By kind permission, from a Portrait in St. Bartholomew's Hospital

SIR WILLIAM LAWRENCE
(1783-1867)
SIR WILLIAM LAWRENCE was a great ophthalmic surgeon and a great deal besides. He claimed that “the whole field of Medicine and Surgery must be laid under contribution for the principles which are to guide us in learning the nature and treatment of ophthalmic disease,” and that, while “the general principles of medical science throw light on ophthalmic affections, the history and progress of the latter reciprocally afford valuable data for general pathology.” Not only did Lawrence, therefore, as a general surgeon, lay broad the base of the specialty which he adorned, both by precept and example, but he was also a man of a broad and philosophic mind, brilliantly endowed by nature as well as sedulously cultivated by art. Sir William Savory, on whom in some respects the mantle of Lawrence fell at St. Bartholomew’s Hospital, in a sympathetic memoir of his hero, claimed “that the whole man, mind and body, was in perfect taste; and—as it is only with the greatest—that the better he was understood the more he was admired.”

Lawrence was of Gloucestershire parentage; his father was the chief surgeon in the busy market town of Cirencester, and his
mother was Judith, daughter of William Wood, of Tetbury. He was born on July 16, 1783; until 17 years of age he was educated at Elmore School, near Gloucester; then coming to London, he was apprenticed to and domiciled with Abernethy, at that time rising to fame at St. Bartholomew's Hospital. He became demonstrator of anatomy three years later, and continued at work in the dissecting room until 1813, when he was elected Assistant Surgeon and became a Fellow of the Royal Society. He had passed his M.R.C.S. Examination in 1805, and the next year he was awarded the Jacksonian Prize for his Essay on "The treatment of Hernia," which, in its five editions, became a classic on the subject, and established its author's reputation, alike as a critical scholar and a practical surgeon. He translated from the Latin, a work by Professor Murray, of Upsala, on the Arteries, and from the German, Professor Blumenbach's "Comparative Anatomy." In 1814 he was elected Surgeon to the London Infirmary for Diseases of the Eye, later known as the Royal London Ophthalmic Hospital, while in the following year he established relations with yet another specialty by becoming Surgeon to the Royal Hospitals of Bethlehem and Bridewell.

On May 19, 1824, Lawrence was elected full surgeon to St. Bartholomew's and continued in office till 1865, thus for a period of 62 years he was in one office or another at his beloved hospital. Expectant juniors remarked, in allusion to his sceptical ideas, that if he did not accept the immortality of the soul he appeared to believe in the immortality of the body and, on the institution of the rule of retirement on attaining the age of 65, he gaily retorted that it was an excellent provision but not retro-active. Lawrence loved lecturing and for thirty-three years he held, in succession to Abernethy, the Chair of Surgery at the Hospital, adding lustre to the City School and winning praise from such competent critics as Holden, Humphry and Savory. He had previously, from 1826 to 1829, taught at the Aldersgate Street School of Medicine; he was also Professor of Anatomy and Surgery at the Royal College of Surgeons, and in 1815-18 dealt with the Natural History of Man in a manner that drew upon him the thunder of theologians and appeared for a while to imperil the reputation of the rising surgeon among the more timorous and conservative folk of his own profession. "He was not," says Savory, "always sufficiently careful to guard against being misunderstood, and proclaimed what he then, and to the last, believed to be the truth, with disregard of, or indifference to, the convictions of those who were then looked up to as the leaders of thought." An impartial review of his career, however, cannot fail to note some vacillation alike in philosophical doctrine and professional politics under the stress of varying conditions and associations. His old
master Abernethy denounced him as a materialist and as prostituting his office to the promulgation of pernicious doctrines. A bitter and regrettable feud continued between these two great ornaments of St. Bartholomew's, to which the early numbers of the *Lancet* bear witness, but which it is unnecessary to revive. It is pleasanter to dwell on the description of Lawrence in the plenitude of his powers as recorded by Savory, who wrote with the enthusiasm of a pupil and the devotion of a disciple, and thus described his respected master: "He was, in later life at least, a remarkably handsome man. Above the ordinary height, elegant in form, with a strikingly fine head and face, a magnificent forehead, rising almost vertically above the brow to an extraordinary height, a clear blue eye, which preserving its brightness even to the last, spoke not only of health and mental vigour, but of a life of uniform temperance, a mouth ample, but with thin lips, and singularly expressive; the distinguished presence of Lawrence as he moved amongst us—a model of intellectual beauty—is not likely soon to be forgotten. . . . The grandeur of his mental powers, when they were put forth, threw all his other gifts into the shade. His was a vast and capacious intellect, and singularly complete. . . . There was a rare charm in his conversation. He touched nothing that he did not adorn. Whether it was philosophy or history, science or literature, there was still the same powerful and penetrating thought, the same unfaltering fluency of pure and perspicacious language. . . . No man ever said so few weak things, or was so seldom silly, as Lawrence. . . . While he compelled men to admire him at a distance, he did not attract them closely, or win their affection."

Savory, who had much in common with his master, and who is said to have modelled himself on his example, regarded his chief as "one of the greatest surgeons that have ennobled" their common profession, since "he was no mere skilled artisan, but a thorough philosopher." "His example," he says, "will survive and influence surgery long after those have passed away who can remember the fine old gentleman as he went round the wards of St. Bartholomew's."

It was at the Abernethian Society, so named after its founder, who had inaugurated it in 1795 as "the Medical and Philosophical Society of St. Bartholomew's," that Lawrence acquired and practised the arts of debate and repartee. He became secretary of the Society in 1801-2 when house pupil to its eponymous founder, and when eighteen years of age he read his first paper on the "Function of the Skin." Among his contemporaries in these early discussions were Brodie, Samuel Cooper of Dictionary fame, Vincent, Macartney, and Carwardine. In an address I gave at the Society on December 5, 1889, on "Rationalism and Free Thought in Medicine," I said "It would be unbecoming to speak of rationalism in medicine in
this place without allusion to that remarkable man who was for sixty-two years connected with this hospital, who in his early prime endangered his position by the breadth of his views and the freedom of his speech upon matters wherein religion conflicted with science. I allude to Sir William Lawrence. . . . He had deeply drunk of that philosophy which possessed the intellect of Europe after the French Revolution. Science, he said in his memorable work on the natural history of man, requires an expanded mind, a view that embraces the universe. Cuvier was his ideal, and his praises he never tired of singing. Hunter might be a surgical physiologist, he said, but Cuvier was a philosophic naturalist. Hunter's view of life, as something superadded to matter, a belief which Abernethy declared to be cardinal, was the object of his unsparing attack and merciless criticism. The defenders of the dogma branded him as a sceptic and materialist, and his heinous doctrine that the brain was the organ of mind, which sounds inoffensive enough to-day, was held to be so impious that the Governors of Bridewell and Bethlehem demanded recantation or resignation. Alas! thus impaled he did not prove superior to Galileo, and the most enthusiastic admirer of his splendid intellect would find it difficult to reconcile the principles which guided his subsequent conduct with those of rectitude and honour. In the introductory lecture he gave in 1817, in which he attacked Mr. Abernethy, who was no literary match for him, he declared: 'However flattering it may be to my vanity to wear this gown, if it involves any sacrifice of independence, the smallest dereliction of the right to examine freely the subjects on which I address you, and to express fearlessly the result of my investigations, I would strip it off instantly. I willingly concede to every man what I claim for myself, the freest range of thought and expression; and am perfectly indifferent whether the sentiments of others on speculative subjects coincide with or differ from my own. Instead of wishing or expecting that uniformity of opinion should be established, I am convinced that it is neither practicable nor desirable; to quarrel with one who thinks differently from ourselves would be no less unreasonable than to be angry with him for having features unlike our own.' Such noble liberality of sentiment, however, is less apparent in his lectures than that subtle sarcasm and invective of which he was so accomplished a master. As to the teaching for which he was so blindly abused, Mr. Savory in his sympathetic biography says he was far in advance of his time; the doctrine he exposed has become a dogma of the past. Lawrence inquired, 'where shall we find proof of the mind's independence of the body, of that mind which, like the corporeal frame, is infantile in the child, manly in the adult, sick and debilitated in disease, frenzied or melancholy in the madman, enfeebled in the decline of life, doting in decrepitude, and annihilated by death?' His reply is, 'nowhere;
all life depends on organization, as the light of day upon the sun.’ Philosophy, since Lawrence’s day, has shown that the problem is not quite so simple. We know more of the untrustworthiness of our knowledge of matter, as matter, than he did. We should agree with him, ignorance is preferable to error; he is nearer to truth who believes nothing than he who believes what is wrong. Materialism held the field in Lawrence’s day. Idealism, thanks to the gentle influence of Berkeley and Spinoza and more modern thinkers, has knocked the bottom out of materialism, and the relativity of all knowledge goes behind the reckonings of the mere materialist. But then, as now, opinions were denounced because they were dangerous, not because they were erroneous, and such mock morality was fair game for Lawrence’s satire. ‘The foundations of morality undermined,’ he cried ‘and religion endangered by a little discussion and a little ridicule of the electro-chemical hypothesis of life! No, I shall not insult your understanding by formally proving that this physiological doctrine never has afforded, and never can afford, any support to religion and morals; and that the great truths, so important to mankind, rest on a perfectly different and far more solid foundation.’ Lawrence also imported his singular inconsistency as well as his great ability into ethical as well as intellectual controversies. In early manhood he posed as a reformer, and led an onslaught upon the council of the College of Surgeons in an agitation which is still alive to-day. Who that attended that meeting and heard the eloquent philippic he delivered against the close corporation he was attacking could have dreamt that when this iconoclast should have been, out of fear, elected into the body he assailed he would turn upon and denounce the reformers he had formerly led? Tempora mutantur, nos et mutamur in illis, but of all turncoats Sir William Lawrence was the most illustrious and most inveterate.”

In 1830, Lawrence published a work on “Venereal Diseases of the Eye,” and three years later appeared his well known “Treatise on the Diseases of the Eye”; second and third editions of the latter work, which at once leaped into popularity, were published in 1841 and 1844, and American editions were issued in 1847. It was translated into many languages, even in part into Arabic. The work, which extended to 820 pages, though unillustrated, was illumined by brilliant writing, and instinct with mature experience. He expressed his doubt whether the specialty ought to be separated from the rest of medicine and surgery, as it must to a certain extent be by devoting to it separate courses of lectures and treatises, and by instituting ophthalmic hospitals. In an historical sketch he conceded to the Germans “the greatest share in advancing our knowledge of ophthalmic diseases,” and especially lauded the Vienna School founded by Barth. In inflammatory affections,
especially gonorrhoeal ophthalmia, he advised copious blood-letting, not merely 10, 12, or 16 ounces, but up to 20 or 30, or more, so as to produce syncope. Of glaucoma he says, "the name which was formerly given to cataract is now used to denote an affection of the eye attended with alteration in the colour of the pupil." The fact of increased tension appeared to have escaped his notice. In extraction of cataract he practised the flap operation without iridectomy, and the treatment of consecutive complications consisted mainly in cupping and the exhibition of mercury. Sympathetic ophthalmia is mentioned, but not dwelt upon, and the treatment advised is directed rather to the sympathetically affected eye than to prophylactic excision of the offender. For the rest the clinical pictures of the commoner diseases of the eye are drawn with a masterly hand, and his pathology was ever based on a thorough knowledge of the anatomy and physiology of the organs dealt with.

Lawrence continued busy with voice and pen, discoursing in well chosen language on the whole range of surgical science, with apt citations from classical authors as well as facile reference to contemporary continental opinion. He contributed articles on anatomy and physiology to Rees' famous Cyclopaedia, and eighteen papers by him are to be found in the Transactions of the Medico-Chirurgical Society. In 1828 he was elected to the Council of the College of Surgeons, and was the President of that body twice, in 1846 and again in 1855.

On February 18 and March 4, 1826, two important meetings of Members of the College of Surgeons were held at the Freemasons' Tavern, at which eight resolutions, having for their object radical reform of the College and redress of abuses, were carried unanimously or with large majorities. On both occasions Lawrence was in the chair and boldly placed himself at the head of the reformers in two brilliant speeches, which he revised and published himself. He complained that the Members had no part in the conduct of the College, their rights were all of a negative kind, the Court of the College had left their humble premises in the City, where they originated as a trading corporation, but retained in their new western quarters their exclusive constitution and commercial ways. With biting invective the Chairman descanted on the contemptible literary composition of the College regulations, the restriction of entrants to examination to five schools in the United Kingdom and to anatomical study under members of hospital staffs, and on the non-recognition of provincial schools and of foreign study. He urged, even at that early date, that the study of diseases of the eye should be included in the curriculum. He advocated radical reconstruction of the College, after Parliamentary inquiry into existing abuses, asserting that "restriction and exclusion are in themselves great evils" and that there was "universal and strong
feeling of disapprobation towards the conduct of the College.” In the course of his second speech he incidentally remarked “You will, I am sure, agree with me that a Surgeon ought to understand medicine thoroughly; and that in proportion as his knowledge of the whole science is more extensive and accurate, will he be better prepared for the particular duties of his department. The denomination pure Surgeon, which some so highly value, has become rather a term of ridicule and contempt. It implies not a higher, but a lower knowledge and utility. Pure! free from what? from all knowledge of medicine! If we wish to deserve and retain public respect, let us reject the imputation of such purity.”

After the lapse of two decades the scene is shifted and few who cheered the reformer of 1826, could have anticipated the change of view which the intervening years had brought about. Saturday, February 14, 1846, was a great day at the College of Surgeons and probably the most memorable day in the life of Lawrence. Reform of the College was in the air and parliamentary intervention had been invoked. The more cautious Councillors deemed it prudent to abandon the Hunterian Oration lest the members should come in force to beard the Council and demand reform. Lawrence deprecated such pusillanimity and by common consent was invited to undertake the task of delivering the oration and rebuking the “reformers” whom he had aforetime championed. On entering the theatre he found it packed from floor to ceiling and apologized in his opening words for the inconvenience of his crowded audience, while accepting their presence as evidence of the prosperity of their College. After a few generalities on Harvey, Jenner, and Hunter, the orator diverged into expressions of regret that the medical profession, sharing the restless spirit of the age, had ceased to mind its own business, had forsaken the cultured tranquillity so essential to the undisturbed pursuit of science, and had embarked upon a vulgar clamour for “what is called reform.” In so doing the partizans of reform had not disdained “the unworthy arts of misrepresentation, falsehood and abuse.” Cheers mingled with a storm of hisses greeted this reckless denunciation from the lips of the quondam reformer, who did not ease the situation when he coolly interjected, “I am in no hurry, Mr. President, and when the geese have done I will go on.” He proceeded, amid much interruption and cries of “Question,” “Hunter,” etc., to rebuke the members for “profaning this sanctuary of science by vulgar brawl and clamour, fit only for the hustings or the tavern.” Comparative calm was restored as the orator in well rounded periods related a not strictly historical account of the origin and development of the College. He told how the precious Hunterian Museum had gone a-begging for six years after the death of its collector, and how Mr. Pitt, when asked for a grant, exclaimed, “What! buy
specimens; I want money to buy gunpowder." He spoke with just approbation of the labours of Owen, of Clift, of Paget and Queckett in worthily extending and rendering accessible the treasures of the Hunterian collection. With hypnotic spell he led his audience to a mute acknowledgment of the Council's labour in fulfilment of their trust, and bade them gaze in silent admiration on the historic canvas bearing the portrait of him in whose honour they were met, and who had "dignified and adorned a profession of which he was the venerated and presiding genius."

Exulting, as it were, in the facility with which he could play upon the emotions of his audience the consummate orator then adopted another tone. He held up to ridicule a contemporary movement in favour of the constitution by Act of Parliament of a "Royal College of General Practitioners" which apparently was to be evolved out of the Apothecaries' Company. Lawrence alluded to the Act of 1815, which he described rather maliciously as regulating "the practice, or the trade, I forget which, of apothecaries." It has, indeed, been unkindly said that "the ancients tried to make medicine a science and failed, the moderns tried to make it a trade and succeeded." The storm broke out afresh, and members, many of whom were also Licentiates of the Company, hissed loudly, and exclaimed, "You are insulting your own body," an interruption that was heartily cheered. Comparative order being once again restored, Lawrence in felicitous terms described the life of John Hunter from its unpromising beginnings, through his unceasing labours to undisputed supremacy and thence to its abrupt termination "on the same day and nearly at the same hour that the unfortunate Queen of France was murdered on the scaffold." The stormy oration closed with a panegyrical of the "Luminary of Anatomy and Physiology" and with an apt poetic peroration. "Great confusion mixed with applause and hisses," according to the excellent report in the *Lancet*, greeted the completion of this most oratorical and dramatic of all Hunterian Orations.

The storm created by the oration continued to agitate the profession for many weeks. The *Lancet*, then vigorously edited by Tom Wakley, M.P., lashed the "renegade" and "apostate" with language neither professional nor parliamentary. The Council of the College, under the worthy and amiable presidency of Samuel Cooper, at first censured, by seven votes to four, their too zealous defender for the medico-political portion of his address, and then rescinded the resolution of censure they had somewhat reluctantly passed in obedience to the storm which assailed them. The bust of the "miserable casuist" was banished from the library of the Medico-Chirurgical Society, of which the offender had been twice President, and to whose *Transactions* he had made many contributions. Letters to the *Lancet* from general practitioners all over the
country anathematized the traducer of their class, and demanded his prompt retirement from professional life.

The object of their vituperation, however, pursued the even tenour of his way and his regular attendance at his beloved hospital, admired by most, feared by many, hated bitterly by not a few, but deeply venerated and even adored by a devoted band of disciples.

In 1857, Lawrence was appointed Serjeant Surgeon to Queen Victoria. In 1865, then in his eighty-second year, he resigned his Surgeoncy to St. Bartholomew's Hospital, but he continued to examine at the Royal College of Surgeons for two years longer. In 1867 he received a baronetcy, but did not long survive to bear the title. On May 11 in that year, when ascending the familiar staircase at the College to conduct an examination he was seized with right hemiplegia. Aphasia accompanied the seizure and when seen by Sir Thomas Watson he had difficulty in describing to his attendants his sufferings and his needs. He felt weary and sleep forsook him; unable to express or write his thoughts he seized a quill pen with his left hand, dropped blobs of ink on the paper and pointed to them. "Black drop," exclaimed his attendants, and he indicated by a nod his assent to their recognition of his request for a preparation of opium, then colloquially known by that name. I have heard this story told by Sir James Paget, and I need not say it lost nothing in the telling by that master of anecdotes with his melodious voice and animated eyes. Lawrence lingered on at his residence, 18, Whitehall Place, and the end came peacefully on July 5, 1867.

Lawrence married on August 14, 1828, Louisa, daughter of James Senior, who predeceased him in 1855. He left two daughters and one son, known to the present generation as Sir Trevor Lawrence, who, after serving as Surgeon in the Indian Medical Service, became Treasurer to St. Bartholomew's and died three years ago.

Lawrence was endowed with qualities which would have led to eminence in any sphere of public or private life, and he had cultivated his natural powers with assiduity and fixity of purpose. His analytic intellect dwarfed the exercise of imagination, and restricted the flow of emotion. He belonged to the eighteenth century, and his soul was infected with its arid influence. His head was greater than his heart, though many, after his death, were able to relate unknown and unsuspected acts of kindness and liberality.

His wide outlook on science and philosophy gave breath of view to his conceptions of surgery and precluded him from limitations which cramp the thoughts of specialists. His marvellous facility for putting ideas into words and his classical and literary erudition combined to make him a teacher and a controversialist unrivalled in the profession of his choice. He was great even in
his inconsistencies and eloquent even in his recantations. He adorned the calling he adopted and elevated the school he served so long. Ophthalmic surgery is lustred by the fact that Lawrence practised it and embellished it.

DISTURBANCES OF VISUAL ORIENTATION

BY

GORDON HOLMES, M.D.

(Concluded)

Disturbance of Visual Orientation

It must be emphasized in the first place that the symptoms presented by these cases cannot be attributed to defects of visual perception as, to the usual tests, the acuity of central vision was normal or approximately so in four cases at least, and it was certainly moderately good in the remaining two, though in these it was not possible to measure it accurately. Further, the examination of a large number of cases with central and paracentral scotomata due to gunshot injuries of the brain has shown that spatial perception is not affected by these conditions, nor is it associated with the defects of central vision produced by retrobulbar neuritis. It is, however, true that in all six cases there were some defects in the visual fields, but except in Case II, the blindness or amblyopia did not approach the region of central vision, and in three there were irregular quadrantic defects only. Here again the fact that the spatial orientation of objects seen is not influenced by the presence of hemianopia or other large losses in the fields of vision, whether they be due to cortical, subcortical, or tract lesions, is an argument that the disturbance of orientation is not due to these associated visual defects. The possible influence of the abnormalities in the movements of the eyeballs which co-existed with this symptom in all my cases, and especially the absence of accurate fixation, will be referred to later, but here it may be mentioned that each patient was unable to localize visible objects correctly in space even when he fixed them accurately, though, as in normal persons, his errors were then smaller than when the images fell on extra-macular portions of the retinae.

The affection of visual orientation was obvious in several tests; the patient was unable to touch accurately any object within his reach and vision, though the movements of one or both arms were intact; in walking he collided with easily visible objects and had difficulty in finding his way around them, and frequently he
to the Hospital for Sick Children, Great Ormond Street, and
honorary physician to the King George Hospital. He had a
charming personality—lovable, modest, genial, and tolerant.

Charles Edward Glasgott, senior consulting surgeon to the
Manchester Royal Eye Hospital, died on August 14, after a brief
illness, at Budleigh Salterton, Devon, where he had lived for some
years in retirement. He had been Vice-President of the
Ophthalmological Society of the United Kingdom (1902-1905).

We regret to announce the death, on July 19, of William James
McCulloch Ettles, at the early age of 49 years. For many years he
practised in the City, but on devoting himself exclusively to
ophthalmology, he migrated to Harley Street. He was Treasurer,
and had been President of the Hunterian and Optical Societies.

The following deaths are announced from America: John Chase,
62, of Denver; I. S. L. Bermann, of Washington, D.C.; H. T.
Moore, 31, of Wilmington; A. F. Sanders, of Cincinnati; N. J. Hepburn, 71, of New York City; and Frank C. Todd, of
the University of Minnesota.

Stephen Bernheimer, Fuchs's successor in the Vienna chair, died
at the age of 57 years, on March 19, 1918. Ewald Hering, widely
known for his researches on colour vision and other physiological
problems, died on January 26, 1918, at the age of 84 years. A full
account of his scientific achievements is to be found in the June
number of the Klinische Monatsblätter für Augenheilkunde.

Dr. Nicolai was killed in France, at the age of 50 years, on April
13, 1918. In civil life he enjoyed an extensive eye practice in
Berlin.

NOTE

Appointment

Mr. R. R. Cruise, C.V.O., has been appointed a Surgeon-Oculist to His Majesty the King.

CORRIGENDUM

In Wardrop's biography, published in the August number of this
journal, it was stated that the brothers Hunter, like Wardrop, were
born near Bathgate. The writer of the biography now informs us
that the Hunters came from a district considerably farther west
than Bathgate. The author was misled by a reference from a book
generally considered as authoritative.