar.

November, 1901.

- Nov. 21.—Abernethian Society. Clinical Evening.
 " 22.—Dr. Gee's Clinic.
 " Dr. Hensley and Mr. Butlin's duty.
 " 23.—Hockey Club v. Oxford Casuals at Oxford.
 " R.F.C. v. West Norwood at West Norwood.
 " R.F.C. v. Harlequins at Wandsworth.
 " 25.—Mr. Cumberbatch. Special Lecture.
 " 26.—Sir J. Lauder Brunton and Mr. Walsham's duty.
 " 27.—Mr. Marsh's Clinic.
 " 28.—Abernethian Society. Paper by Mr. Bainbridge, "Some Neuroses in Children."
 " 29.—Sir Dyce Duckworth's Clinic.
 " Sir W. S. Church and Mr. Willett's duty.
 " 30.—A.F.C. v. Nondescripts (Camb.) at Winchmore Hill.
 " R.F.C. v. Old Leysians at Winchmore Hill.
 " Hockey Club v. Crystal Palace at Crystal Palace.
 Dec. 2.—Dr. Ormerod. Special Lecture.
 " 3.—Dr. Gee and Mr. Langton's duty.
 " 4.—Mr. Marsh's Clinic.
 " R.F.C. v. R.M.A. at Woolwich.
 " 5.—Abernethian Society. Paper by Mr. S. B. Atkinson, "The Law of Negligence in its Relation to Medical Men."
 " 6.—Dr. Hensley's Clinic.
 " Sir Dyce Duckworth and Mr. Marsh's duty.
 " 7.—Hockey Club v. Heudon at Winchmore Hill.
 " 9.—Mr. Bruce Clarke. Special Lecture.
 " 10.—Dr. Hensley and Mr. Butlin's duty.
 " 11.—Mr. Marsh's Clinic.
 " R.F.C. v. R.N.C. at Winchmore Hill.
 " 12.—Abernethian Society.
 " 13.—Sir W. S. Church and Mr. Willett's duty.
 " Sir J. Lauder Brunton's Clinic.
 " 14.—A.F.C. v. Idlers at Winchmore Hill.
 " Hockey Club v. Tulse Hill at East Dulwich.
 " R.F.C. v. Streatham at Streatham.
 " 16.—Mr. Bowlby. Special Lecture.

Examinations.

UNIVERSITY OF LONDON.

Examination for Honours.

E. E. Maples, Gold Medal and First-Class Honours in Anatomy; First-Class Honours in Materia Medica and Pharmaceutical Chemistry; Second-Class Honours in Organic Chemistry.
 K. S. Wise, Second-Class Honours in Physiology; Third-Class Honours in Organic Chemistry.

Pass List.

Entire Examination; First Division.—J. G. Atkinson, S. M. Lawrence, W. C. Pickering, A. H. Pinder, H. W. Wilson. Second Division.—T. Bates, H. Finzel, S. M. Hebblethwaite, C. R. Keed, E. G. D. Milsom, E. F. Travers, A. D. White.
 Excluding Physiology; First Division.—J. M. Plews. Second Division.—C. N. Davis.
 Physiology only; Second Division.—W. C. F. Harland, H. B. Hill, A. R. Neligan.

Conjoint Board.

Chemistry.—P. H. G. Gosse, A. C. Wilson.
 Practical Pharmacy.—D. E. S. Davies, A. M. A. James, H. F. Webb-Bowen, H. D. H. Willis-Bund.
 Anatomy and Physiology.—R. A. Fuller, S. B. Hambling, G. D. Watkins, M. Herzheim, J. Morris, S. C. Foster (approved in Physiology, four years' regulations).

The following have completed the examinations for M.R.C.S., L.R.C.P.:—F. H. Noko, F. R. Carrol, H. B. Butler, J. F. H. Dally, W. T. D. Mart, W. K. Parbury, H. L. P. Hulbert, H. H. Weir, W. G. Paget, R. T. Cooke, E. G. Smith, J. F. Robertson, E. F. Crabtree, H. Wreford, L. Galsworthy, H. Pritchard, M. B. Scott, W. J. G. Johnson, D. C. O'C. Finigan, E. C. Williams, H. H. Raw, T. C. Neville, J. J. S. Serase, W. C. B. Smith, C. L. C. Owen.

UNIVERSITY OF DURHAM.

Elementary Anatomy and Biology, Chemistry, and Physics.—R. J. Douglas (Second-Class Honours).
 Chemistry and Physics.—R. Biggs, M.R.C.S., L.R.C.P.; J. G. Gibb.
 Anatomy, Physiology, and Materia Medica.—J. A. Bell, L. M. Rosten.
 The degrees of M.B., B.S., have been conferred upon E. G. Klump, M.R.C.S., L.R.C.P., and R. Thorne-Thorne, M.R.C.S., L.R.C.P.
 R. H. Vincent, M.B., B.S., has taken the degree of M.D.

Appointments.

BROWN, T. WARREN, M.R.C.S., L.R.C.P., appointed Surgeon to the s.s. "Java" (P. & O.). * * *
 CATHCART, G. E., M.R.C.S., L.R.C.P., appointed a Civil Surgeon to the South African Field Force. * * *
 CROSS, ERNEST W., M.R.C.S., L.R.C.P., appointed Medical Officer of Infant Orphan Asylum, Wanstead. * * *
 DUIGAN, V. J., M.R.C.S., L.R.C.P., appointed Junior House Surgeon to the Herefordshire County Hospital. * * *
 HIRST, W. C., appointed House Physician to the Bradford Infirmary. * * *
 RUMBOLL, C. F., M.D., B.S., appointed a Justice of the Peace for the County of Wilts. * * *
 THORNLEY, R. L., M.B. (Lond.), appointed House Surgeon to the Dreadnought Hospital, Greenwich. * * *
 WOOD, W. V., M.R.C.S., L.R.C.P., appointed House Surgeon to the Birmingham General Hospital.

New Addresses.

CRACE-CALVERT, G. A., Vale of Clwyd Sanatorium, Llanbedr Hall, near Ruthin, N. Wales.
 KEMP, J. H., Tararna, Avenue Road, St. Albans.
 MOBERLEY, SYDNEY C. H., Winslow, Bucks.
 PATERSON, H. J., 9, Upper Wimpole Street, W.
 SAUNDERS, ALLAN, Hampton Court.
 YOUNG, T., Morthoe, N. Devon.

Birth.

FARNCOMBE.—On October 17th, at Bishopstone, Harborne, Birmingham, the wife of W. T. Farncombe, M.D., M.R.C.S. of a son.

Marriage.

MAXWELL—SAUNDERS.—At the Cathedral, Hong Kong, on 9th October, James Laidlaw Maxwell, M.D., B.S. Lond., Medical Missionary (F.P.M.), Formosa, to Millicent Bertha Saunders, daughter of the late Leslie Seymour Saunders, Esq., Bengal Civil Service.

St. Bartholomew's Hospital



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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 J. H. BOOTY & SON, Advertising Agents, 30, Holborn, E.C.

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,

NOVEMBER, 1901.

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

Sir James Paget.

An Address given by STEPHEN PAGET, F.R.C.S., at a meeting of the Liverpool Medical Club, December 7th, 1901.

IT is a great honour and a great pleasure to speak here of Sir James Paget; and to speak, as a son born after the flesh, to sons born after the spirit. But it was hard to know what more to write about him. For he has told the story of his early life in his own words: and I have added to them, as well as I could, the story of his later life. So I do not bring much that is new with me to-night. But I can at least go over his Memoirs and Letters again, and speak freely of him to men of his own calling, and try to put in words what I learned from editing his Memoirs. I do not set out to tell the whole story of his

life; I take the liberty of saying "just what I like," believing that you will hear most gladly what I best love to say of him.

Let me mention first the chief dates in his life. He was born at Yarmouth in January, 1814, and he died in December, 1899; thus he was born in the year before Waterloo, and lived to see the outbreak of war in South Africa. He left his only school, a day school in Yarmouth, when he was sixteen, and went straight into apprenticeship. He entered at St. Bartholomew's Hospital in 1834, and became qualified in 1836. He became Curator of the Hospital Museum, and Demonstrator of Morbid Anatomy, and in 1843 was appointed Lecturer on Physiology, and Warden of the Hospital College. In 1847 he became an Assistant Surgeon to the Hospital, and gave his first course of lectures on Surgical Pathology at the College of Surgeons. In 1851 he left the Warden's house, and set up in practice in Henrietta Street, Cavendish Square. In 1858 he was appointed Surgeon Extraordinary to Her Majesty Queen Victoria, and moved house to Harewood Place, Hanover Square, where he remained for thirty-six years. In 1871, after a severe illness, he resigned his work at the Hospital. He was President of the College of Surgeons in 1875, and President of the International Medical Congress in 1881, and Vice-Chancellor of the University of London from 1884. He left Harewood Place in 1893, and moved to Park Square West, near Regent's Park. Here he lived in retirement, and at the last in extreme infirmity, and died toward the end of his eighty-fifth year.

While he was still at Harewood Place he gave me the manuscript of his Memoirs, saying, "Do what you like with them; make some money out of them, if you can." The work of editing them taught me many things; and especially it enabled me to see clearly three facts concerning his life, which are plain enough now, but were not so plain before I came to study carefully the whole record. Let me try to say what these three facts are.

The first of them is the singular completeness of his life. Mere length of days is not completeness of life: a man may last a century and die with his life incomplete; but this life, whichever way we measure it, is complete. If we measure it in relation to his family, he was one of a large family, he outlived them all, and was left alone for many years, the last of his generation; and he and his brother brought back the good fortune of their family, and saw the rising again of the star that had gone down over Yarmouth. If we measure it in relation to his wife and children, he married his first and only love, and they lived to keep their Golden Wedding day, the last of half a century of years that were all golden, every one of them. The circle of his children remained unbroken round him to the time of his death. Whichever way we take the measure of his long life—by its output of work in science and practice, by its honours and its appointments, by its friendships, its experiences, or its influences,—by all these and all other estimates we come to the same judgment of it, that it was singularly and wonderfully complete. There were no loose ends, no work half done, no longings unfulfilled; like St. Paul, he finished his course.

The second fact of his life—I will say more of it by-and-by—is the singular happiness of it. I do not deny that the early years in London were often unhappy; but even through them there ran a vein of the precious metal, and this vein grew steadily wider as time went on. It did not always run near the surface of his life; it was overlaid by his incessant work, by official affairs, and by the heavy responsibilities of practice. But there it was always; and every year

means at our disposal. Originally the diagnosis had to be made on symptoms,—night sweats, wasting, free expectoration, etc.; and this disease was necessarily and rapidly fatal. Then came the stethoscope, and with an increasing skill in using this instrument, and accuracy of interpreting the knowledge it imparted, the prognosis improved greatly. Then came Koch and the microscope, and the clinical duration of the disease took a great leap, and the number of cures increased rapidly. These are the considerations that make us profoundly sceptical of this or that much-vaunted line of treatment. For the situation seems to be something like this: if you diagnose your cases in the really early stages, and treat them from that moment seriously and sensibly, the great majority of them will get well, permanently and really; if you do not, no line of treatment will do more than patch up, with more or less success. It is clear that the point here lies with the definition of the words "early" and "serious and sensible treatment." Let me see, if I can get at some sort of definition of these terms. What, then, is early phthisis? Can we define it by certain physical signs? Or can we define it by symptoms? Again I think not. It is by a combination of these two that we can best get an idea of an early case. That is to say, absence of physical signs, or physical signs confined to a small area, and of such nature that they point to a limited and sufficiently resisted lesion, combined with symptoms that do not indicate any substantial poisoning of the whole system,—such a combination would constitute an early case. This is not the place, nor am I the person, to define more accurately what these physical signs are. Such knowledge can only come after much practice and experience. It is obvious that such a definition is vague, and depends very much on the skill and experience of the observer. For instance, some refuse to recognise as abnormal any alteration in the breath-sounds that come short of bronchial breathing. Such a man will never recognise an early case with the stethoscope. Again, there are certain symptoms, without physical signs, that, if not diagnostic, are highly suspicious of tuberculous infection. Prominent among these are hæmoptysis and pleural effusion. There is good evidence that the latter in the overwhelming majority of cases—is certainly true that in all cases of pleural effusion were regarded as such, a considerable number of lives would be saved. As to hæmoptysis, I believe that if we regard the spitting of pure blood by a person in whom we may exclude heart disease and chronic bronchitis as invariably tubercular, we shall not be far wrong. Undoubtedly such a condition as new growth of the lung gives rise to this symptom, but this is comparatively a very rare disease. Of this I am certain, that the presence of some granular pharyngitis, or of an enlarged vein in the pharynx, does not justify us in making the disastrously common diagnosis that "the blood comes from the throat," because we cannot detect any physical signs with the stethoscope. That such a diagnosis is common, and that it is lamentable in its results, a residence in any health resort gives ample evidence. It is probably true that this condition may cause a streaking of the sputum, but that it ever gives rise to the spitting of the highly significant mouthful of pure blood has never been proved, and is in the highest degree improbable. In all doubtful cases, *i. e.* in all cases where the stethoscope does not give indisputable evidence of tubercular deposit, the diagnosis rests with the microscopic examination of the sputum. Here we are met by a difficulty. Supposing the patient denies that he has any sputum?—and many do so. In many cases it will be found that there is some expectoration on first rising, or shortly after the first meal, so insignificant in amount as to escape notice, but quite sufficient for our purpose; in others the patient may be taught to expectorate. But there are undoubtedly some cases where for long times sputum is really absent, and where the diagnosis must remain unproven for a time. I believe this class to be a very small one.

Let me now take as a typical case of early pulmonary tuberculosis a man who has been working hard in a town, who comes to a doctor for a tonic, complaining of feeling run down and slack, and easily tired. On being questioned he owns to a cold hanging about him, and to bringing up a little sputum in the morning; his appetite is capricious, and his digestion frequently at fault; he has lost some weight, and all effort is irksome to him. In a word, he feels as if he wanted a good rest and holiday. You examine him, and find some signs that are suspicious at an apex, perhaps a slight diminution of movement, a flattening of the percussion note, a muffling of inspiration and an accentuation of expiration, on coughing and breathing deeply there may be a distinct click at the top of inspiration. You find that his afternoon tem-

perature, between 4 and 6 p.m., is raised a degree, and is liable to rise higher if exercise has been taken, and on examination tubercular bacilli are found in his sputum. Such a description may be taken as giving the clinical picture of an early case, and one that in all probability would prove amenable to treatment. What line of treatment, then, are we to suggest? Let us suppose that our patient is so fortunate that money is no object. There are three main roads that we may follow, which may be described as the climatic, the sanatorium, and the combination of the two. First, climatic, the sanatorium, and the combination of the two. First, then, as to climate. From time immemorial it has been recognised that tubercular people do better in some climates than in others. Latterly, the climates that we may take as of proved benefit may be classed under three heads: the warm and dry, *e.g.* Egypt; the warm moist, *e.g.* Madeira; and the cold dry, *e.g.* the high Swiss valleys. To these may be added the climate of a sea voyage, which is too varied to come under any distinct head. Of these I think it is now proved that for the great majority of cases the dry cold climates give the best results; at least all the statistics that are obtainable point most strongly in this direction, and the opinion of the most experienced in the matter confirms this statement. I say for the majority of cases, because there are undoubtedly some that do not do well in the intense cold of the Swiss winter; but if our typical patient is a young man, capable of taking sufficient exercise to maintain his circulation in full vigour, and not the subject of marked bronchitis or emphysema, we shall be doing our best for him if we send him out to one of the Swiss valley resorts; that is to say, if we have made up our mind to trust to climate alone to effect the cure.

This brings us to the second road, that which leads to the sanatorium treatment. This is what is erroneously called the open-air cure, and, unfortunately, it has got into the lay papers and magazines, and, in consequence, a great deal of nonsense has been talked about it, to the detriment of the treatment, and to the advertisement of certain enterprising men. Some people seem to think that all that is necessary to cure all cases of pulmonary tuberculosis is for the patient to sit in a draught, preferably in damp clothes, and to eat till he vomits. As a matter of fact, the whole essence of the sanatorium treatment consists in the complete resignation of the patient to the elaborated system of hygiene which the medical head of the sanatorium may devise. In this system, no doubt, abundance of fresh air is an important item, but it is unreasonable to fasten on one factor of the whole of an elaborate treatment, and to emphasise that at the cost of underrating the importance of the others.

Let me describe the general routine of the modern sanatorium. Details, of course, vary in different establishments, but the following description covers the essential outlines of the treatment. The patient is seen by the doctor early in the morning, his temperature taken and charted, the account of the night heard, and any sputum examined; his morning is then mapped out, so much walking, so many hours resting on his outdoor couch, etc. The temperature is taken after the morning walk, and an hour of absolute rest is enjoined before the midday meal. This over, and after another rest, the afternoon exercise is also regulated in amount and rapidity by the doctor—is taken, the temperature is charted after coming home, and again an hour later: another rest before dinner, and a visit from the doctor, who then sees if the temperature has risen unduly after the morning walk. The evening is spent resting out of doors, or in strolling slowly, and the patient goes to bed at 10 p.m. The whole of such a day is spent out of doors, the hours of rest being taken on a couch, usually in one of the many "liegehallen," whose object is to let the patient have the maximum amount of fresh air whilst protecting him from the wind and rain. At night the room is kept freely ventilated by open windows, there being usually some heating apparatus to keep the temperature comfortable. In some places the patients actually sleep out of doors. The food provided is abundant in quantity, and well cooked and served; the patient is urged to eat freely, especially of meat and eggs; if his appetite flags some bitter tonic is prescribed before meals, and the great importance of a liberal diet is pointed out to him. As a matter of fact, with such a life, most men can eat what corresponds to two dinners a day, besides a good breakfast, and many can drink, in addition, a couple of pints of milk in the twenty-four hours. Every detail in such a life is regulated by the doctor, whom the patient sees at least three times daily, and the great guide to the patient is a carefully examined amount of exercise is the temperature chart. The chest is carefully examined at regular intervals, and a note kept of the condition found, so that the progress of the local lesion may be as accurately followed as possible. Such is the outline of the day in a sanatorium for a patient with early or arrested disease. Where the temperature

is pathologically high, and there is other evidence of active disease, much more rest than is indicated above is ordered,—in fact, above a certain temperature the patient is kept entirely in bed, lying in the open air, or as nearly so as possible, and fed abundantly. The temperature at which such a course is ordered varies, no doubt, in different establishments, but a nightly temperature above 100° in the rectum is generally regarded as an indication for complete rest in bed. Too much importance cannot be put on the temperature as a therapeutic sign; if it keeps up it is certain that things are going wrong, and the treatment must be modified accordingly in the direction of greater rest; on the other hand, if the temperature keeps down the exercise may be cautiously increased, for most people agree that the more exercise the better, provided that there is no bad effect on the temperature. This being so, it is important to decide what may be regarded as the physiological variation of temperature, a matter which is by no means easy to settle. One of the best authorities on the subject makes the following rules,—with complete bodily rest a temperature of 99.4° is the top limit; beyond that it must be regarded as pathological. With exercise the temperature may rise to 100°, provided that it falls a degree within one hour of coming in from the walk. These temperatures are taken in the stream of urine: about 1/4 of a degree must be added to the above figures if the rectal temperature is taken. The mouth temperature must be disregarded, at any rate in the colder climates, as it is found that the temperature so taken is often normal when the rectal or urinary temperature is pathologically raised. This is probably due to the mouth being kept open during walking, and to the consequent local lowering of the temperature in the intensely cold air of the Swiss winter.

I do not know if any recent work has been done on the subject, but my experience has taught me that the temperature of the tubercular subject, even in quite an early stage, is in a condition of unstable equilibrium as compared with the normal man, much less leads to a rise, and fatigue, even when short of any subjective sensation, makes its impression on the temperature chart. I have known many cases where a keen rubber of Bridge has raised the temperature a degree and a half, and in these instances even the mild excitement so afforded must be forbidden.

Let me now examine the theory on which this life of rigid régime is based. It may be briefly put thus:—You place the patient under the most ideally perfect physical conditions which experience and general principles suggest. You let him take just sufficient exercise to maintain his circulation and excretion and to stimulate his appetite; you encourage him to eat abundantly of the best food, and you watch his digestion carefully, and if necessary correct it; you supply him with the utmost possible quantity of the purest air you can obtain, and, for the same reason, you rigidly forbid any breathing of contaminated or unduly heated air; and you attain these purposes by making the patient live, as far as possible, in the open air. You apportion his rest with the same nicety, and you constantly watch for any special symptoms that may arise, and, if necessary, modify the routine on their account. In a word, the patient lives as carefully regulated a life and as much under medical control as a typhoid patient. It is as absurd to describe the one as the open-air treatment as the other as the bed treatment.

Such, then, very briefly and roughly, is the sanatorium treatment of pulmonary tuberculosis which has come into such prominence lately, and has led to such excellent results. There are many points at issue, concerning which diametrically opposite opinions are held. For instance, people will say that climate has nothing to do with the matter, and that the treatment may be as successfully carried on in the damp and uncertain English winter as in the pungent dryness of the Swiss valley, or the balmy sunshine of the Italian Riviera. Another will say that the object to be obtained is complete rest of the affected part as far as that is possible, and such a man will put the "lung into splints" by prescribing almost continual rest, whilst another will tend to disregard the local conditions, and will trust to getting the patient into the best possible health, and to nature doing the rest. These points cannot at present be settled dogmatically one way or the other; probably here, as elsewhere, the truth will be found to lie somewhere between the two extremes. My own experience would lead me to assert that climate is a very important factor, and that the ideal treatment is to be attained by a life such as I have sketched lived in the high Swiss valleys or in some similar climate. The advantages of these places are many: the great brilliancy of the sun, and the extraordinarily stimulating effect that cold, dry, rarefied air has on almost all people: appetite is increased, weight added, and a general sensation of "fitness" and exhilaration experienced. The comparative absence of wind, and the entire

absence of rains and mists, encourage people to live out of doors, and the fact that the ground is covered by many feet of snow for five months in the year means a practically dust-free atmosphere, that in itself tends greatly to diminish bronchial and laryngeal irritation. Whether there is the definite specific anti-tuberculous element in such a climate that was at one time spoken of is more doubtful, but it is difficult not to believe that the breathing of absolutely pure air must have a curative effect on the local condition. So much do I believe in the importance of the climate, that for a sensible patient, who would rigorously follow instructions, a residence in Switzerland, with a regular visit to a good doctor who would watch the progress of the case, would be more beneficial than a course at a sanatorium in England; and it must be remembered that there are some very real disadvantages in the latter life. In the first place it is intolerably irksome to some people, and the constant companionship of invalids and comparison of symptoms has a very depressing effect, which reacts detrimentally on their health. With other people the close supervision and the accurate recording of symptoms induces a condition of hypochondria which has ruined many lives. Such people cease to believe in the possibility of health, they are depressed almost to suicide by a purely negligible loss in weight, or by a trivial catarrh, and they finally reduce their existence to a valetudinarianism that is pitiable in the extreme. The great advantage of the sanatorium is that it impresses on the early case that he is an invalid, and makes him tolerant of the care which returning health and vigour tends to cause him to resent, so that probably all cases would do well to start for a month or so in a sanatorium for the sake of the drill; then, if all is going well and the patient is sensible and amenable, it is usually wise for him to go to the high resorts and complete the cure there. He will thus learn to take the requisite care, and will not have the touching and erroneous faith in the climate which leads many of the younger men to go to Davos or St. Moritz, and spend their lives in the billiard rooms of the hotels, breathing an atmosphere which is probably more impure than that of the underground railway or of the Abernethian room, and believe that they are deriving immense benefit from the wonderful Engadine air.

We have now got our patient under the most ideal conditions we know of for the restoration of his health: he is in a climate of rare excellence and of proved benefit for his particular complaint; he is provided with abundant food, and encouraged to eat plenty of it; and every detail of his life is subordinated to his health, and under constant skilled supervision. Can we do any more for him? It will be readily answered that of course any symptoms that arise should be dealt with on approved principles, and that especially a careful watch must be kept on his digestive and assimilative processes. So simple a remedy as H. Gent. & Rheo. and Tr. Nuc. Vom. must not be forgotten if the appetite begins to flag and the Swiss cooking ceases to interest, and an occasional dose of calomel will work wonders when the stomach and intestines are beginning to weary of the liberal diet. An additional aid to nutrition which in some cases is of the very greatest value is the administration of the juice expressed from raw beef by means of a special apparatus. Two pounds of beef will yield about twelve ounces of the juice, and if this is taken in separate doses daily it will often be found to increase the appetite and weight of the patient in a most marked manner. Apart from the digestion many attempts have been and are being made to affect the local lesion. In this context the magic word creosote rises to our lips, and I suppose about few remedies have such absolutely contradictory statements been made. It has been given by every conceivable route—by the mouth, by the rectum, subcutaneously, intra-venously, and by inhalation. I am not in a position to add anything to either side of the controversy; I can only say that my own experience has taught me that in many cases creosote and its derivatives, especially Guaiac. Carb., have a distinct effect on reducing the amount of sputum, that in other cases no result can be traced to its administration, and that unless a distinct benefit is derived from moderate doses it is no use pressing the remedy. One other attempt to deal directly with the infection may be mentioned, *i. e.* the inhalation of formalin vapour. This may be done in many ways: the most satisfactory is by mixing the solution of formalin with various essential oils and a little chloroform to modify its irritating qualities, and giving it frequently on a Burney Yeo inhaler. In this manner solutions of considerable strength may be used. I have known a case inhale a 40 per cent. solution for six hours a day without inconvenience, and a decided effect is often produced on the amount and character of the expectoration. Probably the action is not so much on the primary lesion as on the secondary bronchitis and in many the secretion left in the larger tubes. But that the net result is on the

every twenty-eight days, only occasionally as soon as twenty-one days or as late as thirty-five days. Duration four days. Quantity of blood lost, average necessitating one diaper *per diem*. Some pain in lower part of abdomen before and during the first onset of the flow, the pain passing off before cessation of flow. She menstruated regularly from July 2nd to July 5th, 1901, and again from July 30th to August 2nd; i.e. on each occasion for four days with an interval of twenty-four days.

August 7th, that is, five days ago, patient began to lose blood *per vaginam*. She had not injured herself in any way. She had no pain or even discomfort.

August 11th.—Bleeding continued, and at end of four days she was too exhausted to do her work.

August 12th.—She was admitted to Hospital. She was blanched, but a well-nourished, sensible girl. Pulse was 100, soft and small. Respirations were 30. Temperature 98°. She was not restless but only exhausted. Blood was being lost very slowly *per vaginam*. The breasts were of the virgin type. All the other organs were healthy. Heart and lungs natural. No albuminuria.

August 13th.—In spite of rest, ergotin, and hot vaginal douches, bleeding did not cease.

Forenoon.—The pulse frequency was rising 110. A pelvic examination was made. *Per hypogastrium* nothing abnormal discovered. *Per vaginam*, inspection showed an intact, crescentic, non-dilated hymen. Vagina will just admit one finger. Cervix, usual situation; texture healthy; canal closed—nulliparous type. Bimanually, uterus in natural position; not enlarged; moveable. *Per speculum* ("duck-billed"), cervix healthy; no mauve discoloration; blood and mucus oozing from external os.

Blood-count:—Red cells 42 per cent., hæmoglobin 25 per cent., leucocytes 1 to 50.

In the afternoon. Pulse rising to 120, temperature 101°, loud systolic murmur over pulmonary area has appeared since admission.

In the evening (twenty-four hours after admission).—Bleeding showed no signs of cessation—eighteen pads have been saturated in last twenty-four hours, pulse rising to 130, temperature 102.4°. The lips and conjunctivæ were bloodless, and patient was restless and drowsy. The opinion arrived at was, "that loss of blood is excessive, exhausting the patient;" "that it is uterine;" "that it is probably due to a local cause," e.g. mucous polyposis; "that the cavity should be explored as soon as possible."

At midnight.—Patient was anaesthetised with chloroform and placed in lithotomy position, athwart the bed. The vagina having been irrigated with one in two thousand biniodide of mercury, the cervix was steadied with volsellum and the canal dilated up to 1 cm. diameter. Ovary forceps were passed up to the fundus, but no growth was discovered. The uterine cavity was curetted. An uterine douche one in two thousand biniodide of mercury was given, and the cavity of the uterus swabbed out with pure tincture of iodine. During the process bleeding was fairly free.

At Dr. Soltau Fenwick's suggestion supra-renal extract, 5 gr. ad 3j, was poured into the vagina. The mucous membrane of the vagina at once felt indurated, and the os actively closed. All bleeding at once ceased, and did not recur. Cyanide gauze tampon was applied and removed next day.

August 14th.—Blood-count: Red cells 1,000,000, hæmoglobin 12 per cent.

August 17th.—Blood-count: Red cells 2,100,000, hæmoglobin 18 per cent.

Thenceforward the patient progressed satisfactorily, and was discharged 19th September, after a normal menstrual period.

A Case of Opium Poisoning.

By GODFREY LOWE, M.R.C.S., L.R.C.P., L.S.A.

CASES of opium poisoning are sufficiently frequent to warrant special attention being paid to those that present any novel features, either in the way of symptoms or treatment. It is estimated that three-fourths of the cases of poisoning in children under five years of age are due to opium. This drug has a peculiarly fatal effect on children, a case having been reported where a child of nine months old was killed by a dose of four drops of laudanum (less than ¼ gr. of opium).

At the same time some children present marvellous powers of recovery. A case is recorded (Hays) where a child who had swallowed a powder containing 7½ gr. of opium mixed with powdered chalk recovered with scarcely a symptom. The case I have to record is one where the child took a large dose and recovered, but only after the most dangerous symptoms had occurred.

I was called by Dr. A. L. Peacock, of Lincoln, on September 25th, at 4 p.m., to see a child, Lottie B., aged two years and three months, at his house, to which she had been brought, having at 2.30 p.m., two hours after a meal, swallowed between 1 and 1½ drachms of laudanum (Tinct. Opii). On my arrival I found the child had been given a large dose of zinc sulphate followed by strong black coffee, but had not vomited. She was very drowsy, and was with great difficulty kept awake, face dusky, breathing stertorous, pupils contracted, pulse small and rapid. I passed a tube, and washed out the stomach with a solution of Potass. Permang. (gr. 1 ad Oj) till the fluid returned clear. The patient seemed to recover somewhat, and was taken home. At Dr. Peacock's request I undertook the subsequent treatment of the case. I saw her shortly after 5 p.m.; she was then insensible and could not be roused. Resp. 12, stertorous and shallow; pulse over 200, very thin; face cyanosed. Gave hypodermic of Atropin. Sulph. gr. 1/30, which was followed by no apparent change. I repeated the dose at 6 p.m.

The pupils became slowly dilated, but the respirations became shallower and almost ceased. Artificial respiration was employed for about ten minutes, when the breathing improved. At 7.15 p.m. I gave a hypodermic of Strych. Sulph. gr. 1/30. At 8 p.m. the face, which had previously been pale, became flushed; the child remained absolutely unconscious, no reflex whatever could be obtained. At 9 p.m. the whole skin was flushed, hot, and dry, pupils widely dilated; respirations 22, much improved; pulse 180, better tone; temperature 104.6°. As the temperature seemed to increase (at 9.30 it was 105.6°) I commenced cold sponging the skin. I was afraid that the child was only going to recover from opium poisoning to die of hyperpyrexia. I kept applying a sponge wrung out of cold water to the whole surface of the skin, and had the satisfaction of finding the temperature gradually go down. By 10 p.m. it was 100.2°, and at the same time some slight movement of the hands was noticed, and a slight plantar reflex could be obtained. There was never any sign of convulsive movements. The improvement continued, and at 10.30 p.m., on being propped up, the child opened her eyes. At 10.45 p.m. I left, telling the friends to send for me if any serious symptom occurred, and instructing them to go on sponging the limbs only as long as they continued hot and dry. I called next morning and found her sitting up sucking a "dummy." Consciousness was said to have returned at midnight. I ordered calomel 3 gr. to be given at once, and two teaspoonfuls of castor oil to be given at night. I also ordered a mixture containing small doses of bromide and belladonna. Since that time she has made rapid progress, and except for extreme restlessness, which continued for some days, is now quite well.

The case is remarkable owing to the large dose of the poison originally taken, the length of time after a meal increasing the likelihood of its being absorbed, and the length of time which elapsed before our aid was obtained. The puzzling feature of the case was the high temperature which supervened some hours after. Whether this was due to some action of the poison on the heat centre I cannot say, but that seems a likely explanation.

A Case of Gummatus Iritis with Loss of an Eye in a Child aged One Year.

By G. V. BULL, M.B.

THE following case is interesting on account of the early age of the patient and the severity of the affection, resulting in softening and perforation of the cornea.

V. T., æt. 1, was brought to the hospital on account of his eyes on October 18th, with the following history—Two weeks ago the left eye "became bad," being reddened, and the cornea misty. The right eye followed.

When first seen there was interstitial keratitis and iritis in the left eye. There was no breach of surface of the cornea. The iris

was discoloured, and there were large yellowish masses projecting into the anterior chamber. There was complete posterior synechia. The right eye showed similar but less extensive disease of the iris, and no keratitis. A week later, as there was no improvement, the child was admitted.

Past history.—Bad "snuffles" in first month of life; coppery rash at three months. Scarring of the face.

The mother had one miscarriage (?) before the birth of this her only child. The father admits having had syphilis six years ago. The eye was banded and atropine put in, but in spite of this the cornea gave way on the 27th (unfortunately no one saw what came out). The other eye began to improve, and the pupil dilated a little in the outer quadrant. The child gradually went downhill with obstinate diarrhoea; erysipelas and joint pyæmia supervened, and he died in six hours.

Past mortem.—The most noticeable lesion was in the left testicle, which was much enlarged, the tunica albuginea being very thick, and sending bands of fibrous tissue into the body of the organ. There was no naked-eye fibrosis elsewhere, except perhaps in the pulmonary arteries, which were thickened.

Interstitial keratitis is most common after five years of age, and rare so early as one year. It is also very rare for perforation to result, and I have been unable to hear of a case. It seems probable that in this case the iritis was the primary affection, and extended to the cornea, which softened and gave way owing to the severity of the inflammation, assisted possibly by the development of secondary glaucoma.

I have to thank Mr. W. T. Lister for permission to publish a note of this case.

The Advantages of Ethyl Chloride as a General Anæsthetic.

By H. F. PARKER, M.B., B.C. (Cantab.), House Physician to the Wolverhampton and Staffordshire General Hospital.

THE discovery and employment of ethyl chloride as an agent of general anaesthesia dates only from the year 1895. Since that time it has been used with gratifying results on the Continent, in Germany, Switzerland, France, and also in America. Its introduction into

England is due, I believe, to Dr. W. J. McCardie, of Birmingham, who translated into English two papers on the subject by Dr. G. Lotheisen, of Innsbruck, where most of the first investigations were carried out. These translations were published in the *Birmingham Medical Review* for January and December, 1900, and should be read by any who are interested in the subject.

The form of apparatus usually employed is that known as Breuer's mask, which consists of a hollow metal globe connected by a spring valve with the facepiece. The ethyl chloride, which on account of its great volatility is kept in graduated glass tubes of 50 c.c. capacity, is sprayed as required through an opening in the globe on to a small piece of gauze contained therein; the expired air passes out of the apparatus by a second valve, so that no re-breathing is possible. The general appearance of the mask is shown in a diagram among the advertisements in the *Lancet*.

Anæsthesia is usually complete in from one and a half to two or three minutes, and, though not deep, is sufficient for many operations in minor surgery.

Recovery also is very rapid, patients usually regaining consciousness within a minute or two from the time of removal of the mask.

The anæsthetic is very pleasant to take, and there is a complete absence of unpleasant after-effects, such as headache, nausea, or giddiness; in fact, as far as the anæsthetic is concerned, patients can usually walk away from the operating table.

The advantages of ethyl chloride in suitably chosen cases are very marked. It appears to be a very safe anæsthetic, and, so far as I know, only one fatal case has been recorded out of several thousand administrations, that one occurring during a fit of struggling in a man with fatty degeneration of the heart with arterio-sclerosis of the coronary arteries and aorta.

The effect on pulse and respiration is very slight; there is no cyanosis or stertor, and only occasionally vomiting or struggling. On the other hand, muscular tone is generally retained, and therefore it is unsuitable for operations in which muscular relaxation is necessary (e.g. for hæmorrhoids and for most laparotomies).

The right degree of anaesthesia is generally secured when the lid-reflex is lost, and the corneal reflex is either dulled or completely lost.

During the past few months I have administered ethyl chloride in the form known as kèlene in some 120 cases, mostly for minor operations. They include the opening of abscesses, removal of tumours, circumcisions with sounding for stone, dental extractions (14), tonsils and adenoids (8), empyemata (3), trephining for depressed fracture (1), etc.

On the Continent it has been used in major operations lasting an hour or more, but I feel doubtful of its superiority over the usual anaesthetics in such cases.

The cost of the outfit is not great, and portability is a great advantage.

The ethyl chloride is used at the rate of about 1 c.c. per minute for children, and a little more for adults. Men may require as much as 2 c.c. per minute.

The 50 c.c. tubes cost about 3s. each net, and the Breuer's mask a guinea or something less.

What I frequently use, however, in place of Breuer's mask is a simple contrivance in which the globe of this inhaler is attached to a Barth's (nitrous oxide) valve apparatus, and this again to an ordinary rubber facepiece. I have also tried Junker's inhaler and one or two "closed" methods, but have not found them so good as either of the above.

As with any anæsthetic, improvement comes with practice, but I feel sure that anyone who will give it a fair trial will not be disappointed with the results.

A Lament.

Oh the days gone by, the days gone by,
The days of second college and the old "Pre-Sci."
The merry, merry evenings at the festive "sup,"
The journeys down to Richmond for the football cup!
The future seemed so distant, no cloud was in the sky,
It all seemed beer and skittles in the days gone by.

Oh the days gone by, the days so free from care,
The friends and jolly faces in the old Bart.'s square;
The luncheons at the cake shop off the prehistoric bun,
And the dodging of the tailor with his monthly little dun!
Sixpence now is sixpence, and I wonder with a sigh
Why it seemed to be a shilling in the days gone by.

F. W. GALE.

Notes.

DR. GEE has been appointed Honorary Physician to the Prince of Wales.

* * *

SINCE our last issue a vacancy has occurred on the Surgical Staff through the resignation of Mr. Willett. It is always a matter of deep regret to witness the operation of the "age limit" rule, and it is particularly hard to lose one

of our staff while he is apparently enjoying vigorous health, and his faculties, far from being diminished by advancing years, seem to be ripening in the sunlight of experience.

We feel sure that we shall only voice the feelings of the whole Hospital in expressing our sense of sorrow that Mr. Willett should no longer be an active member of the Visiting and Teaching Staff; still there remains one consoling thought when we consider the age limit in all its aspects, namely, that it is a point of no little pride that our staff should enjoy such health as to lead to what may seem a somewhat premature retirement.

Mr. Willett entered Bart.'s in 1857, qualifying in 1859 (having previously studied for two years at the Sussex County Hospital, Brighton); he was House Surgeon from October, 1860-61, Surgical Registrar in 1862, appointed Warden of the College 1865, and in the same year was elected Assistant Surgeon on Sir William Lawrence's resignation. At Mr. Callender's death in 1879 he became full Surgeon. Since Sir Thomas Smith's resignation Mr. Willett has been Senior Surgeon to the Hospital.

Mr. R. C. BAILEY has been appointed Surgical Registrar *vice* Mr. Waring, resigned.

CHRISTOPHER ADDISON, M.D., B.S.(Lond.), F.R.C.S., Professor of Anatomy at University College, Sheffield, has been appointed Lecturer on Anatomy at Charing Cross Hospital.

Mr. H. JOSSE JOHNSON has been appointed Principal Medical Officer to the Gresham Life Assurance Society.

Mr. V. S. A. BELL has started for Abyssinia as Medical Officer to an exploring expedition, under the command of Mr. H. S. H. Cavendish.

THE degree of M.D.(Cantab.) has been conferred upon Mr. J. Cropper and Mr. H. W. P. Young.

Mr. F. K. WEAVER and Mr. T. Gillespie have taken the degrees of M.B., B.C., at the University of Cambridge; Mr. O. Inchley that of M.B.

London M.B. Examination Honours List.

C. J. THOMAS, Scholarship and Gold Medal in Medicine and Gold Medal in Obstetric Medicine.

A. E. THOMAS, Gold Medal in Forensic Medicine and Second Class Honours in Medicine.

E. E. YOUNG, First Class Honours in Obstetric Medicine. Our hearty congratulations are due to the above. It is some years since we made such a heavy bag.

A FINE white marble bust of Her late Majesty, by R. Onslow Ford, has been placed in the Great Hall. It is a gift to the Hospital by Mr. Homan, one of the Governors.

A. O'NEILL and L. R. TOSSWILL have been playing for Devon in the County Championship matches, and the latter has been chosen to play in the International Trial match, North *v.* South.

WE regret that the Hospital only had one member of the Association Football team chosen to represent it in the match *v.* Middlesex on December 5th. *Absit omen* for the Cup Ties.

THE Mid-Sessional Address of the Abernethian Society will be given in the Anatomical Theatre on January 11th, by Dr. Champneys, who has chosen as his subject "Some Pages from the Ancient History of Obstetric Medicine and Surgery."

A CORRESPONDENT, whose signature was formerly well known in these columns (F. W. Gale), has put out a suggestion that a register should be published of all Bart.'s men, past and present. The undertaking would be immense if it were to include all known entries for the past eight centuries. It would be interesting if any reader could inform us how far back the official record of students goes; a complete Biographical History of the Hospital would be of great antiquarian value; but it might entail more time and labour than most Bart.'s men would be able to devote to its compilation.

WE understand that the Musical Society has been passing through chequered times, the trouble being that amid a glut of instrumental talent no conductor was forthcoming. At length, however, Dr. Haydon has undertaken the arduous duties, and the Christmas entertainment will have its usual orchestra.

By the way, "The Magistrate" is promised as the Christmas play—a somewhat difficult task for the Hospital Dramatic Club, seeing that the female *roles* are filled by the sterner sex; yet, with the recollection of "Dandy Dick" before us, we anticipate with some confidence an unusually successful performance on January 9th and 10th.

THE forthcoming thirty-seventh volume of the 'St. Bartholomew's Hospital Reports' will be issued to subscribers about the middle of January. It will contain, amongst other contributions, articles by Sir Dyce Duckworth on "The Pathogeny of Chorea," and Dr. Langdon Brown's essay on "Pylephlebitis," which gained the Horton-Smith Prize at the University of Cambridge for the year 1900-1. There will also be papers by Mr. Butlin, Mr. Walsham, Mr. D'Arcy Power, Mr. Jessop, and Mr. McAdam Eccles. The financial position of the 'Reports' is still in an unsound condition, and further subscriptions are impera-

tively necessary if the series of volumes is to be continued. All gentlemen willing to subscribe, whether students or qualified, should give their names as soon as possible to Mr. P. F. Madden, in the Library of St. Bartholomew's Hospital.

WE regret that the Annual Dinner of the Amalgamated Clubs has had to be postponed, at any rate for the present. A notice, asking for the names of all willing to attend, has been displayed for some time on the Notice Board; up to the present very few names appear on it. Last year's dinner was a great success, and it was hoped that the experiment then tried for the first time, of having the dinner early in the winter session, instead of in the summer, would prove equally successful in future.

MESSRS. ARNOLD AND SONS, the well-known surgical instrument manufacturers, have again received the highest award for excellence in workmanship at the Naval and Military Exhibition, Crystal Palace, and also the highest award at the Military Exhibition, Earl's Court.

Correspondence.

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

IS IT GOOD ENOUGH?

THE REORGANISATION OF THE R.A.M.C.

SUCH a lot of correspondence by various distinguished folk has lately been poured into the medical papers, on the question of the reorganisation of the R.A.M.C., that a few ideas on the subject by one who has for some years watched that service, and who has lately had the honour of working with it in South Africa, may not come amiss.

Twice, quite recently, I have been stopped in the square by Bart.'s men with the remark, "Look here, you have seen something of the R.A.M.C.: is it good enough?" You will see at once that this question eliminates many principles which would require consideration otherwise.

Patriotism, which drives a man, of the standing of one of our own surgeons or physicians, out to the war, is eliminated, and it simply remains a question of "is it good enough?"

To consider this, we must look at it from several points of view—social prospects, prospects as far as the practice of medicine and surgery, and monetary prospects. Take the position of a recently qualified man who enters the R.A.M.C. As all Bart.'s men are (or ought to be) old residents, we will imagine that he is thoroughly conversant with the ordinary civil hospital discipline. That is to say, though he does not patrol the square and wards in a spruce uniform, he is accustomed to good discipline, which is all the stronger because its actual enforcement is not obvious. We are all aware of the respectful help of the ward sister, the discipline of the nurses, and through them of the patients, and the box carriers and porters are as a body useful and courteous. Well, our young man goes to Netley, where he appears as a S.O.P. (surgeon on probation). This sounds rather a fine title, but I can assure you that its owner has rather a thin time of it there.

Watched like an infant at his food in the mess, treated as of less importance than a raw dresser or clerk in the wards, his position in the eyes of the sick soldier or the ward orderly is ridiculous.

The old soldier amuses himself in a hundred ways at his expense. In the corridors, a talking sergeant of the R.A.M.C. will pass him with a leer, pipe in mouth. Small things to be offended at, you think, but work with the army and then speak. The only sign of respect for an officer is the salute of the soldier. It will strike you that you can, by your manner or professional ability, force respect

from the men. You are mistaken. Your manner must conform to the stereotyped (I had nearly written sealed) pattern as closely as possible, and your professional ability will not get much of a run at Netley. Good training to make an officer, I suppose, but deadly to the medical man, the essence of whose life is individuality tempered by knowledge.

Thus at the very outset of his career the young S.O.P. will find himself by no means in a bed of roses. Passing out, I presume he will go to Aldershot for a while, and thence either to India or South Africa. In a letter of Surgeon-General Hamilton in the 'Brit. Med. Journ.', November 23rd, 1901, he states that he has it on good authority that it is intended to keep officers at home for the first four years, that is till they have passed as captains.

This is, with all due deference to Surgeon-General Hamilton's authority, rather a chimera. How the service abroad, especially India and South Africa, could be worked without the newly entered men being used I cannot see. Even an attempt to keep some of them at home would deprive many hard-worked officers of their opportunity of getting sick leave.

Supposing he goes to India. What a prospect! The very men who were with him at his hospital, and who are now in the I.M.S., have a tendency to look down on him (if you doubt this, talk to any I.M.S. man home on leave); whilst he has neither pay nor honours to compensate for the dangers of the climate. That the dangers of fever are great I have seen so many instances. Many of the R.A.M.C. officers whom I saw in South Africa had come straight from India, and most of them were rotten with fever. I use the expression "rotten" advisedly, their strength was so undermined that they fell easy victims to any disease. And of course these men could not be expected to pay the great and unceasing attention necessary to their patients. They did their best under the circumstances, but their enfeebled constitutions rendered their best a little weak.

Socially I do not know the disadvantages talked of. A doctor, unless he forgets that he is primarily a doctor even before he is an officer, will always be treated with every consideration by the army. The men who have complaints to make about their treatment socially by combatant officers, are generally only too deserving of social oblivion, and had they not been in the army would have had even less standing.

Financially the service is not bad. The pay, except in India, is fair as long as one is unmarried. Marriage with no private income means a heavy struggle.

A very pertinent letter in the 'Brit. Med. Journ.', November 9th, 1901, signed "India is the Crux," really puts the matter of Indian service very well and forcibly. And now a few words on the reorganisation scheme.

After General Ian Hamilton's speech at St. Thomas's Hospital, at the opening of the winter session of the medical school, one of its physicians expressed his conviction that the new scheme would attract the best students that the hospital could supply.

One can but doubt this rosy view, that is if the student once understands the troubled career that lies before him if the present reorganisation scheme is adopted in its entirety.

A young medical man will enter for the examination, and, for the purpose of my argument, we will suppose that he passes with credit. He then serves in the R.A.M.C. for his first three years, also with credit. At the end of this time he can either retire, or if "his services have been satisfactory" he will be allowed either to continue serving or to enter the reserve.

Let us consider first the case of his entering the reserve. He receives the sum of 1s. 4d. a day; that is to say, a sum four times as great as that received by a private of the army entering the reserve. We may dismiss without further question the idea that the committee of reorganisation intended to pay the medical man for his liability to be called up for service, and that therefore the £25 a year is merely intended as a retaining fee.

Unable to live on this money, our doctor proceeds to act as an assistant for a while, and having gained the necessary knowledge of private practice, does one of three things,—enters into a partnership, buys a practice, or, as it is commonly called, "squats," with the idea of slowly building up a practice by his own merits. In any of these ways we may safely say that he will expend a capital of £500 to £1000 before he earns sufficient to live comfortably out of his practice.

We will give him three years in which to suppose he has got a comfortable practice together and has married. Then war breaks out—another colonial or "beyond-the-seas" war. The medical reserves are at once called out. At a moment's notice he has to

leave his practice and go. His earnings are reduced from, say, £600 to £700 to his bare pay, that is about £400, and on this he will have to keep up his home establishment.

Medical men will know the difficulty of obtaining a really reliable *locum tenens* when there is plenty of time to choose, and in peace. In time of war, when most of the junior men will be keen to proceed to the front as civil surgeons, the difficulty will be greater. In any case, even if our medico did get a *locum*, it is unlikely that his practice, so recently established, would survive the removal of its maker. Doctors and patients know how strong the personal element is. So that I think you will see at once that from the point of view of the medical man who has entered the army medical for three years the medical reserve is a great danger.

Perhaps he would have to remain on active service two years or more, and in that time his practice and his own knowledge of the methods of private practice would have disappeared, and he would, unless he was "allowed to return to the active list" (in which case two thirds of the time he has services were no longer required, he indeed badly off when his services were no longer required. The privilege of returning to the active list we can fairly think would not be a great attraction to him, since he has already left the army after his three years' service. I know that it will be advanced against me that by the wording of the paragraph "he will be permitted to retire;" but if he does unconditionally, where is the value of this "reserve" scheme? And now suppose he is keen on an army career, and elects to continue to serve. He then proceeds to be attached to a hospital for six months; that is, I suppose, if the exigencies of the service permit it, and I do not see that unless the numerical strength of the R.A.M.C. is about trebled he will have much chance of getting his study leave.

Even before the war there were many officers of the R.A.M.C. who have had but small part of the leave due to them, as the shortness of numbers, sickness, or special conditions have prevented them getting their due.

But we will suppose that he gets his chance of study, and then he has all the pleasure (?) of preparing for an exam. competitive in character, with the knowledge that if he passes it he has got another in six years' time, and again after another six. I feel indeed sorry for the poor medical officer, whose sorrows are thus renewed again and again.

The worst of the examinations is the last—the one for Lieut.-Colonel.

Let me cite a case, which any one conversant with the R.A.M.C. will at once see might happen. Major X., R.A.M.C., has say fifteen to eighteen years' service, and has reached his present rank after excellent work both in the field and in peace service. His last station has been in, say, Burma. He is full of fever, broken in health, has applied for sick leave, when a War Office letter reaches him ordering to England for three months to prepare for his examination. He returns home, is ill with fever most of the time, not sufficient to actually keep him in bed, but quite sufficient to prevent him working at books. He goes up for his examination and is ploughed. He is depressed, in bad health, over-anxious, goes up again and again fails. I think we will all admit that Major X. may be an excellent practical man, and yet fail at exams., especially the last one, where many subjects (ten) must all be taken together, and where a higher standard (50 instead of 40 per cent.) is required than in the other exams. He is compulsorily retired on a gratuity (!) of £2500, broken in health, and unfit for civil work.

What an "awful example" for the candidate for the R.A.M.C. ! There is a saving clause in the report that "he may, by special permission of the Secretary of State, complete twenty years' service and then retire on pension;" but, unless the first part of this clause is a farce—and this special permission is extended to all failures—how hard this compulsory retirement will press on some individuals! It seems absurd to think that an officer whose services have been valuable for so many years should suddenly become useless as the result of an examination.

I see no clause in the scheme which provides for special consideration or extra marks being allotted to officers who have done good work in the field or in hospitals. Clause 49 provides for brevet, but it is not considered apparently for cases not quite deserving brevet, and yet worthy of reward.

I have rather gloomily dilated on one or two points of the scheme which will make it, I am afraid, unpalatable to the young medical man who wishes to serve his country in the R.A.M.C., but who thinks before he does so. It is better they should see these disadvantages now than have them appear before them after they have entered the service.

I do not know how many medical practitioners or even consultants would retain their present positions if they were subjected to searching examinations on all professional subjects plus hospital management, hygiene, civil law affecting lunatics, military law, etc., every six years or so.

Many of the reforms seem excellent, although one cannot quite see to what point the "specialism" which is going to be so encouraged will succeed. Supposing a Major R.A.M.C. becomes a specialist in otology, I wonder how many cases of "mastoid" will come into his hands?

To sum up by returning to the question asked above, "Is it good enough?"

If you are keen on a military life rather than a professional one, fond of pleasant military society, an open-air life, and have private means, I suppose it is; but if you are very jealous of your medical work, or criticism of it, unable to stomach affronts (shall we say touchy?), or want to make money—no.

Of course the reorganisation may really alter things for the better. No one for a moment doubts the thorough honesty of its backers, but will it succeed? And if the scheme succeeds will it tend to improve the military doctor? Time will show; like the Scotchman, "I hae ma doots."

A. G.

Amalgamated Clubs.

RUGBY FOOTBALL CLUB.

"A" TEAM.

ST. BART'S v. ST. THOMAS'S HOSPITAL "A"

Played at Winchmore Hill on November 20th, and resulted in a win for St. Thomas's by 1 goal and 3 tries (14 points) to nil.

Team:

G. P. Jones (back); N. M. Wilson, C. H. Cross, H. C. Waldo, W. R. Favell (three-quarters); W. H. Scott (capt.), W. Loughborough (halves); A. Ryland, R. M. Miller, E. C. Hodgson, R. M. Rankin, J. H. Roberts, R. Jamison, A. J. Kindrew, and R. V. Favell (forwards).

ST. BART'S v. SURBITON "A"

This match was played at Surbiton on Saturday, November 23rd, and resulted in a win for the Hospital by 3 goals (15 points) to 2 tries (6 points). The tries were gained by Scott, Haines, and Plews. Scott converted all 3 goals. Team:

G. P. Jones (back); N. M. Wilson, J. M. Plews, F. H. W. Brewer, R. L. Haines (three-quarters); W. H. Scott (capt.), C. H. Cross (halves); R. M. Miller, E. C. Hodgson, C. F. Nicholas, J. H. Roberts, H. M. Huggins, W. R. Pooley, S. Trevor-Davies, and A. J. Kindrew (forwards).

ST. BART'S v. LONDON HOSPITAL "A"

This match was played at Lower Edmonton on Wednesday, November 27th, and ended in a win for the London by 1 goal 3 tries (14 points) to nil. Team:

G. P. Jones (back); R. L. Haines, F. H. W. Brewer, C. H. Cross, V. C. Upton (three-quarters); A. C. Wroughton, W. Loughborough (halves); T. A. Izard, A. Ryland, E. C. Hodgson, J. H. Roberts, H. V. Wenham, R. V. Favell, G. S. Watkins, and T. W. Chaff (forwards).

ST. BART'S v. UPPER CLAPTON "A"

Played on the ground of the latter on Saturday, November 30th, and resulted in their favour by 14 points (1 goal 3 tries) to 1 goal. The try was gained by Haines and converted by Scott. Team:

R. C. McDonagh (back); R. L. Haines, F. H. W. Brewer, H. C. Waldo, G. P. Jones (three-quarters); C. H. Cross, A. J. Kindrew (halves); W. H. Scott (capt.), C. F. Nicholas, H. M. Huggins, A. J. Symes, W. R. Pooley, J. H. Roberts, R. Jamison, and S. Trevor-Davies (forwards).

ST. BART'S v. COURT HILL.

Played at Beckenham Hill on Saturday, December 7th, and resulted in a win for the Hospital by 10 points (2 goals 3 tries) to 5 points (1 goal); tries gained by Scott (2), Singh (1), Owen (1), and Haines (1). The two goals converted by Scott. Team:

G. P. Jones (back); K. S. Singh, H. B. Owen, F. H. W. Brewer, R. L. Haines (three-quarters); W. H. Scott (capt.), F. R. Carrol, E. C. Hodgson, C. F. Nicholas, A. J. Symes, J. H. Roberts, W. R. Pooley, S. Trevor-Davies, R. V. Favell, and H. V. Wenham (forwards).

UNITED HOSPITALS HARE AND HOUNDS CLUB.

The date for decision of the Inter-Hospital ten miles cross-country race is only about six weeks distant, and it is hoped that any men who are interested in this fine sport will turn out as often as possible in the near future. It will be remembered that last year, although we had first man home (J. G. Gibb), St. Thomas's won the cup by two points. We hope to improve upon that effort this season and win outright. The present conditions allow any number of runners to represent each hospital, the first three to count. This should be an incentive to men to train for this event, as they are certain of having an opportunity of showing their prowess. The form shown in this contest will in great measure enable the Committee to determine the team of six to race against Dublin University at Dublin on February 21st, and a pretty useful team should be available, although the distance (six miles) is rather against such fine stayers as J. G. Gibb and A. C. Birt. Dublin, however, would not race over ten or even eight miles. Had the longer course have been agreed to our chance would have looked very rosy. Only a few individuals find their way to Winchmore Hill for Wednesday runs, the most regular being P. Gosse, A. C. Wilson, F. S. Lister, G. Orton, and T. Bates. A very pleasant course of about five miles has been obtained, and the runs are thoroughly enjoyed by the participants.

December 17th was quite a "field day" at our headquarters at Blackheath, the Blackheath, Ranelagh, and United H. H. and H. Clubs holding a conjoint friendly run over seven miles. J. G. Gibb, A. C. Birt, F. S. Lister, H. Barnett, and G. Orton ran prominently in the various packs. Birt is the possessor of a very fine deerhound, which always runs with the fast division, and is much admired both for its appearance and utility in warding off the attacks of various small dogs we happen to encounter.

Abernethian Society.

THE fourth ordinary meeting of the session was held on October 31st, Mr. Danks in the chair. A paper was read by Mr. G. V. Bull, on "Some Forms of Cirrhosis of the Liver in Children." He thought the condition was

commoner than was generally supposed, as it was not infrequently discovered by accident, and many cases of what was possibly or probably cirrhosis were never examined microscopically. He had collected 56 cases, 14 of these being due to congenital defect, 14 due to syphilis, 3 to specific fever, 2 to tubercle, 1 to alcohol, the rest being of doubtful origin. The paper was illustrated by specimens from the museum and by microscopical specimens, and a case in a child of six was shown due to congenital syphilis, the liver being nodular and reaching to the umbilicus.

The chief symptoms and pathological appearances were described. The congenital cases were taken separately. In these jaundice was always present, hæmorrhage in 11 cases, and vomiting in 7. In the other cases ascites was present in more than half, jaundice in 18, vomiting and hæmorrhage in 16. The commonest mode of termination in these cases was with high fever, probably due to the absorption of some toxin from the system.

Nervous symptoms, such as delirium and convulsions, were also common, occurring in 8 of the second series of cases. Acute yellow atrophy and thrombosis of the hepatic veins occurred in 2 cases. A case was also mentioned where paralytic symptoms occurred, and *post mortem* cirrhosis of the liver was the only lesion found.

In the discussion which followed some form of intestinal poisoning was suggested as a probable cause of many of the cases.

At the end of the meeting the Chairman gave information of a gift made to the Society by the Very Rev. Dean Fleming of three engravings, which were of general and antiquarian interest to members of the Hospital. Suitable acknowledgment of his kindness was made to the Dean. The engravings are hung in the Society's room.

The fifth ordinary meeting was held on November 7th, Mr. Shrubbsall in the chair.

Mr. Nixon read a paper on "The Evolution of the Medical School," in which he endeavoured to trace from the earliest times the history of the teaching of medicine rather than its practice. Taking as his starting-point the Egyptian civilisation as furnishing the most reliable historical evidence of the existence of any organised

system of medical education, he passed through the scant records which exist, and discussed the rise of Greek medicine from Æsculapian times to those of Hippocrates, showing how from the Hippocratic school medical lore spread over Eastern Europe until the fall of the Byzantine Empire, with the subsequent decline of all medicine save such as was preserved among the Arabian schools. From this source the monasteries of Monte Cassino, and later Salerno, revived and brought to Western Europe those seeds of knowledge which were destined to give rise to the Universities of Padua, Bologna, and later Oxford and Cambridge. English medical schools in their modern form owed everything to these universities, and in no small degree the foundation of scientific medicine was due to the work of one man, Dr. Caus, who introduced into Cambridge practical anatomy. The separation of surgery from medicine and the development of the College of Surgeons out of the Barber-Surgeons' Company occupied a considerable part of the paper. Finally, the causes which determined the influx of students to the hospitals for clinical study and the various phases of hospital education closed an interesting historical survey.

There was considerable discussion after the paper, the President bringing forward some facts on medical education which anticipated the period with which the paper dealt by several ages.

The sixth ordinary meeting was held on November 14th, Mr. Danks in the chair.

Mr. Gask read a paper on "The Dangers and Difficulties of Minor Surgical Operations." He dealt with the various operations *seriatim*.

Circumcision required mainly care and neatness for success. Should not be done on very young babies unless necessary, and then without general anaesthesia. The incidence of hæmorrhage and sepsis was discussed, and the time for operation placed under the two heads of "absolute necessity" and "convenience."

Adenoids ought to be accurately localised. Lowenberg's forceps were useful for discrete growths; the ring knife for a mass process, as commonly by growth in longitudinal folds. He quoted Arbuthnot Lane and Semon on the subject, and deprecated indiscriminate operation, some cases only needing constitutional treatment.

Tonsillotomy required, in his opinion, an instrument with a keen cutting edge. Its dangers were from sepsis, too vigorous removal, and from anaesthetics, and recurrence might be troublesome.

For *varicocele* the open operation was best. Possible complications were orchitis, due to manipulation; atrophy of the testis from privation of the blood-supply, and collapse from anaesthetics. He recommended palliative treatment in all but the worst cases. Operation should be determined by presence of pain, physical distress, impending atrophy of the testis, and the requirements of the services.

Tracheotomy and intubation were discussed, especially in relation to diphtheria.

Minor amputations were also dealt with, Mr. Gask drawing attention to the remarkable vitality in the hand, and to the utility of even a small stump.

The paper concluded with some useful observations upon "needles in the hand" and *abscesses*.

There was a very good discussion.

A clinical evening was held on November 22nd, Mr. Shrubbsall presiding.

Mr. Bull showed two cases.

(i) A boy with an injured ankle. There were swellings in the neighbourhood of both malleoli, and shortening of the leg to the extent of half an inch. He excluded osteo-arthritis, syphilis, new growth, and tubercle, and gave his diagnosis as Dupuytren's fracture.

Mr. West found no widening between the malleoli, disregarded the slight shortening, and suggested swellings of the synovial membranes of tibialis anticus and the peronei, Messrs. Scott and Hunt concurring.

(ii) A case of scurvy rickets in a child. There was no question of diagnosis; its interest lay in the fact that the characteristic hæmorrhagic swellings were limited to the cranium.

Mr. Picton showed a case of epidermolysis bullosa in a patient who had been the subject of the disease from childhood. The bullæ appeared as the result of friction upon knees, elbows, toes, and knuckles.

Mr. Shrubbsall showed microscopic sections, and gave the diagnosis from other similar diseases.

In reply to Mr. Waterfield, Mr. Picton said his treatment was to prevent friction, Unna's soap locally, and arsenic internally.

Mr. Niall showed a case of a woman who four years ago had a

pimple on her left cheek, followed by two small papules on the back of the neck, which had developed into a large saddle-shaped eruption extending down to the upper lumbar spine.

Mr. Picton thought that it was a syphilitic or seborrhoeic nature. Mr. Izard concurred.

Mr. Niall stated that he would put the patient on mercury and iodide of potash, and show the result to the Society on another occasion.

Mr. Sale showed a case of a woman who had unilateral tremor, which came on when she was seven months pregnant, and had persisted. He excluded paralysis agitans and hemichorea, and thought the tremors functional. Mr. West agreed. Mr. Picton could not so easily exclude paralysis agitans.

Mr. Pinker showed a case of syphilitic periostitis to demonstrate the beneficial effect of mercury and iodide of potash, combined with rest in bed and massage.

Mr. Maclaren showed two cases.

(i) A case of hairy black tongue, or nigrities, with illustrative microscopic specimens. The disease came and went *sponte sua*, and resisted all treatment.

(ii) A man whose hand had been crushed in 1892, and whose little finger, and later the whole carpus and parts of the metacarpals, had been removed. The result was very satisfactory. The man had now a deformed but useful limb. *Cave hasty amputation.*

Review.

ELEMENTS OF PRACTICAL MEDICINE. By A. H. CARTER, M.D., F.R.C.P. Eighth Edition. H. K. Lewis. Price 10s. Pp. 500.

The fact that this book has already run through seven editions in twenty years is in itself a sufficient proof of its popularity in the estimation of those to whom it is addressed.

The medical student is supposed to require his food chopped very small, and, thanks to the efforts of his caterers, the student seems to thrive on this fare.

There can be no doubt that of books of this class, which are intended only to give beginners a brief survey of the subject, this is among the best.

A great deal that one regards as essential to the description of any particular disease is of necessity left out, and especially we have to complain of the complete absence of what may be called the *clinical picture* of the disease. The symptoms are tabulated with praiseworthy accuracy, the variations from the common type detailed, and the course and complications described in due order, but there is nothing about all this to suggest a *patient* to the reader. The stress of examinations has rendered this method of studying medicine customary if not obligatory, and Dr. Carter has met the need in the best possible way.

New Productions.

Petanelle. PATÉ BURKE AND CO., 6, Wool Exchange, E.C.

We have received from the manufacturers various samples of the above surgical dressings, which are made of peat-fibre wool. The wool is of a very light texture, and possesses excellent absorbent properties. For profuse discharges these dressings prove to be far better suited than most of the other preparations in the market, as the wool retains its elasticity and does not "felt" like other dressings.

Pus is uniformly diffused through its substance instead of soaking through merely at the point of contact.

For empyema or colotomy wounds, where the discharge is being poured out in large quantities, we have found this dressing unusually satisfactory.

The wool is non-odorous and does not tend to stick to the skin, nor does it give rise to any irritation. For padding of splints its elasticity renders it exceptionally applicable.

The reasonable prices at which the several preparations are sold add greatly to their other advantages.

Calendar.

1901.

- Dec. 17.—Dr. Gee and Mr. Langton's duty.
 " 20.—Sir Dyce Duckworth and Mr. Marsh's duty.
 " 21.—Winter session divides.
 " 24.—Dr. Hensley and Mr. Butlin's duty.
 " 25.—Christmas Day.
 " 27.—Sir Lauder Brunton and Mr. Walsham's duty.
 " 31.—Sir Wm. Church and Mr. Willett's duty.

1902.

- Jan. 3.—Dr. Gee and Mr. Langton's duty.
 " 6.—Winter session resumes.
 " 7.—Sir Dyce Duckworth and Mr. Marsh's duty.
 " 9.—Abernethian Society. Mid-session Address by Dr. Champneys, "Some Pages from the History of Obstetric Medicine and Surgery."
 " 10.—Dr. Hensley and Mr. Butlin's duty.
 " 11.—A.F.C. v. Civil Service. Away.
 R.F.C. v. Lennox at Stamford Bridge.
 Hockey Club v. Enfield at Enfield.
 " 14.—Sir Lauder Brunton and Mr. Walsham's duty.
 Final College Examination begins.
 " 15.—A.F.C. v. Richmond Association at Shepherd's Bush.
 R.F.C. v. Royal Engineers at Chatham.

Examinations.

UNIVERSITY OF LONDON.

M.B. Honours Examination.

C. J. Thomas, First-Class Honours, Scholarship, and Gold Medal in Medicine; First-Class Honours and Gold Medal in Obstetric Medicine.

A. E. Thomas, Second Class Honours in Medicine, First Class Honours and Gold Medal in Forensic Medicine.

E. E. Young, First-Class Honours in Obstetric Medicine.

M.B. Pass Examination.

First Division.—R. A. Lloyd, R. H. Paramore, C. A. S. Ridout, A. E. Thomas, C. J. Thomas, E. E. Young.

Second Division.—L. E. Dickson, E. W. J. Ladell, E. V. Lindsey, F. H. Noke.

New Addresses.

ADDISON, CHRISTOPHER, Charing Cross Hospital Medical School, W.C.

CORNISH, SYDNEY, The Old House, Dorking.

FORD, F. C., 1, Sunnyside, Wimbledon, S.W.

GUTCH, J., 12, Museum Street, Ipswich.

ROSE, E. F., Chalfont St. Giles.

WREDFORD, HEYMAN, The Firs, Denmark Road, Exeter.

Births.

COLEMAN.—On December 3rd, at Beaufort House, Castle Street, Reading, the wife of Maurice W. Coleman, M.B., of a son.

NICHOLLS.—On November 4th, at Longton, Staffs, the wife of Hubert Nicholls, M.D. Cantab., M.R.C.S., J.P., of a son.

Marriages.

HENSHAW—GARNER.—On August 21st, at St. Cyril's Church, Stonehouse, Gloucester, by the Rev. C. Strudwick, M.A., Harry Williams Henshaw, M.R.C.S., L.R.C.P., D.P.H., of 1, Priory Terrace, Kew, to Caroline Louise, eldest daughter of George K. Garner, of Springbank, Stonehouse.

PAGET—HARRIS.—On November 28th, at St. John's Parish Church, Croydon, by the Vicar, the Rev. Canon Pereira, M.A., R.D., Walter Gray Paget, M.R.C.S. (Eng.), L.R.C.P. (Lond.), only child of the late John Gray Paget, Esq., of Nindaroo, Mackay, Queensland, to Edith Helena, youngest daughter of John Charles Harris, M.R.C.S. (Eng.), L.M., etc., of Waddon Bridge House, Croydon.

St. Bartholomew's Hospital



JOURNAL.

VOL. IX.—No. 3.]

DECEMBER, 1901.

[PRICE SIXPENCE.]

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, F.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 J. H. BOOTY & SON, Advertising Agents, 30, Holborn, E.C.

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,

DECEMBER, 1901.

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

Installation of the President.

ON Tuesday, December 4th, H.R.H. the Prince of Wales was formally installed as President of St. Bartholomew's Hospital in succession to His Majesty the King.

The ceremony took place in the Great Hall at a General Court of Governors.

The Prince of Wales, who was attended by the Hon. Derek Keppel, was greeted on his arrival in the square by the whole of Bart.'s in manner worthy of the best traditions

of the Hospital, and was received officially on the steps of the Great Hall by the Treasurer, Sir Trevor Lawrence; the four Almoners, Mr. R. Grey, Mr. J. R. Cooper, Mr. Alderman Alliston, and Mr. G. Baker; and Mr. Cross, Clerk of the Hospital.

In the Hall the Governors, with the medical and surgical staff and certain favoured guests, were awaiting His Royal Highness's entrance, which was made amid loud applause.

Sir Trevor Lawrence having taken the chair, with the Prince of Wales on his right hand and the Lord Mayor (Sir Joseph Dimsdale) on his left, the proceedings of the Court were opened by reading of the minutes of the last General Court.

The Treasurer then delivered a speech, in which he reminded those present that the Hospital of which His Royal Highness had been pleased to accept the presidency was one of great antiquity. It was one of the oldest, if not the oldest institution of the sort within the limits of the Empire. St. Bartholomew's was founded in the reign of Henry I, in the year 1132. He believed that at that time there was no Lord Mayor of London, nor even a Mayor of London, but it was recorded that the first Mayor of London was a very good friend of the Hospital, and he scarcely need say that many of the Lord Mayors of the City had been most valued friends of the institution. What happened between the time of Henry I and Henry VIII it would be very difficult to say, but towards the end of the reign of Henry VIII the Hospital was re-founded at the instance of Sir Thomas Gresham. That was in 1544, and in the last year of that reign the estates and property of the Hospital were in a great measure restored to it. The endurance of the Hospital through all these centuries bore emphatic testimony to what was, after all, one of the characteristics of our national institutions—their singular vitality. The Hospital had been doing a great work of mercy and charity for a long course of years. There were in the institution 674 beds, and 70 beds in the convalescent home, making 744 in all. During the past year there had been, in round numbers, 6100 in-patients, 134,000 out-patients and casualty patients, and 1000 patients in the convalescent home. The average attendance of patients during the last ten years had been 150,000, and it would be difficult to calculate the amount of good done during these long years by such an institution towards the diminution of the sum total of human suffering. The patients were attended by a medical and surgical staff fifty-eight in number, and by 243 sisters and nurses, while the 519 students of the medical school rendered very valuable service by the work which they performed in the wards. The Hospital enabled the poorest in the land to obtain the advantages of the highest professional skill, the most perfect nursing, and the best treatment. Hospital and school had done their work in producing the ablest men. Harvey, whose name stood pre-eminent in the Middle Ages, was physician to the Hospital in the year 1609,

and many other distinguished men had succeeded him. St. Bartholomew's had always held a very high position in the affections of the citizens of London. It was the only Hospital for the reception of the sick within the limits of the City, and the decorations of the Hall showed how countless generations of citizens had done their best to maintain, endow, and advance the work of the institution. He wished to bear emphatic testimony to the great interest which the King had ever taken, during his long presidency of thirty-four years, in this Hospital, and to the valuable services which he had rendered to it. His Majesty had always been accessible to his predecessors and to himself as Treasurer, and had invariably shown the greatest interest in the work. He might call to mind the fact that His Majesty was good enough to preside over the Court in July of last year, and give his help towards securing part of the site of the Hospital. He should like, on behalf of the Governors, of the staff of all degrees, of the citizens of London, and of the poor patients treated within the walls of the Hospital, to tender His Royal Highness grateful thanks for the gracious and ready kindness with which he consented to the request that he would become President. They ventured to hope that His Royal Highness would long rule over them as their President, and felt confident he would show the same interest in the Hospital as had been so graciously and so constantly manifested by the King.

Mr. Cross, who performed the same office at the installation of King Edward as President thirty-four years ago, then read to the Prince of Wales the Governor's charge:

"Your Royal Highness having been elected and chosen a Governor of St. Bartholomew's Hospital, it is your duty and charge to acquit yourself in that office with all faithfulness and sincerity, endeavouring that the affairs and business of the said Hospital may be well ordered and managed, and promoting the weal and advantage of the poor, wounded, sick, maimed, and diseased persons harboured in this Hospital. To this end Your Royal Highness is now admitted a Governor of St. Bartholomew's Hospital."

The Prince of Wales was handed a copy of the charge, a Governor's staff, the rules and orders of the Hospital, and the calendar of the medical school, these being respectively tendered by the four almoners. Next His Royal Highness was asked to receive his charge as President, which was in the subjoined terms:

"Your Royal Highness having been elected President of this Hospital, Your Royal Highness is to be received as its chief ruler and Governor. Your Royal Highness is to convene General Courts at such times as you may deem necessary, or be required by resolution of the House Committee, or by requisition in writing, signed by thirteen Governors at least. And Your Royal Highness is to preside at the same, as well as at committees, and on all other public occasions that you may think proper to attend."

The Prince of Wales then took the presidential chair amid loud cheers, and made the following speech in a clear voice, which was audible in all parts of the Hall:

"Sir Trevor Lawrence, my Lord Mayor, and Gentlemen—I thank you for the great honour you have done me in electing me President of your Hospital. I can only say that I am proud to become associated with an institution whose history dates back to the twelfth century, and which ever since then has worked for the relief of pain and suffering among the poor of the City of London. I look upon it as a very great compliment to have been asked to succeed my dear father, who, as Sir Trevor Lawrence has just told us, held the position as your President for thirty-four years. He certainly took during that time the keenest interest in the welfare of St. Bartholomew's Hospital, and he wishes me to assure you that that interest will be maintained. I fully realise the responsibilities of the trust which you have to-day confided in me, and you may certainly count upon my services being always readily given to further the good work of this institution, with which I so heartily sympathise."

Sir William Church and Mr. Langton were then presented to His Royal Highness as the senior members of the medical and surgical staff in the Hall.

Among those present were the Lord Mayor (Sir Joseph Dimsdale), Mr. Sheriff Bell, Sir J. Whittaker Ellis, Sir Reginald Hanson, Sir J. F. Ritchie, Mr. Alderman Vaughan Morgan, Alderman Dr. Crosby, Mr. Alderman Pound, Sir F. Dixon Hartland, M.P., Mr. B. L. Cohen, M.P., Sir James Blyth, the Rev. Sir Borradaile Savory, and Sir E. Durning Lawrence; the members of the medical staff; also the Matron and sisters.

Before leaving the Hall the Prince of Wales inspected the bust of Queen Victoria, one of the late Mr. Onslow Ford's last works, which has been presented to the Hospital by Mr. E. Homan, one of the Governors.

His Royal Highness then drove out of the square amid the loud cheers of those who had not had the opportunity of being present at the actual ceremony.

Weak Hearts.

A Clinical Lecture by Dr. GEE
(Reported by Dr. HORDER).

AM going to lecture to-day upon some diseases of the heart not often met with in hospital practice. There are many diseases met with among private patients which we do not come across during hospital work. The reasons for this are two: the conditions of life differ in the two classes of patients; and secondly, those admitted into hospitals do not usually come for treatment until their disease seriously incapacitates them for work, so that it often happens by this time that the original disease is obscured by some late development of it. These considerations apply markedly to diseases of the heart. In hospital almost all heart affections are due to valvular disease, any affection of the muscular structures of the heart being secondary to affection of the endocardium. In private practice such cases are less often met with, many cases of heart disease being muscular or nervous from the first. Again, in hospital the cases of heart disease are great in physical signs—murmurs, thrills, etc. In private practice auscultation and percussion more often than not are of little avail unless to tell us there is nothing wrong with the heart that they can discover. They will tell us what is not present rather than what is. The indications of the disease are certain symptoms, not physical signs. Lastly, in hospital the patients with heart disease are mostly youths or persons in the prime of life. In private practice the patients with heart disease are mostly past middle life. One chief reason for these points of difference is that rheumatic fever is common among the

class of patients attending hospitals, whereas it is quite uncommon in private practice.

It is difficult to give any more distinctive name to the kind of heart disease I am describing than the one I have chosen as the title of this lecture: "weak hearts" is sufficiently descriptive for our purpose.

I. The symptoms may be arranged into three groups: (1) sensations referred to the neighbourhood of the heart; (2) shortness of breath; (3) changes in the pulse.

(1) Sensations referred to the heart.—(a) Sensations more or less like pain. Patients will often refuse to use the word pain in describing their symptoms. As to the severity of the pain, in many cases it is certainly very slight; in other cases there are all degrees of pain up to what must be called angina pectoris. Angina pectoris generally occurs in men, and is usually associated with an ill-nourished and degenerated state of the myocardium. In women slight attacks of angina pectoris often seem to be more of the nature of a neuralgia—what the text-books sometimes term "pseudo-angina pectoris,"—one kind of what the patients call heart attacks. During a severe heart attack the extremities sometimes become cold and blue. A condition which is also sometimes present is what is called dead fingers.

The situation in which these painful sensations are felt is not constant. (i) It may be somewhere over the heart, and here it is sometimes associated with a feeling of tightness or constriction round the chest, hence the name "angina," first given to this sensation by Heberden. (ii) Sometimes in the epigastrium, and then at first it may not be easy to distinguish this heart pain from stomach pain. (iii) Sometimes elsewhere; for instance, just below the right nipple, or between the shoulder-blades, high up.

(b) Palpitation. This, like pain, varies very much in character in different cases. (i) Sometimes all the heart-beats are sensible to the patients, a condition which they describe as thudding or thumping. (ii) Sometimes only a beat now and then is sensible to them; there is a prolonged diastole (during which it may be found, on examination, that the pulse at the wrist intermits), and then the heart gives a sort of kick, which is felt by the patient, and goes on beating again regularly for a time.

(c) Patients sometimes speak of their heart fluttering; this comes on in paroxysms, which are more or less prolonged and associated with great frequency of the pulse (tachycardia). This is another form of heart attack.

(d) Other indescribable sensations referred to the heart. These are very definite to the patient, but very difficult to put into words. When they are bad there is great distress, and the patient may feel, and look like, dying. "Anguish" is a word sometimes used to express this symptom.

These sensations are often brought on by exertion, such as going uphill or upstairs, by excitement, by indigestible food, by flatulence, and by other causes which the patient

finds out by experience, such as slight looseness of the bowels. These sensations may occur during sleep, waking the patient up.

(2) Shortness of breath.—This is felt on slight exertion, such as going upstairs. Let me remind you of the dictum of a French physician, that if a patient complain of shortness of breath, don't examine his lungs but examine his heart.

(3) Changes in the pulse.

(a) The pulse may be frequent, sometimes very frequent, or even too frequent to count, when it may be shown by the sphygmograph to be 200 or more; but even with this great frequency it may be quite regular. This condition is apt to occur in paroxysms, associated with fluttering of the heart, and lasting an hour or two. Sometimes the pulse cannot be felt at all, the patient seems to be dying, and the skin feels cold. These paroxysms sometimes seem due to stomach disorder; and when this is so the patient may vomit, and all is over.

(b) The pulse is often irregular or intermittent. It must be remembered that old people very often have an intermittent pulse without any other evidence of disease.

(c) The pulse is usually soft and small. But in the earlier stages of the disease the pulse is sometimes hard (increased tension), a condition which aggravates the disorder of the heart because of the resistance in the circulation which the weakened heart meets with.

II. As regards the physical signs there is little to say, because there is nothing definite. The heart's impulse is often weak, and sometimes it is impalpable. But the patient is often fat, and sometimes emphysematous, so that this condition cannot then be taken to mean weakness of the heart. The heart-sounds are either quite natural or are weak; any murmur, if present, is weak. By percussion some extent of dilatation can sometimes be detected; other evidence of dilatation may be that the apex-beat is sometimes found too far to the left, and that there is sometimes marked jugular pulsation, especially when the patient is in the recumbent position.

III. The pathology or nature of these symptoms.—We are a good deal in the dark as to this, for two reasons: in the first place, post-mortem observations are not often obtained, because the cases occur among private patients; and secondly, the patients do not die in the early stages of the disease. So what I say on this point is more or less speculative. But there is little doubt that at first it is a nervo-muscular affection, sometimes the muscular and sometimes the nervous element predominating. The muscular element is probably degeneration of the heart fibres, tending to produce a fatty heart; and this seems to occur especially in men. But in many cases the whole course and result of the disease lead us to think that this muscular element is small; therefore we assume the disease to be mainly due to defective innervation of the heart, the ner-

vous element predominating over the muscular. The fact that some of the cases recover supports this view. These cases constitutes the "pseudo-anginal" affections of textbooks. They are mostly found in women. In the case of a woman we always have to ask, are not many of these symptoms purely nervous? Probably in most cases there is a combination of these nervous and muscular elements. There is one other point bearing upon the pathology of the disease; in men there is often clear evidence of arterio-sclerosis, not nearly so often in women—a condition which gives the heart more work to do, and at the same time that it is less able to do it.

IV. *Etiology: the Conditions under which weak heart occurs.*

(1) *Age.*—The patients are usually past middle life, that is thirty-five years and after. Occasionally they are younger, thirty years; the disease very often begins about fifty.

(2) *Sex.*—We have already referred to this, and to the probability of muscular degeneration being greater in men. In women under forty you are probably right if you regard this affection as being mainly nervous.

(3) The tendency to this affection of the heart undoubtedly *runs in families*. I know a family, five members of which, as they have reached middle life, have suffered from the complaint.

(4) *Exciting causes.*—These are worries, cares, business anxieties, overwork, hurry, and excitement. Not mere overwork, but this accompanied by excitement, the passions or affections being involved; work on the Stock Exchange, "exciting work," not mere overwork of the brain or body. If you want an ocular demonstration of what I mean, go to Waterloo railway station at half past five in the evening. Such people say they are "living against time." There are some enigmatical sentences handed down to us from antiquity, and called the symbols of Pythagoras. One of them says, "Eat not the heart," which is interpreted to mean avoid anxious cares. Milton speaks of "eating cares." And there is a fragment of Pythagoras extant which amplifies the symbol I quoted just now, "Spare thy life, lest thou devour it by the passions of the soul." At first sight it may seem strange that these things should tell more upon the heart than upon the brain; but it is so. The passions and affections are referred to the heart more than to the head even in common language; corroding cares were what Pythagoras had in mind when he said, "Eat not the heart." Like the patient himself, his heart is in a perpetual hurry, and so becomes worn out.

Young people can go through all this without any apparent ill-effect, but it begins to tell after the prime of life. The disease is very common in business men who have lived a toilsome exacting life; in those who have speculated or gambled; in men who have worked up a large business from small beginnings, and have become

rich, perhaps excessively rich; and the sad thing is that just as they reach the time which they have looked forward to for enjoying their wealth their heart gives way, and thenceforth they can enjoy nothing. The meals of such men are hurried and irregular, they have no lunch, and they are in the train when they ought to be at dinner. Most of them live out of town and hurry to catch their morning train. They have to get up early in order to be at business. There is no quiet breakfast, nor any time for a short rest after it. And many of these men are so gluttonous for work, it is to them like alcohol to others, they are always busy and cannot keep quiet. Not satisfied with their business, they load themselves with gratuitous work; they are churchwardens, secretaries of various societies, etc.; and this kind of work takes them out at night when they are already tired by their day's business. They often indulge a great deal too much in alcohol and tobacco; and tobacco excess is often more difficult to deal with than over-indulgence in alcohol. Sometimes they are gouty, and then they are almost sure to suffer from those arterial changes of which I spoke just now.

I have spoken thus fully of business men because they will make up the bulk of your patients. But professional men suffer in the same way, particularly medical men and clergymen. Some medical men live a life which is simply deplorable; there is never a moment by night or by day which they can call their own. I have known men flee from this kind of thing at less than twenty-four hours' notice, possessed by the one dominant feeling that they must get out of it at once. Clergymen also suffer nowadays; "even Sunday shines no sabbath day" to them,—and the same holds for doctors.

In ladies the same thing happens under different circumstances, as domestic worries, and often in comparatively young women, about thirty to thirty-five years of age, when the cause is apt to be nursing, especially nursing some relative at home, year after year, with broken rest; the question of the emotions comes in again and tells upon the heart.

(5) But hearts like this are sometimes found in people who lead quiet temperate lives, with no special anxieties. The exciting cause here is that we must die of something, and must grow old,—and people do not usually grow old altogether; one organ grows old first, sometimes the arteries, sometimes some other organ, sometimes the heart, in which case we are apt to call it a "senile heart;" the heart is old, worn out. It is the beginning of the end.

(6) For the last twelve years rather a common cause of this form of heart disease has cropped up in the shape of *influenza*. It occurs especially in people past middle life, and is not uncommon. It sometimes occurs during, and more often after, the attack. It is sometimes severe, and there may have been no affection of the heart before. When we remember the way influenza lays hold of nerves it

is not improbable that it may affect the nerves of the heart sometimes. The heart's action is feeble; the pulse very feeble, very frequent or very infrequent, irregular and intermittent; there is palpitation and pain of all kinds about the heart, sometimes pain exactly like that of angina pectoris. The heart attack may come on acutely, and may be, in rare cases, fatal during the early stage of influenza. Most people who have suffered thus never wholly recover, the heart being left permanently weak; you often hear them say, "I was quite well until I had the influenza, but have never been right since."

In hospital work rheumatic fever is the commonest cause of heart disease, but is uncommon among the well-to-do, and therefore heart cases are not of the same sort in private practice as in hospital.

(7) *Strained heart.*—This condition usually comes on suddenly, during severe exertion. It may occur at any age, in children even; but it is most often found in people about the prime of life. To mention two cases: a lady of thirty years, during swimming, was seized with a bad heart attack; a clergyman of thirty-six, playing hockey, experienced sudden pain over the heart and "collapsed." Golf, gymnastics, and what is unquestionably a more common cause, bicycling may lead to the same result. Bicycling is quite a common cause in oldish people, for whom it is a dangerous occupation except in a mild form; cycling fast or climbing hills is risky. Not a few old men have had a sudden syncopal attack whilst bicycling, and died a few hours after. But excessive bicycling may lead to this result at any age, even under twenty, and particularly in females; but sometimes in males also; still, it is more dangerous in young women. I remember a young woman who was very strong, riding in a bicycle race,—both excessive and exciting work,—and all at once she had to give up because her "heart was all over the place." These strained hearts seldom recover completely, no matter at what age the condition begins. I know myself a number of people who have had to give up bicycling because their hearts could not stand it. In Hyde Park six years ago it was quite the fashion for people to bicycle in the mornings; you do not see it now, and there are a large number of cycles stored away in cellars because their riders have had to give up the exercise.

(8) *Tobacco.*—Of this as a cause of weak hearts there is no doubt. This is the "smoker's heart." The same may be said of tea.

In many of the patients, especially women, there are other evidences of nervous debility or neurasthenia: constant headache or backache; being very easily fatigued,—the chief evidence of nervous debility; an atonic form of dyspepsia; sleeplessness; low spirits.

V. *Course of the disease.*—People past middle life, I am disposed to say, never wholly recover. But if they take care, and give up the cause of the trouble, they may live

many years and at last die of something else. There are many people who know they have "a heart," and that there are many things they cannot do. The disease tends to be progressive, especially if not treated. The disease ends in one of three ways: (i) by the development of unmistakable angina pectoris with all its dangers; (ii) as fatty heart with its tendency to syncope; (iii), and most often, as dilated heart with dropsy,—this being the condition under which we meet with the disease in hospital wards. For occasionally we see this form of heart disease in hospital, but it is at this stage. There are no signs of valvular disease, no history of rheumatic fever, and the condition suggests this diagnosis; the patient being poor, no care has been taken, and the disease has ended in dilated heart. I believe a woman at present in Hope illustrates this fact. I speak with doubt, because these dilated hearts act so feebly that the patient may have extensive valvular disease which does not yield a murmur. Sometimes all three conditions concur, an event which soon brings about a fatal ending. The disease is usually slow, lasting for years; beginning at about forty-six, a patient may go on without materially changing his mode of life, and die, generally with dropsy, at sixty. Though the progress is usually slow, yet if it begins in oldish people it is often rapid; when due to influenza it may be as brief as two or three weeks, and even if occurring without obvious cause the end may come within two or three months of the first symptom.

VI. *Treatment.*—We can only set before the patients what we should like them to do. Many cannot carry out the advice; others will not. They must lead a very quiet life, with no hurry of any kind. Exercise is necessary, but must be moderate,—there is none better than walking, and unless the patient is very ill no harm whatever can come from it. Exclude bicycling altogether. It is very important to attend to the digestion; so close a sympathy is there between the heart and the stomach that if the stomach is at fault the heart is sure to suffer. Patients must avoid tough meat of all kinds, as well as other hard foods like potatoes and carrots. Inasmuch as the teeth are often bad, because the patients are getting on in life, it is necessary to see that the food is soft and tender; you may order it to be pounded and rubbed through a sieve. Bread is generally bad for these people, not being very digestible. Good crisp biscuits, that will almost break up without chewing, should be substituted. They must not eat in a hurry nor over-eat; and many elderly people, though they do not eat more than when they were young, eat the same amount and cannot digest it, and this is over-eating for them. If they are wise they will not take so much as when they were young and vigorous; but this is a failing not uncommon with men. Most people drink too much at meals. These patients especially should not drink more at these times than is necessary, and not at all

unless thirsty. As a rule nitrogenous food, such as meat, fish, milk, and eggs, is better than too much carbohydrates. If the patients are fat, and they often are, diminish it if possible. If they lose a stone or so in weight, all the better. They should be very temperate in respect to alcohol; a little does no harm, but any excess is bad. Alcohol is not so pernicious as tobacco or tea, especially tobacco. Tobacco is such a tyrant that it is extremely difficult for a man who has the habit to do without it; but you can get it diminished very much, though with a great effort. I generally tell them that tobacco never did anybody any good, and they usually confess that I am right, only, as they say, they like it.

In the earlier stages of the disease get the patient away from exacting business of any sort, if possible for six months' holiday. It is better that he should leave home, but where he goes to depends upon the time of year. What people call a bracing climate suits much better than a relaxing one. Almost any temperature will do, provided it is not too warm. The east coast of Scotland is an instance of a good place, the south of France an instance of a bad one. A moderately high-lying place is good, but there must be no climbing, at first at any rate, not even rapidly going upstairs. Some time ago I met with a very singular instance of this. A gentleman aged forty, suffering from this sort of heart, went to Abyssinia for a change. He knew his heart was weak. Abyssinia is a high mountainous place, a kind of table-land; so long as the patient was not more than one or two thousand feet above sea level he was very much better. Then he thought he should like to see the king; but this meant going to a place that was much higher. However, he started, but before he got there he was so bad he had to come down again. Apparently it was nothing save going too high that did the harm. Unfortunately, after coming down he was no better, but had lost all the benefit he had got before. As the patient improves there is no objection to a little cautious climbing, up to about a thousand feet; and when able to do so the improvement may be considerable. Noticing this, some people recommend climbing for these hearts, and not only for these but for aortic regurgitation and such like more serious organic changes. Treatment of this sort has been justly called a selection of the fittest; some are made better, some worse. English people often want to go abroad; it is a prejudice, but not necessarily a bad one. In the case of invalids the question of food must be borne in mind; in many Continental hotels it is very bad. There is one place in Germany which every one has heard of,—I refer to Nauheim. All sorts of heart cases go there, many on their own initiative, without any medical advice. The principles of the treatment there are saline baths and certain exercises. In England the Nauheim treatment has been extensively employed by Dr. Bezy Thorne. Dr. Thorne tells me that he considers the

main object of this special treatment to be restoration of tone to the heart muscle, both in cases of primary heart weakness and also of failure of compensation for valvular defects; and a main indication for treatment to be found in a pulse of unduly high tension. The baths and exercises relax the arteries, and thus relieve the weak and labouring heart. But the condition of the arterial coats and of the vaso-motor mechanism have to be taken into consideration. Pathological changes in the former, and central or other interferences with the latter, may retard or prevent the action of this method of treatment. My own experience of the treatment is small; but I know enough to say that patients should not undergo it excepting by medical advice and under careful supervision.

As to drugs, I generally prescribe strychnine in small doses, as a sixty-fourth of a grain; big doses are bad, sometimes producing unpleasant sensations about the heart. Small doses of digitalis often suit. If there is any hardness of the pulse small doses of sodium nitrite, not more than a quarter or half of a grain, may be given. All three of these drugs may be given in one mixture if required. If there is much pain the best remedy is arsenic, again in small doses.

If people think there is anything the matter with their heart it is your duty to promise improvement, as you honestly may do if they will submit to treatment; there is no tonic equal to hope. Really bad cases had better take no exercise at all, and should live on one floor so as not to go upstairs to bed; a bath chair should be used instead of walking. The worst cases must be kept altogether in bed. If there be dilated heart and dropsy you must treat the patient accordingly.

The Evolution of the English Medical School.

A Paper read before the Abernethian Society, on Thursday, November 7th, 1901.

By J. A. NIXON, M.B. Cantab.



R. PRESIDENT.—When I offered (may I say somewhat rashly?) to read a paper before this Society, I selected a subject which appeared to me to be capable of being made not wholly uninteresting. For some time past the history of the beginnings of medical education had claimed a good deal of my attention, and I fondly hoped to be able to turn the results of my inquiries into a coherent story; but I feel to-night that, although my researches have been a most engrossing occupation as far as I am concerned, to you it may be but a half-digested compilation that I am offering. It is not my intention to deal only with our own famous institution, though had I been able to follow up the history of St. Bartholomew's I should indeed have been covering the whole story of the rise and progress of English medicine, but the point of view would have been too confined, and the vista too limited. I propose rather to treat of the development of medical study in England, trying in particular to show how the great schools, of which this is by no means the least,

came into being, and through what stages they have passed before arriving at the condition in which we find them to-day.

How the medical art arose, and by what steps it became an honoured pursuit, are almost lost in the obscurity of ages. The earliest book of which we have any knowledge was a work on Anatomy, which is mentioned as being of great antiquity, and is quoted from in an Egyptian papyrus of B.C. 200. Teta was an Egyptian king who reigned about 2000 years before the Christian era, and he seems to have possessed something of a medical education. The Egyptian priests were the official embalmers, and they seem to have profited by their opportunities to study anatomy. The Egyptian monarchy was always hierarchical in character, and it would not be far short of the mark to describe the hierarchy as being in part a medical one.

In Egypt there were no less than four schools in which anatomy was taught—Memphis, Seis, Heliopolis, and Thebes. Later the school at Alexandria became the leading one of the whole world. This was a great centre of learning of other kinds than medicine, and was thoroughly cosmopolitan, since Alexandria was the hub of the world's commerce. The school lasted up to the third century B.C., when its lustre waned for a while, but under the patronage and active interest of Ptolemy Soter it regained its position, and held it until close upon the fall of the Byzantine empire.

Greece meanwhile did not neglect medicine while encouraging the development of art and literature. Æsculapius may or may not have been historical; probably a man skilled in the healing art whom subsequent generations deified. There is a tradition that his two sons were surgeons with the Greek army at Troy. He is supposed to have flourished about 1250 B.C., and after his death certain places were devoted to the Æsculapian cult, and the famous Temples of Health were inaugurated in his honour. These were usually situated on some spring or river, and under the charge of the priests of Æsculapius. Apart from these priests there were the lay physicians, the Asclepiads. Possibly they had originally been the assistants of the priests, but at some time or another they emancipated themselves, and shaking off the priest's yoke travelled afar, learnt from the scientific men of other countries, and formed something like a guild of physicians.

Hippocrates was the bright star in this guild, and he added to a purely philosophical branch of learning the fruits of observation and experience.

In these societies, founded by Æsculapius or named after him, the first germs of organised teaching are found; the guilds, like our more modern ones, preserved and handed on from generation to generation the secrets of the profession, given orally no doubt at first, from father to son or teacher to pupil.

Instruction in these schools began at an early age, and was imparted not only to those connected by birth with the teacher, but also to those whom he thought good to adopt for a honorarium.

Such schools existed in Rhodes, Crotona in Lower Italy, Cyrene in North Africa; but the most famous were at Cnidus in Asia Minor and at Cos, and this last was the school of Hippocrates, who was born B.C. 460; his teacher had been his father, and his mother was a midwife; he was the creator of profane as opposed to sacerdotal medicine, and of public as distinguished from secret practices.

The school of Alexandria was a foreign transplantation, its revival in the third century being due to Grecian influence entirely. Here was centred the literature of the civilised world, its library being increased till it finally contained 700,000 rolls of papyrus, its museum containing preparations of anatomical, zoological, and botanical specimens, and all these free and accessible to teachers and students. Here was the foundation of our scientific teaching, and from this school the study of anatomy originated. Herophilus of Chalcedon (B.C. 380—335), again the son of a physician and a midwife, whose *torcular Herophilii* makes his name familiar to-day, and Praxistratus, physician to Ptolemy Philadelphus—B.C. 284, were alumni of this school.

Amongst the Romans there was no medical profession, it was left to the Greeks and the Jews, and there was in Rome an innate contempt for professional medicine. Yet the advantage of having medical advice for his family and slaves induced the well-bred Roman to buy in foreign lands slaves who had been educated to medicine, or to allow his own slaves to be so educated.

Public medical officers were appointed, and the profession became sufficiently important to form its guilds and corporations, and the education of the younger generation was left in their hands.

The Alexandrian school founded human anatomy, but in obedience to popular prejudice this was abandoned for the dissection of the lower animals.

In the writings of Celsus, who, by the way, was a Roman, not a physician by profession, much of the substance of lost writings, especially those of the Alexandrian age, is preserved to us, his best contribution to medical art being his *Descriptive and Operative Surgery*, showing the advanced state to which the accurate study of anatomy had brought the Alexandrians.

Galen, A.D. 131—201, was of the Eclectic School, who studied anatomy first at Pergamos, later at Smyrna (in his twenty-first year), and also at Alexandria, travelled far and wrote much,—in fact, he was the *savant* rather than the practitioner; yet so widely were his writings read that for 1500 years, among Christians and Arabians, he was the acknowledged authority on—say, the dictator of medicine.

During the decline of the Roman empire, which had absorbed all the centres of learning, interest in science waned also, despite the efforts of the later emperors to revive it by their patronage, so that even when Theodosius II founded an academy at Constantinople with thirty-one professors no benefit resulted, the public taste had sunk so low; magic took the place of scientific medicine. Medical lore drifted into other directions, and the credit for its preservation belongs not a little to the Arabian physicians.

During the sixth and seventh centuries civilisation reached its lowest ebb, the arts were neglected, and needless to say the sciences even more so. Only a few of the clergy could read and write, and the ecclesiastical *savants* did not occupy themselves (even if they had the capacity) with the writings of the heathen,—in fact, to commit their works was a deadly sin.

But about the eighth century a wave of revived learning appeared in the time of Charlemagne, and the chief impulse came from the Arabians of Spain and the English.

The struggles in Central Europe of the Goths, Germans, Vandals, and Huns had plunged all the seats of ancient learning into a state of chaos, from which its recovery could only be slow. Yet fragments of the ancient civilisation and learning survived, as we have seen, among the Arabians, who were in turn indebted to the Byzantine school, where the Greeks preserved a science of medicine based on antiquity.

In this Byzantine empire one teacher stands out, Paul of Ægina, A.D. 625—680; he had studied in Alexandria before its fall in A.D. 641, and passed most of his life in Egypt and Asia Minor; he was an acknowledged teacher, his advice was sought from long distances, and he was a bold surgeon; of the state of education, however, at this time we know but little. At Athens the eastern students enlisted scholars for their own favourite teachers from among the newly arrived students, and drummed up recruits for their societies.

The better physicians of the Eastern empire were, as a rule, educated at Alexandria, though travelling abroad afterwards they often attended Asiatic schools. Many received instruction as private pupils of famous physicians, and completed the course at Alexandria.

Hospitals were probably first instituted about A.D. 335, after the decree of Constantine closing the Asclepeia and other pagan temples. Helena, mother of Constantine, was active in founding such institutions at Constantinople, Jerusalem, and other cities, Basilides hospital at Caesarea, A.D. 373, being the first whose foundation is recorded.

In the Græco-Arabian period the Jews once again entered as a controlling factor in the world's culture and civilisation; many of the so-called Arabian physicians were Jews, and many Jewish schools of learning were founded in Asia to which Arabians and Persians resorted, and in this manner a connection was established between the East and the West.

Meantime Christianity, in the West, had from motives of humanity preserved among the monks some relics of the healing art, and the Benedictines were foremost of all the orders in maintaining hospitals, e.g. Mt. St. Catherine, A.D. 825, and Great St. Bernard, A.D. 980. These institutions were under the direction of the Church; in only a few cases were regular physicians employed, and there is no doubt that they did little to foster any progress in medicine, for their methods of cure were founded on the grossest superstition; and so degrading to the monks themselves did their tenets become, that an indulgent Church was compelled, during the twelfth and thirteenth centuries, to forbid the study or teaching of medicine to the higher clergy.

It was from the Benedictines in England that Albin Lecuin (736—804) came to the court of Charlemagne, and of him the following account is given:—He was a learned Anglo-Saxon theologian, who happened to be at the court of Charlemagne as commercial envoy from one of the kings of the Saxon heptarchy, when two Scotsmen, Claud Clement and John Melrose, also arrived in the capital (either Paris or Aix-la-Chapelle) with some English traders.

Amidst the ordinary cries of the market-place the townspeople were surprised to hear the Sootmen calling out, "Who will buy knowledge? for we have got it to sell." The people thought the men mad, but the king, hearing of the incident, sent for Clement and Melrose, and asked them whether they really had knowledge to sell, and what they asked for it. They replied that they had, and its price was "a place to teach in, pupils to learn, and needful food and raiment." Charles came to terms with them, established a Schola in his palace under the charge of Clement and Alcuin, and taking Melrose with him to his Italian was settled him as superintendent of a Schola at Pavia, afterwards the university of that city.

Charlemagne was a patron of learning, and founded or assisted in the development of many centres of education in his empire, Paris, Pavia, Florence, Cremona, etc.; and he ordained that Physic should be taught among other subjects.

How far the Arabian schools served as models is not known, but their influence is not improbable seeing that Charlemagne had intercourse with the Arabians. The glory of Monte Cassino as a medical school far outshines anything that had gone before, short-lived as it was; it owed its origin to the Benedictines. The monastery had been founded by St. Benedict; it was a monastic infirmary where practice ranked above theoretical instruction, and of course miracles could not be kept out of the pharmacopœia; still there are traces in history of a monkish school of medicine at Monte Cassino, from which the famous school of Salerno arose, the first of all schools to confer degrees in medicine. Concerning its origin one tradition is extant,—not confirmed, it is true, by any other authority, but giving a narrative written within fifty years of the event by Leo Mariscianus, one of the monks who was afterwards Cardinal Bishop of Ostia (1101), it has obtained fairly universal acceptance. He ascribes the development of the school to one Constantine, a Carthaginian, who after enriching his mind with the medical lore of Asia by many years of Eastern travel, and being in peril of his life among his countrymen as a necromancer, fled to Italy, took refuge at Salerno, joined the medical school there soon after 1050, and attracted many students; among whom at some time in the eleventh century was "a woman learned in medicine."

The teachers at Salerno were called Magistri; they were probably at first selected by chance, and, shall we say, on their reputation among the students as coaches.

There is no vestige of evidence that the State recognised Salernian teaching or sanctioned Salernian certificates of study before the twelfth century, but in 1149 Roger, first king of united Sicily and Apulia (Naples), issued a decree in favour of the school, granting "that its own statutes should have the force of law." This appears to be something confirmatory of pre-existing conditions, and is probably comprehended in a more precise decree contained among the famous statutes of Frederick II, Emperor of Italy, and Roger's grandson, in 1231: "No one pretending to the title of physician shall practise or cure unless first approved at Salerno, by a decision of Magistri at a public sitting; he shall present himself with letters testimonial as to his trustworthiness and sufficient skill from the Magistri as well as our officials before ourselves, or in the case of our absence from the realm before our vicegerent, and receive from us or him a licence to practise." This was the first "charter" given to a university making the designation *Magister* a privileged title or degree; but both the university and the *degreo* pre-existed with *de facto* consuetudinary rights, which the monarch simply adopted, legalised, and checked.

At or soon after the foundation of a university at Salerno two universities came into being in England. "The zeal of some men to instruct, and the thirst of others for instruction, who drew towards one another by a new-born instinct, established schools in a wilderness of ignorance, achieved fame for them, gained for them consuetudinary rights, and thus offered to monarchs objects of favour, which it became the peculiar honour and glory of the Crown to adopt and consolidate."

Whatever traditions may be now in vogue at the respective universities, Oxford clearly had a school of secular canons, established by the city governor, Robert D'Oyley, before 1087, where William the Conqueror's third son, Henry, was educated; while Cambridge has a record written only fifty years after date of the establishment of a school by five monks who were sent from the monastery of Peterborough in 1109.

Meantime, while Salerno and Montpellier were rising to the zenith of their fame, one of the Prelendaries of St. Paul's Cathedral, Rahere by name, had been travelling to Rome and suffered there from malarial fever. He, owing to a dream during his convalescence, on his return to England founded in 1123, on land

which he obtained from Henry I, the Priory and Hospital of St. Bartholomew.

At first the Hospital was little more than the monastic infirmary, the treatment being in the hands of the monks who themselves had no special claims to a medical education, but may have availed themselves of their opportunities to devote part of their attention to medical literature, which was entirely Galenic, for since Galen's time no one had ventured to set up an opinion. And this spirit was fostered nowhere better than in the monasteries where reverence for the authorities overcame any desire for original research.

But we have very early knowledge of the state of learning in our Hospital, thanks to the investigations of Dr. Norman Moore, and his translation of the *Breviarum Bartholomœi*, composed by a Yorkshireman, John Mirfield, one of the monks in the Priory, from which it is evident that he was a regular attendant on the clinical practice of the Hospital under some one who was in a position of authority, and to whom he refers as "Magister meus."

In the eleventh and twelfth centuries, as we have seen, the practice of physic was in the hands of the clergy, and John of Salisbury gives us an outspoken summary of their methods and attainments. He says of the physicians "that the professors of the *theory* of medicine are very communicative; they will tell you all they know, and perhaps out of their great kindness a little more. From them you may learn the nature of all things, the cause of sickness and health, how to banish the one and preserve the other—for they can do both at pleasure. They will describe to you minutely the origin, the beginning, the progress, and the cure of all diseases. In a word, when I hear them harangue I am charmed; I think them not inferior to Mercury or Æsculapins, and almost persuade myself that they can raise the dead. There is but one thing which makes me hesitate; their theories are as directly opposite to one another as light to darkness. Two contradictory propositions cannot be true. But what shall I say of the practical physician? I must say nothing amiss of them. It pleaseth God for the punishment of my sins to suffer and fall too frequently into their hands. They must be soothed and not exasperated, that I may not be treated roughly in my next illness. I dare hardly allow myself to think in secret what others thus proclaim aloud." And later as regards their education he says, "They soon return from college full of flimsy theories to practise what they have learnt. Galen and Hippocrates are continually in their mouths. They speak apophisms on every subject, and make their hearers stare at their long, unknown, and high-sounding words. The good people believe that they can do anything because they pretend to all things. They have only two maxims, which they never violate: Never mind the poor—Never refuse money from the rich."

The monks found the profession so lucrative that they deserted the monasteries and neglected their religious duties in order to embark on the study and practice of physic. To such an extent did this spread that the Council of Tours in 1103 forbade the monks staying out of their monasteries above two months at a time, or to teach and practise physic. But this prohibition did not touch the secular clergy, and many high dignitaries in the Church, bishops, etc., acted as physicians at court.

Their education was acquired at Salerno from the writings of Rhazes, Avicenna, Avenzoar, and other Arabian authors.

In the annals of the Church at Winchester, Richard Fitz Nigel, who died Bishop of London in 1198, is said to have been apothecary to Henry II.

At this time (end of twelfth century) the separation of physicians and surgeons into two separate classes began owing to the action of the Popes, who, jealous of such an interruption of the duties of the clergy, made several attempts to prohibit priests from the performance of surgical operations. The priests, however, not being willing to surrender surgery as a whole to their Jewish rivals, nor to ignorant laity, made use of their barbers, who having previously been employed to shave the heads of and to perform minor operations, were now instructed to work entirely under the direction of their masters.

These men, qualifying themselves by the instruction of the clergy, assumed the title of barber-surgeons, and became a confraternity or fellowship. The more enlightened of the barber-surgeons, again in the march of knowledge by attending lectures and practising dissection, began to spurn such a degrading conjunction, and at last freeing themselves from the barbers became a college of surgeons.

From this date (beginning of fourteenth century) the two branches remained widely separated. Surgery was preserved as a handicraft by one of those guilds or corporations which in London especially, but also elsewhere, maintained the vitality of the arts and crafts;

whilst physic continued to be a branch of higher literary education, which was studied at the universities or monastic centres.

In the guild of barber-surgeons itself the members who had entirely ceased to act as barbers very soon formed a distinct class in the corporation.

The guild existed as early as 1308, though it did not attain to the rank of a company till many years later. There are but scanty records of its doings at this date, and the only surgeon—in fact, the first surgeon of whom we know anything—does not appear to have had any connection with the guild. This was John of Arderne, who was born in 1307; he practised in Newark from 1349 to 1370; he describes himself as "Chirurgus inter medicos." Was he the first specialist in surgery? Of his place of education we know nothing, he himself gives no information on this point; he does not appear to have studied at either of the ancient universities, though it is evident from his literary attainments—he wrote in Latin a treatise on fistula in ano—that his education was an exceptional one at that date.

Fistula was his special study, and he travelled over most of England, operating on patients of high degree, taking by the way enormous fees for his pains.

He tells us in his book the names of his most notable patients: "Sir Reynald Grey, Lord of Wilton in Wales; Sir Henry Blakborne, clerk Treasurer of the lord Prince of Wales; Adam Gumfray of Chesterfield, by side Nottingham; Sir John Masty, parson of Hopporte in Cheshire shire; John Colyn, Maie of Northampton; Hew denny, fishmonger of London," and many others.

Contemporaneous with him was John of Mirfield, who represented clinical study at Bart.'s; and just before, in 1320, flourished John of Gaddesden, mentioned by Chaucer, educated at Oxford (Merton College), Doctor of Physic and Prebendary of Ealdland in St. Paul's; and the Rosa Anglica, who treated Edward II's son for smallpox.

Whether he ever came to our Hospital is not known, but if he was prebendary at St. Paul's it is not unlikely.

Otherwise of fourteenth century education there is little to tell. At the universities a certain number of monks resided for the purpose of study; there were but few of them, and they reproduced in the earliest collegiate institution what they could of the monastic rule.

Still they were there solely for the purposes of education, and youths selected from the monasteries who showed any aptitude for learning were sent on to Oxford or Cambridge, where doubtless three courses were open to them, all purely literary—divinity, classics (though scarcely revived at this period), and medicine.

Here they read the authors; no practical application of what they read was possible, and the books, such as they were, were merely transcripts of Galenic tradition, either taken direct from that author or filtered through the Arabians.

(To be continued.)

Three Cases of Recurrent Hæmaturia occurring in One Family.

By W. H. W. ATTLEE, M.B. Cantab., M.R.C.S.

THE following cases of hæmaturia are interesting from the fact that the patients affected are three sisters, the only members of a family. The father died aged thirty years of uræmia, and the mother seems to be a perfectly healthy woman.

CASE 1.—A. C., æt. 4½ years, was admitted into hospital on July 10th, 1901, suffering from hæmaturia with the following history:

On April 13th she was admitted to a children's hospital suffering from hæmaturia. She was an in-patient for three weeks, and is said to have been discharged improved but with still a trace of albumen in the urine.

On July 6th the child seemed again unwell, and complained of pain in the calves of the legs. The urine was then seen to be smoky.

She is said to have had several fits since she was eleven months old. The fits begin suddenly, the eyes are fixed and she becomes

unconscious, and occasionally passes urine under her. She has never bitten her tongue. There is no history of scarlet fever or of anything to suggest that she has had that disease.

On admission she was to all appearances a perfectly healthy and well-nourished child. There was nothing abnormal to be found in her circulatory system, and there was no œdema. There was nothing to be felt to suggest any new growth. Urine smoky, 1020, acid. Cloud of albumen, microscopically blood and granular casts. No crystals.

She remained in hospital until July 31st. During that time she always seemed perfectly well, never had any fits, and nothing was discovered to suggest any cause for the hæmaturia. She passed on an average about twenty ounces of urine per day. It was always acid. The specific gravity varied between 1026 and 1015. It always contained albumen and blood, usually in small amount, and occasionally granular casts were found.

No crystals were found, and there was nothing to suggest the presence of a stone. She was discharged with the urine in the same condition.

On November 11th she was again admitted. The history was that she had seemed quite well till November 6th, when she began to vomit frequently. On November 8th she had a fit, in which her eyes were fixed, her lip was bitten, and she was unconscious for forty minutes.

The first time she passed urine after the fit it was smoky. On November 9th she was feverish, had some bronchitis, and there was much blood in the urine.

On admission there was still some bronchitis, but the temperature was normal. The child seemed very well except for some cough. Urine 1015, bright red, acid, much albumen, and microscopically was found to contain blood and granular casts.

The bronchitis cleared up, and the child seemed perfectly well and gained weight, and the blood decreased until there was only a faint trace. On December 29th she suddenly complained of not feeling well. She had no pain and no fit. The temperature rose to 101.8°, and about six hours afterwards the urine was again bright red. The temperature kept up for two days, then became normal and continued so. The blood decreased to a mere trace in three days, and then remained stationary.

She was discharged on December 31st in the same condition.

CASE 2.—K. C., æt. 5½ years, admitted into hospital on May 20th, 1901, with the following history. On May 15th she went to school and seemed perfectly well. On May 16th she complained of headache and some pain in the right side of the chest. She vomited three times on that day. She continued out of sorts until she was admitted. There was no history of scarlet fever.

On admission she was found to be a healthy-looking, well-nourished child. The temperature was 100.6°, and she had a slight cough. There were a few moist sounds over the bases of the lungs, but no other abnormal physical signs.

There was no œdema, and nothing abnormal to be felt in the abdomen. There were no signs of cardiac hypertrophy, and nothing abnormal in the pulse.

The urine was smoky, acid, 1017, contained a cloud of albumen and a considerable quantity of blood. There were no clots. Blood-corpuses and blood-casts were found, but no crystals.

After five days the temperature was normal and remained so, the moist sounds in the chest disappeared, and she seemed perfectly well. She continued to pass blood in diminishing quantities until June 6th, when this ceased. The urine continued to contain a trace of albumen until her discharge on July 9th.

She was seen again in December, and the urine at that time contained a cloud of albumen and blood, but nothing else was found under the microscope.

CASE 3.—E. C., æt. 2 years and 4 months, admitted July 4th, 1901. The history was that on June 26th she vomited frequently and became feverish. On June 27th she had a convulsion. She continued to be feverish until her admission. There was no history of scarlet fever.

On admission she was a fat, perfectly healthy-looking child with rosy cheeks. Temperature 101.5°. There was no œdema and nothing abnormal discovered in the circulatory system. There was no tenderness or resistance in the abdomen. The urine was clear, acid, 1020, contained a cloud of albumen but no blood.

The temperature was normal on May 30th and 31st. She vomited twice on May 31st, and again frequently on June 1st, when her temperature rose to 101.8°. On the evening of that day the urine was found to be loaded with albumen and to contain much blood. The urine was scanty, but it was impossible to measure the exact amount.

The pyrexia continued until June 4th, when the temperature gradually fell to normal. The amount of blood rapidly decreased, and on June 6th there was none to be found in the urine. She continued to pass a trace of albumen until her discharge on July 8th. During her stay in hospital specific gravity averaged 1017. The urine was always acid, and she always passed a fair quantity after June 5th. On two occasions granular and epithelial casts were found under the microscope, but never any crystals.

On January 1st, 1902, a skiagraph of the abdomen and pelvis was taken. It was not very satisfactory owing to the difficulty experienced in keeping the child still, but nothing could be found either in the skiagraph or on the screen to suggest the presence of a stone.

No satisfactory cause has so far been found to account for the condition.

The following various suggestions have been made by those who have had the opportunity of seeing the cases:

1. That they are cases of nephritis following scarlet fever. The objection to this is that there is no evidence whatever that the children have ever had scarlet fever, and there is no history of any possibility of infection. The general condition of the patients does not in the least suggest that they are suffering from nephritis. They never seem to be particularly ill, have never had any œdema, and have no cardio-vascular changes.

2. That they are suffering from stone in the kidney. No abnormal crystals have been found microscopically, and there has been no pain suggestive of renal colic. The youngest sister has been examined with the X rays with a negative result.

3. That the hæmaturia is caused by Raynaud's disease. There has been no sign of Raynaud's disease in the fingers, toes, ears, or elsewhere.

4. That some form of new growth in the kidney is the cause. Nothing has been found *per abdomen* or microscopically to bear out this suggestion.

5. That all the children are suffering from tuberculous disease of the kidney. All the patients appear to be so well and healthy that it is difficult to believe that they are suffering from such a severe disease.

6. That the fits from which the second child has suffered are epileptic in character, and that the hæmaturia is simply an exaggeration of the albuminuria which is frequently found after an epileptic fit.

7. That the patients are suffering from paroxysmal hæmoglobinuria. Against this is the fact that perfectly formed red blood corpuscles are seen microscopically.

I am indebted to Dr. Alexander Haig and Dr. Arthur Davies, under whose care the children have been while in the Metropolitan Hospital, for permission to publish these cases.

Two Instructive Cases of Appendicitis.

By E. PERCY PATON, M.S., F.R.C.S.



HAVE thought the two cases narrated below were worth recording, as they illustrate some points of clinical importance in appendicitis, which, though not unknown to those well acquainted with the disease, are perhaps not as well known as they might be.

J. S.—, male æt. 19, was admitted into hospital on September 13th with the history that he had been suddenly attacked with acute abdominal pain the day before, accompanied by vomiting. His bowels had not been open for twenty-four hours, and he was doubtful if he had passed any flatus.

He was a good deal collapsed, and shivered a little; his temperature was 99° F., respirations 32, pulse 80 and small. On examination of the abdomen it was not found to be very tender, and the pain was not definitely localised; it was also a little full, but not distended; there was an inguinal hernia on the right side, and as this was somewhat tense and also of recent appearance its strangulation was thought to be the cause of his symptoms. A very slight amount of taxis easily effected its reduction, and the house surgeon did not think it necessary to ask me to see the case, particularly as during the next few hours his vomiting stopped and he seemed distinctly better.

Next day, however, he had more pain, and I was sent for.

I found the lad complaining of no particular pain, and apparently fairly comfortable. His pulse was regular and of fair volume, his breathing easy, and there had been no more vomiting. On examining the abdomen it was found to be full, but not distended, and moving easily; on palpation it was not tender anywhere, and there was no rigidity of the muscular wall even on deep pressure; the right iliac fossa was particularly carefully examined, and although it was quite easy to get deeply into it the boy complained of no tenderness; his bowels were still not open, but the hernial rings were all quite free.

Examination of the rectum was negative. As there seemed no sufficient ground for opening his abdomen, nor any very clear indication of the nature of his case I ordered him a turpentine enema, and said that I wished to see him again if there were any more acute abdominal pain.

I was called to see him again in about eight hours' time; he was now evidently in a good deal of pain; the enema had produced no result; there was no vomiting, but the abdomen was a little more full and a little tender, but not specially over the right iliac region; he was otherwise much as when seen before; it was, however, decided to open the abdomen. This was done at once over the right iliac fossa, and on opening the peritoneum an ounce or two of almost clear fluid at once escaped. The appendix was then looked for and easily drawn into the wound, there being no adhesions; it was noted to be much engorged and to contain a concretion, and to be obviously acutely inflamed, but there was no perforation. It was removed in the usual way, and a further opening having been made in the middle line the whole peritoneal cavity was thoroughly cleansed by sponging; a tube was then put deeply into the pelvis from the median wound, and the iliac wound was plugged with gauze. The operation was done in the middle of the night, and, unfortunately, no specimen of the fluid from the abdomen was kept for examination, so the exact nature of the infection is not known.

For the first day or so the boy improved, but it was soon seen that the course of the general peritoneal inflammation had not been stopped, and he soon began to go downhill, and died four days later. No autopsy was allowed. Possibly it would have been better to have thoroughly flushed out the abdomen instead of relying on sponging only; but my own experience has been rather in favour of the latter in these cases.

The second case was that of W. S. K.—, male æt. 27. He was admitted into hospital on October 8th, 1901, with the history that he had had an attack of appendicitis in 1900, about fourteen months before; this went on to suppuration, and three weeks after its commencement an abscess formed which was opened and drained by a tube six inches long for four weeks, and the opening plugged with gauze for three weeks more; the appendix was not removed at the operation.

In the early part of 1901 he began to notice some bulging of the scrotum and also a swelling in the right groin, which proved to be an inguinal hernia. He was anxious to have both these troubles attended to, and also to have the appendix removed, in view of the fact that he was returning to India, where he might not be able to get skilled attendance if he had a return of the appendix trouble.

I undertook the cure of his two hernias, but told him I was doubtful as to the wisdom of dealing with the appendix, as one was a good deal in the dark as to the condition of parts after the prolonged suppuration, and he had had no further attacks.

On October 12th an incision was made over the old scar and extended inwards over the inguinal canal; the inguinal hernia was then dealt with, and on passing the finger in through the ring, as far as could be made out, there were no adhesions; the radical cure operation was thus completed. The old scar was now opened up, and it was at once found possible to draw out the cæcum and appendix through the two-inch opening; around the appendix itself there were no adhesions, and there were only one or two very thin ones of the omentum to the cæcum and to the abdominal wall, which were tied and divided, and the appendix was then removed in the usual way, the abdomen being closed by uniting the various strata of its wall layer by layer. The subsequent history of the patient was one of uninterrupted recovery.

Examination of the appendix showed no signs of old perforation, but as the mucosa was a little ulcerated, and in its lumen were three concretions (one being of very considerable size), it was evidently in a condition when further trouble might have been expected.

The first of the two cases illustrates the very great difficulty that may be in the diagnosis of some of the very gravest of abdominal troubles. That a period of quiescence often succeeds the sudden onset of an acute peritonitis is well known, but that this

period of quiescence should be attended with no rigidity of the abdominal muscles, which has been said by some surgeons recently to be the one sign which is never absent, and that there should also be no tenderness, even to deep pressure, in the iliac fossa is at least very unusual, and is instructive as showing how, in some of these cases, the local signs may be so poorly marked that it is only by taking a general view of the case that a right conclusion can be come to. The low pulse rate and normal temperature, though very well known, is, generally speaking, the best guide in this class of case, the fact that it is not rapid must not be allowed to mislead one as to the true condition of matters.

Both cases illustrate once more the now well-known fact that perforation of the appendix is not a necessary antecedent to its inflammation, giving rise to either a general peritonitis or a local suppuration.

The second case also shows what, from a treatment point of view, is of very great importance, namely, how very little influence even prolonged suppuration may have in what used to be considered the usual result of such a process, namely, the destruction of the appendix and so the prevention of future attacks.

It therefore emphasises the practice which is becoming more and more the rule in dealing with all these suppurating cases, that in such as softened gut, and therefore danger of tearing it, or great used to be done, but that the appendix should be merely drained, as the same time. This, I think, can usually be done without any appreciable increase of risk by patience and carefully closing off the general peritoneal cavity with gauze packing to prevent its contamination. The removal of the appendix not only removes a source of future trouble, but also usually lessens the time which the abscess cavity takes to close.

The almost complete absence of adhesions is interesting as showing once more to what an extent peritoneal adhesions may disappear with time, as there can be no doubt that at the time of the abscess there must have been sufficient adhesions to cut off the general cavity entirely, but these had quite melted away.

Three Cases of Idiocyneasy to Drugs (Iodoform and Cocain) applied externally.

By E. W. G. MASTERMAN, F.R.C.S., D.P.H. (Cantab.),
Jerusalem, Syria.



HE three cases narrated below appear to me to be worth recording, as with drugs in such constant use as iodoform and cocain one is apt to overlook the danger of disagreeable consequences following their external use. Cocain used hypodermically or as a spray, and iodoform in closed cavities, not so uncommonly are followed by symptoms of semi-poisoning; but in these cases the applications were external, the doses very small, and yet the symptoms following most troublesome, not to say alarming.

It is the more interesting that all these cases occurred within one month.

CASE 1.—*Alarming collapse following application of cocain to the anal mucous membrane.*

K—, æt. 32, a strong and well-developed man of Hebrew origin, with no organic disease of heart or lungs, was operated on for internal hæmorrhoids on October 23rd. He took chloroform well, and I ligatured four large "piles." On October 30th he left the hospital cured.

On November 9th he came to me complaining of two small "external piles" which were irritating him. As he was evidently for that purpose applied a small piece of absorbent wool soaked in five minutes I removed the piles with two cuts of the scissors; he appeared to feel it a little, and almost immediately became faint. After holding his head between his legs a few minutes and giving him some ether and sal volatile, I was about to apply a bandage when suddenly he became intensely pallid, quite pulseless, and really as if dying. I quickly laid him flat on the floor, where for three quarters of an hour he remained in this condition in spite

of brandy and ether. The pulse from time to time returned at the wrist, only to die away again. After this he slightly revived and could answer questions, and I removed him to another room, but in the process he again went off with a severe syncope. On being brought to, he muttered that he only wanted to be allowed to sleep; he was left outstretched on the floor for another hour, and then carefully removed to the hospital and put to bed. On arrival not for five hours after the first application of the cocain that he came to, but after a good night's rest he was as well as ever.

He states that from the moment of my using the scissors up till five hours later, when he found himself in bed in the hospital, he had not the faintest recollection of anything that happened. He has never fainted before nor since, and I think there can be no doubt but that in his case the very small amount of cocain he had absorbed from this mucous membrane must be accountable for all his symptoms.

CASES 2 and 3.—*Acute erythema following the external application of a small quantity of iodoform powder.*

CASE 2.—R—, æt. 8, a Hebrew, who had been suffering some two or three years from chronic right otitis media, came under my care November 19th, and under my directions had his ear syringed out with Lotio Acid. Boracic, after which a very small quantity of iodoform was blown into the external meatus. Half an hour after his return home, less than an hour after his being seen, he complained of pain in the right side of his face, which became rapidly increased and oedematous. The next morning when I saw the boy he appeared at first sight to be suffering from acute erysipelas. The whole of the right side of his face was red and oedematous; there were several large vesicles on the pinna and cheek, and a rosy well-defined blush spread down his neck below the ear. The eyelids were very oedematous. His temperature was, however, normal, and there was little constitutional disturbance. I admitted the boy to our hospital, and the inflammation rapidly subsided, leaving some chronic eczematous patches on face and over pinna of ear. Ten days later, when he was about to be discharged, the ward sister, not knowing what had been the cause of the original trouble, put a very little iodoform again into the ear. This was followed by a very rapid recurrence of the symptoms in a slightly less severe form, though the œdema of right eyelids was sufficient to close the eye for some hours.

CASE 3.—B—, æt. 16, a Hebrew, came to me October 21st, and had an ingrowing toe-nail removed under cocain; sal alchembroth gauze was applied afterwards. Attending the out-patient department he, on October 26th, had a little iodoform powder dusted on the surface of the wound—a very small surface by this time. This was followed by a most violent reaction of the skin, the lower part of the foot with all the toes being intensely inflamed. Bullæ formed on the toes and instep, and the whole inflamed area desquamated. Under treatment with dry starch and boracic powder he gradually improved, and was discharged from the hospital November 11th. When attending the out-patient department my colleague, not knowing what had happened, ordered some iodoform ointment. The first application of this led to immediate recurrence of all the symptoms. He had to be again in hospital till December 1st, when he was discharged cured.

These two cases (2 and 3) illustrate how extremely small a quantity of iodoform may produce symptoms in the susceptible, and also, as is usual in such cases, that the inflamed area is very much larger than the part actually sprinkled with the drug. The unfortunate and quite accidental double repetition of the dose in both cases has the compensatory advantage that it makes the diagnosis morally certain.

It is rather important to be on the look-out for such cases, as to inform the patient of his idiosyncrasy may save him much discomfort. Looking back I feel sure one or two perplexing cases I have seen, and not diagnosed, may have been due to iodoform.

A case very similar to Case 3 is recorded on p. 321, vol. xxix, *St. Bart's Hosp. Reports*, by Dr. S. West. Of it he says, "Possibly, I suppose, it might be referred to the iodoform."

A much more interesting case of long-tested susceptibility to iodoform in a monthly nurse is recorded by Dr. H. H. Watkins, of Kimberley, South Africa, in the *Brit. Med. Journ.*, vol. i, 1899, p. 1214.

The cocain case presents the usual features of such cases, but I imagine it is uncommon to have such acute symptoms in a particularly strong and healthy patient from absorption from an intact external mucous surface. Perhaps the operation in the neighbourhood seventeen days before made the surface specially absorbent.

Notes on the Analysis of Urine, with Special Reference to that of Fever.

By G. C. GARRATT, M.B.



the course of a somewhat protracted study of the urine of fever, I have encountered certain analytical difficulties not met with when normal urine is used. The methods which I have found useful in surmounting these obstacles, and therewith other practical hints, form the subject of this paper.

(A) ANALYSIS OF THE INORGANIC CONSTITUENTS.

1. *Acidity*.—For the simple direct method free dilution is necessary owing to the high colour of febrile urine. Take 20 c.c. and dilute to 200; further, always make up a second sample similarly diluted for purpose of comparison. Phenol-phthalein gives only a pale salmon-pink with monohydrogen phosphates, therefore the first change of colour must be taken. There are bodies in urine, especially of fever, which decolorise phenol-phthalein, therefore add plenty.

2. *Chlorine*.—Methods involving decarbonisation by heat are peculiarly unsuited to the highly carbonised urine of fever. Particularly to be avoided is that which combines with decarbonisation usually to be avoided is that which combines with decarbonisation addition of a salt of ammonium. The direct method of Mohr is a much less accurate in febrile than normal urine, but is useful as a preliminary to that of Volhard. The latter requires modification, as not only does the high colour of these urines seriously mask the end reaction, but in them the chloride of silver often obstinately refuses to be filtered off. Now filtration is essential, as thiocyanate dissolves the precipitate. Decolorisation to pale straw-colour with potassium permanganate after the addition of nitric acid, as employed by Arnold, is a great improvement, and with normal urine leaves nothing to be desired. In dealing with febrile urines, however, it is desirable to first raise to near boiling after the addition of the acid, cool till comfortable to the hand, and then decolorise with permanganate. All difficulties of the end reaction very delicate. The filtration becomes easy, and the end reaction very delicate. The urine must not be boiled with permanganate and nitric acid. Never give results in terms of NaCl if you have not also estimated Na.

3. *Phosphoric acid*.—It is frequently desirable to dilute febrile urines before this analysis. A rough guide to the P_2O_5 present will often be given by the acidity in terms of oxalic acid, for it is a curious thing that urine is commonly much more acid than its acid phosphate would be to the same indicator. The best standard phosphate is KH_2PO_4 , as it contains no water. I have found cochineal far inferior as indicator to a saturated solution of potassium ferrocyanide. Always standardise your urinum; its weight cannot be relied on.

In estimating acid phosphate by the method of Freund and Lieblein add an excess of uranium before heating in the preliminary trial, otherwise barium phosphate will come down.

4. *Sulphuric acid*.—Do not attempt this volumetrically, it is weary work. If, however, you must, estimate urea first; this will commonly give you some indication of what to expect. For the commonly give urea free dilution is, in the case of febrile urines, gravimetric method free dilution is, in the case of febrile urines, essential. Take 25 c.c. and 1.5 c.c. hydrochloric acid. After centrifuging the ethereal sulphates make up to 150 c.c. and precipitate version of the ethereal sulphates take more urine and wash excess of acid. Leave twenty-four hours before filtering, and wash by decantation. For the ethereal sulphates take more urine and dilute it less, as a good deal of pigment is removed by the first filtration, and the precipitate is small.

5. *Sodium and potassium*.—If you use Lehmann's process read his own description of it. * It has suffered in transcription. Febrile urines are rather troublesome owing to their high percentage of urines are rather troublesome owing to their high percentage of carbon and small percentage of bases. The carbon, by the way, comes almost entirely from the pigment and extractives. Never over-heat the carbon, or the dish will suffer; break it up and exercise patience. A further trouble arises later as the barium precipitate consists largely of phosphate, forming a bulky jelly quite impossible to wash. Leave the beaker under a bell-jar for four or five days, and the precipitate will become granular or powdery and present no difficulty. With normal urine this trouble does not arise. The

* 'Ztschr. f. physiol. Ch.', viii, 508.

platinum analysis is easy with these febrile urines owing to their small content in sodium. It is convenient to have the solution made up in terms of sodium chloride. 150 Pt to the c.c. — 1 NaCl. Add 1 c.c. for each 1 gramme of total chlorides, and you cannot go wrong. Alcohol-ether mixture is to be preferred to alcohol. I have devised a simpler method of estimating Na and K, as well as a slight modification of Lehmann's process.

6. *Ammonium*.—Febrile urines should be left long if Schloessing's method is used. Shake with chloroform, filter and put up for six days. More convenient than the usual apparatus is a squat, flat-based, bottomed cylinder inverted over a round glass plate. These may be piled in column one on another, and occupy little space. Never add formalin, it fixes the ammonia.

7. *Calcium and magnesium*.—If the ordinary method be applied to a febrile urine a mass of urate of ammonium is usually thrown down. To avoid this, first saturate the urine with Na_2HPO_4 down. To avoid this, first saturate the urine with Na_2HPO_4 down. Magnesium is indeed incompletely precipitated even from normal urine unless phosphate be added. Probably the most accurate method of estimating Ca and Mg in febrile urine would be to conduct the analysis on the ignited residue.

(B) ORGANIC BODIES.

1. *Total nitrogen*.—The most convenient of the modifications of Kjeldahl's process is that recommended in *Analyse des Harns*, potassium sulphate and sulphate of copper being added to the sulphuric acid. If distillation is done in an Erlenmeyer's flask upon a thin sheet of iron covered by a little asbestos wool, no bumping occurs. It is best to add the soda, after all is fixed up, through a special tube. Before doing this analysis it is convenient to estimate urea by the simple method. One then knows what to expect, and can arrange accordingly. In making up standard soda the solution be first allowed to stand with a small addition of baryta, and then be standardised, it will possess the advantages of baryta without its drawbacks. Pure litmus in the cold is extremely sensitive to such a solution, one drop of it, where 1 c.c. = 0.005 N, producing a change.

2. *Urea*.—If Bohland's reagent (phospho-tungstic and hydrochloric acids) be used to remove extractives, more is required for febrile than for normal urine. This reagent precipitates much of it, but all the ammonia; it precipitates urea also from strong solutions; finally it precipitates urea from weak solutions in the presence of formalin. Some years ago I found no urea in a case of acute mania. Formalin had been used.

If Mörner and Sjogvist's method is used there seems to be difference of opinion as to the necessity for adding magnesia to remove ammonia. If it is added the resulting hydrate causes most troublesome bumping in the distillation. Personally I leave it out, but add a little more baryta towards the end of the evaporation. I have tested this on an artificial urine containing much ammonia with excellent results; no ammonia remained in.

3. *Uric acid* by Hopkins's method. The following hints may be useful. Put the full quantity of the powder as sold will commonly used, but a fresh sample of NH_4Cl should be tested before it is used, as samples differ) and add the urine to it. Don't filter till the fluid is quite clear. Wash off with hot 5 per cent. hydrochloric acid instead of water, and add no more acid. After filtering and washing the uric acid spread the paper on a larger short-stemmed funnel, and wash straight into your flask. Put your sodium carbonate in the beaker, wash it out over the same funnel, and make up to 100 c.c. so previously marked. Impure sulphuric acid precipitates uric acid, so don't try does pure acid in the presence of magnesium sulphate, so don't try adding the latter in order to avoid washing away hydrochloric acid.

In most urine analysis it is a great convenience to make up the sample before analysis to a round number of c.c.

A little rectified spirit quickly removes fruit, and also washes down precipitates which tend to creep. In all the above hints I have necessarily assumed that the reader is acquainted or can make himself acquainted with the method under consideration. They are merely intended to supplement ordinary sources of information. I therefore omit all methods of which I have not practical experience.

LONDON FEVER HOSPITAL.

* To be published shortly in the 'Journal of Physiology.'

Pulmonary Tuberculosis in Gayer and Son cured by Development of Uricacidemia.

By WILLIAM WYLLYS, M.R.C.S., L.R.C.P., L.S.A.



HR aversion that the tubercle bacillus has for nitrogenous compounds, and the curative influence that such bodies as urea and uric acid appear to have over tuberculosis, are so well brought out by the following cases that I feel emboldened to publish them, especially after reading the most instructive article by Dr. Henry Harper, "Pure Urea in the Treatment of Tuberculosis," in the *Lancet* of December 7th, 1901.

CASE 1.—T. G., male, æt. 22 years, recently married, suffered at end of June, 1899, from an attack of tracheal and bronchial catarrh, which, after some ten days' duration, was noted to be accompanied by falling off of appetite and occasionally a rise of temperature, 100° F., in the afternoon. Rhonchi at first were to be heard widely distributed through both lungs, but at end of three weeks moist râles were detected in upper third of left lung, and could be heard both anteriorly and posteriorly. The sputum, at first yellow, became green and nummular, and was streaked at times with blood. Night sweats were complained of, and the patient stated that during this attack he had lost a stone in weight, which I verified.

From age of sixteen years he had been subject to headaches with pain in back and the passage of urine, which deposited a thick pink sediment.

From his earliest boyhood he had repeated attacks of bronchial catarrh, especially in the winter, sometimes accompanied by aphonia.

On July 21st I came to the conclusion that my patient was suffering from phthisical catarrh of apex of left lung; the sputum was stained and found to contain tubercle bacilli. A few days later pleuritic pain in upper part of left chest was complained of.

On July 29th a consultation with a physician was held, and a diagnosis of pulmonary catarrh of tubercular variety arrived at, the patient forthwith being placed upon open-air method of treatment with what appeared a magical result, for in three days' time the afternoon temperature had become normal and the cough less, and a week later the night sweats had considerably diminished, as also the amount of sputum. I had been administering thiochol in fifteen-grain doses three times daily for a fortnight, and was inclined to believe that it had had something to do with the miraculous improvement in the case, freely admitting that their part in the cure, a full diet, and outdoor life in a tent were playing their part in the cure. I now inclined to think the thiochol was of assistance by fixing the urea and uric acid in the tissues, and consequently augmenting the patient's gouty tendencies. After two weeks of open-air treatment (thiochol still being given) the catarrh in left apex had considerably abated, a few soft crackles on deep inspiration and deficient vesicular murmur being the only marked physical signs left; a week later patient's weight showed an increase of six and a half pounds.

For some weeks longer symptoms and signs in chest varied but little. A bilious attack occurred on September 22nd. At end of October patient's weight had increased to 11 st. 5 lbs., a gain, since commencement of illness, of 1 st. 5 lbs. The amount of sputum at this date was slight, chiefly expectorated first thing in the morning, but contained many tubercle bacilli; the afternoon temperature for many weeks had been normal. On November 15th the air sounds at both apices were almost equal, no adventitious sounds to be heard anywhere in chest; the cough, sputum, and night sweats had ceased, and patient was still gaining weight, and had acquired a healthy ruddy complexion; short walks were allowed, but nothing approaching vigorous exercise. Thiochol was discontinued at end of November, and patient went away for a month's holiday, apparently well. While away, unfortunately, he contracted influenza, which caused a return of cough and expectoration, and a loss in weight of 5½ lbs.; examination of chest, however, on January 19th, 1900, revealed nothing amiss. On January 24th patient was suddenly seized with an attack of left renal colic, and some blood-stained urine, containing uric acid, sand, and urates, was voided. Morphia was necessarily administered, and had to be repeated, as several colicky attacks ensued, each time followed by the passage of urine heavily laden with urates, and sometimes uric acid sand, and on one occasion containing a small uric acid calculus. This state of affairs continued for one week, when patient was able to get up and about again, and, as I told him at the time, "seemed all the better for his gouty attack." Slight

indications of gout appeared from time to time, and on April 26th an acute attack of renal colic ensued, necessitating hypodermic injection of morphia. Urine was acid, contained deposit of urates, but no albumen.

For next three months no renal colic occurred, but anti-gout medicines were administered to meet the gouty symptoms (irritability, pain in back, and headache) he complained of. In June, 1900, on examination, no signs of active mischief were found in the chest, but a return of cough with night sweats ensued in October; but, as afternoon temperature was normal, and no adventitious sounds in chest were detected, this was regarded as a simple catarrh, and the patient shortly returned to his usual occupation, and has not required medical attendance since.

CASE 2.—T. G., æt. 60, father of the patient above alluded to, a strong, rather plethoric individual, of considerable mental capacity, and a successful public speaker, informed me, to my intense surprise and interest, that he had suffered as a boy just as his son; that he had "a hole in one of his lungs," for which his doctors prescribed cod-liver oil, with the result that it healed. He, however, added that he had been a gouty subject all his life, and so prone was he to produce and eliminate uric acid and small uric acid stones in his early manhood, that he could not consume a glass of beer without immediately experiencing gouty symptoms, and frequently the almost immediate passage of gouty gravel. Of late years, by frequently soaking his tissues with salicylate of soda, he has prevented the formation of calculi, though at times has had renal colic, and often gouty headaches, and sometimes œzema.

A perusal of the history of these two cases of pulmonary consumption occurring in persons of a gouty diathesis, and the fact that the tubercular process abated in both when the tissues became sufficiently saturated with uric acid, will, I think, lead one to the inference that Dr. Harper's contention that urea and other nitrogenous products are antagonistic to tubercle bacilli is right; and further, that they actually destroy these bacilli, and in many instances act as such a specific for tuberculosis as does iron for erysipelas or mercury for syphilis.

Notes.

H.R.H. THE PRINCE OF WALES was installed as President of the Hospital on December 4th. It is a cause for no little pride that His Royal Highness should have made our ancient institution the scene of his first official act under his new title.

NOTHING has done more to justify our name of the Royal Hospital of St. Bartholomew than the support which the three generations of the reigning house have given us; and by his speech in the Great Hall on taking office the Prince of Wales gave proof that, following the example of our most noble Patron, His Majesty the King, he would be no mere figure-head, but would be an active factor in the life and management of the Hospital, as the King has been for the past thirty-four years.

MR. HARRISON CRIPPS has been appointed Surgeon to the Hospital in succession to Mr. Willett.

MR. J. G. FORBES has been appointed Medical Officer to the Gold Coast Anglo-French Boundary Commission.

FOR the second year in succession the Hospital has a representative in the English Rugby Football team. Last year it was A. O'Neill; this year it is L. R. Tosswill. He has been chosen to play against Wales. He is to be

Slow-continued hæmorrhage was less likely to be fatal than sudden rapid loss of a smaller amount of blood. Treatment was to restore continuity of injured vessels, to reduce local blood-pressure, and to promote coagulation.

Various hæmostatic agents were described, including supra-renal extract, of which he gave a full account. Inaccessible hæmorrhage required special treatment, as by elevation of a limb and compression of a main artery. Venesection seemed paradoxical, but was indicated in cerebral hæmorrhage. Rest was especially important, but not always easy to obtain, e.g. in cases of hæmoptysis and hæmatemesis. Opium was generally indicated, except in cases of cerebral hæmorrhage. He gave an historical résumé of the subject of transfusion, quoting William Hunter, and described the methods of injection of fluids. The paper concluded with a summary of the subject in its relation to medical, surgical, and obstetric practice respectively.

The Rahere Lodge, No. 2546.



Ordinary meeting of the Rahere Lodge, No. 2546, was held at Frascati's Restaurant, Oxford Street, W., on December 10th, 1901; W. Bro. Phin, S. Abraham, W.M., in the chair. Mr. Walton R. Read, L.D.S., Mr. Thomas B. A. Haggard, B.A. (Cantab.), Mr. Sydney L. Harke, B.A. (Cantab.), and Mr. Albert W. Griffin, M.R.C.S., L.R.C.P., were unanimously elected members of the Lodge, and Mr. Read was thereupon initiated into Freemasonry. W. Bro. John Peplow Cartwright, M.R.C.S., L.S.A., was also unanimously elected a joining member. Bro. Edge was passed to the Second Degree, while Bro. Keown was raised to the sublime degree of Master Mason. It was unanimously decided that the W. Masters of the Middlesex Hospital Lodge, the London Hospital Lodge, the Chère Reine Lodge, and the Cheselden Lodge should be entitled Honorary Members of the Rahere Lodge during their year of office. A proposal to present the jewel of a P.D.G.D.C. to W. Bro. Gripper, I.P.M., and that of a P.G.C. to W. Bro. Sir Borradaile Savory, Bart, Chaplain, was unanimously approved, and it was also resolved to contribute out of the Lodge funds the sum of ten guineas to each of the three masonic charities. The brethren and a number of guests subsequently dined together.

Calendar.

- 1902.
- Jan. 15.—Mr. Langton's Clinical Lecture.
A.F.C. v. Richmond at Shepherd's Bush.
R.F.C. v. Royal Engineers at Chatham.
- .. 16.—Abernethian Society. Mid-sessional Address.
Dr. Champneys on "Some Pages from Ancient History of Obstetric Medicine and Surgery."
- .. 17.—Dr. Gee's Clinical Lecture.
On duty. Sir Lauder Brunton and Mr. Cripps.
- .. 18.—A.F.C. v. St. Leonards at St. Leonards.
R.F.C. v. Catford Bridge at Winchmore Hill.
H.C. v. Guildhall at Manor Park.
- .. 20.—Mr. Cumberbatch's Special Lecture.
- .. 21.—On duty. Sir Wm. Church and Mr. Langton.
- .. 22.—Mr. Langton's Clinical Lecture.
- .. 23.—Abernethian Society. Mr. C. E. West, "Some Innocent Tumours of the Breast."
- .. 24.—Sir Dyce Duckworth's Clinical Lecture.
On duty. Dr. Gee and Mr. Marsh.
- .. 25.—A.F.C. v. Tunbridge Wells at Tunbridge Wells.
R.F.C. v. Bedford at Bedford.
H.C. v. Uxbridge at Uxbridge.
- .. 27.—Dr. Ormerod's Special Lecture.
- .. 28.—On duty. Sir Dyce Duckworth and Mr. Butlin.
- .. 29.—R.F.C. v. Roslyn Park at Winchmore Hill.
H.C. v. R.M.A. at Woolwich.
- .. 30.—Abernethian Society. Mr. Litley Jones, "Concerning Arthritis."
- .. 31.—Dr. Hensley's Clinic.
On duty. Dr. Hensley and Mr. Walsham.
- Feb. 1.—H.C. v. Tulse Hill at East Dulwich.
A.F.C. v. Old Cholmeians at Winchmore Hill.
R.F.C. v. Northampton at Northampton.

- Feb. 3.—Mr. Bruce Clarke's Special Lecture.
- .. 4.—On duty. Sir Lauder Brunton and Mr. Cripps.
- .. 5.—Mr. Butlin's Clinic.
H.C. v. Blackheath School at Blackheath.
- .. 6.—Abernethian Society. Mr. W. Hamer, "The Diagnosis, Prognosis, and Treatment of Intussusception."
- .. 7.—Sir Lauder Brunton's Clinical Lecture.
On duty. Sir Wm. Church and Mr. Langton.
- .. 8.—A.F.C. v. Tonbridge at Tonbridge.
H.C. v. Royal Artillery at Woolwich.
- .. 10.—Mr. Bowly's Special Lecture.
- .. 11.—On duty. Dr. Gee and Mr. Marsh.
- .. 12.—Mr. Walsham's Clinical Lecture.
A.F.C. v. Eastbourne at Eastbourne.
- .. 13.—Abernethian Society. Dr. Clive Riviere, "Tuberculosis in Children."
- .. 14.—Sir Wm. Church's Clinical Lecture.
On duty. Sir Dyce Duckworth and Mr. Butlin.
R.F.C. v. Portsmouth at Portsmouth.
H.C. v. Royal Artillery at Woolwich.

Examinations.

UNIVERSITY OF LONDON.

M.D. Examination.

Medicine.—E. V. Brown, J. F. G. Calverley, A. S. Cobbleddick, M. W. Coleman, A. R. Cook, P. R. Cooper.

B.S. Examination.

Second-class Honours.—C. A. S. Ridout.

Pass List.

First Division.—C. A. S. Ridout. Second Division.—F. H. Nole, W. T. Rowe, H. S. Ward, E. E. Young.

Final B.Sc. Examination.

K. S. Wise, Second class Honours in Physiology and Zoology.

UNIVERSITY OF CAMBRIDGE.

Medicine.—F. H. Deckett, J. G. Cooke, A. J. Fairlie-Clarke, H. Vaughan Pryce, F. Sanger, J. Stirling Hamilton, H. H. Weir, F. E. Wood.

Surgery and Midwifery.—J. F. Alexander, J. M. Bennion, R. B. Etherington Smith, C. L. McDwill, J. E. Payne, H. Vaughan Pryce, R. M. Ranking.

Anatomy and Physiology.—S. H. Gibson, H. E. Graham.

Appointments.

CRABTREE, F. F., M.R.C.S., L.R.C.P., appointed Assistant House Surgeon to the Royal Surrey Hospital, Guildford.

FORBES, J. GRAHAM, M.A., M.D., D.P.H., appointed Medical Officer to the Gold Coast Anglo-French Boundary Commission.

ROBERTSON, J. F., appointed Assistant House Surgeon to the Royal Infirmary, Derby.

TAYLOR, MARK R., M.R.C.S., L.R.C.P., appointed Medical Officer and Public Vaccinator to the Wendron District of the Helston Union, and Joint Surgeon to the Helston Dispensary.

New Addresses.

JORDAN, A. C., 33, Leadenhall House; and 1, Norton Folgate, E.C.

PEARCE, T. M., Tollmarsh, Buckfastleigh, S. Devon.

TAYLOR, MARK R., Cross Street, Helston, Cornwall.

WILDE, A. N., 29, Court Road, Barry Dock.

WINTER, L. A., Thalmford, Southampton Street, Farnborough, Hants

WRANGHAM, W., Cranborne Corner, Ascot.

St. Bartholomew's Hospital Journal.



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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 J. H. BOOTY & SON, Advertising Agents, 30, Holborn, E.C.

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St. Bartholomew's Hospital Journal.

JANUARY, 1902.

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

On the Learning of Medicine.

An Introduction to the Course of Lectures on Medicine.

By SAMUEL WEST, M.D.

THIS Lectureship on Medicine, like its fellow on Surgery, is the crowning honour of a teacher's career at the Hospital. I think myself fortunate to have achieved it. I trust I shall not prove an unworthy successor of the distinguished physicians who have preceded me, nor fall short of the ideal I have set myself.

Standing here, my thoughts revert to the time when I sat in the seats you occupy. Yet not exactly so; for then neither this theatre existed, nor any of the other school buildings of which it forms a part. They were not opened for use till 1881, just twenty years ago. Ample provision they were then thought for many years to come. Yet within this short space of time, such has been the rapid development in our subject that we find ourselves once more cramped, cabined, and confined, and progress barred on every side by want of room; but I hope ere long these restraints will be removed, and growth be all the more rapid then because retarded now.

These twenty years have seen many changes in both Hospital and School, but I will speak only of some of those which concern the Medical side. The Medical Staff has been increased in number from eight to ten, two new departments have been instituted, viz. those of Electricity and Public Health; and two old departments have been so reorganised and developed as to be really new, viz. the Pathological and the Tutorial.

In my student days the Pathological Department consisted of one Demonstrator of Morbid Anatomy who made the Medical post-mortems, one Surgical Registrar who made the Surgical post-mortems, a Curator of the Museum, whose duties were largely surgical, and a Lecturer who gave a few lectures in the summer term.

We have now a Special Pathologist, the Director and Controller of the department, who lectures and demonstrates all the year round. He has working under him a Demonstrator and Assistant Demonstrator, and an Assistant Curator of the Museum. Two Demonstrators of Morbid Anatomy and the Surgical Registrar make the post-mortems, and work under the lecturer's supervision.

The Pathological Staff is thus equivalent to what in a university would be described as a professor with six assistants. In other words, the actual staff has been more than doubled, but the work and efficiency of the department have increased in far greater proportion. The fact is, that at the present time the Pathological Department represents

and is doing the work of two distinct departments, the one pathological and the other clinical. Pathology has grown rapidly, especially in the direction of Bacteriology, but it is particularly in the application of Bacteriological and Physiological methods to Clinical Medicine and Surgery that the great development of recent years has taken place. For this we require a special Clinical Laboratory and a still larger staff of teachers. I trust that in the rearrangement of the near future provision will be made for relieving this department of pathological work. Further development is now hampered by want of space and want of money. The officers are all overcrowded, overworked, and, alas! underpaid. The Pathological Department wants an endowment. To what better purpose could wealth be applied than to the support and development of the science which in this Hospital is daily doing so much to prevent disease, relieve suffering, and save life? We have many friends, some rich. Is there no one who will give us what we so urgently need?

The Medical Registrar of my day was a simple clerk, appointed by the Hospital to draw up the Annual Statistical Report. Teaching was expressly excluded from his duties. The post, though useless to the School, had, however, two great recommendations to the holder. It gave him access to the wards; and last, but not least when the holder is young, practice a dream of the distant future, and times hard, it made him passing rich on £50 a year.

There are now two Medical Registrars, equally affluent, but they have been brought also into the service of the School, are responsible for the medical notes, and are expected to give help to the Clinical Clerks in the wards.

The Medical Tutor of ancient times was "Jack of all trades," a sort of general coach and crammer for all examinations—Surgical as well as Medical.

In my day Anatomy and Surgery had ceased to be part of his work, but Sir William Savory had these also to supervise. It was still a tradition that the Tutor was responsible for seeing that men were fit for the examinations in Physiology and Chemistry, but this had become a farce, and had been otherwise provided for.

Obstetrics I had myself to deal with for a time. Fortunately, I was soon relieved of that by the appointment of a Midwifery Tutor, my present colleague Dr. Griffith, who laid the foundation of his reputation and practice in the excellent work he did for some years in that capacity.

Materia Medica and Pharmacy developed rapidly under Sir Lauder Brunton's direction.

In these ways soon after my appointment the medical tutor was relieved of all extraneous duties, and left free to devote himself to medicine alone.

Even thus the tradition of the past remained, for the medical tutor was regarded still as a common grinder, and his classes were disrespectfully called "grinders." Men attended, for a few weeks before their examination, to be

crammed and stuffed with tips and *memorie technica*. They came to be ground up till they got a sufficient polish to deceive the examiners.

The problem was to break down this tradition, to convert the grinder into a teacher, and make the medical tutorship a department for the teaching of elementary medicine.

The problem has, I think, been successfully solved, for the tutorship is now one of the most important teaching posts in the Hospital. Instead of going a-begging, as it were, among the junior aspirants of the school, whose only longing when they held it was for the time when they could give it up for more congenial work, it is now an office important enough to be held by members of the medical staff. I held it myself for some years after my appointment on the staff, and my place has now been taken by two other members of the medical staff, Dr. Herringham and Dr. Tooth, under whose direction the work of the department will, no doubt, be still further organised and developed.

The first event of importance in my tenure of office was the establishment of regular classes for the instruction of students prior to clerking to the medical wards,—the auscultation and percussion classes, as they are still called. I well remember the feeling of bewilderment with which I found myself when suddenly pitched into the wards, equipped with a stethoscope, thermometer, and note-book, and with five to ten patients allotted me, but without any idea of what was expected except that I had to take a mysterious thing called a note, and read it out to the physician. Fortunately the house physicians were equal to the emergency, and though they had no junior house physician then to assist them in their hospital duties, they still found time to give their clerks most valuable instruction. I have never ceased to be grateful to such men as Scott of Bournemouth, Turner of Brighton, and Strugnell of Highgate, who gave me my first lessons in clinical work. To depend upon the accident of having men like these in office was not fair to the students, and so the preliminary classes in auscultation and percussion were instituted. These classes added to the rest of the tutor's work soon became too much for one man. An assistant medical tutor soon became necessary, and a few years later a second assistant was appointed. The tutorial staff now consists of three teachers, each with so much work that it is difficult for them to do it all satisfactorily.

With this change of organisation came a change in title. The medical tutor disappeared, and was replaced by the demonstrator of practical medicine. Thus the tutorship became formally recognised as a teaching department.

The tutorial department has now to provide for the wants of the students at many periods in their career. The clinical clerks are first taken in hand and prepared for

the wards. Dr. Andrewes has recently inaugurated a scheme by which the junior house physicians will be utilised during their term of office in the elementary clinical work of the Hospital, so that the instruction commenced previously may be continued systematically in the wards.

The connection between the Pathological Department on its clinical side and the Tutorial is thus becoming very close. The work of the Tutorial department, as originally planned, may be, and is indeed already, being in part performed by the clinical department of the Pathological Laboratory, and if a fully equipped Clinical Laboratory be instituted, as I trust it will be in the near future, it is probable that the internal work will, at any rate in respect of direction and control, be to a great extent absorbed in that department. The students come again under the hands of the tutors during the last year, when preparing for the pass examinations. For them catechetical classes are held and clinical classes taken in preparation for the *vivâ voce*. For the higher examinations special classes are given for the M.B.s and a commentary class for the M.D.

A department of this kind once brought into existence gives proof of its vitality by continuous growth and development. If we can with satisfaction look back upon its past, I think we may also with confidence look forward to its future, and believe that it will always be found equal to the demands made upon it.

Many of the changes referred to were rendered necessary by the increasing stringency of the medical examinations. When I was a student the M.R.C.S. was the popular examination. It was always sound in surgery, but in medicine it left much to be desired. It was only in the year 1882 that these examinations were reorganised, and as the result a complete revolution in the teaching of medicine became unavoidable.

When the conjoint examination of the two Royal Colleges was established a few years later the standard of Medicine was still further raised. I do not think anyone will now say it is too low; indeed, I often think it is too high for a mere pass examination, and I wonder how the amount of knowledge required can be assimilated and reproduced as it is in the time allotted to it. This would, indeed, be impossible without a well-organised system of instruction such as our school now provides. Further organisation and development are necessary, and will no doubt come in time.

It is to the credit of St. Bartholomew's that throughout this period of rapid change in medicine the School has moved with the times; indeed, it has, I believe, generally been somewhat in advance of them. St. Bartholomew's has for many years had a high reputation for surgery, but I truly believe that at the present time St. Bartholomew's provides a systematic and thorough training in medicine

such as it is possible to get at few other places, and I trust this will always continue to be so.

Medals and scholarships obtained in open competition at outside examining bodies are the highest testimony of efficiency. At the London University of recent years we have had far more than our share of the prizes, and this year we have secured three. The Murchison scholarship at the Royal College of Physicians has not infrequently fallen to this school. In the conjoint examination our percentage of passes in medicine is regularly a few units to the good, and considering how large a proportion (nearly one eighth) of all the candidates comes from this school, so that we more or less set the average, it is indeed a matter of congratulation that our success is well above the general average.

Looking back upon the last twenty-five years we may truly say that it has been a period of uninterrupted progress, characterised by increased organisation, co-operation, and efficiency in all parts of the school. Much remains to be done—none are more conscious of this than the teachers—but the record of the past is good earnest of the future.

With these preliminary and retrospective remarks I now turn to the subject with which you are more immediately concerned at the present time, viz. the learning of medicine.

General medicine is made up of two great parts, the science of disease and the art of healing.

The material consists of what are commonly called medical and surgical cases.

Surgery is a mode of treatment, and surgical cases are such as require or are likely to require surgical treatment. The line between medicine and surgery is difficult to draw, but we understand well enough for our present purpose what is meant. Of course these lectures treat of medical subjects only.

Medicine, as so restricted by the removal of surgery, is concerned first with general principles, and then with the application of these principles in certain special directions. The principles must, of course, be first mastered before they can be applied. Specialties must therefore be reserved for later study. Thus forensic medicine and preventive medicine, that is medicine in relation to the law and medicine as applied to the prevention of disease, are the subjects of special lectures, which you will attend by-and-by. Again, diseases of special organs—the eye, ear, throat, or skin—can only be studied with advantage after the general principles of medicine have been fully mastered.

These lectures have to deal, then, with general principles chiefly. Even then it is obvious that time would not suffice to treat all parts of medicine fully. The lecturer must therefore exercise his judgment in selecting what is most

important, and his courage in omitting what can be left for later study. You, on the other hand, must not depend on these lectures alone, but you must fill up the gaps left by your own work and reading. It must not be thought that general principles are elementary, and therefore useful to no one but a beginner; on the contrary, even the oldest and most experienced has constantly to fall back on general principles. They are the most difficult to understand and master. To present them clearly and convincingly is a task which will tax to the utmost the lecturer's skill. It is a task, indeed, which can only safely be entrusted to one of long experience in both the practice and teaching of the subject. This being so, it is easy to conceive the modesty and diffidence with which a new lecturer will enter upon his duties.

In the pictures of disease he draws, the lecturer should endeavour to preserve a true perspective. To do this he must exercise some artistic skill. What a muddle a picture seems, in which every part of it is treated as if of equal importance! and the more accurate and finished the details are, the more confusing the picture becomes, for the eye cannot see clearly all parts at once. It fixes on one object only at a time. What surrounds this is seen more or less dimly according to its distance from the point of fixation. The drawing or colouring may be good, bad, or indifferent, but provided the picture possesses true artistic feeling and composition its meaning will be clear. The lecturer on medicine must compose his picture in the same way, bringing into prominence the central object, and sketching in the details in strict subordination to it. A lecture, like a picture, may lose effect by over-elaboration of details. Though the lecturer indulge thus much in art there need be no fear lest his imagination run away with him, for he will soon be brought up by the practical demands of his subject. The end of all our science is the practical art of healing, and in this imagination is somewhat out of place.

Treatment, *i. e.* the relief of suffering and the cure of disease, is our ultimate aim and object. It is this which gives force and precision to all our work.

The study of treatment cannot be begun too soon. There are a thousand little things which can be picked up now in the hospital, almost unconsciously, which can be learnt in no other way, and which can never be taught in any course of lectures. It is a reproach of the present day that so little systematic instruction is given on treatment. The teaching is mainly directed to diagnosis, and thence it so often seems to stop.

Treatment does not consist simply in giving some mysterious mixture out of a bottle so many times a day. The larger part consists not in the administration of drugs at all, but in general management of the patient, fitting diet, sanitary surroundings, and good nursing. These general principles of treatment can nowhere be so well

learnt as in a general hospital like this, where there are splendid opportunities of seeing how all these things ought to be done. There is a highly skilled body of sisters and nurses, trained in the latest and best methods. They are willing and excellent teachers, and you can learn from them what no one else can teach so well. *Experto crede.* The sisters and nurses of my day taught me much, and I am glad to acknowledge the debt I owe them. In respect of prescribing you cannot learn too soon how to deal with simple ailments, such as constipation, diarrhoea, cough, and dyspepsia. For many of these maladies treatment becomes so much a rule of thumb; then take care the rules you act on are sound.

In a large hospital like this, where everything has to work in a more or less regular and mechanical way, the students tend to be spoilt. The nursing is so good and works so smoothly that it does not obtrude itself, and is taken as a matter of course. Prescribing has to be, so far as possible, by hospital mixtures which can be prepared in bulk when work is not heavy. Many of these mixtures are indicated in the hospital pharmacopœia by symbols, and it often happens that the symbols are all the student seems to know of the medicine he prescribes. So it comes to pass that many a student leaves the hospital unable to write the simplest prescription. Hospital pharmacopœias during student life and patent medicines afterwards have ruined prescribing.

Learn up your hospital pharmacopœia; the prescriptions have been all carefully selected, and have stood the test of experience. It will be hard to improve upon them. Do not strain after originality in prescribing; you will probably only make yourself ridiculous. Licence of this kind is a privilege of later life, and then you will find the temptation not so great as it is in youth. It has more than once happened here that the physician has had to check the therapeutic enthusiasm of a new house physician who would invent a novel prescription for every case,—often, by the way, exhibiting a wonderful command of incompatibles.

Treatment, being our aim and object, must be rational; it must be based upon an exact knowledge of what it is which we have to treat, or upon correct diagnosis. If rational treatment be our ultimate aim, diagnosis is the penultimate aim and necessary antecedent.

The first object in diagnosis is to ascertain whether the patient be healthy. If not, what is wrong? You have already learnt in your anatomy and physiology the structure and functions of the healthy organs. You have now to learn how structures and functions can be perverted.

Medicine is not merely applied physiology; what is applied are the physiological methods by which the perverted functions may be studied just as the normal functions were.

Medicine is the complement of physiology. It is not so

much an application as an extension of it. If an accurate knowledge of normal physiology is necessary as an introduction to the study of medicine, so is the study of abnormal physiology requisite for the full comprehension of the normal, and medicine more than repays the debt it owes to normal physiology by the light it casts upon the processes of health.

One department of normal physiology, and the most popular at the present time, is the experimental. In medicine we study the experiments which disease provides. Morbid and healthy physiology thus act and react powerfully the one upon the other. The greater and more precise our knowledge of the normal the more easily shall we detect and appreciate departures from it, *i. e.* the conditions of disease.

Disease, then, may be described as a departure from health. Health is not a fixed and constant thing. On the contrary, it is a relative term and constantly varying.

Herbert Spencer's definition of life may be applied to health. Life he described as "a continuous adjustment of internal to external relations." When this adjustment is all in order and as it should be the body is healthy.

Health, then, is a condition of equilibrium. It may be illustrated by a balance: the external conditions, *i. e.* the forces which tend to destroy the equilibrium, are in one scale-pan; the internal conditions, *i. e.* the forces which tend to maintain it, are in the other. The equipoise has nothing to do with the actual weights in the pans. They may be ounces or pounds. All that is required is that the weights on the two sides should be the same.

Some balances are made to carry heavy weights, some to carry light weights only; the latter are called delicate, the former strong.

Here are two balances: the one has half a pound weight in each pan, and would bear much more; the other has an ounce in each pan only, and it is as much as it will carry. If I were to put a pound in the lighter balance I should strain it greatly, probably wreck it and completely spoil it.

I now add a few grains to one pan in each; the lighter balance swings at once, the stronger only after a time. So it is with health: the stronger the health, the more difficult it is to disturb it; the more delicate the health, the more easily disturbed it is.

In the physiological balance continuous adjustment is necessary, for the weights are constantly changing. As weights are added to or taken from the one side, so must weights be added to or taken from the other to preserve the equipoise. This is called compensation.

If I take this balance with a pound in each scale-pan, and add a few grains to one side, the heavier side begins to fall. It falls slowly, and I have plenty of time to put the same weight on the other side and stop the swing. The

equipoise is restored, and after one or two gentle oscillations the balance comes to rest again.

If I now add an ounce in the same way the pan falls more quickly; but still, if I am quick, I may have time to stop it going far, though the swing will be more rapid and greater.

If I add two ounces the pan falls too fast for me to stop it. If I add more it may fall with such a shock as to throw the balance out of gear altogether. Failing this, I can still restore the balance by adding equivalent weights. The lower pan then begins to rise slowly, and after several wide oscillations in time recovers the position of equilibrium again.

If I add the same weight of two ounces which produced so much disturbance, not all at once, but gradually—grain by grain, for instance—the adjustment is easy and the oscillation slight, as in the first case.

The power of compensation is thus shown to depend not so much upon the actual amount of change as upon the degree of suddenness with which the change is made. The rate of fall and the oscillations which result are an index of the disturbing force.

Further, there are limits to compensation. Suppose I have 500 grains in reserve. I can draw on this as may be necessary in large or small amounts, but so soon as the reserve is all used up no further adjustment is possible; even one grain added more destroys the equipoise for ever.

In a muscular organ like the heart, compensation is represented by growth, that is hypertrophy. Hypertrophy is only possible by drawing on the heart's reserves. So the paradox is explained that an hypertrophied heart, though apparently so muscular and strong, is a weak heart, for it has used up its reserves, and a slight extra demand may lead to its sudden and complete breakdown.

Health, then, is a condition of equilibrium. Disease is a condition in which this equilibrium is lost. The oscillations in the balance are the result of it, and represent the signs of disease.

The signs of disease fall into two groups: the subjective, those of which the patient complains, that is symptoms of dis-comfort or dis-ease; the objective, those which the doctor can detect, the evidences of organic disease. This is a distinction of considerable clinical importance. Originally the word disease meant dis-comfort, dis-ease, and referred to the patient's feelings only. Gradually it came to acquire a pathological meaning, that of organic disease. A patient is not unfrequently told that there is no disease, and yet what brought him to the doctor was his dis-comfort or dis-ease. There may be much dis-ease without any organic disease, just as there may be considerable organic dis-ease without any dis-ease.

Many patients trouble themselves but little about any dis-ease they may have if they have no dis-ease; and if they

have *dis-ease*, discomfort, they rightly expect the doctor to relieve it.

The prime object of treatment is to remove if possible the cause of disease, and rightly, for with the removal of the cause the consequences will vanish. But if the cause cannot be removed, it does not follow that there is nothing to be done. If we cannot remove the disease we must relieve the *dis-ease*. If we cannot cure the disease we can at any rate treat the patient.

Treatment of symptoms is sometimes spoken of as if it were irrational. But it is not so. In diphtheria we may not be able to remove the bacilli which cause the disease, but we can neutralise their products upon which the evil results depend. So with other symptomatic treatment; we may find hereafter that when administering the remedies which give relief we have really been employing, without being aware of it, the most scientific antidotes to the cause. You see how naturally diagnosis leads to treatment. I began to discuss diagnosis, and yet passed almost at once to discuss principles of treatment. I return again to diagnosis.

If a patient be not well, it is necessary to discover what is the matter. This is called making a diagnosis.

The diagnosis is a conclusion which follows logically from certain premises. It is not a guess or lucky shot. Given all the facts, the diagnosis necessarily follows. But if the facts be not real facts, but inaccurate observations, or incorrect assumptions, then the more logical the mental process the more certain is the diagnosis to be wrong. The importance, then, of correctly ascertaining and stating the facts of the case is obvious, and the greater part of your time as students will be spent in learning this art.

To make a diagnosis you must learn—

1. What the facts are which it is important to ascertain. This you will be taught in these lectures and in other parts of your hospital course.

2. The methods by which these facts can be ascertained. These are the subjects of your various practical classes.

3. The use that can be made of these facts and the conclusions which can be drawn from them. This will be your work in the wards and out-patient departments.

The lecture method is analytical. There a disease is taken and dissected, and its parts laid out before you. Your own work as students will be the exact opposite of this, for the method of learning is synthetical. The lecturer takes the fagot, picks it to pieces, and shows you the separate sticks of which it is made up. The student has to collect the sticks, lay them side by side, and bind them all together so as to make up the fagot for himself.

The first year of clinical work should be spent by you in mastering the methods of clinical investigation, in learning how to collect your sticks.

Pathological demonstrations and work in the post-mortem room will show the structural changes which disease pro-

duces, for medicine is built upon the basis of morbid anatomy. You will there be taught how to recognise these structural changes in the living person.

Having learnt these methods so that you can make practical use of them and rely upon your results, you will next have to observe the perversion of function with which these changes of structure are associated, *i. e.* the symptoms which the patients exhibit. These two courses of instruction really run concurrently to a great extent, and you will begin at once to practise both by taking the notes in the wards.

The taking of a note is really an art of great importance to you, and by no means easy to acquire. I wish we had a uniform system of note-taking throughout the hospital, but it is not so. There are two systems in use,—the one anatomical or regional, the other physiological.

The anatomical method is intended to train the observation only, and not the reason. The student examines the whole body, beginning from the crown of the head and ending at the sole of the foot, noting down everything which strikes him. The great objection to this method is that it brings into relation parts which have little or no physiological relation to one another, *e.g.* the hair, the eyes, and the tongue.

The physiological method is much to be preferred. Then the various physiological systems are taken each in turn and examined, so that the facts recorded hang together in a rational way, and the student practises from the commencement the method which he will certainly adopt subsequently. A short scheme of this kind which I drew up for my own classes you will find on the table.

On this subject of note-taking I will give you a few practical hints.

- i. Be orderly and systematic. You had better form a habit of order than not, for a habit of one kind or the other you will certainly form. There is so much to observe and record in any case that without some regular system upon which you can work you will infallibly miss something of importance, or will, at any rate, never feel confident that you have not missed any.

- ii. Express your observations in the simplest and plainest words you can find in your vocabulary. Avoid technical terms as far as possible, at any rate at first. They are a great trap, and though they give an appearance of knowledge more often conceal ignorance. If you cannot avoid them, be sure you fully understand and are able to explain their meaning. The perplexities of auscultation and percussion, as of many other parts of medicine, lie less in the facts themselves than in the inaccurate use made of words to describe them.

- iii. Do not mix up the facts observed with your opinions upon them. A beginner may be able to describe the facts he has observed with perfect accuracy, but his opinions

cannot be of much value, and will probably be wrong. To state the facts observed is all the clinical clerk has to do; the conclusions to be drawn from those facts is the business of his physician.

- iv. Cultivate a good style. Think clearly. Arrange your thoughts well, and try and express them simply and tersely in good English. Then your meaning will be clear, and that is the essence of good style.

This advice is of more importance than you may now think it, for consciously or unconsciously an examiner is always influenced by the style of the papers he has to read; with a good style a little knowledge may be made to go a long way, and with a bad style much greater knowledge may fail to have full justice done it.

Having obtained your facts, and stated them, you have next to draw your conclusions from them,—that is, to make the diagnosis. The diagnosis made has next to be tested—verified. You should now go over the whole case again in your notes. See what the difficulties and objections are to the diagnosis you have made, and consider how they are to be explained. If you write down the results of your review, they will constitute that mysterious thing which is called "a commentary," *i. e.* the comments you have to make. Let me advise you now to take your notes home, read up the subject, go over your notes again, and make a list of the points you have omitted, or wish to investigate further on your next visit to the wards. If you study your cases in this way, not reading a text-book from cover to cover, but getting up subject by subject as opportunity offers, the knowledge you get will stick to you, and you will be surprised how much you have learnt in a few months without any conscious effort. The best test of a diagnosis is the autopsy, for if your diagnosis be confirmed by that most crucial of all tests, you will gain confidence; and if it be not confirmed, you will at any rate see wherein the mistake lay, and learn humility.

It is in the wards that the difficulties of diagnosis will first be brought home to you. A puzzle seems so easy when the solution is known; but in the wards the puzzle is there, its solution is unknown, and you have to discover the key for yourself.

It is best for the student to begin in the wards, for the work there is more quiet and deliberate; there is more time to investigate the facts and digest them. In the out-patient room the work is necessarily more noisy and more rapid; there is less time to investigate and think. But you will find that it is in the out-patient rooms that you will learn most of what is of greatest use to you in practice hereafter.

Be constant in your attendance in both wards and out-patient rooms, and above all in the post-mortem room, for there you will gain a greater insight into the processes of disease than can be obtained in any other way.

Do not be afraid when you are young of making mistakes

and asking questions. It is the only way to learn, and you cannot well do either of these things afterwards in practice.

You have three years to devote to clinical work: the first will be partly occupied in learning the clinical methods; the second in practising and applying them; the last year will be spent attending the special departments and preparing for examination. I have already shown how the School provides help for you at all these stages, of which I trust you will take full advantage. I have but one last piece of advice to give you, and not the least important: "Do not be in a hurry."

There is time for everything, much as it seems, if it is taken quietly and in order. *More haste, less speed.* Hurried work is scamped work. Work as rapidly as you please and can, but let the work be thorough. Some men have an insane desire to get their examinations over, and are tempted to go up before they are ready,—“to rush it,” as they describe it. This is fatal. The list of plucks in all the examinations is largely made up of those who rush; and they are often ploughed not once, but over and over again. The mischief is that work once badly done is never well done afterwards. All that such men can do is to go back and hurry again over the parts they have failed in. The effect of hurry can no more be made up than the time be recovered which has been lost. The foundation has not been firmly laid, and the structure built on such foundations will never be secure.

There is plenty of time, with the classes and instruction so well organised and arranged as they now are, for every one to get up the work thoroughly without hurry or worry—if only he will do one thing at a time, and do it well. No better advice can be given than that contained in the legend over the school entrance, "What thy hand findeth to do, do it with thy might."

The Evolution of the English Medical School.

A Paper read before the Abernethian Society, on Thursday, November 7th, 1901.

By J. A. NIXON, M.B. Cantab.

(Concluded from p. 41.)

THE thirteenth and fourteenth centuries probably represent the low water mark of English letters; the physicians were ecclesiastics reading the Latin medical authors, writing only as copyists and commentators, practising physic and surgery *more antequorum*, and adding nothing to the general stock of knowledge.

The surgeons were in some respects rather worse; they knew no language but their mother tongue, and were hence absolutely unlettered,—perhaps, if the truth were known, to the advantage of mankind at large, for as handicraftsmen they acquired no little dexterity, and as empirics they fared no worse than their contemporary physicians who theorised on Galenic premises.

At the beginning of the fifteenth century the physicians began to evince a desire to improve their social status, and this, considering

the influence of ecclesiastics at court, they were able in some degree to accomplish, for they presented to the king, Henry V, a petition in which they prayed that "no man of no manner of estate, degree, or condition practise in Fysyk from this time forward, but he have long tyme used the scoles of Fysyk within some universite, and he graduated in the same under payne of long imprisonment and paying a lile to the kyng." Also (and this is a liberal clause) "lest they which ben able to practise in Fysyk ben excluded from practysing the which be sought graduated. Pleaseth to your high prudence to send warrant to all the shereffs of England, to every practysor in Fysyk, nought graduated in the same science, that will practise forth, be withynne one of the universites of this lond by a certayne day, that they ben able and approved after trowe and stryct examination be receyved to their degree, and they that be nought able to cese from the practise unto the tyme that they be able or never more entre mette thereof, and that thereto also be set a peyne convenient." This is the first attempt at registration of medical practitioners, and it shows clearly that a university education was essential to the better class physician; however, and though the reply directs the Lords of the Council to see that the various recommendations of the petition are duly executed, there is no evidence that any further steps were taken in the matter.

To protect their interests the physicians then took the matter into their own hands, and seeing the position which the City Guild of Surgeons then occupied (for the craft guilds were in London at least all powerful in their respective spheres) associated themselves into a society, which was to co-operate with the already existing fellowship of surgeons. And at some date between May, 1421, and May, 1423, the physicians and surgeons formed a conjoint college independent of each other as to rights and privileges, but under the approval of the mayor and aldermen of London, to regulate the medical and surgical professions. During Henry V was in France, the surgeons with the army, and notably Thomas Morstede of St. Bartholomew's, had risen to an eminence which had hitherto been denied to them, and the influence of the latter, who was the first serjeant-surgeon, was not improbably sought to ensure success for the petition and foundation of the College.

This body made regulations for the examination of would-be practitioners, and issued licences to practise. After 1424 there is no further evidence of its existence; and it is probable that the jealousy between the two branches rendered the scheme unworkable in practice.

But the surgeons continued to carry on the work of their half of the College, and a definite Fellowship of Surgeons was incorporated in 1435. They taught the apprentices and examined outsiders who were anxious to practise surgery, the fee to the latter (who are always referred to as "foreigners") being of course much higher than that demanded of apprentices who were made free of the craft.

By the year 1462 both barbers and surgeons had been separately licensed by the City, but as yet neither had obtained a royal charter for their guild; and in 1468 the barbers practising surgery obtained a charter from Edward IV.

From this time the barber-surgeons continued to improve their position until they finally became surgeons, when the Barbers' Company and the Guild of Surgeons were united by Henry VIII.

The rules for the enrolling of fit and proper persons as apprentices in the Barbers' Company were very strict, and extended to a physical examination. Each enfranchised barber might instruct three apprentices, and not more than two "stranger" servants might be kept, while none but they should be allowed to keep open shop in the City under penalty of 40s.

The surgeons at this time had obtained exemption from keeping of watch and bearing arms, a privilege which the City authorities struggled hard to contest; yet the shadow of victory rests with the surgeons. For the Chairman of the Court of Examiners still informs successful candidates that they are exempt from service in the militia or on juries, nor can their horses be requisitioned by the Fire Brigade. Thenceforward the barbers and surgeons lived in amity. The surgeons held the higher social position, but had not the advantage of a Royal Charter; the surgeons had no doubt improved their intellectual status by the contact of the military surgeons with foreign influences during the wars, yet when in the third year of Henry VIII further powers were sought to forbid "any person in the City of London or within seven miles of the same to take upon him to exercise or occupy as a physician or surgeon, except he be first examined, approved, and admitted by the Bishop of London or the Dean of St. Paul's," little improvement

seems to have taken place in the practice of either medicine or surgery at large.

This is the first mention of the licence of the Bishop of London; yet in the history of medicine, and especially of our Hospital (v. Calendar), this authority figures frequently.

Either the Bishop or Dean had to associate himself with four doctors of physic before granting a licence in medicine, and for surgery other expert persons in that faculty, who were to certify after due examination as to the fitness of the candidate to practise. In other parts of the country the bishop of the diocese or his vicar generally acted as licenser.

Strange as the situation may seem, the licensing power of the ecclesiastical authorities still exists though never exercised, for the Archbishop of Canterbury has the right to confer any university degree on fit and worthy persons—a right which is claimed from time to time at the present day, though never in medical degrees.

There is no doubt that, at the time, the Church dignitaries were as fit or fitter than any layman to grant licences; many of them held medical degrees, and at best the qualification to practise medicine only comprised a knowledge of certain authors, which the university education of the clerics had brought within their reach.

The accepted medical curriculum in the early days of the sixteenth and succeeding centuries was somewhat as follows:

At the tender age of fourteen years the more promising lads in the monastic schools were sent to Oxford or Cambridge, where still in a monkish atmosphere they read, with a reverence only equalled by that in which the fathers of the Church were held, the Galenic and Arabian literature of medicine.

Having thus qualified in the literature of their subject, they subsequently studied practical medicine, chiefly anatomy, at one of the great Continental schools, Padua, Montpellier, Bologna, or Paris, where, under such men as Achilini, Sylvius, Vesalius, and Fallopius, they shared in the making of history. From these centres of real learning they travelled abroad to others, perhaps begging their way from town to town, or, if men of substance, placing themselves under the direct tuition of one of the great professors.

Of these one stands out pre-eminently, Vesalius, the inventor or creator of modern anatomy, as Herodotus had been of the old; he was a native of Brussels who went to Paris, and from the lips of Sylvius laid the foundations of his anatomical knowledge. Subsequently he journeyed to Padua, and there became the greatest teacher of any country or time; his class, we learn, numbered 500; his writings included the first really great work on anatomy, being a description of the human frame as seen from dissection, and not through the hazy telescope of tradition.

To his class came a young Cambridge graduate, one who, destined for the Church, had acquired at Gonville Hall all that the university could offer of a classical education; lodging in the house of his master, John Caius with his contemporary William Butts, a member of the same hall, propped by his relations with Vesalius to become not only a distinguished anatomist, but studied also, to the lasting advantage of every English medical student from that day to this, the methods of scientific teaching.

Then fully qualified, Caius returned to England, and in Cambridge, in his own college founded by Gonville, he created the modern study of physic. He obtained permission for dissections in Cambridge, and ordained that yearly in the hall of his college a public dissection of a human body should be held. This was known as the "Anatomy of Caius," and from this institution dates the true English study of medicine. Henceforth it was possible to study medicine not as a literary subject, but as a true science, in England.

Medicine has had many fathers, but the medical student has but one; our filial gratitude is due to one name only, John Caius.

In 1518 Linacre had founded the College of Physicians in Knight-riding Street, but great as was the influence of this body in maintaining a high standing of medical knowledge it had but little connection with the unqualified student of medicine; it admitted to its fellowship none save those who had previously graduated at Oxford or Cambridge. But Linacre and Caius stand out as the greatest educators in the medical world; they emancipated English medicine from the control of the clergy, and at the same time laid the foundation of the self-government of English physicians.

For two centuries after Dr. Caius's time medical study went forward on the lines he had laid down; his example in studying practical anatomy was followed in London by the Barber-Surgeons Company (after its incorporation by Henry VIII in 1542). Public anatomies, as they were styled, were held on the bodies of condemned felons, and it is evident that at St. Bartholomew's the surgeons turned their attention to anatomy, for in 1548 Thomas Vicary,

Surgeon to the Hospital and Serjeant-Surgeon to the King, published his work on anatomy, which may now be found in our library—*The Englishman's Treasure, with the True Anatomy of Man's Body*—a book whose popularity was soon established, and ran through nine editions in the ninety-three years succeeding its first appearance.

Vicary himself was not gentle by birth or by profession, and his education was probably not of the highest, yet he had sufficient common sense to appreciate the value of a general education if the surgeon's position was to be improved. The surgeons of St. Bartholomew's Hospital—William Bedon, Richard Story, Edward Baily, and William Clowes—thought it "so learned a worke of anatomy" as worthy to be by them "students in Chyrurgie not without our great study paines and charges newly revived, collected, and published abroad to the commodity of others," long after the death of the author.

In 1582 the first of the now famous public lectures was founded in the College of Physicians by Lord Lumley, and the Lumleian Lecture is still delivered year by year, though not in the same form as originally devised.

In these years many ordinances were drawn up for the teaching of apprentices, who learnt practical surgery with their masters, and doubtless attended the Public Demonstrations in Anatomy and such lectures as were given at the Barber-Surgeons' and College of Physicians' Halls.

Throughout the reign of Elizabeth the company maintained one scholar at the University of Oxford or Cambridge; these scholars were usually the sons or relatives of prominent members of the Company.

Licences to practise were still granted after examination by the master and governors, and according to results the licence was given either permanently if the candidate acquitted himself well, or for a longer or shorter term of years if less satisfactorily. On very rare occasions aspirants were referred for a further period of study.

In 1599 an unsuccessful attempt was made to persuade the Bishop of London to forego his right to issue licences to practise surgery in his diocese.

In the early half of the seventeenth century the position of medical study remained but little altered; physicians graduated at Oxford or Cambridge, then studied abroad, and clinical work was entirely, as we should say, post-graduate; but our Hospital became, or had been for some time past, a place of resort for clinical work for graduates in medicine.

In 1645 Mr. Edward Arris, who had been examined and admitted to practise surgery in 1629, bequeathed to the Barber-Surgeons' Company certain money to found a Lecture and Public Dissection.

Later in the same century private persons took upon themselves to dissect and demonstrate anatomy, for executions were frequent and Government officials venal. In 1630 first, and later in 1673-4 and 1714, complaints were made to the court of the company that "diverse persons inhabiting in London and the suburbs, and diverse aliens, foreyners, mountebanks, impostors, and empiricks have of late indirectly obtained many dead bodies and dissect them in private dwelling-houses, to the shame and scandall of the government of this City and the general grievance of the Commonwealth by smothering men murdered in private places and dissecting them in private houses, giving the word forth that they are anatomies, which may prove of dangerous consequence."

The private persons alluded to sometimes included members of the company itself,—as, for example, Mr. William Cheselden, who was arraigned before the court of his own company, for that "he did frequently procure the dead bodies of malefactors from the place of execution and dissect the same at his own house, as well during the company's public lectures as at other times, without the leave of the governors, and contrary to the company's by-law in that behalf."

Such was the rise of the private schools of anatomy in London, which for many years threatened to rival the budding hospital schools, and still exist though in diminished numbers.

During the years that these changes were taking place in the study of surgery, which have been traced in London for the sake of uniformity, though similar systems had sprung up elsewhere, notably in Edinburgh and Dublin, the study of medicine remained, speaking broadly, what Dr. Caius made it, medicine was a University subject, and was open only to students of Oxford and Cambridge, who like Sydenham, after leaving Oxford, went to the Continental schools, probably Leyden and Paris, and certainly Montpellier. At Oxford in his time, 1647, there was a Regius Professor

of Medicine, whose duties were to read a lecture twice weekly on Hippocrates or Galen; and there was some regular teaching in anatomy, since a readership had been founded in 1623. But the most have seen its beginning under Lower [1642] and Willis [1650].

The troublous period of the Civil War and the early days of the Commonwealth interfered somewhat with the smooth course of medical education in the two ancient universities, which became actively partisan, and the wonted intellectual calm was rudely shaken.

London, then as now ballasted by its commercial interests, preserved a more placid atmosphere, and education began to centre there.

The two existing hospitals of any note, St. Thomas's and St. Bartholomew's, profiting by the unsettled state of the provinces, entered into competition with the Barber-Surgeons' Company, and opened their doors to the medical student as we understand the term.

In 1662 their first official recognition by the *Governors of St. Bart's* is recorded by the formation of a library, as the Hospital minutes say, for the use of the Governors and the young university scholars.

In October, 1695, complaints were made by members of the Barber-Surgeons' Company "against breeding so many illiterate or unskillful pretenders to chirurgery at St. Thomas's Hospital or wherever else the like ill-practices are used, where contrary to the oath of our Company and of the City of London the chirurgeons pretend to qualifie any person how unfit soever in half a year or a year for the expert practise of our art." Then after further clauses they go on, "Nay, so far has this mischief extended itself that . . . one if not two of the very master chirurgeons of that hospital had noe education but what was spurious and of this sort."

In 1702 the Governors of St. Thomas's Hospital took the matter of teaching into their own hands, and whilst recognising the right of the surgeons to take pupils ordained that "none shall have more than three cubbs at one time, nor take any for less than a year."

The eighteenth century shows the hospital schools gaining power and increasing in numbers.

At our own Hospital in 1726 a museum of anatomical and surgical specimens was instituted, and in 1734 leave granted for any of the surgeons and assistant surgeons to read lectures in anatomy in the dissecting room of the Hospital, which we thus hear of for the first time.

In 1745 the Barber-Surgeons' Company divided into the Barbers' Company and the Surgeons' Company, then newly incorporated, the latter company no longer resisting the claims of the hospitals to teach surgery.

Physicians continued to graduate at Oxford and Cambridge, but instead of seeking knowledge at the Continental schools they began to realise the vast wealth of clinical material which then as now was available in the London hospitals. Clinical training was recognised to be, as Sydenham had shown it, the main object of the medical education, and the more purely scientific subjects as they came into prominence were relegated to the position of valuable adjuncts.

Hence the centre of teaching became the hospital, on to which the school was grafted and where the subsidiary branches could be cultivated. Moreover the Hundred Years' war had made living and travelling on the continent of Europe less secure than it had been in the days of John Caius and William Harvey.

About 1765, however, the two Piteirans, successively physicians to the Hospital, delivered lectures on medicine as well as surgery and anatomy.

From the life of John Hunter one learns that at St. George's, as at St. Bart's, there was no common school attached to the hospitals where students shared in courses of instruction, but the physicians and surgeons had each of them their own pupils who followed them, and saw what they could of the work of the other men; the pupils were present at operations, consultations, and post-mortem examinations; but for everything else (this is St. George's in 1793) "they have to go for their anatomy to Windmill Street; for their midwifery to Queen Street, Golden Square; for their chemistry, materia medica, and practice of physic to Leicester Fields." There were the great private schools, such as the Aldersgate Street of anatomy was in Sir James Pagan's day nearer home, and "Coole's" is to-day.

In 1791 physiology had been added to the curriculum. And now the apprentice system was in full swing; first apprenticed to a country practitioner, then to a hospital surgeon (physicians seem not to have profited by the remunerative system), finally qualified by the College of Surgeons or the Society of Apothecaries, the

newly fledged doctor either went into the cold world, or if he became a house surgeon by mere lapse of time came on the senior staff.

Such was the natural order of events until Sir James Paget came on the scene. Circumstances and lack of means prevented his paying the large fee necessary to become an apprentice to a hospital surgeon, but his intellectual attainments and the man himself forced the Governors to break through their rule, neglect vested interests, and at one blow break the apprentice system by electing Sir James to the staff of our Hospital. Henceforth the absurdity of the apprentice system became apparent, and from the student's side it met with but little support, for what was the use of paying a big fee to be a surgeon's pupil, and a further one to be his house surgeon, if an outsider without incurring any of this expense could step in and take the higher appointments?

Here, gentlemen, is the school we know; and if I have said but little of the later phases of the examination system, and but little of the qualifying bodies of the present day, it is because they have had but little or nothing to do with the making of the medical schools. They have been the result of the system rather than its cause.

If we have finally reproduced the Conjoint Examining Board of the fifteenth century, it is because our system of education was ready for it, as it had not been four centuries before.

If I have left out all mention of the University of London, it is because it has merely maintained the standard rather than altered the course of medical education. It may be that but little time has been spent on the nineteenth century with all its discoveries in science and medicine, with its additions to the curriculum, and its lengthened term of pupilage. The reason has been that the nineteenth century has been the apt pupil in that school the broad outline of which John Cains had conceived, to which Harvey contributed his marvellous discovery, the pioneer of all physiology and to which Sydenham added clinical medicine. These are the founders of our school, in which succeeding generations have worked, and page by page laid open the book of knowledge, that precious merchandise which Clement and Melrose offered to Charlemagne, whose price Harvey so simply expressed when he wrote in his friend's album,

Dii laboribus omnia vendunt.

Perforating Gastric Ulcer occurring in Two Sisters.

By W. L. PETHYBRIDGE, M.D., B.Sc., Plymouth.

PERFORATION of a gastric ulcer is not a very common event, and the fact of its occurrence in two sisters, both of whom were operated on, and both of whom recovered, must, I should imagine, be unique in the history of surgery.

The following are brief notes of two cases which have come under my observation, and which were operated on in the South Devon Hospital by Mr. Lucy and Mr. Whipple respectively:

CASE 1.—At 10 p.m. on March 8th, 1900, I was called to see G. P., a factory girl æt. 20. Her history was that she had been at work in her usual health in the morning, when at 11.30 a.m. she was seized with sudden very severe pain in the pit of the stomach. She was slightly sick once, but there was no other retching or attempt at vomiting. She was brought home and put to bed. I found that about two years previously she had been treated for dyspepsia but that latterly she had not complained of anything definite. She had never brought up any blood.

On examination the face was very pale with an anxious expression; pulse 120, feeble; temp. 100°. The abdomen was very distended, and moved very slightly with respiration. There was great tenderness in the epigastrium and left hypochondrium. The abdomen was resonant everywhere except for some slight dullness in the right flank. The liver dullness was diminished.

The patient was advised to go to the hospital for operation at once, but declined. At 10 a.m. on the following morning her pulse

rate had risen to 140, and the liver dullness had almost disappeared. Patient now consented to operation, and was sent to the hospital. The abdomen was opened at 12.30 p.m. by Mr. Lucy. Free gas at once escaped, and a perforated ulcer the size of a half-crown was found on the anterior surface of the stomach towards the cardiac end. The edges were thickened and indurated. On this account, and considering the large size of the ulcer and the desperate condition of the patient, no attempt was made to suture it, and it was merely brought up to the abdominal wall, packed round with gauze, and a drainage-tube passed through the perforation into the stomach. The abdomen was washed out with hot saline solution, and the stomach contents, which were free in the peritoneal cavity, and included a large piece of orange, were evacuated.

During the operation patient was infused with six pints of saline solution and an ounce of brandy. She was extremely ill for forty-eight hours after the operation, but then began to improve steadily. The fistula healed without further operation. The drainage-tube was left in for about a week, and on a few occasions the patient was fed through it. There was not much discharge of gastric juice, and the wound was soundly closed before the patient left the hospital at the end of six weeks. She has had no return of any stomach trouble since.

CASE 2.—At 8 p.m. on November 16th, 1901, I was hurriedly summoned to see A. P., a younger sister of the above, the messenger stating that the girl's mother believed her to be suffering from the same complaint as her sister had had, and events proved this diagnosis to be correct. The girl was sixteen years of age, a machinist. She had been ailing for several weeks, but had not seen a doctor. She had her usual dinner of meat and vegetables at 1.45 p.m., and then worked at her machine for about two hours. At 5.15 p.m., while sitting quietly in a chair, she was seized with acute pain in the upper part of the abdomen and left side, which persisted until I saw her. There was no vomiting or retching.

On examination the face was very pale and pinched, the legs were drawn up, respiration shallow and rapid; the abdomen was distended in the lower half, and scarcely moved with respiration; there was tenderness in the epigastrium, and dullness from the pubes nearly to the umbilicus. This, however, and the abdominal distension proved to be the result of a distended bladder. The liver dullness was normal.

In this case there was no difficulty in persuading the friends to allow the girl to submit to operation, and she was at once sent to the hospital, and the abdomen was opened by Mr. Whipple at 10 p.m. The perforation was the size of a sixpence, and was situated on the posterior surface of the stomach at the cardiac end high up under the diaphragm. With a little trouble the perforation was successfully sutured and the abdominal cavity cleansed. No gas escaped on opening the abdomen. This patient was also infused with saline solution, strychnine, and brandy. She made a rapid and uneventful recovery.

The chief points of interest in these two cases are—

(1) The fact of a comparatively rare misfortune happening to two members of the same family.

(2) The fact that perforation did not come on soon after a meal, the interval being three and a half hours in each case. In the first case the patient breakfasted at 8 a.m.

(3) The absence of retching after perforation in both cases. (4) In the first case the fact of recovery after an interval of twenty-five hours between perforation and operation. Recovery was no doubt largely assisted by the injection of saline solution.

(5) In the first case the liver dullness was diminished, and there was free gas in the abdominal cavity. In the second case the liver dullness was normal, and there was no gas in the abdominal cavity. (6) In the second case the youth of the patient. She looked a mere child.

I have not studied the literature of gastric ulcer, but I do not remember to have read of a case of perforation occurring under the age of seventeen.

I am indebted to Mr. Whipple and Mr. Lucy for permission to publish these notes.

Apology of a Minor Poet.

SINCE the first unlucky hour
When I patronised the muse,
I've been greeted with a shower
Of gratuitous abuse.
"It's a crime
To waste time
Making rhyme!"

Though to poetry addicted,
Still, at any rate as yet
I have never been convicted
Of a penny novelette:
Heaven knows
No mere prose
Is my pose!

Were I painfully pedantic,
Were I wanton with my wit,
Were I rabidly romantic,
Then the symptoms, I admit,
Might be worse;
But my verse
Is most terse!

When I'm cured of this distemper,
Then my sympathising friends
Will be kind to me, *quid semper*,
Overjoyed to make amends,
I'll explain
That I'm sane
Once again!

HAROLD WHALE.

Notes.

MR. WILLET has been appointed Consulting Surgeon to the Hospital.

MR. WARING has been elected to the post of Assistant Surgeon—a most popular appointment, on which we congratulate ourselves no less than Mr. Waring.

SIR T. LAUDER BRUNTON and Dr. J. S. Edkins are among those appointed University Lecturers in Physiology and Experimental Psychology at the University of London.

DR. HORTON-SMITH has been appointed one of the Honorary Secretaries of the Advisory Committee appointed by the King for the erection of a Sanatorium for Tuberculosis in England.

MR. MCADAM ECCLES is delivering, as Hunterian Professor three lectures, illustrated by lantern, on the Anatomy, Physiology, and Pathology of Imperfectly Descended Testis in the Theatre of the College of Surgeons on February 24th, 26th, and 28th, at 5 o'clock each day.

DR. CHARLES POWELL WHITE has been appointed Erasmus Wilson Lecturer. His subject is the "General Pathology of Tumours," and the Lectures will be delivered at the College of Surgeons on February 10th, 12th, and 14th at 5 o'clock each day.

THE Annual Oration of the Hunterian Society will be delivered on Wednesday, February 12th, at 8.30 p.m., in the Theatre of the London Institute, Finsbury Circus, by Arthur T. Davis, M.D., F.R.C.P., subject "Organotherapeutics, Ancient and Modern." It is open to members of the profession to attend.

MR. PHILIP DE SANTI, F.R.C.S., Senior Assistant Surgeon and Surgeon in charge of the Ear Department at Westminster Hospital, has been appointed Surgeon to the Throat, Nose, and Ear Departments, which have been amalgamated at Westminster, and in consequence has resigned the Assistant Surgeoncy.

DR. CLAYE SHAW is giving a series of Demonstrations on Mental Diseases on Thursdays, at 4 p.m., at St. Luke's Hospital, in place of those formerly given at the Daistead Asylum, beginning on February 6th.

MR. HERBERT WILLIAMSON has been appointed Demonstrator of Practical Midwifery.

MR. W. D. HARMER has been appointed Demonstrator of Anatomy.

MR. K. R. HAY has taken the degree of M.B. in the University of Cambridge; Mr. F. E. Wood and Mr. F. H. M. A. Beckett that of B.C.

It is with deepest regret that we hear of the death of Dr. A. N. Weir, who was only recently Demonstrator of Anatomy. He met with an accident on the Brighton Railway on February 1st, and died the following day in Guy's Hospital. We hope to give a full account of his life and achievements in our next issue; meanwhile we offer our sincere sympathy to his family.

A. E. J. LISTER has been maintaining the reputation of the Hospital by coming out first at Netley and taking the "Maclean" Prize for Clinical and Ward work, the "Parkes Memorial" Bronze Medal for Hygiene, and Special Honourable Mention in Military and Tropical Medicine,

which things do not surprise us, but our congratulations are none the less hearty.

L. M. MORRIS was placed First in the entrance examination for the Navy: more congratulations!

In accordance with the scheme for the development of clinical pathology in the wards the assistant house physicians are now required to attend a special course of practical instruction in the Pathological Department before entering upon their duties. This course will be held twice a year, as soon as possible after the nominations for the appointments have been decided. The provision by the Hospital of modern microscopes and blood-counting apparatus will enable much of the work which has hitherto been performed in the Pathological Laboratory to be carried out in the wards, and it is the intention of the School that the junior house physicians shall be responsible for the teaching of elementary clinical pathology to the clerks.

It is further intended to institute a course in Practical Pathology, with special reference to clinical work, for the benefit of senior students, especially those preparing for the M.B. exams. in the different universities. Notice will be given of this course as soon as the necessary apparatus has been procured.

THERE is an impression abroad in the Hospital (whether well founded or not we know not) that the University of Cambridge propose very shortly to make a separate examination in Pathology in which to ensnare the struggling "M.B.-ster." Moreover, it is rumoured that Cambridge will be the only place of study for this examination.

Pathology as an abstract science, rent forcibly from the parent stem of Clinical Medicine, does not commend itself to us as a healthy pastime.

It would not perhaps be too bold to assert that if the Cambridge course of medical study were so arranged as to shorten in any way the period of *Clinical* study, the whole practical value of medical education in the University would be undermined.

THE Association Football Club plays Guy's in the second round of the Inter-Hospital Cup competition, on February 13th, on St. Thomas's ground at Chiswick. May they avenge last year's defeat!

WE hear with great regret as we go to press that the Bart's Rugby team fell before Guy's in the first round of the Inter-Hospital Cup.

WHETHER advancing years make us less critical, or the Dramatic Club improve at each Christmas entertainment, there is no doubt that the "Magistrate" is one of the best

plays we have seen of recent years. The whole cast worked in a wonderfully level way, and the high standard of acting reflects no little credit on the stage managers and on those who helped to coach the club, notably Dr. Emlin. Berryman's was a first-rate performance, and the quiet way in which he played the "restaurant" scene was the most marked feature in a part which is very prone to be overdone. In Upton the Club possesses a "lady" who can walk—and sit down, a rare gift among male impersonators of female parts.

A full account of the play appears from an abler pen than ours, and we restrain an impulse to plunge into the byways of dramatic criticism.

To adapt an old story, the Christmas Entertainment suggests to us that, if ever an unmusical Bart's man should exist who can only recognise two tunes, one will be the "Valse Bleu" and the other won't!

THE Secretary of the Abernethian Society will be pleased to supply any gentlemen requiring "dog leashes" with information as to prices, etc. He regrets that the funds of the Society do not permit of his giving them away gratis with the railway guide-books as formerly.

WE have received the first number of the *Journal of Obstetrics and Gynaecology of the British Empire* (there is something sound in the mere title), which is a monthly publication sold at half-a-crown. The editor is Alban Doran, F.R.C.S., assisted by an editorial committee whose names (including that of Dr. Champneys) are a sufficient guarantee of the high standard of the journal.

The January number contains five original articles, Reviews of Current Literature and Recent Books, together with Transactions of Obstetrical and Gynaecological Societies.

The journal is well printed and of a convenient size. There was room moreover for such a publication, which should give wide satisfaction.

Amalgamated Clubs.

RUGBY FOOTBALL CLUB.

ST. BART'S v. LENNOX.

This match, arranged to take place at Stamford Bridge on January 11th, was scratched, owing to the international match at Blackheath.

ST. BART'S v. ROYAL ENGINEERS.

This match should have been played at Chatham on January 15th, but had to be scratched, owing to the ground being frost-bound.

ST. BART'S v. CATFORD BRIDGE.

The Hospital had a very weak team out for this match at Winchmore Hill on January 18th, and, consequently, suffered defeat by 3 goals and 3 tries to one try.

In the first half Catford Bridge scored four times, two tries of which were converted, and Body scored a try for the Hospital, led by 2 goals and 2 tries to one try.

In the second half Bart's played up much better, and the game was fairly even, each side attacking alternately; Catford Bridge scored twice, one try being converted. The Hospital made several attempts to score, but were unsuccessful, and were left defeated as stated above. Team:

E. S. Marshall (back); D. M. Stone, J. Corbin, H. B. Owen, T. M. Body (three-quarters); W. H. Hamilton and W. H. Scott (halves); H. T. Wilson, H. E. Stanger-Leathes, A. R. Neligan, J. Morris, T. A. Izard, J. M. Pews, E. C. Hodgson, and A. J. Symes (forwards).

ST. BART'S v. NORTHAMPTON.

This match was played on February 1st at Northampton in bitterly cold weather, and on a frost-bound ground. Both sides were practically at full strength, and a good game resulted. Bart's lost the toss, and O'Neill kicked off against a gale of wind. The opening stages of the game were very disastrous to the Hospital, West, H. E. Kingston, and Weston scoring tries in the first ten minutes for Northampton, one of which Simmonds converted. From now till half-time play was very even, the Hospital forwards doing good work, and the opposing three-quarters were well marked, as Hamilton was playing as an extra three-quarter. Bart's had very bad luck in not scoring once, as A. O'Neill, with a fine dribble, passed the opposing full back, but slipped at the critical moment, and knocked the ball forward. Half-time came with Northampton leading by 1 goal and 2 tries to nil.

The Hospital, playing with the wind in the second half, had somewhat the best of the game, although they only had six forwards—Wilson being injured, left the field at half-time. Our forwards played with great dash and vigour, and, getting the ball out to the three-quarters, some good rounds of passing were seen, from one of which Ellett scored a good try, wide out, which Stone failed to convert. Northampton then attacked, and Dixie-Smith scored a try, which was not converted. From now till call of time Bart's had the best of matters, and were unlucky not to score again, and the whistle blew leaving Northampton winners by 1 goal and 3 tries to 1 try.

Except for the first ten minutes, Bart's had quite as much of the game as Northampton. The Hospital forwards, although only six in the second half, played up splendidly, and quite held the opposing O'Neill, Tosswill, and Neligan being exceptionally good. The outsiders did good defensive work, frequently spoiling the opposing combination, which was very good. Hamilton, Owen, and T. O'Neill tackled well, whilst the kicking of Stone and Marshall was excellent. Teams:

St. Bart's.—E. S. Marshall (back); D. M. Stone, J. Corbin, H. B. Owen, G. G. Ellett and W. H. Hamilton (three-quarters); T. O'Neill and W. H. Scott (halves); A. O'Neill (capt.), L. R. Tosswill, H. T. Wilson, A. R. Neligan, H. E. Stanger-Leathes, J. Morris, and E. C. Hodgson (forwards).

Northampton.—C. Leigh (back); W. H. Kingston, F. Simmonds, L. Atterbury, and J. W. D. Smith (three-quarters); H. E. Kingston and E. Morgan (halves); H. Weston (capt.), H. Atterbury, W. H. Edwards, G. Burke, J. Mason, Rev. A. St. G. B. Cummins, J. West, and C. H. Naylor (forwards).

ASSOCIATION FOOTBALL CLUB.

ST. BART'S v. TUNBRIDGE WELLS.

This match was played at Tunbridge Wells on January 25th on the Down Lane Ground, which name, by the way, is most appropriate, and the Hospital losing the toss started playing up hill. During the first twenty-five minutes Tunbridge Wells kept the ball well in the Hospital goal, but thanks to the good defence were prevented from scoring. Bart's then got more together, and twice got away with a good rush, but each time failed to score. The home team then pressed again, and from one of the numerous corners scored the first goal.

On changing ends the Hospital naturally got the ball down the hill, and from a corner O'Brien scored a good goal. The Wells showed to more advantage up hill than the visitors had done, and once or twice got dangerously near, and at last with a good shot from their outside left added another goal. Bart's then set to work, and rushing down the hill Fernie notched a nice goal, first

striking the cross bar. There was no further scoring, the game thus ending in a draw (2-2).

It should be mentioned to the Hospital's credit that during its defence in the first half it lacked Nealor, but who arrived just before half-time to relieve them.

The team representing the Hospital was—C. E. Armitage (goal); J. R. Lloyd, W. S. Nealor (backs); F. E. Taylor, W. H. Jones, N. E. Waterfield (half-backs); T. A. Killby, C. H. Fernie, C. W. O'Brien, A. H. Hogarth, G. Butcher (forwards).

ST. BART'S v. OLD CHOLMELEIANS.

Played at Winchmore Hill on February 1st in a very high wind, which made good shooting almost impossible. The Hospital started playing with the wind, and so kept the ball in their opponents' goal, but failed to score. A good rush by the visitors' right wing resulted in the first goal being scored shortly after the start. Bart's then renewed their attack, but the Old Boys defended well, keeping them out close on half-time, when Killby managed to net one and so equalised.

The second half was of a give-and-take nature, but the visitors had by this time got more together, and with the wind in their favour scored three times more. The game thus ended in a win for the Old Cholmeleians by 4-1.

The team representing the Hospital, which by the way is not the best it can raise (when will it ever play its strongest team?), consisted of—

C. Dix (goal); J. R. Lloyd, F. E. Taylor (backs); W. H. Jones, T. W. Godsell, N. E. Waterfield (half-backs); T. A. Killby, C. H. Fernie, C. W. O'Brien, A. H. Hogarth, C. Lebracq (forwards).

ST. BART'S 2ND XI v. WESTMINSTER SCHOOL.

Match played on January 18th on our opponents' ground at Vincent Square. Butcher kicked off for Bart's, and soon scored our first goal, Bennett-Powell quickly following with a second. After half-time both sides again scored, and the match was won by 3 goals to 1. Team:

D. W. Hume (goal); C. S. Rorse, J. R. Lloyd (backs); F. W. Jackson, H. B. Scott, W. H. Jones (halves); R. H. Bott, N. Bennett-Powell, C. B. D. Butcher, F. J. Rees, and C. H. Fielding (forwards).

ST. BART'S 2ND XI v. H.A.C.

Match played on February 1st at Raynes Park in a strong wind. Read and Dutcher each scored for us in the first half. After half-time we were playing against the wind, and only allowed our opponents to get through once, the match resulting in a win by 2 goals to 1. Team:

D. W. Hume (goal); G. S. Rorse, F. Gooding (backs); T. W. H. Burne, H. B. Scott, C. Williams (halves); R. H. Bott, N. Bennett-Powell, C. B. D. Butcher, T. C. Read, C. H. Fielding (forwards).

THE UNITED HOSPITALS' HARE AND HOUNDS CLUB.

We have had a particularly busy time the last few weeks, having contested matches with the Ranelagh Harriers over a seven-mile course, the Thames Hare and Hounds over eight miles, and also decided the ten-mile Inter-Hospital Cross-Country Championship. We have been greatly handicapped in our team racing by the absence of C. Birt (St. Thomas's), who has always been one of our best performers over a country. He has lately been operated upon for varix, and is not yet sufficiently recovered to race, although it is hoped he may be fit enough to represent us on February 28th at Dublin. In the forthcoming Southern Counties and National Cross-Country Championships St. Bart's looks like providing several runners. J. G. Gibb and P. Gosse will represent the Ranelagh Harriers, F. S. Lister may be included in the Finchley Harriers, and H. Barnett in the Blackheath Harriers' team. P. Gosse is now showing improved form, and with a few more runs will no doubt be going as well as at one time last year, when a crooked knee prevented his competing in the "Southern." St. Bart's has practically varied the members of the Club going single handed this season. The various members show surprising keenness, which is a great factor towards the success of any club, and a few more successes may stimulate other hospitals to greater enthusiasm. The best of our regular running men are J. G. Gibb, F. S. Lister, P. Gosse, H. P. Gibb, H. Barnett, W. H. Orton, A. C. Wilson, and G. W. Lloyd.

U.H.H. AND H.C. v. RANELAGH HARRIERS.

The above match was run January 18th at Putney, over seven miles, six aside to count. We were without the services of A. C. Birt and G. A. Symmonds, whilst the Ranelagh were at full strength and included Bessell, who is at the present time one of the best men in the south. Under the circumstances it was not surprising that we suffered a heavy defeat by 29 points to 55.

The race was run at a very fast pace, Bessell cutting out the work, with Taylor and Lister in close attendance for the first three and a half miles, when Bessell got away and won with ease. J. G. Gibb came up with Taylor a mile from home, Taylor eventually securing second place, J. G. Gibb third, Lister fourth, the next hospital man in being Gosse ninth.

Bessell's time for the seven miles was 37 min. 4 sec.

U.H.H. AND H.C. v. THAMES H. AND H.C.

On Saturday, January 25th, we opposed the above in an eight-mile race over the Inter-Varsity course at Roehampton, five aside to count. We were without A. C. Birt and G. Symmonds, and W. H. Whitelaw was an absentee from the Thames pack.

The race was chiefly remarkable for the amount of barbed wire negotiated and the various accidents which happened to the first three men home. H. G. Lloyd quickly took the lead, followed by J. C. Gibb and O. S. Norton, with F. S. Lister twenty yards away. After a mile had been covered J. G. Gibb assumed command, and led Lloyd by ten yards. Hereabouts all the leaders overran the trail, and let up F. S. Lister and others, only to find a high barbed wire fence barring the way. As everyone tried to scramble through at the same time considerable damage occurred to our clothing, Lloyd losing most of his vest. Once fairly going again Lloyd, Gibb, and Lister soon opened up a wide gap from the remaining competitors. After crossing a long piece of plough together Lloyd established a lead of ten yards from Gibb, Lister dropping back thirty yards. At the end of another mile Lloyd and Gibb, by some unaccountable accident, found themselves at the bottom of an extra deep ditch, and Lister, profiting by their experience, jumped at and just managed to clear it, so gaining a considerable advantage at a critical part of the race, and was enabled to keep the lead for another mile, when Lloyd again took up the running, with Gibb sixty yards away. On reaching Putney Heath Lloyd quickened his pace, but was unable to shake off Lister, who beat him in the run in by five yards; J. G. Gibb was third. On adding up the points it was found that the U.H.H. and H. had won their first contest for several years by the narrow margin of 1 point, the score reading U.H.H. and H. 27, Thames H. and H. 28. The hospital man ran well up to form. The performances of P. Gosse, H. Gibb, and O. S. Norton (Guy's) were very meritorious, as neither of the three is yet fit, their training having been interrupted through illness.

Placings of men

	Min.	Sec.
1. F. S. Lister (St. Bart.'s)	40	15
2. H. G. Lloyd (T.H. and H.)	46	17
3. J. G. Gibb (St. Bart.'s)	47	1
4. G. B. Adeney (T.H. and H.)	48	45
5. S. W. Fowler-Dixon (T.H. and H.)	48	48
6. P. G. Gosse (St. Bart.'s)	49	30
7. G. T. Brassey (T.H. and H.)	49	38
8. H. Gibb (St. Bart.'s)	49	47
9. O. S. Norton (Guy's)	50	31
10. R. H. Watson (T.H. and H.)	50	37

Also ran, A. C. Wilson and G. W. Lloyd (St. Bart.'s) and six other members of T.H. and H.

U.H.H. AND H. TEN MILES CHAMPIONSHIP.

This race should have taken place at Putney on February 8th, over the ten-mile Clutton Cup course. Owing to no other hospital being able to raise a team St. Bart.'s had a walk over, and so secured the cup for 1902. The gold medal for first man home is to be given to the first hospital man in the six-mile contest against Dublin University on February 28th. Dublin seem to be fairly strong this year, as they easily disposed of Edinburgh University some six weeks ago. We hope to put up a very good race with them even if we do not just win.

HOCKEY CLUB.

ST. BART.'S HOSPITAL v. ENFIELD.

This match was played at Enfield on Saturday, January 11th, and resulted in a win for Bart.'s by four goals to one. We had the best of the game nearly all the way through. Beckett shot three goals and Sale one.

The Hospital was represented by—Wright, Orton, and Phillips (backs); C. Adam, H. B. Hill, and L. Murphy (halves); Jeudwine, Griffin, Becket, Sale, and Hallows (forwards).

ST. BART.'S v. GUILDHALL.

This match was played at Manor Park on Saturday, January 18th, and resulted in a draw after a hard game.

In the first half our forwards played well together, taking the ball down the field time after time but just failing to score. Just before half-time Murphy and Sale took the ball down the field from our "25," but their backs just saved in time. After half-time our opponents worked hard and pressed us, having several shots at our goal, but Orton saved well each time. Orton at back was excellent, stopping many dribbles and clearing well each time. Of the forwards, Sale, Griffin, and Hallows played a good game.

The Hospital was represented by—L. Orton, F. A. Wright, L. Phillips (backs); W. E. Fowler, H. B. Hill, C. Adam (halves); H. Grant, W. Griffin, Sale, Murphy, A. Hallows.

ST. BART.'S v. UXBRIDGE.

This match was decided in favour of Bart.'s on Saturday, January 25th, at Uxbridge, by fourteen goals to three. We had the best of the game the whole way through, and were in our opponents' twenty-five for the greater part of the game. Our forwards had the ball most of the time, their backs not being able to prevent us from shooting.

Of the goals, Griffin scored seven, Sale five, Gray and Hallows one each.

The Hospital team was—Orton, Phillips, and Wright (backs); Adam, Murphy, Fowler (halves); Gray, Griffin, Sale, Hallows, Jeudwine (forwards).

The Christmas Entertainment,

JANUARY 9TH AND 10TH, 1902.

ON January 3rd, 1883, an addition to the Christmas entertainment of that year was made in the shape of two dramatic items. These consisted of two farces of one act each, "Little Toddlekins" and "A Regular Fix."

The small stage, raised but eighteen inches from the floor, and only lighted by a row of candles for footlights, was little better than that usually erected in the "Theatre Royal Back Drawing-room;" but among the cast were several men who were undismayed by this small beginning, and to whose devotion and energy the Dramatic Club owes its long life, steady development, and flourishing condition. Mr. W. H. Cross, who was elected President of the club at its birth, and who still holds that post, has been another factor in its success. He has cheerfully assumed the office of umpire in chief, and has always found a way over or round the many rough places and difficulties which without his advice might well have proved unsurmountable.

Among the audiences who witnessed the twentieth consecutive performance in the Great Hall on January 9th and 10th must have been a good many people who, seeing the first and latest productions, compared the present with the

past, and wondered at the growth of the club and the style of the play produced this year, which, in the absence of female talent, the earlier members would have unanimously condemned as leading to certain failure.

We wonder what thoughts occupied Mr. Berry's mind, whose name appears upon the first programme as playing the part of "Smiler (a sheriff's officer)" in "A Regular Fix." Sitting among the audience he afforded a link with the past, and an example of the abiding interest which old members take in the doings of the St. B. H. A. D. C.

We might indulge in many reminiscences, for it is a far cry from the two antiquated farces of the first programme to the play of Piner's which furnished the latest entertainment, but it is of that we have to deal, and space in the Hospital JOURNAL is valuable.

The choice of Piner's "Magistrate" was a happy one, the plot being very amusing and the *dramatis personae* including many good parts. The whole performance went with great spirit, each member's efforts combining to make a very successful show.

The play, which abounds in excellent situations, has one weak point, viz. the final curtain, and no amount of rehearsal and dash can remove the poor impression caused by the feebleness of the few closing lines.

The scenery was an advance on that of the last few years, and the arrangement of furniture and the small accessories showed a thoroughness on the part of the management which should be acknowledged.

Mr. R. J. Waugh played the unfortunate "Poskett" with much skill, and despite an occasional tendency to monotone rose to his occasions well, many lines being quite excellent. The character is an exacting one, and he may be congratulated on his performance. Mr. K. D. Bell as "Mr. Bullamy" was sound, and besides having a good comic stage laugh has an easy bearing, which is so rare a possession among amateurs. Mr. H. S. Ward added to his labours as stage manager those of the mainstay of the piece. His "Colonel Lukyn" was first-rate, and whenever he was on the stage he infused a dash and go into the piece which was invaluable. Mr. P. Gosse played "Captain Vale" with quiet humour, and avoided exaggeration, which is the pitfall of such a part. Mr. R. C. P. Berrymans as "Cis Farringdon" showed himself to be one of the best comedians the club has possessed. Never over-accentuating yet making every point, always natural yet never obtrusive in his admirable by-play, he was a tower of strength. Mr. C. Dix gave a clever character sketch as "Worrington," and Mr. P. Lloyd-Jones as "Isodore" played his few lines in a way which leads us to hope that we may see him in a part more worthy of his powers. Mr. B. Digby gave prominence to the character of the police-sergeant "Messitor." As "Agatha Poskett" Mr. V. C. Upton looked charming, and enunciated his words clearly. The part is beset with difficulties, and the thanks of all are

due to him for essaying the character. Mr. R. C. Elmslie played "Charlotte Verinder" with humour, and scored a success. Mr. J. A. Izard as "Beakie" did what he could with the one thankless part in the play, while Mr. Honiball was amusing as "Popham." Messrs. Chaff, Black, and Killby gave very adequate assistance in the smaller parts.

The audience, which on both nights filled the hall to overflowing, enjoyed the entertainment thoroughly.

During the evening the Hospital Orchestral Society gave a pleasing selection of music admirably played.

There are rumours that the A.D.C. proposes giving an "outside show" at St. George's Hall, some time about May, for the Samaritan Fund, if the authorities wish.

Seeing the success, both histrionic and financial, which attended the performance given at that place in 1891 and 1892, we hope that rumour will give place to certainty.

Ibernetian Society.

JANUARY 16th. The mid-cessional meeting was held in the Medical Theatre, Mr. Danks in the Chair. Dr. Champneys read a paper on "Some Pages from the Ancient History of Obstetric Medicine and Surgery." A vote of thanks was proposed by Mr. Rose, seconded by Mr. Shrubbsall. The Paper will be reproduced in the JOURNAL, January 23rd. The twelfth ordinary meeting was held, Mr. Shrubbsall in the chair. Mr. West read a paper on "Some Innocent Tumours of the Breast." After some preliminary remarks he explained the scope of his paper, and went on to describe what he called "Local Chronic Mastitis." He gave its clinical and histological characters, and made original suggestions upon its pathology. It was a common source of diagnostic errors, being often taken for scirrhus or fibro-adenoma. He believed that in some cases the disease ended in carcinoma, and he recommended removal, and described the operation, putting in a plea for drainage of the wound. Two cases were given in illustration of points raised. In regard to tuberculous and gummatous mastitis he would depend on the house for information. The adenomata were next taken, and attention specially directed to fibro-adenoma. This was completely described, together with diagnosis, especially that from nodular scirrhus. He quoted a case where a small breast-tumour was locally removed, with disastrous results. As to the ultimate fate of fibro-adenomata, he expressed his belief that in many cases they gave origin to carcinoma. He next explained its histology and the degenerations to which it is liable, the mucoid and the cystic. The latter led to a discussion concerning intra-cystic growths, their structural variations, and their relation to the one hand to definitely innocent, and on the other to definitely malignant tumours. The whole paper was illustrated by microscopic specimens.

The Rahere Lodge, No. 2546.

AN ordinary meeting of the Rahere Lodge, No. 2546, was held at Frascati's Restaurant, Oxford Street, W., on Tuesday, January 14th, 1902; Bro. Abraham, M.D., W.M., in the chair. Bros. Scott and Edge were raised to the Third Degree. Bro. Read was passed to the Second Degree, and Messrs. Sydney I. Harko, Percival Yettis, and J. C. S. Dunn were initiated into Freemasonry. A sum of Ten Guineas was voted from the Lodge funds to each of the masonic charities, and past grand officers' jewels were awarded to W. Bro. the Rev. Sir Borradaile Savory, Bart., Senior Grand Chaplain, and W. Bro. Walter Gripper, M.B., Deputy Grand Director of Ceremonies. The Lodge also contributed the sum of Ten Guineas towards a gift to W. Bro. Clement Godson, Treasurer, on the occasion of his silver wedding.

Calendar.

- Feb. 17.—Special Lecture.
 " 18.—On duty. Dr. Hensley and Mr. Walsham.
 " 19.—Mr. Walsham's Clinical Lecture.
 " 20.—Abernethian Society. Discussions, Clinical and Pathological.
 " 21.—On duty. Sir Lauder Brunton and Mr. Cripps.
 Dr. Gee's Clinical Lecture.
 A.F.C. v. Chiswick at Chiswick.
 H.C. v. Hendon at Hendon.
 " 24.—Mr. Cumberbatch's Special Lecture.
 " 25.—On duty. Sir Wm. Church and Mr. Langton.
 " 26.—Mr. Walsham's Clinical Lecture.
 " 27.—Abernethian Society. Mr. M. H. Gordon, M.A., M.B., "Bacteriology of Scarlet Fever."
 " 28.—On duty. Dr. Gee and Mr. Marsh.
 Sir Dyce Duckworth's Clinical Lecture.
 Mar. 1.—R.F.C. v. Old Leysians at Ellham.
 H.C. v. Epsom College at Epsom.
 Hichens Prize.
 " 3.—Dr. Ormerod's Special Lecture.
 " 4.—On duty. Sir Dyce Duckworth and Mr. Butlin.
 " 5.—Mr. Cripps's Clinical Lecture.
 " 6.—Abernethian Society. Mr. L. J. Pieton, M.B., "Chlorosis."
 " 7.—On duty. Dr. Hensley and Mr. Walsham.
 Dr. Hensley's Clinical Lecture.
 " 8.—A.F.C. v. Cheshunt at Cheshunt.
 H.C. v. Crystal Palace at Winchmore Hill.
 " 10.—Mr. Duane Clarke's Special Lecture.
 " 11.—On duty. Sir Lauder Brunton and Mr. Cripps.
 " 12.—Mr. Cripps's Clinical Lecture.
 " 13.—Abernethian Society. Discussions. Clinical and Pathological.
 " 14.—On duty. Sir Wm. Church and Mr. Langton.
 Sir Lauder Brunton's Clinical Lecture.
 Harvey Prize.
 Kirkes Scholarship and Gold Medal (Paper).

Junior Staff Appointments.

THE following nominations have been made for junior staff appointments:

HOUSE PHYSICIANS IN APRIL.

<i>Sir William Church.</i>	H. L. P. Hulbert.
<i>Dr. Gee.</i>	R. H. Urwick.
<i>Sir Dyce Duckworth.</i>	A. E. Thomas.
<i>Dr. Hensley.</i>	J. Stirling-Hamilton.
<i>Sir Lauder Brunton.</i>	II. H. Weir.
INTERN IN APRIL	H. G. Pinker.
EXTERN IN APRIL	R. T. Worthington.
EXTERN IN JULY	A. H. Hayes.

Examinations.

Conjoint Board.

Chemistry.—R. M. Coalbank, L. G. H. Furber, J. G. Watkins.
Practical Pharmacy.—H. F. Bodvel-Roberts, H. F. Hatfield,
 G. M. Leveck, F. E. Whitehead, A. C. Wilson, F. H. Wood.
Biology.—G. B. Scott.

Anatomy and Physiology.—J. B. Binns, H. Gray, E. C. Hayes,
 C. Loddiges, A. O'Neill, F. M. P. Rice, F. Weber.
D.P.H. Examination.—A. E. H. Thomas, B.A., M.B., B.C.
 (Oxon.).

UNIVERSITY OF DUKHAM.
 M.D. Degree.
 H. G. Harris.

Appointments.

BROWNLOW, HARRY L., appointed Assistant Surgeon to Royal United Hospital, Bath.

GREAVES, H. S., B.A.(Durham), M.R.C.S., L.R.C.P., appointed Resident Medical Officer to the General Hospital, Barbadoes.

JACKSON, ARTHUR N., appointed Medical Superintendent of the Notts County Asylum.

JOHNSTON, D. M., M.R.C.S., L.R.C.P., appointed House Physician to the Derbyshire Royal Infirmary.

LINDSEY, E. V., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed House Surgeon to the Stockton and Thornaby Hospital.

LLOYD, J. A., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed House Surgeon to the General Hospital, Stroud.

MCDONALD, W. M., M.R.C.S., L.R.C.P., appointed Medical Officer to a Concentration Camp.

PETHERIDGE, W. L., M.D., B.Sc., appointed Honorary Anaesthetist to the Royal Eye Infirmary, Plymouth.

RIDOUT, C. A. S., M.B., B.S.(Lond.), M.R.C.S., L.R.C.P., appointed House Surgeon to the North Staffordshire Infirmary and Eye Hospital, Stoke-on-Trent.

ROWLAND, P. W., M.B.(Lond.), M.R.C.S., L.R.C.P., appointed Junior Resident Medical Officer and Registrar at the Evelina Hospital for Sick Children.

New Addresses.

BUTLER, T. H., 6, Palmeira Gardens, Westcliff-on-Sea, Essex.
 CARSON, H. W., 26, Welbeck Street, W.
 GREAVES, H. S., General Hospital, Barbadoes.
 HARRIS, H. G., Westward Ho, Birchington-on-Sea, Kent.
 MITCHELL, A. M., St. Vincent's, Epsom Road, Guildford.
 RAWLING, L. B., 16, Montagu Street, Portman Square, W.
 SMITH-WYNNE, G. S. A., Woolpit, near Bury St. Edmunds.
 WALLIS, F. C., 107, Harley Street, W.
 WARE, A. M., 13, Sussex Villas, De Vere Gardens, W.

Marriage.

DALE—NIXON.—On January 8th, at St. Saviour's Church, S.W., Cuthbert Bracey Dale, M.R.C.S., L.R.C.P., of 106, Bristol Road, Birmingham, to Winifreda, younger daughter of the late Lieutenant. Col. A. J. Nixon, Rifle Brigade.

St. Bartholomew's Hospital



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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 3s., including postage. Subscriptions should be sent to the MANAGER, W. E. SARGANT, M.R.C.S., at the Hospital.
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St. Bartholomew's Hospital Journal,

FEBRUARY, 1902.

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

Some Pages from the Ancient History of
Obstetric Medicine and Surgery.

*The Mid-Sessional Address, delivered on January 16th,
 1902.*

By F. H. CHAMPNEYS, M.D.



ENTLEMEN,—In choosing a subject for the Mid-Sessional Address of the Abernethian Society I felt that any very serious scientific subject would be somewhat out of place.

After much thought I determined to speak about some of the facts of ancient obstetric medicine and surgery, which I thought would be interesting to you, and a little off the usual track.

I have derived much information from an excellent German work, *Versuch einer Geschichte der Geburtshilfe* ("an attempt at a history of midwifery"), by von Siebold, of Göttingen, published in 1830.

Beginning at the beginning of all things so far as recorded, the work continues the history up to the time of its publication, or nearly so; but to night we shall not be able to advance far.

The first period of our history ends with the end of the fifth century before Christ.

The earliest practitioners of midwifery were women.

No mention is made in any very ancient writing of a man-midwife or doctor assisting at childbirth. In more historical periods (as will be seen) doctors assisted exceptionally, but only in consultation.

The material for history previous to regular records can only be gathered by inference; some materials for speculation can, however, be obtained by examining *myths*, such as those of the birth of various deities, in which details are sometimes given; for instance, an account of the birth of Apollo states that his mother bore him clasping a palm tree with both hands while he knelt on both knees. This kneeling attitude is probably one of the most ancient.

Another set of facts may be abstracted from the birth customs of savage tribes, but here again we must be very cautious. It is usually inferred that a savage is a sort of primitive man. This seems, however, a pure assumption. There appears not to be a tribe on the face of the earth which has not an elaborate civilisation of its own, barbarous it may be, and corrupt to our ideas, but bearing on its face the evidences of great age. Indeed, some of the birth customs of savage tribes are far more complicated than those of civilised nations. Such people as these are no representatives of Adam and Eve, and all inferences must be drawn with the greatest caution, and with the

belief that they may very likely be quite wrong. Hence it seems a waste of time to speculate.

Certainly, enough weight has not been given to the process of *degradation*, which is marked by the very presence of elaborate customs in barbarous tribes. The Fuegians (the inhabitants of the Tierra del Fuego), some of the most miserable specimens of our race, have, according to Prof. Max Müller, a vocabulary of, I think (I speak from memory), some 40,000 words, and these founded largely on *ethical* roots. A fact like this teaches us to be careful, and "not to prophesy unless we know."

If we want to know what "Prehistoric man" was like, it is no good looking up twentieth century savages, we had much better study Mr. Reid's portraits of him in *Punch*.

Speaking generally, we find the idea that all presentations except head presentations are abnormal, very widely held.

It is probable that attempts may have been made early to correct improper presentations by external manipulations, which are very common among savages.

For an account of the birth customs of savages I refer you to papers by Dr. Engelmann, published in America, and very interesting, which, however, cannot be made to contribute to our subject this evening.

MIDWIFERY AMONG THE HEBREWS.

We have several references to childbirth in the Old Testament.

The first to our purpose is *the labour of Rachel* (Genesis xxxv, 16—18), circ. B.C. 1729: "And they [Jacob and his family] journeyed from Beth-el; and there was but a little way to come to Ephrath: and Rachel travailed, and she had hard labour. And it came to pass, when she was in hard labour, that the midwife said unto her, Fear not; thou shalt have this son also. And it came to pass, as her soul was in departing (for she died), that she called his name Ben-oni [that is, "the son of my sorrow"]; but his father called him Benjamin [that is, "the son of the right hand"]. And Rachel died, and was buried in the way to Ephrath, which is Beth-lehem. And Jacob set a pillar upon her grave: that is the pillar of Rachel's grave unto this day."

The fact that the child lived points to the absence of an excessively protracted and obstructed labour, but no further light is thrown upon the cause of the maternal death.

The next passage to our purpose is that describing *the labour of Tamar* (Genesis xxxviii, 27—30, circ. B.C. 1727), the wife of Er, the son of Judah. The passage is as follows:—"And it came to pass in the time of her travail, that, behold, twins were in her womb. And it came to pass, when she travailed, that the one put out his hand: and the midwife took and bound upon his hand a scarlet thread, saying, This came out first. And it came to pass, as he drew back his hand, that, behold, his brother came out:

and she said, How hast thou broken forth? this breach be upon thee: therefore his name was called Pharez [that is, "a breach"]. And afterward came out his brother, that had the scarlet thread upon his hand: and his name was called Zarah."

The facts of this labour as detailed are "twin pregnancy, shoulder presentation with prolapse of a hand, spontaneous evolution (of Denman), birth of the other twin, birth of the twin which presented first." Such a description is very interesting. It would appear, too, that both children survived and had descendants. Pharez, indeed, was an ancestor of David, and therefore of our Lord (see Genesis xlvii, 12; Numbers xxvi, 20, 21; Ruth iv, 12, 18; 1 Chronicles ii, 4, 5; ix, 4).

The next passage that concerns us is that relating to the Hebrew midwives in Egypt (Exodus i, 15—21), circ. B.C. 1635: "And the king of Egypt spake to the Hebrew midwives, of which the name of the one was Shiphrah, and the name of the other Puah: And he said, When ye do the office of a midwife to the Hebrew women, and see them upon the stools; if it be a son, then ye shall kill him: but if it be a daughter, then she shall live. But the midwives feared God, and did not as the king of Egypt commanded them, but saved the men children alive. And the king of Egypt called for the midwives, and said unto them, Why have ye done this thing, and have saved the men children alive? And the midwives said unto Pharaoh, Because the Hebrew women are not as the Egyptian women; for they are lively, and are delivered ere the midwives come in unto them. Therefore God dealt well with the midwives: and the people multiplied, and waxed very mighty. And it came to pass, because the midwives feared God, that He made them houses."

The midwives Shiphrah and Puah seem to have held a recognised if not an official position.

The word translated "stools" is of obscure meaning, only occurring in one other passage (Jeremiah xviii, 3): "Then I went to the potter's, and, behold, he wrought a work on the wheels."

The word translated "wheels" is the same as that translated "stools" in the former passage. In the passage in Jeremiah the marginal reading is "or frames, or seats."

The meaning of "on the stools" is really unknown.

The next passage is one in Ezekiel (xvi, 4), circ. B.C. 594: "And as for thy nativity, in the day thou wast born thy navel was not cut, neither wast thou washed in water to supple thee, thou wast not salted at all, nor swaddled at all. None eye pitied thee, to do any of these unto thee; but thou wast cast out in the open field, to the lothing of thy person, in the day that thou wast born."

This passage throws light on the customary *care of the new-born*. (The care of the navel is mentioned in several other ancient records.) It will be seen to include division of the umbilical cord, washing, salting, and swaddling of

the child. The passage has a sort of medico-legal aspect, the points mentioned being such as would bear upon the question of the exercise of due care towards the child at its birth.

Among the Jews a physician is never mentioned as attending confinements, which were all in the hands of midwives.

The question of ceremonial uncleanness is referred to in the Bible in many places. The law is stated in Leviticus xii, 2 *seq.*: "If a woman have conceived seed, and born a man child: then she shall be unclean seven days; according to the days of the separation for her infirmity shall she be unclean. . . . And she shall then continue in the blood of her purifying three and thirty days; she shall touch no hallowed thing, nor come into the sanctuary, until the days of her purifying be fulfilled. But if she bear a maid child, then she shall be unclean two weeks, as in her separation: and she shall continue in the blood of her purifying three-score and six days."

It will be seen that the ceremonial uncleanness was decreed to last forty days after the birth of a boy and eighty days after that of a girl.

It is interesting to find the same idea in Hippocrates (*De natura pueri*), the durations being thirty days for a boy and forty-two for a girl.

Among the Egyptians medicine was part of the duties of the priests and part of their religious service.

THE ANCIENT GREEKS.

Some information can be gathered from mythology, poetry, and general literature.

Callimachus describes the new-born Zeus as being washed in a river immediately after his birth.

Plutarch says that the Spartan women washed their new-born children with wine to make them strong. Nonnus says that the Spartan women brought forth their children upon a shield, and that they were carried by the midwives, after ceremonial ablutions, round the family altar, and solemnly received into the family. The name was given on the seventh day among the Spartans, on the tenth day among the Athenians, with solemn ceremonies. On the fortieth day the recently delivered woman dedicated herself in the same manner, being till then considered unclean. This idea of uncleanness was the reason for a law which forbade any birth to take place on the sacred island of Delos, the women of the island being obliged to go to the neighbouring island of Rhenea for their confinements.

Pausanias describes the foundation of *the first general and lying-in hospital* at Epidaurus by Antoninus (circ. A.D. 150), in order that the sick might have a roof to die under, and women a roof to shelter them in labour. It was due to the complaints of the worshippers at the temple of Epidaurus, and was a religious institution.

Birth of Dionysus.—Lucian relates that Hermes removed Dionysus as a seven months child from the body of Semele,

who had died in the flames, and that Zeus sewed the child up in his own leg till he came to maturity. Others make no mention of the surgical operation, but say that Semele brought forth a premature child in the fire, and that Zeus took care of it (Apollodorus; Diodorus Siculus).

Birth of Asclepius.—Phoebus is said to have rescued Asclepius from the body of Coronis, which had been burnt on the funeral pile. So ancient are the references to Cæsarean section after death, the possibility of such a proceeding having been perhaps suggested by the sight of living fetuses in the body of their dead mothers in hunting, in sacrifices, or in combats in the arena.

This concludes the first period up to the time of Hippocrates, that is up to the end of the fifth century B.C.

The second period begins at the end of the fifth century before Christ, and ends with the destruction of science after Galen, at the beginning of the third century after Christ.

Hippocrates, 460 B.C. to 370 B.C., was a member of a family of priests, which was supposed to be descended from Asclepius on the father's side, and from Hercules on the mother's side. His father was Heraclides; he instructed him in the traditions of the Asclepiades, his education being afterwards continued by Herodicus, of Selymbria, who taught him gymnastic medicine (a very old form of medicine, lately brought into prominence again), and by Gorgias, of Leontium, who taught him philosophy and rhetoric.

He afterwards lived in Thessaly and in the island of Thasos. He died in extreme old age about 377 B.C. at Larissa.

THE GENUINE WORKS OF HIPPOCRATES.

The great name of Hippocrates was used to cover many spurious and later works (as in the case of other great writers), especially during the time of the foundation of the great libraries of Alexandria, B.C. 323—221, and Pergamos B.C. 158, in order to gain the easier access to these libraries for such works.

Unfortunately, the so-called Hippocratean writings on midwifery and the diseases of women and children do not belong to those which are probably genuine; but even if of later date they are extremely instructive, being in any case of great antiquity.

The *Aphorisms* (genuine) contain sentences about the diseases of women, irregular menstruation, abortion, the signs of conception, the signs of the life of the fetus, etc. (Aph. 28 *seq.*). Hippocrates here discusses the prediction of the sex of the child; if the mother looks well she is carrying a boy, if the reverse a girl. A boy is carried on the right side, a girl on the left (this idea being prevalent almost to our own day, and being a relic of the anatomical ignorance which believed that women had double uteri, like the lower animals); sternutories are advised to aid the expulsion of the afterbirth;

the death of the fœtus may be inferred from the shrinking of the breasts; pregnancy may be inferred from the closure of the mouth of the womb; the weather is said to have an influence on abortions. That Hippocrates was acquainted with the method of vaginal examination follows from his description of the condition of the os uteri.

The Book of Airs, Waters, and Places (genuine) contains some passages concerning diseases of women, abortion, sterility, and lactation. The custom of some Asiatic nations of binding the soft head of the new-born child by bandages and other things, in order to make it elongated, is referred to, and it is added that after a time the heads of the children assumed this shape without pressure. (This is, of course, incredible.)

He also says that the Scythians do not swaddle their children like the Egyptians, and that this improves the growth of the Scythians, and helps to make them good riders. He also describes what he calls "the female disease" among the Scythians (the same as that referred to by Herodotus, i, 105, in the following passage:—"Venus inflicted upon the Scythians, who pillaged her temple at Ascalon, and on their descendants, the feminine disease,—at least, it is to this cause that they attribute their disease; and travellers that go to the land of Scythia see how those persons are affected whom the Scythians call *accursed, évapees*;" its nature is unknown: see Adams's *Genuine Works of Hippocrates*, i, p. 187).

The Second Book of Prognostics (genuine) discusses fertility, chlorosis, spurious pregnancy, "ulceration in the womb" (probably of the external genitals, as buboes are mentioned). (See *Genuine Works*, p. 265.)

Hippocrates, in all the above, only alludes to pregnancy, parturition and its consequences, and the diseases of women incidentally, and not as an obstetrician would do.

In *The Oath* (genuine) occurs the passage (p. 780), "I will not give to a woman a pessary to procure abortion." This is superior to his age. Aristotle, his immediate successor, had no such scruples; nor had others, as we shall find in due course.

The Book of Labour at the Seventh Month (probably spurious) attempts to prove that the viability of a seven months fœtus is greater than that of an eight months fœtus (still a popular belief). The ordinary duration of pregnancy is said to be seven times forty days (we now say nearly forty times seven days!), and the children are said to be carried ten months: eleven months children are mentioned. The sacred number seven has great importance, and reference is made to the critical days, and also to the spontaneous version (or somersault) of the child in the eighth month as a reason why it should be delicate at that time. The reason for this belief is probably the greater frequency of abnormal presentations in premature labours.

The Book of Labour at the Eighth Month (probably

spurious) continues the preceding. It asserts that children born in the eighth month cannot survive, the chief danger being the interference with the somersault above mentioned.

The treatise *concerning the Seed* (probably spurious) deals with such subjects as conception, its signs, the determination of sex, intra-uterine injuries, etc. It is of no great value.

The book *concerning the Nature of the Boy* (spurious) describes how the author advised a harp player who was pregnant and wished to procure abortion to jump down from a height on to the ground, and says that after she had done this seven times the ovum came away. This is contrary to *The Oath*. The ovum is very accurately described. The author compares it with the hen's egg, and advises the investigation of its development by examining one each day of a setting of twenty eggs. He also refers to the vegetable kingdom. He says that a boy takes his (characteristic) shape thirty days after conception, a girl forty-two days after conception. This probably refers to the modification of the external genital organs. It is not, of course, accurately correct, but it shows observation so far as the fact goes that the external genitals of both sexes resemble the male superficially at first, and that definite female form is obvious much later. This is familiar to all obstetricians, and is exemplified by the fact that an early fœtus is always described by the laity who have seen it as "a boy."

The author also says that foetal movements occur earlier in boys than girls, that the lochia last longer after the birth of a girl than of a boy (compare the Mosaic law), that the only natural and easy mode of delivery is by the head, and that when the fœtus presents by the feet or side, labour is difficult and dangerous for mother and child.

The causes of abnormal presentations are too great width of the uterus or restlessness of the woman. The development of twins is explained by the seed getting into the two sinuses of the uterus, and there becoming covered with a membrane in both sides of the uterus. (The same idea of a human double uterus.)

The two books on *Diseases of Women* (spurious). These books are by the author of the treatise *Of the Nature of the Boy and Of the Diseases of Virgins*. He seems to have had considerable experience of gynecology, and had an extensive materia medica with many curious ingredients. He writes as a man accustomed to examine women for such complaints.

The first book begins with the disorders of menstruation, especially suppression, in which connection reference is made to displacements and their consequences, hysteria, abortion, or sterility. If the theory of displacements depended upon antiquity for its respectability it would be respectable indeed. He also treats of the diseases of pregnancy and lying-in, especially disorders of the lochia.

There is much writing on ulceration of the womb, and on remedies for amenorrhœa and sterility, for helping the progress of labour, and for the cure of ulcerations.

The second book deals with morbid secretions (especially leucorrhœa) and with displacements (especially procidentia and its consequences). The advice is given to replace the uterus and keep it up with sponges. The author describes ascarides in the rectum and vagina, and mentions many remedies for leucorrhœa, and for the maintenance and restoration of female beauty.

Head presentations are said to be the only natural and favourable ones; cross-births and footing presentations are abnormal, and make labour more difficult. The difficulty is illustrated by that of getting an olive through a narrow-necked bottle; it will pass most easily lengthways. Labour is also difficult if the child is dead, or "apoplectic," or doubled. The first two conditions probably refer to the long-enduring belief that a child helps itself into the world; "doubled" probably refers to breech cases (? with extended legs). The retention of the placenta is also mentioned, and many remedies recommended, such as food cooked with wine and oil, and other things calculated to produce expulsive effects; and the remark is made that the secundines usually decompose on the sixth or seventh day, or even come away later. It is, however, never recommended to remove the afterbirth. The midwife is called "the navel-cutter" (compare the passage from Ezekiel), and the retention of the placenta is attributed to tearing off the cord or dividing it too soon. If the placenta is retained in a case of abortion, it decomposes in favourable cases, and is expelled, whereupon the patient recovers. Sternutatories are advised to expel the afterbirth; and, in normal presentations, delivery may be hastened by tying the patient firmly on a bed, tilted up and violently shaken during the pains. The midwife is advised in lingering cases to dilate the cervix with her fingers and remove the child and placenta.

Abnormal presentations are to be corrected by cephalic version. During version a half-sitting posture is recommended for the patient. Among other remedies for lingering labour are warm baths and oiling and anointing the genitals. If the fœtus is dead and the extremities are prolapsed, and cephalic version cannot be accomplished, the fœtus must be cut up. The swelling of the foetal body by decomposition is taken as evidence of its death. For cutting up the fœtus its head is opened, the bones are separately removed (cranioclast), the limbs are cut off, the trunk is pulled on, and the thoracic and abdominal cavities are opened. Three instruments are named: a knife, which is curved; an instrument for breaking the base of the skull (a cranioclast of some kind), and a hook for pulling on the child. It is advised when the limbs are prolapsed to remove them, and then do cephalic version. There are also some remarks on molar pregnancy.

The book on *The Sterility of Women* (spurious) states that the causes of sterility are displacements, ulcerations, occlusion of the cervical canal, profuse menstruation, etc. Many remedies are named. Much stress is laid on displacements. Signs of the sex of the child are given. Freckles mean a girl, good complexion a boy. It is also repeated here that a boy begins to move in the third and a girl not until the fourth month. The pigmentation of the face has been considered a sign of sex by later writers, such as Rhazes, and others even later. It is, of course, nothing of the kind.

The treatise *Concerning the Nature of Woman* (spurious) has many of the contents of the former, but not the parts referring to midwifery. It deals with diseases of the womb and of lying-in women, and contains descriptions of many remedies.

The treatise *Of the Things concerning Virgins* (spurious) has epilepsy produced by disordered menstruation for its chief topic. The author prescribes pregnancy as the best remedy. He also mentions the connection between mal-developments and a tendency to suicide.

The treatise *Of Superfetation* is perhaps by the author of *The Diseases of Women*. The uterus is described as bicornute, as usual in works of this epoch. Twin conception is due to duplicity of the uterus.

Prolapsed limbs are to be replaced. If the child is dead, and its head, having advanced through the os uteri, cannot come further, a finger (? thumb) is to be put into the orbit and another under the chin and into the mouth, and the head extracted (a sort of primitive jaw-traction). The extraction of the after-coming head is to be effected by the fingers in the orbit. Dead children which cannot be otherwise delivered are to be cut up according to methods described. If the afterbirth is delayed the child is to be placed upon a skin bottle full of water, which is then allowed to escape, the child sinks and pulls the placenta out by its weight (!). During this time the labouring woman is placed upon a night-stool ("λάσανον"), or, failing that, a labour-chair; if she is too weak, in a bed with the upper part much raised. But women were delivered in bed and not on a chair or night-stool under ordinary circumstances. Great stress is laid upon the division of the cord at the proper time, and upon the injurious results of its immediate or premature division. A dead child is felt to roll to the most dependent part like a dead weight (a correct observation). Receipts are given for begetting a boy or a girl. Many diseases of women are described, and their treatment specified.

The treatise *Of the Excision of the Fœtus* (spurious) contains the rules for cutting up the fœtus when dead and presenting abnormally. The arm is to be removed and evisceration performed. In this treatment the patient is ordered to be shaken to rectify malpositions.

(To be concluded.)

The Law of Negligence in relation to the Medical Man.

A paper read before the Abernethian Society, December 5th, 1901.

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AN occasional paper on the relation of medical men, as such, to some aspects of the law of their country is neither out of place nor unprofitably discussed in this Society. The subjects appeal to "our business and bosoms," for year by year unenviable notoriety is thrust upon individual members of our fraternity by proceedings in which they find themselves too often unwilling plaintiffs or defendants in a court of law, and of little advantage is it to them to know that as a class they are more sinned against than sinning. There is a species of speculative litigants, often mere men of straw, who adopt this "blackmail" (for they know the doctor cannot politically sue for his debts or be litigious) as a means of wringing out of their just dues and debts, and even of endeavouring to lessen the doctor's bank balance by their allegations; for instance, the London Medical Defence Union, with 4750 members, contested last year 140 cases, and in each case succeeded in exonerating a member from an apparently false charge; of these cases forty-nine related to matters alleged defamatory and twenty-six to charges of malpraxis, malum regimen, or Negligence. This statistic implies that in one year 3 per cent. of the Union's members had to prove their right before a jury, before whom improper intention or attention had been set up as a defence, usually in mitigation of medical charges.

As was long ago written of penitents and patients,—

"God and the doctor they alike adore
When on the brink of danger, not before;
The danger o'er, both are alike requited,
God is forgotten and the doctor slighted."

Negligence has no Act of Parliament constituting it a statutory offence; there is no parliamentary definition of the tort, for it is part of the common law of the land; there is indeed no special law in the matter applying to medical men to the exclusion of His Majesty's other subjects, the general law merely has special and personal applications. It is here desirable to explain the principles underlying the whole subject of legal Negligence by illustrative cases rather than by jurisprudential reasons; yet, while recalling Lord Beaconsfield's characterisation of the legal mind—"a talent for explaining the self-evident, illustrating the obvious, and expatiating upon the commonplace"—it is as necessary to remember that the basis of the common law, namely, the common sense of a people, is often disappointingly rare, the common sense of the best minds has been formulated for all in tentative definitions. The best *obiter dictum* on our subject is that of Baron Alderson (1856):

"Negligence is the omission to do something which a reasonable man, guided upon those considerations which ordinarily regulate the conduct of human affairs, would do, or doing something which a prudent and reasonable man would not do."

At the outset it may be stated that the judge's function is to state generally what may be, it is for the jury called for the special case to decide what is negligence. In a few cases the judge may peremptorily declare, "*res ipsa loquitur*."

Chief Justice Tindal once directed his jury thus.

"Every person who enters a learned profession undertakes to bring to the exercise of it a reasonable degree of care and skill. He does not undertake, if he is an attorney, that at all events you shall win your case; nor does a surgeon undertake that he will perform a cure, nor does he undertake to use the highest possible degree of skill. There may be persons who have higher education and greater advantages than he has; but he undertakes to bring a fair, reasonable, and competent degree of skill."

By the fact of his State registration a presumption arises that a qualified medical man knows his work and does it properly, and he has no need to adduce evidence of general skill and fitness; he is held *prima facie* competent in any lawful act, and on the plaintiff lies the onus of proof to the contrary; if he poses as a specialist a greater competence will be presumed, and yet considerable latitude in the practice of any theory or line of treatment will be allowed;

this latter statement has the support of a Medical Act. But if a jury decide, after hearkening into the evidence, that a registered practitioner has been guilty of a culpable lack of attention, an absence of due care and caution or competent degree of skillful knowledge, and on that account has actually caused needless injury and loss to his patient, then the medical man may not only forfeit his fee, but (since 1874) be liable to an action in the King's Bench for damages for the benefit of the patient (or his relatives). The malpraxis must be a substantial thing, and will carry responsibility with it for its natural and probable consequences.

Errors of Negligence may obviously be of two classes—omissions and commissions.

Sir William Jenner used to say, "More mistakes are made, many more, by not looking than by not knowing." The moral of this trite remark "lies in its application." It was sufficient for Sam Weller, an ostler, to plead that he had "only eyes" to see with, but this plea would today be insufficient for the practitioner, for he has many modes of looking, notably through "scopes," and these instruments must within reason be applied in aid of diagnosis. Further, the advice offered to Roderick Random in his final examination as to the value of giving "ocular demonstration" is indeed not to be lightly set aside; there are times when you must be eyes to the blind,—as, for example, in showing to their lawful owners through your microscope any captured smaller beasts of prey if you diagnose scabies or pediculæ. You must remember the applications and limitations of olography, and at least suggest its use on occasion. A large class of errors of omission is illustrated in documents you may be compelled to deliver; not long ago, for failing to notify a case of scarlet fever until six days after the diagnosis, a fine was levied, apparently to enforce the virtue of promptness. Death certificates may lead to annoyances and even to the coroner's inquest should you defy the whims of the local registrar; you must of course state the fact in the certificate if the lady died within six weeks of childbirth, though the friends of the deceased (for insurance or other policy) may desire you to ignore that fact, and you yourself may perchance not be unwilling so to do.

Veritas Moris. It is at your peril, to some extent, that you sign all professional certificates; you may not be shrewd enough to guess to what base uses they may be put. In 1896, in Ireland, a milliner's assistant was notified as suffering from variola; later the rash was found to be merely erythema nodosum; the milliner claimed to have lost custom on account of the suspected infection, but he was not allowed damages from the notifier. Another class of cases may before long come into the courts, where infected antitoxins are injected with results even more fatal than the historic Algerian "specific" vaccinations produced.

Omissions are the basis of most errors of diagnosis, of treatment they are usually commissions; often, however, the subsequent mistakes depend upon a wrong premiss, which leads one to neglect a fundamental Hippocratic principle. "That the treatment do the patient no harm." In a well-known case £100 was forfeited owing to the impairment and deformity of a hand, the use of which was lost owing to treatment founded upon a mistaken diagnosis of the initial injury. Suppose a medical man by mischance transposes the labels of a draught and a lotion he is sending to a patient, he may have to assist in the payment of the funeral expenses. In 1866 a man sent, as was his habit, two bottles to a chemist; on this occasion one was signed "Henbane thirty drops at a time," the other was unlabelled; he now wanted Tinct. Hyoscyami and Lin. Aconiti; these drugs were dispensed into the wrong bottles, and the patient, taking internally thirty minims of the liniment, died. Criminal proceedings instituted against the chemist failed, but it was suggested that damages might be recovered although the unusual practice of sending the pills put the dispenser off his guard. Suppose you correctly copy from a reliable book an incorrect, because misprinted, prescription,—where, for instance, the ʒ has replaced the ʒ in Extractum Filicis Liquidum; it is thought by high legal authority you will be technically liable for the resulting injury, as it is said the act of copying makes the prescription virtually your own. *O si sic omnia!* 'then indeed would originality cease from being the thief of time. Of course, any mistake a dispensing pharmacist may make will not involve the prescriber, provided their relation is not that of servant and master. Again, suppose an accoucheur carries puerperal sepsis and death to several successive unsuccessful cases, it will be dangerous for him to continue in his practice without an appropriate intermission for purification. Such an instance well exemplifies how quickly, even in one generation, the cases recognised by the public and the profession as comprising medical Negligence may change in character; thus "hospitalism," a word coined by Prof. Simpson

in pre-Listerian days as a succinct opprobrious epithet, is to-day associated with the idea of human perfection in the art and practice of medicine and surgery.

The person injured may have neither employed nor promised to pay the medical attendant, yet the confidence induced by the close professional relation is regarded sufficient consideration to create a contract, and therefore a duty. But a medical man is not to be held liable for giving mere friendly advice, which when executed injures the advisee. It is generally held that you may with impunity assist, even surgically, an unconscious man, whether he be so discovered or he be previously anaesthetised for another to save his life, or even to delay his *extremis lethatis*; if he makes no complaint you are in no way legally compelled to embrace every opportunity to succour and play the good Samaritan; as A. H. Clough says:

"Thou shalt not kill—but needst not strive
Officiously to keep alive."

It is undesirable to treat young persons without a parent's consent. It is said a wife may be operated upon by the husband (consent being presumed), but a husband cannot forbid an operation if the wife herself assents.

Privity is not an essence of the medical relationship, and from this doctrine arises the liability of principals and their medical assistants. A qualified assistant or *locum tenens* is thus by being registered responsible himself for any Negligence that may be proven in his practice; he does not involve his principal. The matter is more complicated when unqualified assistants (students, nurses, etc.) are considered. If the principal was superintending the alleged negligent act of the assistant, then he is liable; but if in his absence the subordinate omits some precaution in some matter which is within, or in acting goes beyond, the scope of his specific employment or directions, the principal will not be liable. But every error of an unqualified person does not imply punishment. Lord Hale said, "If a physician or surgeon, even though he is not a regular or licensed one, acting with due care and skill gives his patient a potion or plaster intending to do him good, and contrary to the expectation of such physician or surgeon it kills him, this is neither murder nor manslaughter, but misadventure."

An unsettled point is the liability of the Governors of a charitable hospital for the misfeasances of employes. The U.S.A. courts have decided that there is no liability if a competent staff is employed, and those aggrieved must seek personal redress from the operators.

No case has been tried as to the liability of an anaesthetist for a death under anaesthetic; liability might arise from neglecting the physical examination which is by rule made prior to the administration, or from leaving the patient before complete recovery of normal respiration. It is, however, still the objectionable regulation that all such cases must be set upon by that most ancient English institution, the coroner's jury, and so is the public without the walls of hospitals familiarised with "accidents" which are happily very unfamiliar within.

To illustrate some of these relations:

Mr. Haikie requested Mr. Hooper's apprentice to bleed him from the basilic vein; he did so, and cellulitis followed. In the consequent action against Mr. Hooper the jury would not allow that the plaintiff had proved that the injury resulted from the inexperience or want of previous knowledge on the apprentice's part; they believed the evil result arose from some latent peculiarity in the plaintiff's constitution. This was in the septic days of 1850, and one is told venesection often then demonstrated "peculiar constitutions."

Perionowsky was a patient in St. George's Hospital; he was there ordered baths as hot as he could bear them. Unfortunately he was, on one occasion, scalded. He thereupon sued Mr. Freeman and another surgeon who had ordered these ablutions. It was held unless they were near enough to be aware of it and to prevent it. "The defendants will not be liable for the negligence of nurses. An action would have probably been held against the nurses."

Again: until recently it has been generally accepted that more or less illiterate monthly nurses are essential for obstetrical purposes, at least among the very poor in provincial towns; such women would not be so easily convicted of Negligence as a midwife holding the L.O.S., or indeed as one of the modern man midwives known as Mackenzie clerks with all his prospective experience.

A contract on the terms, "No cure, no pay," is rare, and ex-

cluding such cases a general practitioner does not, if he is wise, undertake to cure diseases, but to treat his patients; nor does he oblige himself to use the highest possible degree of skill; he declares to do all that any skilfully competent person could reasonably be required to do in any particular case. "Success is nought, Endeavour's all." No absolute liability is recognised. A medical man is not, in fact, a life or accident insurer, he warrants only that all has been done which reasonable pains can do, and in any action the question is whether the alleged injury must be directly referred to the culpable unskilfulness of the practitioner or not; he cannot be punished for unsuccessful diligence. But he may not suddenly and without notice cease visiting and treating a patient. He may be held negligent if he does not when in doubt, and be at times little enlightenment may result; as when Sir Astley Cooper himself refused to diagnose (away back in the X-ray Dark Ages of surgery) a dislocated shoulder from a fractured anatomical neck of the humerus, or as in the lamentably frequent "commentary" set in the higher examinations, on fatal cases beyond the ken—of powers of ante-mortem observation!—of the examiners.

Surgeons and accoucheurs are perhaps the most often pursued by litigants with charges of Negligence, in doing those things they ought not to have done. Of physicians, "observers of nature," it has been said they amuse a patient, while Nature effects the cure." Certain it is that the heroic policy of "blood and iron" is beset with dangers unknown to those whose policy is a mastery inactivity, and often has even the surgeon-dentist suffered for not extracting "the tooth, the whole tooth, and nothing but the tooth." It is not an uncommon jest in operating theatres to feign to have forgotten which side had to be operated upon; and quite recently in the U.S.A. a surgeon removed the left instead of the right leg, although the latter had been prepared by the nurse; both the legs had been injured, and he was convinced an error had been made in the preparation. He was, however, exculpated in an action at law.

A medical man is not bound to "condescend" to minutely explain surgical principles, therapeutics, and prognosis when proposing some line of treatment; a general intimation of a likelihood of great pain, danger, or subsequent disability is sufficient; both branches of the faculty have been encouraged in court. "It would be dreadful if every time an operation was performed an individual was liable to have his practice questioned," similarly of physic Chief Baron Pollock said, "It would be most fatal to the efficiency of the medical profession if no one could administer medicines without a halter round his neck." There are some very special cases where great care is imperative in explaining the possible result of your treatment, e.g. prescribing silver nitrate internally for a professional beauty, or suggesting a minor surgical operation on a prima donna's pharynx. The use of the word "explore" has been known to frighten timid patients out of a surgeon's charge.

Treatment does not extend to a surgical operation without special consent; nor may the extent of the operation sanctioned be exceeded unless under very critical conditions. From this it follows that if a hospital patient, even in a surgical ward, declines to follow the surgeon's advice with respect to operative treatment he cannot be compelled—he may be expelled. It is not easy to strictly define "an operation"; it is technically a surgical "battery," the preparation and production of the instruments being the "assault." It appears logically that, e.g. vaccination, antitoxin or hypodermic injections, tracheotomy, and catheterisation are all "batteries," and should be only performed after permission has been given. Patients themselves cannot lawfully consent to unnecessary operations, these would rank with the grosser forms of malpraxis; this question may be ventilated by the possible developments of aesthetic plastic operations. Shylock's "pound of flesh" penalty would be taken *pro non scripto* in the English law.

If during an operation an unforeseen extension is seen to be inevitable, e.g. the compulsory amputation of the leg when by mishap the popliteal artery is damaged during an arthroctomy, proof that such was in the opinion of the surgeon honestly necessary for the life or health of the patient would be sufficient to exonerate him (unless previously such extension was expressly prohibited—Beatty v. Cullingworth).

The medical man has no liability if the injury complained of is the result of intervening Negligence contributed by the patient himself or by a third person, such as willful disobedience to specific instructions. This question often arises in connection with murder trials, for if a man dies within 300 days after being feloniously attacked, his assailant is guilty of murder; it is neither an available

plea that he refused treatment, nor that but for a surgical operation performed upon him with the hope of benefiting his condition he would have survived the "year and a day" limit. Where, owing to obvious maltreatment of the original wound, an operation was called for leading to a fatal termination, the assailant would probably be free from technical murder. Much discussion has arisen on these points, and many theoretical cases have been enunciated; e.g. What if the fatal condition was not proper, but merely noticed post the alleged injury (e.g. an aneurysm being first noticed after a blow might be mistaken for an abscess and opened with fatal result)?

So far we have considered civil cases, where a practitioner may have to pay in money for his errors; these are the common cases, for patients enjoy little satisfaction from knowing that a medical man is paying in person by imprisonment; yet the more notorious cases are those which lead to (criminal) prosecutions, and they are what the public generally know as malpraxis. We dismiss the cases where a medical man enters wittingly with a *mens rea* or malice aforethought into criminal negotiations, and consider the traps into which the unwary and unwilling may fall. They come under the heading of gross Negligence. There is no clear distinction from actionable Negligence except in so far as to constitute criminality there must be such a degree of complete Negligence as the law means by "felonious." There are two special classes of operations which are felonies by statutory enactment—inoculation with smallpox virus and assisting in an abortion. Strictly in the eye of the law all abortions are criminal offences. A practitioner is not held liable to a criminal investigation for every grave or even fatal slip or error in judgment, and, as we saw earlier, the onus of proof of negligence lies with the prosecution, provided the practitioner is on the Register. With regard to "quacks," their position was well stated in the Indian oculists' case (1893):

"If you think these men deliberately performed these operations with the full knowledge that that which they were doing was useless, unnecessary, and cruel, as the skilled surgeons tell you, you cannot resist the conclusion that the intention they had was to defraud. If you think that this is not established, then they are entitled to be set free."

As "quacks" they had no ability to raise the presumption that *prima facie* they were skillful and competent. They had to commence their defence *ab initio*. The following are the classes of cases in which a charge of gross Negligence has been sustained:—Where recklessness, stupidity, or manifest ignorance in an essential matter has been displayed, or where some willful injury has been effected, e.g. by way of experimentation, or by treatment otherwise than for the patient's benefit, or by treatment when the practitioner was not in a sober condition. It is an established position that you may not experiment on a patient, not even "in corpore vilo," or rather that you experiment at your peril. It is, of course, much more difficult to prove criminal than it is to prove civil liability. Nor is a principal jointly liable for his assistant's criminal acts unless he commands them or co-operates in their execution.

The two following cases illustrate these points. Both, however, refer to unqualified practitioners, who had therefore to prove their general experience and skill as practitioners.

Mr. Archer in 1820, suffering from disease of the rectum, was treated by Van Butchell, who passed a rectal bougie, causing him pain. He died shortly after the operation. Van Butchell, who had had a medical education, was acquitted of manslaughter on the ground that gross Negligence was not shown. He would probably have been liable to a civil action for damages.

In 1807 Mrs. Delacroix was delivered of a boy with the aid of a man midwife, Mr. Williamson, *et. 75 years*. A few days later, mistaking a prolapsus uteri for secundines, his misdirected energy in attempting to remove them led to severe pelvic lacerations, and consequently to death. Lord Ellenborough, taking the view that he always practised with care and skill, but on this occasion became alarmed and confused, obtained for Williamson an acquittal.

Two dislocation cases may be of interest. Early this year a publican declined to pay his medical man's account, and counter-claimed damages on the ground that a dislocated shoulder had not been actually diagnosed until some weeks after the treatment had commenced. By the expert evidence of Mr. Horsley and Mr. Clutton the practitioner gave the day, for they held it impossible for a qualified man to have overlooked the presence of the alleged condition at the first examination if he had carried out the routine described by him in the witness box.

In 1891, where a medical man was sued for not diagnosing a dislocation, there was merely an exaggerated elevation of the

acromial end of the clavicle, he was discharged on the ground that he could not possibly discover what did not exist.

The following case is of considerable historical interest. In 1767 S. broke both bones of his leg, which were set by a surgeon. He later called in Stapleton, an apothecary, to remove the bandage; the bones were said to be well set, and good callus was present. For some unstated reason Baker (for twenty years a senior surgeon at St. Bart's) comes upon the scene, and without the consent of S. rebreaks the bones and applied, by way of trial, "a heavy steel thigh" with teeth, evidently a primitive extension apparatus. This treatment unfortunately failed, and two surgeons (both of Bart's staff, *mirabile dictu*) gave evidence at the trial against their colleague, to the effect that the proper way to straighten a crooked leg was by "compression" (i.e. splints), and not by extension. S. gained £500 damages from Baker and Stapleton jointly (2 Wills., C.R., 359). (Percivall Pott sustained his compound fracture in 1756).

This case shows—

1. A patient should be told what operation is to be performed, so that he may have the opportunity of objecting.

2. To perform a novel or experimental operation is to lay one's self open to the charge of ignorance and unskillfulness for a rash act is an ignorant act. Thus you strike out a new path for yourself at your peril; you must not experiment on your patient, or more correctly you must not experiment unsuccessfully.

These principles, the case further shows, apply to the recognised leading members of the profession as fully as to general practitioners.

The last case I shall quote is *Beatty v. Cullingworth* (1896).

B., a professional nurse, consulted Dr. C., who diagnosed ovarian tumour (possibly bilateral).

Dr. C. (who had performed in his gynecological practice 350 ovariectomies), suggested an exploration (for which no fee was to be paid), and advised that subsequent proceedings should be left to his discretion.

B., who was a Roman Catholic and engaged to be married, was understood at the trial not to be able to marry unless she could become a mother. She consented to the exploration.

Just before the operation was performed the following dialogue was admitted by all to have occurred:

"Dr. C., if you find both ovaries diseased you must remove neither."

"You really must leave that to me, nurse. I know your wishes; you may be sure I shall not remove anything that I can help."

B. was thereupon anaesthetised without having given further reply.

Dr. C. found the right ovary cystic, and removed it: on examining the left ovary he found that also diseased, and as he was unable to remove the disease he extracted the second ovary. B.'s sister was in an adjoining room, but was not communicated with. The ovaries were both destroyed after the operation, and were not lectured upon by Dr. C.

On being told what had happened B. was very angry, and instituted proceedings for malpraxis and assault against Dr. C.

The meeting at the court in which the case was first tried was not unlike an adjourned session of the Obstetrical Society, as well from the number of expert gynecological witnesses as from the utterly divergent views which these experts expressed. Dr. C.'s position was—

(1) The operation had been left to his discretion based upon the result of his exploration.

(2) The double ovariectomy was at least necessary to prolong the nurse's life, if not to enable her to escape imminent danger.

(3) The operation was not the cause of her sterility, as she was necessarily already sterile from her cysts.

The jury came to a peremptory conclusion—acquitting Dr. C., and adding, "that an action ought never to have been brought." Such opinion was upheld in the Appeal Court next year, and apparently by the House of Lords, who refused to allow the nurse to sue at their bar *in forma pauperis*.

Several practical points are driven home by this case.

1. It is advisable to have a definite understanding, in writing if possible, as to the scope and possible results of your operative treatment, and it is best to have it stated clearly that the matter is left at your discretion to act when you have gained full information. More especially is this the case where a series of operations or examinations under anaesthetic is required. It is further urged that it is always undesirable to give a too flattering prognosis, if you have later to climb down you may strain your reputation. To promise another is to compromise yourself.

2. If your patient is "under," and you see that you must exceed the limits of your permission, you must consult with the nearest relative at hand, or else be able to rely on the extreme necessity of the case, before proceeding.

3. Remember always that you are operating upon a possible plaintiff.

After quoting a few actual cases in illustration of the foregoing principles it may be hinted that it is always undesirable as a matter of practical policy for any public man to be found occupying a prominent forensic position, for there is usually a vague if unmerited stigma of reproach attaching to a frequenter of courts of law. This caution, I need hardly observe, does not apply to the learned professors of the law! In petty matters it ultimately pays dermatous. It is because the average practitioner does not consider the judges are the most suitable washerwomen to deal with linen which at times may be sadly soiled that he often prefers to settle his quarrels out of court; and hence few cases of Negligence are dealt with publicly compared with the number arising, and the amount of fees often forfeited as the result of grounded or groundless charges. It is wise to inform would-be speculative suers that you have placed the matter in the hands of the Medical Defence Union, "of which you have long been a member," and to that body all communications should in future be addressed. Many trumped-up charges have suddenly become silent upon the receipt of such information. There is also the suggestion that medical men should insure themselves against legal proceedings, and let it be publicly known they are so insured, though no such scheme has yet been definitely formulated, I believe.

A Case of Intra-cranial Section of the Second and Third Divisions of the Fifth Nerve, under the care of Mr. Anthony Howlby.

By J. D. HARTLEY, F.R.C.S.

PATIENT, a man *set. 42*, by trade an engineer, was admitted into hospital, under the care of Mr. Howlby, on November 6th, 1901, suffering from neuralgia in the left side of his face.

His history was that the pains in his face first came on eight years ago. He was treated by various drugs without relief, the pain becoming gradually worse. Six years ago he had an operation performed at the Sussex County Hospital in order to relieve his pain, and an incision was made in front of the left ear. This operation did him no good.

Subsequently two further operations were performed, the supra-orbital and infra-orbital nerves being cut down upon and stretched. The operation on the supra-orbital nerve completely cured his neuralgia in that situation, and no return of pain has occurred there. The infra-orbital neuralgia still continued.

During the last six months he has had neuralgia along the course of the inferior dental nerve.

On admission he complained of a dull, intense, aching pain over the whole of the left side of his face except in the supra-orbital region. The pain was continuous, becoming more intense at times, especially on eating and speaking and when warm in bed. It was so severe that patient was unable to sleep, and had hardly had any sleep for a fortnight before admission.

On examination the scars of former operations were seen in the supra- and infra-orbital regions and in front of the ear. He has had all his teeth extracted in order to obtain relief. No anaesthesia of the affected area, and no paralysis of muscles. Nothing else abnormal made out. Urine natural.

On November 14th the left mental nerve was cut down upon on the chin and fully exposed. Osmic acid was then injected by means of a hypodermic syringe into the nerve, and the latter was pulled out of its foramen by a blunt hook and twisted round until it gave way. The wound was then closed. A similar operation was then carried out on the infra-orbital nerve.

These operations did the patient no good, the pain being if anything intensified. Tr. Gelsemium \times morning and night was tried, but with no relief.

Under these circumstances it was thought justifiable to undertake the operation of intra-cranial section of the second and third divisions of the fifth nerve.

Operation (December 13th).—An incision was made through the skin and temporal muscle down to the bone, commencing just behind the external angular process of the frontal bone on the left side, upwards in a curved direction and then downwards and backwards to the front of the external auditory meatus. The summit of the flap was about three and a half inches above the level of the zygoma. The flap thus formed was turned down together with the temporal muscle and periosteum. The bone exposed was trephined and the trephine opening enlarged with a pair of Hoffman's forceps until an opening was made into the skull nearly corresponding in size to the flap turned down. Smart hemorrhage occurred during this stage of the operation from the anterior branch of the middle meningeal artery. This was controlled by pressure. Bone was removed right down to a level with the zygoma in order to ensure a good view of the base of the skull. The dura mater was next peeled off from the base of the skull, and the dura together with the brain retracted as much as possible. In this way the processes of dura mater passing into the foramen ovale and foramen rotundum, in order to form a sheath for the inferior and superior maxillary nerves, were brought into view, and the middle meningeal artery passing out from the foramen spinosum was plainly seen. A good deal of oozing occurred at this stage of the operation, requiring constant sponging to keep the wound dry and the nerves visible. A tenotomy knife was taken, and, with its back toward the middle meningeal artery, the inferior maxillary nerve was divided in the foramen ovale, and then the superior maxillary nerve in the foramen rotundum. No great amount of hemorrhage occurred during section of the nerves.

The dura mater and brain were allowed to sink back into place and the skin wound was sutured, a small drainage-tube being inserted at the anterior angle of the wound. No bone was replaced.

The patient stood the operation exceedingly well. His pulse was rather slow when the brain was being held aside with a retractor, but at the end of the operation its rate and character were natural.

The tube was removed on the day following the operation, and the patient was comfortable except for severe headache. He had no neuralgia whatever, but complete anaesthesia of the parts supplied by the second and third divisions of the fifth nerve.

The headache was persistent, lasting for about a fortnight, but bromide of potassium given in twenty-grain doses every four hours quickly gave him relief.

Patient had no return of his neuralgia while in hospital. He was sent to Swanley, January 10th, 1902, feeling quite well.

The skin of the left side of his face was absolutely anaesthetic over the malar and superior maxillary bones, and impaired sensibility was present in the supra-orbital region and in the skin over the lower jaw to the middle line in front. The buccal mucous membrane on the left side was partially anaesthetic, the patient being unable to feel the presence of food in this situation except by means of his tongue.

The anterior portion of the left side of patient's tongue had impaired sensation.

The patient was seen again on February 12th on his return from Swanley. The change in the man's appearance was remarkable; indeed, it was difficult to recognise him. Previous to the operation he was a pale, decrepit, ill-looking man, with his hand held continuously to the affected side of his face, and speaking in a whisper and with hardly any movement of the lips in order not to set up any fresh paroxysms of his pain. He had done no work for six months. When seen last he looked bright and cheerful, with a healthy colour in his face, and speaking with a natural voice, though it was noticeable that from habit he kept his lips almost motionless.

He had not had the slightest return of pain since the operation, and his headache had entirely disappeared. He was going back to work again in the course of a day or so.

This case is of interest, and I have thought it well to report, as it is the first time that this operation has been performed at this hospital.

Of the operations proposed and practised for trigeminal neuralgia this appears to be the simplest and most satisfactory. Though the Gasserian ganglion was not touched, cure of the neuralgia followed, and simple division of the main trunks of the nerves is a less severe undertaking than partial or complete removal of the ganglion.

Again, in cases in which the ganglion has been removed, and with it necessarily the nerve-fibres forming the ophthalmic division

the cornea becoming anæsthetic has allowed dirt, etc., to collect on it, and panophthalmitis with sloughing of the eye has followed.

In this particular case no operation on the first division of the fifth nerve was called for, as the patient had no supra-orbital neuralgia; division of the second and third branches was all that was required.

The operation of simply stretching the supra-orbital nerve through an incision in the frontal region almost always gives complete relief to the neuralgia in this region, and thus intracranial interference with the ophthalmic division is seldom called for. And this is fortunate, as the intimate connection of the ophthalmic nerve with the cavernous sinus would render any attempt to divide it likely to be followed by severe and even fatal hæmorrhage.

With regard to the route followed in laying bare the nerves the one adopted seems quite the simplest. The extra-cranial route, in which the zygoma is turned back, the pterygoid region opened up, and the skull trephined at the foramen ovale (Rose's operation), is an extremely difficult operation on account of the hæmorrhage which occurs from the pterygoid plexus of veins, and from branches of the internal maxillary artery obscuring the field of operation.

The intra-cranial route was made use of by Howley in his operation, the skull being opened in a similar manner to that adopted by Mr. Bowley; but the subsequent stages of the operation were different in the two cases, as in Howley's method the dura mater is divided along the whole length of the incision, and the nerves and the ganglion searched for intra-durally.

The division of the dura seemed to add to the gravity of the operation without any corresponding material advantage, so another operation was devised and practised simultaneously by Hartley and Krause. In this operation the skull is opened up as before, but the brain together with the dura mater is retracted and peeled away from the base of the skull. The nerves are exposed and divided in their foramina, and then traced up to the Gasserian ganglion, where they were divided again, and the excised portion pushed into the foramina to prevent union of the cut ends of the nerves. The Gasserian ganglion was itself partially removed if it was considered necessary; only the second and third divisions of the fifth nerve were divided.

The Hartley-Krause operation seems to be the simplest and most effectual operation for trigeminal neuralgia if combined with stretching of the supra-orbital nerve in those cases in which supra-orbital neuralgia is present; and simple division of the nerves is preferable to removal of part or whole of the Gasserian ganglion, seeing that if the latter is done there is great danger of sloughing of the eye following.

The great danger of the operation is hæmorrhage, and though this may not be so excessive as to threaten the life of the patient, it may greatly inconvenience the operator by obscuring the field of operation. Hæmorrhage is profuse during the removal of the squamous portion of the temporal bone from the anterior branch of the middle meningeal artery. This, however, can usually be controlled by a ligature or pressure, or if occurring from the artery in the bone by plugging with aseptic wax. But the hæmorrhage may be more difficult to control if the main middle and meningeal artery is cut at the base of the brain where it passes through the foramen spinosum, as in this situation it is in close proximity to the inferior maxillary division of the fifth nerve traversing the foramen ovale. If the artery is injured here ligature of the external carotid artery is the right course to adopt in order to stop the hæmorrhage.

In Mr. Bowley's case the middle meningeal artery was seen passing through the foramen spinosum, and was carefully avoided. During division of the inferior maxillary nerve the back of the tenotomy knife was kept toward the artery. During the actual division of the nerves but little bleeding occurred, though one would expect a good deal from the large veins which pass through the foramen to the pterygoid plexus.

As the Gasserian ganglion and ophthalmic nerve were not touched no hæmorrhage from the cavernous sinus was encountered. Beyond headache the patient had no bad symptom from the necessary pressure exerted on the brain during its retraction.

I have to thank Mr. Bowley for permission to report this case.

Notes.

THE Prince and Princess of Wales visited the Hospital on February 15th, and made a tour of inspection round the wards.

* * *

SIR WILLIAM SELBY CHURCH, Bart., Mr. J. Langton, and Mr. H. T. Butlin have been chosen with others as delegates to draw up a detailed scheme for systematic investigation into the causes, prevention, and treatment of cancer.

* * *

MR. HOWARD MARSH has been chosen Bradshaw Lecturer to the College of Surgeons for the ensuing collegiate year.

* * *

H. E. G. BOYLE has been appointed Junior Assistant Anæsthetist.

* * *

CONGRATULATIONS to Mr. Waring on the advent of a son and heir.

* * *

THE arbitration between Christ's Hospital and Bart's as to the price of the land which it is proposed that we should buy is at last finished, Lord Balfour of Dufferin having issued his award, which fixes the sum at £238,781, the area of land being 67,680 square feet.

Apart from all questions of sentiment, worse things might be done than to follow the lead of Christ's Hospital and vacate the Smithfield site altogether.

* * *

It is with the deepest regret that we have to chronicle the deaths of two members of the nursing staff in the Hospital. Miss Maria Pitt, who was for several years in charge of the Isolation Ward, had been a nurse at Bart's for twenty nine years, and eventually succumbed to a disease for which an apparently successful operation had been performed. Miss Helen Buckland, who had only recently obtained her nurse's certificate, also died in the Hospital after a brief illness.

The fortunate rarity of such items of news renders the task of recording them, when they occur, only the more sad; and it is not the nursing staff alone that feels and deplores the loss of two of its members.

* * *

ALL Bart's men who knew Dr. Harding—and their name is legion—will bear with the deepest regret of the sad bereavement which has befallen him in the loss of his wife.

* * *

WE have to announce with deep regret the death of Large, the Post-mortem Room attendant, from Pneumonia. His unfailing courtesy no less than his technical skill won for him the respect of all who knew him.

* * *

WITH reference to the new regulations for the appointment of House Physicians a difficulty seems to have presented itself which may not have been anticipated. There seems to be a danger that some candidates will be prevented from holding an appointment elsewhere during the six months prior to their term of office. This will prove a real hardship to many men whose financial circumstances do not render them independent of the necessity of making both ends meet.

* * *

A NEW regulation, issued by the Examining Committee of the Conjoint Board, states that the production of a certificate showing attendance on a course of practical administrations of Anæsthetics will be required of all candidates for the finals who shall have passed their Second Examination subsequent to May 1st.

* * *

It is sincerely to be trusted that the Midwives Bill now before Parliament will not pass into law. In its present form the registered midwife would not be of the class which attends the poorest of the people, and in other professions it has not been the experience that to penalise the use of a particular title prevents unskilled practitioners from plying their trade.

We do not quite implicitly trust in registration even of qualified practitioners of medicine, and it is less likely that the registration of qualified midwives will hasten on the millennium.

* * *

It is not often that the *St. James's Gazette* furnishes us with food for criticism, but the other day the exigencies of space led to a somewhat humorous grouping of news.

Under the heading of DISTINGUISHED INVALIDS a telegram reporting the condition of Count Tolstoy was immediately followed by the announcement that J. A., the potman of the "Crown and Cushion," who cut his throat yesterday morning, died during the night in St. Bartholomew's Hospital.

* * *

A LARGE poster met our eye recently holding forth the merits of the Royal Turkish Baths somewhere in the north of London.

The only lines which could be seen from a distance thus summed up the inducements for patronising the establishment:

SMALLPOX

AT THESE TURKISH BATHS

AFTER ONE TRIAL.

Season tickets ought to be cheap there!

* * *

A PERFORMANCE of "Acis and Galatea" has been given in London in which the scenery was obviously inspired by

the gauze used for surgical dressings. Strips of cyanide gauze hung all round the stage, and lighted only from the "flies" (no footlights being used), is a form of decoration that requires to be seen to be properly appreciated.

* * *

SOME men were born with unlucky names. A coroner's jury not long ago brought in a rider censuring "the abominable conduct of the man Bangs," who was in some way mixed up in a suicide case. This must have been a lineal descendant of Kipling's hero—

"Don't dance or ride with General Bangs,
A most immoral man."

* * *

THE following specimen of English as she is wrote in Hawaii shows that the Bengali Babu does not hold the field unchallenged in the art of letter-writing.

PEPEEKEO;

June 3rd, 1901.

O MY HONORABLE MANAGER!

I am a man working under your management. Now I have a hope that to get your certifying paper about the dead of Shikazo Shogi, a Japanese who had lived in your plantation and he was depending to your management. I think that his field number is fifth hundred fifty-two (552), he lived at Ito's camp. Now he was affected by a sick between some times, at last he came to your Hospital. He had dead August 2uth, 1898. Then can you oblige me to give me a paper about the dead of the man? I must send a paper of the dead to Consulate General at Honolulu, but if I have not your or Doctors certification the officer will resend the paper repeatly! Therefore I wish you to give me the paper at all, please you are kind to me, Honorable Manager!

SHINMURA.

THERE are some people who are never happy unless they are aware of all the risks which they run of contracting disease from food. To these, if any there be among our readers, a case of anthrax traced to the horsehair of which the brushes of "knife-cleaning" machines are made may prove a valuable addition to their stock-in-trade of "discomforting facts." We had thought of communicating this to the *D—y M—L*, but recollected that our first thought should be for our own readers.

Presumably the moral to be drawn from this (a moral is always drawn from such items of knowledge in the lay papers, and this JOURNAL should not be behind them) is that every one should eat with his fingers.

* * *

IN answer to an anxious inquirer we should say that it is neither good English nor sound pathology to say that Tumours, Motors, or any other form of new growth *break down*.

* * *

THE Annual General Meeting of the Abernethian Society will be held on March 20th.

Ibernetian Society.



HR thirteenth ordinary meeting was held on January 30th, Mr. Shruball in the Chair.

Mr. Litle-Jones read a paper "Concerning Arthritis." Having enumerated the chief points in the diagnosis of gout, rheumatism, and arthritis deformans, he went on to review the principal theories regarding the latter disease, summing up in favour of the "infection" theory, and concluded this part of his paper with a description of the manipulative and operative treatment of the disease. He next gave an account of "Hydrops Articulii," drawing special attention to its apparent association with vasomotor disturbances, and ended his paper with illustrations of the difficulty sometimes met with in diagnosing tuberculosis of the knee-joint from new growths in the neighbourhood.

The fourteenth ordinary meeting was held on February 6th, Mr. Danks in the Chair. Mr. Harmer read a paper on "Intussusception." Beginning with its aetiology, he proceeded to describe the various forms of the lesion, showing specimens of all, the symptoms and signs to which they gave rise; the diagnosis; clinical course; treatment and prognosis. Laparotomy and injection of fluids were thoroughly described, their merits discussed, and suggestions made on details and on difficulties met with. He gave statistics bearing on all the main points.

The fifteenth ordinary meeting was held on February 13th, Mr. Danks in the Chair. Dr. Riviere read a paper on "Tuberculosis in Children." He began with a history of the *Bacillus tuberculosis*, described its modes of entry into the body, and made a distinction between tuberculosis in the first and that in the second dentition. He dealt fully with the former class, naming the usual situations of primary infection, and explaining the manner of dissemination. He alluded to the work of Cohnheim, Straussmann, Baumgarten, and others. He described the post-mortem appearances in a case of acute general tuberculosis. Next he dealt with abdominal tuberculosis, and criticised the question of its being primary, quoting his own post-mortem examinations at the Shadwell Hospital during one year to illustrate the matter. In the same connection he recalled Koch's speech of July, 1901, described the Professor's experiments bearing on the question of infection by bovine tuberculosis, and ended by giving his own conclusions in the matter.

The sixteenth ordinary meeting was held on February 20th,—a clinical evening.

Mr. Pinker showed a typical case of periorbitis due to congenital syphilis. The patient was a girl, aet. 18. The disease affected the uina. The swelling was diminishing on treatment with iodide of potash, together with rest and massage.

Mr. Hayes showed a case of myositis ossificans in a young man. Mr. Picton showed two cases:

(i) A girl with a marked rheumatic history and *morbus cordis*, in whom the joints of the hands and knees were affected with osteoarthritis.

(ii) A woman who had a diffuse rash of sudden onset, having the appearance of a tubercular syphilid. The diagnosis was doubtful, because the disease was not improving under treatment by mercury. The general opinion was that the disease was syphilitic. Mr. Pinker recommended an addition of potassium iodide to the mercury.

Mr. Pridham showed a case of a young girl with a gradual loss of strength and wasting of muscles of her arm and leg. She first noticed that she could not button her glove; then her intercostal muscles wasted, and for four months she had an increasing difficulty in walking. In the hands there was wasting of the muscles of the thenar and hypothenar eminences and of the interosseus, with some reaction of degeneration. In the legs knee-jerks were increased, there was no ankle-clonus, and sensation was unaffected. On respiration there was apparently no movement of the diaphragm. Mr. Pridham was inclined to a diagnosis of peripheral neuritis, at the same time fully realising the difficulties of the case.

Mr. Picton thought that cervical caries ought to be taken into consideration.

The seventeenth ordinary meeting was held on February 27th, Mr. Waterfield, Vice-President, in the Chair.

Mr. Gordon read a paper on "The Bacteriology of Scarlet Fever." The researches which he detailed form part of the work which Dr. Gordon is engaged in for the Local Government Board, and an

abstract of his paper cannot therefore be published. The whole subject will appear later in a Government Blue Book.

The paper was illustrated by 120 lantern slides of microphotographs.

Dr. Calger was present at this meeting, and he and Mr. Scholberg discussed the paper.

Amalgamated Clubs.

RUGBY FOOTBALL CLUB.

ST. BART'S v. BEDFORD.

This match was played at Bedford on January 25th, and resulted in a win for the Hospital by 2 tries to 1 try.

In the first half the Hospital were attacking nearly all the time, but our three-quarters could not break through the Bedford defence, so half-time came with no score.

In the second half of the game some good rounds of passing were seen amongst the Hospital three-quarters, and Stone scored twice far out on the right wing. Neither of the tries was converted.

Just before call of time one of the Bedford forwards got over with a try, which was not converted. Team:

F. S. Marshall (back); D. M. Stone, J. Corbin, H. B. Owen, W. H. Hamilton (three-quarters); T. O'Neill and W. H. Scott (halves); A. O'Neill (capt.), L. R. Tosswill, H. T. Wilson, A. R. Neligan, H. F. Stanger-Leathes, J. Morris, E. C. Hodgson, T. H. Izard (forwards).

INTER-HOSPITAL CHALLENGE CUP.

ST. BART'S v. GUY'S (HOLDERS).

The above match was played on February 4th at the Richmond Athletic Ground, about 1000 spectators being present, among which number we were sorry to see Bart's men did not predominate. Of the members of the staff present Mr. Holmes Spicer and Mr. Waring were alone noticed. The teaching staff were represented by Dr. Drysdale, Dr. Edkins, and Mr. Mundy.

Although we were generally expected to come out heavy losers against such a consistent side as Guy's this year has proved itself to be, one of the most interesting and best games in the history of the Cup ties was seen, thanks mainly to our front rank, who were much superior to their opponents, O'Neill, Tosswill, Wilson, and Neligan being especially noticed in a pack who were all good. There were rumours that we were to play five three-quarters, perhaps a somewhat risky proceeding to weaken our only strong point, but the game adopted of playing a wing forward was fully justified, as Hamilton's tackling outside the scrum was excellent, and, on more than one occasion, saved a dangerous situation.

O'Neill kicked off against the slight breeze, and play settled down in the Guy's half, and was chiefly confined to the forwards, several attempts of the Guy's backs to get away being quickly stopped. Very soon after this Bart's were awarded a free kick for off side, and Stone tried a long shot at goal. The ball was brought back to the Bart's "25," and, by some good passing among the Guy's three-quarters, Alcock scored wide out. O'Brien failed with the kick.

The Guy's three-quarters now frequently got the ball, but Morgan was several times pulled up on the touch line. A good run by Owen took play to Guy's territory, where Bart's several times looked dangerous, and the rest of the first half was chiefly confined to the forwards, Tosswill and Wilson being prominent.

On changing ends Guy's kicked off, but play soon settled in their half, due to some good dribbling by Tosswill, O'Neill, and Neligan, the forwards, however, several times running over the ball. A good dribble by Thomas and a kick by Alcock brought play into the Bart's "25," where Guy's looked like scoring, and, but for the good tackling of Hamilton and the half-backs, they would certainly have crossed our line. T. O'Neill secured the ball cleverly from a throw out, and made a lot of ground, but very soon Alcock took a pass and ran in, Morgan kicking a goal about twenty minutes before time. Bart's then played up, and kept the ball nearly confined to their opponents' territory, and certainly on one occasion had but luck in not scoring by a good dribble by Scott, Guy's being penalised for a foul. Stone made a good attempt at goal, and again soon after

from a mark by Owen, but neither was successful. The whistle blew with the score Guy's 1 goal, 1 try (8 points), St. Bart's nil.

That we were unable to lose no one can say, as, with a back capabilities were not good. The keenness of the tackling all through the game alone saved us from further defeat, though to the forwards must be attributed much praise in their splendid attempt to reverse the decision. The teams were—

St. Bart's.—F. S. Marshall (back); D. M. Stone, J. C. Corbin, H. B. Owen, G. G. Rillet (three-quarters); W. H. Scott, T. O'Neill (half-backs); A. O'Neill (captain), L. R. Tosswill, H. T. Wilson, A. R. Neligan, H. F. Stanger-Leathes, W. H. Hamilton, G. H. Adam, and L. Morris.

Guy's.—E. M. Harrison (back); E. Morgan, A. D. O'Brien, P. F. McEneaney, F. Alcock (three-quarters); O. V. Payne, M. C. Wetherell (half-backs); H. A. Cutler (captain), T. P. Thomas, R. C. Lawry, A. R. Thompson, A. M. Talhurst, B. Glendonning, T. H. B. Milson, and E. L. Ward.

Referee.—Mr. E. V. Gardner (I.R.U.S.R.).

Touch Judges.—T. M. Bony (St. Bart's),—Morgan (Guy's).

ASSOCIATION FOOTBALL CLUB.

INTER-HOSPITAL CUP TIE (2ND ROUND).

ST. BART'S v. GUY'S.

This match was played at Chiswick on Thursday, February 20th, on a hard ground. O'Brien lost the toss and kicked off for Bart's. The ball, however, was quickly carried by Norton into our goal, and before five minutes had passed Barber had scored the first goal for Guy's. After O'Brien had again kicked off our opponents seemed to get the better of the game and pressed hard, Barber very shortly, by means of a smart shot, again scoring (2-0). Guy's, who up to this point had been playing one man short, now obtained the eleventh man, but, contrary to expectation, the game till half-time turned in our favour, and it was not long before Fernie netted the ball (2-1). Unfortunately, Bates at this juncture got seriously hurt and had to retire, whereby we were forced to play one man short. Although Fernie was sent half-back and we were playing four forwards we pressed hard, and just before half-time Anderson scored a second goal (2-2). Throughout the latter half Guy's pressed hard; the excellent play, however, of Nealar, coupled with the hard work of the rest of the team, kept them out, and the match resulted in a draw—2 goals all.

E. Armitage (goal); W. S. Nealar, J. R. R. Lloyd (backs); T. W. Bates, T. W. Godsell, N. E. Waterfield (half-backs); C. A. Anderson, C. A. Fernie, C. O'Brien, A. H. Hogarth, T. A. Kilby (forwards).

ST. BART'S 2ND XI A.F.C. v. CHESHUNT.

Match played at Cheshunt on Saturday, February 22nd. We were pressed hard during the first half, but latterly we got together and Butcher scored the first goal. Cheshunt, however, quickly equalised, and the match resulted in a draw (1-1). Team:

A. N. Other (goal); G. B. Scott, G. S. Morse (backs); W. Jackson, H. B. Scott, F. Gooding (halves); R. H. Bott, N. Bennett-Powell, J. C. Mead, C. H. Fielding, A. C. Wilson (forwards).

ST. BART'S v. GUY'S.

This match was replayed at Winchmore Hill on Wednesday, February 26th. We kicked off at 2.50 p.m., and for ten minutes neither side scored; Barber, however, then kicked the ball into the hands of Armitage, and rushed at him as he was trying to clear, and unfortunately kicked his (Armitage's) hand instead of the ball, which forced the latter to let it roll into the net. O'Brien kicked off again for Bart's, and after some give and take play in the field through for Guy's (2-0). We were now pressed hard till within five minutes of half-time, when a good run down the field by O'Brien brought the ball to our opponent's goal, but we failed to score and half-time was called. In the latter half it seemed for a time as if we might yet prove successful. The forwards were playing well together and pressing hard. Once O'Brien netted the ball, but was unfortunately ruled off-side. Norton now got hold of the ball and carried it up the field, and after passing to Lichfield Guy's scored again (3-0). Once more we kicked off and seemed to have our own way, Nealar playing

especially well. We failed in our shooting, and the ball was brought into our goal and quickly landed in the net by Lichfield (4-0). A last effort was then made on the part of Bart's, and after a little intricate play Hogarth put the ball through (4-1). This, however, was only a signal for our utter collapse, and Barber, just before time, scored twice more for Guy's, leaving the result 6-1 in their favour. Team:

C. E. Armitage (goal); W. S. Nealar, J. R. R. Lloyd (backs); W. H. Jones, T. W. Godsell, N. E. Waterfield (half-backs); C. A. Anderson, C. A. Fernie, C. O'Brien, T. A. Kilby (forwards).

ST. BART'S v. CHESHUNT.

Match played at Winchmore Hill on Saturday, March 1st. We had the game all our own way from the start, and won easily (5-1). The goals were scored by Mead (1), Butcher (3), Bennett-Powell (1). Team:

D. W. Hume (goal); G. B. Scott, G. S. Morse (backs); F. W. Jackson, W. H. Jones, F. Gooding (halves); R. H. Bott, J. C. Mead, C. B. D. Butcher, N. Bennett-Powell, C. H. Fielding (forwards).

THE UNITED HOSPITALS' HARE AND HOUNDS CLUB.

The team chosen to represent the above club in the race against Dublin University on February 28th was as follows—J. G. Gibb, F. S. Lister, P. Gosse, W. H. Orton (Bart's), G. A. Simmons (St. Thomas's), and O. S. Norton (Guy's). The "ill" luck which has so far attended all our efforts to get together a thoroughly representative team was again in evidence; A. C. Bird had not sufficiently recovered to race, and at the last moment P. Gosse was unable to assist us owing to influenza. The remainder of the team, however, were all men who had trained throughout the season rather harder than is the wont of most Hospital combinations, and could at least be relied upon to finish the course at a fair pace.

The course is at Dunsany, about three miles from Dublin, and is in itself quite a feature, being a miniature Grand National as regards the jumps it entails. It is rather more than one and a half miles round, and had to be negotiated four times. Each time round there were ten jumps, four being over water, a small crowd collecting at the widest to see the unlucky ones swim about. There was no plough, but the grass land was very wet and heavy.

The U.H.H. and H. ran five men and Dublin U.H. six. The Dublin team were the first away, closely followed by J. G. Gibb, F. S. Lister, and G. A. Simmons until the widest water jump was reached, when Gerald Horan (capt. D.U.H.) fell an easy victim. F. S. Lister and J. G. Gibb immediately went to the front, and were at the end of the first lap a good 100 yards in front of the field, Simmons running third. During the next lap Lister led Gibb by about 100 yards, with Simmons still third 80 yards from Gibb. In this order the leading trio ran the remainder of the race, Lister eventually winning a somewhat tame race by about 200 yards. On adding up the points the Hospitals were declared easy winners by 13 points, the scores being U.H.H. and H. 12 points, D.U.H. 25.

	Min.	Sec.
1. F. S. Lister (St. Bart's)	42	14
2. J. G. Gibb (St. Bart's)	42	51
3. G. A. Simmons (St. Thomas's)	43	18
4. J. H. Askim (D.U.H.)	43	58
5. H. P. Hart (D.U.H.)	44	53
6. O. S. Norton (Guy's)	45	17
7. W. J. Kerr (D.U.H.)	45	29
8. W. H. Orton (St. Bart's)	45	32
9. W. H. Frey (D.U.H.)	45	46
10. H. I. Hagan (D.U.H.)	45	50

G. Horan retired at the second lap.

After the race we were entertained by the opposing team in their usual hospitable style.

This fixture practically ends the season, which has proved most successful. Many more men have taken part in the training runs, and considerable enthusiasm has been aroused by means of the various matches. It is hoped that next season more matches may be arranged, and the club more strongly supported both by men from St. Bart's and other hospitals.

SUMMARY OF FIXTURES.

U.H.H. and H. v. Ranelagh II.....	Lost.
" v. Thames H. and II.....	Won.
" v. Dublin U.H.....	Won.
Inter-Hospital Cup.....	St. Bart's.
Championship Medal.....	F. S. Lister "

SWIMMING CLUB.

At a general meeting of the Swimming Club, held on February 20th, Mr. A. H. Bloxsome in the chair, the following officers were elected for 1902:

President.—Howard Marsh, Esq., F.R.C.S.
Vice-Presidents.—W. P. Herringham, Esq., M.D.; W. Fay Bennett, Esq., M.R.C.S., L.R.C.P.; E. M. Niall, Esq., M.R.C.S., L.R.C.P.; W. H. G. Thorne, Esq.
Captain.—Mr. D. M. Stone.
Vice-Captain.—Mr. A. H. Bloxsome.
Hon. Sec.—Mr. J. G. Watkins.
Committee.—Messrs. A. M. Anisler, C. Dix, F. E. Taylor, R. C. P. McDonagh, H. M. Hanschell, G. T. Veley, W. H. Scott.

It was settled that the following races are to be held during the season.

Sealed Handicap, two lengths.
 Dribbling the ball, one length scratch.
 Eight lengths Handicap.
 Four lengths Handicap.
 Team Race.

A vote of thanks was unanimously passed to Mr. Howard Marsh and Dr. Herringham for their kind gift of silver medals to last year's team, on the occasion of winning the Inter-Hospital Cup for the fourth year in succession.

Reviews.

ON DISORDERS OF ASSIMILATION, DIGESTION, ETC., by Sir LAUDER BRUNTON, M.D., F.R.S., etc. (Macmillan and Co., 1901.) Price 10s. 6d., pp. 495, with illustrations.

This delightful book Sir Lauder Brunton describes in the preface as "a collection of scattered papers and addresses, written at various times and delivered on various occasions."

Many of the lectures and addresses which are included in the volume have been delivered to a "Bart.'s" audience, and those of us who may have been fortunate enough to have already heard them will admit that the charm of style which forms so attractive an element in Sir Lauder's lectures is no less felt in the printed pages than in the medical theatre.

The title of the work allows doubtless for a great variety of themes, and we find the various sections covering a sufficiently wide area, dating as they do from the year 1874 to May, 1901.

As the author says in his preface, it is possible that the same ideas recur again and again; but if this is so, we can only feel that they are sound practical ideas, which the reader will do well to carry away with him on his daily round.

Some of the papers are written and were delivered as popular addresses to lay audiences, such as "The Influence of Stimulants and Narcotics on Health;" but there are

homely illustrations and similes which serve to drive home the points, even into a medical mind, far more forcibly than pages of statistics and columns of analyses; and when Sir Lauder Brunton calls in Hogarth's pictures to his aid, we cannot say with Emerson that "Science does not know its debt to imagination."

The Clinical Lecture on "Sprue" will be welcomed by all who remember hearing it in 1899, and saw the two interesting cases that were warded in Rahere at the time.

The account of the first successful case of operation for perforated typhoid ulcer in England recalls once again the feelings of satisfaction which were evoked at the time. The papers on certain original researches in physiological chemistry are by no means the least interesting portion of a collection of articles full of practical value set forth in an interestingly readable form.

Finally, it only remains to add that this volume is a worthy companion to Sir Lauder Brunton's other published works.

SELECTED ESSAYS AND ADDRESSES, by Sir JAMES PAGET.

Edited by STEPHEN PAGET, F.R.C.S. (Longmans, Green and Co.) Price 12s. 6d., pp. 445.

The value of Sir James Paget's observations is not lessened by lapse of years, nor does the eloquence of his writings fade; the essays and addresses which have been collected to form this volume are all to be found scattered in various medical journals or reviews, but unless preserved in some such book as this there is a danger of their being lost sight of, to the irreparable damage of the literature of medicine.

Several of the articles appeared in lay papers, notably the *Nineteenth Century Review*, and one of these describes the history of the discovery of anaesthetics, a sufficiently familiar story, no doubt, but worth listening to again for the dramatic and graphic touches which Paget has lent the tale. What expression could bring more clearly home to us the unscientific experiences which led to the discovery of the volatile anaesthetics than that of "ether frolics," as applied to the parlour games of certain youthful but inquisitive Yankees?

Better known to many Bart.'s men is the fascinating account of the after career of medical students, as it appeared in the Hospital Reports under the title of "What becomes of Medical Students;" in one short phrase in this essay an insight is obtained into Sir James Paget's feelings, which some commentators on his life would do well to grasp: these frequently assume that his early struggles against adverse fortunes handicapped Sir James to the end of his days.

His own views were different, for he describes, with a suggestion of sympathy, the lot of two students who retired from the profession "too rich to need to work."

The summary of this investigation is worth remembering.

"All my recollections would lead me to tell that every student may draw from his daily life a likely forecast of his life in practice, for it will depend on himself a hundredfold more than on circumstances. The time and place, the work to be done and its responsibilities, will change; but the man will be the same, except in so far as he may change himself."

"Senile Scrofula" appeared in the Hospital Reports also, and drew attention almost for the first time to the age incidence of tuberculosis.

"Cases that Bone-setters cure" is full of sound teaching and humour.

The account of the serious attack of cellulitis which followed a dissection wound in Paget's own case forms the basis of a lengthy chapter on "Dissection Wounds in General," in which his own illness is described in detail, concluding by showing that there are exceptions to Sir William Lawrence's aphorism that no one recovers on whose case more than seven medical men had consulted.

The two diseases specially associated with Paget's name are represented by the papers in which the original announcements were made: the first, "On Disease of the Mammary Arcola preceding Cancer of the Mammary Gland," dealing with what is now known as *Paget's Eczema*; and the other "On a Form of Chronic Inflammation of Bones," being a study of *osteitis deformans*.

"Experiments on Animals" is an essay which should be read twice a week to all anti-vivisectionists; it was published in the nineteenth century, and was therefore intended for lay readers.

No one could suspect Paget of any desire to inflict suffering on animals to satisfy a morbid curiosity. The article affords a powerful defence of experimental work in physiology and pathology in its application to animals, and contains numerous refutations of the contention of ignorant "anti-humanitarians" that no practical benefit is derived from experiments on living animals.

Sir James Paget was a man who avoided controversy when possible, but if he entered upon it he always took the unfair advantage of having right on his side.

Obscure cases of spinal caries are probably less frequently overlooked since the methods of examination recommended in the notes "On Spines suspected of Deformity" were given to the medical world.

But the newest and freshest of all the essays is that entitled "Errors in the Chronometry of Life." The error may be of two kinds, illustrated by the simile of an orchestra in which the music is played too fast or too slow, but in which all the musicians keep the same time; in the other case one or more of the musicians play too fast or too slow, and are as constant sources of discord as if their instruments were out of tune. Of the first type are those

people who look older than they really are; for their age they are not healthy as a whole, but no particular organ is at fault. The second type is that of the man who, otherwise sound, has one vital part in a state of decay.

The personal factor in the study of disease is the text of the article, and in practice the power of recognising this factor and estimating it correctly may be of more use than a mind teeming with the latest facts in pathology or fads in treatment.

Paget's writings, few in number though they be, could be ill spared from the catalogue of English medical literature.

ILLUSTRATED MEDICAL DICTIONARY, by W. A. NEWMAN, DORLAND, A.M., M.D. (W. B. Saunders and Co., London and Philadelphia.) Pp. 770, price 12s. 6d.

In this volume the author has aimed at producing a book of reference which, while less condensed than a dictionary of medical terms, shall be less verbose than an encyclopaedia—there is no doubt that he has succeeded in this object, but it is not certain whether there can be much demand for such a work.

Medical words, phrases, and methods, all find a place; and at times the space devoted to the subject admits of a complete yet condensed account, for under such a word as "*staining*" there is an accurate and up-to-date description of the stains and methods of using the same for histological and pathological work.

Diseases and remedies do not seem capable of being reduced to the limits of space assigned to them, and there is small profit in reading of a drug such as *chrysoarobine*, "that it is used in skin diseases, locally and internally, acting in the latter case as an irritant and purgative; dose, $\frac{1}{4}$ — $\frac{1}{2}$ gr.

The illustrations are good, an excellent coloured plate of the blood-corpuscles being given. There are in all sixteen plates, and numerous woodcuts. The book is handsomely bound and well printed, but it can hardly be regarded as an indispensable "vade-mecum."

HANDBOOK OF PUBLIC HEALTH. By JOHN ORR, M.D., F.R.C.P.E. (E. and S. Livingstone, Edinburgh.) Pp. 236, price 4s.

We do not approve of the idea that the rudiments of public health required of medical students for their examinations should be reduced to the smallest possible allowance, and cannot agree with the author that this book describes "in as concise a manner as possible those matters relating to public health which a medical student ought to know to fit him for his future duties as a practitioner of medicine." The binding and general appearance of the volume is considerably above that of the "Aids" series.

FIRST AID TO THE WOUNDED AND SICK. By F. J. WARWICK, B.A., M.R.C.S. and A. C. TUNSTALL, M.D., F.R.C.S. (John Wright and Co., Bristol.)

An excellent little manual, written by two experienced "Ambulance Lecturers," each being a surgeon captain in the volunteers, which may perhaps account for the space devoted at the end of the book to military methods of transporting the wounded. The anatomical and physiological chapters are short but accurate, and might convey to an intelligent non-medical mind a fair amount of useful information, and render the succeeding chapters easy to follow.

Bandaging and temporary splinting are excellently described. Indeed so much attention is nowadays given to bandaging at "first aid" classes, that the efforts of the medical man are often thrown into the shade by those who render "first aid" to the injured.

The vexed question of hemorrhage and its treatment is not so satisfactorily dealt with, the universally appropriate "pressure on the bleeding point" is quite lost in a maze of elaborate diagrams for applying pressure everywhere else with, we are sure, the most disastrous results in many cases. House surgeons are only too pain-

fully aware of the frequency with which elaborate tourniquets are resorted to, with no good, and often very ill effects in cases of hæmorrhage; and a new doctrine ought to be taught to the "ambulance classes," that of checking bleeding by the method common sense dictates, which in nine cases out of ten is the right one.

The treatment of poisoning, drowning, and burns, leaves little to be desired.

SYLLABUS OF LECTURES TO NURSES. By ANDREW DAVIDSON, M.D. The Scientific Press, Ltd. Price 1s.

The difficulties of lecturing to nurses on Anatomy and Physiology are perhaps best appreciated by those who have experienced this responsibility, and it is to them that Dr. Davidson addresses his syllabus. The book does not lay down what to teach, but how to set about it.

A synopsis of a Course of Lectures is given, with hints as to the headings and sub-headings. The lecturer is left to supply his own instruction.

Anatomy and Physiology occupy about half the book, while a small section is devoted to First Aid, and the last portions refer to the Care of the Sick and Care of the Insane.

The book is printed on one side of the page, leaving the alternate sheet blank for notes.

To those on whom the task of Lecturing to Nurses, especially in provincial hospitals, falls we cordially recommend the help this syllabus affords.

SYPHILIS AND OTHER VENEREAL DISEASES. By H. DE MÉRIC.

(Baillière, Tindall and Cox.) 1901. Price 4s. 6d.

In the preface to this excellent little volume the author expresses a hope that "this small work will help to elucidate certain points which, though often unnoticed, are, however, of great value in the consideration of diseases affecting not only the patient, perhaps for his or her whole life, but also very probably, if not checked by proper treatment, pursuing their disastrous course in his or her descendants."

This wish is amply fulfilled in the pages of the book, the subject-matter of which is obviously the outcome of a very large experience.

Probably more examples of venereal diseases present themselves in the surgical out-patient rooms of a large hospital than of any other, and a clear and concise account of their symptomatology, diagnosis, and treatment, such as this is, should prove of great value.

The necessity for early and absolute diagnosis of "hard" from "soft" sores is rightly insisted on, and the differential diagnosis of these conditions is well described.

The "Treatment" throughout is excellent, and should be of great service to the practitioner.

The two final chapters are devoted to "Prophylaxis of Syphilis" and "Contagious Diseases Acts" respectively. The views of the author, as expressed in the last chapter, may not be in accordance with the ideas of the English reader, but one can hardly fail to recognise the sound practical common sense that underlies his remarks and suggestions on the subject. The author must be congratulated on producing a volume that is well written and full of practical aids to the surgeon.

House Physicians.

The regulations regarding pathological work necessitate a change in the time of appointing House Physicians.

The following appointments have been made for October,

1902:

SIR WILLIAM CHURCH	H. Whale.
DR. GEE	F. Gröne.
SIR DYCE DUCKWORTH	W. V. Wood.
DR. HENSLEY	F. R. Carroll.
SIR LAUDER BRUNTON	D. C. O'Finigan.

In future the House Physicians will be appointed once a year, in December, and the classes in pathology will be held during the months of January to March, also once only in each year.

Calendar.

- Mar. 15.—Hockey Club v. Enfield at Winchmore Hill.
 " 17.—Junior Practical Anatomy Prize. Mr. Bowby Special Lecturer.
 " 18.—On duty. Dr. Gee and Mr. Marsh.
 " 19.—Senior and Junior Scholarships.
 " 20.—Abernethian Society. Annual General Meeting.
 " 21.—Kirkes Scholarship and Gold Medal.
 " On duty. Sir Dyce Duckworth and Mr. Butlin.
 " 25.—On duty. Dr. Hensley and Mr. Walsham.
 " 27.—Cambridge Lent Term ends.
 " 28.—Good Friday.
 " On duty. Sir Lauder Brunton and Mr. Cripps.
 " 29.—Essays for Wix and Bentley Prizes to be sent in.
 " 31.—Winter Session ends.
 April 1.—On duty. Sir Wm. Church and Mr. Langton.
 " 2.—Oxford Easter Term begins.
 " 4.—On duty. Dr. Gee and Mr. Marsh.
 " 8.—On duty. Sir Dyce Duckworth and Mr. Butlin.
 " 11.—On duty. Dr. Hensley and Mr. Walsham.

Appointments.

CHOLMELEY, W. F., appointed Honorary Assistant Surgeon to the Wolverhampton General Hospital.

SKERDING, HENRY, M.B., B.C. Cantab., M.R.C.S., appointed Medical Officer to the Post Office, Bedford.

LOWE, GODFREY, has been appointed Medical Officer in charge of Troops at Lincoln.

New Addresses.

CALVERLEY, E. J. G., 10, Earl's Avenue, Folkestone.
 MEADE-KING, K. L., Powlett House, High Street, Taunton.

Marriage.

CHOLMELEY—GORDON-CUMMING.—January 20th, at St. Bartholomew the Great, Manington A. Cholmeley, M.R.C.S., L.R.C.P., fourth son of the late Rev. John Cholmeley, M.A., Rector of Carleton Rode, Norfolk, to Mary Bertha, eldest daughter of George Gordon-Cumming, Esq., late of "Rossmore," Aldershot.

Deaths.

COOKE.—On Feb. 20th, at Aldridge, Staffordshire, William Henry Cooke, M.D. Aberd., J.P., æt. 67.
 ECCLES.—On March 1st, at Plymouth, John Henry Eccles, M.R.C.S., æt. 87.
 HARDING.—On March 1st, at West House, Eastbourne, Amy Persis, dearly loved wife of C. O'Brien Harding.
 JOHNSON.—On Jan. 22nd, at Evandale, Tasmania, John George Johnson, M.R.C.S. (Eng.), L.R.C.P. (Lond.), æt. 44.

St. Bartholomew's Hospital



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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 J. H. BOOTY & SON, Advertising Agents, 30, Holborn, E. C.

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,

MARCH, 1902.

"Æquum memote robur in arduis
 Servare mentem."—Horace, Book ii, Ode iii.

The Diagnosis, Prognosis, and Treatment of Intussusception.

A Paper read before the Abernethian Society on
 February 6th, 1902.

By W. D. HARMER, M.C., F.R.C.S.



ENTLEMEN,—In reading Mr. Power's book on Intussusception you will find it stated that Hippocrates was a believer in enemata in the treatment of this complaint, and Praxagoras of Cos had opened the abdomen for its relief.

There is, therefore, nothing new to you in my subject, as it was familiar to the surgeons of that remote period. In any case it is a

curious complaint, and I hope to be able to arouse your interest in, and your discussion of, the symptoms and treatment that I am about to mention. It is only in recent times that intussusception has been recognised as a common disease. Statistics show in former years—as, for instance, from 1880 to 1890—that hardly any cases came to the large hospitals. On the other hand, since that date it is not uncommon for twenty patients to be treated during the course of a year at a single hospital.

This is due to a better knowledge of the disease amongst the doctors who see the cases, and although there are still mistakes they are less frequent, I take it, at the present moment.

In its usual acute form intussusception has very typical symptoms, but when of a chronic type these may be confusing. In the latter instance the symptoms simulate gastro-enteritis, a condition so common amongst children that the *graver* complaint is overlooked.

As it is so highly important that treatment of a proper kind should be commenced without loss of time, I intend to devote a few pages to the symptoms that are found with the disease, and especially with the acute form of disease that occurs in young children.

Ætiology.—The great majority of cases that have been reported have been spontaneous in their origin. There has rarely been a history of a fall, a blow, or other injury. In fatal cases it is not uncommon to find anything definite, such as a polypus, that could have been the cause of the intussusception. There is, however, one interesting point in the anatomy of the disease, namely, that it is the rule, as Mr. Power explains, to find the mesocæcum of children abnormally long as compared with its condition in later life, so that the great mobility of the cæcum may predispose to the complaint.

In many cases I have found that indigestible food, such as an apple or some pastry, was given to the child shortly before an attack, and in one case that I can remember the child was absolutely well until a purgative had been given. Dr. Batten agrees with this theory. Speaking at the British Medical Association last year, he said that "he thought that the production of intussusception was largely due to bad feeding and powerful purgatives, and this accounted for the greater frequency of the condition in the children of the poorer classes."

In this connection the experiments upon animals, conducted by Mr. Power, may be cited; he found that when turpentine mineral was given to an animal, a very irregular contraction of the intestine was produced, the bowels being slightly contracted in some places and dilated in others, with the result that small intussusceptions were formed, the contracted portions having slipped inside the dilated parts. Again, the cause of *pauco-ante-mortem* intussusceptions is not anything within the bowel, but is probably the result of irregular nervous discharge at the last moment causing an irregular peristalsis: this has been observed also in dogs, and the occasional passage of fæces by human beings shortly before death is possibly also a case in point.

A normal peristaltic wave is due to a co-ordinated contraction of both the longitudinal and circular muscles of the intestine, and any deviation from this co-ordination might give rise to the condition that is required for the production of an intussusception.

Moreover ill co-ordinated nervous phenomena of all kinds are especially characteristic of the age at which intussusception is most common, and it is possible that many of these are produced, as

are "agonic intussusceptions," by some irregular inco-ordinated contractions which act for a short time only.

Again, it is known that waves of contraction travel down the ileum as far as the ileo-caecal valve, and stop there, that new waves are started in the caecum which travel along the colon, so that the caecum may be dilated while the lower end of the ileum is contracted; in this condition any irregular contraction of the muscles, especially of the longitudinal muscles of the ileum, might cause the smaller portion to enter the larger.

As regards the appendix, although it is frequently invaginated with the rest of the caecum, do not see how it can have anything to do with the causation of the disease.

Previous history.—The previous histories are usually unimportant, but there are cases in which it is doubtful where the intussusception originated: perhaps it may occur, and then reduce itself for a time; if this is so it is possible that some of the sharp abdominal pains that commence in children and last for a short time are intussusceptions that have afterwards reduced themselves.

Age.—This is certainly important. Sir F. Treves says that 25 per cent. are less than a year old; Mr. Eccles found, moreover, that of the cases that entered this hospital between the years 1879 and 1900, 65.4 per cent. were in children under a year old; and Mr. Pitts states that 82 cases out of 115 treated at St. Thomas's Hospital, which is approximately 70 per cent. were also under twelve months, so that it is obvious that a very large number of the cases affect young children.

The sex.—It is generally agreed that it is rather commoner in males than in females—61 per cent., Eccles; 67 per cent., Pitts.

With regard to the diagnosis, there is perhaps no acute disease of the intestines that may be marked by so little disturbance of the system; on the other hand, those symptoms that are present are generally typical.

It should be noticed that in nearly all instances the onset is sudden; the child is either sleeping quietly when it suddenly wakes up and begins screaming, or it is taking its milk and suddenly becomes violently sick.

In acute cases the vomiting is persistent, but very often the patients are relieved for a time and seem to be better, which no doubt accounts for many of them being brought to a doctor several days after the commencement of the disease. Whatever the history, by the time the child is seen there is generally more or less collapse; it appears pale, has an anxious, pinched expression, with hollow cheeks, bluish lips, and sunken eyes.

Restlessness is not usual, and although the children are sometimes peevish and irritable, it is far more common and much more typical of the disease to find them very markedly apathetic. They take little or no interest in their surroundings when undisturbed; if a toy is given to them, they will play with it in a casual, unappreciative manner for a time, but soon tire of the amusement.

Although quite apathetic the children are obviously ill, and a facial diagnosis alone points to the grave illness. The pulse is generally feeble, of small volume, and very rapid, 140 to 160, or perhaps impossible to count. Respiration is quickened—on an average 40. The temperature is as a rule only slightly raised at first, and never subnormal.

Of the more definite symptoms, vomiting, blood, and mucus are called by Mr. Eccles the cardinal symptoms.

The pain is very important, and perhaps enough stress has not been laid on this particular symptom. It is present at some time, I believe, in nearly all cases. In its more typical form the pain is paroxysmal in character, coming at intervals, which may be definite periods—as, for instance, either every half-hour, or quite irregularly. As it occurs in young children the nature of the pain is difficult to describe, but the invariable screaming at the time shows that it must be an intense "colicky pain," very severe while it lasts. The pain is referred to the region of the umbilicus in most cases, and is generally relieved by pressure (as there is no peritonitis).

In cases where pain is absent the form of intussusception is usually ileo-caecal, and there is a large invagination extending into the rectum, with very little strangulation of the bowel. On the other hand, ileo-colic forms have very acute pain, which is probably due to the great strangulation, owing to the tightness of the ileo-caecal valve.

Vomiting is the most important symptom of this disease, because it is the only one that is invariably present. I say invariably because I found, after looking over a series of twenty cases at the Children's Hospital, that it was always present. Unfortunately it often occurs as simple sickness after food, the child bringing up its milk as soon as it is fed. As this is a condition common amongst

babies as the result of slight disorders of the stomach, it may not suggest the presence of intussusception. The prominent features are that it begins very suddenly, and often in a child who has had nothing of the kind before. It tends to recur after all food, and to get worse. Medicine only aggravates the condition, especially if of the nature of a purgative. The vomit often becomes bile-stained after a time, and occasionally may be faecal in an acute case.

The intensity of the sickness is directly proportional to the amount of the strangulation, and in most cases is very mild because the constriction is slight.

The vomiting is the symptom that suggests the abdominal condition, and leads to the discovery of the sausage-shaped tumour which is found in a large percentage of cases.

Blood and mucus.—It is interesting to note that of the twenty cases that I have previously mentioned are described with this symptom. As further evidence of this point I find that it occurred in 82 per cent. of the ninety-six cases referred to. When blood and mucus are passed *per rectum* by a child who is suffering from sickness and pain in the abdomen intussusception is immediately suggested. The amount passed is in nearly all cases small, and there is generally a history of its being found on the napkin, or, as often happens, the child tries to pass a motion, and after much straining only succeeds in expelling a small quantity, perhaps a teaspoonful of blood and slime. With this there is generally tenesmus, which must be regarded as one of the typical symptoms of the disease. If strangulation is acute the haemorrhage is more profuse, and when large quantities of blood are passed gangrene is present in some form or other. In some cases that are marked by constipation the blood and mucus are only noticed when a rectal examination is made, or when an enema is administered. In this connection it should be noticed that, although there is more or less obstruction of the bowel, yet constipation is not the rule.

The abdomen in the majority of the cases appears normal, is flat and supple, and moves well with respiration. In cases of long duration, especially in the so-called chronic intussusception of adults, there may be distension, but not often to any marked extent. There is not as a rule great tenderness, but when present it is in the region of the tumour, and when palpation of the latter causes a fresh attack of pain it is a very significant point in the diagnosis.

Tumour.—In his article on this disease in *Allbutt's Medicine* Sir Frederick Treves states that a tumour can be demonstrated in rather less than 50 per cent. of all cases. Mr. Eccles found that it was 73 per cent. in his series, and in mine it was fifteen out of twenty. It may be sausage-shaped, or very often is an elongated mass, that is doughy to palpation, and presents the peculiarity that it is apt to change its position at intervals and to vary in hardness. The hardening of the tumour, which is caused by the contractions of the muscles of the gut, and corresponds to the paroxysms of pain that accompany it, is a most important diagnostic element, and occurs, I believe, fairly frequently. It should always be sought for, and is especially useful in chronic intussusception where the diagnosis is much more difficult. The position of the tumour is quite indefinite. Perhaps it is more common to find a transverse mass lying in the region of the umbilicus, or sometimes of the ascending or descending colon, or in both the latter positions. If in the hepatic or splenic flexures it is exceedingly likely to be overlooked, owing to the deep position of the colon in those places. For example, I remember a case where the tumour occupied the splenic flexure chiefly, but it was not discovered even when laparotomy was performed. There was another in which there was indolent resistance in the left hypochondrium, which afterwards proved to be an intussusception in the splenic flexure. In other cases where tumour is absent there may be ileo-colic forms, slightly invaginated so that a tumour would not be expected. In any case very careful palpation is required to demonstrate the tumour, and an anaesthetic may be needed.

Another interesting point to remember is that the apex of the intussusception may often be felt in the rectum—in thirty-three out of ninety-six cases collected by Mr. Eccles, and in seven of my series of twenty.

Again, as the caecum generally moves its position in those cases where it is involved, there may be a hollowness in the right iliac fossa, its normal position.

This is called the "Signe de Dance." Treves thinks the sign absolutely useless, but I think in some instances it may materially assist the diagnosis.

To recapitulate, the patient is as a rule a young child, more often a boy, generally less than a year old: there has been a sudden onset of pain in the abdomen, accompanied by sickness, and in most

instances by the passage of blood and mucus from the rectum, with tenesmus; with this a good deal of collapse supervenes, with feeble and rapid pulse, and quickened respiration. The child becomes very apathetic, and obviously ill. Palpation of the abdomen discloses the presence of a tumour, the apex can often be felt in the rectum, and the diagnosis is obvious.

Treatment.—Turning now to the treatment of intussusception, I would say that there are two methods, and only two, that can be employed with a chance of success: namely—

1. Injection of fluid or air.
2. Laparotomy.

Consider for a moment to what condition is really due. Some part of the intestine has slipped inside another portion, carrying with it the mesentery and the vessels contained therein.

There are on the table some specimens that I have selected of the various forms that occur; they are—

1. **Ileo-caecal forms**, found in 44 per cent. of cases. In these the ileo-caecal valve always remains at the apex of the tumour; the latter goes on increasing at the expense of the ascending colon, so that it is really an invagination of the caecum and large intestine.

2. **Enteric forms**, found in 30 per cent. In these it is the small intestine only that is involved, and the tumour increases almost invariably at the expense of the lower part of the gut (descending variety).

3. **Colic forms**, which, including the rectal forms, are found in 18 per cent. These also are generally of the descending variety, and, of course, affect the large bowel.

4. **Ileo-colic forms**, found in 8 per cent. of cases. In these the small intestine slips through the ileo-caecal valve, and the tumour grows at the expense of its intestine above, *i.e.* the ileum. This is the only form in which the intestine that is above increases the size of the tumour. It is obvious that in these cases there soon comes a time when no more of the ileum can be invaginated, and, as a rule, the tumours are very small, because of the difficulty that the ileum experiences in forcing its way through the fibrous ileo-caecal valve.

In all of them there was compression of the vessels that supplied the portion of intestine invaginated, to a greater or lesser extent, with consequent impairment of the functions of the part. There is, in fact, a condition very closely analogous to a strangulated hernia of the intestine.

The treatment for the latter is to cut down and relieve before injury has been done, and where there is a doubt an exploratory operation is necessary.

I wish to emphasise that this equally applies to intussusception, and that early treatment of an energetic kind is essential; in those cases where the diagnosis is uncertain further steps must be taken.

An anaesthetic should be given, because it allows of an easier and more scientific examination of the abdomen, and, moreover, is necessary in all forms of treatment.

If after narcosis there is still a doubt, it is necessary to proceed with the same treatment as for other forms of intestinal obstruction. It is fatal to wait for any further light on the case, and far better to open the abdomen at once.

You may say that, with such a rule, needless operations would often be done: I went, therefore, to considerable pains to try and find a record of such mistakes, and could only lay my hands on two instances, so that I conclude that in hospital practice, at any rate, it is exceptional. On the other hand, it is not a rare occurrence to find an intussusception present at a post-mortem, which has not been suspected during life.

Now before I proceed to the details of laparotomy, I should like to say a few words upon the method of injection. It is found that injection is preferable to inflation of air because it is easier to introduce a fluid into the rectum, and the pressure that is applied can be more certainly controlled. Most people are agreed, therefore, and use a fluid. Normal saline solution or water is generally employed at a temperature of 100° F. or a little higher.

An anaesthetic having been given, the buttocks are well raised above the level of the head; a funnel is filled with the fluid and attached to a full-sized red-rubber catheter, which is then introduced into the rectum. An assistant raises the funnel about one foot above the level of the rectum. The abdomen is manipulated, and any variation in the position or size of the tumour carefully noted.

In favourable cases the tumour slowly recedes, but if this does not occur, the funnel is raised to a higher level, though never more than two feet in a young child, because of the great danger of rupture of the bowel.

If the treatment is now more successful, it is most important at

this stage to be sure that reduction is complete, because in many instances the mass of the tumour disappears excepting the last inch or so. I would warn you to be very careful, because if you leave the patient in this condition the tumour is certain to recur as soon as the child recovers from the anaesthetic; in fact, recurrence after injection is quite a common result, I am sorry to say, and caused in many instances by incomplete reduction. On this account it may be advisable to continue the injection for a few minutes after all traces of the tumour have disappeared.

After a reasonable time, if reduction is only partial and is not progressing, it is time to operate. Here I might remind you that injection should not be attempted unless instruments have been prepared for opening the abdomen.

Where should the abdomen be opened? In the majority of cases the middle line is the better because a more satisfactory examination is possible; only in rare instances, with a small and localised tumour in the region of the caecum, should an incision be on the right side.

It is important to remember that an abdominal operation upon a young child is a serious undertaking; therefore it must be done quickly (by which I mean in ten or twenty minutes from start to finish), and, almost as important, the child must be kept warm, so that there shall be as little shock as possible.

As soon as the abdomen is opened, two fingers are introduced and the tumour located; this done, the intestine is carefully manipulated as it lies *in situ*. The invagination can often be reduced without any further disturbance of the abdomen, but if difficulty is encountered, it is better to bring the tumour out of the wound *en masse*, so that the condition can be seen, and necessary treatment applied without loss of time. By kneading the tumour with the fingers of both hands the apex can generally be made to retrace its steps, and it is not necessary to employ taxis.

After reduction, if the condition of the gut is satisfactory, it can be replaced in the abdomen and the wound closed. This is done rapidly and satisfactorily by the insertion of numerous interrupted sutures through all the coats of the abdominal wall, and tying them after they are in position. The wound is dressed with some appropriate preparation, and a firm bandage is applied. The child is then returned to a warm bed as quickly as possible.

Children are generally very restless after an anaesthetic, and therefore it is better to administer some drug that will quiet them; I think the tincture of opium, one minim for each year, is the best; and if there is any collapse it is better to give with it a minim or two of strychnine. Brandy also can be given freely to children who are suffering from collapse. There is one other point in the after-treatment that I wish to mention, namely, that feeding must begin early, as the child has been starved since the symptoms commenced, and much of the collapse is due to want of food.

If the child is less than six or seven months old, and is being nursed at the breast, it is better to allow this to continue. The breast may be given as soon as the child has recovered from the anaesthetic, and shows an inclination for food.

I have described to you only the straightforward case of intussusception, such as occurs in those with a short history, but unfortunately complications are often present. Of these I mentioned Distension. It is not common, but is serious. For instance, with a distended abdomen the tumour is difficult to find, and may even be missed when the abdomen has been opened. (I mentioned previously such a case.) Even if it can be felt, there may be difficulty in bringing it out of the wound. In such cases the intestine must be punctured with a small tenotomy knife in more than one place if necessary, so as to evacuate the contents.

I remember helping Mr. Marsh to operate on a case where there was so much distension that a good deal of the small intestine had to be drawn out of the wound before the tumour was found. Afterwards everything was easy until we began to replace the intestine, which proved an impossibility until the contents had been evacuated.

The patient recovered, and I believe it was partly due to this treatment.

It is also a serious complication when it is impossible to reduce the tumour. This occurs in those cases in which adhesions have formed between the various layers of the tumour, and is especially common in chronic intussusception—that is to say, in cases with a long history. In such a case the treatment varies according to the different conditions of the intestine.

Shortly it may be said that, if of the enteric variety, resection of the whole tumour and an end to end anastomosis, with a Murphy's button, is the only treatment. If of the large intestine, when the tumour is small, the same treatment seems advisable. When it is

large, the gut must be opened above the tumour; a further attempt can then be made to remove the invaginated portion from the inside, which is preferable to leaving it *in situ*. After that the two ends can be joined or brought into the wound so as to form an artificial anus, as seems best. If the tumour cannot be separated, a portion of the intestine that is just above must be opened and stitched to the abdominal wall.

At a later date, if the patient survives, a second operation can be performed to bring the ends of the intestine together. I may point out that nearly all these patients succumb; only about eighty are recorded in literature as having recovered.

I will read you Mr. Power's statistics from the Victoria Hospital. Fifteen cases needed excision of the bowel. In 7, an artificial anus was made, all fatal, 5, Murphy's button was used, 4 died, 1 recovered, 2, Maunsel's operation; both died, 1, circular enterorrhaphy; it died; and that is the usual record of these cases.

In cases where no treatment at all can be applied because of the collapse, the whole intussusception may slough and pass *per rectum*. Treves says that this takes place in about 40 per cent. of the cases, and the death-rate among those in whom it does occur is over 40 per cent.

When the gut is found with a very long mesoecum, the question of fixing it to the right iliac fossa with sutures must be considered. There have been a few cases recorded in which there has been recurrence several years after the performance of laparotomy, and so if the greater mobility of the part has anything at all to do with the causation of the disease, it is better to try and correct this defect while there is a chance. It may be done very quickly, and at any rate does no harm.

Some surgeons go so far as to say that the appendix has an important bearing upon the disease, and therefore make a point of removing it. They also have in mind the prevailing custom of the American surgeons, who at the present time always perform appendicectomy whenever they open the abdomen. My own feeling is that the appendix has absolutely no connection with the causation, and it is a mistake to waste time in taking it away unless it is found to be in a damaged condition.

Peritonitis, when present at all, is generally localised; it only occurs in the worst cases and must be treated upon usual lines. If extensive the abdomen must be drained; this will give the best chance, but recovery is not to be expected except in very rare instances.

With regard to the relative value of the two methods of treatment that I have described to you, it is very difficult to be definite. Statistics are interesting, and as usual very misleading.

Since 1875 there have been 115 cases at St. Thomas's, and since 1879, 96 at this hospital. The treatment was as follows.

At St. Thomas's.—Twenty-three had injection only and 13 recovered, *i. e.* 56.5 per cent.; 76 had colotomy and 25 recovered, *i. e.* 35 per cent.; 11 had both and 2 recovered, 18 per cent.

At St. Bartholomew's.—Twenty-three had injection only and 18 recovered, *i. e.* 78 per cent.; 32 had laparotomy and 12 recovered, *i. e.* 37.5 per cent.; 26 had both and 7 recovered, *i. e.* 27 per cent.

At first sight one is struck by the extraordinary result of injection alone, 56 and 78 per cent. of recoveries respectively. It is misleading, however, because they were the picked cases of the series, and would probably have done equally well after primary laparotomy; when the cases in which injection was not successful are added the percentage falls to 44 and 51 per cent. Now at St. Thomas's the treatment, since 1897, has with one exception been primary colotomy with 41 per cent. of recoveries, and the same applies to the majority of cases at Bart's, 50 per cent. being cured.

There has been a tendency of recent years, in hospital practice at any rate, to perform laparotomy and not use injection.

At the British Medical Association last summer there was a discussion upon this question, and all the speakers were in favour of operation. Statistics show that its results are becoming better every year.

Taking the cases of colotomy at St. Thomas's—

Since 1868 (*i. e.* leaving out 97 recoveries are 43 per cent.
 " 1890 " " 98 " " 50 "
 " 1900 " " 98 " " 53 "
 —there having been 17 cases treated with 0 cures.

I think, therefore, the preference for operation is sound, but I would not go so far as to throw out of court the other treatment, because under certain conditions it is very successful.

It should be tried in those cases with a history of less than twenty-four hours, provided firstly that the symptoms are not very acute, and secondly that the surgeon is prepared to operate at once if

necessary. The points in its favour are that it may completely relieve the symptoms; it may help a further operation by reducing the mass of the tumour; it does not add to the shock, I think, when not continued for too long a period. On the other hand, there is only one strong argument against it, in suitable cases of course, namely, that there is so much uncertainty about complete reduction.

For instance, I once saw a large intussusception treated by injection, with rapid disappearance of the tumour. Everything seemed satisfactory, but the child did not recover. At the post-mortem it was found that the intussusception had been displaced into the region of the splenic flexure, where it could not be felt.

I would sum up the treatment with these rules.

1. Injection should be used in cases with a short history and mild symptoms.

2. It should never be repeated.

3. If after injection there is the least doubt a small opening should be made, through which the abdomen can be explored.

4. In a large majority of cases primary laparotomy is more satisfactory to the surgeon and gives better results.

Prognosis.—It may be said of intussusception that the prognosis is unfavourable; the best statistics only show recovery in 50 per cent., and in isolated cases the chances are not nearly so good. There are certain factors in the prognosis which are very important, namely:

1. **The duration of the disease.**—Of the 211 cases mentioned previously—

85 had suffered less than 1 day; recoveries 51 per cent.
 32 " " between 1 and 2 days; " 43 "
 76 " " more than 2 days; " 24 "

These results are natural, and it is obvious that the prognosis becomes worse the longer the case is left without treatment.

2. **Sex.**—Forty-three per cent. of females and 30 per cent. of males recovered.

3. **The age.**—Statistics are unreliable, but from clinical experience it may be said that the older the patient the better the prognosis; patients less than three months old do not often recover.

4. **The condition of the patient.**—Most of the cases of intussusception occur in patients who have been quite well until the complaint began, and it is not by any means a disease of unhealthy or ill-nourished children; on the contrary, they are generally active and robust, which in itself is favourable to the prognosis. It is to be remembered that the shock of an intestinal obstruction increases not only with the time of existence, but also with the severity of the strangulation. A small intussusception, therefore, such as occurs in the ileo-colic variety (where the ileum has slipped through the ileo-caecal valve), may cause far more shock and be accompanied by serious collapse.

Again, an infant who is still at the breast requires frequent feeding, and can ill afford to be starved; but when strangulation is severe the vomiting is incessant, and the child absorbs no nourishment; this also causes collapse. Now the amount of the collapse is very material in the prognosis, much more so than the age of the patient or the duration of the disease (the latter have been shown by statistics to be unreliable).

It amounts to this: the prognosis is good when the symptoms are slight and treatment is provided sufficiently early; the prognosis is bad when there is great apathy, a feeble and rapid pulse, a quick respiration, with a history of violent and persistent vomiting.

5. **The condition of the abdomen** has an important bearing upon the prognosis. When it is flat and supple, and moves well with respiration, reduction of the tumour is generally accomplished with ease; but if there is distension and rigidity of the abdominal walls the treatment becomes complicated. The distension is generally due to tympanites, namely, a simple distension of the coils of intestine without any general peritonitis. The latter is fortunately rare excepting in the cases with a long history, and usually occurs in connection with a tight stricture, with acute symptoms and marked collapse. Difficulty is to be expected in treatment. Even after laparotomy it is not easy to reduce the tumour. The gut often has to be punctured, and the intestine does not recover well from the over-distension. In the later stages diarrhoea is often present, and is a serious complication. It may confidently be said that the prognosis is always grave when there is any distension of the abdomen.

6. **The condition of the tumour.**—In many cases the smaller the tumour the worse the prognosis. As Mr. Power says, "a long tumour means a long colon, a long mesentery, a rapid production, and an easy reduction." I think that there is a great deal in this statement, and that to find the apex of an intussusception in the rectum improves the prognosis.

It, at any rate, signifies that the invagination has been produced easily, and that the gut is not very tightly constricted. Peristalsis probably continues, and causes the hardening of the tumour. The latter can only occur when blood is still flowing through the vessels of the tumour, and when the muscles and nerves remain undamaged, so that this particular sign is important, not only in the diagnosis, but also in the prognosis.

On the other hand, a small intussusception is often very troublesome: it cannot be felt distinctly through the walls of the abdomen, so that diagnosis is more difficult; the constriction is tight, and inflammation in the tumour more rapid and acute; adhesions begin to form at an earlier stage, and prevent an easy reduction.

I would say, therefore, that the prognosis is worse in proportion as the difficulty of reduction increases. If reduction is found to be impossible, the prognosis becomes very serious. The same may be said of any case where there is much injury to the walls of the intestine; even if the tumour is reduced without any tearing, there is a liability of gangrene at a later stage.

With regard to resection and anastomosis in these cases, they have often been performed, but rarely with success. The production of an artificial anus cannot be said to improve the chances, and to leave the patient without any treatment, on the assumption that the tumour may separate by itself, is practically the signature of the death certificate.

In connection with the various complications that may arise after the reduction of the tumour, there is little that can be added. I would simply mention the following:

Vomiting, when persistent, is difficult to counteract, and very soon produces collapse.

Tympanites and distension point to loss of tone in the intestine, and are dangerous if they persist.

Diarrhoea is exhausting, and is as serious as in other forms of strangulation.

Temperature: occasionally, after operations for the relief of intussusception, the temperature rapidly mounts to 104° F. or thereabouts; the cause is doubtful, and it does not appear to have any connection with toxic absorption; the result, however, is that the patient dies, and so it must be regarded as a very serious omen.

Peritonitis may occur after an abdominal operation, especially if the gut was in a damaged condition at the time. It is always a very bad sign, and means that the intestine has ruptured, or that germs are escaping through the walls of the gut.

To sum up, I do not think that you will ever be able to give a really good prognosis in any definite case of intussusception. I have known the most favourable cases to be operated upon and die without an assignable reason.

In this respect I might make the comparison to a child that has been burnt. In both conditions there is that sudden collapse that may come at any moment without any obvious reason, and continue, regardless of all forms of treatment.

All that can be said is this: given a suitable age, a short history, symptoms of a mild character, easy reduction, and I would add, a competent doctor on the spot, then the prognosis is distinctly favourable.

In conclusion, gentlemen, I have to thank you for listening with such attention to a subject with which you are doubtless familiar: I have expressed my views upon the question, and I shall be much interested in hearing yours.

Two Cases of Internal Tumour with Unusual Symptoms.

By C. H. D. ROBBS, B.A., OXON., M.D. LOND.

CASE 1.—A. B., male *et. 60*.

History.—Chest trouble of some months' duration. Looks very ill, and complains of "tightness" about the heart. States that he has lost flesh lately, but is still very stout. During the three days previous to my first seeing him he had noticed a "tingling" and numbness of his legs, and he is now quite unable to move them.

Physical examination.—Chest: absolute dulness and loss of breath-sounds on the left side over the whole lung. Heart-sounds normal. Radial pulses equal. Pupils equal.

Neuro-muscular system: both lower extremities are completely paralysed, and sensation is lost from the iliac crests downwards. There is true paralysis of the sphincters; knee-jerks are absent.

Patient died two days afterwards.

Diagnosis.—The patient had the physical signs of left pleuritic effusion and of lumbar myelitis, and this raised the interesting point as to whether these separate conditions could be explained by a common cause. An aneurysm might cause the effusion and a dorsal myelitis. A tumour, by extension, might be responsible for the physical signs.

Post-mortem.—Left pleura full of fluid. Left lung very small and carcous; from its hilum a new growth extends along the diaphragm to the abdomen, where there is a huge mass involving the pancreas and extending into the vertebral column over the first and second lumbar vertebrae. Microscopically a small round-celled sarcoma, the primary growth being presumably in the lung.

CASE 2.—Mr. F.—*et. 55*.

History.—Quite well until October, 1901, when he was treated for indigestion with some success. On January 12th, 1902, he had oysters for supper, was violently sick, and the next morning noticed that his neck was swollen.

Examination showed considerable swelling over left parotid region, which became greater and extended to the other side, forming a large "brawny" collar, not pitting on pressure, and extending down to the shoulders, rendering it impossible to palpate the clavicles or pectorum Adami.

After some three weeks the swelling gradually subsided, leaving large subcutaneous veins on the neck and chest.

Temperature throughout normal. The heart was apparently normal, but the pulse rate always rapid, 100 to 120. The radial pulses and pupils were equal.

With the subsidence of the swelling the indigestion became worse, the pulse more feeble, and the patient weaker, until on March 24th pericarditis occurred, proving fatal on the 26th.

Diagnosis.—The swelling of the neck appeared to be due to blocking of the superior vena cava (Clifford Allbutt's *System*, vol. vi, p. 397). The undoubtedly sudden onset suggested that an aneurysm might be the cause, the straining in the act of vomiting causing an extension of the sac. Beyond this there was no evidence of the presence of an aneurysm. I should state that the only abnormal signs in the chest were a few fine crepitations heard over the right front. There was one enlarged gland to be felt over the left clavicle.

Post-mortem unfortunately hurried and incomplete. A new growth was found about the size of a Tangerine orange occupying the inner and middle aspect of the right lung in close connection with the great vessels. A few secondary small growths were found in the left lung. The heart showed acute pericarditis with much effusion.

Chlorosis.

A Paper read to the Abernethian Society in the Spring of 1902.

By LIONEL JAMES PICTON.

GENTLEMEN,—I fear that I can lay before you this evening no new theory of chlorosis. I am not prepared to claim for any recently discovered internal secretion the rôle of acting as its causal. Probably everything I may mention as to the condition of the blood in this disease you are already aware of. Nor do I know anything of an infective source from which some suppose the disease to spring. Of toxins I shall have little to say, even of those absorbed from the alimentary tract; whilst the relation of congenital abnormalities of the vascular system to chlorosis is outside the scope of my knowledge.

But I trust that you may think it worth while to consider a review of such clinical and pathological phenomena of chlorosis as have most certainly been observed; to see if some general but sure idea of the nature of the disease do not shape itself naturally in your minds, as a result of such a rehearsal of facts; and to test, by the conception which we have so formed of the natural history of chlorosis, the scattered fancies and theories which are entertained concerning its nature.

I am well aware, gentlemen, that such an exercise has nothing novel or original; and that every one here has probably so thought

out the subject for himself. But I trust you may agree with me in thinking that an attempt to consider and examine the essentials of a common everyday disease like chlorosis is not foreign to the object with which such an association as the Abernethian Society was founded.

Chlorosis is a disease of young women; and those two facts of youth and sex are the most significant things about it. No explanation of it can be entertained which fails to suggest why it falls upon that particular section of humanity and no other. And here at once, without going further, we have reached the heart of the position; and must take our stand upon the axiom that young women have a liability to chlorosis, a tendency which they alone exhibit.

A third patent fact brings us a long way in our investigation, namely, that chlorosis is common, is found all over the world, in every race—young negroes, even, being very prone to it,—in every climate, in every class of society, in town dwellers and country dwellers, amongst the rich and amongst the poor. Nor has it a modern origin. It has not come, like dyspepsia, from America; nor is it a product of the movement called "the higher education of women;" for it is as old as romance, and the Lady of Legend, sick from love, and languishing in her tower, justifies the mediæval name for chlorosis—*lætus amantium*. In short, I think there will be no dissentient from the view that chlorosis is universal in every land, and has been so from a time "whereof the mind of man runneth not to the contrary."

It may be well to dwell for a moment on the three facts that I take it, we have all agreed on before proceeding to consider the more special characters of the disease. It is, we have said—

1st. A disease of youth.

2nd. A disease of females.

3rd. It is universally distributed.

Now these facts duly considered cannot fail to suggest that such a disease is of a different character from the run of diseases. Its incidence is not capricious, alighting here and there on an individual from any time of life; nor does it select any one type, but the strumous, the rheumatic, and the gouty, the robust and the delicate, are alike swept into its net. No doubt the peculiar idiosyncrasies of each constitution make modifications in the disease, but of that more anon. What we are here concerned with is that any young woman is liable to chlorosis, a fact which goes a long way towards the establishment of the view that the physiological condition of the blood in young women, that is its healthy condition, is chlorotic; or, if a pathological term be inappropriate to health, is normally modified in a direction similar to, but in degree less than, the alteration which takes place in the blood in the actual disease.

To put the matter from a different standpoint, chlorosis is only an exaggeration of a certain condition of the blood which in young women is normal and natural.

That, gentlemen, is the theory of chlorosis so far as it can be called a theory, which is based upon the sure grounds upon which I have already too much insisted—youth, sex, and universality. Later on I hope to mention certain facts and views which may help to support it, shape it, and give it definition. But I have thus early shown my hand, and sketched in rough outline the opinion I believe the chief facts support, in order that the lesser facts when we come to consider them may not distort our vision, and that the various theories which it will be our duty to examine may be tested by the criterion of whether they fail to accord with the essentials, though they explain the details never so well.

Leaving, then, this theory, but always bearing it in mind, let us pass on now to a consideration of the clinical features of the disease. There is no common kind of anemia in males at all comparable to chlorosis; so without attempting to answer the well-worn question, "can a man have chlorosis?" we may confine our attention to the female sex.

Chlorosis begins about the time of puberty, say, roughly, in about the fourteenth or fifteenth year. It may last continuously, but in varying degree, to the eighteenth or even the twenty-fifth year. It generally ceases after the woman becomes mature; but in a few cases it drifts into a chronic anemia, not at all like the chlorosis proper in which it began—a miserable protracted malady, vitiating the patient's life, and bringing in its wake evils—hysteria, dyspepsia, irritability of temper—which react upon their cause, intensifying the anemia which gave rise to them. It is the old story of a vicious circle.

The most of chlorotic patients, however, get well, as I have said, about the age of twenty-five at latest, generally much earlier. Treatment fortunately has much to say concerning the rapidity of recovery.

Thus the chlorotic period is one of change and disturbance of the bodily functions. The onset of menstruation and the time which elapses before the newly established function settles into regular ways is the period of life in which the disease chiefly shows itself.

Every schoolboy, as Macaulay would have said, knows that the colour in chlorosis is peculiar to that malady. It is not the mere unhealthy paleness of an anemia which is secondary to constipation or to some other special cause. It is to be distinguished from the pinched white face of the syphilitic, and from the dull pallor of those whose tissues are impregnated with lead. The bloodless look which results from a severe hemorrhage or a series of hemorrhages is, again, unlike the typical chlorotic appearance.

That, as the name implies, is signalled by a greenish tinge, which rather shines through the skin than resides in it. The "green-sickness" is the old English name, and well it fits the disease. The typical colour is better seen in the fair than in those of a dark complexion, and for this reason, if for no other, it is often seriously stated that the fair are the more subject to the disease. A long series of blood examinations in a number of young women suspected of chlorosis, accompanied by an exact note of the colour of the hair, eyebrows, irides, and skin, and of the quality of the skin, whether of the opaque and thick or of the thin and transparent type, would be a valuable contribution to the natural history of chlorosis. But only such a record, of the existence of which I am not aware, could prove that the subjects of the condition are less often brunettes than blondes.

Be that as it may, the true chlorotic tint is a sign which is much more obvious in the fair than the dark; and it is well to leave the matter there for the present, admitting that in perhaps the majority of cases of even marked chlorosis the green tint is not recognisable.

Anyone who has ever seen a case of pernicious anemia will recall the curiously pale, yellow complexion. The tint of the skin in that rare disease is lemon-yellow, differing entirely from the coarser canary-yellow pigmentation of bright jaundice. Again, it differs from the sallow icteric pallor of a patient who exhibits the cachexia of malignant disease.

With none of these has the colour of the chlorotic girl anything to do, and I only mention them by way of contrast, and to emphasise the fact that the colour in the green-sickness is *sui generis*, and is a very definite, special, and peculiar characteristic. It is a classical symptom of the disease; but nevertheless, as I have said, it is doubtful whether half of the marked cases exhibit it.

With pernicious anemia chlorosis is not likely to be confused, for the former occurs principally in middle-aged people, especially men. But confusion has arisen between the melasma of Addison's disease and the chlorotic tint, so that cases of Addison's disease have been labelled chlorosis.

This is a less surprising mistake than might at first sight appear, for Addison himself is said to have come across the disease called after him whilst investigating cases of severe anemia. It was his merit to clearly distinguish Addison's disease and pernicious anemia as entities separate at once from each other and from chlorosis.

There is one form of pernicious anemia to which young females are as liable as anyone else. I refer to the profoundly bloodless conditions which certain parasites produce in their hosts. The notorious guests are *Ancylostomum duodenale*, responsible for the "miner's chlorosis" in Egypt, and which produces a similar cachexia in the West Indies; and *Bothriocephalus latus*, which is a common parasite of the people on the shores of the Baltic.

With regard to chlorosis in the dark races, my experience is very small and only allows me to speak of chlorotic negroes and half-caste creoles, in whom the nail-beds and mucous membranes are pale, and the skin and hair lose their gloss and become dull.

Here, however, at home in England, the diagnosis of chlorosis is seldom complicated by such confusing possibilities.

The colour of chlorosis, then, we need say no more about, save to mention in what parts of the body the pallor is most apparent. The face is generally pallid, but may be red—*chlorosis florida*. Of the lips the same may be said, and I am sure that very red lips are not inconsistent with a low hæmoglobin estimation. Still, as a rule, the lips, gums, and buccal membrane show reliably the degree of bloodlessness.

The colour of the lachrymal caruncle is said to be the most trustworthy index—an observation which I fancy is very valuable, and worthy to be daily borne in mind by every practitioner of medicine.

A good and practical way of judging the colour of the blood is to look at the nail-beds. In one of the Sherlock Holmes stories an

incident is mentioned which illustrates clearly how not to examine the nail-beds. "Mrs. Lyons had resumed her seat. Her hands were grasping the arms of her chair, and I saw that the pink nails had turned white with the pressure of her grip." To judge properly of their colour the fingers should neither be firmly flexed, as Mrs. Lyons' were; nor stiffly extended; but they should be lightly and loosely flexed, and compared with a standard colour, of which the handiest is the physician's own nail-beds if he be in good stable health himself.

So much for the colour of chlorotic patients. Let us pass now to another classical sign of the disease. It is an old observation which never fails to surprise the student on first becoming acquainted with it, that even in a profoundly anemic girl there is, in pure chlorosis, no loss of flesh, no wasting. On the contrary, the more severe the disease the fuller is the face, and the thicker the layer of flabby fat upon the muscles. Such patients, although still in their teens, and in health mere slender girls, often have a distinct roll of fat under their chin—in short, a "double chin." An interesting pallor with a tendency to *embonpoint* has had at various epochs a certain vogue. If you consult a volume of Lodge's portraits you cannot fail to be struck with these characteristics in the ladies of the court of the second Charles, who are there presented. The portraits of eighty years earlier, of the more austere yet more splendid court of Elizabeth, entirely lack such unhealthy features. In this connection it is interesting to contrast the manners of the two courts. I merely suggest them to your minds, and will not further dwell on them, except to recall that in the Elizabethan time it was said "the earl and countess rose at six, and breakfasted off herrings and a blackjack of ale," whilst in the later reign persons of fashion lay late of a morning, and for the first time in history the chocolate tray appeared at the bedside.

Sir Godfrey Kneller painted fat chlorosis; Hogarth often painted it; and in Spain Goya has painted it. The true Spaniard is proud of being fat. The skin in that nation is characteristically of a thick opaque white, or rather cream-colour. In chlorosis the fat looks flabbier, and the skin a more deadly ivory tint; but the greenish tinge does not show as the skin is not translucent. The Neapolitan *noblesse*, who are mostly grandees of Spain, also show the same points. I may mention as a curious accidental confirmation of the commonness amongst them of the type of pallor I have described, that their favourite jewel is a bright turquoise, a colour which would ill accord with the pink and white of the Anglo-Saxon maiden, but which worn in the ears of these southerners looks as if set in ivory. Here is a copy of one of Goya's works which shows what I mean.

I fear I shall have tried your patience with these details in labouring my point about fat chlorosis; but I am anxious that you should bear in mind a tendency to fatness as an outstanding feature of the disease; for, as will be seen in the sequel, it has a close relation to the explanation of the pathology of the condition.

Gentlemen, I have now mentioned the most primary and most important of the signs of chlorosis.

Summa.—The age and time of onset is youth—puberty to twenty-five.

The sex ♀.

The colour pale green in the fair, and especially in persons with translucent skins, but dead white in the dark, and especially in persons with opaque skins.

Finally, in pure chlorosis the subjects of the disease are fat, and do not lose flesh, but rather the contrary. If a chlorotic girl lose flesh, you know at once that besides chlorosis there is something else the matter with her; but of that more anon when we consider the complications.

The condition of the patient, whatever it is, which directly causes these signs gives rise to a certain group of symptoms which is very well known. They are breathlessness and palpitation, headache, particularly in the morning; lethargy, and amenorrhœa.

Instead of laboriously describing each of these symptoms one by one, I think that it will be better to comprise them all in a clinical picture of the disease; and afterwards there will fall to be mentioned about each certain special points. A clinical picture is nothing else the matter with her; but of that more anon when we consider the complications.

The condition of the patient, whatever it is, which directly causes these signs gives rise to a certain group of symptoms which is very well known. They are breathlessness and palpitation, headache, particularly in the morning; lethargy, and amenorrhœa.

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treat them simply as cases of chlorosis. The condition is very frequent among girls brought from the country to boarding schools in town or to domestic service; both modes of life implying a large amount of work, with deficiency of open fresh air and of bodily exercise. In whatever manner produced, the disease is of great importance, leading, as it sometimes does, to disease of the heart, to renal disease, or to phthisis pulmonalis.

"The girl becomes languid, the skin, especially of the face, becoming pale and dull, or even very slightly greenish, the lips and mucous membranes generally pale, the appetite bad or curious, the tongue foul, the bowels torpid, the feces scanty, dark-coloured, hard; the pulse quick, the heart easily made to palpitate, the breath easily made short. Sometimes there is puffiness of the face, and particularly of the eyelids; and sometimes anasarca, affecting of course chiefly the lower limbs. This state may disappear quickly or be easily cured, or it may persist long, or be only partially cured. Some cases do not get right till after one or more pregnancies. Some cases become inveterate, or are so from the first, and there have been found in some rare instances malformations of internal organs, specially of the heart and great arteries."

Gentlemen, I think it has often been said that for simplicity and clear vision the descriptions of disease, such as I have read, occurring in the lectures delivered at this hospital by Matthews Duncan, are hardly to be surpassed by those of any physician since Hippocrates. Anyhow, to my mind that picture is full of truth and force.

In taking the symptoms of chlorosis more in detail we ought to mention the breathlessness first of all. This, according to Professor Clifford Allbutt, who himself wrote the excellent article on "Chlorosis" in his *System*, is the characteristic complaint of the patient.

"Dyspnoea," he adds, "is more persistent and incapacitating in chlorosis than in any other disorder, except, of course, in advanced organic disease of the heart." He gives as a probable reason of dyspnoea "incessant stimulation of the bulb by suboxidised blood."

Gentlemen, in this Society the rights of free speech are shared by the humblest member, and, in spite of the great authority of the pen which wrote the phrase I have just read—"incessant stimulation of the bulb by suboxidised blood,"—I should like to protest against such an abuse of words. Examined, it is seen at once to be nothing more nor less than a thin paraphrase in physiological language of the homely word breathlessness.

That the blood is crying out for air and appeals to the nervous system is well understood by any educated reader, and is true of all dyspnoea. We ought to be chary of accepting such grand seeming explanations, "full of sound and fury, signifying nothing."

That by the way, however. The great professor has the root of the matter right enough. Dyspnoea is the characteristic complaint of the chlorotic. From this spring palpitations, lethargy, headaches, swellings of the feet. Not only the bulb, of which we have heard so much, but every tissue in the body is denied its due of oxygen.

With this in mind listen to Sydenham describing the disease. "The face and body lose colour," he begins; "the face also swells; so do the eyelids and ankles. The body feels heavy; there is tension and lassitude of the legs and feet, dyspnoea, palpitation of the heart, headache, febrile pulse, somnolence, pica, and suppression of the menses."

What wonder, then, that the chlorotic girl complains of incapacity for work? The story in the pages of *Punch*, which says a laugh against an able-bodied seaman, is as true enough of her. He complains to the ship's doctor, "Well, sir, I eats well and I sleeps well"—which may be the case in chlorosis,—"but when I sees a job of work I comes over all of a tremble."

It is hard to realise the case of the chlorotic. Imagine yourselves in a condition in which your energy has gone out of you. A vessel throbs in your temple, your head is heavy, you can almost hear your heart beating. To turn your head is an effort, to move your eyes a greater. To walk is to pant, to climb the stairs finds you dizzy and gasping at the top. Speech is an exertion, to get into bed or out of it an exhausting labour. Every task irks you, so that resolution forces you hardly to the simplest duty, whilst necessity drags you unwilling to perform the actions which are necessary to your existence. A fly at the first frost of winter could not feel more powerless to change his condition than you do.

Still further, imagine yourselves thus incapacitated, not for a day nor a week only, but for weeks dragging their slow length through many seasons. Then, gentlemen, if you have pictured yourselves thus, you will be able to understand the effects which dyspnoea produces in a chlorotic girl.

But there is another side to this picture which is very singular. The patient, in spite of the depression of all her functions, is often capable of reacting in a peculiar manner to the stimulus of excitement or awakened interest. As the hours of the day flow by she warms to the enjoyment of life. She is apathetic as Minna in the morning, as sparkling as Brenda when the candles are lit in the hall. Hear Dr. Coupland on the point in Allchin's *Manual*:—"It is a well-known fact that the subject of chlorosis, who is mostly a heavy sleeper, awakens unrefreshed, finds it difficult to rise, and experiences much lassitude throughout the day, does nevertheless considerably brighten up towards nightfall, and become more wakeful and energetic than her companions. Many a chlorotic is the life of the ball-room, but she pays the penalty of drawing so largely on her nerve-power."

Let us now consider some of the symptoms more in detail. The palpitation is sometimes one of the worst complaints. I think Sydenham was right in associating this especially with hysterical patients, but then hysteria, by which he meant a disorder or ataxy of the animal spirits, was, according to his doctrine, the prime cause of the green-sickness. He says of hysteria that, "falling on the vital parts, it creates such a palpitation that the patient makes cure that the sound of the heart beating against the ribs can be heard by the bystanders. This is commonest with the weakly and pale, and those who look consumptive. So also with those who have the green-sickness."

The physical examination of the heart in chlorosis reveals the fact that in a majority of the more marked cases there are signs suggestive of dilatation. These are, of course, displacement of the apex-beat to the left, increase of the cardiac dulness, and hemic murmurs.

The apex-beat in marked cases of chlorosis is generally in the nipple line, often outside it.

The cardiac dulness, on account of the mammae, is particularly difficult to percuss in a woman in such a manner that the note elicited can be accurately interpreted. Moreover Prof. Allbutt points out that, the breathing being shallow in chlorosis, the lung is poorly inflated, and the edges of it accordingly recede from the surface of the heart, enlarging the incisura cardiaca and giving rise to an increased area of that absolute dulness on which the percussor lays so much stress. It seems to me to follow from this that the relative dulness is alone of much value as a sign of dilatation. But the relative dulness is hard to determine, and indeed, as a rule, can only be very roughly appraised. The conclusion to be drawn from all these considerations is that only large and certain alterations of cardiac dulness ought to be regarded as factors influencing diagnosis. Of such easily recognisable changes in the area of cardiac dulness extension towards the right beneath the sternum is said to be the most common.

The hemic murmurs are more important, for the simple reason that they are easier to be certain about. To be sure, they present a difficulty in their distinction from organic murmurs; but that is to be overcome by a consideration of the restricted area over which they are heard, and by the fact that as the case improves under treatment they clear up. Far the commonest is a soft blow superimposed upon the systolic sound at the pulmonary base. Such a murmur is seldom heard at the aortic base, but is not infrequently made out at the apex. It is not my intention to follow this subject into the realms of cardiac physics. No one knows the exact cause of these murmurs. A good working hypothesis about the apex murmur, however, is the idea that it is due to actual mitral regurgitation. As the heart is admittedly dilated in most bad cases of chlorosis, I see no reason against such a theory. I know that such an assumption lands me in the necessity of justifying the term hemic or functional murmurs as opposed to organic, and, to be short, I should be inclined to find the distinction in the fact that the one clears up and the other does not.

From the presence, then, of a systolic murmur, sometimes at the apex, generally at the pulmonary base, from the increase in cardiac dulness to the left and more markedly to the right, which is sometimes recognisable, and from the displacement of the apex-beat more or less outward, it is fair to arrive at the important conclusion that the heart in chlorosis is more or less dilated. It follows that either the myocardium is at fault or that there is some increase of the peripheral resistance in the circulation, or that there is a combination of these factors.

We know that in chlorosis all the tissues are denied their proper oxygen, that every organ is hence atonic, and we may at once conclude that there is a degree of atony also of the myocardium. Is the dilation due to that alone, or does an increased peripheral

resistance complicate the question? The answer to this problem must be deferred for the present.

There here falls to be mentioned a group of cases in which chlorosis is associated with an undoubted organic heart lesion. Certain cases of mitral stenosis are closely connected with general nutritional disturbances, of which chlorosis must be reckoned as the chief. Indeed, if there be any causal relation between chlorosis and mitral stenosis, that would entirely explain the fact that the latter is common in women and very rare in the opposite sex. I merely mention the matter as a noteworthy circumstance, and will not pursue it further.

With the flabby dilated heart and hemic murmurs typical of young women who have the green-sickness, we should naturally expect a somewhat rapid pulse of low tension. In fact, the pulse is often quickened. Sydenham says that it is feeble, by which he probably meant the same thing. He may have meant more, and have conceived that chlorosis is a subfebrile condition. Osler, indeed, says that, "as in all forms of essential anaemia, fever is not uncommon." However, probably what struck Sydenham as feverish was only the increased pulse rate, not the heat of the patient's skin.

On the matter of the tension of the pulse there appears to be great difference of opinion. I will read a few statements on the subject by authorities.

Osler: "The pulse is generally full and soft."

Allbutt: "The pulse, as Sydenham said, is generally quickened more or less, and is very impressionable by change of posture and the like. In opposition to some authors I am scarcely disposed to admit that in chlorosis the arterial blood-pressure generally ranges above the normal standard, though no doubt it is characteristic of chlorotic anaemia that such a rise may be observed occasionally, and, as a rule, the mass of the blood is not diminished and the artery well filled."

Immerman (q. Allbutt): "In chlorosis the arterial blood-pressure rises."

Bihler (q. Allbutt) holds the contrary view.

Coupland: "The pulse may be full and even of high tension, at least in the early stages of the disease, although with advancing anaemia and cardiac weakness it becomes softer and quicker."

I think I have quoted enough to show that on this subject of blood-pressure the doctors differ, and I would particularly ask you to note the Cambridge Professor's nicely balanced indecision.

Unfortunately, a person reading a paper is expected to mention his own opinions, so if I am asked mine I am bound to admit that I am as much in a fog on this point as my betters; but of this I am sure, that Prof. Allbutt is right when he says that the artery is well filled. It would be perhaps near the mark to say that the vessels are dilated and atonic; but that the blood nevertheless is enough in amount to fill them and give them a certain degree of tension. This amounts to saying that there must be more blood in the circulatory system than in health. Such a conclusion as that is so momentous that it would lead to a suspicion that the argument is too slender to bear such a superstructure were it not for other facts, which I will point out later, that firmly support the same theory.

Before entirely leaving the circulatory system it is my duty to mention the well-known venous and arterial murmurs. Sir Benjamin Richardson recognised a murmur in the subclavian arteries of persons who did hard work with their arms, and he called it the carpenter's murmur. Prof. Clifford Allbutt says this is a recognised sign of chlorosis. It certainly occurs in chlorotic girls, but whenever I have heard it, I have made a point of inquiring about the kind of work the patients do, and I think invariably have learned that they have much lifting to do or other special stress upon their arms.

No more need be said of subclavian murmurs, and we come now to the more important venous bruits.

Every one here has heard the famous humming-top sound in the jugulars of a chlorotic. It was first described by Dr. Bouilland in 1841. At that time a favourite toy on the Boulevards was a humming-top called "le diable," and Bouilland called the humming murmur from this "le bruit de diable." The Germans call it the "Nonnengeräusch," which means the same thing. Niemeyer used to teach that it is best elicited by putting the sterno-mastoid on the stretch, the chin being drawn by the physician's hand as far as possible over the shoulder opposite to the side being examined. It is generally louder in the right jugular. Hear Trousseau describe it: "On applying the stethoscope above the middle of the clavicle"—I pause to note that in the New Sydenham Society's edition this

is mistranslated "below the middle of the clavicle," an error which gravely affects the sense—"we have a rather dry blowing murmur accompanying the first sound of the heart. But during the ventricular diastole the murmur assumes a more musical character, louder, and resembling the purring of a cat when it is being caressed, or the noise of a spinning-wheel. Between the first and second sounds of the heart the murmur never altogether ceases. The name given by Dr. Bouilland, viz. 'sustained blowing sound,' is therefore appropriate. But it is important to remark that the continuance of the sound takes place during the cardiac diastole. Along with many other physicians I believe that the first sound is in the arteries and the second in the veins. On compressing by the application of a thread the lateral part of the neck above the point where the stethoscope is applied, in such a way as to interrupt the current of venous blood, we find that the second sound ceases." May I again interrupt Trousseau to point out that one's thumb does just as well as his third? He continues, "Whatever there may be in this explanation, it appears to me that there are two classes of blowing sounds in the neck, viz. the simple sounds, purely arterial, and the double current sounds [bruits à double courant] so well investigated by Dr. Bouilland. The first belong to anaemia, whatever may be the cause of the anaemia. The others are peculiar to chlorosis. They are so decidedly chlorotic sounds that they precede or follow the most ordinary manifestations of chlorosis." This last remark by Trousseau is very noteworthy. Sir Dyce Duckworth, who lays great stress on the bruit in the neck in chlorosis, often says of it, "It is the first sign to come and the last to go."

In listening to the neck murmur in various cases of anaemia in the Surgery, I heard them so frequently that I got to be very sceptical of their pathognomonic value with regard to chlorosis; but coming across the passage in Trousseau which I have just read to you, the tangle in my mind was at once smoothed out. In short, it is the *bruit à double courant* which is constantly characteristic of chlorosis.

(To be continued.)

Some Pages from the Ancient History of Obstetric Medicine and Surgery.

The Mid-Sessional Address, delivered on January 16th, 1902.

By F. H. CHAMPNEYS, M.D.

(Concluded from p. 69.)

REVIEW OF THE HIPPOCRATEAN LITERATURE.

IN reviewing the foregoing we see that the practice of midwifery was in the hands of the *midwives*, who used various means for making labour easier—baths, lubrication and anointing of the genitals, and also drugs internally. In difficult cases they called in a physician. After delivery they looked after the mother and child. The physician had thus no opportunities of seeing normal labours, and the ideas of the time were in many respects erroneous. The description of head presentation as the only normal one was correct, but it was believed that no others could be delivered without help; in footling cases, for instance, if the child was alive, cephalic version was performed; if dead, it was removed piecemeal. On the other hand, living children were never deliberately destroyed.

There can be no doubt that in modern times cephalic

version has been too much neglected, though the Hippocratean age overstated the case for it.

The anatomy of the soft parts was very little known, and the pelvis was hardly known at all. Physicians were naturally associated in the minds of the people with disaster and bloody measures, and were not called in if it could be helped. On the other hand, observations, so far as observations go, are generally excellent, considering the absence of anatomical knowledge.

Aristotle (B.C. 384 to 322). His work on the natural history of animals contains many references to human beings. In speaking of menstruation he refers to the association of amenorrhoea and sterility, but says that the association is not constant; he describes menstruation during pregnancy, and gives his opinion that it is injurious to the development of the embryo. He refers to puberty, and gives its signs in both sexes, also the signs of conception. He disputes the theory that boys are carried on the right side and girls on the left, but asserts that girls are developed in the uterus later than boys (see above "concerning the nature of the boy").

He says that after conception the uterus closes up, and only opens again in the eighth month; he describes the symptoms of pregnancy, such as headache, heaviness in the limbs, dislike for food, vomiting, etc.; and says that a woman feels better when pregnant of a boy than of a girl; also that labour is easier in the case of a boy. The somersault by which a child changes from a sitting to a head-first position is described. He states that the duration of pregnancy varies in the human race; it can last ten, or even eleven calendar months. Viability dates from the seventh month; eight months children are viable, "especially in Egypt, but less so in Greece" (conf. Hippocrates concerning the seventh and eighth month fetus). He personally inclines to believe the Hippocratean view that eight months children are not viable, but that seven months children are, and that the *parents* of those who die are themselves in danger of their life. He doubts the occurrence of eleven months children, and considers that such alleged instances are errors of calculation.

As regards plural births, he thinks that the number at a birth does not exceed five, and says that twins are very common in Egypt. Superfetation is rare, but it occurs, and he gives an instance of ten to twelve embryos being prematurely discharged as a consequence of superfetation. (This probably belongs to the same class as a still more wonderful story, in which a woman was said to have been delivered of 365 fetuses at a time; the boys were all christened by one name, and the girls by another. It was probably a case of hydatid mole.*) Also of a woman

* The celebrated case of Countess Margaret, daughter of Florent IV, Earl of Holland, and spouse of Count Hermann of Hennebrigg, was supposed to have occurred on Good Friday, 1278. She was at this time forty-two years of age, and at one birth brought forth

bearing two children at a birth, one by her husband, the other by her lover, as proved by their likenesses; also of a woman who bore a seven months child, and two months later, at full time, twins which survived.

He also treats of the milk, of the beginning and end of fertile life, of sterility, and of the likeness of new born children to their parents. He says that the semen received into the uterus is covered with a vascular membrane containing the ovum with its two membranes well described; it is nourished through the umbilical cord. He describes accurately the cord in the cow, and says that two veins penetrate into the interior of the fetus through the gate (porta) of the liver to the vena cava; two others run to the aorta at the spot where this divides. The human embryo lies with its nose between its knees, its eyes on its knees, and its ears external to its knees. At the beginning of pregnancy the head lies uppermost, at the end of pregnancy downwards. All but head presentations are unnatural. *The downward position of the head is due to its greater weight.*

In women labour pains are particularly violent in the legs. Women suffer more than animals, particularly such as sit much, and have not good chests to enable them to hold their breath well. Labour is caused by the movements of the child, which rupture the membranes and cause the escape of the waters; the child then follows, "the womb turning itself," and the afterbirth follows. (This gives a very curious view of anatomy.)

The division of the umbilical cord is part of the business of the midwife. Aristotle describes the treatment of the cord in detail: after the expulsion of the afterbirth it was tied with a woollen thread and cut; "in the opposite case" (? when tied and cut before the expulsion of the afterbirth) hæmorrhage occurs: if, however, the afterbirth does not appear immediately, the cord is tied and cut. Children which look weak and bloodless are recovered by skilful midwives, who press the blood back from the cord into their bodies.

In children the hands lie down by the sides, whereas in animals the fore-limbs are born with the head.

Immediately after delivery the child cries, brings its hands to its mouth, and voids meconium; the stools soon change with the incoming and swallowing of the milk.

No child cries before its complete birth, even when the head is born some time before the body. The functions of

365 infants—182 males, 182 females, and 1 hermaphrodite. They were all baptised in two large brazen dishes by the Bishop of Truro, the males being called John, the females Elizabeth. During the last century the bodies were still on view in the village church of Lordey, and most of the visitors to the Hague went out to see them as they were reckoned one of the curiosities of Holland. The affliction was ascribed to the curse of a poor woman who, holding twins in her arms, approached the Countess and begged for aid. She was not only denied alms, but was insulted by being told that her twins were by different fathers, whereupon the poor woman prayed God to send the Countess as many children as there were days in the year. —Gould and Pye, *Anomalies and Curiosities of Medicine*, p. 147.

the breasts are well described. Children are said to suffer often from convulsions, of which they generally die on the seventh day; for this reason they are not named before the seventh day.

Sterility, menstruation, capacity for conceiving, and diseases of the womb are among other subjects treated.

Where Aristotle describes what he saw his observations are excellent: in matters of human anatomy he depended upon the dissection of animals, as human dissection was not allowed; where this failed, he had only tradition to depend upon.

Plato (B.C. 430—348; therefore a contemporary of Hippocrates).—In the *Theætetus* we have some light thrown on the duties and work of midwives. A woman could only become a midwife when she was past child-bearing, thus being under the protection of Diana, who was herself childless, and therefore the protector of childbirth.

Midwives administered drugs, used incantations for the relief of labour pains and the expediting of delivery; they also procured abortions. Their duties included the arranging of marriages with a view to the production of healthy children.

They appear to have occupied an important position, and to have treated many diseases. Many midwives are mentioned by name.

In the *Timæus*, cap. xlv, sect. 91, occurs the following passage:

"The same is the case with the wombs and other connected parts of women—so called,—as forming an animal destitute of procreating children. This, when it remains without fruit long beyond its proper time, becomes discontented and indignant, and, wandering every way through the body, it obstructs the passage of the breath, and throws women into extreme difficulties (hysteria), causing all varieties of diseases."

It is impossible not to be struck, in considering the works of Hippocrates, Aristotle, and those near their time, by the curious mixture of accurate and acute observation with profound anatomical ignorance and the acceptance of old wives' tales. What is remarkable is the absence from it all of reference to occult influences, which did so much harm to medicine in later times.

It seems comparatively easy to account for all these points. The accurate observation was due to the healthy mental attitude of the time, specially exemplified in its great men—Hippocrates and Aristotle.

The anatomical ignorance was due to causes which are so well expressed by Dr. Payne, in a letter which he has kindly written to me on the subject, that I cannot do better than read it. He says:

"I think there is no doubt that among the Greeks dissection of the human body was generally impossible on account of the strong feeling about burial, it being thought that the happiness of the dead in the next world largely

depended upon their being properly buried, whether previously cremated or not. Hence the strong feeling of duty on this subject (see Antigone). There was, no doubt, a possibility of examining bodies of barbarians and strangers killed in war, with regard to whom there was no religious feeling; also there was the opportunity of examining the bodies of the numerous female children who were exposed to die in waste places; but they do not seem to have made much use of them.

"It was different when the Greek philosophers and physicians founded schools in Alexandria. Here they adopted the Egyptian custom of embalming instead of burying, and some sort of dissection being necessary for embalming there was not the same objection to handling and cutting up the body.

"Thus at Alexandria there was a great deal of human dissection, Herophilus being one of the great anatomists. They also dissected living men, i.e. condemned criminals, and made experiments upon them. The horror excited by this practice led to its suppression, and it would seem that *the anatomy of the dead* fell under the same condemnation. So human dissection went out, having lasted perhaps two centuries or less; and in the time of Galen it was either prohibited or entirely disused.

"The works of the anatomists before Galen are hardly known; but it seems that their statements about anatomy may have been more correct, as founded on human dissection, than Galen's, which were founded on dissections of animals.

"Why the Romans had such a strong feeling against human dissection is not quite clear; but it is certain that there was a very strict public opinion on the subject (I have not heard of laws against dissection). They objected to Galen's dissecting and making physiological experiments on monkeys because they were like men; hence his investigations of the nervous system were made chiefly on pigs and oxen. Galen speaks of having examined the dead bodies of some barbarian soldiers killed in battle, but this would not have meant systematic dissection. Of course Christian ideas were at first antagonistic to dismembering the human body, which was expected to rise again, and even in Galen's time Christian ideas had considerable influence, though not recognised."

The old wives' tales are derived from the same source in all times. Where you have women gossiping, especially about matters peculiar to their sex, and still more particularly when they are primarily the sole guardians of the treatment of midwifery and the diseases of women, in which they are only partially instructed, you are sure to have such stories rise.

What would we not give for the opinions of a real Gamp of the age of Hippocrates!

I am not in any way stating that all women are gossips, nor am I discussing the question of the suitability of

women for medical practice, but merely state that partially instructed women in a domain monopolised by them are apt to weave fairy stories.

It seems rather strange that observers so acute as Hippocrates and his school should have accepted as many of them as we find in their writings.

Had I stopped to comment, either in praise or in criticism, upon each subject as it was mentioned my address would have run on into an endless dissertation. I have preferred to let most of the statements speak for themselves.

The Letters of Lord Smithfield to his Son.

Collected by JOHN STREET ROAD.



SERIES of letters have come into my hands which were written by this accomplished nobleman to his son, who seems to have studied medicine at St. Bartholomew's Hospital towards the end of the nineteenth century.

Lord Smithfield, though not himself educated for the medical profession, intended that these letters should direct and guide his son (whose talents were not of the highest order) in the footsteps of Hippocrates.

I feel that it is only fair to extend to others the advantages of Lord Smithfield's advice and warnings.

I.

DEAR BOY,—I am edified with the allotment of your time at St. Bartholomew's, of which your last letter gave me such a satisfactory account. You will not regret the time which you devote to the study of anatomy and physiology, though I would warn you of the perils which you will meet with in the dissecting rooms. Every virtue, if carried beyond certain bounds, sinks into its kindred vice or weakness; thus great learning will carry you into error, pride, and pedantry. You will find some of your companions that will talk in season and out of nothing else than their studies. They are never without a note-book in the one pocket and *Gray's Compendium* in the other; their conversation will teem with quotations from medical lore; and I would have you avoid such low company. Knowledge carried in the pocket may introduce you to the company of the Examiners, but it will by no means endear you to them.

The day, if well employed, is long enough for many things. One half of it bestowed upon your studies and your exercises will finish your mind and body; the remaining part of it spent in good company will form your manners and complete your character. What would I not give to have you read *Foster's Physiology* critically in the morning and understand him better than anybody; at

noun believe yourself better than any person in the square, conversing with the people, not of the raree-shows of the town, but politics, cricket prospects, and the like; and, in the evenings, trifle more agreeably than anybody in mixed companies.

You had better talk trifles elegantly to the most trifling woman than coarse inelegant sense to the most solid man.

Make your Court particularly and show distinguished attentions to such men as are best at the Hospital, highest in the profession, and in the opinion of the public. Speak well of them behind them when you think they shall hear, or in companies who you have reason to believe will tell them again.

Express your admiration of the Surgical Registrar, and of the many great men that the house of Anatomy has produced; observe that nature, instead of being exhausted by these efforts, seems to have redoubled them in the person of the present holder of the office; thus you will find him perhaps less critical of your writings when you meet him anon in the wards.

I would have you endeavour to get acquainted with the Warden, who is so eminently distinguished by all kinds of learning and merit; he can refuse more graciously than other people can grant. And those who leave him the most dissatisfied as to the substance of their business, are yet personally charmed in some degree by the manner of his saying, "No! friend."

Remember to take the best demonstrator in anatomy, and be at some pains to learn the technical terms in the Latin language; for though you will not be an eminent anatomist, yet these anatomical matters are so frequently the subjects of conversation, particularly among such men as you will meet with on the banks of the Thames, that you will look very awkwardly if you are ignorant of them.

I mean that your stay at Bartholomew's should, and I flatter myself that it will be a useful and ornamental period of your education; but I fear there are many dangers for you to encounter.

I well know the general ill-conduct, the indecent behaviour, and the illiberal views of some of the inhabitants of your district; for you will get little knowledge, no languages (at least of the refined sort), and, I am sure, no manners from the hooligans of Clerkenwell. Be upon your guard, therefore, against their exhortations and invitations, and I desire that you will form no friendships with these people, though I have no fear that any of your fellow-students will be of their kind, becoming disturbers of play-houses, breaking the windows, and commonly the landlords of the houses where they drink.

My wishes and my plan are to make you shine and distinguish yourself equally in the learned and the polite world.

Deep learning is generally tainted with pedantry, or, at least, unadorned with manners; it is, therefore, not only

reasonable but useful that your evenings should be devoted to amusements and pleasure, this will be so much time saved and by no means ill employed.

Many people lose a great deal of time by reading. Thus I write whatever occurs to me, that I think may contribute either to form or inform you. May my labour not be in vain! Adieu.

In Ungrateful Patient.



HE grip of a cold thaw was dragging up the year
When my theme caught a chill, and felt a little
queer,

And thus it was Progressive Medicine found him.

Soon the bronchitic kettle was a-fizzing on the hob,
While half a dozen doctors were "working on the job,"
With their diagnostic hammerings to pound him.

Each thought he heard bronchophony, a whistle or a wheeze,
And said 'twas highly probable he'd commenced it with a
sneeze,

As they bristled him with stethoscopes to sound him.

They fumigated cresoline to disinfect his lung,
Placed five or six thermometers to boil beneath his tongue,
And with hyper-learned glances did astound him.

He had "concentrated" this, and "concentrated" that,
And "concentrated" nothing "without the slightest fat"
To counteract debility that bound him.

They gave him latest nostrums and hydrocarbon drugs,
They wrapt him up in blankets and rolled him up in rugs,
With a dozen fiery mustard leaves around him.

They telegraphed to London for an extra special nurse—
A fashionable æsthetic (the hyperbole is terse)—
Who, in temperature unvaried, did surround him.

They boxed him up in cotton-wool, in poultices, and paint,
Until the air within the room with iodine was faint,
And in jackets fore and aft did empound him.

But he creaked with emphysema, and from dyspnoea turned
blue,

Insomnia challenged Morpheus, and had a round or two,
While the rain of perspiration nearly drowned him.

The band of Esculapians consulted night and day,
Though perhaps a little mixed in a scientific way—
While the hand of fate all silently unwound him.

They called in "star physicians" to shed their burnished
light,

Who said the "treatment was correct," with etiquette—
that's quite,

Yet the patient slipped his anchorage—confound him!

GALLEN—UP TO DATE.

Notes.

SIR WILLIAM CHURCH has been re-elected President of the Royal College of Physicians for the fourth year in succession

MR. D'ARCY POWER and Dr. P. Horton Smith are the Honorary Secretaries of the International Congress of Medicine to be held next year in Madrid.

MR. GASK and Dr. Bainbridge have been appointed Junior Demonstrators of Pathology.

THE Hichens Prize has been awarded to K. S. Wise.

THE Kirkes Scholarship has been awarded to E. G. Pringle; the Treasurer's Prize to A. Giuseppi; the Foster Prize to (1) F. B. Ambler, (2) C. D. Butcher (Lecturer's Prize); and the Harvey Prize to F. B. Ambler.

THE Annual View Day will be on May 14th. We understand there will be no dinner this year.

NEITHER of the Metropolitan Football Cups has fallen to the share of Bart.'s this year; but we heartily congratulate Guy's, who obtained the Rugby Cup, and whose team was decidedly above the average; and also Mary's, who once more carried off the Association Cup.

EVERY one will hear with regret that Mr. Nixon has resigned the Editorship of the JOURNAL. During his term of office he has fully maintained the standard of the JOURNAL, and our readers are indebted to him for many a witty and amusing article. His departure will be a loss not only to the JOURNAL, but also to the Musical Society, for which he has done so much during the past two years.

WE came across the following metaphor in a book sent for review the other day:—"Perhaps for our sleep we must drown our cerebral cells in a kind of auto-intoxication with the ashes of our waking fires."

SNAPSHOTS IN MODERN PRACTICE (FACTS).

1. Boy in Eton coat (æt. 14): "My mother sent me, sir, to ask you what your fee would be to vaccinate my sister and myself if we bring our own lymph?"

2. Paterfamilias (commercial gentleman): "I have brought my son to see you. He has a weak chest. I intend sending the sputum to the Clinical Research; I suppose you have heard of it. I have a friend in it. I have not been able to do so, as my son has not been spitting the last few days!"

3. Patient (in trade) picking up magazine from bed: "I wonder if you would like to look through the *S.*

—'s *Hospital Gazette*? There is rather a good article on the treatment of chronic Bright's disease!"

THE officers of the Abernethian Society for the ensuing year are—

Presidents.—Messrs. A. J. Fairlie Clarke and E. C. Elmslie.

Vice-Presidents.—Messrs. T. J. Faulder and S. D. Atkinson.

Hon. Secs.—Messrs. A. D. White and W. H. Hamilton.

Additional Committeemen.—Messrs. E. B. Aylward and L. L. Phillips.

Two memorial tablets have been recently placed on the walls of the Church of St. Bartholomew the Less.

The one to the memory of Sir James Paget has been erected by the members of his family. The other has been subscribed for by Mr. Vernon's House Surgeons.

It was with great joy that we read the article by Dr. Syers "On the Decay of Auscultation and Percussion," which he attributed to the introduction of the binaural stethoscope and neglect of the modern instrument.

Shortly after this appeared we overheard an instructive dialogue in a surgical instrument maker's shop.

Enter youthful student of medicine, who, after buying a pocket case full of impracticabilities, asks for a stethoscope, and thus addresses the shopman:

"Er, I suppose now all the chest specialists would use this double one?"

"Yes, sir; nobody in a good class practice has the wooden stethoscope."

"Thank you, I'll have this one."

Exit medical student with a weapon of unrivalled sagacity, guaranteed by the maker to give diagnosis, prognosis, and treatment of physical signs on both sides of the chest at once, price 11s. 6d., and cheap at that!

In the next scene we can picture a clinical clerk standing by his venerable chief, who with the despised "wooden thing" describes to the clerk's amazement a "ringing second sound," which to the possessor of the latest improvement in stethoscopes had suggested dimly the closing passages of Tschaiakowsky's "1812" Overture.

THE *Practitioner* for March contains a delightful example of Parisian humour, which we take the liberty of quoting at some length, acknowledging our indebtedness to the said journal for saving us the trouble of looking for a translator.

"M. Doyen's newspaper report of his operation on Radica and Doodica has been made the subject of an amusing parody in that eminently respectable paper the *Temps*. The author records how he operated upon Dr. Doyen, whose exceptional cerebral activity had doubled his personality.

"By ill-luck the scissiparity was incomplete, the two persons remained attached to one another by a membrane extending from the umbilicus to the sternum. To distinguish them it was necessary to call one Radoyen and the other Doyenka. This at first caused no inconvenience, but with increase of age troublesome disagreements, grave incompatibilities of character and temper, became manifest between the two doubles.

"It was determined to separate them, and my scientific aid was invoked. The operation did not last twenty minutes. I had invited my friends the phenomena of Darnum and Bailey's circus, who are now indispensable to me. They were of the greatest use to me, particularly the man with the elastic skin. By stitching the skin of his abdomen to that of the abdomen of the living skeleton I constructed artificial Siamese twins on whom I made most interesting preliminary experiments. There were also present the armless man, who wrote at my dictation with his foot, and the pincushion man, who played a modest but indispensable part, as will presently be seen. The two monsters, Radoyen and Doyenka, were placed upon a table invented by me, covered with a sheet sterilised by means of a preparation which is my property. I took up my position on their right, so that the cinematograph should lose nothing either of my movements or my features. The superficial part of the portion of the membrane was formed by a cartilaginous plate of a certain thickness, which I divided with a bistoury made according to my directions. As is usual in my clinic, anaesthesia was produced by means of chloride of methyl. As I ceased to require my needles, my scissors, and my forceps, I stuck them into the cheeks of the pincushion man, that is what he served for. Underneath the cartilaginous plate I found, as was to be expected, a bridge of liver, seven centimetres in breadth by four in thickness, traversed by a large number of arteries, arterioles, veins, and venules. This was the time or never to use my original method of hæmorrhage. I therefore performed extemporaneous crushing of the hepatic pedicle by means of my large double-lever forceps from Creusot, which weigh a million tons, but which can be act in motion by one finger, and which exert a pressure of 600,000 kilos.

"Happily for posterity the operation was completed before the cylinders of the cinematograph were exhausted. Radoyen was first carried to a neighbouring table, a compress invented by one of my usual assistants was placed in the wound, and the skin provisionally brought together with toothed forceps of which I recently published a drawing. Then came the turn of Doyenka. I sutured his abdominal wall, taking care to leave in a small drain of gauze sterilised by my ordinary attendant, whom I cannot recommend to my confidante. The operation had succeeded. As for Radoyen and Doyenka, I hope they will get over it."

Amalgamated Clubs.

ASSOCIATION FOOTBALL CLUB.

ST. BART'S V. HASTINGS AND ST. LEONARDS.

This match was played at Hastings on Wednesday, November 13th, on the Central Ground, and resulted in a win for the Hospital by 5 goals to 2. The score, however, does not accurately represent the merits of the two teams, as the game was very well contested throughout, and had the home side been better in front of goal they might have made a very different result.

Bart.'s started by defending the Town Hall end, and for the first quarter of an hour the game was of a give and take nature, though at times some very fast play was witnessed.

The Hospital forwards then settled down and got more together, and from a good rush on the left wing Ward scored the first goal. Soon after Hastings equalised. After this goals were scored faster. Hastings scored one more and the visitors two (Ward and O'Brien), and the sides changed ends without any further score being recorded.

The second half was uneventful save for the addition of two more goals to the Hospital (Ward and Jones). The game thus ended as above stated in a win for the Hospital by 5 to 2. Team:

H. H. Dutcher (goal); W. G. G. W. S. Neale (backs); W. H. Jones, V. C. Upton, N. E. Waterfield (half-backs); H. N. Marrett, R. C. P. Berryman (right wing); C. W. O'Brien (centre); V. G. Ward, C. A. Anderson (left wing).

After the game both teams and the members of the Hastings and St. Leonards Football Club were entertained at the Castle Hotel to tea by the old Bart.'s men of the district, Dr. Howard Marshall being in the chair. After an excellent meal, to which needless to say every one did justice, a smoking concert followed, the music being provided by some well-known artists.

Between the turns the following toasts were given:—"Success to St. Bartholomew's Hospital A.F.C.," proposed by the Chairman and responded to by Mr. C. W. O'Brien.

Dr. Howard Marshall in his speech, among other things, gave some good advice to both teams, suggesting that a great improvement would be effected if more attention was given to shooting at goal, and strongly recommended the home team to spend a short time of an evening in such practice. In conclusion, he wished the Hospital every success in their coming Cup tie.

On rising to reply, the Bart.'s captain, Mr. C. W. O'Brien, said that he was proud to be captain of a team which had beaten Hastings; he remarked that this was their eighth successive victory, and although he hoped the Hospital would always win, he thought that it would do them good if they were once beaten, and certainly it was time that Hastings turned the tables. He thanked the old Bart.'s men most heartily for their hospitality towards the team, and assured them that the Hastings match was always looked forward to with the keenest pleasure. The only flaw in the evening's enjoyment was the absence of the familiar face of Mr. Gabb, especially so inasmuch as he was the first to have started this annual gathering.

The Chairman next proposed "Success to the Hastings and St. Leonards Football Club." He pointed to the challenge cups on the tables, and hoped that next year more would be added to their number.

Mr. A. W. Cotton, in reply, said that they had had a good game, but he certainly thought that the best team had won; but with some of the Chairman's advice carried into practice great improvement would be made.

The Right Worshipful the Mayor then proposed "Our hosts" in fitting terms, which was responded to by the Chairman. This finished up the evening, and the visiting team returned to London, having had a most enjoyable day.

Abernethian Society.

REPORT OF THE COMMITTEE FOR THE YEAR 1901-1902.

GENTLEMEN,—Your Committee have great pleasure in presenting the annual report. It deals with the ordinary transactions, the attendance at meetings, the special business, matters of government, and the finances of the Society.



The ordinary transactions of the Society include the sessional address, July, 1901, by Dr. Ormerod; the sessional address, October, 1901, by Mr. Willet; and the mid-sessional address, January, 1902, by Dr. Champneys. Thirteen papers have been read: one by a member of the teaching staff, three by members of the junior staff, seven by former members of the junior staff, and two by other members of the Society. Several of these papers were accompanied by microscopical and other pathological specimens, and in particular an important paper by Mr. Gordon, on the bacteriology of scarlet fever, was copiously illustrated by the lantern.

Four clinical evenings have been held, numerous important and interesting cases being shown,—some for diagnosis, some as typical demonstrations, and others to illustrate the effects of treatment.

The cases belonged to this Hospital and to others, notably the Metropolitan and the Children's Hospital, Great Ormond Street.

In addition many important pathological specimens were shown. Accounts of all these meetings, either in the form of abstracts or full reports, have appeared in the Hospital Journal.

Fifteen new members have been admitted. The average attendance is thirty-four per meeting. The special business of the Society includes a Special General Meeting, held on June 21st, 1901, at which Dr. Norman Moore was unanimously elected Treasurer.

A present of three engravings was made to the Society by Canon Fleming: a vote of thanks was passed and communicated to the reverend gentleman by the Secretary.

A photographic engraving of the late Dr. Kanthack has been placed in the room.

The Committee beg to express their sympathy with Mr. Shrubhall in his enforced absence from his position as President during the last month. As a mark of appreciation of his services to the Society his office has not been declared vacant.

The government of the Society has involved the question of smoking in the Society's room, and the protection of papers. The former is now pending; the latter has been to some extent met by simple methods, which have undoubtedly been efficient. Reports were presented to the Society dealing fully with the whole matter, but no elaborate scheme was deemed advisable.

The Society has a balance at the bank of £11 16s. 6d.

Signed on behalf of the Committee,

W. SEYMOUR DANKS.

March 20th, 1902.

The Nineteenth Ordinary Meeting of the Session was held on Thursday, March 13th, Mr. Danks in the Chair. A paper was read by Mr. Ficton on "Chlorosis," a full report of which appears in the Journal.

The Annual General Meeting was held on March 20th, Mr. Danks in the Chair, the following officers for the ensuing Session were elected:

Presidents.—Mr. R. C. Elmslie, Mr. A. J. Fairlie Clarke.
Vice-Presidents.—Mr. S. B. Atkinson, Mr. T. J. Faulder.
Secretaries.—Mr. A. Denham White, Mr. W. H. Hamilton.
Additional Committeemen.—Mr. L. L. Phillips, Mr. E. B. Aylward.

The balance sheet of the Society was read, and showed a balance at the bank of £11 16s. 6d.

It was decided to apply to the School Committee for renewal of the permission to smoke at all future ordinary meetings of the Society, an arrangement which, during the past year, has proved satisfactory. A vote of thanks to the retiring officers was passed, and the last meeting of the Session then adjourned.

Correspondence.

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

DEAR SIR, Dr. Champneys, in the very interesting address published in your issue for February, says the meaning of "on the stools" is really unknown. It is possible that so accurate an observer as Dr. Champneys refuses to recognise anything except what may be deemed clearly proven. But for the sake of any of your readers who are interested in the subject, and may not be quite so cautious, I venture to call attention to the old English "groaning stools." On p. 9 of Wolsley's *Life of John*

Churchill, Duke of Marlborough, will be found mention of the sale of the "groaning chair" in which Mrs. Winston Churchill "was delivered of her son John." Only recently I was given, or rather offered, a piece of heavy cake which was called the "groaning cake," and which was cooked in the honour of a piniupara's baby. There is also, or was, groaning cheese. As regards the other translation, "wheels" (Jeremiah xviii, 3), the margin has it "frames or seats."

It seems to me possible that the potter therein mentioned as making a "work on the wheels" either had to use wheels to fashion the stools (seats), or the seats had wheels on them for purposes of mobility.

But the same Hebrew word, as far as I can gather from my clerical friends, may have two meanings, not otherwise than when lead in our tongue means in one place the metal, and in another the instrument used in sounding for nautical purposes, or, in electrical parlance, the wire from the battery cell to the electrode.

I have no doubt some of these (groaning) "stools" or "chairs" for labour are still in existence (as curiosities); that mentioned above was sold in 1782.

Towards the end of the address Dr. Champneys mentions the directions given to put labouring women on a night stool or, failing that, a "labour chair."

The connection between this sentence and the passage in Exodus seems so very suggestive, that I feel the lecturer must have very strong reasons for using the words "really unknown."

Writing on this subject reminds me how much time and strength are wasted by watching labours occurring in the usual left lateral position. It is a pity to keep the upright or semi-upright as a later resource when our patients are rapidly wearying. But we must conform to custom, and at present must sit by, secure the cord, and express placenta, etc., which any clean woman can do equally well—often better.

Apologising for the length of my letter,

I am, dear Sir,

Yours faithfully,

COUNTRY G.P.

Review.

CONTRIBUTIONS TO PRACTICAL MEDICINE. By SIR JAMES SAWYER, M.D., F.R.C.P. (Cornish Bros., Birmingham.) Pp. 309, 3rd edition.

A large variety of subjects is dealt with in this volume, which for the most part consists of a number of clinical lectures delivered during the past twenty years. In the present edition these lectures have been revised and brought up to date. In the first article the author discusses the aetiology and treatment of insomnia, in regard to which many useful hints are given, though the classification of the causes of sleeplessness is empirical rather than scientific. Perhaps the best of the remaining chapters is that on floating kidney. The book contains nothing strikingly fresh, and its style, always florid, is at times extremely involved. Nevertheless it is always sound, and will furnish agreeable and useful reading for the general practitioner.

The Bahere Lodge, No. 2546.

An ordinary meeting of the Bahere Lodge, No. 2546, was held at Frascatti's Restaurant, W., on Tuesday, February 11th, 1902; W. Bro. Phin. S. Abraham, M.D., W.M., in the chair. Bro. Walton K. Kead was raised to the Third Degree, and Bros. Harke, Yetts, and Dunn were passed to the Second Degree. A subscription of two guineas was voted to the Soldiers' and Sailors' Families Association. The W.M.'s of the other medical lodges in London attended the meeting as honorary members of the Bahere Lodge. There was a large attendance at the subsequent banquet.

Calendar.

Apr. 29.—On duty. Dr. Hensley and Mr. Walsham.
 May 1.—Summer Session begins.
 " 2.—On duty. Sir Lauder Brunton and Mr. Cripps.
 " Examination for Medical Brackenbury begins.
 " 6.—On duty. Sir Wm. Church and Mr. Langton.
 " 9.—On duty. Dr. Gee and Mr. Marsh.
 " 13.—On duty. Sir Dyce Duckworth and Mr. Butlin.
 " 14.—View Day.
 " 16.—On duty. Dr. Hensley and Mr. Walsham.
 " 17.—Examination for Lawrence Schol. begins.
 " 20.—On duty. Sir Lauder Brunton and Mr. Cripps.
 " 23.—On duty. Sir Wm. Church and Mr. Langton.
 " 27.—On duty. Dr. Gee and Mr. Marsh.

St. Bartholomew's Hospital Students' Christian Association.

SUMMER SESSION, 1902.

MAY—JULY.

Meetings are held in the Inquest Room on Thursdays, at 4 p.m.
 May 8.—Members' Meeting.
 " 15.—Dr. Maxwell.
 " 22.—Rev. Prebendary Webb-Peploe.
 " 29.—Annual Meeting.
 June 5.—Col. Wroughton.
 " 12.—Missionary Meeting.
 " 19.—Dr. Soltau.
 July 3.—Rev. Geo. Tonge.

Examinations.

CONJOINT BOARD.
 Second Examination.

Anatomy and Physiology.—W. G. Ball, R. H. Bott, R. A. Bowling, J. R. Briscoe, C. B. D. Butcher, W. R. Collingridge, C. H. Cross, P. A. Dingle, C. Elliott, L. Gray, J. P. Griffin, J. R. Kemp, J. E. R. McDonagh, M. Reichwald, C. F. O. White.

The following completed the examinations for the M.R.C.S., L.R.C.P., at the January examination.—G. H. L. Whale, A. S. Woodwark, H. M. H. Melhuish, J. McBryde, G. W. Miller, J. A. West, G. W. Stone, A. C. Young, H. N. Murrell, R. D. Stacey, W. R. Read, J. B. Cook, H. G. McKinney, V. G. Ward, S. G. Mostyn, G. F. Gill, C. S. Woodwark, S. B. Atkinson, R. J. Waugh, J. W. Llewellyn, N. Leonard, P. G. Harvey, F. W. Jackson, L. E. Hughes.

Appointments.

BALL, C. R. H., M.R.C.S., L.R.C.P., appointed Assistant House Physician to the Metropolitan Hospital.

COPE, R., M.R.C.S., L.R.C.P., appointed House Surgeon to the Dorset County Hospital, Dorchester.

DANKS, W. S., M.B.(Lond.), appointed Civil Medical Officer to the South African Field Force.

JACKSON, F. W., M.R.C.S., L.R.C.P., appointed Surgeon-Captain to the Highland Horse.

LLOYD, W. F., M.B., B.C.(Cantab.), appointed Assistant Surgeon to the Windsor Royal Infirmary.

NIXON, J. A., M.B., B.C.(Cantab.), appointed Surgeon to the s.s. "Johannesburg."

NOKE, F., M.B.(Lond.), appointed Assistant House Surgeon to the Metropolitan Hospital.

SHRUBSALL, F. C., M.B., B.C.(Cantab.), M.R.C.P., appointed House Physician to the Brompton Hospital for Diseases of the Chest.

TA'BOIS, A. C., M.D.(Lond.), appointed Deputy Medical Superintendent to the Gore Farm Hospital.

WILLIAMS, E. C., M.R.C.S., L.R.C.P., appointed Surgeon to the P. and O. s.s. "Peninsular."

WOOD, M. D., M.D.(Durham), appointed Second Assistant Medical Officer to the Hayward's Heath Asylum.

YOUNG, A. C., M.R.C.S., L.R.C.P., appointed Junior House Surgeon to the Royal Sea-Bathing Hospital, Margate.

New Addresses.

ADDISON, CHRISTOPHER, Urcar Croft, Northwood R.S.O., Middlesex.

BOX, S., 47, Gordon Road, Ealing, W.

CHOLMELEY, W. F., 3, Waterloo Road South, Wolverhampton.

COLEMAN, F., 6, Mount Park Crescent, Ealing, W.

GUTCH, J., 28, Fonnereau Road, Ipswich.

KENNEDY, W., 6, Alexander Square, South Kensington.

MALTBY, E., Avondale, Feltham, Middlesex.

NEVILLE, T. C., 238, Upper Richmond Road, Putney, S.W.

NIXON, J. A., 55, Venner Road, Sydenham, S.E.

SCORER, FRANK, St. Cuthbert's, Christchurch Road, Bourne-mouth.

SHUTER, G. P., Cleveland House, Chiswick Lane, W.

STEPHENS, J. W. W., 7, Quay Street, Carmarthen, South Wales.

STORRS, W. TOWNSEND, 39, Mount Ephraim, Tunbridge Wells.

TAPLIN, B. DUTTON, Thames Villa, St. John's Avenue, Bridlington, Yorkshire.

Births.

ANDREWS.—On April 15th, at "Martindale," Tonbridge, Kent, the wife of H. Arthur Andrews, M.R.C.S., L.R.C.P., of a son.

HARRISON.—On April 5th, at 320, Humberstone Road, Leicester, the wife of L. K. Harrison, M.B.Cantab., of a son.

PEARSON.—On March 18th, at Alicedale, South Africa, the wife of Maurice Grey Pearson, M.B., B.Sc., F.R.C.S., of a son.


Marriage.

HARRIS—SCALES.—At St. Mark's, Hamilton Terrace, N.W., on the 23rd inst., Herbert George Harris, M.D., B.S.(Durh.), M.R.C.S., L.R.C.P., son of the late W. T. Harris, Esq., of Worthing, to Hilda Mary, eldest daughter of G. E. Scales, Esq., of Ichleton, Cambs.

Death.

PEARSON.—On March 23rd, at Alicedale, South Africa, the infant son of Maurice Grey Pearson, M.B., B.Sc., F.R.C.S.

St. Bartholomew's Hospital



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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 J. H. BOOTY & SON, Advertising Agents, 30, Holborn, F.C.

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,

APRIL, 1902.

"Equum memento rebus in arduis
 Servare mentem."—HORACE, Book ii, Ode iii.

The Pathological Department.

WE understand that very considerable changes will shortly take place in the Pathological Department, and that the teaching of pathology is to be more elaborate and more completely organised than hitherto. During the past few years the rapidly increasing importance of pathology both to the practitioner and to the student has necessitated a corresponding development on the teaching side; and the present scheme simply

represents a further stage in the evolution of pathological teaching in this Hospital. We believe that we were the first hospital to provide for the systematic examination of clinical material from the wards by the pathological department of the School; and for this we are indebted to the late Prof. Kanthack, who was then pathologist to the Hospital. As time went on the wards and the pathological department came more and more closely into touch, and the work of the latter constantly increased. Gradually more of these investigations passed beyond the experimental stage into one of undoubted usefulness; and with that transition there arose a growing tendency for them to be carried out by house physicians and research clerks in the wards. This has now led to a further change, and the Medical School Committee has decided that every student shall be taught clinical pathology as part of his routine work. In the first place, every ward clerk will be instructed by the junior house physicians how to carry out certain investigations on clinical material, and the wards have already been provided with the requisite apparatus. There is also to be a special preliminary course for men who are coming on as house physicians, at which they will practise those methods which they are to teach. In the second place, a class will be held in the pathological department intended mainly for men who propose to take the higher examinations, though not necessarily limited to them. By these means the pathological laboratory will be relieved from the burden of such investigations as may reasonably be expected of anyone in practice, while still being available for those that are more difficult; and at the same time the teaching of clinical pathology will become more systematic and complete. We believe that this scheme—which comes into full effect almost at once—will be one of the most important changes made in the School for some time. We hope that it is only the beginning of still further advance in this direction; and we are convinced that not only will it be fully appreciated by those for whom it is intended, but will do much to maintain our supremacy as a teaching hospital and school.