by treatment, they would be accepted as immigrants by one or other of these countries. This is an admirable suggestion and might be extended to include the 'tuberculous', who could receive their treatment in this country on the same understanding with regard to their future emigration. Moreover, there seems no good reason, considering the small numbers likely to be involved, why Great Britain should not accept the so-called 'incurable' as well, for permanent residence and care in this country.

In the future, no doubt, tuberculosis will have been reduced to the level of smallpox, with large areas of the world free, or almost free from it. One may then require a certificate of a negative tuberculin test or recent BCG vaccination before crossing a frontier, even as a visitor. But, at present, the exclusion under all circumstances of those with radiographically manifest tuberculosis seems unjustified; and in regard to refugees even inhumane.

It has been said that 'Settling Europe's refugees will give us heart and confidence for the vaster issue of the two million in the Middle East. In this endeavour let us be informed by Edmond Burke: "It is not, what a lawyer tells us I may do; but what humanity, reason, and justice, tell me I ought to do"."

² Leading Article. Lancet (1960) i, 475.

HERE AND THERE

THE LIFE AND WORK OF C. J. B. WILLIAMS (1805-1889) AN EMINENT PUPIL OF LAENNEC

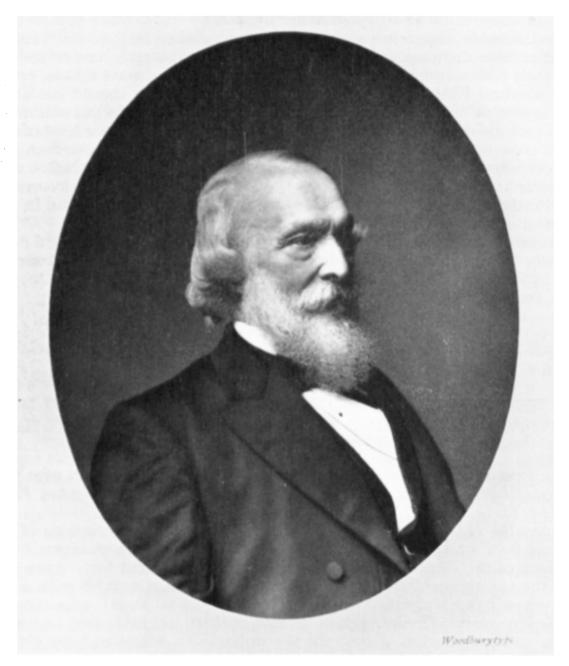
One of the most interesting and informative medical autobiographics ever published is 'Memoirs of Life and Work', by Charles James Blasius Williams, London, 1884, 522pp (Smith, Elder, & Co.).

The venerable old gentleman whose portrait graces the frontispiece of his book (Fig. 1) was born at Hungerford on February 3rd, 1805, the youngest but one of nine children of the Reverend David Williams, for more than forty years perpetual Curate of the Collegiate Church of Heytesbury in Wiltshire, and his wife, a surgeon's daughter whose name was also Williams. Williams had no formal education until he entered the University of Edinburgh at the end of 1820; but his father, who undertook the tuition and preparation of boys for the universities, seems to have given him a good grounding in the classics and the usual subjects. It soon became apparent that Williams' talents lay in the field of the 'natural sciences', and by the time he was fourteen he had constructed 'two electrifying machines; a battery of Leyden jars; a voltaic pile; several little telescopes, microscopes, kaleidoscopes, and acolian harps'. He fitted up a small room as a laboratory, and with the aid of Professor Thomas Thomson's famous 'System of Chemistry' he made such good use of it that he was later able to regard formal courses in chemistry as a recreation, rather than hard work.

EDINBURGH

In the autumn of 1820 he left home for London, en route to Edinburgh. He had hoped to sail from London to Leith, but finding the service discontinued he was obliged to make the five day coach trip to the Scottish capital. On arrival he took up residence with Dr. John Thomson, who directed him in his studies. Under his guidance he read Cullen's 'Nosology', Celsus' 'De Medicina', and parts of Hippocrates and Sydenham. His first year's studies were chemistry, physiology, or the 'institutes of medicine' as it was then called, anatomy and dissection. Although Edinburgh in 1820 enjoyed a high reputation as a centre of medical study, the various lecturers were naturally not all of the same standard. Williams speaks highly of Dr. Hope's lectures on chemistry, but Professor Monro's anatomical lectures he found so dull that like

384 TUBERGLE



My Milliams)

Fig. 1. - Photograph and signature of C. J. B. Williams which appears as a frontispiece to his 'Memoirs of Life and Work,' London, 1844.

many of his fellow-pupils he had to supplement them by attending an extraacademical lecturer, and later in life he found it necessary to take one of John Lizar's popular courses in the subject. Of Monro tertius (1773-1958) we read in J. D. Comrie's 'History of Scottish Medicine to 1860', London, 1927 (Baillière, Tindall & Cox) that 'He used to read his grandfather's lectures written about a century before; and even the shower of peas which greeted his annual reference, "When I was a student in Leyden in 1719", failed to induce him to alter the dates'.

The most popular lecturers were, he tells us, Dr. Andrew Duncan, junior (materia medica), the already mentioned Dr. Hope (chemistry), and Dr. James Hamilton (midwifery). Drs. Home (practice of medicine), Monro tertius (anatomy and surgery), and Duncan, senior (institutes of medicine) were all unpopular, but Williams tells us that when William Pultency Alison took the place of Duncan, senior, the position was very different. Alison, who lectured both on clinical medicine and general pathology, was his favourite professor, and he permitted certain promising pupils, such as Williams, to attend him at the New Town Dispensary and to accompany him on visits to patients in the old Canongate. In his second year, Williams, in addition to attending the usual lectures, privately studied mathematics, logic, metaphysics, and other subjects. He found the Library of the Royal Medical Society of great use, as it not only supplied him with the books he needed, but also with apparatus required for investigations. He was one of the first to benefit from Sir Robert Christison's lectures on medical jurisprudence in 1823. Christison has recently returned from Paris where he had studied toxicology under Orfila, and he did much to make this then rapidly expanding subject widely known. Another important teacher was John Thomson, who at his extra-academical school at Surgeon's Square, attracted many students who found Professor Home's lectures on the practice of medicine unattractive. In 1824 Williams received his doctorate, the subject of his discrtation being 'On the Blood and its Changes by Respiration and Secretion'. He then set off with two friends for a walking-tour of the Highlands. Subsequently he returned home to Heytesbury, but apart from a little practice among the poor did little work, his intention being to study for at least two years longer.

LONDON

He came to London and attended a course of lectures given by the famous Sir Charles Bell. He was greatly impressed by the way Bell illustrated his teaching by blackboard drawings, this being then somewhat of a novelty. He met Benjamin (later Sir Benjamin) Brodie, who generously offered him some unpublished notes he had compiled on a subject of mutual interest—respiration and animal heat. Williams was not, on the whole, very impressed with the medical practice and teaching he found in the London hospitals, and thought they compared ill with what he had experienced at Edinburgh. He did occasionally find it worth his while to attend the lectures of Abernethy, Sir Astley Cooper, Brodie, and others. But Paris, with its famous hospitals and medical schools was a greater attraction.

Paris

The summer of 1825 found him bound for France, travelling by Southampton, Le Havre and Rouen. Like many others, he was much impressed with the grandeur of Paris at that time. He noted, however, the contrast between the Rue de Rivoli, the Rue de la Paix, the Place Vendôme, and the greater part of the city, which consisted of narrow, dim-lit, evil-smelling streets, the home of diarrhoca and fevers. The gayer parts of Paris, the grand boulevards, and the Palais Royal, he reported provided 'such displays of finery and fashion, of ingenuity and cleverness, of taste and elegance, of cheapness and extravagence, and of sensibility and licentiousness,—as were probably unequalled in any other city'.

He took lodgings with an old soldier, his wife, and step-daughter, where he tells us he was well looked after, and was termed Tenfant de la maison'. He spent some time learning French and drawing; the latter was to prove a lifelong pastime, and in common with many of his contemporaries, he could produce a fair likeness. His drawings of the various savants he encountered in Paris adorn several pages of his book. Of his sketch of Laennec (Fig. 2), he thought '... the drawing is faulty; but still it has succeeded in giving somewhat of his fine sharp intelligent features

336 TUBERCLE

INVENTOR OF MEDIATE AUSCULTATION.



R. T. H. LAENNEC,
Professeur Royal de Médecine au Collége de France. Prof. de
Clinique à la Faculté de Médecine de Paris. Chev. de l'Ordre
Royal de la Légion d'honneur, &c.

Fig. 2 - Williams' sketch of Laconec showing him as he appeared when making his visits to La Charite in 1825-26, with Laconec's signature (from 'Memoirs of Life and Work', London, 1884).

and amiable expression of countenance; and with his ordinary costume of straight cut grey frieze coat, and embroidered decoration, it may be acceptable, as a reminiscence of the celebrated inventor and teacher of auscultation'.

Williams was provided with letters of introduction to several people of importance. He called on Professor François Magendie, who invited him to attend his Sunday matinées for physiological observations. But Williams had been brought up in an atmosphere where the Sabbath was strictly observed, and felt he had to decline; although he did at a later date attend one of Magendie's courses of experimental physiology and found it very instructive. He was introduced by W. F. Edwards, the physiologist, to the Institut de France, and here he attended meetings of the Academie des Sciences, hearing such great figures as La Place, Von Humboldt, Cuvier, Gay-Lussac, Ampère, Arago, Geoffroy St.-Hilaire, and others. When he first visited the Institute, his knowledge of French was insufficient to allow him to enjoy the meetings,

and he amused himself by making sketches of the speakers. He also visited the theatres and saw the great Talma, whose gesticulations he thought 'too French', and Mlle Mars, whom he found charming, if a little incomprehensible. Although he did not begin regular hospital practice until October, he paid visits to some of the hospitals to see the leading medical and surgical lights of the day. He thus saw Guillaume Dupuytren, who he says 'almost swore at me, because I objected to be called Blaise, instead of Blasius, when he asked me my name: so much for his temper'. On one of his visits to Val de Grace he saw Baron Larrey, Napoleon's favourite surgeon, and was unfavourably impressed by the way he performed his method of cupping. Williams says 'the patient endurance of the soldier equalled the cruel sangfroid of the operator'.

He decided to attend the Charité and the clinic of Laennec, and his critical and unbiased impressions of the latter are of great interest. Lacnnec's visits were from ten to twelve in the morning, and usually consisted of the examinations of patients and the demonstration of auscultatory signs to the attendant students, conducted in Latin, then a clinical lecture delivered in French. Sometimes a post-mortem examination was substituted for the latter, superintended by Laennec himself, and with the free use of chloride of lime in the room. Williams writes 'we counted ourselves fortunate in thus having the personal instruction of the great master, when most matured by the latest observations and practice'. No doubt Laennec's appreciative audience, consisting mostly of foreigners, acted as a spur to him, for most of his fellowcountrymen, so Williams says, were more attracted by François-Joseph-Victor Broussais, who with his general ascription of all diseases to inflammation, provided a fine sweeping hypothesis. Williams, however, records that 'I soon found that Laennec had a bias, from his opposition to those views, to go to the other extreme, and deny the existence of inflammation, where it really exists'. He was much impressed by Gabriel Andral, who took an eclectic view of the question, and thought that he, by the use of auscultation correlated with pathological anatomy, gave a more rational view of disease than either Laennec or Broussais.

Andral attended the clinic of Nilammon Théodore Lerminier, whose visits to the hospital were made at the early hour of seven a.m., and by accepting responsibility for all Lerminier's post-mortems, he was able, while still a student, to gather material from his important 'Clinique Médicale, etc.' (5 vols., 1823-33), a work that had much influence; volumes 2-3 were concerned with diseases of the chest. A condensed English version was published in 1836. The importance of Andral's work lies in its empirical approach. For the first time, for many centuries a large series of medical cases had been employed to establish the foundation of clinical medicine. Another physician whose ward-rounds Williams frequented was Auguste François Chomel, of whom he spoke very highly. He tells us that he often saw in the same ward 'a tall solemn man with spectacles, diligently taking notes alone, not accompanying the physician'. This was the great P.C.A. Louis, collecting material for his pioneer work on tuberculosis. Williams says of him 'he was equally remarkable for the gloominess of his predictions, and the inefficiency of his practice'.

Such works as William's autobiography are of value in giving us an authentic and frank picture of many of the great names of nineteenth century medicine. For instance, he tells us that he found Laennec's lectures on systematic medicine at the Collège de France, 'not first rate'. Williams, however leaves us in no doubt as to his admiration, although qualified, for the illustrious inventor of the stethoscope. He writes 'the clinic of Laennec, and the study of auscultation under him were my foremost objects; and by close attention I succeeded in fairly understanding and practising what he taught'. Laennec was 'somewhat partial in his attention to pupils'. James Gregory, son of the Professor Gregory at Edinburgh, and Williams' close friend, was his favourite pupil. Apparently Laennec frequently annoyed the few Frenchmen present

388 TUBERGLE

by asking Gregory to explain special points to the other pupils in English. When Williams subsequently left Paris, Laennec told him and Edwin Harrison that he would mention their names in the forthcoming (2nd) edition of his book, as having been particularly assiduous in the study of auscultation. He also asked them for the names of any others who attended his clinic with the same results, and Williams furnished him with the names of Thomas Hodgkin and Alexander Urquhart. The name of Williams did, indeed, appear in the preface to the 1826 edition of the book, along with thirteen other British physicians, and several foreigners. Williams writes that little of Laennec's work in pathological anatomy came out in his clinic, the emphasis being on auscultation, which by his own experience he had worked out and clothed in a new phraseology, and taught on the authority of his new experience and knowledge'. Williams, while questioning whether Laennec was too dogmatic in his teaching of the rules of mediate auscultation, regarding the art as complete, rather than progressive, says 'the chief discoveries of auscultation, and its large development, were undoubtedly his, and have placed him in the foremost rank among the benefactors of mankind. To these, as well as to his personal teaching, I owe not only some of the most valuable knowledge that I have ever acquired; but also the opening up of new avenues of knowledge . . .' And again: 'In hearing his attempted explanation of several of the phenomena of auscultation, I soon found that his knowledge of acoustics was by no means profound; and clever as he had been in teaching the signs empirically, he was not equally successful in explaining them rationally; so that the practice of auscultation was a matter of memory more than reasoning. Yet it appeared to me that physical laws, and that a knowledge of those laws, so far as attainable, would be the best guide to a knowledge and understanding of the signs, and of the causes, which produce them'.

He ended his stay in Paris with visits to the Salpetrière, where he saw Esquirol, Pinel's principal disciple, and to the Hôpital des Enfants Malades. After a few weeks

holiday, after fourteen months in France, he returned to England.

TRAVELLING PHYSICIAN

Back in England he spent some time in practice among friends and relations, and met Thomas Moore, having the pleasant experience of hearing him sing some of his own songs. In London in the spring of 1827, he met Sir James Clark and Sir John Forbes. He sometimes assisted the former, both in his private practice and at the Parochial Infirmary of St. George's, Hanover Square. Through Clark he was engaged, like many young physicians of his day, as travelling physician to a gentleman who had been recommended a sea voyage, on account of 'delicacy of the throat'. Williams therefore sailed with his charge for Madeira, which they reached after a passage of fourteen days. Unfortunately his patient was 'a clear case of rapid hopeless consumption', and died six weeks after his arrival in the island. Williams knew the state of his patient's health before setting out, but the patient was acting on the advice of 'two of the leading physicians of the day', and although Williams had notified them of his findings before setting out, he had only had a bare acknowledgement of his letter.

Back in London Williams busied himself on the first edition of his book 'Rational Exposition of the Physical Signs of Diseases of the Chest', and this appeared in 1828. It would seem that Williams was one of the few to study the physical laws involved in auscultation before Skoda, and his book was written to fill certain gaps he thought existed in the understanding of auscultation.

As soon as had seen his work through the press, he was engaged as travelling physician to the Earl of Minto and his family on a tour of Switzerland, and he formed part of this nobleman's entourage, consisting of Lord and Lady Minto, their ten children, a governess, tutor and seven servants, the whole contained in five carriages.

Soon after this tour abroad, during which, thanks to the good health of this large party, Williams was able to indulge his hobby of sketching, he became engaged to a cousin, and on his marriage set up house in Half Moon Street, Piccadilly, then a fashionable quarter for young physicians. He became a Permissior Licentiates of the Royal College of Physicians, as Members were then called, and was invited by the medical staff of St. George's Hospital to attend the practice there, and to demonstrate auscultation to the pupils. He was next invited by Forbes, Tweedie, and Conolly, to contribute several of the articles on diseases of the chest and heart to their famous 'Cyclopaedia of Practical Medicine' (1833-35). He wrote ten articles in all, his longest contribution—on pneumonia—occupying nearly fifty pages. He was clearly proud of these contributions, and he devotes two chapters of his memoirs to a description of his views expressed fifty years earlier.

PRIVATE PRACTICE

In his first year of practice he hardly earned more than £100, and he was left with ample time to indulge his favourite pursuit of drawing and to attend the lectures of Faraday at the Royal Institution. At Faraday's invitation he was able in 1834 to deliver a public lecture on low combustion, a subject which had long interested him and had given rise to his first publication in the Annals of Philosophy of July 1823. He also prepared a paper on the same subject for the Royal Society, and was disappointed when it was not published in the Philosophical Transactions. In 1833 a second edition of his 'Rational Exposition, etc.' was called for, and third edition, with an altered title was published in 1835. This work was very popular, being reprinted in America and translated into German and Swedish.

It was at this time that Williams entered into his controversy with James Hope. This took place over priority in relation to certain investigations on the movement of the heart and the causation of cardiovascular sounds and murmurs. As this incident has been described at length in a recent paper by Dr. P. T. O'Farrell (Irish J. med. Sci., June, 1957), I need devote no further space to it, except to quote this author's concluding remarks—'In spite of all the bitterness and ill-will that separated the two doctors concerned, one feels that the study of cardiology was not retarded but actually advanced as a consequence of the event which led to this famous controversy'. Williams was elected an F.R.S., in 1835, not without some opposition, as it was thought by some at the time that too many medical men were being admitted. Although he was a Fellow for forty-eight years, he seldom attended meetings, preferring the British Association for the Advancement of Science, with its section of anatomy and medicine.

In the spring of 1836 he began his first course of lectures on diseases of the chest, being allowed by a friend to make use of the theatre of the Anatomical School in Kinnerton Street, connected with St. George's Hospital. His course of thirty lectures was attended by nearly thirty students and physicians and surgeons. He made use of drawings, diagrams, apparatus and models, at that time an almost unheard of innovation in teaching. These lectures were repeated, and although they brought fewer paying students, they attracted more practitioners, and were successful in making his name known to a wide circle of professional colleagues.

In 1836 he was elected President of the Harveian Society and the Westminster Medical Society. At the meetings of the latter society he frequently heard James Johnson, the editor of the popular 'Medico-Chirurgical Review', speak, and also Thomas Addison, of whom he relates that he was equally successful as lecturer, speaker, clinical teacher and hospital physician. Williams, nevertheless, gave it as his opinion that a certain shyness in his manner prevented him from attaining the position for which his many talents qualified him. His own comprehensive lectures on diseases of the chest were published in the London Medical Gazette in 1838.

390 TUBERCLE

They were very well received, but except for fifty copies struck off for presentation, they were not published separately. The octavo pamphlet of over two-hundred double-columned pages of small type, illustrated with wood engravings of Williams's drawings, is quite scarce. In response to many requests that he should publish them in book form, Williams did intend to do so, after revision, but pressure of work prevented him from ever completing it. Subsequently parts of the lectures appeared in volume three of Alexander Tweedie's 'Library of Medicine' (1840), and parts in the fourth edition of his 'Rational Exposition, etc' (1840). An incident which illustrates the diversity of Williams' interest belongs to this period. The hansom cab had just been introduced to the London streets, and Williams, after a careful study of the principles involved in its construction, concluded that certain re-arrangements in its centre of gravity would result in improvement to its stability. Friends suggested that he should take out a patent, but as he says 'I was soon reminded by calls to weightier matters, that good and useful as this diversion was in its way, it was not my line of business...

Professor of Medicine

In 1838 John Elliotson saw fit to resign his position as Professor of Medicine at University College. This was due to the Council's having prohibited him from practising mesmerism in the wards of the Hospital. Williams applied for the post, and at the age of thirty-four was appointed Professor of the Principles and Practice of Medicine, Professor of Clinical Medicine, and First Physician to the Hospital. University College was at this time the largest medical school in England. It seems that Williams was faced with a somewhat delicate situation, as many of the students regretted Elliotson's departure, and there had been noisy scenes when the learned James Copland, author of the 'Dictionary of Practical Medicine' (1834-59) had consented to finish the course started by Elliotson. When the new course was due to begin, it was decided that Williams should give the introductory lecture. Williams reports-'I chose for my subject, The Scientific Foundations and Noble Objects of Medicine. I delivered this address before a crowded audience, who received me in a most friendly manner, and encouraged me by unhesitating applause. One passage was especially cheered by a group of students. It was a quotation from the writings 'of one who formerly occupied this chair.' My young friends thought this must be their favourite: it was really Dr. Conolly, his predecessor. But all passed off peaceably, and my 'first appearance' was pronounced 'a success'.

In the summer of 1840 he was nominated for the Fellowship of the Royal College of Physicians, an honour which he only accepted after some hesitation, as he disapproved of the way some of the College's bye-laws were administered. All his life Williams was to remain a stern critic of certain aspects of the College's administration, although as will be seen, it never prevented him from being offered or accepting

some of its highest honours.

By 1840 he was comfortably settled in his academic duties at University College. He came to the conclusion that there was a great need for a textbook covering the 'principles of medicine, or general pathology and therapeutics'. He decided to write one himself, and his 'Principles of Medicine: Comprising General Pathology & Therapeutics, and a brief general review of Etiology, Nosology, Semeiology, Diagnosis, and Prognosis',

London, 1843, 390pp (John Churchill) was the result.

Williams took a prominent part in the foundation of the Brompton Hospital in 1841, and was in fact one of the first physicians consulted by Sir Philip Rose. He was present at the earliest meetings, held at Rose's house in Hans Place, and was responsible for interesting other medical men in the project. Later he and Sir John Forbes were appointed the first Consulting Physicians. About this time he had a house at Brighton for several months of the year, and spent his weekends there. He

had some strong views on the railway travel of the time and its effects on everyday passengers—'In my weekly return of Monday morning, I used to watch many of these up and down travellers; and by the end of the season, I could see their hair whitened, and their faces more wrinkled . . in those days the Brighton line was notoriousness for its noise and unsteadiness'. He published some notes in the Lancet on the effect of railway travel on health and disease.

The Pathological Society of London was founded in 1846, and Williams felt greatly honoured in being elected its first President. He recalls that the most active members in the formation and early success of the Society were Edward Bentley,

Thomas Bevill Peacock, and Richard Quain.

In 1847 the death took place of Robert Liston, the famous surgeon of University College, where he had in 1846 performed the first major operation under ether anæsthesia in Britain, and Williams, who had attended him, became involved with Sir Thomas Watson in some public and private correspondence concerning the management of Liston's fatal illness. However, all ended well, with an exchange of polite dignified letters.

By 1848 his health was giving him some cause for concern. He suffered much from severe toothache with abscesses of the jaw, and also painful boils. His annual income now amounted to about £3,600, and after several moves he was installed at a house in St. John's Wood. He delivered his last course of lectures at University College in the winter of 1848-49, and for the first time in ten years he hoped for leisure to enjoy some social life. But Williams tells us that he found that engrained habits of

work could not easily be relinquished.

In January 1849 the first number of the London Journal of Medicine carried his paper 'On the Use and Administration of Cod-Liver Oil in Pulmonary Consumption'. The English cod-liver oil used in medicine at that time was so impure and nasty tasting, that patients were with difficulty persuaded to take it; but by 1846 chemists were producing a more palatable oil, and Williams was able to report his experiences with it over three years. He writes—'I have prescribed the oil in above 400 cases of tuberculous disease of the lungs in different stages, which have been under my care in private practice, and of 234 of these I have notes. Out of this number the oil disagreed, and was discontinued, in only nine instances. In nineteen, it appeared to do no good; while in the large proportion of 206 out of 234, its use was followed by marked and unequivocal improvement . . .' In 1851 he, like many of his fellow-countrymen, visited the Great Exhibition in Hyde Park. His impressions were 'that while Britain asserted her superiority in everything relating to mechanics and engineering, her inferiority and poverty in all objects of taste and decorative art was quite humiliating'.

On September the 14th, 1852, Williams received the following telegram—'Dr. C. J. B. Williams, late of 7 Holles St, is requested to come to Walmer Castle immediately'. He had never attended the Duke of Wellington, and did not even know of his illness. On the train he heard rumours of his death, and on arrival at Walmer Castle these were confirmed by Lord Charles Wellesley. Williams received an invitation to the funeral in St. Paul's, and had an excellent view of the proceedings. He wrote 'I could not but be grateful and proud of the privilege of taking part in such an event; but not without a humiliating thought of how little I merited the honour'.

PROSPEROUS CONSULTANT

He had now a house in Upper Brook Street, and devoted most of his time to private practice. His 'Principles of Medicine' continued to be a great success, and a letter from John Churchill the publisher lamented that he had received an order from India for twenty-five copies, and had only been able to send eleven. Williams therefore began work on a third edition, in which he had some assistance. He also wished

392 TUBERCLE

to publish a work on diseases of the chest, as he had accumulated a large amount of material; but felt the need of a collaborator. The help of Richard Quain was enlisted, but it appears that he failed to produce any contributions. Unfortunately Williams, doubtless discouraged by Quain's lack of enthusiasm, also ceased work on the project. The comprehensive work on chest diseases he was so eminently qualified to write, never in fact appeared. His practice at this time occupied some ten to fourteen hours a day, and his income varied from four to seven thousand a year. But far, so Williams tells us, from being a rich man, a large family, five of which were boys, and some bad investments, had rendered him comfortably off, rather than affilient.

In 1858 the New Sydenham Society was formed, and Williams was invited by Sir Jonathan Hutchinson and others to become the first President. This important society, intended to carry on where the Old Sydenham Society had left off with the reprinting of important out of print medical works, and the printing of translations of modern German texts, which by now had become of increasing importance. By 1883 the New Sydenham Society had issued its 108th volume, and had a membership of about three thousand.

He delivered the 1862 Lumleian Lectures at the Royal College of Physicians, his subject being 'Sketches of Success and Failure in Medicine'. These remained unpublished until 1871, when they appeared in an expanded form in the Medical Times and Gazette. The reason for the long delay was ill health, and it was this that induced Williams to decline the Senior Censorship of the College, and the office of Harveian Orator. In 1867, when Dr. Murchison and others sought to propose him for Presidency, he stated that due to his state of health he could take no active part in the matter, but if elected would accept the honour together with its commitments. In the end Sir James Alderson was re-elected. He also declined a proposal that he should be nominated for one of the university seats in Parliament. In connection with medical politics, Williams refers to Thomas Wakley, who in his later years was a popular Member of Parliament and coroner. Of Wakley and the Lancet, Williams writes-'that when he first came to London, to be suspected of connection with the Lancet, was to be tabooed by societies and bodies; and woe to the student going in for examinations, if he were supposed to have supplied it with reports.' At St. George's, Williams says he was in the anti-Lancet camp, and he read the 'London Medical Gazette', which was started and edited by Roderick Macleod of St. George's in 1827, reputedly in opposition to the Lancet. Later Wakley's sons were Williams's pupils at University College, and Williams says that although Wakley made many enemies in his early days, 'they were mostly pacified, and many converted into friends, in his later years, when the beneficial fruits of his efforts became apparent'.

He seems to have had few personal dealings with Wakley until he attended him as a patient in 1861. Two other famous patients of Williams' were John Stuart Mill and Lord Lytton. The former gave him the following impression—'For a man so noted in his writing for profundity of thought and grasp of intellect, his usual conversation was remarkable for its plainness and simplicity'. He was, however, 'a confiding, comformable patient'. Lord Lytton, whose complaints included asthma, received Williams at his Park Lane house, wearing an oriental dressing-gown and fez, half reclining on an ottoman, smoking a pipe. Williams reports that he found it difficult to 'get at the simple truth'. Lytton had apparently studied all systems of medicine, legitimate and illegitimate, and was influenced by 'German scepticism and oriental credulity'. Williams, apart from trying to persuade Lytton to substitute stramonium, belladonna, or Indian hemp for his beloved tobacco, could do little to help him. In 1866 a certain Dr. Robert Hunter brought an action for libel against the Pall Mall Gazette. Hunter had stated in a pamphlet that he had detected the nature of consumption: in brief—defective respiration, and also the cure—inhalations

of oxygen. Details of his treatment were at best semi-secret, and he charged a guinea for the first consultation and £5 a month afterwards for the treatment. A writer in the Pall Mall Gazette (un-named and apparently a layman) shocked at this extortion and the accompanying efforts to discredit medicine and medical men in general, condemned Hunter and warned the public against him in strong terms. Hunter felt obliged to bring an action against the publishers of the journal, who felt equally obliged to defend the action, pleading that the alleged libel was true. Williams, together with other London physicians was a witness for the defence. The jury after two hours of deliberation found a verdict for the plaintiff, and awarded damages of one farthing. Williams gives a detailed account of the case, and concluded that although Hunter won the verdict, the lowest possible amount of damages awarded reflected the opinion of the law, and that the Pall Mall Gazette had done a public service.

Three years later Williams was more personally involved in a libel case. He was consulted by the Earl St. Maur, only son of the Duke of Somerset, in September 1869. In Williams' subsequent opinion his patient was suffering from an aortic aneurysm, although a necropsy was never permitted. When the Earl died, his mother, the Duchess, printed for private circulation an account of her son's illness, with reflections on Williams' conduct of the case. Williams brought an action, and the Duchess later completely withdrew all charges. He was greatly supported at this difficult time by nine of the most eminent physicians and surgeons of the day. Sir Thomas Watson; Sir George Burrows, Sir William Jenner; Sir William Gull; Sir Richard Quain; Francis Sibson; Sir William Fergusson; Sir James Paget; and Sir John Erichsen, issued a statement in which they supported his handling of the case.

In 1871 appeared his work on consumption entitled—'Pulmonary Consumption: Its Natural Varieties, and Treatment, with an Analysis of One Thousand Cases to Exemplify its Duration', London, 1871. In this work he had the collaboration of his son, Charles Theodore Williams, who had qualified in 1864. Of the book's thirty chapters, twentyfour were written by the senior Williams and the remainder by his son. The book was very favourably received in the medical and lay press. His experience in chest diseases was probably unrivalled, extending over forty years. For thirty years he kept notes of consumptive patients under his care, and these amounted to about 25,600 case-histories. Charles Theodore's contributions, on his particular subject, the climatic treatment of consumption, were also well received. In 1887, the latter published a second enlarged and re-written second edition of the book, the discovery of the tubercle bacillus having necessitated it being completely revised. The younger Williams (1838-1912) was the author of several works on climatic treatment, and was on the staff of the Brompton Hospital from 1867-94. He took a prominent part in the foundation of the National Association for the Prevention of Tuberculosis (now the Chest and Heart Association), and also in the building of the King Edward VII Sanatorium at Midhurst.

After the publication of the first edition of the book on consumption, Williams set off on a tour of East Germany and Austria. Visiting Vienna he was disappointed to miss seeing Rokitansky and Skoda. He had a great respect for Rokitansky, and wrote of him—'Our views in pathology were much alike and although I had the advantage in point of priority, his long and extended devotion to the subject had rendered him a more complete master of the situation'. With Skoda he says—'I had a little controversy of several years standing, and I greatly regretted having missed him when he called on me in London, as well as on the present occasion. I flatter myself that with a few simple acoustic experiments, we should have come to a better understanding about tubular sounds, and what he calls "consonance".

He was always interested in the various medical societies which were starting up in his day, and he gave his early support to the Clinical Society of London which had been proposed by Edward Headlam Greenhow in 1867. In its first year a hundred

394 TUBERGLE

members were enrolled, many of whom, like Williams, were also members of the Pathological Society. The first President was Sir Thomas Watson, and Williams was later made a Vice-President. In 1873 he was elected President of the Medical and Chirurgical Society, and although he feared that his increasing deafness would make the discharge of this office difficult, he relates that with the aid of the secretaries he was able to fulfil his duties. He attended the meeting of the British Association for the Advancement of Science in Belfast in 1874; and in the train between Dublin and Belfast, he read in an Irish newspaper that he had been appointed Physician Extra-ordinary to the Queen. While in Ireland he made several excursions, and visited Sir William Wilde, the famous otologist and father of Oscar Wilde. He also visited the great William Stokes whom he had first met nearly forty years previously. The two men, who had been among the early British pioneers of the use of the stethoscope, must have had much to talk about.

RETIREMENT

Soon after this he retired from professional work, after forty-five years of London practice, and fifty years as a doctor. London had naturally greatly changed since Williams first visited it. He wrote that the 'grey-paired brougham with striped-grass wheels was no longer to be seen in the London streets'. The population had multiplied fourfold in his lifetime, and he says 'the smoke and fog of London during more than half the year told on me, and quite determined me not to pass another winter in it'. He decided to spend his retirement on the Riviera, and as was to be expected of one who had made a special study of climatology, he occupied successive villas in the northern, western, and eastern part of Cannes, before deciding on the last.

Here Williams spent nine months of every year remaining to him; the other three were spent in England or in Switzerland. He rested from his long labours, although he still took an interest in several subjects; for instance, he engaged in a controversy with Dr. Arthur Leared on the heart sounds, and wrote to the British Medical Journal in an effort to improve the drainage of Cannes, which had caused an outbreak of typhoid. He also made daily meteorological observations, and 'brought out my old telescope of "sixty years since",... and took an occasional look at the heavenly bodies'. His illustrated accounts of a comet and the transit of Venus were published in several numbers of 'Nature' in 1882. In February 1883 he received from Richard Quain a copy of his 'Dictionary of Medicine', and in his letter of acknowledgement wrote -... but I must confess to a predominant feeling of painful surprise, on glancing through several subjects with which my name has been identified during the last fifty years, at not finding it mentioned', and further on — 'But aged as I am, I see that I must rely on my own efforts, if God spares me, to leave behind me some record of my humble efforts to fulfil my mission. Meantime I remain, dear Quain, Your shelved old Friend, C. J. B. Williams'.

This incident is mentioned, as Williams tells us it was the causative factor in the writing of his memoirs. Quain sent a conciliatory reply, in which he spoke of Williams as the principal founder of the modern school of pathology, and stated that '... your work has always seemed to me so important and so complete—constituting a large part of the modern history of Pathology and Physical Diagnosis, that I should as little have expected a reproach from you for not mentioning your name in connection with those subjects as from the shade of Harvey for not mentioning his name in connection with disorders of the circulation, or of Laennec because no reference is made to his name in connection of the stethoscope and auscultation'. At the same time Williams was reminded that Quain had invited him to write the articles on pathology and physical diagnosis.

In April 1882 Koch's first paper on the Tubercle Bacillus appeared in the Berliner Klinische Wochenschrift. Williams's son, Charles Theodore, was one of the first

REVIEW 395

British physicians to study the bacillus. His father wrote—'My son has shown them to me in many specimens, verily, they seem the tiniest linear trifles, to have such mighty effects. Nevertheless, search them out, and give them no quarter, till their antidote or bacillicide be discovered.'

When he died at Cannes on the 24th of March, 1889, Williams had outlived most of the men who had been his fellow-pupils at Edinburgh and Paris. There cannot have been many students of Laennec who lived to see the discovery of the tubercle bacillus.

I am indebted to Mr. Alan Curd of the Photographic Department of the Institute for supplying the photographs of the two portraits.

The Library,
Institute of Diseases of the Chest,
London, S.W.3

P. JAMES BISHOP.

Correction

والأناسية والمهم فعال الحاديث المديلات بتناهي الحاجيبية والمتهدية والمارية والمارية والمراجي وتهديم

From the list of members of the Research Committee of The British Tuberculosis Association published in the August number the following names were omitted:

Dr. C. Darke

Dr. K. Citron

Dr. J. Dawson

Dr. G. P. Maher-Loughnan

Dr. C. H. C. Toussaint.

The Editor regrets the error and apologiscs to the doctors concerned.

REVIEW

Infectious Diseases of Animals. Diseases due to Bacteria. Vols. I and II.

Edited by A. W. STABLEFORTH AND I. A. GALLOWAY. Butterworths Scientific Publications, London, 1959. Pp. 810. £8.

This very well produced work is a notable addition to veterinary text books. Volumes on viral, rickettsial and protozoal diseases are expected to follow. Each disease covered is dealt with in a specialist article. It was the editors' stated intention to provide a critical, adequately referenced book, primarily for post-graduate students in the veterinary field, human medicine and public health; and in this they have been very successful.

Tuberculosis is impressively covered (61 pages + 6 of references) in three articles by different authors; but inevitably, perhaps, a certain amount of overlapping occurs in places. More than half of the first article on bacteriology—by A. B. Paterson—is devoted to a discussion of tuberculin, and the evolution and assay of the PPD tuberculins produced at the Weybridge laboratory of the Ministry of Agriculture, Fisheries and Food. In mid-1958 however, Northern Ireland adopted, for official use, the single intradermal comparative test in place of the one referred to on p. 682. The second article 'Epidemiology and Pathology', by J. T. Stamp, discusses routes of infection and the pathology of the disease in cattle, making comparison with aspects of the disease in man and the relationship of bovine and human tuberculosis. The pathology in other domestic species is more briefly discussed. Surprisingly perhaps, the author does not mention that the avian strain does at times produce extensive lesions in

cattle.