

## James Young Simpson & the early testing of anaesthetics (on oneself)

*By Helen-Jane Shearer*

*Published Konect March 2016 issue (West Lothian editions)*

Before anaesthetic the quicker a surgeon (“a savage armed with a knife”) worked the better the patient's chance survival. One doctor wrote to Simpson “a patient preparing for an operation was like a condemned criminal preparing for execution.” Many died from the shock of pain, and exploratory surgery was out of the question. Patients' desperate attempts to anaesthetise themselves with drugs and alcohol was fraught with danger. Surgeons were often traumatised themselves, and like many aspiring doctors James Simpson almost abandoned medicine altogether after witnessing his first operation. But he was so deeply affected by the suffering he saw that his driving motivation became “Can nothing be done to prevent this suffering?”

James was the youngest child of Mary Jarvey of Balbardie Mains, descended from refugees who fled to Scotland during the French Huguenot persecution; and of David Simpson, who ran a struggling bakery in Main Street, Bathgate. A few days after baby James was born on 7th June 1811, Mary found out how bad things were in the business and took it in hand. She must have been a remarkable woman - having just given birth to her eighth child, she took on the failing business and turned it into a success, so James' early days were spent helping out with the bakery.

A sweet-natured child, he was fondly called "the bonnie callant" at Balbardie House where he delivered hot breakfast rolls. Bathgate was a weaving village, and James used to hang around a group of weavers who were experts in natural sciences and absorb their conversations about geological finds and biological specimens. He had a thirst for knowledge and an extraordinary memory. His grand uncle Jarvey (who ran a brewery in Bathgate) was a keen historian and also shared his knowledge and interests with young James. (Jarvey Street is named after him). James' mother, who had a huge impact on his formative years, died when he was just nine.

Simpson's daughter writes in her biography, "His mother gave him freely of the treasures of her mind, and her earnestness, her contentment, her firm God-fearing faith, ever lived in his memory." Mary's dream was for her youngest to get a university education – an ambition that her husband and all their older children shared, realising that he had the best prospects of all his siblings. His eldest brother Sandy once warned him against the temptation to drink like most boys in Bathgate which was a village of hard-drinkers, "Others may do this, Jamie, but it would break all our hearts and blast all your prospects were you to do it."

Bathgate parish school education concluded at the age of 14. Whereas most left for work or an apprenticeship locally, it was a foregone conclusion that James would go to university. He described later in life his bewilderment at finding himself in Edinburgh "very, very young and very solitary, very poor and almost friendless." He lived frugally so as not to be too great a burden on his family, sharing lodgings with two Bathgate men, John Reid and Mr McArthur, both older than him, who were studying medicine. Sometimes as a treat John Reid would take him to one of Dr Knox's (of Burke and Hare fame) lectures in the evening.

He spent all his holidays back home in Bathgate helping out with the business. And despite the stress of nursing then losing his beloved father just before his final exams, James passed and became a member of the Royal College of Surgeons before he was out of his teens. Too young to become a medical doctor immediately, he lodged with his brother in Stockbridge and took a couple of jobs including assistant to a Professor Thomson, who was the first person to suggest the field of obstetrics to him. It was at that time the lowest of medical arts, still somewhat

shrouded in mystery, but James took it up with his customary thoroughness and obstetrics went on to become his professional speciality. Finally, before settling down to open his own medical practice, his brothers funded him for a three-month tour of Europe. He sent regular letters home to Bathgate recounting and commenting on all he saw.

He opened his first practice in Edinburgh, living frugally, conscious as always of the burden he placed on his family in Bathgate. His sister Mary sent him boots, as he said “Bathgate ones last the longest”, walking many miles to see patients day and night. When he wasn't seeing patients his insatiably curious mind was reading, learning, and writing papers on medical and other topics. His early patients were too poor to pay him, but in time, better-heeled, paying patients were attracted by his growing reputation. He never discriminated – he treated the paying and non-paying patients alike.

His career flourished as his reputation grew, and he became a popular lecturer in archaeology, religion, medicine, geology and more. A Professor at the shockingly young age of 29, he was appointed to the Midwifery Chair at Edinburgh

**"James was less flattered by Queen Victoria's appointment as her physician in Scotland than by the fact he had delivered a woman without pain."**

University (first getting married, apparently an essential requirement!) Papers from his prolific output include a history of leprosy in Scotland; ideas on hospital reform; an improved design of forceps – still called the Simpson Forceps today – and other things. With nobility and aristocracy among his patients he often travelled to London, but preferred being near his beloved family in Bathgate, taking refuge there from his hectic professional life.

But Simpson always believed it was his duty as a physician to alleviate pain. On hearing about ether trials in America he enthusiastically adopted it, delivering the first baby with ether for the mother on January 19th 1847. At the same time he was appointed Queen Victoria's physician – and he wrote to his brother that he was less flattered by the queen's appointment than by the fact he had delivered a woman without pain.

But ether was not a viable solution for various reasons. Throughout 1847 Simpson and his friends Dr George Keith and Dr Matthew Duncan would settle down after work every evening at Simpson's house at 52 Queen Street to sample various narcotic drugs. A neighbour came in every morning to “see if the experimenters had survived!”

## Pass-out party!

On 4th November 1847 they were trying various drugs at Queen Street in the usual manner. Simpson pulled out a phial of chloroform he had ordered some time previously but not been inclined to try. The three took it simultaneously, and were “all under the table in a minute or two.” Simpson's wife and three other family members who were in the room at the time were pretty used to these experiments, but were alarmed by this – the speed they passed out and how thoroughly unconscious they were.



Wellcome Images

*Image from Wellcome Images: the first chloroform test at 52 Queen Street, Edinburgh*

When Simpson came to on the floor he noted that Dr Keith was under the table, kicking confusedly as he came to; and Dr Duncan was still out to it. He realised straightaway that he had found something “far stronger and better than ether.” The night turned into quite a party as they took chloroform to knock themselves again and again until 3am!

Many people welcomed the discovery, but it was also met, incredibly, with opposition and prejudice. While abhorring the pain of surgery, people were suspicious of pain relief, believing that to avoid pain was in some way unnatural and wrong. And pain-relief for childbirth was definitely contrary to the God-ordained course of nature! But Simpson battled on, spending hours answering his detractors with thorough and educated responses over many years.

He collected extensive statistics to prove the reduced mortality rates, and chloroform gradually won over. Friends in high places helped - Queen Victoria used it for delivery of her eighth child in 1853, and again for her ninth.

It revolutionised the operating theatre where it reigned for nearly 100 years. By the time it was eventually replaced by safer anaesthetics, massive advances had been made in surgery as a result and many lives saved.

Simpson never forgot his Bathgate roots, or how much he owed to the help of his loving family. He instigated a prize for the best darning in Bathgate school – in memory of his mother who had once taken him on her lap to darn a torn sock, and said to him “My Jamie, mind when your mither's awa' that she was a grand darning.”

### **Chloroform - not a good choice for criminals...**

**The chloroform-soaked rag is the weapon of choice of vintage crime fiction anti-heroes. But in reality... it takes around five minutes of inhalation before it knocks you out.**



Statue of Sir James Young Simpson in Edinburgh

Copyright remains with the original author.

Original article found at: <http://www.konectdirectory.co.uk/james-simpson.php>

perioperativeCPD@gmail.com