

SIR VICTOR HORSLEY*

by

J. B. LYONS

MANY years ago G. K. Chesterton called the English 'the eccentrics of the earth' because of their unawareness of the 'very existence of some of their most extraordinary claims to glory and distinction'. He referred to a neglect of Chaucer the Father of English Poetry but today, with science in the ascendant, his stricture may be applied to the medical profession for allowing obscurity to threaten the memory of the Father of Neurosurgery whose boon to mankind is more universally applicable than any gift of letters, but whose splendid achievements, and no less splendid aspirations for the betterment of his countrymen, appear to have shrunk in the general mind to a single eponym, 'Horsley's wax'.

How fitting, therefore, that the Osler Club of London, a bastion against neglect, should have held this commemorative meeting! Fifty years have elapsed since Sir Victor Horsley's death on active service in Mesopotamia. A reappraisal of his career is overdue. The venue—the National Hospital which he graced with such distinction—could not have been more appropriate.

Victor Horsley was born at 2 Tor Villas, Campden Hill, Kensington on Tuesday 14 April 1857. He was the son of John Calcott Horsley, an artist, but his earliest known ancestor was a medical practitioner. This man who practised successfully in Carlisle early in the eighteenth century deserted his family at the height of his career. His wife with her two sons followed him to London but he was not seen again. One of the boys became a cabinet maker. His son, William, Victor Horsley's grandfather, was born in Swallow Street, Golden Square, in 1774.

In boyhood William Horsley assisted his father in the manufacture of pianoforte keys and in this unorthodox way embarked on a musical career. He succeeded John Wall Calcott as Organist to the Asylum for Female Orphans in Westminster Bridge Road. Later he married Calcott's eldest daughter. By 1823 when they moved to 1 High Row, Kensington Gravel Pits, they had five children, Mary who married Isambard Kingdom Brunel, John an art student at Sass's Academy, Fanny, Sophy, and Charles Edward who followed his father's bent and was at one period Mendelssohn's pupil.

Fanny and Sophy Horsley were amusing, talented girls. A collection of their letters¹, entitled *Mendelssohn and his Friends in Kensington* has been published and gives a vivid picture of their home. It was a household where, after God, music held a supreme place, and after music, books, languages, and ideas.

To an aunt Sophy wrote:

Miss Skerret and I had a most delightful conversation about books, languages, German, Götze von Berlicken etc. which I enjoyed very much. Today . . . I have been reading Robertson's *History of America*, practising, writing harmony, playing Fidelio, reading German and Italian, and have had a very nice German lesson and later a still nicer supper off peas and bacon . . .

* Guest-speaker's paper at a Horsley Commemorative Meeting held by the Osler Club of London at the National Hospital, Queen Square, on 10 November 1966.

In 1854 John Calcott Horsley married Rosamund, daughter of Dr. Charles Haden author of *Practical Observations on the Management and Diseases of Children*. When their third child was born, on the same day as Princess Beatrice, their friend Miss Skerret, who had an important position at Court, mentioned the coincidence to Queen Victoria. Her Majesty graciously requested that the boy be given her own names. Following a family custom the maternal surname was added—the infant was christened Victor Alexander Haden Horsley.

Though by birth a Londoner, Victor Horsley was by upbringing a Man of Kent. His early years were spent at Cranbrook where his father had purchased Willesley, a charming house which today is a country-club. On the plaster ceiling of the dining-room the embossed initials of the former master and mistress of Willesley may still be seen. And on a rear gable one can still read Victor's parents' inscription: 'Except the Lord build the house their labour is but lost who build it'.

His life was almost cut short by the action of a vindictive nurse who threw him on to a heap of stones. Fortunately he survived this malevolent act without apparent ill-effect but a depressed area remained on his skull and during a later phase when he indulged in self-experiment he discovered that the bone was thinned and that he could make it spring in and out. He observed that firm pressure on the centre of the area caused a neuralgic pain in his teeth which ceased immediately the pressure was removed.

It has been said that 'everybody's youth is a dream, a form of chemical madness'; the dancing molecules in Victor's bloodstream drove him in those early days notoriously to mischief. He was for ever in a scrape. One morning his father admonished him at the breakfast-table for his latest prank. He listened for a while and then said, 'All right, I'll try to remember, but I must be off to school now'. As he jumped up he caught his foot in the table-cloth and dragged the breakfast things to the floor.

He was a good-looking boy, bright, alert, unassertive and very happy. Long-limbed and prodigiously active he stood very straight and walked very fast. He had blue eyes with a slight outward cast and talked with a hint of a lisp. Left-handed, he was trained early to be ambidexterous.

After attending Cranbrook Grammar School where his reports were never better than 'very good' he matriculated at London University in 1874. He wished to become a cavalry officer but accepted instead his father's suggestion that he should study medicine. One of his first mentors in the natural sciences was a local general practitioner, Dr. Thomas Joyce of Shepherd's House, Cranbrook.

The Horsleys returned to London in 1875 and lived at 1 High Row, Kensington Gravel Pits (now 128, Church Street, Kensington). Walter, the eldest boy, was an art-student despite colour-blindness, a defect from which Victor and Gerald, the youngest son, also suffered.

Victor took the preliminary science examination in the summer of 1875 and in October he entered the medical school at University College. The pre-clinical teachers who exerted a formative influence on him were John Burdon Sanderson and Edward Schafer. Burdon Sanderson who had recently succeeded William Sharpey in the chair of physiology made the work as experimental as possible and Schafer said later,²

Sir Victor Horsley

'There can be no possible doubt it was this training in experimental physiology which determined Horsley's future career, both as a physiologist and as a scientific surgeon'.

His teachers at University College Hospital included F. J. Roberts, Sydney Ringer, Christopher Heath, John Marshall, Henry Charlton Bastian, William Gowers, and Marcus Beck. Roberts had brought his technique of bedside examination to such a degree of perfection that he could detect fluid in a chest by simply running his fingers down the chest wall and sensing changes in the resistance beneath his finger-tips—he rather despised technical advances speaking disdainfully of 'microscopes and spectroscopes and all the other scopes people use nowadays'. Ringer had a courtly eighteenth-century air and preferred the old wooden stethoscope to the binaural type. A large experience had made him cautious and he would say, 'You young men like to be right; we old men don't like to be wrong'. Heath, a courageous operator, attributed a high death-rate to London fogs. He regarded Lister's ideas as new-fangled, whereas Beck was their apostle.

Horsley was surgical dresser to John Marshall and clinical clerk to Bastian who may have been the first to interest him in the nervous system, and in collaboration with whom he wrote, while still a student, his first scientific publication. Gowers, too, must have been a vital influence and Horsley carried out anatomical studies which the former used in his *Diagnosis of Diseases of the Spinal Cord*.

Victor Horsley took the M.R.C.S. in November 1880; in the following year at the university 'finals' he was awarded the gold medal in surgery. Meanwhile he had spent a six month period as house-surgeon at University College Hospital devoting much of his spare time to research acting as his own guinea-pig.

In August 1881 an International Medical Congress was held in London and I digress to mention briefly some of the problems of the day. Klebs discussed the relationship of minute organisms to certain specific diseases, for bacteriology still rested on the shifting-sands of medical opinion; Goltz and Ferrier vigorously disputed the function of the cerebral cortex; Michael Foster, supporting Virchow's denunciation of the anti-vivisectionists, declared, 'We sigh in our bondage, like the Israelites of old; we are asked to make bricks when they have taken away our straw'. Sir John Erichsen, Consulting Surgeon to University College Hospital, delivered the Address in Surgery and with what he imagined to be sagacity remarked, 'There must, indeed, be a limit to the progress of operative surgery . . . There cannot always be new fields for conquest by the knife, there must be portions of the human frame that will ever remain secret from its intrusion'. How astonished Sir John would have been had he known that within a few years his words would look foolish! And how it would have delighted him that chief among the pioneers were to be two surgeons from his own hospital, Rickman Godlee and Victor Horsley! But the latter's gifts were not narrowly deployed—he contributed to bacteriology, to cortical localization, and was engaged for years in a vendetta with the anti-vivisectionists.

After a post-graduate year in Germany Horsley returned to London and was appointed surgical registrar to University College Hospital. At this time Victor shared rooms at 101 Charlotte Street, Fitzroy Square, with C. J. Bond who found his gay spirits and good humour stimulating.

J. B. Lyons

As an example of his energy and enthusiasm [Bond^s wrote in *Recollections of Student Life and Later Days*] I recall one occasion when, after working in the wards all day, Horsley suggested that we should spend the night in operating on the dead body in the old post-mortem room. This we did and he resumed work in the wards on the following day. This particular experience was very useful to me in view of the approaching F.R.C.S. examination.

Advancement was not delayed. Two years later he became Assistant Surgeon to University College Hospital and in 1886 he was elected to the Staff of the National Hospital, Queen Square. Meanwhile this versatile young man had been appointed Assistant Professor of Pathology at University College and Superintendent of the Brown Institution, the latter appointment forming a corner-stone of his career in neuro-surgery.

The Brown Animal Sanatory Institution, 149 Wandsworth Road, London which was destroyed by bombs in 1944 was founded through the beneficence of a Mr. Thomas Brown of Rosy Park, Kill-of-the-Grange, Co. Dublin, who at his death in 1852 donated an amount exceeding £20,000 to the University of London to found an Institution either in London or Dublin for research into maladies of quadrupeds and birds useful to man. Brown decreed that if his wishes were not effected within nineteen years the legacy should revert to the University of Dublin to found professorships in three or more of the following languages, Welsh, Slavonic, Russian, Persian, Chinese, Coptic, and Sanskrit.

Legal difficulties led to delay and a dispute between the Universities ensued. The *Lancet* referred to the affair in 1867:

A suggestion has been made that the Universities of London and Dublin should compromise in the matter of the Brown Trust and end a dispute which may possibly lead to serious diminution of the money value of the bequest and afford a harvest for the lawyers without any compensatory benefit for the public.

The Brown Institution was eventually opened in 1871. When Burdon Sanderson, its first Superintendent, resigned in 1877 it was expected that Klein, his unpaid Assistant, would succeed him but to the surprise of many Greenfield of St. Thomas's was appointed. It appears that some ill-advised utterance of Klein's had made the Senate unwilling to entrust the senior post to him. The decision caused ill-feeling and the *British Medical Journal* commenting rather more freely than it would do in similar circumstances today stated, 'Of course Dr. Klein will not continue office . . . Dr. Greenfield is a good pathologist and an able physician, but he cannot and does not pretend to stand within several grades of the aptitude, knowledge, and eminent achievement in research of Dr. Klein . . . With Sanderson gone and Klein requited with insult for his splendid services to science and humanity, and with a hospital physician in search of patients and practice installed at the head of the Institution, *more Brittanico*, it will be little short of a miracle if it does not sink into relative insignificance'.

These gloomy forebodings came to nothing. The tradition of scientific excellence imposed by Burdon Sanderson was maintained by his successors but troubles of another nature were growing. In the introductory speech to the annual Brown Institution Lecture in 1879 the Chairman inveighed against the anti-vivisectionists.

Charles Smart Roy was Greenfield's successor, He investigated pleuro-pneumonia

Sir Victor Horsley

in cattle and made physiological studies on the heart-beat. His appointment to a chair of pathology at Cambridge created the vacancy which was filled by Horsley who took up his appointment on 1 September 1883.

Horsley's research subjects at Wandsworth Road included canine chorea, healing by first intention, cortical localization, the pathological changes following thyroid ablation, and Pasteur's anti-rabies vaccine. He became F.R.S. in 1886. He resigned the Superintendentship in 1891 and was succeeded by Charles Scott Sherrington.

The development of anaesthesia, antiseptics, and cerebral localization were necessary preludes to modern neurosurgery; the virtuosi who ushered in the speciality were William Macewan of Glasgow, F. Durante of Rome, and Rickman Godlee of London, who performed their respective operations in July 1879, May 1884, and November 1884. Godlee's operation at the Hospital for Epilepsy and Paralysis, Regent's Park, the first removal of a cerebral glioma, attracted greater attention than did Macewan's operations, although by 1884 the Scotsman had performed six successful intra-cranial operations.

If the priority for demonstrating the feasibility of brain surgery belongs to Macewan rather than to Godlee how, then, can it be claimed that Victor Horsley was the first modern neuro-surgeon? His right to the distinction rests on the constancy of his devotion to experimental physiology and his unremitting research into the fundamental principles, apart altogether from the techniques, underlying the new craft. Charles H. Frazier, elaborating this point, wrote: 'If we were to outline a course in preparation for the practice of surgical neurology we could not do better than to use Horsley's life and activities as the prototype'.

On 25 May 1886, watched by Ferrier and Hughlings Jackson, Horsley performed his first operation at the National Hospital on a case of traumatic epilepsy. It was deemed a success. By the end of his first year at Queen Square he had done eleven intra-cranial operations with only one death.

In 1887 he performed on a wealthy businessman what Osler referred to as 'the most brilliant operation in the whole history of surgery', and in respect of which we may borrow the more penetrating phrase which Wilfred Trotter⁴ spoke of Godlee's operation, calling it 'a victory of the human spirit over chaos'.

His forty-two year old patient, Captain Gilbey, had experienced an Odyssey of suffering. His tribulations commenced in 1884 when his wife was fatally injured in a carriage accident. Gilbey had on that occasion wrenched his back but otherwise escaped personal harm. Subsequently he attributed a backache to the accident and when it continued to bother him he visited his doctor and was told that there was nothing much amiss. During the next two years business affairs took him to China, France, and Constantinople, where doctors ascribed his symptoms variously to intercostal neuralgia, aneurysm, and neurosis. His legs became numb and paralysed but his consequent emotional distress attracted disproportionate attention. When the waters at Aix-la-Chapelle proved unavailing, a course of Weir Mitchell treatment was mooted but through the fortunate intervention of a family connection Gowers was consulted. His diagnosis of spinal tumour ordinarily amounted to a death sentence. On this occasion, however, the diagnostician was determined to challenge fate and advised surgical treatment but insisted that his radical suggestion be submitted to a second

opinion. A consultation was arranged with Sir William Jenner, Gowers' former teacher, who concurred in the diagnosis and sanctioned the unprecedented therapy adding an unencouraging rider—'provided the patient clearly understood that a perfectly successful result was no more than a possibility'.

Horsley operated at the National Hospital on 9 June 1887 but when he exposed the cord it appeared perfectly normal. He palpated it and probed with a curved needle around its anterior surface but he could not detect a tumour. He removed another lamina at either end of the wound without discovering causative pathology.

In his account of the case in the *Medico-Chirurgical Transactions* Horsley⁵ remarked, 'At this juncture it appeared as if sufficient had been done . . .' words which conceal the dismay he must have experienced and which the onlookers in the theatre must have shared. Was Gowers' diagnosis incorrect? Was the intrepid operation ill-advised? Horsley may be pardoned if he wavered at that moment.

'At this juncture it appeared as if sufficient had been done, but I was very unwilling to leave the matter undecided, and my friend Mr. Ballance being strongly of the opinion that further exposure of the cord was indicated I determined to explore further if the state of the patient warranted me in so doing'. He eventually located and removed an almond-shaped tumour (histologically a fibro-myxoma) at the level of the third and fourth dorsal roots on the left side.

On the fifth post-operative day Gilbey noticed some return of sensation and on the thirteenth day he moved his right thigh. By November 1887 he was walking with the aid of a stick and early in the following January he could walk several miles.

Horsley's contributions to neurosurgery included the use of wax, muscle, and deep anaesthesia to control haemorrhage, the invention of a number of instruments and a head-holding device; he was the first to attempt to remove a pinealoma, to expose the pituitary gland, and to perform root section for trigeminal neuralgia. More important, perhaps, was the general effect of his enthusiasm and optimism and his insistence, year in year out, that intra-cranial expanding lesions must be treated surgically. In 1895 he stated:

Six years ago I made a suggestion that all cases of Jacksonian epilepsy should be explored . . . after six weeks of unsuccessful treatment with drugs. The only notice of the suggestion has been the adoption in principle by Dr. Allen Starr in his very valuable work on cerebral tumours.

And at the British Medical Association meeting in Toronto in 1906 he said:

. . . so long as our powers of diagnosis remain as they are so long will the vulgar error of regarding surgical treatment as a *dernier ressort* be committed. The question, namely, when should medicinal treatment be given up and operative treatment substituted?—has been raised in connection with many diseases, notably appendicitis. Even in the present year I have been asked to operate on a patient with a lateral tumour of the cerebellum who has been known to have optic neuritis for nine years.

His contributions to the basic medical sciences were astonishingly diverse. He commenced his studies of cortical function with Edward Schafer at University College and continued them at the Brown Institution with Charles Beevor and at Oxford with his brother-in-law F. J. Gotch with whom he delivered the Croonian Lecture for 1891. He worked with Rickman Godlee on thyroid ablation in Schafer's

Sir Victor Horsley

laboratory and later carried on this investigation independently at the Brown Institution. He studied the faculty of orientation in space, the function of cranial nerves, the changes in respiratory and circulatory function which result from raised intracranial pressure. He was the first to perform extirpation experiments on the pituitary gland. He carried out a long series of experiments in collaboration with Felix Semon to elucidate laryngeal innervation. He investigated cerebellar structure and function with Max Lowenthal and with R. H. Clarke, who in the course of their work invented the prototype of present-day stereotaxic instruments. He studied the cervical spinobulbar and spino-cerebellar tracts with A. S. MacNalty, who today is probably the sole survivor of Horsley's co-workers.

As an illustration of the range of his scientific curiosity it is worth recalling that with C. J. Bond he studied the salivary-glands of woodpeckers and that he and R. H. Clarke, who frequently visited the London Zoo together, made observations on normal conjugate movements in the divergent eyes of ducks and armadillos.

It is surprising to learn that Sir Edward Sharpey-Schafer expressed an adverse opinion of Horsley's scientific work in a letter to Stephen Paget:

I am afraid you will be rather horrified to hear that I think poorly of it. In science he was an amateur—which is by no means against him: but he was an amateur *not* of the Darwin type. For he was always too desirous of getting results quickly and he was too apt to get the results he expected.

Sharpey-Schafer had quarrelled bitterly with Horsley. It is unlikely that he allowed this to influence his judgement but he was too close to Horsley to realize the seminal effect of such an 'amateur' on younger clinical scientists. Sir Walter Langdon Brown spoke of him as an intellectual hormone; Sir Thomas Lewis stated that when he was a student Horsley's reputation attracted him to University College Hospital and it was in Horsley's laboratory at University College that Lewis found encouragement to pursue his own investigational work; George Crile⁶ of Cleveland regarded an opportunity to work in Horsley's laboratory as 'one of the good fortunes of my life'. His great professional success and his insistence on the necessity for the advancement of medical science by experimental means caused the powerful anti-vivisectionist groups to regard Horsley with particular disapprobation.

His denunciation of *Nine Circles*, a book by Miss Frances Cobbe founder of the National Anti-vivisection Society as 'one of the rankest impostures that has for many years defaced English literature', led to an acrimonious correspondence in *The Times* which continued until *Punch* poked fun at both parties.

His most implacable foe was the Hon. Stephen Coleridge, Honorary Secretary of the National Anti-vivisection Society, who did not confine his criticism of Horsley to his role of physiologist but implied that there was an element of cruelty in his surgical practices.

Coleridge circulated a German surgical-instrument-maker's catalogue and followed this dubious propaganda by suggesting that Horsley's operating methods were not followed 'by the best and the most humane of our surgeons', and that he was 'somewhat singular in using on his patients head-holders made of the strongest material and gags with steel bars passed through the mouth behind the teeth, which are clenched upon it immovably with steel chains'.

This distortion of the truth was repudiated by a correspondent in *The Times* who wrote:

I am one of Mr. Victor Horsley's patients. He has operated on me twice—on the last occasion in the mouth . . . I felt no pain whatever either during or after either operation. In the second operation I lay on an uncanny looking table and Mr. Horsley left behind him a pailful of iron-mongery, which I am sure would have made Mr. Coleridge's clients shudder had he reproduced it for them from his German catalogue. It was all, I have no doubt, of the strongest make and of the best materials. What Mr. Horsley may or may not have put into my mouth, after the insertion of the initial 'gag' to prevent me from choking during the anaesthetic, I do not know and do not care. But I hope that if ever again I have to undergo the knife Mr. Horsley may hold it; for then I shall feel assured that I shall meet with all the care that science and skill can inspire and with all the gentleness and consideration that comes from a most kindly and straightforward nature.

Present-day physiologists, fortunate in their relative freedom to pursue research without the hindrances of Horsley's day, may forget that the pioneers faced opposition which was unremitting, unscrupulous, and sometimes bizarre.

There was at that time a Society of United Prayer for the Prevention of Cruelty to Animals, but this was surpassed in solicitude for the welfare of the animal kingdom by Mrs. Cowan, a wealthy Irish lady, who circulated a letter to London laboratory assistants stating that having heard of a person who claimed to have prayed successfully for the death of certain leading vivisectors she had decided to pray with a similar lethal intent.

I thought first of experimenting on Dr. Starling [she wrote] but it seemed to me unfair to give such a stab in the dark without first letting it be known what was intended. It seemed also almost cruel, without knowing any of the surrounding circumstances, to select at random one from the large number of distinguished scientists on the medical lists. It was, therefore, finally decided to make earnest prayer, giving much thought to the subject, that the Almighty, if the prayer were in accord with His Will, would promptly remove the man most likely to cause future suffering to innocent subjects. About a fortnight later, one of our most distinguished scientists dropped and the newspapers were lamenting the loss to science of this vivisector, and the discoveries he was just about to make.

Mrs. Cowan's letter caused a furore, but the anti-vivisectionists sought to repudiate this too radical member of their fraternity, not for her lack of charity be it understood, but in case her potent weapon be turned against them.

Stephen Coleridge (let us hope with his tongue in his cheek) expressed alarm lest the document she had circulated should cause the physiologists to retaliate and pray for his removal. A member of the Society of United Prayer remarked in all seriousness that an unrepentant vivisector, dead, might do more harm to the community than a living vivisector and the Secretary of the Society endorsed her suggestion: 'We can control the actions of the living but we do not know what evil influences may be set at work by the uncontrolled spirits of the dead. It is at least a curious fact that our work was never so severely attacked as shortly after the deaths of several well-known vivisectors'.

Victor Horsley married Eldred, daughter of Sir Frederick Bramwell, at St. Margaret's, Westminster, on 4 October 1887. They were ideally suited and remained devoted and attached. They had three children, Siward, Oswald, and Pamela.

They rented 80 Park Street, Grosvenor Square, until 1891 when they purchased

Sir Victor Horsley

25 Cavendish Square, previously occupied by C. B. Radcliffe, and before him by C. E. Brown-Séguard. It has been said that when the latter lived there he looked out a window one morning and was dismayed to see the Square filled with carriages of patients coming to consult him. The role of fashionable consultant was not for Brown-Séguard who shortly afterwards resigned his appointment at the National Hospital.

Horsley was more adaptable and managed to combine a large practice with research. He was sometimes delayed in the laboratory but he explained unapologetically to Ernest Sachs, 'If people want me to learn they must be willing to wait'.

His patients did not complain. They found him kind and considerate. His friends were impressed by his charm, his junior colleagues by his easy manner and lack of pomposity. Sir Edward Sharpey-Schafer, writing to Paget, described Horsley as a splendid personality, the most optimistic man he had ever met. But he had one great fault, 'he was absolutely unable to recognise that there was more than one side to every question; and if anyone ventured to differ from him—especially on a public question—he was *anathema maranatha*, an utterly worthless person activated by all the worst motives'.

His fame attracted many visitors and on 4 July 1900 a young American, Harvey Cushing, called at 25 Cavendish Square. Subsequently, Cushing's biography⁷ carried an uncomplimentary account of this visit: 'He found Horsley living in great confusion: dictating letters during breakfast . . . patting dogs between letters; and operating like a wild man'. But Cushing himself wrote, 'I found Horsley kindness itself . . .' And when he attended the British Medical Association meeting in Oxford in 1909 Cushing noted in his diary: 'Thursday, 28 July—dawned fresh and clear . . . In the anatomical section (Gustav) Mann and Horsley on the thalamic region—very interesting talk—*anatom. and physiolog. Horsley is a daisy.*'

He had an instinct for friendship but lost many of his friends through a penchant for controversy which amounted to a vice. His most intimate and lifelong friend was C. J. Bond, Surgeon to Leicester Royal Infirmary, who shared his interest in experimental research, his antipathy to alcohol, and his concern for the public weal. Bond said,⁸ 'If I were asked what causes appealed most strongly to Horsley's generous nature I should reply, the Search for Knowledge, the Dispersal of Ignorance, and the Righting of Wrong in every sphere of life. His ardent wish to relieve suffering in every form, and his sympathy with the sufferer were deep-rooted instincts in his nature and greatly influenced his surgical work and outlook'.

A knighthood was bestowed upon him in 1902 in recognition of his scientific achievements. Like many scientists his significant contributions were made in the opening phase of his career; much of his time in the later decades was given up to medical and national politics and to the advocacy of Temperance.

Sir Victor Horsley's aversion to alcoholic beverages dated from student days and was based on the observation that if he took beer with his meals it made him sleepy, whereas if he abstained he remained alert. The more he thought of it the more apparent it was that this indicated a toxic action. 'A man who desires to use his entire force on behalf of himself or his fellow men', he declared later, 'can do so best and longest by entirely avoiding alcohol'.

It was his contention that even minimal quantities are harmful and he demonstrated experimentally that manual skills and judgements are adversely affected by small amounts. In his Lees and Raper Lecture he stated:

That even dietetic quantities of alcohol produce change in the nervous system is established on corroborative evidence, not, I think, to be disputed. That the change is a harmful one is equally clear. It is the part of the scientist, I think, to demonstrate this; but it is the part of the politician to persuade the nation to accept it, and to act accordingly.

Unfortunately Sir Victor had no patience with those who disagreed with him and caused offence by referring to colleagues who drank moderately as 'drunkards' and 'alcoholics'. He regarded the brewers and distillers as ogres, hell-bent on destroying the country and called the newspapers which carried their advertisements 'the drink-trade press', obviously incapable of veracity.

Sir Victor's conviction that Temperance on a national scale could be achieved only by legislation was the driving force behind his desire to obtain a seat in Parliament. He stood as Liberal candidate for London University in 1909. He had many prominent supporters, including Sir William Osler, but he was defeated.

It was the same belief which made him an ardent supporter of female suffrage; he did not doubt that women would use their votes constructively to secure improvements in slum clearance and to control the drink-trade. The cast of his mind was so rational that he does not seem to have realized that people are dominated by emotive forces. This explains, moreover, his illusion that he could speak his thoughts on politics without hazard to his reputation in medical circles where the man who forsakes his last is instinctively distrusted.

Dr. F. N. L. Poynter in the General Medical Council's centenary year wrote: 'The development of a corporate spirit within the Council was not notable during the first half of its existence'. During the 1890s Horsley was one of the Council's most trenchant critics. He was elected to the General Medical Council as a direct representative in 1897. Almost at once he was at loggerheads with Sir William Turner, who, when he succeeded Sir Richard Quain in the Presidency, refused Horsley access to documents and financial papers of the Council, unless the Executive Committee's permission was previously obtained. Horsley demanded to be informed by what regulation of the Council was he debarred and wished to know if all documents were included and whether the President, like his colleagues, was similarly debarred. Later he complained that the President 'has complicated his extraordinary action by refusing in uncivil terms to answer any of my questions'. His forthright utterances were resented but his resignation in 1907 was regretted and in the interim he had done much useful work.

He was one of those who drafted a new Constitution for the British Medical Association and was first Chairman (1903–1907) of its Representative Body.

Beatrice Webb dined with Sir Victor Horsley on 4 June 1907 and urged him to try to interest the British Medical Association or at any rate to stop hostility towards impending health legislation.

How unfortunate that the medical profession so easily manages to give the impression of being reactionary! The facts, of course, are different. Just as the British

Sir Victor Horsley

Medical Association's *Report on a General Medical Service for the Nation*, issued in 1930, anticipated to some degree the Beveridge Report, so did the Association's *Report on the Organisation of Medical Attendance on the Providence or Insurance Principle* predict the legislation introduced by Lloyd George in 1911.

Sir Victor Horsley was one of many doctors who saw advantages for both the nation and the profession in the National Insurance Bill and, subject to satisfactory conditions for the doctors being obtained, he declared his support for the Bill.

His motives were misinterpreted by those who accused him of sacrificing the profession to the Liberal Party. At a rowdy meeting in the Queen's Hall he was shouted down and refused a hearing. Dawson Williams, the Editor of the *British Medical Journal* rebuked the hecklers later remarking that their behaviour 'was worse than a crime it was a blunder besides being a gross discourtesy to a distinguished man'.

The winnowing years brought ill-health and death to many of Sir Victor's older colleagues. Sir William Gowers had declined sadly physically; Hughlings Jackson died in 1911, Lord Lister in February 1912.

Lister's funeral service at Westminster Abbey was a solemn occasion. The coffin was carried slowly through the nave and choir and placed on a high catafalque at each corner of which burned a tall candle. The pall-bearers included the President of the Royal College of Surgeons and representatives of the Lister Institute and of the Order of Merit. They were followed by the chief mourners and by representatives of scientific and learned societies. Sir Victor Horsley acted as delegate for the *Société de Chirurgie* of Paris.

In May 1912 he was elected to membership of the Royal Society of Uppsalla in the vacancy created by Lister's death. A year previously he had been the first recipient of the Lannelongue Prize, an international prize awarded to the person who had contributed most to the progress of surgery in the preceding decade.

At the outbreak of the Great War, Horsley was fishing in Cumberland. He had for years been a Captain in the Territorial Army and at once he returned to London and volunteered for active service. Not until 1915, however, was he appointed to the 21st General Hospital. Meanwhile he had attracted further notoriety by condemning the rum ration and engaging in controversy over the treatment of war-wounds advocated by Sir Rickman Godlee.

Although an agnostic he frequently spoke at meetings of the Brotherhood Movement, a non-sectarian Christian organization. He equated Christianity with democracy and summed-up his attitude to life in words from Isaiah: *They helped everyone his neighbour and everyone said to his brother be of good cheer.*

While the 21st General Hospital was preparing for departure overseas Sir Victor acted as Surgeon to the British Hospital at Wimereux, a private hospital established by Sir Henry and Lady Norman. Conditions were not to his liking and in a letter he remarked caustically, 'It is the unsatisfactory business of amateurism. The private hospitals are not wanted though the beds are.'

On 20 May 1915 he embarked in the H.M.S. *Delta* outward bound for Egypt. To Horsley's annoyance the officers were ordered to parade wearing spurs 'though they were not going to ride as much as a broom-stick'.

The narrator in Lawrence Durrell's *Justine* describes Alexandria graphically:

'Capitally, what is this city of ours? What is resumed in the word Alexandria? In a flash my mind's eye shows me a thousand dust-tormented streets. Flies and beggars own it today—and those who enjoy an intermediate existence between either.'

Horsley found similarly unhealthy conditions. Several days were spent disinfecting an old barracks at Ras-el-Tin to make it suitable as a hospital. And he was put out of patience by the Commanding Officer's failure to provide necessary equipment.

Promotion to the rank of Colonel afforded wider scope for his talents. He was consultant to a number of local hospitals and also visited Gallipoli. But he continued to complain of the inadequate facilities:

The public-house loafer at home is far better treated by the nation than the soldier who is sacrificing his life. Of course the normal lie will be uttered, 'Oh, but this is war!' The net result is that the shirker and the drinker benefit enormously and the unfortunate wounded are practically told to shut up. The work as you can understand is depressing beyond words and the more so as every effort to get better drugs and conditions is criticized and thwarted as if something unreasonable was being asked instead of the bare elements of medical treatment.

His letters were lightened by comments about Alexandria where many things amused him including the boot-blacks' patter: 'Good boots, yes? Shine boots verra good! Like clean boots, no?'

To his delight it proved possible for his wife and daughter to come to Egypt but they were not long there before Pamela fell ill. Later she went with her mother to convalesce at Helwan. Sir Victor accompanied them to the station, Hassan, the gardener, driving. On the return journey Horsley took the wheel and put the gardener in the back seat, 'where he sat with dignity [wrote Horsley] and as we whirled through the Bacos district his *intimes* welcomed his new glory and himself with shouts of "Saida! Hassan!" Thus with a kind of triumphal progress we got back.'

Without his womenfolk this masterful man may have experienced a sense of masculine inadequacy when faced with minor domestic affairs. He occupied his spare time as best he could.

The pious Hindoo tailor [he wrote to Lady Horsley] has handed me a garment of yours in exchange for sixty piastres. What shall I do with it? Send it on or keep it here? Also there is a pair of shoes of yours (? house or walking look like half and half) if required say so . . . I called today at the Museum and made Signor Breccia's acquaintance and borrowed Thiersch on the Pharos. He invited me to some excavating at Aboukir . . . Of course I jumped at the chance and hope to go next Tuesday.

When Sir Victor learned of the breakdown of medical services in Mesopotamia his immediate action, as foolhardy as it was gallant, was to volunteer to go there. After visiting India briefly he arrived at Basra on 16 April 1916 and proceeded by river-boat up the Tigris to the Front, despatching *en route* plain-spoken telegrams and reports to the Director of Medical Services and Commander in Chief at Simla. He declared it 'a misuse of language to say that the sick and wounded are being cared for'. He demanded improvements in transport, water supplies and rations.

The Staff-Officers resented the adjectives *insanitary* and *inhuman* which he frequently used but the minority who visited hospitals near the Front realized that he spoke the truth. The nobility of Sir Victor Horsley's character, seen at its best in the cruel marshland between the Tigris and the Euphrates, lay in this—the needs

Sir Victor Horsley

of others so filled his soul with indignation that his mouth uttered threats and imprecations, but all the while his own discomforts were borne with acceptance and good-humour.

Dawn comes suddenly in Mesopotamia, a malignant sun ascending behind the motionless palms. When the Shamal blows life is a little more tolerable for Europeans but British soldiers regarded each day as another ordeal to be faced with grim resolution. 'They tell me this place was the Garden of Eden', a Tommy is reputed to have said. 'Well it wouldn't want no angel with a flaming sword to shift me out of it'.

A long siesta was customary but Horsley—as uncompromising in his attitude to climate as to everything else—ignored this safeguard and overtaxed his strength.

A New Zealand surgeon, A. Eisdell Moore, who mentions Horsley briefly in his memoirs⁹ has sent me additional details of the brain-surgeon's visit to his unit.

We were a small unit with only eight medical officers and were very perturbed when we learned we were to be responsible for Horsley, because his views on smoking and grog were well known. Our fears were, however, unjustified and neither by word or manner did he question our use of these solaces. What did give us some concern was his complete disbelief in the need of a midday siesta. Our ordinary hospital routine was 6 a.m. to 11.30 a.m. With a spell of at least two hours at midday. He ignored this and caused our senior officers great concern.

Having accomplished much of what he set out to do Horsley returned to Amara in July intending to leave for India in August. Fate decreed otherwise. He was not to reach the comparative safety of India, and beyond it a homecoming and a return to neurosurgery and to social-planning in post-war England. Instead he

. . . found the place
Of silence and the endless halls of sleep.
And that which breathes alone throughout the deep
The end and the beginning;

Dr. H. L. Barker⁹ who was at Amara at the time has recently recalled how Horsley and Major Thurston arrived from the desert both looking desperately ill. Sir Victor was admitted to the typhoid ward of the Rawalpindi Hospital on Saturday 15 July at 6.30 p.m., his temperature which earlier in the day had been 101°F. having risen to 104°F. The fever subsided temporarily but next morning rose again and hyperpyrexia developed. Sir Victor became unconscious and died at about 8 p.m. on Sunday, 16 July 1916. Fifty years later we salute him: scientist, surgeon, social-thinker, he was, as I have called him elsewhere,¹⁰ beyond parallel the Citizen Surgeon.

REFERENCES

1. GOTCH, R. B., *Mendelssohn and his Friends in Kensington*, London, John Murray, 1937.
2. SHARPEY-SCHAFFER, SIR E. 'The relations of surgery and physiology', *Brit. med. J.* 1923, ii, 739-44.
3. BOND, C. J., *Recollections of Student Life and Later Days*, London, H. K. Lewis, 1939.
4. TROTTER, W., *Collected Papers*, London, Oxford University Press, 1941.
5. GOWERS, W. and HORSLEY, V., *Trans. R. med.-chir. Soc.*, 1888, 1, xxi.
6. CRILE, G., *Autobiography*, vol. 1 (Ed. Grace Crile), Philadelphia, J. B. Lippincott, 1947.
7. FULTON, J. F., *Harvey Cushing*, Springfield, Illinois, C. Thomas, 1946.
8. MOORE, A. E., *Operation Lifetime*, Auckland, Collins Bros., 1965.
9. BARKER, H. L., *Brit. med. J.*, 1966, ii, 590.
10. LYONS, J. B., *The Citizen Surgeon*, London, Peter Dawnay, 1966.