SOME OF THE GREAT HISTORICAL FIGURES ASSOCIATED WITH MOORFIELDS

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JOHN CUNNINGHAM SAUNDERS (Hospital Staff, 1805–1810; Fig. 1)

Saunders would probably never have started an eye hospital in London but for two factors: the influence of Sir Astley Paston Cooper (Fig. 2) and the rule that, in order to be a general surgeon on the staff of one of the London teaching hospitals, it was necessary to be articled at the College of Surgeons for a period of 6 years.

FIG. 1.—John Cunningham Saunders (1773–1810).

FIG. 2.—Sir Astley Paston Cooper, Bart., F.R.S. (1768–1841).

Saunders was born at Levistone in Devon in 1773, and at the age of 17 became apprenticed to John Hill, a surgeon at Barnstaple. At the age of 22 he decided to go to London to study medicine at the then combined school of Guy's and St. Thomas's. There he met Astley Cooper who became Professor of Anatomy. Astley Cooper, impressed by the capability of Saunders, asked him to become his private demonstrator of anatomy, a post which Saunders held for 3 years. Seeing no hope of his ever getting a

hospital appointment in London (as he had not been articled at the College of Surgeons), Astley Cooper suggested that he should seek work elsewhere; Saunders therefore went to Gravesend to practise general surgery, but had not been there long before Astley Cooper asked him to come back to London to continue working for him in a part-time capacity. He also suggested that Saunders should start in private practice, not as a general surgeon but as a surgeon for diseases of the eye and ear. Thus, at the age of 27, he started practising in Ely Place, Holborn, in the year 1800. It must have taken considerable courage to specialize in eye diseases, for at that time such eye treatment as was carried out was almost entirely in the hands of the itinerant quacks who called themselves oculists.

The proposition of a hospital for diseases of the eye and ear had the full support of the medical staff of Guy's and St. Thomas's. Saunders unfortunately died in 1810, at the age of 38, of brain disease, but he had had time to make two important contributions to ophthalmology. In 1806 he wrote a paper on the use of belladonna for inflammation of the iris, to prevent obliteration of the pupil, and in 1808 he published a paper on the treatment of congenital cataract by dissection of the lens.

JOHN RICHARD FARRE (Hospital Staff, 1805–1857; Fig. 3)

FIG. 3.—John Richard Farre (1775–1862).

Farre, the son of a doctor, was born in the Barbadoes in 1775 and met Saunders at the Guy's and St. Thomas's Medical School in London. He was the first physician on the staff of the new eye hospital, a fact which indicates that, from the first, the importance of the medical aspect of ophthalmology was recognized. Although he published practically nothing, Farre was said to be a good teacher; some of his lectures, published in the *Lancet*, were not reassuring—they were packed with quotations from the Bible and full of protests against materialism—but he was a man who inspired the warmest regard and affection and there is no doubt that he worked hard in the interests of the hospital. In 1811 he edited and published Saunders's book entitled "A Treatise on Some Practical

Points relating to Diseases of the Eye", just one year after the author's death, and he was largely instrumental in starting the Saunderian Institute, a new building adjacent to the hospital, to which he donated the sum of £120 himself. This institution may be regarded as the precursor of the modern Institute of Ophthalmology, although at that time it was chiefly concerned with the analysis of the vegetable substances of the *materia medica*.

In 1828 Farre started a medical journal entitled "The Journal of Morbid Anatomy, Ophthalmic Medicine and Pharmaceutical Analysis, and the Transactions of the Medico-Botanical Society", but only one number appeared. He died in the year 1862, at the age of 87 years. His portrait (painted by Thomas Phillips, R.A.) shows him sitting in a chair with a drawing of a malformed heart in his hand, a portfolio of drawings of pathological specimens (now in the library of St. Bartholomew's) at his side, and a large Bible on the table.

RICHARD BATTLE (Hospital Staff, 1805–1818)

This was the third member of the original staff of the hospital. He also was a student of the medical school of Guy's and St. Thomas's. Born in 1770 in Wakefield, he started his medical training in Newcastle, but later came to London and after finishing his training became an apothecary practising in St. Paul's churchyard. Battley remained hospital secretary for 14 years, a most unusual post for a medical man.

FIG. 4.—Benjamin Travers, F.R.S. (1783–1858).

BENJAMIN TRAVERS, F.R.S. (Hospital Staff, 1810–1817; Fig. 4)

When Saunders died just 5 years after the hospital was founded Astley Cooper acted as a *locum tenens*. The vacancy was advertised and there were three applicants: John Stevenson, already a pupil at the hospital, William Lawrence, a demonstrator in Anatomy at St. Bartholomew's, and Benjamin Travers. The first two both withdrew in favour of Travers, an ex-house pupil of Sir Astley Cooper. It is interesting to

note that Travers's father, Benjamin Travers, senior, was Chairman of the first committee set up to found the hospital.

Travers was articulated at the Royal College of Surgeons for 6 years and subsequently became a surgeon at St. Thomas's in 1815. He was the first of a number of men on the staff of Moorfields who combined ophthalmology with general surgery. He was twice elected President of the College of Surgeons.

Farre and Travers were the men who were essentially responsible for starting the medical school in 1811. During the first 7 years there were no less than 412 students at the medical school, fifty of whom were physicians. They came from many parts of the world including India, America, Germany, and Portugal.

Travers wrote an excellent synopsis of "Diseases of the Eye" which he dedicated to Dr. Farre, and a paper "on a case of pulsating exophthalmos treated by ligature of the common carotid artery". He resigned from the hospital in 1817, but continued his appointment as surgeon at St. Thomas's. He died in 1858.

SIR WILLIAM LAWRENCE, Bart., F.R.S. (Hospital Staff, 1814–1826; Fig. 5)

Lawrence was elected to the staff in 1814 and resigned in 1826, but he continued as a surgeon at St. Bartholomew's until 1865, when he was 82 years old, there being at that time no set age for retirement. He was made Sergeant-Surgeon to Queen Victoria in 1864, was created a baronet in 1867, and died shortly thereafter.

FIG. 5.—Sir William Lawrence, Bart., F.R.S. (1783–1867).

In 1822 the course of lecturing at the hospital was advertised as follows:

- (1) *Morbid anatomy and physiology and general ophthalmic medicine*, by Dr. Farre (occasionally).
- (2) *Physiology and Diseases of the Eye*, by Mr. Lawrence (on Tuesday, Thursday, and Saturday, at 5.30 p.m.).
- (3) *Optics*, by the Rev. T. Gill (Chaplain) (on Thursdays at 7.0 p.m.)!

In those days, since all eye operations had to be performed

without any sort of anaesthetic, at least four or five assistants had to be employed in order to hold the patient down. The division of labour was roughly as follows:

One assistant to fix the patient's head, one to depress the lower eyelid and grip the chin, one to confine the arms and upper part of the body and one to secure the legs and lower part of the trunk.

Lawrence wrote a book on the "Venereal Diseases of the Eye" and also a "Treatise on Diseases of the Eye". The latter was the best book of pre-ophthalmoscopic times and was translated into several languages including Arabic.

FREDERICK TYRRELL (Hospital Staff, 1817–1843; Fig. 6)

Tyrrell, who married Sir Astley Cooper's niece, served his apprenticeship under him at Guy's and St. Thomas's Hospitals and also studied at Edinburgh University; thereafter he worked in the Military Hospital at Brussels after the battle of Waterloo. An anonymous writer has claimed that when Tyrrell was first attached to Moorfields he operated so clumsily that he was suspended from major surgery for a year; but as time passed by steady perseverance he acquired a dexterity with either hand that could not be surpassed.

His success depended as much on his judicious methods of after-treatment as on his manual dexterity. His memory is preserved in the name of "Tyrrell's hook", which he introduced for the operation of making an artificial pupil and is still widely used at the present time. In 1840 he published a book in two volumes entitled "A Practical Work on the Diseases of the Eye and their Treatment, Medical, Topical, and by Operation". In 1843, whilst attending the auction of the house he occupied, he fell dead.

FIG. 6.—Frederick Tyrrell (1793–1843).

SIR WILLIAM BOWMAN, Bart., F.R.S. (Hospital Staff, 1846–1876; Fig. 7)

Bowman was elected a Fellow of the Royal Society at the astonishingly early age of 25 for his histological work on muscles. He was a general surgeon on the staff of King's College Hospital and served Moorfields for 30 years. He was the first to employ chloroform anaesthesia for the removal of a cataract. History relates that the operation was beautifully executed, but unfortunately the patient vomited afterwards and the eye was lost because of an expulsive haemorrhage. This did not discourage him and he continued to use anaesthesia, usually with great success.

His name is well known for he is commemorated in the Bowman Lecture given in alternate years at the Annual Congress of the Ophthalmological Society of the United Kingdom. He was the first President of this society and held that office for 3 years. He invented Bowman's lacrimal probes

and was the first to provide a detailed and accurate description of the anatomy of the eye as revealed by the recently invented compound microscope, his name being perpetuated in the layer of the cornea known as Bowman's membrane.

He and his colleague George Critchett, both men of strong and attractive personality, were so popular as teachers that on retiring from Moorfields at the age of 60 they were both asked by the governing (lay) committee to continue to use five beds for operating and teaching; their medical colleagues would not hear of this, however, and they both left the hospital somewhat disgruntled.

FIG. 7.—Sir William Bowman, Bart., F.R.S. (1816–1892).

SIR JONATHAN HUTCHINSON, F.R.S. (Hospital Staff, 1862–1878; Fig. 8 opposite).

Hutchinson was born in York in 1828 of Quaker ancestry. He served on the staff of Moorfields from 1862 to 1878, and was also assistant surgeon at the London Hospital. He has sometimes been described as the “greatest

general practitioner in Europe” and at other times as the “universal specialist”. He was a patient and elaborate note-taker and was interested in the natural history of disease, as well as in natural history generally.

Before his appointment to the Moorfields staff, he served as a clinical assistant and wrote an interesting article “On the different forms of inflammation of the eye, consequent upon inherited syphilis”. Included in this article was a description of what are now known as Hutchinson’s incisors.

His teaching was made impressive by ingenious arguments, apt metaphors, and quaint expressions, and was driven home by the simplicity and solemnity with which they were delivered. He retired from Moorfields largely because of the increasing importance of refraction work which did not interest him.

FIG. 8.—Sir Jonathan Hutchinson, F.R.S.
(1828–1913).

FIG. 9.—Hughlings Jackson, F.R.S.
(1835–1911).

HUGHLINGS JACKSON, F.R.S. (Fig. 9), the great neurologist, was also one of the early clinical assistants at Moorfields, and in later years in his oration at the Medical Society of London he said, “I count it as one of the luckiest things in my life that I started the scientific practice of my profession working in an eye hospital”.

GEORGE JAMES GUTHRIE, F.R.S. (Hospital Staff, 1816–1856; Fig. 10, overleaf)

This quite remarkable man, hot tempered and brusque to a degree but with great kindness of heart, should be mentioned here. He was born in London in 1785 and started his medical career serving as hospital mate and dresser to Mr. Carpice, a surgeon to the York Hospital, Chelsea. He

qualified as a member of the College of Surgeons at the early age of 16, and then joined the Army and served with distinction as a surgeon for 15 years, taking part in the American and Peninsular Wars and being at one time the sole medical officer in charge of 3,000 wounded. Returning to England he was put in charge of a ward for desperate cases in York Hospital, Chelsea.

FIG. 10.—George James Guthrie, F.R.S. (1785-1856).

At that time he was struck by the lack of systematic instruction in diseases of the eye and by the slender provision for their treatment in London. Under the presidency of the Duke of Wellington he started an eye institution in 1816, known as "The Royal Westminster Infirmary for the Cure of Diseases of the Eye", and later as "The Royal Westminster Ophthalmic Hospital". At first Guthrie received patients free of charge at his private house at No. 2 Berkeley St., on Monday, Wednesday, and Friday, from 9.30 to 11 a.m. The hospital moved to Marylebone St., Piccadilly (now Glasshouse St.), Warwick St., Golden Square, and later to Charing Cross. Finally, in 1928, it was rebuilt in High Holborn, then called Broad St., W.C.

Guthrie's hospital catered especially for the the instruction of medical officers from the Army and Navy. At first he was the only surgeon on the staff but subsequently his son joined

him while Sir Charles Ferguson Forbes was the physician.

In 1834 Guthrie published the first hospital report; thus anticipating the "Moorfields Reports" by 50 years! This first number contained an article on cataract extraction and one on "spots" in the human eye. In 1823 he published "Surgery of the Eye", a well-illustrated and interesting manual. He was President of the Royal College of Surgeons on three occasions, in 1833, 1840, and 1854. His hospital is now part of Moorfields Eye Hospital (the High Holborn Branch) and shares in the clinical instruction of students.

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