Unwillingly, Lilian Lindsay started to commit to paper the story of her professional life, although, sadly, this did not progress further than the early years of her distinguished career. Her autobiography, entrusted to one of us with her personal historical notes and manuscripts in 1950, is published here for the first time, with annotations (in italics) to clarify the text by adding biographical details of persons she mentions and commenting on places and events. For some 40 years Lilian studied the history of dentistry, publishing many important papers as well as a book, *Short History of Dentistry,* but perhaps her most important contribution to dental history is her translation of Fauchard's *Le Chirurgien Dentiste.*

M R B. J. WOOD is responsible for this autobiography, for he has tried to persuade me that it is my duty to write down my early experiences. My mental response to this was 'Must I do so? Must I ravel out my weaved up follies'?

Bryan Jardine Wood (1877-1965) qualified LDS in 1898. He practised in Kettering, Northamptonshire and belonged to the Eastern Counties branch of the Association of which he was a very active member, serving as secretary from 1909 to 1914 and as president in 1915. With A. Layton he conducted an early survey of children's teeth in Kettering. From 1939 to 1945 he was editor of the British Dental Journal, becoming President of the British Dental Association in 1937, a Vice President in 1942 and an honorary member in 1954. He and Lilian were close friends for many years and when the Journal office was moved to Kettering at the beginning of the Second World War, Lilian, as sub-editor, stayed with his family. At the end of 2 weeks, however, she returned to London saying she could not work away from the library of the Association.

Whenever I was introduced to some new acquaintance there came, like a reflex action, the question 'Whatever made you take up dentistry as a career?'. This was difficult to answer and still is.

Delving deeply into 'whys' and 'wherefores', it seems to me an explanation must be found long before I was born. My mother and her sister were sent to a Moravian school at Neuwied on the Rhine, and among the German girls there was one hoch wohl geboren of outstanding character, impotent of all restraint, especially that of the formal life of a German aristocratic family. She became a deaconess and served as an army nurse in the campaigns in Austria, Denmark and France, winning several medals, one of which was the coveted Iron Cross for bravery. When the army was disbanded she met a German woman who was going to America to study dentistry. They went to Philadelphia and took the DDS diploma. After practising in Cologne she was persuaded to come to England and practise in London.

The Moravian Church was founded in the eighteenth century but originated in the sixteenth century Hussite movement in Bohemia and Moravia. It had strong links with the Lutheran Church and influenced John and Charles Wesley until 1740 when Methodism went its separate way. The Moravian schools were based on ecumenical Protestant principles. It is not known why Lilian's mother and aunt were educated in Germany.

The girl of 'outstanding character' who became a deaconess and nurse in the German army was Olga von Otzen, and Anna von Robertson Murray at St Botolph's Aldersgate in 1865. They had 11 living children, two others having died in infancy; Lilian was the third child and second daughter. After her husband's death, Lilian's mother must have found it very difficult to bring up her large family with little income.

Lilian's father, James Robertson Murray (1819-1885) was educated at Westminster School, a chorister at Westminster Abbey and intended for the legal profession which he found un congenial. He became a pupil of Sir John Goss and then a teacher of singing and the organ. For 21 years Murray was the organist and choirmaster at St Botolph's Aldersgate and at St Paul's Camden Square. His death on September 12, 1885 was possibly hastened by his efforts for the London Church Choir Association which he founded in 1870 to encourage contemporary musicians to compose for the church by performing only original works at the annual festival held in St Paul's Cathedral.

There was a society in London of old Neuwieders, where my aunt met her German schoolfellow and brought her to visit my mother in 1886. That year, I won the Frances Mary Buss Scholarship which gave me 2 years' free education at the North London Collegiate School for girls. Two years later I gained a second scholarship. Miss Buss was ardent in recruitment of teachers. She sent for me and announced that I was destined to be a teacher of the deaf and dumb. Whether the sudden attack roused my rebellious spirit or I may have had an allergy to teaching I do not know, but I refused to teach. This enraged Miss Buss who stated emphatically 'Then I will prevent you from doing anything else'. Like a flash I replied 'You cannot prevent me from being a dentist'. She prevented me from having that scholarship. I knew nothing of dentistry, but having stared boldly that I would be a dentist, there was nothing else to be done.

The North London Collegiate School in Camden Town was opened by Miss Buss in 1850 with 35 pupils from the professional classes, emulating Queen's College in Harley Street, founded in 1846, where Miss Buss had attended evening classes in French, German and geography. Queen's College, however, attracted the wealthier classes, whereas Camden Town was largely inhabited by the middle class. In 1870 when the school became a public school, its old premises were used by the lower school, Camden School, which provided a sound but less costly education for poorer girls, and here
My mother's German friend used to send her mechanical work to a dentist registered under the 1878 act and I was accordingly apprenticed to him for 3 years. I then found that I must pass the preliminary examination before registration as a dental student. This was hard but I had started on the road to dentistry and must not turn back. After one or two defeats I managed to pass, and to visit the Registrar of the General Medical Council who told me the next step must be to enter a dental school and suggested the National Dental Hospital and School, Great Portland Street. Thither I went and found the Dean, Henri Weiss, standing outside a shabby house adapted for the purpose of a dental hospital and school. He did not permit me over the threshold, so I do not know how the inside was arranged. He was against allowing women to enrol as students and recommended application to Mr Macleod, Dean of the Edinburgh Dental Hospital and School. I wrote to Mr Macleod and received in answer 'Women are received on the same footing as men' and with that letter he sent a prospectus of the school, which I conned with diligence.

The German friend of Lilian's mother, Dr Olga von Oetzen, could not be registered on the Dentists Register in spite of her American qualification of DDS, since at that time (1888) the only foreign dental qualifications recognised by the General Medical Council were the DMD of the University of Harvard and the DDS of the University of Michigan. It has proved impossible to discover the name of the dentist registered under the 1878 Act to whom Lilian was apprenticed, or to determine which preliminary examination she passed.

William Bowman Macleod (1843-1899) Scottish branch of the British Dental Association in 1898, first Scottish president of the Odontological Society of Great Britain in 1893, President of the British Dental Association in 1895. He was elected FRSE for his work on plaster of Paris, and his paper on the effects of bagpipe playing on the teeth read before the Odonto-Chirurgical Society of Scotland was probably the first paper on the association of wind instruments and the dentition.

Everything pointed to Scotland, as the RCS England did not admit women at that date (1892). The first women to qualify in dentistry were obliged to take the LDS Edinburgh or Glasgow. Somehow money was borrowed to pay for my classes. A friend of my aunt in Edinburgh offered to put me up until I found lodgings and, greatly daring, I left King's Cross by the 10 pm train which arrived in Edinburgh at 9.30 am the next morning. Securing my many boxes (about eleven of them) in the left luggage office, I went to my kind hostess. We looked up advertisements in The Scotsman and found a room which looked out over the Meadows. It was my first experience of the Scottish bedroomsitting room. The bed was secluded in a cupboard with the other requisites of a bedroom.

I called upon Mr Macleod who described my next duties. These were first of all to visit the Treasurer of the school and pay the fee for the whole of the course. It looked simple as I had the money, but when I faced the Treasurer he used his considerable powers of persuasion to make me return to London. That was out of the question. He tried modification: 'A three months' ticket, you will be sure to give it up as you do not know what you are in for and will be sorry when you find that no money is returned'. There was no going back for me and there I sat, facing that well-meaning man, and at last, exasperated with my determination, he gave me the ticket. I found that women students were not admitted to the medical classes for men, but there were two schools for women, one over which Dr Jex-Blake ruled and the other run by a committee, some members of which had separated from Jex-Blake. I was recommended to join the latter and this I did for anatomy and physiology. Dental students had classes for chemistry and made no distinction as to sex—indeed, there never has been this difficulty in the dental schools.

I was told to repair to the dental school in Lauriston Lane on the Monday morning. My first Sunday in Edinburgh was a melancholy affair. The rain poured down, it was chill October, my landlady was a strict
Sabbatarian and did not light fires or cook on Sundays. My dinner consisted of a slice of cold suet pudding and syrup and a glass of milk.

The next morning I called at George Square, where Mr Macleod practised and his secretary, Miss Watson, took me to Lauris- ton Lane where on the doorstep stood Robert Lindsay, so loud had been the sound of my name to the dean to be ready to induct me into the hospital and show me what to do. I was taken to the extracting room and left with the dental surgeon in attendance. He, the dental surgeon, was highly amused but the students were, from the first, the kindest imaginable. I had imagined that there would be other women besides myself and was surprised to find I was alone. However, it was part of the road I had to travel, and believing that the merry heart goes all the way, I enjoyed those years to the full. There were difficulties now and then, but looking back they do not seem so formidable as they may have appeared at the time. I seemed to manage the work and I was moulded differently, like one who on a lone, some road doth walk in fear and dread... because he knows a frightful fiend doth close behind him tread'. There was only enough money, and barely enough, to get me through my classes and examinations—I must not fail. Number 5 Lauriston Lane was the second home of the Edinburgh Dental Hospital and School, the first being at 30 Chambers Street which the hospital occupied from 1879 to 1899. In 1894 another move was made because of the continuing expansion of the institution, this time to 31 Chambers Street.

Robert Lindsay (1894–1930) was appren- ticed to W. B. Macleod as a dental mechanic at the age of 14 and eventually became head of the workshop. Having attended classes as a part-time dental student, he qualified in Edinburgh in 1894 and was appointed tutorial dental surgeon at the Edinburgh Dental Hospital. He practiced first at 6 Eyre Crescent, Edinburgh and after his marriage at 2 Brandon Street. On his appointment as dental secretary of the British Dental Association in 1919, he and Lilian crossed to America and moved to London. He played an important part in the difficulties which preceded the Dentists Act 1921 and was an active member of many committees. Before it was time for clinical classes in surgery, there came a crisis in the medical women's world. The 'Infirmary' where they took these courses closed its doors to women. The RCS Edinburgh found that the number of beds allotted to the women students were too few for the standards required for qualification. Appeals were made and Dr Joseph Bell was a strong supporter. At last the management of the infirmary announced that on the receipt of £500, they would provide the requisite number of beds. The women set to work to collect the money, and sales of rags and weak-willershaves gave largely to the collection which was raised and presented. Once more the women entered the wards, and I among them. It was necessary to take a ticket which admitted to all the wards; this proved a great advantage for it gave me an insight into the various departments, eyes, skin, nose and throat, nervous diseases, as well as medicine and surgery.

At that time Macewen of Glasgow had started cranial surgery, using a saw in the dental engine (the foot engine). J. M. Cottrell was our surgeon, and a follower of Macewen. Having been trained in a dental workshop, I was used to a lathe and the foot engine in the workshops of the surgical hospital. This gave me an advantage even over the house surgeon (a man), so that I was in demand for these operations. On one occasion Mr Cottrell sent to the dental hospital for me.

Joseph Bell (1837–1911) lectured in surgery at the Edinburgh Medical School from 1864. Because of his gift at making diagnoses and unexpected deductions, one of his students, Sir Arthur Conan Doyle, based on him the character of Sherlock Holmes. Bell became consulting surgeon at the Edinburgh Dental Hospital and School.

Sir William Macewen (1848–1924) qualified in Glasgow in 1869 and spent his life in that city in various appointments including the Royal Infirmary and the Western Infirmary. In 1890 he was appointed to the chair of surgery. As a pupil of Lister he did research into the treatment of wounds using antisepsis, but is best remembered for his work on osteotomy and the development and growth of bone.

I took full advantage of my infirmary ticket and took turns at taking pulses and temperatures as well as clinical lectures in medicine, nervous diseases and out-patients on the medical side. These were in addition to the clinical surgery lectures, operations and surgical out-patients. I also did locum for one of the senior medical woman students in her district in the Cowgate. At that time the Cowgate was in a parlous condition of filth and extreme poverty. It was customary for the student who worked there to go to the office of the Medical Mission and look at the log book in which calls were entered. If there were any calls in the district assigned to the student she was required to go there. My most vivid recollection is that on a Christmas Day—one of the patients lived up a stair. The stairs were coated with filth—there was no glass in the windows on the stairs as glass invited missiles, and was never whole. The apertures were covered with wire netting and this received various trifles such as fish skins, bones, etc. I used to try to hold my breath going up those stairs for the stench was indescribable. When I found my patient the room was dark as pitch, and from a corner a child was wailing and crying. When my eyes got accustomed to the gloom I saw that the only furniture, if it could be called by that name, was a straw mattress and a miserable blanket under which were ten persons. That was the worst place in my experience, though others were pretty bad.

My greatest difficulty came when I needed the ladies' toilet. There were only two rooms to be had at Jex-Blake's school. With some trepidation I applied to her and she allowed me to sign on for double fees. She was gracious to me and invited me to lunch, a somewhat awe-inspiring function. A remark made to me almost as constant as the question why I had taken to dentistry was that I was depriving some man of his livelihood. One day Sir Henry Littlejohn stopped me and said 'I am afraid, madam, you are taking the bread out of some poor fellow's mouth'. That was somewhat of an irony, for just then 'bread' was hard to come by. I shared a room with a Norwegian girl and we had just been able to scrape together the sum of fourpence halfpenny and were debating as to what food would keep us going longest for that amount. It ended in oat cakes, which gave us some satisfaction. There was a small restaurant run by an old lady who wore a black lace cap, we called her 'mother'. She was kind to the women students and used to allow us to have half portions of whatever was on the menu—I wonder whether there is anyone so kind to students nowadays.

Sophia Louisa Jex-Blake (1840–1912) was a pioneer in medical education for women. She was educated at Queen's College, London, and studied medicine in New York and Boston. In 1889 Edinburgh became the first British university to admit women, when Jex-Blake and four other women began their medical course. After surmounting the many obstacles placed in their way, the women were ready to qualify in 1872, and Jex-Blake graduated MD in Berne in 1876, obtaining a qualification registrable in Britain by gaining the licentiatehip of the King's and Queen's Colleges, Dublin, in 1877. She founded the London School of Medicine for Women in 1874, then became the first official registrar of the London (later Royal) Free Hospital to admit students for clinical work. In 1876 she was practising in Edinburgh where she founded a women's hospital in 1885 and an extra-academatical school of medicine for women in 1888. While it was kind of Jex-Blake to invite Lilian for lunch, it was unforgiveable to charge double fees in view of the latter's financial situation which the former probably guessed. One is forced to the conclusion that it was the result of Lilian's attendance at another series of lectures. A discerable episode.

Sir Henry Duncan Littlejohn (1828–1914) graduated at Edinburgh in 1847. He began to lecture on medical jurisprudence in 1856 and was a great teacher and an outstanding and accurate witness in court. In 1862 he became the first medical officer of health for Edinburgh, pioneering public health measures such as the notification of infectious diseases. He became professor of medical jurisprudence in 1897.

The final examination came and I managed to pass it. Some of the most joyous, and certainly the most carefree days of my life, came to an end. I was free of all the students, without exception, had treated me as one of themselves and I do not think there could have been a kinder or finer set of young men. They are all gone now. Robert Lindsay and I had found that we loved each other, but as we were both without means and with heavy responsibilities we had not progressed without any immediate hope of marriage.

I returned to London and the only prospect before me was to start in practice by myself. It may seem strange to modern people that there were many empty houses in London. I went with house agents over some of these. It was amusing to hear these agents
who seemed to have a stock phrase 'this room will accommodate a large dining table'. I found a house and proceeded to occupy it, much in the same frame of mind as that in which I went to Edinburgh. No money to buy even necessary dental equipment. A noble uncle offered to pay my rent and I was able to borrow another £100 without interest on condition that it should be repaid at the end of the year. By dint of visiting curious places in the vicinity of Poland Street, in back shops and up spiral stairs, I bought a dental engine for £3, a lathe and a Vulcanizer. The dental chair cost £14! The hundred pounds soon vanished and at the end of the year was paid by means of another loan with interest attached. My mother's German friend died and left her practice to me and this helped me greatly to redeem the debts I owed. She had started a small weekend practice in the country, and that was one of the greatest aids to experience—at the end of 10 years I had been able to repay the money for my classes and starting in practice, and Robert also had discharged his responsibilities and we were married—to live happily for 25 years.

Lilian qualified LDS with honours in 1886, having been awarded the Watson Medal for dental surgery and pathology and the medal for materia medica and therapeutics, both in 1884. Thus she was the first woman to qualify in dentistry in Britain, though not the first qualified woman dentist to practise here since those with foreign degrees had done so.

The cost of a new dental engine in 1886 was about £10, while a lathe for grinding porcelain artificial teeth and polishing vulcanite dentures cost from £3 to £5. A vulcanizer cost from £3 10s to £10 depending on the degree of sophistication. It would appear that Lilian intended to do her own mechanical work. The cost of a dental chair was from £11 to £26 depending on quality and accessories. The practice was at 69 Hornsey Rise but the location of the country practice is unknown.

Lilian Murray and Robert Lindsay were married on July 26, 1905 at St Luke's Church, West Holloway in the parish of Islington. It was 2 days after Lilian's thirty-fourth birthday, while Robert was 40. Their long engagement was due to Lilian's need to repay her debts and probably also to her responsibilities to help educate the eight younger children of her family.

Any use or good I may have been or have done is entirely owing to Robert Lindsay, his example and his influence. It began with the flippant answer I made when he asked the eternal question as to the reason why I thought of dentistry as a career, that 'I had to earn my living and I thought I might as well do so in dentistry as in anything else'. He was grave and answered 'If that is your only reason, give it up at once'. This came like one of those shocks which have proved almost miraculous in cases of depression or allergy—or may account for those mysterious cases of conversion. From that day I began to realise that the debt I owed to my profession was of equal importance to the debt I owed as a citizen.

This fragment of autobiography shows only too clearly the problems faced by impetuous students before the days of grants and loans, who met and eventually overcome clandestine or even overt opposition to the admission of women to the study of medicine and dentistry. Lilian speaks of the debt she owed to her profession; on the contrary, the profession and the British Dental Association owe a great debt to her and partially repay her with many honours, respect for her attainments and affection for her endearing qualities. A great and gentle woman.