

THE PART PLAYED BY SCOTLAND IN EARLY CANADIAN MEDICAL DEVELOPMENT*

BY JOHN D. COMRIE, M.D., F.R.C.P.E.,

Physician to the Royal Infirmary of Edinburgh

The story of early Canadian medicine under the French regime has been vividly told by Heagerty in the opening chapters of his "Four Centuries of Medical History in Canada." There came a period after the cession of Canada to the British Crown by the Treaty of Paris in 1763 when a much more intensive development of medicine and medical institutions took place through the English speaking inhabitants of the provinces. The object of the present paper is to give some account, however incomplete, of the developments that were due to men who had been trained in Scotland. Sometimes these were Canadians, who, after a course of study in Scotland, returned to their native country, and in a smaller number of cases they were immigrants seeking their fortune in a new land after graduation. The greater number of these men were

trained at Edinburgh. In the century which followed the incorporation of Canada into the British Empire, and the American revolution, up to the period of Canadian union in 1867, Edinburgh became the great resort for Britons beyond the seas.

The first American colonial who graduated M.D. at Edinburgh University was Thomas Jarvis, from the island of Antigua, in 1744. For the next twenty years almost every session saw one American graduate, including such men as William Shippen, John Morgan and Benjamin Rush, all of Pennsylvania. After 1764 they came in greater numbers, and in the following century 650 students from the Americas graduated at Edinburgh. This does not include many who came for a year or two to take some classes, nor those who contented themselves with a licence from the Royal College of Surgeons. The total number of the Americans who studied at Edinburgh should probably be at least twice as great. Out of the 650, 180 came from those colonies which became the United States. As regards Canadians, beginning with John Macculloh, who, in 1793, thirty years after Canada had become a British possession, came to Edinburgh from Sarnia, 104 Canadian born students graduated M.D. at Edinburgh by 1867.

At the less well known University of Glasgow in the same period there graduated 85 students

* A paper embodying the remarks of Dr. Comrie in opening the Session, as President, of the Section of Medical Sociology and History of Medicine, at the combined meeting of the British and Canadian Medical Associations, Winnipeg, on August 27, 1930.

from the Americas. Of these 13 were Canadians, including such well known names as those of Le Baron Botsford from New Brunswick in 1835, and William Johnston Almon from Nova Scotia in 1838.

Just before the American revolution, a youth of some thirty years, James McGill, emigrated from Glasgow and settled in Montreal when it was a little town of 9,000 inhabitants. He had studied for one year at the University of Glasgow, and being impressed by the necessity for the advancement of learning in Canada, he left a share of the fortune he had made when he died in 1813 to found a university to be named the McGill College.

Up to this time numerous Canadians had studied medicine, chiefly at Harvard, but quacks abounded everywhere and the need for medical training was admittedly acute. In October, 1822, Dr. A. F. Holmes, who had graduated at Edinburgh in 1819, and Dr. John Stephenson, a native of Montreal, who had graduated at Edinburgh in 1820, were appointed by the medical officers of the Montreal General Hospital to draw up a statement setting forth the difficulties of the students of Canada, and the "imperious necessity of establishing, after a permanent manner, a seminary of medical learning, together with an outline of the proposed medical institution and the suggestion that this be established and duly incorporated." The result was that a scheme for a school of medicine centred on the Montreal General Hospital was drawn up, which was avowedly based upon the plan of the medical school at Edinburgh. This school received the approbation of Lord Dalhousie, and, under the name of the Montreal Medical Institution, was opened on November 10th, 1824, with 25 students. Dr. Stephenson was to teach anatomy, physiology and surgery; Dr. Holmes was assigned chemistry, pharmacy and botany; Dr. William Robertson, another Edinburgh graduate, who had been born in Scotland, and had served as a military surgeon and emigrated to Canada, was to teach midwifery and diseases of women; Dr. William Caldwell, who had been born in Ayrshire, Scotland, and had studied at Edinburgh and been a military surgeon, was to profess the practice of physic.

The officers of this Montreal Medical Institution were afterwards constituted the Medical Faculty of McGill, and in the year 1832 obtained a royal charter. The professor of medicine, elected in this year, was Thomas Fargues, an Edinburgh graduate. From this small beginning the University of McGill College rapidly increased, so that it numbered 108 medical students in the year 1860, and ultimately became one of the most famous schools of the western hemisphere.

L'Université de Montréal, which was incorporated in 1920, was the product of the union of L'École de Médecine et Chirurgie de Montréal, which was the first French medical school to be

established in Montreal, and of L'Université de Laval de Montréal, which was originally a branch of L'Université de Laval de Québec. L'École de Médecine et de Chirurgie had been founded in 1843 by a group of medical practitioners, Drs. Arnoldi, Francis Badgley, Munro, Sutherland and McNider. Dr. Francis C. T. Arnoldi, the first president of the school, had graduated M.D. at Edinburgh in 1827. Dr. Francis Badgley had graduated M.D. at Edinburgh in 1829. Dr. Pierre Munro was of Scottish descent, from the family of Munro of Foulis, and his ancestors had been in Canada since the conquest. Dr. William McNider had graduated M.D. at Edinburgh in 1836, and in addition to lecturing on obstetrics in L'École de Médecine, was one of the founders of the old Lying-in Hospital, now called the Montreal Maternity. Dr. Hector Peltier, who had graduated M.D. at Edinburgh in 1845, was later, in 1847, appointed professor of the institutes of medicine.

As regards medical teaching in Quebec, a meeting of medical students of the Marine Hospital in this city was held as far back as 1835 to discuss the question of medical education, and they recommended that a school of medicine should be established at the Marine Hospital. Lectures appear to have been delivered here in 1837, and a school of medicine, known as the Incorporated School of Medicine of the City of Quebec, was in existence in the year 1847. The Marine Hospital was founded by, and the first president of this school was, Dr. Joseph Morrin. He had been born in Dumfriesshire, Scotland, in 1794, brought by his parents at an early age to Canada, and had afterwards returned to Edinburgh to study medicine. In 1852 the teachers in the Incorporated School of Medicine were formed into the Medical Faculty of Laval University. Out of the original faculty of five professors, one, J. A. Sewell, was an Edinburgh graduate, and became professor of internal pathology and special therapeutics.

With regard to the early development of medicine in Upper Canada, or Ontario, the increase of population following the advent of the Loyalists in the year 1784 occasioned a great shortage of physicians. For many years medical attendance was carried out chiefly by men who had been military surgeons, but many persons practised medicine who were woefully lacking in medical training and knowledge. The Kingston Gazette of 1815 laments that quacks "without one ray of science presume to thrust the created into the presence of the Creator," and in this year an act to license practitioners in physic and surgery was passed, the number of qualified men in Ontario being found to be 36 or 40. A medical board was set up in 1819, of whom the senior member was Dr. James MacAulay, a native of Scotland who had studied at Edinburgh. He was one of the pioneers of York (as Toronto was then called), and took an active part in the development of this town.

With regard to the University of Toronto, the

first attempt to organize a medical school appears to have been made towards the end of 1824 by Dr. John Rolph, who had been a pupil under Sir Astley Cooper in London. This school met with considerable success, but as Rolph had taken part in the Rebellion of 1837 and a reward of £500 had been offered for his capture, it came to a premature end. Dr. Rolph appears to have resumed lecturing in the year 1843, when his school began in earnest. By 1850 there were three schools of medicine in Toronto, the Toronto School of Medicine, the Faculty of Medicine of Trinity College, and the Medical Faculty of King's College, but all in time came to an end and the Faculty of Medicine of the University of Toronto was not reorganized until the year 1887. Heagerty gives a list of 28 medical practitioners residing in Toronto about the year 1850, of whom 6 were Edinburgh men, several being concerned with one or other of the medical schools.

In Nova Scotia, Edinburgh men predominated. Out of 14 practitioners at Halifax in 1845 no fewer than 13 had studied at Edinburgh. The first proposal to establish a medical school was made by the governors of Dalhousie University in 1863. It was strongly advocated by Dr. (afterwards Sir) Charles Tupper, who had graduated M.D. at Edinburgh in 1843. A medical faculty was shortly afterwards formed, and a medical course was inaugurated in 1867. The president of this faculty was William Johnston Almon, a graduate of Glasgow University.

The first medical superintendent of the Nova Scotia Hospital for Mental Diseases, opened in 1857, was James Ratchford de Wolf, who had graduated M.D. at Edinburgh in 1841.

In the year 1854 the Medical Society of Halifax had urged the establishment of a City Hospital, for, up to this time, the City of Halifax and the Province of Nova Scotia do not seem to have had an institution fulfilling the function of a general public hospital. After various delays the first medical staff was appointed in 1866, and the senior visiting physician was Dr. R. S. Black, who had graduated at Edinburgh in 1836, while the senior visiting surgeon was Dr. Charles Tupper.

Dr. Tupper had been born at Amherst, Nova Scotia, in 1821, and proceeding to Edinburgh, took the degree of M.D. with a thesis on "The Mechanism and Management of Parturition, illustrated by a Report of 116 cases." It shows extraordinary energy that a youth of twenty-two should have already attended 116 obstetric cases. Before leaving Edinburgh, he also took the licentiatehip of the Royal College of Surgeons, an alternative qualification which many Edinburgh students took in those days without graduating at the university. As early as 1855, he was a member of the Nova Scotia Assembly. In 1862 he was governor of Dalhousie College, Halifax, and in 1867 was president of the Canadian Medical Association. He gradually drifted into politics, was prime minister of Nova

Scotia in 1864, and took a great part in the arrangements which resulted in Canadian union. The numerous posts of high office which he held in Canada and his services to this Dominion are too well known to require mention, and he forms one of the best examples of those medical practitioners who have been empire builders.

In New Brunswick, Dr. William Bayard, who had graduated M.D. at Edinburgh with a thesis "On Asiatic Cholera" in the year 1837, conceived about the year 1860 the idea of building a hospital for the care of the poor in the City of St. John. Up to this time, although the population of this city was over 30,000, there was no institution other than the municipal poorhouse where medical treatment could be obtained. He accordingly set about an agitation for the construction of such a hospital, and in 1865 the General Public Hospital of St. John was opened with a medical staff of six physicians and surgeons, of whom two, Edward Bayard, M.D., and T. W. Smith, M.D., were Edinburgh graduates, while a third, Le Baron Botsford, M.D., had graduated at Glasgow.

With regard to medical journalism, the first professional paper to appear in Canada was the *Journal de Médecine de Québec*. This was founded in January, 1826, by Dr. Xavier Tessier, of Quebec, and published both in French and English. Dr. Tessier had as co-editors Drs. Caldwell, Robertson and Stephenson, all of whom were Edinburgh men. The *Montreal Medical Gazette* first appeared in 1845 under the editorship of Drs. Badgley and Sutherland, of whom the former was an Edinburgh graduate. In the same year, the *British American Journal of Medical and Physical Science* was published in Montreal, and continued its existence for seven years. It was edited by Archibald Hall, M.D., and R. L. McDonnell, M.D., of whom the former had graduated at Edinburgh in 1834, and was professor of midwifery in McGill College. This periodical was continued by the *British American Journal* under the editorship of Archibald Hall. In 1852 the *Canada Medical Journal* was founded in Montreal by Dr. R. McDonnell and Dr. Aaron Hart David, who had graduated at Edinburgh in 1835.

In the founding of early Canadian medical societies Edinburgh men seem to have played a special part. The Quebec Medical Society was inaugurated in 1826 with Dr. Joseph Morrin, an Edinburgh man, as president. The Medico-Chirurgical Society of Montreal, formed in 1846, had for its first president A. F. Holmes, M.D. of Edinburgh, and for one of its vice-presidents Francis Badgley, who had graduated at the same university. It is of special significance that when the Canadian Medical Association was formed in 1867, Dr. James A. Sewell, M.D. of Edinburgh, who was president of the Quebec Medical Society, presided at a meeting in Laval University, to which every practitioner in Canada had been summoned, and the first office-bearers of this association to be elected included as president

Dr. Charles Tupper, M.D. of Edinburgh, and among the four vice-presidents two Edinburgh graduates in the persons of Dr. Hector Peltier, of Montreal, and Dr. R. S. Black, of Nova Scotia, with a Glasgow graduate, Dr. Le Baron Botsford, of New Brunswick.

One more advance in medicine which came from Edinburgh to Canada remains to be mentioned. This was the introduction of antiseptic surgery. Joseph Lister was professor of clinical surgery at Edinburgh from 1869 to 1877. During this time numerous Canadians studied in his wards and assimilated his methods. These methods were brought back and introduced at Montreal by Dr. (later Sir) Thomas G. Roddick, to Halifax by Dr. John Stewart, and to Toronto by Dr. Frederick le Maitre Grasset, who had been house surgeon at Edinburgh with Lister in 1874.

Works consulted—List of Edinburgh Graduates from 1705 to 1866, Edinburgh, 1867; Roll of Graduates of the University of Glasgow, 1727-1897, Glasgow, 1898; Heagerty, Four Centuries of Medical History in Canada, Bristol, 1928; American Medical Biographies, Baltimore, 1920.