Henry Bence-Jones, M.D., F.R.S. 1813-1873: autobiography with elucidations at later dates.

Contributors

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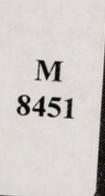
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H. BENCE-JONES, F.R.S.



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HENRY BENCE-JONES

M.D., F.R.S.

1813-1873

An Autobiography

with elucidations at later dates

(Privately printed).

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HENRY BENCE-JONES, F.R.S.,

1813-1873.

HESE fragmentary notes of autobiography were dictated in the latter weeks of his lifetime, namely, in March and April, 1873. Whenever possible, reference was made to notes and dates, but failing health will account for possible inaccuracies. The first draft of these notes was read over to him, and a few corrections and many additions were made. Many years later, his youngest son caused them to be set up in type and a few proofs were drawn. In 1926 it was not known whether the original MS. existed; but it is thought it may yet be found.

I was born the last day of December, 1813, at a time when there had been the most heavy snowfall known for years, and it was feared that no access to the house could be obtained even for supplies of food, at Thorington Hall, Yoxford, Suffolk. The Rev. Mr. Bence, my mother's father, had, I believe, lent this place to my father for a year when he left the Army, on his return from the Peninsular where he had been Lieutenant-Colonel in the 5th Dragoon Guards.

"The Rev. Mr. Bence" (1749-1824) was Mr. Bence Sparrow, LL.B., of Emanuel College, Rector of Beccles. By royal sign-manual, May, 1804, he took the name and arms of Bence. He married May, 1786, Harriet, daughter and heir of William Elmy of Beccles. His youngest child was Matilda Sparrow (or Bence after 1804) who married July, 1811, Lieut.-Col. William Jones, Fifth Dragoon Guards. The Rev. Mr. Bence's elder brother was Robert Sparrow of Worlingham, whose daughter married Lord Gosford. Lady Gosford was the mother of Lady Millicent Acheson who

married, 1842, Dr. Bence-Jones. Lady Gosford's brother, Robert Bernard Sparrow, married Olivia Acheson, Lord Gosford's sister.

'The Fifth Dragoon Guards.' The regiment was much distinguished in the Peninsular War, especially at Salamanca. It was not engaged in the Waterloo campaign, and was detained in England 'because its horses were too young and untrained,' says the Regimental History. In 1811 William Jones' rank in the regiment was Senior Major, and in the Army Lieut.-Col. (See Cannon's Historical Records of the Fifth Dragoon Guards.)

The year after my birth my father took a lease of Theberton Hall, Saxmundham, and when I was between six and seven years old, in riding a pony I fell off and broke my left arm at the elbow joint. The confinement and lead lotion made me very ill, and it was found that the joint had become perfectly fixed. The energy of Mr. King, the then well-known surgeon of Saxmundham, determined him to overcome this by daily and slow continued motion. Each morning for months he or my father moved the bones, with great pain to me but with so much success that after continued perseverance the point of the forefinger of the left hand was able to touch the point of the shoulder. This accident and the ill-health and treatment requisite must have occupied at least a year, during which my father began to teach me Latin Grammar, and I learnt it with as little energy as it is possible to conceive.

When I was quite recovered, I think at about eight years old I was sent with my elder brother to a school at Hingham in Norfolk, where I remained a year. Here nothing that I recollect occurred of any interest. At the end of a year we went to the Rev. Mr. Carmell's private school at Putney. There were, I think, 120 boys in our house and within the four walls of a not very large playground. Mr. Carmell took only a very small part in the management of the school himself, but he had many ushers and we were there prepared for Harrow, where my grandfather Jones (who had made a considerable fortune as a lawyer in Cork) had agreed to send us.

During my stay at Mr. Carmell's, I recollect nothing of any learning, but chiefly of reading all the novels contained

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in a circulating library at Putney; the beauty of Wimbledon Park, where we were occasionally allowed to walk, was one of the greatest pleasures I can remember.

About 1827 I went to Harrow, then under Dr. Butler. The school was then almost at its lowest state, there being at that time probably not more than 150 boys, and the numbers decreasing.

Mr. C. H. K. Marten, then lately undermaster of Eton, in "The Times," 21st August, 1928, says: "When Arnold came to Rugby in 1818, its numbers were only 123. In the forties Westminster fell to under 80 and Harrow under 70."

I was placed much lower than was expected, the lowest Fourth form; this, however, led to my being generally fifth or sixth in the remove, and as every second term we almost certainly got our remove, I rose slowly in the school. I was at first in Batten's house, where the fagging was very slight. My chief duty as a fag was to prepare the breakfast and tea of Lord Grimston, and afterwards for a short time of Sydney Herbert. To this day I never see a cup of a certain pattern without it recalling Sydney Herbert to my mind.

By the time I got out of the Fourth form, I had become quite a good cricketer, football and racquet player, in all which games I took immense delight; I was soon put into the Harrow cricket eleven for my batting and bowling, but the number of boys at Harrow was so few that we were quite unable to compete with Eton (or other public schools) until my third year in the eleven. I was then the only one remaining from the first year, and was therefore the best player in the school, but my father would not allow me to stay in London to play in a match against Eton, much to the disappointment of my schoolfellows.

Of classical knowledge during this time I had acquired nothing more than is generally learnt by Harrow. I had learnt to read and write French under a French tutor, but imperfectly.

After the death of Mr. Batten from a sudden illness, I went to a small house belonging to Mr. Phelps. He soon afterwards moved to Harrow Park, one of the largest houses in Harrow, which had formerly belonged to Lord Northwich,

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and here I ultimately became head of the house. Dr. Longley had succeeded Dr. Butler as head master. As a gentleman and a scholar, he was of the highest excellence, but as a school-master his management was lamentable. No master in any school knew less of what was going on than Dr. Longley, and under him, Harrow was in the worst state of order. Happily there were but few boys, though the numbers slowly increased.

Whilst at Harrow I, of course, did the school work, and when in the Sixth form I began to read Euclid, the study of which Dr. Longley had for the first time introduced into the school, and I was greatly attracted by the clear ideas which thus became known to me. In classics and verse-making I took comparatively little pleasure.

Euclid at Harrow. J. A. Godley wrote 12th April, 1888, that Montagu Butler, Master of Trinity, was much interested to ascertain if Euclid was ignored under his father at Harrow, that is, if "it was introduced for the first time" by Dr. Longley (John Arthur Godley, K.C.B., 1893, as Sir Arthur Godley, and G.C.B., 1908, and Lord Kilbracken, 1909). George Butler wrote to his brother Montagu 9th April, 1888, and said he did not remember the introduction of Euclid at Harrow by Longley. "There are two persons living who would be able to answer the question—Was Euclid taught before Longley came to Harrow? One is Bishop Perry, whose address I do not know; the other is Bishop Charles Wordsworth. The Dean of Ely might also be consulted."

Among the imperfect knowledge that I acquired at Harrow was that of turning in wood and ivory. I also had instruction in etching, mezzotint and even engraving on copper; but I made no progress worth mentioning, and they were of no use to me excepting the etching, which led me to practise copying drawings in pen and ink. In this I acquired considerable proficiency as an accurate copier even of large pictures, and on many occasions I have found this power of use, though I had no originality and could only produce a more or less accurate copy of what was before me.

I also learnt to play a little on the clarionet, and the bugle, and delighted in the musical power of my friend, Pearson, afterwards the composer; and Weber's valse and a

song called "Rise gentle moon" and "Oft in the stilly night" are constantly associated even now with the shop of a tailor, in one room of whose house Pearson used to take his lesson and practice.

The last year of my Harrow life, John Godley was my chief friend, with whom in Phelp's house I became very intimate. I delighted in his knowledge, which was very great. He had been educated at home, I think chiefly by his father and a governess at a school, and I looked forward to his success at Oxford with the greatest hope. I saw him very rarely in after life.

"John Godley."—John Robert Godley, M.P., afterwards Assistant Under Secretary of State for War. He married Charlotte, daughter of C. G. Wynne. His son, John Arthur Godley, K.C.B., was the first Lord Kilbracken, 1909.

My energy at this time was considerable, both in games and also as shown in a volume consisting of the tables of Blair's Chronology, which I copied out from beginning to end from the large original folio in the school library. This was done during the summer months in the midst of school work and many hours daily spent on the cricket ground.

He was captain of the Eleven. (See Thornton's History of Harrow, pp. 342-3.)

When I rose to be head of the Sixth form and should have been a monitor in the following half, I persuaded my father to let me leave Harrow and go to a private tutor in order to learn mathematics and prepare for Cambridge, instead of following my eldest brother to Balliol, Oxford.

"My eldest brother"—the late Mr. William Bence-Jones of Lisselan, Clonakilty, Co. Cork. He entered at Balliol, October, 1832.

My father was very unwilling to do anything regarding a tutor, so I almost arranged for myself with the Rev. Hartwell Horne to take me as a pupil for a year. I had heard of him at Hatchard's in Piccadilly, and his surprise was considerable that his future pupil should take so active a part in arranging the business. However, before the engagement was finally made, it was settled that I should go to the Rev. John Babington at Corsington Rectory, Leicestershire, one of the

sons of Mr. Babington of Rothley. Here I found three other pupils also going to Trinity, Cambridge; one of them was Joseph Hoare, another was one of the Upcher's of Sheringham.

We principally studied Euclid and algebra, and had but little classical work. I soon made progress enough in Euclid to require no figures to demonstrate the propositions of the four first and part of the sixth books. My progress in algebra was not, however, nearly so good, and as our tutor never pressed us in the slightest degree, and none of my companions had any more love for mathematics, we did comparatively little work.

After spending a year in Leicestershire, Mr. Babington took us all to Trinity, Cambridge.

Joseph Hoare's brother was at this time one of the most influential men in a set known as "the reading Trinity." He started a new Trinity eight-oar boat; this was also known as the 2nd Trinity crew, and they formed, with their friends, a small set of the hardest reading men in the College. I was asked to join this crew, and soon found myself rowing No. 5 in the boat, and belonging to the steadiest and best set of men at Trinity.

Before long I became acquainted in our classroom with a very silent quiet man, and from him I discovered how deficient was my knowledge in mathematics. This was Archibald Smith, the future senior Wrangler of my year, with whom I became very intimate.

I worked hard at the College subjects, and hoped I might even get a first class in the summer examination, but my conceit misled me and I was only placed in the third class.

When I returned to Cambridge in October, having passed the vacation at home, I determined to give up all hope of taking honours.

I had a clined like my elder brother to go into the Dragoons, where my father wished one of us to be, and ultimately my youngest brother went into the Army, whilst I was intended for the Church.

I now read very promiscuously. Thinking I could acquire a knowledge of Hebrew, I engaged a tutor and obtained the

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necessary books to enable me to read the Old Testament in that language. However, I made but poor progress with the grammar. I also attended divinity lectures and obtained my certificate for ordination from the Regius Professor of Divinity. My zeal for Hebrew did not last long and I took to reading German and Italian with a tutor. I also began to attend Professor Smythe's lectures on Modern History and Professor Sedgwick's course of Geology.

My long vacations were chiefly passed at home, where my reading was still more desultory, my time being chiefly spent in boating and fishing. My last long vacation was passed with my relations at Blackrock, near Cork, and this summer is full of most pleasant remembrances, though it in no way added to my progress in knowledge.

In January, 1836, I took my degree and was seventh in the poll, and by this time, although I had taken all the necessary steps for ordination, I had resolved not to go into the Church. I left Cambridge and joined my father, who was staying in London, and my daily thought was my future occupation.

As a relation of my father's family was a merchant in Liverpool, I coolly wrote to him asking him to take me into his house as a clerk, but I cannot remember that he ever answered my letter. I then thought of emigrating to New Zealand, and from the Emigration Society I procured the requisite papers. Before I had come to any conclusion we returned to Suffolk.

I had previously met in London a friend from whom, in talking about professions, I had learnt the difference between a surgeon, a physician and an apothecary, and he told me shortly what was required in the education of these different branches of our profession.

When I mentioned to my father the difficulty I found in deciding on my future course, he suggested that I should remain at home and study for a year with our Lowestoft general practitioner, Mr. Worthington, but this did not suit my ideas, and as I had heard whilst with Mr. Babington that he had some relation an officer in one of our hospitals in London, I wrote to ask if he could give me an introduction

that might, if possible, obtain some information from him regarding my future course of life. He sent me an immediate and most kind answer, saying the relation was his brother, Mr. George Babington, surgeon of St. George's Hospital, and he was sure he would see me any morning that I went to him in Golden Square.

I almost immediately went up by the mail from Lowestoft, and was very soon at Mr. Babington's house. He seemed to consider that I had already made up my mind, for he at once wrote me an introduction to the assistant apothecary at St. George's Hospital. He also told me what I did not know, that my friend, Henry Pearson, was studying at St. George's Hospital, and he gave me his address in Chapel Street, Belgrave Square. I went to the apothecary, Mr. Hammerton, who, with awkward manner, asked me what I knew in connection with medicine. Did I know chemistry? I said, "Not a word." Did I know anything of drugs? I said, "Not the least." He seemed to think it was no use my coming to St. George's Hospital. However, I told him I wanted to learn, and it was settled that for six months I should enter as a pupil in the shop where the medicines were prepared. I then went to my friend Pearson and complained of the incivility of the apothecary, but he told me I should learn to like him, and so I did.

Mr. R. R. James, of 22, Norfolk Square, London, W.2, supplies, August 16th, 1922, interesting information relative to Dr. Bence-Jones and those whom he met at St. George's Hospital. In March, 1837, he entered under Mr. Babington, surgeon to the Hospital, as pupil for a period of twelve months, having previously been pupil under the physician.

Tel. Padd. 2335. 22, Norfolk Square, Aug. 16, 1922. London, W.2.

Dear Sir,

I understand from the Secretary Superintendent of St. George's Hospital that you are making enquiries about Dr. Bence-Jones and his contemporaries, particularly Dr. Hammerton. I fear I cannot add much to what you probably already know about Dr. Bence-Jones, as I take it he is an ancestor of yours. I have some notes about him in my register

of the pupils of the Hospital, but these were mainly drawn from the obituary notices in the Medical Press, Medical Directories and such-like sources. You may like to know that he entered under Mr. Babington, surgeon to the Hospital, in March, 1837, for a period of twelve months' study, and he had previously been a pupil under the Physicians. The Physicians' register of pupils is, I regret to say, no longer in existence.

Mr. Hammerton entered in 1824 under Mr. Ewbank, for twelve months. John Harrop Hammerton came of Yorkshire stock and was apprenticed to the well-known firm of Apothecaries, Messrs. Walker and Nussey, of St. James' Street. Walker and Nussey were both St. George's men, and were the Apothecaries to the Royal Household. Mr. H. qualified L.S.A. in 1827, and was elected Assistant Apothecary to the Hospital, where he remained for 41 years. The Resident Apothecary in those days occupied the position of a glorified House Physician and took charge of the medical cases at all times when the Physicians were not in the house. He was the recipient of an address of thanks on his retirement. His brother was Thomas Hammerton, apothecary and surgeon of Piccadilly. J. H. H. died at Henley-on-Thames 10th January, 1871, at 85. There is a photo of him in a group of the staff in 1864 which might interest you as containing photos of many of Dr. Bence-Jones' contemporaries, such as Nairne, Page, Wadham, Tatum, George Pollock, Hy. Lee.

We have a copy of a print by Holl, after Lawrence, I think it is, of Dr. Bence-Jones. Of those who entered the same year George Pollock was a well-known surgeon and was, I think, nearly related to the legal family which now flourishes, I hope, in the person of the Attorney-General. Am I right in this? (Later Master of the Rolls). Sir Prescott Hewett entered much about the same time.

Yours very truly,

R. R. JAMES.

Mr. John Harrop Hammerton had entered the Hospital in 1824 as pupil to Mr. Ewbank, and was an apprentice of the Apothecaries of the Royal Household, Walker and Nussey, of St. James's Street. Mr. Hammerton qualified as L.S.A. in 1827 and became assistant Apothecary to the Hospital, where he remained forty-one years. As resident Apothecary he was

practically House Physician. At the age of 85 he died at Henley-on-Thames. 10th January, 1871. With Mr. Hammerton the following may be named as contemporaries of Dr. Bence-Jones at the Hospital: Nairne, Page, Wadham, Tatum, George Pollock, Henry Lee, Pitman, Sir Prescott Hewett entered much about the same time and was (with Sir Henry Holland) among Dr. Bence-Jones's closest friends.

Pearson undertook to look for lodgings for me in his neighbourhood and I returned to Suffolk to make arrangements for settling in London. Before long two small rooms were engaged in Park Street, Grosvenor Square, and I began my daily work in the basement of St. George's Hospital. One of my relations gave me an apron; I began to learn how to make up pills and powders, draughts and mixtures. were two other pupils of the apothecary who took part in making up and dispensing the different medicines which were ordered by the physicians and surgeons. The two apothecaries mostly superintended the work and the laboratory men prepared some of the medicines that were used in the greatest quantities, such as decoctions of bark, sarsaparilla, etc. His business was also to make other infusions and plasters and take care of the stores of drugs. This work in the apothecaries' shop for six months was of the utmost use to me all my life. Afterwards at St. George's I became, so to say, a part of the house. I used to go to my work soon after nine o'clock, and the business in the shop was never over till four. I was often asked to dine in the board room with Mr. Hammerton, and I stayed in his rooms until early in the evening, when I returned to Park Street, to read Paris' Pharmacollodia or some other book on drugs, but I was usually too tired to work much and soon went to bed to be ready for my next day's work.

Thus I rapidly acquired considerable knowledge of the making up and dispensing of medicines and I gradually became more and more useful. Often the laboratory men, when I wished to remain at work, cooked my beef-steak or mutton chop and I did not return until tea time to my lodgings.

I kept up my acquaintance with only one of my Harrow friends who had also been at Cambridge, and to his father's

house in the neighbourhood of London I often went during the beautiful Saturday or Sunday evenings during the summer. This friend was W. Talbot Agar, who lived in what is now (1873) Agartown,* but was then a country house surrounded by cultivated fields.

Pearson's great friend was Charles Macaulay, who was at this time house surgeon at the Lock Hospital; with him I also became intimate, and I well remember his delight at the early numbers of Pickwick, which began to be published about that time. He offered to help me in learning the bones of the body, but I do not recollect that I began my lessons; my time was so fully occupied that I did not see either him or Pearson very frequently.

Late in the summer when the laboratory man was given ten days' holiday, I had charge of the preparation of the medicines, and by the commencement of the medical session in October I had acquired a considerable practical knowledge regarding the way drugs were used. I only went into the wards of the hospital on rare occasions, but frequently at night I accompanied Mr. Hammerton when he visited those of the physician's patients who were most dangerously ill.

On October 1st, 1838, I became a perpetual pupil at St. George's and began to attend lectures and the dissecting room. I then for the first time went to the Royal Institution, where Mr. Faraday, at eight in the morning, gave a short course of lectures on electricity, which preceded Mr. Brand's general chemical course for the medical students of St. George's.

Those lectures of Mr. Faraday's, beautiful as they were, were of small use to medical pupils, who could not see much connection between electrical induction and the action of drugs.

I became for a time dresser in the surgeon's wards, but as soon as I had acquired some practical knowledge as a pupil of the surgeons, I returned to work in the physician's wards. I did my utmost to acquire a thorough knowledge of the use of the stethoscope. Dr. Hope, at this time our

^{*} The site of St. Pancras station nearly.

assistant physician, set us a bright example of the importance of this study, and to those who were willing he gave every assistance in obtaining the power of diagnosis of heart and lung disease. I also tried to get some knowledge of chemical diseases, but these in the physician's wards, notwithstanding the glorious discoveries of Dr. Bright, were not valued by any of our medical men. No means whatever for investigation existed except a spirit lamp and some nitric acid in one of the surgical wards, and with it I tried to make out all I could regarding albumen, but I found I could not come to any solution of the questions that daily puzzled me, and I found myself more and more confused. As to the stethoscope, little idea of any knowledge being thereby attainable existed in St. George's Hospital at that time.

I worked hard till late in the spring of 1839, when I was attacked by rheumatic fever. I managed to return home and had six weeks of serious illness, but recovered without any complication of disease of the heart. Before October 1st, 1830, though still very weak, I was well enough to return to London, and instead of resuming my work at St. George's I entered myself as a private pupil to Professor Graham, of University College. I was enabled to do this by means of a small legacy which had been left me out of which I gave £50 for a year's pupilage. There were two other pupils in the laboratory, and Professor Graham attending but rarely, their instruction was chiefly derived from Mr. Fownes, the assistant, and this began my acquaintance with one who shortly became my most intimate friend and from whom I acquired knowledge and habits of accuracy and love for original research which had the greatest influence on my future. This friendship continued until Mr. Fownes' death, which took place in January, 1849, after great suffering, from consumption.

George Fownes, F.R.S. (1815-1849), was elder son of John Fownes, "the famous glover," then of Coventry Street and later of Gresham Street. He deserted the family business in favour of science. A pupil of Liebig at Giessen, then of Graham at University College, and lecturer on chemistry at Charing Cross Hospital, he published his Manual of Chemistry in 1844. One writer speaks of Fownes' kind friend and medical adviser Dr. Bence-Jones. He died of consumption at the age

of thirty-three. He had succeeded Mr. Everett in the lectureship at Middlesex Hospital, where there was a good laboratory. Fownes' first lecture at the Royal Institution in June, 1841,

was on chemistry applied to agriculture.

Whilst at University College I obtained a general knowledge of laboratory work, and as Fownes had been at Giessen I learnt what was required to determine the composition of organic substances according to Liebig's methods. Many calculi that existed in the Museum of University College were brought to Fownes for examination; these were given to me to analyse, and among them I discovered the half of a very large cystine calculus. The presence of sulphur in this substance had not long been recognised and it was a matter of interest to look for it in this newly-found and very large calculus. The account of the examination of this substance formed my first medical paper and in the autumn it was read at the Medico Chirurgical Society and ultimately printed in the transactions.

During this year (1839) I only repaired occasionally to the Hospital on Saturdays, when the laboratory was closed, until October, when I again returned to work in the Physicians' wards, taking notes with the utmost diligence. About this time my father took the lease of 30, Grosvenor Street, intending to pass half the year in London and to make the house a home for me. I had made up my mind to pass the examinations for the College of Physicians as soon as I could, and then wished to study in Liebig's Laboratory at Giessen for six months. The College of Physicians at this time wishing to compete with the New London University. examined those who had obtained no medical degree at any University for a license to practice and agreed to call those who passed doctors of medicine. Before Easter, 1841, I was admitted a licentiate of the college and on Easter Sunday I left London by steamer for Antwerp, and in three days reached Giessen, where I was received with great friendship through Professor Graham's and Mr. Fowne's introduction. I immediately entered the laboratory where Scheerer was at that time working at animal chemistry. I took daily lessons from one of the professors of the University in German in the early morning before the laboratory work began, and I became for the time a German student, but the number of young chemists in Liebig's laboratory was so considerable that we formed a society among ourselves, and saw and knew little of the other University students. We dined daily together when the laboratory work was ended at 4 o'clock, and a walk to some of the beautiful places in the neighbourhood where good beer was known to exist was taken in the evening. On returning home I prepared my German for the morning lesson, and so the time passed quickly away. At Whitsuntide I made a short excursion alone to Heidelberg, the Bergstrasse, and Mannheim, down the Rhine to Ems to see the mineral waters, and then wandered up the beautiful Lahn back to Giessen. I had already got such a smattering of German by constantly listening and speaking in the laboratory that I met with no trouble in this ten days' trip.

My first conversation with Professor Liebig on his new views on physiology had filled me with admiration, and appeared like a new light where all had been confusion and incomprehensible before. His work on animal physiology was not yet finished, but he had made some of his ideas known, and one of my fellow pupils possessing an account he had drawn up in English, I got leave to copy his paper and thus became better acquainted with the views of animal physiology which have exercised so vast an influence upon all our future advances in knowledge on this subject.

In September I visited the baths of Bohemia, Marienbad, Carlsbad, and Toeplitz, returning by Prague, Dresden and Berlin to Hamburg, whence I came to London, and by October 1st I was again at work at St. George's Hospital. I studied in the Physicians' wards until Christmas, when I went home to Lowestoft. About this time I proposed to my cousin, and after difficulties, overcome by the aid of Lady Noel Byron, we were married at the end of May, 1842.

"My cousin": namely Lady Millicent Acheson. (See genealogical note herewith.)

Anne Bence b. 1707 married Robert Sparrow b. 1701 d. 1776 Dec. 1740 d. 1765

Their eldest son Robert Sparrow married Mary, dau. and heiress of Sir John Bernard of Huntingdon, and their younger son Bence Sparrow married Harriet, dau. of William Elmy of Beccles in 1786 (d. 1824).

By Royal Sign Manual of May, 1804, Bence Sparrow took the surname and arms of BENCE.

Robert Sparrow (the elder son) had two children:

Mary Sparrow, b. 1777, married 2nd Earl of Gosford and Robert Bernard Sparrow, b. 1773, married Olivia, daughter of 1st Earl of and Viscount Gosford, and had two children, one of whom married the Duke of Manchester.

Bence Sparrow, or Bence Bence, had a daughter Matilda who married Colonel William Jones, 5th D.G., whose son, Henry Bence Jones, married Millicent Acheson, daughter of Mary Sparrow, wife of 2nd Earl of Gosford.

We then left London and spent some months with Lady Olivia Sparrow at Brampton, and whilst at this place I went to Cambridge to take my M.A. degree. We afterwards went to Lowestoft, and by October 1st I was settled in London at 30, Grosvenor Street, and I began my regular work at St. George's Hospital.

"Lady Olivia," Lady Olivia Sparrow (nee Acheson) of Brampton, Huntingdon.

"Lady Noel Byron," widow of the poet Lord Byron. She died 1860. Much of her correspondence and poetic compositions survives in MS. In 1922 her history was being written by Mr. Harold Child of 12, Hill Road, Hampstead, and of "The Times" He gave up the work in 1925 and it was carried on by Miss Ethel Colburn Mayne for some time.

About this time I undertook to make a catalogue and analysis of the calculi in the museum, and out of this I formed my second paper, which was published by the Medico Chirurgical Society. I made this analysis at home, where I had fitted up a small room as a laboratory.

In 1843 my father died. This year Dr. Latham sent me my first patient and from him I received 7 guineas. Through Professor Liebig I also saw a great nobleman, who gave me one guinea. At this time Professor Fownes was appointed to succeed Professor Everett at the Middlesex Hospital. Fownes was so much engaged by lectures at the Charing Cross

Hospital, where he was chemical professor as well as by another course he had to deliver at the Pharmaceutical Society, that it was impossible for him to give a third course at the Middlesex Hospital. In consequence he had me appointed his temporary substitute. In the autumn of 1843 I began this course of lectures. I was to give one hundred lectures during the medical session. Professor Everett having left a most intelligent boy who had been his assistant, I had the benefit of his help in preparing my lectures from notes given me by Professor Fownes. My class consisted of six attentive pupils. In preparation for these lectures I acquired more practical knowledge of chemistry than I could possibly have done in any other way, and at the end of the course for which Mr. Fownes' representatives received the fees from the pupils, I was given the smaller sum of ten guineas, which to me were precious earnings.

Dr. Bence-Jones attributed much importance to these lectures at the Middlesex Hospital and to the effect they had on his professional prospects. Mr. Walter Kewley, the House-Governor of the Hospital, has kindly made a search of the Minute books which confirms all that Dr. Bence-Jones has recorded of his work at this period. The subject of the course of lectures was Animal Chemistry, and a MS. "prospectus" of the series gives the following outline of their subject matter: Chemical means of obtaining information; re-agents; constitution; organic analysis; schools of animal chemistry; Proximate principals; Fluids of animal body; Blood; Water; Milk; bile; saliva; mucus; Solids of animal body; organic processes; nutrition; respiration; secretion; death.

A year or two later Dr. Bence-Jones's application to St. George's Hospital, where a vacancy occurred on the staff, was strongly supported by the importance of this course of lectures. It is much to be regretted that there is no report of the series. His remarks on the subject of his chemical knowledge will be

noted later.

In December, 1845, a vacancy occurred in the assistant physicianship of St. George's, and after a comparatively easy contest I was appointed to that office. I had earned but a very small sum during the year; my prospects looked very discouraging, but in May, 1846, another vacancy occurred,

and thus in four months I was full physician of St. George's Hospital. I was well nigh over-weighted with the responsibility, for the physicians had ceased to have any consultations with one another on the patients, and but for my friendly relations with Mr. Hammerton, with whom I was able to consult at any moment, I should have found myself in constant perplexity regarding the treatment of my cases. In this way the alliance I had formed in the shop became my greatest support in the wards of the hospital, and I rapidly acquired knowledge in the management of the patients and confidence in myself, though my private practice was very small indeed for some time. Gradually, however, my chemical knowledge brought me medical men to ask for my opinion on their own cases, and this was followed by their occasionally bringing me their patients for consultation.

The dates of the appointments at St. George's Hospital are:

Assistant Physician .. 19th December, 1845.

Physician 17th April, 1846 till 1862. Consulting Physician .. 3rd April, 1868 till 1873.

In 1845 I was elected a Fellow of the College of Physicians. The College of Physicians. In the same year (1845) he was appointed to deliver the Gouldstonian Lectures in 1846. He was lecturer on Materia Medica in 1850, 1854 and 1856. In 1857 and 1858 he was Censor and in 1867 Senior Censor. He was Member of Council in 1860, 1861 and 1862, and Croonian Lecturer in 1868, in which year he delivered the lectures "On Matter and Force" on March 13th, 18th and 20th.

In the year 1845 I was appointed lecturer in the hospital on medical jurisprudence, an appointment generally filled by the youngest physician, and this led me to work on poisoning cases and many other interesting subjects, and my income from the pupils of the hospital made me much less anxious for my future than I had hitherto felt.

In 1846, through the kind help of Sir Francis Beaufort and Professor Fownes and Professor Graham, I was elected a Fellow of the Royal Society. I had previously had a paper on Animal Chemistry read and published in the Transactions.

In November I went to Cambridge to obtain a degree in medicine, a step which I found it was desirable to take.

Thus my medical career was clearly marked out and future success to a certain degree assured. Each year my practice gradually increased and I endeavoured to let no year pass without doing something original in natural science as applied to medicine; my papers were frequently published in the Philosophical Transactions.

In more exclusively medical knowledge my work appeared in the Medico Chirurgical Transactions. My work may thus be divided into scientific papers, merely professional papers and books and medical and other subjects. An account of the papers I have written on medical or non-medical subjects will be found at the end of this sketch.

(No such account of papers and publications is attached to the autobiographical notes. It is difficult to form such a list, but an attempt is made on another page.)

From the time that I became full physician at the hospital I was most diligent in my attendance there. At first, Lady Noel Byron used to lend us her house at Esher, but I was able for a few weeks in the summer to hire a house at Hampstead, whence I could easily visit St. George's Hospital daily. This course of life with a gradually increasing practice continued until 1851, when the loss of one of my children caused me to go for a time to Sandgate, near Folkestone. My intimacy with Mr. Roscoe, the medical man at Folkestone, led to my visiting this part of the country, and in the following year I bought a house, 5, Albion Villas, at Folkestone, whence for many successive summers I crossed to the Continent and visited different places, chiefly with a view to seeing as much as possible in the three weeks to a month, especially of the mineral waters of Europe. The baths of the Eastern Pyrenees were those I first visited. I, if possible, made acquaintance with the chief medical men of the place so that I might write if needful and obtain the last reports and papers regarding the waters, and as I generally had no Englishman with me I learnt to use the languages of the country; ultimately returning home as quickly as I could to my family at Folkestone. Usually on October 1st I was in the wards of the hospital. In a few years I got a clear knowledge of the baths of France. I stayed at Bagnieres de Bigorre, Luchon, Cauterets, Barege, Eaux Bonnes, Eaux

Chaudes and Montecatini in the Eastern Pyrenees; another year Amelie-les-Bains, with its great military hospital, and Vernet; for Italy, the Baths of Lucca, Aix-en-Savoie, Evian, Pfeffers, Loeche; in Bohemia, Marienbad, Karlsbad, Toeplitz; in Germany, Baden and Wildbad, Gastein, Kissingen, Franzensbad; in the centre of France, Vichy Clermont, Mont d'Or, Bourboule; in the Vosges, Plombieres, Luxeuil, the Rhine baths, Aix-la-Chapelle and Ems. I went twice to Pau, once to Biarritz and to Hyeres, Cannes, Nice, and Mentone. These visits enabled me to read in books the different accounts of the mineral waters with a degree of clearness that otherwise would not have been possible.

"One of my children"; issue of the marriage of Dr. Bence-Jones and Lady Millicent:

Millicent Mary .. b. 4th April, 1843 d. 26 Jeb., 1933

Henry Robert .. b. 18th April, 1844 d. 5th Nov., 1902

[Olivia Mary .. b. 20th Nov., 1845 d. 4th May, 1919

[Ralph Noel .., ,, d. 17th Feb., 1866

Anabella Mary .. b. 30th Nov., 1846 d. 25th July, 1851

Edith Mary .. b. 27th Feb., 1853 d. 20th July, 1919

Archibald Bence .. b. 24th July, 1856

Dr. Bence-Jones had one grandchild only, Millicent, daughter of his younger son, who married (1901) Susan, daughter of the first Lord Ludlow of Heywood, Wiltshire.

Lady Noel Byron has been already mentioned. She was a devoted friend of Lady Gosford (nee Mary Sparrow) and of Lady Gosford's daughters, of whom Dr. Bence-Jones' wife was one. The existing correspondence between Lady Noel Byron and Dr. Bence-Jones shows a rapid growth of confidence and friendship. In Lord Lovelace's "Astarte" (London, 1905) it is stated (p. 68), speaking of Lady Noel Byron; "Lady Olivia Acheson was the child of one of her dearest friends, Lady Gosford. Lady Byron's affection for both was very strong. On Lady Gosford's death (in 1841) she took this much-loved Olivia more than ever to her heart. Lady Olivia went into charitable work and a convent at Birmingham, and in 1861 she was ill. In June, 1851, Lady Olivia went to Birmingham for a meeting which was to be the last, and Lady Byron was, during her visit, introduced to John Henry Newman. . . . There was

secret antagonism between them because she thought he encouraged Lady Olivia to go out against Dr. Bence-Jones' injunctions." She died of consumption, 28th March, 1852. Lady Olivia and Lady Millicent were sisters and close friends.

In 1854 I took my wife and two elder children to Chamonix, but the fatigue to her was so great that we with some difficulty got back to Paris. After that I decided that I would either travel alone or accompanied only by my eldest boy. In different years I saw all the north of Italy from Nice to Venice, much of Bavaria and Austria. At Vienna I made an acquaintance with Professors Brucke and Ludwig, and by correspondence with Professor Brucke he became one of my personal friends.

I continued these excursions from Folkestone until 1866. In 1861 frequent palpitations of the heart led me to examine myself carefully with a flexible stethoscope, and I found chronic rheumatism had done permanent injury to one of the valves. I determined to resign the Physicianship of St. George's, and this determination I carried into effect early in 1862; I also gave up attending at the Institution for Invalid Ladies in Harley Street, where I had the great pleasure of becoming well acquainted with Miss Florence Nightingale, who for a time had the management of the Institution and only left it to undertake the great Crimean work.

Miss Nightingale opened the Hospital for Invalid Gentle-women at Chandos Street in 1850 and later on it was moved to I, Upper Harley Street, subsequently removing to 90, Harley Street, and in the present century it was moved to Lisson Grove, bearing Florence Nightingale's name. It is not a little remarkable that Dr. Bence-Jones' friendship with Sydney Herbert, which began at Harrow, had little to do with his friendship with Miss Nightingale. Both connections were intimate. Sydney Herbert's illness and death in 1861 formed the subject of much correspondence of a semi-professional nature between the organiser of nursing and the then eminent physician.

It was my desire at this time to spare myself less, but I ceased to have any trouble with my heart and my practice gradually grew larger. I went on with fresh work, full of

the energy which stimulated my success. In 1866, under the Presidency of my friend Mr. Grove, I was Chairman of the Chemical Section of the British Association at Nottingham. Early in that year my health began to fail, and after a season of very hard work I became exceedingly ill. On examining my chest I fancied that one side was half-full of fluid. could not believe, however, that this could be the case, and I went to Nottingham and did my work. On returning to Folkestone on September 1st I was taken dangerously ill and was with some difficulty removed to London at the beginning of the winter. My illness proved almost fatal in January; however, I slowly recovered some degree of health and by May was able to leave the house, but from that time my energy decreased and my power of exertion became less. In 1870 I was with difficulty able to go to Oxford to receive the Honorary Degree of D.C.L. which the University, at the installation of the Chancellor, Lord Salisbury, had bestowed upon me. Each year my health became worse and early in 1873 I was compelled to give up my practice.

"Mr. Grove," afterwards Sir William Robert Grove, a judge of the High Court, F.R.S., D.C.L., author of "The Correlation of Forces," and the originator of Groves' Batteries. Dr. Bence-Jones' close acquaintance with many of the leading scientific men of his time may be illustrated by a few quotations from biographical works and memoirs. In Huxley's autobiography

one reads:

"In April another good friend, Bence-Jones, lent his house at Folkestone for three months."

In the Life and Letters of Charles Darwin (ii, 215) it is said, "The year 1865 was again a time of much ill-health, but towards the close of the year he began to recover under the care of Dr. Bence-Jones, who dieted him severely and, as Darwin expressed, "half-starved him to death."

In Herbert Spencer's "An Autobiography" (ii, 106, 174): "speaking of drugs, Bence-Jones said that there is scarcely one which may not under different circumstances produce opposite effects."

And there is a reference to the doctor's approval of a bed which Herbert Spencer invented for the use of invalids.

Further, in Koenigsberger's Life of Helmholtz (p. 109) one finds that Helmholtz went to London "to see Bence-Jones, physician, physiologist and chemist, hoping to get news of du Bois Raymond and of the chemist Hofmann, but he (the latter) had gone off to du Bois's wedding." And Helmoltz adds: "In the evening I dined at seven with Dr. Bence-Jones. Bence-Jones is a charming man, simple, harmless, cordial as a child and extraordinarily kind to me."

Reference may also be made to the Hofmann Memorial Lectures in the Proceedings of the Chemical Society, London, 1893, and to Dr. A. Blackhall Morison's "The Sensory and Motor Disorders of the Heart," 1914, p. 91, where a curious illustration is given of Dr. Bence-Jones' skill in diagnosis, narrated by Sir (Thomas) Clifford Allbutt.

In the fascinating "Journals of Walter White" (Chapman and Hall, 1891, p. 159) there is another glimpse of Dr. Bence-Jones. In November 20th, 1864, the assistant secretary of the Royal Society records a walk in the Zoological Gardens with Tennyson. "We met Bence-Jones, to whom I introduced the poet, and he (B.-J.) took occasion to beg him to give a recitation at the Royal Institution." These Lectures at the Royal Institution form the chief feature of a large quantity of correspondence of the last century and many interesting letters exist relating thereto.

In 1872 Mr. Disraeli writes to Lady Folkestone enclosing a copy of a prescription which Dr. Bence-Jones had given Lady John Manners. He used it himself, says the leader of the Opposition, and Lady John assures him of its efficacy in her own case. It was a remedy for loss of voice, and the story of it is well told in Helen Lady Radnor's "From a Great Grandmother's Armchair," p. 68 (vol. I, 1927).

As regards extra-professional work, I undertook many things that I might have spared myself. The College of Chemistry was founded by Sir James Clarke in 1845, and Dr. Hofmann, through the influence of Prince Albert, who was president of the college, was appointed first Professor. In 1846, a house was engaged in Hanover Square with a frontage in Oxford Street, where convenient and well-arranged laboratories could be erected. In June, the first stone was laid by Prince Albert, and in November the work

was completed. A heavy debt was one of the results of this proceeding, and though considerable donations and subscriptions were given, the college from this time was in constant trouble. I was asked to become a member of the Council, and thus made the acquaintance of Professor Hofmann, who before long became one of my most intimate friends, and until he left England to become Professor of Chemistry at Berlin, our intercourse was almost of daily occurrence. Since that time our friendship has continued unabated, though we have only met occasionally.

Another piece of work my energy led me to engage in, was the establishment of the Hospital for Sick Children. Dr. West had been physician to the Children's Infirmary in the Waterloo Road, and he found the place so unsuited, that he determined, if possible, to found a new hospital in a different part of London. In the early part of the summer of 1849 he came to see me, and I agreed to join him in the work in which he was about to engage. I expressed my firm intention not to become physician to the Institution, while from the first, he professed that his wish was to take the most active part in the care of the patients. On July 9th, 1849, we settled the objects which we wished to obtain, the mode of our proceeding, and by the end of the year our plans had taken definite shape.

The Hospital for Children (Great Ormond Street).

Further details, from a different point of view, may be gathered from a pamphlet written in 1877 by Dr. West, in the form of a letter to the then Governors of the Hospital. Dr. West says: "I sought, while connected with the Infirmary (The Infirmary for Children, Waterloo Road) to obtain its conversion into a hospital—a result which has since been attained. Though I failed in my endeavour, I did not lay aside the project. Encouraged by the favourable reception of my book, which appeared in 1847, I strove to enlist the support of the leading medical men in London . . . while thus employed . . . I was informed by Dr. Bright that Dr. Bence-Jones had talked of a similar undertaking. I saw Bence-Jones, who told me that a lady, a relative of his, had suggested it to him, she being desirous of devoting herself to such an object. Dr. Bence-Jones had influential friends out

of the profession, while I had none. The meetings of the provisional committee were held at his house (in Grosvenor Street), and many persons, whom I had no means of approaching, were induced by him to join it. But for his aid, the establishment of the Children's Hospital would have encountered far more difficulties than attended it; the attempt might have failed altogether.

At the same time, the whole work of the undertaking rested upon me. Every document addressed either to the profession or to the public was written by me."

Later on, Dr. West stated: "When I called on Dr. Bright he said to me: Dr. Bence-Jones was saying something to me about a children's hospital; the sister of his wife, Lady Millicent Bence-Jones, wishes for some such employment; go and talk to him." I saw Bence-Jones, and found that he had done nothing, but would be happy to co-operate. He kindly lent his house for the meetings of a provisional committee (not one of whom I believe is in the present managing committee) and his social influence was so much greater than mine that the majority gave their names at his request and some also gave active co-operation."

At this time I had many influential friends, and with their help I was able to form a provisional committee which had considerable influence.

The first meeting of the friends of the Hospital for Sick Children was held at my house in Grosvenor Street, January 30th, 1850, and through my friend Mr. Niven, Lord Ashley became the chairman. (Lord Ashley, afterwards Lord Shaftesbury, the seventh, born 1801, died 1851. He and Dr. Bence-Jones were long on intimate terms.) My old friend, Joseph Hoare, was the first treasurer, and another friend, Mr. Henry Bathurst, became the Secretary. Frequent meetings took place at my house, and Dr. West, whose energy and information were very great, drew up all papers which from time to time were required. Arthur Barclay, who was treasurer of the Infirmary in Waterloo Road, objected to the new hospital, and as I had known him for years, Dr. West and I had an interview with him at the Brewery. We were unable to persuade him to close his infirmary, and he was unable to make us give up our scheme.

Joseph Hoare, who was his brother-in-law, was led to resign our treasurership, and Mr. Labouchere accepted the office. Dr. West obtained three very strong letters of approval from Sir J. Forbes, Sir C. Locock and Dr. Burrows, and I received very influential ones from Dr. Latham, Dr. Watson and Dr. R. Ferguson. These letters we were permitted to print and circulate with our prospectus. A public meeting was held at Hanover Square Rooms, under the presidency of Lord Ashley, and before long sufficient funds were collected to enable us to hire a house. A most excellent old mansion was found by Dr. West in Great Ormond Street, and very soon afterwards the hospital was opened for in and out patients. I continued on the management for several years, but after a time circumstances led me to give up my attendance. As a life member of the hospital, I have watched its progress up to the high position it has attained through the energy of Dr. West, with the greatest interest. (He left it in May, 1854). In more recent years its history will always be associated with the name of Dr. George Still, and other eminent persons.

Perhaps the most important part of my extra professional work arose from my connection with the Royal Institution. This caused me but little trouble, but it gave me the greatest interest, as it led to the warmest intimacy with Professor Faraday, and afterwards with Dr. Tyndall. When I was a pupil of St. George's Hospital, one of the Governors, who was a member of the Royal Institution, used frequently to give me an admission to all Friday evening lectures, until 1849, when I became a life-member. At this time, Dr. Latham, my near neighbour in Giosvenor Street, and my best supporter, used to attend Mr. Faraday. During the Juvenile Lectures a few years later, Mr. Faraday lost his voice in the middle of a lecture, and was obliged to stop. Dr. Latham, not being well enough at this time to go to him, I for the first time occupied his place in attendance on Mr. Faraday, and as I was continually in the house as a member, I gradually became intimate, and soon my medical advice was asked for whenever he or his family happened to require it. In 1851, I was asked by the Rev. J. Barlow, the Secretary, to give a course of lectures on Animal Chemistry in the small theatre at the Royal Institution. This course

consisted of 21 lectures, from the middle of January to the end of April. The Institution being at this time very poor, I only received the thanks of the Managers for my lectures. In 1854 and the two following years, I was asked to give Friday evening discourses. My first Friday evening lecture was on the amount of alcohol, sugar and acid in different wines. The second was on Ventilation; I had been appointed temporary Poor Law Inspector in order that I might thoroughly investigate the condition of St. Pancras Workhouse, and I had powers to visit the wards at any time during the night or day. The experiment which I made on the state of the air in the wards at night formed the most important part of my lecture.

In his preface to Dr. Bence-Jones' Life and Letters of Faraday, he says: "To write a life of Faraday seemed to me at first a hopeless task. Although I had listened to him as a lecturer for thirty years, and had been with him frequently for upwards of twenty years, and although for more than fifteen years he had known me as one of his most intimate friends, yet my knowledge of him made me feel that he was too good a man for me to estimate rightly, and that he was too great a philosopher for me to understand thoroughly."—and adds: "I . . . made the attempt to join together his own words, and to form them into a picture of his life which may almost be looked upon as an autobiography."

In 1851, attracted by the wonderful accuracy and extent of Dr. du Bois Raymond's experiments in animal electricity, and further induced by the very small knowledge we in England at that time possessed on the subject, I wrote to him to inquire if he would show me as much as possible, and put me in the way of procuring the necessary apparatus if I came to Berlin. His answer was all I could wish for, and in the middle of December I started by the night mail, and called upon him in the evening of the second day. He arranged that during the next three days he would show me the greatest possible number of his experiments, and he accompanied me to the different instrument makers, from whom I ordered one of his galvanometers and all the apparatus by which I could myself acquire any practical knowledge of animal electricity.

From this date my friendship with du Bois Raymond began, and it has lasted without the slightest interruption up to the present time (1873). In 1852, I persuaded him to come to England and stay with me. He lectured at the London Institution, and also gave a lecture at the Royal Institution, but he exhibited his marvellous experiments privately to a large number of our scientific men. He drew up a short account of his experiments, and this, after his departure, I edited in a small volume, which Mr. Faraday allowed me to dedicate to him. (On Animal Electricity, an abstract of the Discoveries of Emil du Bois Reymond, i. vol., 1852.) Whilst with du Bois Reymond in Berlin, he mentioned an Englishman named Tyndall who, he told me, was a candidate for the Physical Professorship at Toronto, but at that moment was occupied at Queenwood College, Hants, a place which had never before been mentioned to me; and he expressed great surprise that England should allow her young men of promise to leave the country. As soon as I returned home, I inquired about Queenwood College, and found it was a school.

John Tyndall was born in Co. Carlow, 2nd August, 1820. At the age of 19 he entered the Ordnance Survey of Ireland as assistant, and at 32 the English Survey. At 26 he went to Queenwood College to teach mathematics and surveying, and Edward Frankland was his colleague as lecturer on chemistry. In 1848, they both went to Marburg, where Prof. Knoblaugh was lecturing on magnetic repulsion, then called diamagnetism. He became a close friend of Thomas Huxley; he married at the age of 56, a daughter of Lord Claud Hamilton. He died in 1893.

With Mr. Barlow's permission in October, I wrote to Tyndall, and Mr. Barlow ultimately arranged that he should give a Friday evening lecture at the Royal Institution on February 11th, 1853. At this time I was very intimate with Sir James Clerk, and he asked me to invite Tyndall to dine with him and a few other gentlemen the evening of the lecture; and on leaving this house to drive with me to the Royal Institution after dinner Tyndall told me that he had no abstract or note of what he intended to say. This showed me that he had no want of confidence in himself,

but I almost shuddered to think of what I considered his presumption in thus appearing for the first time before members of the Royal Institution. The subject of his lecture was the conduction of heat in different directions through sections of wood; the audience was small and consisted of only 330 people, but among them were those who could best estimate the ability of the new lecturer.

I sat in the managers' seats, and as the lecture began, his manner and voice, the table furnished with only a small apparatus for experiments, made me fear that my recommendation of him as a lecturer would prove to be a mistake. Before, however, a quarter of an hour was passed, the clearness of his views and the fluency of his expression satisfied me that the lecture would be no failure, and at the end of half an hour the applause of the audience showed that his success was assured. When he ended, the applause he received was far greater than I ever heard given to anyone else at the Royal Institution, except, indeed, to Mr. Faraday himself.

When the lecture was over, many sought to make his acquaintance, and certainly one offer of an engagement which would have brought him to the neighbourhood of London was made to him. The managers of the Institution before long invited him to give four afternoon lectures at the end of the session on Air and Water. These took place on the last two Saturdays in May, and the two first Saturdays in June. On June 3rd, he gave another Friday evening lecture, when he had an audience of 510 persons, the lecture being on Profes Diamagnetism (in which he opposed Faraday's views). Before the next session at the Royal Institution began, with the full approval and generous help of Mr. Faraday, Tyndall was appointed Professor of Physics. Such was the beginning of my lasting friendship with Dr. Tyndall, and one of the greatest pleasures of my life has consisted in doing my utmost to promote the original researches in natural science, which he has carried out at the Institution; and to witness the success he has attained as a discoverer and lecturer in natural science.

In 1860, the health of the Rev. J. Harlow entirely failed, and I then undertook to fill his place at the Royal Institution. I resigned only in March, 1873, because it was impossible through the state of my own health for me to attend to any business. He died 20 April 1873

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The profit and amount of enjoyment which I derived from my connection with the Royal Institution cannot be estimated.

No account of Tyndall's Life and Work has been published; it is thought to exist in MS., but incomplete. He was the author of various well-known books, and of the article on Faraday in D.N.B.

The proceedings of the Royal Society, of the Philosophical Transactions, include thirty-four papers of scientific memoirs under the name of Dr. Bence-Jones. It has been said that he first described the xanthine in urine (Quarterly Journal of the Chemical Society, xv. 78) and that the priority of discovering alkaloid substances in animals is to be attributed to Dupre and Bence-Jones. (Proceedings of the R.S. xv, 73, and Leitschrift fur chemie, 1866, p. 348). The Bence-Jones protein in urine is described in the Philosophical Transactions, 1843, v., p. 673; in Animal Chemistry, 1851, p. 108, and in the Transactions of the R.S., 1848, i. 55. Probably his first scientific paper was that in the Medical Chirurgical Transactions of 1840, entitled "On a cystic oxide Calculus." Among publications in book form by Dr. Bence-Jones are to be found:—

"Applications of Liebig's physiology to the Prevention and Cure of Gravel Calculus and Gout." 1843.

"On Animal Electricity." 1852.

"The Chemistry of Urine." 1857.

"Lectures on Animal Chemistry in its relation to Stomach and Renal Diseases." 1850.

medicin Tectures on some of the Applications of Chemistry to

1850 (Murdill) Pathology and Therapeutics." 1867.

*Croonian Lectures on Matter and Force, including a Lecture by E. du Bois Reymond and one by E. Frankland." 1868.

"Life and Letters of Faraday." 2 vols. 1870.

Second edition, revised. 2 vols. 1870. Both published by Longmans Green.

"The Royal Institution; its Founders and its First Professors." I vol. 1871.

"G. H. Mulder's Chemistry of Wine." 1857.

The following is thought to be a correct list of the principal honours received:—

A.M., M.D., Trinity College, Cambridge.

Honorary D.C.L., Oxford, 1870.

Fellow of Royal College of Physicians, 1845.

Fellow of the Royal Society, Ap., 1846.

Fellow of the Chemical Society.

Consulting Physician of St. Ğeorge's Hospital and of the West London Hospital, also of the Institution for Invalid Gentlewomen, Harley Street, and of the St. George's Dispensary.

Corresponding member of the Society of Hydrologia, Paris,

1854.

Corresponding member of the Phys. Soc., Berlin.

Associate Member of the Sec. of Biologies in Paris, 1864. Member of the Society of Friends engaged in Scientific Research, Berlin, 1868.

The late Right Hon. Sir Thomas Clifford Allbutt, K.C.B. (who died in 1925), addressed the St. George's Hospital Medical School in October, 1922, and made special reference to Henry Bence-Jones, whom he must have known well for a time. Some of the personal characteristics are of interest:—

"Of his pioneer work in bio-chemistry it is not my purpose and hardly within my competency to speak," said Sir Clifford. "Clinical teacher, he was not; for this reason and because of his scandalous unpunctuality there was no competition amongst the students for his 'clerkship.' The man was fascinating, and from his brilliant personality one gained much inspiration. . . . First appeared the silvery head, then the handsome presence, the sanguine and vivid countenance, the blue eyes; then came the kindly penetrating glance at the patient, the almost magical rapidity of the diagnosis rapped out in half-a-dozen words, and generally right; then the bed card with the scratchy prescription of his invariable pot. nit. and The frequent chiding phrase 'medical mint water . . . facts, medical facts,' all with a dancing blue eye and a merry, petulant face. Moreover, there were the happy days when Bence-Jones, who was well-known among foreign professors, would bring one of them to the wards. A lively, interesting and patient discussion would ensue, to the enjoyment and invaluable

experience of his St. George's disciples. . . He was a noble gentleman, joy be to his soul-peace, that eager spirit would not have desired." Elsewhere Sir Clifford Allbutt recounts a curious instance of Bence-Jones' skill in diagnosis, detailed at p. 91 of "The Sensory and Motor Disorders of the Heart," by A. Morison, 1914. As recently as 1919-20, the "Fall Number Annals' of Medical History, contains 'An Appreciation of Henry Bence-Jones, M.D., F.R.S.," by Jacob Rosenbloom, PH.D., Pittsburgh, Pennsylvania. Quoting from Koenigsberger's "Life of Helmholtz," he mentions (as already noted) Helmholtz's "respect for Bence-Jones," when he went to see the doctor in London, hoping to get news of du Bois Raymond and Hofmann. Later, Helmholtz "dined at seven with Bence-Jones," and found him "a charming man, simple, harmless, cordial as a child and extraordinarily kind to me." The American author mentions the friendship with Sir Benjamin Brodie (the second baronet, who died in 1880), and adds that "as a physician, Bence-Jones' chief characteristics were scientific truth, accuracy, and a dislike to empiricism."

II, King's Bench Walk,
Temple, E.C.4.

January, 1929.

A. B. B.-J.

Postscript.—There is one matter amongst others which the writer of these notes cannot explain. Dr. Bence-Jones makes no reference to his authorship of "The Life and Letters of Faraday," Longmans, 1870, 2 vols. (second edition the same year). It is not improbable that this work will cause his memory to continue longer than any other of his labours. It is the source from which most other writers on Faraday have derived their information. After its publication, a fine portrait of Faraday in 1841, came into Dr. Bence-Jones' possession—by way of Sir Charles Wheatstone and Sir James South. It compares very favourably with any other portrait of the great man of science. The signature is difficult to decipher. Possibly the name is Fuger.

February, 1929.

