

## THE EARLY HISTORY OF ANAESTHESIA IN NEWFOUNDLAND

DAVID J. WRIGHT

### INTRODUCTION

LITTLE SEEMS TO HAVE BEEN WRITTEN previously on the history of anaesthesia in Newfoundland. Unlike mainland Canada, Britain or the United States, Newfoundland had no local medical journals to record events. Little appears in the several histories of Canadian Medicine. This is not surprising, since Newfoundland did not join Canada until 1949. However, Heagerty's book on Canadian Medical History<sup>1</sup> contains an appendix entitled "A Sketch of the History of Medicine in Newfoundland" written by Dr. L.E. Keegan, who was Medical Superintendent of St. John's General Hospital from 1909 to 1935. In this he suggested that the first chloroform anaesthetic in the country had been given by Dr. Renouf in St. John's, during a successful tracheotomy operation and that Dr. Frazer of Bay Roberts was the first to use chloroform in the outports. Dr. Keegan did not, however, give dates for either of these events.

The only other sources I could find<sup>2,3</sup> both gave 1849 for the first use of chloroform in Newfoundland – for an operation to remove a woman's gangrenous finger. It seemed likely that more information could be obtained from newspapers of the time and other contemporary writing. In the late 1840s there were at least four newspapers published in St. John's. These were *The Public Ledger*, *The Newfoundlander*, *The Times and General Commercial Gazette* and *The Royal Gazette and Newfoundland Advertiser*. I looked at these newspapers dated 1846 to 1849. The Journal of the Newfoundland House of Assembly contained yearly accounts of the St. John's Hospital and from 1851 it also had an annual statement from the medical staff. I looked at these journals dated 1846 to 1914, by which time the first (albeit part-time) anaesthetist, had been appointed.

In the 1840s the only way in which information could come to the island was by ship. There was a

regular mail run from Halifax, Nova Scotia, which took two or three days and news originating from Boston, New York or Montreal normally came in this way. There were frequent transatlantic voyages to and from St. John's and ships must regularly have come from Ireland, Liverpool, and the Clyde. The usual deliveries of British and Irish papers and mail to the island came, however, first to New York or Boston, on the British and North American Steam Packet Company's ships from Liverpool, taking two and a half to three and a half weeks. Passengers and mail then went up to Halifax before crossing to Newfoundland. Journeys of a month from Britain to the island were not unusual, especially in the winter.

In the second half of 1846 the Newfoundland press was concerned mainly with the rebuilding of St. John's following the disastrous fire earlier in the year, which had left half the population homeless. Overseas news was mostly about Ireland, where thousands were dying in misery from the famine caused by the potato blight. Most foreign news came from across the Atlantic. Newfoundland had its back to North America and looked to the British Isles for its people and its ideas.

### *Ether*

It is not surprising that first news of the momentous events in Boston on October 16, 1846, came from Britain after several months' delay. News of ether anaesthesia had first reached Britain through the Boston Medical and Surgical Journal and Dr. Bigelow's letter to his friend Dr. Boot, which were carried in the *Acadia* from Boston to Liverpool, arriving on December 16, 1846.<sup>4</sup> On February 12, 1847, the Newfoundland *Public Ledger* published a report<sup>5</sup> of Robert Liston's operation of amputation of the leg, under ether, which had taken place at University College Hospital, London, on December 21, 1846. During the next four months, hardly a week went by without some mention of ether in one of the newspapers. For example, on March 11, 1847, *The Newfoundlander* carried a copy of a letter from a Mr. Herapath of Bristol, England, de-

David J. Wright, M.B., B.S., F.F.A.R.C.S., Department of Anaesthesia, The General Hospital, St. John's, Newfoundland, A1A 1E5.

scribing in detail the construction of an ether apparatus and giving an account of its use to induce surgical anaesthesia.<sup>6</sup> On April 29, in *The Newfoundlander*, there were details on an inquest near Grantham in Lincolnshire on Ann Parkinson, who had died following the administration of ether.<sup>7</sup> *The Public Ledger* carried news on June 11 of the use of ether at Barbados General Hospital<sup>8</sup> and news on June 22 describing its use in Gibraltar<sup>9</sup>.

On July 30, 1847, *The Public Ledger* carried an editorial on Ether Vapour which included details of the first use of ether in St. John's. The editorial is a fine example of expecting good to have come from across the Atlantic rather than from North America.

"It is true that we have heard but little of this practice out of Great Britain. We have heard nothing of it on this side of the Atlantic except in the solitary instance to which we shall presently advert. The French ... did attempt to set up some claim to the origin of the theory but of this the Americans seem to have despoiled them: the practice is, however, an English one."<sup>10</sup>

This attitude is either uninformed or dishonest. *The Public Ledger* itself, on March 2, had an account of an operation on a lady in New York under ether<sup>11</sup> and on April 13, *The Royal Gazette* had a report from the Montreal Pilot describing Dr. Horace Nelson's use of ether on February 20.<sup>12</sup> The editorial goes on to state that an operation had been carried out under ether at St. John's Hospital in the previous week or ten days, that the patient was a man named Kennedy who had both legs amputated and that the surgeon was Dr. Keilley, with Drs. Martin and Bunting attending. The report continues, "Some temporary contrivance was made for the exhibition of the vapour, but the man unacquainted with the effects which it was intended to produce, at first resisted the inhalation, or expired it again and, as we understand, more than twenty minutes elapsed before he was thrown into a comatose state, or rather into that state in which there is an absence of all nervous irritability, and by consequence a prostration of the muscular system. The operation was performed with no observable pain to the patient and he was lifted into his bed. One of his legs is healing from what is technically called the first intention, and the other is doing well."<sup>10</sup> There are no other details in the report of the people involved or of the hospital and further information has come from a variety of sources. Dr. Edward Keilley was surgeon to the St. John's Hospital. He had first been appointed to the staff

in 1818, having previously been in the Royal Navy and a student under David Coughlin, who had been Medical Officer in charge of the old Military Hospital. He spent some time in Jamaica in the late 1820s but was back in St. John's in 1828. He remained on the staff of the hospital until 1855. He was probably the most remarkable man associated with the Hospital with the exception of his contemporary William Carson. Perhaps because of their strong personalities, these two often crossed swords. In 1834 Dr. Carson, who had been more involved in politics than medicine for some time, was relieved by the Governor of his post of District Surgeon and Edward Keilley was appointed in his place. In 1838 there occurred what was to become known as the Keilley versus Carson case which made Edward Keilley's name famous throughout the British Empire.

Keilley threatened and abused John Kent, one of the members of the Newfoundland House of Assembly, following Kent's remarks in the House on the running of the Hospital. The House and its speaker, William Carson, decided that this was a breach of its privileges and started a long series of legal actions against Keilley. These resulted in a decision from the Supreme Court of Newfoundland in favour of the House. Keilley appealed against this decision to Her Majesty Queen Victoria in Privy Council. After three years of deliberation the Privy Council decided in favour of Keilley and stated that the House of Assembly was a local legislature which did not have the same exclusive privileges which the ancient laws of England had annexed to the Houses of Parliament. This case established a precedent for all similar matters regarding local Assemblies throughout the British Empire.<sup>13</sup>

Keilley died in 1855 at the age of 60 and he was succeeded at the Hospital by his son, Edward James Keilley, in a joint appointment with Dr. Frederick Bunting. Less than six months after his father's death, however, young Edward James Keilley died, aged 28, after a short illness. For his fellow appointee and friend, Frederick Bunting, who had been present eight years previously at the first use of ether in St. John's, young Edward James's death must have been very sad, as it was the second time that he had lost a close young friend and colleague. In 1847, a few weeks before Mr. Kennedy's operation, Frederick's brother John had died at the age of 33, while on the staff of the Hospital, from typhus, while looking after patients during an epidemic. None of the Keilley family's gravestones stand intact today, but the



FIGURE 1 Gravestone of Edward James Keilley "Erected by his friend Frederick Bunting". Anglican Cemetery, Forest Road, St. John's, Newfoundland.

broken one that has inscribed on it "To the Memory of Edward James Keilley, from his friend Frederick Bunting" has a certain poignancy (Figure 1).

Frederick Bunting qualified in medicine in 1845 at St. Andrew's University in Scotland. He took over the post of Keeper of St. John's Hospital from his brother on his death in 1847 and remained there until 1856, when criticism of the running of the hospital, which he strongly resisted, brought about his resignation. He remained in practice for many years however, dying in his 79th year in 1901. He was remembered by Dr. Keegan, writing in 1925, as a typical old-time physician, always wearing a top hat and white gloves when visiting his patients.<sup>1</sup>

Information about Dr. Martin, the other medical man present at the first administration of ether in St. John's in July 1847, is more difficult to find. The *Newfoundlander* carried a story about him on January 6, 1848. It told of an unprovoked attack made upon him by some vagabonds as he made his way back to his quarters on Signal Hill. He was rescued by two passers-by, "not a moment too soon, as the injuries to him were described as such as must have inevitably destroyed a less powerful person."<sup>14</sup> He sounds a helpful person to have had around in the days before quiet surgery on anaesthetized patients became common-place.

The patient Kennedy, whose feet had become gangrenous, may have had peripheral vascular disease and perhaps diabetes. The other common cause of peripheral gangrene at the time – frost-bite – is unlikely to have been responsible, as this was the middle of summer. He is said to have been from the outports. It is unlikely that he

would have come from near the other large centre of population at Harbour Grace, as there was a hospital and a surgeon already there. In the *Journal of the House of Assembly* for 1850 in the Report on the Poor, there is an allowance of £1:14<sup>s</sup>:8<sup>d</sup> to William St. Croix of St. Mary's for the support of a lame man named Patrick Kennedy.<sup>15</sup> It is possible that this was the patient, though Kennedy is not an uncommon name.

The Hospital in which the first anaesthetic was given was the old St. John's Hospital at Riverhead, which had been built in 1813 following William Carson's strenuous efforts. It was in use for over 50 years but by 1870 the institution had moved to the one time Military Hospital on Forest Road, becoming the St. John's General Hospital, where it stayed with various improvements until its decampment in May 1978 to the University site. The Riverhead Hospital was abandoned after 1870 as unfit for use and it was eventually burned down by the fire brigade in 1888 because it was a public hazard. The fire brigade arrived at 5 o'clock on the morning of December 29, 1888 with muffled bells so as not to attract attention. They played hoses on adjoining buildings to prevent the flames spreading and by 7:30 a.m. it was all over and the engine and horses, Captain and twelve men went home.<sup>16</sup> This hospital was on the site of the present Victoria Park, just off Water Street, next to Bennett's Brewery.

#### *Nitrous oxide*

The next event of anaesthetic interest is an announcement in *The Public Ledger* of November 16, 1847, headed "Laugh and Grow Fat!" which describes a public lecture to be given by a Mr. S. Copeland. This was to be on the subject of the NERVOVITAL AND EXHILARATING FLUIDS. After this Mr. Copeland would administer the "Nitrous Oxyde or LAUGHING GAS to a number of individuals showing the effect of the exhilarating fluids upon different constitutions." "The manifestations produced by the exhilaration cannot fail of affording much entertainment: the Jovial Song, the Sprightly Dance, and the animated and always interesting display of Forensic Eloquence are all brought into requisition, suiting all tastes, and giving those who enjoy a healthy laugh plenty of gratification" – Tickets 1<sup>s</sup>:3<sup>d</sup>, Reserved Seats 2<sup>s</sup>.<sup>17</sup>

Next to the announcement is an advertisement by a Dr. S. Adams, a surgeon dentist visiting St. John's for two weeks, presumably from the mainland. His advertisement mentions dental

**LAUGHING GAS.**—Mr. Copeland delivered his first lecture on this subject last evening, at the Factory, giving an interesting explanation of the nature and effects of nitrous oxide. After the lecture several of the audience subjected themselves to the experiment of inhalation. The gas is administered by means of a tube, in quantities of from four to six quarts, and is no sooner inhaled than its operations on the system is exhibited. It acts variously on different subjects; some were incited to violent dancing, some to singing, some to ground tumbling, and not a few displayed the most pugnacious propensities, and boxed their neighbours with right good will; but all described the sensations produced as most delightful, and the impulses entirely beyond control. The effects passed off in about two or three minutes. Mr. Copeland's experiments were, on the whole, very successful, and afforded much amusement.—*Newfoundlander*.

FIGURE 2 Report of a demonstration of the effects of nitrous oxide, from *The Newfoundlander*, St. John's, Newfoundland, November 18, 1847 (from the Reference Library of the Newfoundland Public Libraries, with kind permission).

extractions, but does not mention anaesthesia and it may be a coincidence that his visit was at the same time as Mr. Copeland's.

*The Newfoundlander*, two days later, carried a report of Mr. Copeland's lecture (Figure 2). "The Gas is administered by means of a tube in quantities of from 4 to 6 quarts, and is no sooner inhaled than its operation on the system is exhibited. It acts variously on different subjects. Some were incited to violent dancing, some to singing, some to ground tumbling, and not a few displayed the most pugnacious properties and boxed their neighbours with right good will; but all described the sensations produced as most delightful, and the impulses entirely beyond control. The effects passed off in about 2 or 3 minutes. Mr. Copeland's experiments were on the whole successful and afforded much amusement."<sup>18</sup>

Earlier in the month, on November 5, an advertisement had appeared in *The Public Ledger* announcing that W.L. M'Kay had set up business as a chemist and druggist.<sup>19</sup> By November 26, ten days after Surgeon-dentist Mr. Adams had an-

nounced his arrival, Mr. M'Kay had expanded his business and was advertising as a dentist. He announced that he was prepared—"to perform all operations on the teeth. Having purchased from Dr. Adams his ETHER APPARATUS, he will administer the vapour in all cases where required."<sup>20</sup> (Figure 3). This is the only advertisement for Mr. M'Kay's dental services though he continued to advertise as a chemist for some years.

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Notices.

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DENTISTRY.

**WILLIAM L. M'KAY,**  
**W**OULD respectfully inform the inhabitants of St. John's, and its vicinity that he is prepared to perform all operations on the Teeth. Having purchased from DR. ADAMS his ETHER APPARATUS, he will administer the vapour in all cases where required.  
 November 26.

FIGURE 3 An advertisement in *The Public Ledger*, St. John's, Newfoundland, November 28, 1847 (from the Reference Library of the Newfoundland Public Libraries, with kind permission).

### *Chloroform*

Chloroform was first used by James Young Simpson on November 4, 1847 in Edinburgh<sup>21</sup> and by the 28 January, 1848, Dr. E.D. Worthington of Sherbrooke had given the first administration in Canada.<sup>22</sup> The first mention of chloroform in Newfoundland seems to have been a report in *The Newfoundlander* on April 13, 1848, headed "Death by Chloroform." This concerned the death of a Dr. Anderson of Birkenhead, England, who had been given the drug for the painless extraction of a tooth and who died some 48 hours afterwards.<sup>23</sup> On May 4, *The Newfoundlander* carried an article headed "CHLOROFORM:" "We have learned with much pleasure that Chloroform, an agent which has been recently introduced into the practice of medicine, was within this last week used by Dr. Carson, with the most gratifying results, in a case of labour. The patient who had endured extreme pain for upwards of 24 hours, was, after inhaling the chloroform about a minute, thrown into a profound sleep, during which she was delivered without the slightest suffering or consciousness. We congratulate Dr. Carson and the Public on this first and most successful application of an agent which promises to be of inestimable value in alleviating human suffering. At the same time, we cannot avoid observing that from what we have heard and read on the subject, we are convinced that the experiment is one which should not be inadvisably or indiscriminately adopted."<sup>24</sup> (Figure 4).

The Dr. Carson mentioned was Samuel Carson, the only surviving son of Dr. William Carson. He was born in 1807 in Birmingham, England, the year before his family followed his father out to Newfoundland. He had gone back to Britain to study medicine, qualifying in Edinburgh in 1829. He married in 1830 and then returned to St. John's where he practised for some 30 years. He was at various times District Surgeon, Physician to St. John's Hospital and Health Officer of the Port of St. John's and, like his father, he was involved in politics, being for some years a legislative councillor. He seems to have been a much respected and well-liked man and, when he retired in 1860 with failing health, he was presented with a silver tea set and £160. He left St. John's in an attempt to improve his health but died in Hamilton, Ontario in 1860, aged 53 years.

Within a week of the newspaper article mentioning Sam Carson's use of Chloroform in labour, a letter was written by Dr. Thomas McKen to the editor of *The Public Ledger* – the

CHLOROFORM.—We have learned with much pleasure that *Chloroform*, an agent which has recently been introduced into the practice of medicine, was within this week employed by Dr. Carson, with the most gratifying results, in a case of labour. The patient, who had endured extreme pain for upwards of twenty-four hours was, after inhaling the *Chloroform* about a minute, thrown into a profound sleep, during which she was delivered, without the slightest suffering or consciousness. We congratulate Dr. Carson and the public on this first and most successful application of an agent which promises to be of inestimable value, in alleviating human suffering. At the same time we cannot avoid observing that, from what we have heard and read on the subject, we are convinced this expedient is one which should not be inadvisably or indiscriminately adopted.—*Newfoundlander*.

FIGURE 4 An article from *The Newfoundlander*, St. John's, Newfoundland, May 4, 1848 (from the Reference Library of the Newfoundland Public Libraries, with kind permission).

letter later appearing in *The Royal Gazette* of May 16. This gave details of the first surgical operation performed under chloroform in St. John's.

"On the forenoon of Wednesday last, I was invited to witness an amputation of the leg at the St. John's Hospital. The other medical men present were Drs. Grant, Martin, Bunting, and Kielley, the latter gentleman being the surgeon. Ensign Martin R.N.C. was also present. The patient was a man over 60 named Doyle, a resident of Torbay. Before removing the patient from his bed to the operating room, a portion of chloroform was sprinkled on a handkerchief and applied to his mouth and nostrils, which in a few minutes produced unconsciousness, when the patient was removed and placed upon the operating table. The necessary arrangements having been made, Dr. Keilley proceeded to amputate, which operation was performed with all that gentleman's usual dexterity and coolness. During all the time the patient evinced no sensibility to pain, and the operation being finished he was put into bed and immediately afterwards consciousness returned"<sup>25</sup> (Figure 5).

Of the doctors mentioned in this letter, Drs. Martin, Bunting, and Keilley had been present, ten months earlier, at the first administration of ether. Of Dr. Grant and Ensign Martin I can find no trace. Thomas McKen was born in 1815 in Dumfries, Scotland, and qualified at Glasgow in

*To the Editor of the Public Ledger.*

As the use of Chloroform is novel in this community, the following particulars of the application of that valuable agent in alleviating human suffering, by producing insensibility to pain, cannot fail to be interesting to the public.

On the forenoon of Wednesday last I was invited to witness an amputation of the leg at the St. John's Hospital. The other medical men present were Drs. Grant, Martin, Bunting, and Kielly—the latter gentleman being the operator—Ensign Martin, R.N.C., was also present. The patient was a man over sixty, named Doyle, a resident of Torbay.

Before removing the patient from his bed to the operating room, a portion of Chloroform was sprinkled on a handkerchief and applied to

FIGURE 5 Part of a letter to the editor of *The Public Ledger*, published in *The Royal Gazette*, St. John's, Newfoundland on May 16, 1848 (from the Reference Library of the Newfoundland Public Libraries with kind permission).

1836. On the death of Sam Carson in 1860 he was appointed to the staff of St. John's Hospital to join Dr. Rochfort and, on the death of Dr. Rochfort in 1865, he assumed sole charge of the institution. By 1867 he was giving evidence to a government enquiry on the unhappy state of the hospital which was gradually becoming more decrepit and dangerous. He had to explain why he rarely called in other doctors and why children in the ward slept two in a bed. Later that year he left the staff and he died in 1869.

A year after chloroform was first used in St. John's another letter was written to the editor of *The Public Ledger*, the writer signing himself Scrutator. It announced that "an amputation of the leg was skilfully performed at Harbour Briton about a week since by Henry Clinton, M.R.C.S.L., on a planter named Skinner, who had for some months been suffering from a diseased knee. Previous to the operation the patient was brought under the influence of chloroform which was effected in about 5 minutes. The operator with his usual dexterity proceeded to remove the limb, which was expeditiously accomplished, and after the necessary dressings, the patient began to recover from the effects of the chloroform. He had not the slightest recollection of anything that had taken place after the chloroform was administered"<sup>26</sup> (Figure 6).

This may have been the first use of chloroform in the outports, outside St. John's, although Dr. Keegan's undated claim for Dr. William Frazer of Bay Roberts may well be true. According to Dr.

TO THE EDITOR OF THE PUBLIC LEDGER.

Sir,—An amputation of the leg was skilfully performed at Harbour Briton, about a week since, by Henry Clinton, Esq., M.R.C.S.L., on a planter named Skinner, who had for some months been suffering from a diseased knee, occasioned, apparently, by not applying in time for surgical advice. Previous to the operation the patient was brought under the influence of chloroform, which was effected in about five minutes. The operator, with his usual dexterity, then proceeded to remove the limb, which was expeditiously accomplished; and after the necessary dressings the patient began to recover from the effects of the Chloroform inhalation. On being informed that the operation was concluded, he appeared quite astonished, and acknowledged to have had not the slightest recollection of anything that had taken place after the Chloroform was administered. The patient is now doing well.

If you deem the above worthy a place in your journal, you are at liberty to make use of it.

I am, Sir,  
Your obedient servant,  
SCRUTATOR.

Fortune Bay, 30th May, 1848.

FIGURE 6 A letter to the editor, appearing in *The Public Ledger*, St. John's, Newfoundland, on July 13, 1849 (from the Reference Library of the Newfoundland Public Libraries, with kind permission).

Keegan, Dr. Clinton was born in London, England, in 1815 and received his diploma from the London College of Surgeons in 1837, arriving in Newfoundland soon afterwards in the service of Newman and Company. He died at the comparatively early age of 42 years.

LATER YEARS

During the next 30 or 40 years little information is available except that reports from the St. John's Hospital in the House of Assembly journals suggest that the number of operations gradually increased from an initial 10 or 20 a year in the 1850s. Most of the operations were probably amputations, like the ones already described, because early methods of anaesthesia—of induction without maintenance—only allowed the performance of operations which could be speedily completed.

In 1856, however, James Nutting Fraser, an Edinburgh Graduate, described in the *Edinburgh Medical Journal* a most unusual case on which he had operated in St. John's. The patient was a fisherman named William Roberts of Brigus, Newfoundland, who had been injured while at the Labrador Fishery in 1848 by the bursting of a gun near his face. He had been unconscious for several days after the injury but had made a gradual recovery with the wound healing. For several years following this he was well except for a

discharge from his nose, but eventually pain, haemorrhage, loss of vision, and further discharge caused him to see Dr. Fraser in 1856. On June 19, with the help of Dr. W.L. Simms, another Edinburgh graduate, Mr. Roberts was anaesthetized with chloroform. At operation, with considerable difficulty, they removed from the patient's upper jaw the breech of the gun which had exploded eight years previously. It measured more than 2½ inches in length and weighed over a quarter of a pound. The patient made a good recovery, although for a few days postoperatively there was a discharge from the wound which contained small pieces of rust.<sup>27</sup> The breech eventually passed into the possession of the Newfoundland Medical Association in 1924 and was used as a gavel for some time, although it was eventually lost to be replaced by a Shillaghly.<sup>28</sup>

In about 1890, the first abdominal operation was performed on the Island when Dr. Herbert Smith carried out a Caesarean Section on a woman with Pott's disease of the spine who had lost babies at two previous deliveries. The anaesthetic was given by a local merchant, the customs officer, who Dr. Smith had trained. The midwife assisted and the operation, performed on the patient's kitchen table in Burin, was a success, all participants surviving.<sup>29</sup>

By 1893 laparotomies were being performed at the General Hospital in St. John's and, as the amount of work gradually increased, nurses became more involved in the giving of anaesthetics. By 1902 most of the anaesthetics were being given by the Matron, Miss Hannaford, with some being given by Miss Mary Southcott, the Nursing Superintendent.

In 1903 the Hospital set up a training school for nurses and one of the first four graduates was Margaret Cullian. When Dr. Keegan took up his post as Medical Superintendent of the General Hospital in 1909 he recognised the qualities of Miss Cullian, who was then a sister. She was sent to the Royal Victoria Hospital in Montreal for five months, three and one half months of which were in the X-ray department and one and a half months in the operating theatres studying anaesthetics under the direction of Dr. Nagle. By October 1912 she had been appointed X-ray operator and anaesthetist to the General Hospital at a salary of \$400 per annum (compared to Dr. Keegan's \$2,300). She thus became the first officially designated anaesthetist on the island, if only part-time as her appointment contained several duties. She gave about 700 anaesthetics a

year and by 1914 she was able to say that she had given about 1400 anaesthetics without a death. How part-time her anaesthetic duties were can be seen by a description of her other responsibilities. In 1914, in addition to being anaesthetist, she was X-ray operator and developer of films. She was also in charge of the Pharmacy and the dispensing of all medicines and her knowledge of shorthand allowed her to carry out the task of bookkeeper of the hospital records, making a daily report for each patient, as well as being Dr. Keegan's general secretary. She had about 5 to 10 hours off duty each week, but was otherwise supposed to be on call and in the hospital day and night, week in, week out.<sup>30</sup> A commission reporting on the state of the General Hospital at the time suggested that there was more work in those duties than should be imposed on one person and recommended that she should be relieved of the burden of her bookkeeping and secretarial duties, leaving her only with the jobs of X-ray operator, Anaesthetist, and Pharmacist.

Full-time physician anaesthesia was formally established with the appointment of Dr. Tom Stentaford to the General Hospital in 1939 and within 40 years the anaesthetic strength in St. John's alone has risen to more than twenty. Miss Cullian and Dr. Keilley, two busy people, would not have been surprised.

#### SUMMARY

The early history of anaesthesia in Newfoundland is described by reference to newspapers and other writings of the time. News of ether first reached Newfoundland in February 1847 with a report from England of Robert Liston's amputation of a leg on December 21, 1846.

Ether was first used in St. John's some days before July 30, 1847, for an operation to amputate both legs, the surgeon being Edward Keilley. Chloroform was used in St. John's a few days before May 4, 1848 by Samuel Carson in an obstetrical case, and on May 10, 1848 it was used during the amputation of a leg by Edward Keilley.

Also discussed are some other items of anaesthetic interest which occurred during the years following until the appointment of the first (albeit part-time) anaesthetist in St. John's in 1912.

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