

SIR WILLIAM BOWMAN, BART., F.R.S.,

(1816—1902)

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16.—SIR WILLIAM BOWMAN, BART., F.R.S., 1816-1892

BY

R. R. JAMES

LONDON

THE great man whose life I endeavour here to portray has been dead for more than thirty-three years; there can be few now living who knew him in his prime, and to most of us he is only a name: a name, it is true, highly honoured and in daily use in ophthalmology all the world over.

Great as a physiologist, an anatomist and as a general surgeon, it is as an ophthalmologist that Bowman will go down in history among the immortals, for to him, in this country at any rate, were largely due the placing of ophthalmic surgery upon a sure scientific basis, and its rise to a pre-eminent and dignified position as a speciality.

He was born at Nantwich on July 20, 1816, almost exactly a year after the battle of Waterloo. He grew up in the lean years following the titanic struggle of the Napoleonic wars; saw the great industrial development of the early middle years of the last century, and died in 1892, at a good old age, full of years, honours, and the knowledge of a well-spent life.

His father was John Eddowes Bowman, a banker, of Nantwich, and later of Welshpool and Wrexham. William was the third of his four sons. His three brothers who all died before him had successful careers; one being a classical scholar of some distinction; one, an architect; and the last a professor of chemistry. His mother was Elizabeth, daughter of William Eddowes of Shrewsbury, a well-known bookseller of that town.

Nantwich, the place of his birth, is a historic town in the County Palatine of Chester, famous for its salt springs. The name is derived from the British word "nant," a brook or marsh, and the Saxon "vic," by corruption "wich," a vill or settlement. The "wich" seems to have a special affinity for places where salt is worked, Droitwich, in Worcestershire, being another example. Among the natives of Nantwich, it is interesting to remember the name of John Gerarde, the herbalist, born there in 1545. At the present time Nantwich is chiefly famous for its fine old timber houses, like so many other market towns on the Welsh border, and for its stately church, the architecture of which belongs mainly to the Decorated period.

It is to be assumed that Bowman's father was either the proprietor of a local private bank, or more probably the manager of the local branch of the county bank. These were the days before the era of the large joint-stock companies; the county banks were profitable to their proprietors, and in spite of the prejudices of the landed gentry of the period against any form of trade an exception was often made in respect of the banking business; indeed, it was sometimes found that a post in the county bank was not despised by a local squire with a large family of sons. Instances in point occur in the neighbouring county of Shropshire, where, in Shrewsbury the banking business was largely in the hands of Messrs. Eyton and Burton, both very good names in that proud county. As a matter of fact, Sir William Bowman's grandfather was in business in Nantwich, and so it is probable that the son was manager of the local branch of the bank and not the proprietor.

J. E. Bowman was a Fellow of the Linnaean Society, and a geologist of more than local repute. He is credited with having given some assistance to Sir Roderick Murchison in his great work on the Silurian system. His wife was of an artistic temperament, and the children grew up in artistic surroundings. Bowman's early studies seem to have been directed by his father chiefly in botany and geology; but at the age of ten years he was sent with two of his brothers to a school well known at that time, Hazelwood, near Birmingham, to be under the care of Mr. Hill, the father of Sir Rowland Hill of postal reform fame, an earnest and somewhat eccentric pedagogue; eccentric in this, that he dis-

approved of corporal punishment at a time when its practice was much rife among the seminaries of England than it is in our days. Bowman spent six years at this school. It is on record that he took a prominent part in the management of the school magazine, not as an editor, but actually as printer, for the master seems to have owned a private press, many of the proof sheets being signed by Bowman. A model of the school buildings cut out of cardboard at this time by Bowman and another schoolboy is proof that besides learning to use his eyes, he had also acquired some manipulative dexterity with his fingers.

On leaving school he chose the medical profession and at his own request was apprenticed to Joseph Hodgson, who at that time was one of the surgeons to the Birmingham General Hospital. Hodgson had an extensive reputation as a surgeon in the Midland counties, and later, after moving to London, became F.R.S. and President of the Royal College of Surgeons of England. He was a member of the Society of Friends.

In those days apprenticeship was the regular method of entering the surgical profession. Indentures were drawn up, a fee was paid and the pupil was bound to the business of his master for a period of, usually, either five or seven years. Many of these surgeons' indentures are extant, and they form rather curious reading. If the master was lacking in conscience he usually pocketed the premium, gave his pupil the run of the surgery, fed and boarded him and allowed him to work out his own salvation by picking up what he could of medical education in that most practical of all ways, by teaching himself. But there was no such laxity between Hodgson who was a Quaker and doubtless took his duties seriously, and Bowman, who was an enthusiast for work and lived in the Hospital as a House Pupil. During his holidays Bowman saw a good deal of country practice at home through his friendship with Mr. Griffith of Wrexham.

From the first he interested himself in pathology as well as in practical surgery, following all post-mortem examinations, drawing and recording what he saw. His first microscope was given to him at this time by Dr. Blakiston, physician to the hospital, for whom he had made a large number of measurements of the cardiac orifices. To this period also belongs his first paper on a medical subject: "A Note on Influenza as it occurred in Birmingham in 1835." This was not published at the time, but it is included in the collected edition of his works. In the following year appeared Ryland's work on "Diseases of the Larynx and Trachea." Some of the cases and five of the coloured illustrations were by Bowman, done in his eighteenth year.

In 1837, he came to London and joined the Medical Department of King's College. It is stated that he took the M.R.C.S.

in 1840, but in the preface to one of his works he notes that he was appointed Assistant Surgeon to King's College Hospital on its foundation in 1839. In 1844, he was elected F.R.C.S., Eng. The true date of his M.R.C.S. is June 10, 1839.

I find the name "Wm. Bowman" entered on the Pupils' Register of St. George's Hospital on April 25, 1838, as a six months' pupil of Sir Benjamin Brodie. A copy of this signature is here appended.

T.B.C. 2	John G. Phipps	One year	W. B. Brodie
T.B.C. 4	Henry Foster Baxter	One year	L. B. Brodie
T.B.C. 25 April 25	Wm. Bowman	Six months	L. B. Brodie
T.B.C. 7 May 7	Edward Henry Shells	One year	W. B. Brodie
T.B.C. 9	Frederick John Lower	One year	W. B. Brodie
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Although I know of no other evidence that he was ever connected with my own school, the dates fit in so well that I think it highly probable that Bowman took a short course under Brodie, who was at that time at the zenith of his fame. In an address delivered before the meeting of the British Medical Association at Chester, in 1866, Bowman adverts to Brodie's death, and "recalls with gratitude the converse—in later years, the intimate and friendly intercourse—I enjoyed with this considerable man." His presentation copy of "The Lectures on the parts concerned in the Operations on the Eye" to Brodie, has the following inscription on the fly-leaf: "Sir B. C. Brodie, Bart., with the author's compts. and thanks." This copy is now in the possession of my senior colleague, Mr. Grimsdale, who has kindly allowed me to give the transcript. Many years after the date of publication of this book, Brodie's cataracts were removed by Bowman, a mark of confidence from an acknowledged head of the profession to one who was much junior, and who may very possibly have been at one time his pupil, as gratifying to the junior as it is unusual.

Physiological Enquiries

Bowman's great physiological investigations were for the most part undertaken during the years 1839-1842. In these three years he did the microscopical work for which he will be for all time

famous, on the structure of striated muscle, and on the structure of the kidney. These two papers were read before the Royal Society, the first on June 18, 1840: that on the kidney on February 17, 1842. His original work secured him his election as F.R.S. in 1841, at a very early age. In 1842, he was awarded the Royal Medal of the Royal Society. His papers were illustrated entirely by his own drawings. They will be found in Volume I of his collected works. Besides these original papers, a very important piece of work was that on the structure of the mucous membrane of the alimentary canal. This appeared in the "Cyclopaedia of Anatomy and Physiology." In 1843, appeared the first part of the "Physiological Anatomy and Physiology of Man" by R. B. Todd and William Bowman. Its concluding part appeared in 1856. This was an epoch-making work, for it was the first of its kind to give an accurate description of the histology of the organs of the body. Most of the illustrations were by Bowman, Todd being no artist. It is recorded that the junior author was so sure of hand that many of the drawings were made on the wood blocks directly.

The following excerpt from the paper on the "Malpighian bodies of the Kidney," his second paper read before the Royal Society, gives a good example of his style; his meticulous accuracy and his modesty.

"The tubes on issuing from the Malpighian bodies invariably become greatly contorted. I have on one occasion seen two of them unite, and from their dichotomous mode of division, when traced up from the pelvis, there can be little doubt that this is constantly their disposition. I have never, in all my examinations, met with any appearance of an inosculation between different tubules. The tortuous tubes unite again and again in twos, and finally, under the name of pyramids of Ferrein, become straight and converge towards the pelvis, forming the medullary cones or pyramids of Malpighi. The Malpighian bodies are imbedded in a kind of nidus formed among these convolutions, and are touched on all sides by the surrounding tubes. As the emergence of the tube from the Malpighian body can be seen only at one point, it is not wonderful that it should have been overlooked, and that the demonstration should have seemed clear, that the Malpighian bodies merely lie among the tubes, and have no connection with them."

The Physiological Anatomy and Physiology of Man

This great work, which became known to generations of students, for short, as "Todd and Bowman," was projected in

1839. It came out in parts as already stated. Of the 298 illustrations, 120 were by Bowman himself. The work was intended "to furnish the student and practitioner in medicine and surgery with a plain and accurate view of the intimate structure and functions of the human body, and is accommodated in its plan and arrangement to the physiological lectures delivered in King's College, London." It was dedicated to Sir Benjamin Brodie, and for many years held the field alone as *the* exposition of physiology in the English language.

In 1839, Robert Bentley Todd began the publication of "The Cyclopaedia of Anatomy and Physiology," in the words of Mr. Henry Power, "the largest and most important work of the kind that has appeared in England, and still valuable for the number and variety of the original articles contributed by men of the highest standing." Bowman's first contribution to it is found in the third volume. The articles on mucous membranes, muscle, and the Pacinian Bodies were all his work.

King's College and Hospitals

Bowman began work at King's College under John Simon, afterwards Sir John Simon, P.R.C.S. Simon was Prosector to Todd for the physiological lectures. In 1838, Simon was appointed Second Demonstrator of Anatomy; his senior colleague being F. T. MacDougall, who later left medicine for the Church and became Bishop of Labuan. Simon's new appointment gave Bowman a step up, and he passed on to the Prosectorship in Physiology. In this year it is stated that he visited several of the foreign hospitals in Paris, Vienna, Germany, and Holland; and I opine that he also worked under Brodie at St. George's Hospital. In 1839, MacDougall left King's College for Oxford, on his way to a curé of souls and the episcopacy of Labuan, and Simon became Senior Demonstrator; Bowman becoming his junior colleague and being placed in charge of the museum as curator. He was appointed Assistant Surgeon to King's College Hospital in 1840; Surgeon in 1856; and retired from his surgeonship in 1862.

The surgical staff of King's College Hospital was overshadowed by the personality and forcible character of Sir William Fergusson, the great operating surgeon of the day. Simon was Fergusson's deputy, while Bowman was Assistant to Professor Richard Partridge, the father of Sir Bernard Partridge, the artist. At a later date, Simon having left King's College for St. Thomas's Hospital, Bowman became Senior Assistant Surgeon, and the junior post was filled, I think, by Mr. Henry Lee, of my own

hospital. Lee returned in 1861, or thereabouts, to St. George's, and it is on record that he had been heard to say jokingly that while he was at "King's" it was considered an honour for him to hold Fergusson's knife. This is probably not quite true, as Lee was a distinguished authority on syphilis and no mean surgeon, but the joke gives a graphic picture of the supremacy of Sir William Fergusson.

Pressure of private work compelled Bowman a few years later to resign his appointment on the surgical staff of King's College Hospital. He kept up his connection with the College, however, for up to the time of his death he was an active member of the Council, and Chairman of the Medical Committee. Bowman married in 1842, Miss Harriet Paget, the daughter of a Leicester surgeon. She survived him. On arriving in town he took lodgings near the Strand, and later moved to Dr. Robert Lee's house in Golden Square. In 1850, he moved to 5, Clifford Street, the house of the illustrious Liston, the inventor of the splint which bears his name, not the actor. From 1851-1871, Bowman had a house at North End, Hampstead.

Ophthalmology

Bowman was appointed Assistant Surgeon to the Royal London Ophthalmic Hospital in 1846. He became surgeon to the Institution in 1851, and retired under the age limit in 1876. His first important paper in ophthalmology was read at Oxford in 1847, at the meeting of the British Association. This was "On some points on the Anatomy of the Eye, chiefly in reference to the Power of Adjustment." In this paper he demonstrated simultaneously with, but quite independently of, Bruecke, the structure and function of the ciliary muscle.

In 1851, appeared Helmholtz's ophthalmoscope, and in this year was held the Great Exhibition, and there met at Moorfields Eye Hospital three remarkable men, von Graefe, Donders, and Bowman. A warm friendship sprang up between the three, to be broken only by death; that of von Graefe occurring in 1870, while Donders lived till 1889.

In 1849, appeared "The Lectures on the Parts concerned in the Operations on the Eye and on the Structure of the Retina," delivered at the Royal London Ophthalmic Hospital, Moorfields, June, 1847, to which are added a paper on "The Vitreous Humour," and also a few cases of ophthalmic disease, published by Longman, Brown, Green and Longman. The dedication runs as follows:

To

JOSEPH HODGSON, Esq., F.R.S.,

late Surgeon to the General Hospital at Birmingham,
 in grateful recollection of early kindness and
 encouragement during five years spent
 within the walls of that noble Institution :

and to

JOHN RICHARD FARRE, M.D.

FREDERICK J. FARRE, M.D.

GILBERT MACKMURDO, Esq., F.R.S.

JOHN DALRYMPLE, Esq.

JAMES DIXON, Esq.

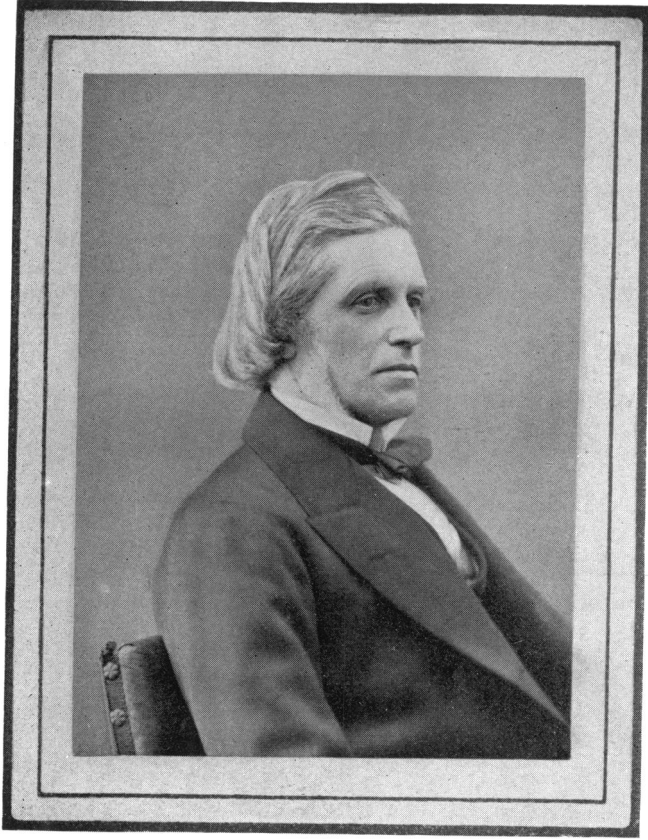
GEORGE CRITCHETT, Esq.

ALFRED POLAND, Esq.

My colleagues at the Ophthalmic Hospital, in
 token of sincere respect and esteem :

This small work is
 Dedicated.

My own copy of this work contains Bowman's signature in pencil on the fly-leaf. The tone of the preface is almost apologetic : "The following lectures were hastily put together, and were delivered nearly in their present shape, in the summer of 1847, with the simple object of exciting in the minds of the pupils some interest in the study and treatment of eye diseases. They are quite elementary It is a matter of regret to the author, that want of leisure has rendered it impossible for him, in this reprint of them from the *London Medical Gazette*, to hazard any attempt at making them less imperfect than they are." A footnote in ink states that "the lectures were delivered on June 8, 15, 22, and July 6. Part III of 'The Physiological Anatomy and Physiology of Man,' containing Chapter XVII, on vision, etc., was published in April, 1847." The paper on "The Vitreous Humour" was published in the *Dublin Quarterly Journal of Medical Science* in 1848; and the cases of ophthalmic disease were selected chiefly on account of their having some reference to the subjects of the lectures. "A tabular statement has also been appended of the cases treated, and the principal operations performed at the Ophthalmic Hospital during the last ten years. This has been compiled by Mr. Ledger, the intelligent House Surgeon to the Hospital, from the Annual Reports drawn up by the medical officers, and regularly published by the authorities



*Barrand & Jerrard.
Photos.*

*96, Gloucester Place.
Portman Sq^r W*

Ern King
W. Dorman

of the Institution." This preface is dated March, 1849, from 14, Golden Square. These lectures deal almost entirely with the normal histological appearances of the different parts of the eyeball, and show Bowman at his best on a subject peculiarly his own.

The appendix contains notes of 22 cases of ophthalmic disease. The first ten deal with corneal conditions; active ulceration, or nebulæ. As an instance, I take the second case, "sloughing of the cornea in the collapse of scarlet fever," in which five boys of one family had scarlet fever; two of whom lost their sight by sloughing of the cornea within a week of their seizure. Of these, one died; the other was brought to Bowman some months after convalescence, with sunken globes and no perception of light. There was no previous debility discoverable in these cases to account for this unusual destruction of the corneae.

Case 9 was one of symmetrical opacity of the corneae, extending horizontally over the central region, and obstructing vision; consisting of an earthy deposit limited to the anterior elastic lamina, and successfully removed by operation. Illustrations are appended of the eye before and after operation, with a drawing of the earthy deposit as shown by the microscopical examination.

The next case was a similar one under the care of Mr. Dixon. Two cases of pyaemia with metastatic panophthalmitis are recorded, and some cases of cataract relieved by spontaneous depression of the lens, vision remaining; and of cataractous lenses dislocated into the anterior chamber. The cases end with an account of the microscopical examination of an eye after the operation of solution; a case of dropsy of the posterior aqueous chamber, with synechia posterior—bulging of the sclerotica over the ciliary processes, *i.e.*, iris bombé with ciliary staphyloma; and a case of hyphaema undergoing very slow absorption during twelve months.

It would be interesting to compare the table drawn up by the "intelligent House Surgeon," with similar tables of a recent date. Taking the total number of cases for the ten years: Acute and chronic conjunctivitis, total, 19,848 cases; catarrhal and pustular conjunctivitis, 7,592 cases. Purulent conjunctivitis (adults), 187 cases; (infants), 1,590 cases. Strumous inflammation of the conjunctiva, 5,976 cases. Scleritis, 1,056 cases. Ulcers and opacities of the cornea, 5,085 cases. Conical cornea, 60 cases. Iritis, 1,143 cases. Cataract, 1,531 cases. Amaurosis in various degrees, 4,865 cases (this was before the ophthalmoscope was in use). Inflammation of internal tunics and glaucoma, 1,747 cases. Neuralgia, palsy third, sixth, and seventh nerves and strabismus, 835 cases. Lid inflammation, 1,029 cases. Lid tumours, 898 cases. Tinea, lippitudo and trichiasis, 577 cases. Inversion and eversion of lids, 44 cases. Lacrymal disease, 1,100 cases. Wounds of the eye, etc., 2,302 cases. Fungus of the globe or appendages, 24

cases. Tumours of the orbit, 16 cases. Miscellaneous, 32 cases. Escaped registration, 2,500 cases. Making a grand total for the ten years of 65,353 cases. The operation table may be abstracted as follows: Cataract extraction, 451 cases; depression, 26 cases; solution, 396 cases; congenital, 110 cases; dislocated lens, 6 cases;

5 Clarendon St.

June 20/53

Dear Canton

Herewith is a copy of the notes I hurriedly took of Mr Mc Intyre's case. They are quite at your service. You should have had them earlier, but I have been very busy & occupied with Mr. Bennett's illness.

Yours always truly

W. Bowman

E. Canton Esq

I don't think I have any other copies of the Profile of Belye altered with your acceptance

Mr Mc Intyre at 42. Since 22 years old has had constantly recurring inflammation of both sclerotics - not usually painful - sight good now, but feeble for 6 months past. - Reads well with ~~left~~ ^{right} eye - less well with left. Sclerotics muddy browned. Irises perfectly natural but brown - very strongly marked broad arcus in both eyes, leaving only the central 3^d of cornea clear, & that not quite clear. Pupils natural. has amaurosis always - The cornea bulge somewhat - The front of sclerotics shows inkly thinning corresponding to the width of post. chamber. Fusion of the globe natural.

The cornea is chiefly opaque white, minutely mottled - and in the left there is in the center of the opacity a yellow tract following the curvature, for an eighth of an inch & looking like calcareous or opacous deposit - 101



artificial pupil, 123 cases; tumours, 13 cases; pterygium, 1 case; staphyloma, 18 cases; strabismus, 188 cases; miscellaneous, 2 cases; entropion, 49 cases; cilia dissected out, 7 cases; globe extirpated, 4 cases; fistula lacrymalis, 20 cases. Making a grand total for the ten years of 1,419 operations.

Of Bowman's other work in the field of ophthalmology must be mentioned his advocacy of his friend von Graefe's operation

of iridectomy for glaucoma; his sounds for the treatment of lacrymal obstruction and his work on conical cornea, detached retina, and the use of two needles in needling operations. All have used Bowman's stop needle, and some of us have probably used his lacrymal probes; but the writer can claim to have used a Bowman's corneal trephine. When I did my first trephine operation for glaucoma in the year 1910, I used the only trephine I could find at St. George's Hospital, probably one of the few remaining in England at that date, a Bowman's small trephine with the graduated scale on the plunger to mark the depth of the cut. It cannot have been used for many years, but it worked perfectly, and I tapped the anterior chamber without any difficulty.

The Ophthalmic Hospital Reports began their career in 1857 under the editorship of J. Fremlyn Streatfeild. Bowman was doubtless one of the prime movers in the organization of this venture. He wrote some papers which were published in the earlier volumes.

The Ophthalmological Society of the United Kingdom

The foundation of the Ophthalmological Society was first mooted in 1880, and a committee met at Bowman's house to make arrangements and to draw up rules. Sir Thomas Barlow and Mr. Waren Tay are the sole survivors of this Committee. Everyone knows that Bowman was the first President, and that he held office for three years, and that the Bowman Lecture was founded in his honour in 1883 to mark his pre-eminent position in ophthalmology. Bowman saw the new venture launched, and delivered the usual Presidential addresses during his years of office. It may not be so generally known that he was the moving spirit in the foundation of the Society's Library, now called the Bowman Library. He presented a couple of good oak bookcases, and gave annually till his death, a sum of £50 towards the upkeep of the library. This gift was continued by the family of Sir William Bowman into the early years of the present century.

Conclusion

Power, in his memoir in the collected edition of Bowman's works, says that "the natural bent of his mind was towards pathology and operative surgery; that he disliked being called an oculist, and always declined the appellation, saying that he was a surgeon. After the death of Dalrymple, the heads of the profession, represented by Sir James Clark, Todd and Liston, strongly supporting him, the tide of ophthalmic practice became too strong to be resisted, and he gave himself up to it. His careful and prolonged work with the microscope was an excellent introduction

to the delicate manipulations required for the successful prosecution of ophthalmic surgery, and it was soon generally recognized that he possessed extraordinary skill, both in the diagnosis and in the operative treatment of the diseases of the eye."

"The want of good nursing in King's College Hospital led to the establishment by Todd, Bowman, and others, of St. John's House and Sisterhood. In this connection he was able when the time came to aid Miss Nightingale by sending out trained nurses to the East at the time of the Crimean War, and he was a member of the Council of the Nightingale Fund until his death."

"In consultation he was gentle, patient and thoughtful; alive to, and quickly seizing, the salient points of every case; very reserved, giving his opinion in a few words, but decisively, both as to forecast and treatment." A glaucoma patient of much experience said of him "that his touch was the lightest and yet the most inquiring of all those under whose care he had placed himself." "Another who knew him well said that one of his most striking characteristics was the power he possessed of concentrating his thoughts for the time on the one subject he was investigating. When iridectomy and tension of the eye engaged his attention, he thought of nothing else; and so with conical cornea and detachment of the retina."

"Though delicate and fragile both in form and feature, he was able to endure much work, and rarely suffered from any disturbance of health, with the exception of occasional headaches, and in later years slight attacks of sciatica. He was abstemious in his habits, eating little and drinking less. He was an early riser, and a non-smoker."

Personal Recollections

In response to a request relating to this memoir, Mr. Priestley Smith, one of the very few now living who can speak from personal recollection, writes as follows: "Early in 1874, having been house surgeon at the Birmingham Eye Hospital for two years, and being armed with letters of introduction, I called on Mr. Bowman in Clifford Street. After a few quiet words he asked me whether I should like to be one of his clinical assistants at Moorfields, and, as I was afterwards told, in disregard of a rule of the Hospital, he nominated me to that coveted post. In my case it meant little more than the privilege of closely watching his work. I have heard that even in the earliest days of his anatomical teaching at King's College, his manner had a peculiar fascination for those around him. It certainly was so at Moorfields. His dignity, his calmness of speech and of movement suggestive of power in reserve, and the refined expression of his face were

irresistible. Watts's fine portrait of him in earlier life reproduces this charm.

"He spoke little and always carefully and to the point, but not always without humour. One day in the theatre after the excision of an eye, the question of suturing the conjunctiva was raised. He said: 'I think not; it presents two difficulties; one in putting it in, the other in getting it out.' We had no cocain then. When I called on him to say good-bye and spoke doubtfully of succeeding as a specialist, he said: 'You will be sure to succeed—if you cure your patients.'

"For years he held the leading place at all the chief gatherings of ophthalmic surgeons. In 1880, the British Medical Association held its annual meeting at Cambridge; Bowman presided over our section and his intimate friend Donders was an honoured visitor. The University conferred the degree of LL.D. on both, and the enthusiasm with which the waiting section received them on their arrival from the Senate House in their new robes was something to remember. In 1881, Bowman presided over our section of the Seventh International Medical Congress, in London. His inaugural address showed finely his ideals, his simplicity, and his modesty.

"It was through his Presidency for three years of the Ophthalmological Society, founded in 1880, that most of the younger men of that time had the opportunity of knowing him. It was through his influence that the Society rose so rapidly into strength and importance. He was an ideal President commanding universal respect without self-assertion. I have always regarded it as a privilege and advantage to have entered on my career in those days."

In 1884, a baronetcy in recognition of his scientific attainments was conferred on Bowman. He remained in practice until he was 70 years of age, and he continued to see a few patients almost to the end of his life.

His portrait by Oules was exhibited at the Royal Academy in 1889. At the same time, or rather in July, 1888, the year of his final retirement, the Bowman Testimonial Fund was inaugurated at a meeting held at Sir George Johnson's house. It was decided that the portrait already referred to should be painted, and that his publications should be reprinted. Professor Burdon-Sanderson and Mr. J. W. Hulke were chosen to edit the published works, which appeared in two volumes in 1892. The secretaries to the Fund were Messrs. W. A. Brailey and W. H. H. Jessop.

Sir William Bowman moved from Clifford Street to his country house, Joldwynds, not far from Dorking. He caught a chill while

superintending the removal of his library from London to Surrey, and died of pneumonia on March 29, 1892. His burial took place on April 1, in the churchyard of Holmbury St. Mary, and a memorial service was held at St. James's, Piccadilly, on the same day.

In ending this all inadequate memoir of one of the founders of our speciality I should like to quote the epitaph written by the widow of another great physiological surgeon of an earlier day, probably the greatest of all time, namely, John Hunter; the sentiments of which seem to me to be peculiarly adapted to the case of Bowman, whose own untiring search for truth was so marked a feature of his character.

“ Here lies in awful silence, cold and still,
 One whom no common spark of genius fired;
 Whose reach of thought Nature alone could fill,
 Whose deep research the love of truth inspired.

Hunter! if years of toil and watchful care,
 If the vast labours of a powerful mind
 To soothe the ills humanity must share,
 Deserve the grateful plaudits of mankind.

Then be each human weakness buried here
 Envy would raise to dim a name so bright:
 Those specks which in the orb of day appear
 Take nothing from his warm and welcome light.”

In conclusion I must state that the chief authorities which I have consulted are the two volumes of the collected works: Bettany's "Eminent Doctors, their Life and Work," the obituary notice contributed to the *Ophthalmic Review* by Mr. Priestley Smith, 1892, p. 129; and the article contributed to the *Annals of Medical History*, 1924, by Dr. Burton Chance of Philadelphia. The reproduction of the signature in the Pupils' Register of St. George's Hospital is given by permission of the Dean of the Medical School, Dr. James Torrens. One of the pictures of Bowman is reproduced from a photograph published in 1873, in a series of volumes dealing with eminent medical men at home and abroad, by the courtesy of Messrs. J. and A. Churchill, the publishers. The frontispiece is from a photo of Bowman taken about a year before his death, kindly lent by Mr. Lawford; it was reproduced in the obituary notice in the *Ophthalmic Review* in 1892. The last illustration is from a letter with notes on a case by Bowman which is in my possession.