nearly sixty pages are taken up by a careful consideration of the various septicaemias met with in the newborn infant. The last three chapters are devoted to clinical and bacteriological diagnosis and treatment of septicaemias in general. A remarkably full bibliography, arranged according to the chapters, is appended. The writers are to be congratulated on their work.

CALDWELL'S *Volumetric Analysis*⁹ is a book intended mainly for medical and university first-year science students. It is a matter of no small difficulty to prepare a course of study in chemistry for a particular class of students who for the greater part of their time are occupied with other studies. The prime necessity of directing the work along lines suited to their special needs is ever a danger to the survival of a more important object—namely, that of teaching chemical science as a thing distinct from a selected group of chemical facts. In no case does this danger occur more obviously than in teaching chemistry to students of medicine. The author of this volume has handled the difficulty with circumspection. He has produced a useful volume giving a clear exposition of the subject-matter. Whether it is scanned for the finer elements of instruction or scrutinized for the absence of essentials, it bears the examination well. What has been omitted can be conveniently taken up by the student at a later stage. It is not well to obscure the landmarks of a new region to a beginner's view. This is likely to be the effect of giving too plentiful information. We note, however, the omission of a test which we regard as too important to be excluded—namely, the perchlorate test for potassium. Assistance has been borrowed from the art of the printer with good effect in the arrangement and spacing of the text as well as in the choice of plain and leaded type. A description of solubility should be more cautiously expressed than that under strychnine, where the sentence occurs, "It is only sparingly soluble in water . . . whilst it is insoluble in alcohol. . . ." These two statements are only permissible when used for different comparisons. Occurring as they do in the same sentence they are misleading, for little as is the solubility of strychnine in alcohol it is many times greater than in water. But this fault must not be allowed seriously to detract from the author's work. The book that contained nothing needing amendment in a future edition would indeed be a remarkable production. Since it is an excellent book we anticipate that opportunity for revision of its very few defects will not be long delayed.

Patrick Branwell Brontë¹⁰ is the subject of an essay by Miss ALICE LAW, who, brought up in the neighbourhood of Haworth, has been imbued with the interest of the tragic Brontë family. She stands up with a vigour that must command respect, though it does not bring conviction, for the memory of the brother of the three phenomenal girls, and argues that the black sheep of the family and not his sister Emily (Ellis Bell) was the real author of *Wuthering Heights*. Among the illustrations is one of "The Withens," Haworth, the supposed site of *Wuthering Heights*.

⁹ *Elementary Qualitative and Volumetric Analysis*. By William Caldwell, M.A., Sc.D. With an introduction by C. S. Gibson, D.B.E., M.A., M.Sc., F.I.C. London: J. and A. Churchill. 1924. (Demy 8vo, pp. xxiv+418. 10s. 6d. net.)

¹⁰ *Patrick Branwell Brontë*. By Alice Law, F.R.S.L., F.R.Hist.S. London: A. M. Philpot, Ltd. 1924. (Cr. 8vo, pp. 192; 6 illustrations. 6s. net.)

MEDICAL AND SURGICAL APPLIANCES.

Swabbing the Female Urethra.

DR. NOEL F. ROWSTON (Medical Officer, V.D. Clinic, Sunderland) writes: The Holborn Surgical Instrument Company has made for me a urethral probe, which I venture to think will be found to be a considerable improvement on other types. It consists of a rod

six inches long, the distal end of which is roughened for the attachment of cotton-wool, and terminates in a smooth acorn tip which permits of easy introduction into the female urethra. For use, the wool is attached to the roughened portion and the acorn tip is left bare. Swabbing with this instrument is smooth, painless, and speedy.

X-ray Apparatus and Material.

We have received from Messrs. Watson and Sons (Electro-Medical), Limited, of Sunic House, Parker Street, Kingsway, London, three leaflets containing particulars of the firm's x-ray apparatus and material. One of them describes the general principle and purpose of the Potter-Bucky diaphragm for eliminating scattered radiation when making an x-ray examination of deep parts, and advertises a special form of this construction by the trade name of the "Sunic." The second leaflet describes the "Sunic" intensifier screen, which is the result of a special process for the production of extremely minute grains of calcium tungstate and for binding the crystals together as closely as possible with the minimum quantity of binding agent. The third leaflet is a list of second-hand and reconditioned x-ray and electro-medical apparatus offered by this firm.

GUY'S HOSPITAL BICENTENARY.

BY

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ALMOST exactly 200 years ago, on January 6th, 1725, sixty patients were admitted to the newly built hospital "founded at the sole cost and charges of Thomas Guy, Esquire." In the course of the two centuries that have passed since the opening of what has for many years been known as Guy's Hospital, many hundreds of thousands of patients have found within its walls a resting place in time of sickness, where all the resources of medicine and the skill of the greatest exponents of the art have been freely given to them—the gift, not of the physicians and surgeons who from time to time have had the honour of serving upon the hospital staff, but of him to whose generosity and philanthropic spirit this great charity owes its origin, the founder, Thomas Guy.

The private life of the founder has been the subject of much rumour, and many stories are told that are hardly compatible with the character of the greatest philanthropist of his day. It must be remembered that in the eighteenth century it was a very remarkable, if not an entirely unique act, for a man to devote practically the whole of an immense fortune made out of business to the founding of a hospital for the poor. The advent of the millionaire—a product of the nineteenth and twentieth centuries—has led us perhaps to accept philanthropy on the large scale as more or less a commonplace of everyday life. Two hundred years ago it must have been relatively rare, and it is difficult to picture Thomas Guy as the parsimonious miser that some of the traditional anecdotes would appear to suggest. The story of his preferring to sit in the dark to discuss business rather than give rise to the extravagance of a farthing rush-light has been told of other great men and is doubtless quite unreliable. On the other hand, many stories of his philanthropy are told, even before he conceived his great project of building and endowing a hospital. Of these, one of the most attractive relates how Guy was looking moodily into the Thames at London Bridge one evening when an entire stranger, fearing he was some unfortunate at the end of his resources and contemplating suicide, came up and spoke a few encouraging words, at the same time pressing half a guinea into his hand. Years later Guy heard that his would-be benefactor had fallen on evil days and was in the throes of bankruptcy proceedings. He immediately went to the rescue and paid the debts, re-establishing the poor man in a business which prospered greatly in the future.

The truth about Guy probably lies somewhere between the two extremes. He was doubtless a hard-headed business man of great capacity and economical in his private habits, preferring to use the great wealth he thus accumulated for the benefit of posterity rather than on himself. It may or may not be true that his failure to marry was due to his annoyance at finding that his bride-to-be had exceeded his instructions in the matter of giving orders for repairs to the pavement in front of his house. But even if he had married it is doubtful whether his philanthropic projects would have been greatly modified, for he acquired the habit of philanthropy *pari passu* with the accumulation of his fortune, as is well illustrated by the town hall and almshouses which he built for his native town of Tamworth, and of which the former is still standing.

The main facts of Guy's life are so well known that there is little need to narrate them in detail here. It is, however, interesting to note that he was born off Fair Street in Bermondsey—a street still standing, and many thousands of whose inhabitants must at one time or another have been patients at the hospital he founded within so short a distance of his birthplace. His father was a coal merchant and lighterman, which makes it particularly appropriate that the hospital should have been so placed as to draw the majority of its inmates and out-patients from among the riverside workers and dock labourers. By trade Thomas Guy was a bookseller and publisher, and devoted himself especially to the publication and sale of

bibles. But the great bulk of his fortune was made out of the purchase of the tickets which were given by the Government to the seamen in the navy in lieu of pay. These tickets were commonly bought at a discount by speculators in the City in the hope of redeeming them later at par. Guy and others who speculated in this way have been much criticized, and have been accused of sharp practice in persuading the sailors to part with these bonds. The Governments of those days, however, were quite capable of repudiating such debts, and no doubt the sailors felt that 50 per cent. in the hand was worth 100 per cent. in the bush, and were glad enough to get ready cash at any price; the purchasers undoubtedly took a great risk, and might have lost heavily but for the permission subsequently given to exchange these for South Sea stock. Guy took advantage of this offer, and became possessor of some £45,000 worth of stock in the South Sea Company. By judiciously selling out before the final crash he piled up an immense fortune in a very short space of time.

The idea of building a hospital only occurred to Guy comparatively late in life. As a governor of the ancient foundation of St. Thomas's Hospital, then situated in the Borough High Street, he had been impressed by the poor provision made for the convalescent and incurable cases discharged from that institution. His first idea seems to have been to start a home for incurables as a complement to the existing hospital, but later his mind changed, and the hospital is described in Guy's will as "for the reception of four hundred poor persons or upwards labouring under any distempers, infirmities, or disorders thought capable of relief by physic or surgery, but who, by reason of the small hopes there may be of their cure, or the length of time which for that purpose may be required or thought necessary, are or may be adjudged or called incurable, and as such, not proper objects to be received into or continued in the present hospital of St. Thomas or other hospitals in and by which no provision has been made for distempers deemed or called incurable."

In 1721, when Guy was already about 76 years of age, land was obtained from St. Thomas's Hospital on the other side of St. Thomas's Street, and the building was begun in the following year. Guy lived to see the building completed and ready for the reception of patients, but died on December 27th, 1724, in his 80th year, just ten days before the first patients were admitted. The building as it was in 1725 represents but a small fraction of the present-day hospital. The two wings of the front quadrangle were added soon after the opening of the hospital. In 1850 Hunt's House, in which are now housed the medical and private wards and a large section of the out-patient department, was built from the proceeds of the munificent bequest of William Hunt, who died in 1829, leaving £200,000 to the hospital. Since that date building has been almost continuous, and round the eighteenth century nucleus provided by the founder has grown, or rather evolved, a modern hospital, with all the plant and equipment that a modern hospital involves.

The names of many famous physicians and surgeons are intimately connected with Guy's Hospital. Among the earliest is that of Richard Mead, who is reported to have stimulated Guy to found his hospital. However that may be, there is no doubt that Mead took an active part in assisting Guy with the planning and organization, although he was never physician to the hospital, being already on the staff of St. Thomas's. Mead is described as a highly cultivated, scholarly physician, the exact opposite of his great friend, John Radcliffe, with whom he shared a large proportion of the fashionable practice of London. He was in practice for some fifty years, and is said to have made as much as £7,000 in one year. Amongst his intimate friends were such men as Halley, Pope, and Isaac Newton.

The most famous of Guy's men are undoubtedly Astley Cooper, Bright, Addison, and Hodgkin. The former was by far the most distinguished surgeon of the day and had a phenomenal reputation as teacher. His position was richly deserved, for his capacity for teaching was only excelled by his skill with the knife. Chandler, a contemporary surgeon at St. Thomas's, said of him, "Sir, it is of no consequence what instrument Mr. Cooper uses, they are all alike to him, and I verily believe he could

operate as easily with an oyster knife as the best bit of cutlery in Laundy's shop." Like Mead, Cooper made an immense income from private practice, his biggest annual income being placed at £21,000, an enormous figure for those days. His biggest individual fee was received in unsuspected fashion. He operated on a wealthy inhabitant of the West Indies for stone in the bladder. On being asked his fee, Sir Astley Cooper replied, "Two hundred guineas." To which the patient responded, "Nonsense; I shall give you nothing of the sort. That's all I shall give you," and took off his nightcap and threw it at the surgeon. With his usual perfect manners, Cooper merely bowed, and put the cap in his pocket, saying "Thank you, Sir, anything is acceptable from you." On his return home he took out the nightcap to examine it and found it contained a cheque for 1,000 guineas.

Richard Bright's name is immortal owing to his discovery of the association of morbid changes in the kidney with albuminuria and dropsy. Thomas Addison will ever be remembered for his essay on disease of the suprarenal capsule and for his description of pernicious—or, as it is now more often called, Addison's—anaemia. Thomas Hodgkin was never appointed to the staff at Guy's. He was an applicant for the post in 1837, but Babington was appointed in his place. He was chiefly known for his article on "a peculiar enlargement of the lymphatic glands and spleen." Another great Guy's physician, Sir Samuel Wilks, many years later extracted from Hodgkin's work the material for the description of a new disease which, with characteristic modesty, he insisted on calling Hodgkin's disease. It would, perhaps, be more just to call it Wilks-Hodgkin's disease.

A great character at Guy's during the last century was the apothecary, James Stocker. He appears to have been a sort of Pooh-Bah and to have been competent in all his offices. He had especially a reputation for rapid diagnosis from the appearance of a patient. He had little science, but his long experience in the wards rendered his judgement uncannily certain. He once denied that a case was one of pyaemia on the grounds that patients with pyaemia never did their hair in that particular way. He was wont to observe that if, in a difficult case that might be typhoid or tuberculous meningitis, the patient resisted an attempt to pull down the bedclothes the case was probably meningitis; if on the other hand the patient took no notice it was more likely typhoid. This is still described in some books as Stocker's sign.

These brief and somewhat disconnected notes can hardly be brought to a close without some reference to the rivalry, and indeed bitterness, that sprang up between the residents of Guy's and St. Thomas's Hospital. There was always great competition to secure the "best" accidents, and the police were persuaded to patronize one hospital rather than the other by the quality and quantity of the beer they received as remuneration for their services. This state of affairs continued until the extension of the railway and the replacement of the old Bricklayer's Arms terminus by the new one at London Bridge led St. Thomas's Hospital to sell their old site and rebuild on the magnificent new one which they secured opposite the Houses of Parliament.

Now, on its two hundredth birthday, this hospital of Thomas Guy is appealing to the public for funds to enable it to carry on its work as a centre of healing, research, and education. By the end of the last century the original endowment began to be insufficient for the cost of maintenance. An appeal was made in 1896 with such good results that, by the end of the war, the hospital was able to meet its expenses with the aid of annual donations from King Edward's Fund, governors, and other benefactors. However, science is always advancing. A scientific institution, like a lady's dress, is always getting out of fashion and as constantly has to be replaced or readapted. And so it comes about that the extensive alterations and additions that the march of science has imposed upon all hospitals during the last five or six years has left Guy's Hospital with a debt of nearly £200,000. For this sum the president and governors are appealing, and it must be the wish of all medical men, whatever their school, that this modest birthday gift will be forthcoming.