

The  
Scottish Society  
of the  
History of Medicine

(Founded April, 1948)

REPORT OF  
PROCEEDINGS

---

SESSION 1986 - 1987 and 1987 - 88

---

# The Scottish Society of the History of Medicine

## OFFICE BEARERS

	(1986-87)	(1987-88)
<i>Honorary President</i>	Dr. HALDANE TAIT	Dr. HALDANE TAIT
<i>President</i> - -	Dr. A. H. B. MASSON	Prof. D. A. G. WADDELL
<i>Vice-Presidents</i> -	Dr. W. CUNNINGHAM	Dr. A. H. B. MASSON
	Prof. D. A. G. WADDELL	Mr. JOHN BLAIR
<i>Hon. Secretaries</i> -	Dr. D. A. DOW	Dr. D. A. DOW
	Dr. D. J. WRIGHT	Dr. D. J. WRIGHT
<i>Hon. Treasurer</i> -	Dr. M. EASTWOOD	Dr. M. EASTWOOD
<i>Council</i> - -	Mr. JOHN BLAIR	Prof. A. S. DUNCAN
	Prof. A. S. DUNCAN	Prof. B. LENNOX
	Dr. J. FALCONER	Prof. DAVID MASON
	Dr. M. GARREY	Dr. SHEILA MILNE
	Prof. DAVID MASON	Dr. H. STALKER
	Dr. ELIZABETH ROSE	Dr. SCOTT WILSON
	Miss FIONA WATSON	Miss FIONA WATSON

# The Scottish Society of the History of Medicine

(Founded April, 1948)

## *Report of Proceedings*

### CONTENTS

Papers	Page
(a) The History of Medicine on Bank Notes <i>Richard Underwood</i>	1-7
(b) The Bramwells <i>Bryan Ashworth</i>	7-8
(c) Cowane's Hospital – A Stirling Almshouse <i>Constance Brodie</i>	9-14
(d) Airthrey Castle Maternity Hospital 1939-1948 <i>E. Neil Reid</i>	14-16
(e) Airthrey Castle Maternity Hospital 1948-1969 <i>Elizabeth Rose</i>	16-17
(f) The Glasgow University Physic Garden 1704-1803 <i>A. D. Boney</i>	20-26
(g) We are how we Write <i>Bernard Lennox</i>	27-28
(h) Sir William Fergusson, Bart. 1808-1877 <i>J. B. Wilson</i>	28-31

---

SESSION 1986 - 87 and 1987 - 88

---



The Scottish Society  
of the  
History of Medicine

(Founded April, 1948)

*Report of Proceedings*

---

*Session 1986 - 1987*

*Session 1987 - 1988*



# **The Scottish Society of the History of Medicine**

---

## **REPORT OF PROCEEDINGS**

SESSION 1986-87

---

### **THE THIRTY EIGHTH ANNUAL GENERAL MEETING**

The Thirty Eighth Annual General Meeting was held in Edinburgh on 8th November 1986 in the new Conference Centre of the Royal College of Physicians. 63 Members or guests attended. The recent 11th British Congress on the History of Medicine was reviewed. This had been hosted by the Scottish Society on behalf of the British Society for the History of Medicine. It was agreed that our Society should underwrite this meeting at a cost of £1126 leaving an operating profit of £751 for the British Society. The President, Dr. Masson, reported on Council's recommendations for use of some of the income received from Dr. Guthrie's Bequest. These included the acquisition of a Presidential Badge of Office, the institution of a research fund to assist members engaged in research and the revival of the annual Report of Proceedings.

The retiring members of Council, Drs. Wilson and Noble and Mrs Gibson, were thanked for their contributions and three new council members were elected, Miss Fiona Watson, Professor David Mason and Professor Archie Duncan. Mrs. Brenda White was elected to replace Dr. Kenneth Collins. The Honorary President, Dr. Haldane Tait proposed the election of Dr. John Cule, the President of the British Society as an Honorary Member and this was warmly agreed.

### **THE ONE HUNDRED AND NINETEENTH ORDINARY MEETING**

This meeting directly followed the Thirty Eighth Annual General Meeting in the new Conference Centre at the Royal College of Physicians in Edinburgh. Dr. Alastair Masson, in the chair, introduced Dr. Richard Underwood who talked on the history of Medicine on bank notes.

### **THE HISTORY OF MEDICINE ON BANK-NOTES**

Our story starts nearly four thousand years ago in the reign of King Hammurabi of Babylon, who reigned from 1792 B.C. to 1750 B.C. approximately. Towards the end of his rule he caused a Codex of Laws to be carved on a black basalt column. These laws gave guidance to a wide range of situations, and Laws 215 and 223 laid down the rewards and punishments for the successful and incompetent surgeons of the day. At the top of the column is a vignette showing Hammurabi receiving the Laws from the Sumerian sun-god, Shamash. This vignette is to be found on the back of the Iraqi 5 dinar note of 1973.

Moving on several centuries we come to the Greek Sun-god, Apollo. Apollo was a many-talented god, controlling various aspects of earthly life, one of which was medicine. Just as the sun can warm the earth and bring it to life, so Apollo the Sun-god was the god of medicine, giving life and health to the human race. He is to be found on three Greek notes, one being the 100 drachmai note of 1927.

One day Apollo took the mortal woman Coronis as his lover and she became pregnant. Apollo then departed for other amours and adventures, whereupon Coronis herself took a lover. Learning of her infidelity, Apollo had them both slain, but then, hearing that she had been about to give birth to a child, he sped to her funeral pyre and delivered the babe from her belly. This, I think, is the first recorded case of Caesarean section! Now full of remorse Apollo resolved to teach the child all he knew of medicine, and persuaded the Centaur Chiron to teach him the art of surgery. His name Asklepios (in Latin Aesculapius) became famous as *the* god of Medicine. His temple at Epidauros became famed for miraculous cures for many centuries. A 15th Century statue of Asklepios is to be seen on the Belgian 5000 franc note of 1972. In the background in this vignette is the famous Epidauros temple.

About one millennium later another person was born who was to have a dramatic and incredibly far-reaching influence on the practice of medicine - Jesus Christ. Of humble birth and mixed parentage, he performed, as we all know, many miraculous cures during the last two years of his short life on earth. The lame, the blind, the diseased, the mentally ill, even the dead, he restored to health and happiness. His philosophy of "Love thy neighbour as thyself" fostered the close association of medicine and nursing with Christianity. Thus medical missionaries across the world have sought to improve both the physical and the spiritual health of those around them. The Christ-child appears with his mother on a number of Hungarian notes - for example the 10 pengo note of 1936.

Abu Ali al-Husayn ibn Abd Allah ibn Sina was born at Bukhara (in modern-day Uzbekistan) in 980 A.D. and he was destined to become the most famous and erudite sage of his day. It was said that at the age of 10 he had memorised the whole of the Koran. By his mid-twenties he was the foremost of all court physicians in Persia, as well as being an expert in architecture, mathematics, and canon and secular law. Soon his fame reached Europe where his Arabic name was Latinised to the more familiar one of Avicenna. His writings were prolific and varied but he is best remembered for his two monumental books "The Book of Healing" and "The Canon of Medicine". The latter remained a standard medical textbook well into the Middle Ages and was translated into many languages. Avicenna died at Hamadan (in modern Iran) age 57, and a hideous modern concrete structure now marks his resting place. The 1981 Iranian note of 200 rials shows Avicenna's tomb on the reverse.

Still in the East, we come to The Order of St. John of Jerusalem, founded in that city in 1099 by Pierre Gérard de Martigues. There was a small hospice close to St. John's Church in Jerusalem which offered questionable medical and nursing care to sick and weary pilgrims. De Martigues set up a secular brotherhood of men who would devote themselves to giving dedicated and expert care to their charges. The Order rapidly became rich and powerful as many wealthy knights joined its ranks. As the Islamic empire expanded, the Order retreated to Acre in 1137 then to Cyprus in 1291. Twenty years later they took control of Rhodes island where they remained for over 200 years growing steadily more powerful and influential. It was during their tenure of Rhodes that they adopted the



familiar 8-pointed star, to indicate their eight points of faith: To live in Truth; To have Faith; To repent of Sins; To give Proof of Humility; To love Justice; To be Merciful; To be Sincere and Whole-hearted; To endure Persecution. After their expulsion from Rhodes by Suleiman the Magnificent, they were given the island of Malta where they remained, till Napoleon ousted them in 1798. The standards of medical and nursing care were raised to high levels - a contemporary wood-cut shows large spacious airy wards in the Grand Hospital at Valletta, Malta. The 8-pointed star can be found on the back of the Maltese 2 shilling note of 1918. It can also be seen as a fluorescent security marking on modern notes, visible only under ultraviolet light.

Leonardo da Vinci, the famous Italian painter, sculptor, architect and anatomist, is our next character. He was born in 1452, and soon became renowned for his marvellously detailed and realistic paintings. His passion for detail shows in the anatomical drawings made during 30 dissections he carried out in the mortuary of the Santo Maria Nuova Hospital in Rome between 1503 and 1506. He was the first to draw the fetus in its correct proportions and position in the uterus. He was also the first to use text to explain the pictures rather than vice versa, and his script was in a curious mirror-writing which he used for his private notes. The Italian 50,000 lire note of 1967 depicts Leonardo's self portrait of himself as an old man.

The Portuguese physician and botanist, Garcia de Orta was born probably in 1501 and after completing his medical studies set sail for Goa, the Portuguese colony on the west coast of India. He rapidly established himself as a competent and likeable physician and spent most of his professional life there. He wrote prolifically on his clinical and botanical observations and was the first to give an accurate description of Asiatic cholera, the acute and chronic dysenteries and the neurotoxic effects of the cobra-bite. His observations and experiments on the effects of drugs on the human body can be said to be the foundation of modern pharmacology. In 1971 the Bank of Portugal commemorated his achievements by issuing a 20 escudo note showing his statue which stands in the centre of Lisbon.

The science of anatomy experienced a vitally important boost in 1543 with the publication of the book "On the Fabric of the Human Body", by the Belgian anatomist and surgeon Andreas Vesalius. By the age of 23 he was Professor of Anatomy at Padua University and his skill and accuracy in surgery, dissection and teaching spread far and wide. His famous book exposed many of Galen's long-propagated anatomical errors and aroused great controversy. He died in mysterious circumstances on the Greek island of Zante after a pilgrimage to the Holy Land. The Belgian 5000 franc note of 1971 bears his image on the front the reverse showing Asklepios).

Jan van Riebeeck was a Dutchman born in 1619, and was apprenticed to an apothecary from whom he learned pharmacy, first aid and the art of dressing wounds. At the age of 22 he joined the Dutch East India Company and went out to Batavia (modern Java) acting as ship's surgeon on the way. His job in Batavia was a secretarial one, but on being caught engaging in private business he was sent home in disgrace. On the way back to the Netherlands, the ship stopped on the South African coast to rescue some shipwrecked sailors and salvage some stores. Back in Amsterdam van Riebeeck took up his surgeon/apothecary trade for a living. Later he re-joined the Company and was given the job of founding a relief station on the African coast for Company ships. Remembering the place of the shipwreck, he thought it would be a suitable site for a settlement and indeed it proved to be so. The first building he erected was a hospital, and the first laws were

sanitation laws. Thus Jan van Riebeeck became the founder of the now well-known Cape Town and his portrait is seen on all the current South African notes, including the 2 rand note.

The Father of the Bedside Manner is the title given to another Dutchman, Hermann Boerhaave who was born in 1668. A professor of Medicine and Botany at the University of Leyden, he had only twelve beds under his care, six male, six female. Yet such was his clinical skill, his attention to detail, his kindness and patience that his fame as a clinician and teacher was widely acclaimed. Doctors and students came from all over Europe to hear his bedside dissertations, and observe his clinical methods. The 1955 Netherlands note for 20 gulden bears his placid gentlemanly features.

The Swiss note for 500 Swiss francs shows a portrait of Albrecht von Haller. He studied under Boerhaave and became Professor of Botany, Medicine and Anatomy at the University of Göttingen in 1736. He taught all branches of medicine and engaged in prodigious research in anatomy and physiology. He was the first to demonstrate that conduction is the property of nerves, and contraction the property of muscles.

In 1747 a Royal Naval surgeon, James Lind demonstrated that lime juice would prevent scurvy. Ten years later Captain James Cook put this knowledge to good use by insisting that his ship's crew should have adequate supplies of orange extract, cress, sauerkraut, and whenever available as much fruit as possible. He was the first sea-captain to keep his crews free of scurvy on long sea-voyages. In 1775 the Royal Society awarded him the Gold Copley Medal for his paper on the prevention of scurvy. His portrait is on the five pound New Zealand note of 1967.

We now move across the Atlantic Ocean to the New World - South America in particular. Quito, the capital city of Ecuador, was the home of Dr. Eugenio de Santa Cruz y Espejo, who was born in 1747. Of humble birth he rose to eminence by his quick wit, keen intellect and graceful charm. A plague of smallpox struck Quito in 1785 and he was asked to study the problem. He wrote a classical treatise denouncing the slovenly standards of hygiene in the houses and streets, and even in institutions such as churches, convents and government buildings. He campaigned vigorously for strict standards of public and private cleanliness, and with these and other, often unpopular, measures he was able to mitigate the effects of the plague. The Ecuadorean 500 sucre note of 1976 commemorates his achievements both in medical and political fields.

Further south, in the Peruvian city of Lima a contemporary physician, Hipólito Unánue became the Professor of Anatomy in 1789. An enthusiastic teacher and medical reformer, he was responsible for the building in 1793 of the first anatomical amphitheatre in South America. Amongst his many other achievements was the introduction of the newly discovered smallpox vaccine into Peru. His aristocratic features are portrayed on the 100 soles note of 1969.

Now we come much nearer home to consider the great Scottish medical missionary David Livingstone. Born at Blantyre in 1813, he trained first as a doctor and then as a missionary, before setting out to explore the great continent of southern Africa. He made three epic journeys, the first from 1841 to 1856, the second from 1858 to 1864, and the third from 1866 till his death at Chitambo in 1873. During the course of these incredible foot-slogging expeditions he treated patients, preached the Gospel, campaigned

vigorously against the slave-trade and amassed a great wealth of medical and scientific information. His photograph, taken by Thomas Annan, forms the basis of the portrait to be found on the current Clydesdale Bank ten-pound note.

The fifth of November 1854 was the day of the Battle of Inkerman, in the Crimean War. As the casualties streamed into the Barracks Hospital at Scutari, in Turkey, an English gentlewoman called Florence Nightingale arrived to take charge. With no formal nursing training, she tackled with unflagging energy the task of transforming the place into a clean and efficient hospital. It was her custom to go round the wards each night with her oil-lamp and speak to each wounded soldier in turn, and so she became known as "The Lady with the Lamp". The lithograph by Thomas Bedwell of the Scutari Barracks Hospital and a photograph of Florence herself form the basis of the vignettes on the back of the current English ten pound note.

On her return to England two years later, Florence went on to found the Army Medical School, the Nightingale School for Nurses and several other important institutions.

A small but colourful and attractive French five franc note of the 1960's tells the life-story of one of mankind's greatest benefactors - Louis Pasteur. Trained as a chemist, he discovered the mirror-image crystal forms of tartaric acid and racemic acid. The crystals can be seen on the left and right. His fermentation studies are shown by a group of different glass flasks, alongside a microscope. Another flask containing a silkworm denotes his valuable work on silkworm diseases, while the grapes and vine leaves in the border tell of his studies which eventually rescued the French vineyards from two destructive bacterial plagues. His important anthrax studies are indicated by the sheep in the border, chicken cholera by the cockerels and rabies by the rabbits. He prepared his anti-rabies vaccine from the brains of rabbits, and on the other side of the note is a statue of Jupille, a young French lad who was the second person to receive Pasteur's life-saving vaccine. Also on the same side is shown the culmination of Pasteur's life's work - the Pasteur Institute in Paris, which the great man founded in 1888, and which is still an important centre of research today.

Now, a physician unknown to the world at large but famous in his native country of Lithuania. Jonas Basana-vivcius was born at Ovzkabiliai in 1851. He received his medical training in Russia, moved to Bulgaria in 1880 and eventually took Bulgarian citizenship in 1891. He was appointed chief physician at Varna city hospital and later became palace physician to Prince Ferdinand. He retired in 1905 and returned secretly to his homeland where he spent the remaining 22 years of his life fighting for Lithuania's political, literary and economic freedom. He is commemorated on the Lithuanian 50 litu note of 1928.

Julius Wagner-Jauregg was a famous Austrian psychiatrist, whose gloomy features scowl from the Austrian 500 schilling note of 1953. He qualified in 1880 at Vienna and did considerable work on the physiology and pathology of the nervous system. His main claim to fame was his daring work on the treatment of demential paralytica by malarial fever therapy. He had considerable success with this and was eventually awarded the Nobel Prize for Medicine in 1927. His other fields of activity included forensic psychiatry and thyroid disease.

In the year 1909 a devout middle-aged American Jewess was touring Palestine on holiday whilst recovering from a nervous breakdown. Fascinated by the beauty of the country and appalled at the wretchedness of the lives of her fellow Jews, she returned to

America and set about organising a relief organisation. Nine years later the American Zionist Medical Unit travelled to Palestine and established a permanent medical and nursing organisation there. This later became the Hadassah Medical Organisation, and in 1934 Miss Szold founded the Rothschild Hadassah University Hospital at Mount Scopus, near Jerusalem. She continued to work for the betterment of her people almost up to her death in 1945 aged 85. She is commemorated on the Israel 5 pound note of 1973, and in the background can be seen part of the modern Hadassah Hospital.

I wonder how many know that Queen Elisabeth of Belgium was a fully qualified physician? Born in Bavaria in 1876 she took her degree at Leipzig University. Then, in 1900 she married Prince Albert of Belgium, becoming the Queen of Belgium on her husband's accession to the throne nine years later. She maintained her medical connections throughout her life, being closely associated with the Belgian Red Cross Society. During the First World War she sold all her jewels for the relief of the homeless, actively nursed wounded soldiers, and had a hospital built near the front line so that the war-injured could receive immediate medical treatment. The Belgian 5 franc note of 1938 commemorates both Queen Elisabeth (on the left) and King Albert (on the right).

The Nobel Prize Winner in Medicine in 1945 was the Australian, Howard Walter Florey, who qualified at Adelaide University and became Professor of Pathology at Oxford in 1935. Together with the biochemist Ernst Boris Chain he worked on the problems of producing penicillin (discovered by Fleming in 1928) in a form that was safe, stable, and capable of being manufactured in commercial quantities. This was eventually achieved towards the end of the Second World War and penicillin saved the lives of many wounded service-men. Florey and Chain received the Nobel Prize jointly for this important contribution to medicine.

The Australian fifty dollar note of 1973 shows Florey's portrait, along with a collage of vignettes (penicillin mycelia, agar plates, mice etc.) relating to his important researches.

François Duvalier - also known as "Papa Doc" - was the iron-fisted, power-hungry dictator of Haiti till his death in 1971. How many know that he really *did* train as a physician, and graduated in the Haiti Medical School in 1934? He was involved in two important American-sponsored anti-yaws campaigns in the 1940's and was Director-General of the National Public Health Service in 1946. In the 1950's he became increasingly involved in politics and eventually became President of Haiti in 1957. The rest of his career is well-known. His deceptively benign features appear on many Haitian notes, such as the one gourde note.

Ernesto Guevara de la Serna - better known as "Che Guevara" was popularly known as a Cuban guerrilla and revolutionary. He was, however, Argentinian by birth, and qualified in medicine in 1953. He practised as a surgeon only for a short while. During his holidays he travelled widely and was distressed by the hard-ship of the poor and oppressed peasants. He joined Fidel and Raoul Castro in 1954, and after their failed attempt to overthrow the Batista regime retired to the Cuban mountains to re-group. During this period he acted as nurse, surgeon and dentist to the guerrillas. They were finally successful in taking power in 1959 and thereafter Guevara led a chequered career as government minister, diplomat and secret revolutionary. He was eventually slain in Bolivia in 1967 when caught in an ambush. The three peso Cuban note showing his portrait was very kindly sent to me by the Cuban Information Office in London.

We turn now to yet another modern politician, the late Samora Moises Machel who was recently killed in a tragic air crash. Born in 1933 in the town of Lourenço Marques (now Maputo) in Mozambique, he worked as a male nurse for over ten years. He then became involved with the independence movement Frelimo, becoming its president in 1970. When Independence from the Portuguese was finally achieved in 1975, Machel became the first President of Mozambique. A youthful portrait of him is seen on the 100 meticaïs note of 1980.

My last two notes are both fascinating little curiosities. Could you imagine a bank note which actually showed a surgical operation in progress? The small 10 kip note issued by Laos in 1979 shows an operating theatre in full session, alongside a clinic scene in which a small child is being examined. I suppose this could be an attempt at propaganda - the government caring for the health of its subjects.

Finally, a very rare trade note for 25 cents, for use on Japtan Island in the Pacific Ocean. This coral island was a recreation centre for staff working on the Eniwetok Atoll, famous in the 1950's for its atomic bomb tests. The note shows a typical atom bomb explosion and reminds us of the health hazards of radiation in the fall-out (remember the Chernobyl disaster). On the positive side, of course, nuclear medicine is achieving wonderful things in the fields of diagnosis and treatment. Japtan Island no longer exists, as it was obliterated in one of the later tests.

With that reference to this modern nuclear age, I conclude my rather breathless gallop through four thousand years of medicine as shown on the bank-notes of the world and I hope that you have enjoyed these glimpses into this long and fascinating story.

Dr. Underwood's paper was illustrated by numerous excellent slides of the bank notes which he described.

This was followed by a paper by Dr. Bryan Ashworth, entitled:

## THE BRAMWELLS

During the period from 1879, when the present Royal Infirmary of Edinburgh was opened, until 1933, the Bramwells held a predominant place in the teaching and practice of medicine in Edinburgh. Sir Byrom Bramwell (1847-1931) graduated in 1869. He has left a detailed account of his teachers. They included Turner in anatomy, Bennett in physiology, Syme in surgery, Simpson in obstetrics and Argyll Robertson in ophthalmology. The strongest influence would seem to have come from James Laycock, the professor of medicine. Laycock came to Edinburgh from the York Dispensary in 1860 and was the first Englishman to be appointed to a chair in the Faculty of Medicine. Laycock was interested in psychological disorders, Epidemiology, and Statistics. Much of his work centred on the nervous system.

The origin of the name Bramwell is not clear but branches of the family can be traced in Cheshire, Lancashire and Cumbria. No details are known until George Bramwell, a property owner. His son was the Rev. William Bramwell (1759-1818) a preacher on the Wesleyan circuit who married Ellen Byrom. The Rev. Bramwell was an evangelist and fanatic. He indulged in fasting and self-inflicted injuries as well as prolonged prayer. The founder of the Salvation Army called his son and successor - Bramwell Booth - after him.

Byrom Bramwell was the eldest of 13 children of Dr. J. B. Bramwell. At Cheltenham College and Edinburgh University he had a distinguished career. After qualifying he was not able to become Laycock's assistant because of the demands of the family practice in North Shields. After five years there he was appointed to a hospital post in Newcastle. In 1879 he moved to Edinburgh and set up practice in Drumsheugh Gardens. He became physician to Chalmers Hospital and later, the Royal Infirmary. Until about 1917 he was engaged in consulting practice and teaching. Most Edinburgh students in those days came under his influence and he continued to publish papers and books. He was not promoted to the chair of medicine when it became vacant in 1859 but emerged as a leading physician in Scotland.

Sir Byrom Bramwell had three sons, two of them graduated in medicine. Byrom Stanley Bramwell had a distinguished academic career and graduated in natural sciences at Cambridge before being called to the Scottish Bar. He followed a business career but was also chairman of both the Eugenics Society and the Genealogical Society.

Edwin Bramwell (1873-1952) followed his father to Cheltenham College and qualified in medicine at Edinburgh. He was trained as a neurologist and later became Moncrieff-Arnott professor of medicine. He also published many papers and was in demand as a lecturer. He was particularly involved in the arrangements for postgraduate teaching.

John Crichton Bramwell (1889-1976) went to Cheltenham and Cambridge but was then advised by Sir Byrom to go to Manchester in order to avoid competition within the family for the senior positions in Edinburgh. He became physician to the Manchester Royal Infirmary and professor of cardiology - the first in the British Commonwealth.

A separate talk would be needed to do justice to the numerous publications of these men. The Bramwells were distinguished exponents of clinical method and clinico-pathological correlation before investigative medicine became dominant.

An extended form of Dr. Ashworth's paper has been published as a book by the Royal College of Physicians of Edinburgh. In the discussion which followed the paper, Dr. Margaret Menzies Campbell revealed that Sir Byrom had been one of her external examiners when she had graduated from St. Andrews in 1918.

## THE ONE HUNDRED AND TWENTIETH ORDINARY MEETING

The One Hundred and Twentieth Ordinary Meeting of the Society was held in Edinburgh on 7th March 1987 in the Royal Museum of Scotland. After lunch, Dr. Masson initiated the proceedings with an unexpected treat, a silent film made in the 1930s, of life in the Royal Infirmary of Edinburgh, which captivated the audience. He then introduced Dr. Robert Anderson, Director of the Museum, who took the chair.

After a brief description, by Dr. Alan Simpson, of some recent donations to the Museum, of equipment from the Renal Unit and the Pathology Department of the Royal Infirmary of Edinburgh, Dr. Anderson introduced Dr. Christopher Lawrence who spoke on "Historians and the History of Medical Technology." In a well illustrated talk, Dr. Lawrence sketched the origins of medical technology from primitive cultures to the late eighteenth century. He then explored the relationships between diagnosis and technology

from that time to the present, including the respective and sometimes antagonistic roles of physicians, surgeons and other specialists. In conclusion, he suggested that the Scots were perhaps more receptive to innovation than their English counterparts and urged upon his audience the desirability of a research initiative to examine such themes.

Dr. Ghislaine Lawrence then prefaced her talk on "The Preservation of Medical Technology" with a resume of the furore which accompanied the first showing in 1958 of "Your Life in Their Hands." She contrasted this adverse reaction to the medium of television with the willingness to display technology in a museum setting, a legacy of the late nineteenth century education function of museums. In a critical assessment of current display techniques, she examined such topics as the quality and purpose of exhibition labels, the appropriateness of the concept of linear development in the field of technology and the need to adopt a more contextual frame of reference, including the linking of the end product with the means of production.

These very different but related presentations provoked a lively debate, brought to a reluctant conclusion by a vote of thanks proposed by Dr. Masson.

## THE ONE HUNDRED AND TWENTY FIRST ORDINARY MEETING

The One Hundred and Twenty First Ordinary Meeting took place at the University of Stirling on 23rd May 1987 and was attended by 41 Members or guests. Professor David Waddell, in the chair, introduced the first speaker, Mrs Connie Brodie, formerly Archivist to Central Regional Council, who talked on

## COWANE'S HOSPITAL - A STIRLING ALMSHOUSE

The royal burgh of Stirling was provided with various hospitals or almshouses from mediaeval times. There were the Leperman's House, St. James' Hospital and the Hospital of St. Peter and St. Paul. Robert Spittal, tailor to the Queen, built and endowed a hospital in 1550 for indigent members of the Merchant Guildry and the Incorporated Trades and the poor of the Burgh. Neither buildings nor records of any of these survive today but, climb the long slope leading to the Castle and you will find a charming 17th century building, flanked by a terrace overlooking an ancient bowling green and facing the 15th century nave of the Kirk of the Holy Rude. This is Cowane's Hospital, little changed externally from 1649, when the statue of the founder was brought by ship from Edinburgh and dragged up the hill on a sled to be painted and set above the door by Jon Mylne, King's mason. Not only does the building still stand but its whole history is recorded in the Accounts and Minutes of the Patrons and Masters (i.e. the administrative committee made up of the provost, magistrates and town council along with the town's minister) which are held by Central Regional Archives in Stirling.

The donor of the building and Stirling's greatest benefactor was John Cowane, the wealthiest member of a family of substantial Stirling merchants, a banker, a provost of the burgh, commissioner to the Convention of Royal Burghs and to the Three Estates, and a

bachelor with no legitimate heir. The prospect of death caught him unprepared in 1633, for he had prepared no will, but on his deathbed he instructed his brother Alexander, a physician, that he desired 40,000 merks from his estate to be employed for the erecting of "a Hospitall or almous hous within the said Burght - for enterpenyng and sustenyng there-intill - Twelf decayed Gildbreither." Alexander dutifully intimated his brother's legacy to the Town Council and a Deed of Foundation was delivered to them three years later.

The Merchant Guildry of a royal burgh were the commercial elite of the country. Guaranteed a monopoly in all foreign trade and in wool and hides, they had an unrivalled opportunity to amass capital and to put it to work. This, in turn, gave them political importance at national and local levels. However, ships could founder and cargoes be lost, investments fail and health give way. Besides regulating trading practice and acting as a court of adjudication, the Merchant Guildry, like the Incorporations of craftsmen, was a friendly society, distributing relief to indigent and distressed members and their families. Yet Cowane clearly believed in the desirability of a home where former men of substance, though now needy or frail, might be maintained in decency and dignity, freed from dependence on family or friends.

The legacy was invested, mostly in land. A site was chosen and an existing house thereon was demolished in the spring of 1637 and by summer, drink money was spent with the provost and bailles "when they were agreeing with James Rynd, mason, to devys of the plot." The fortunate choice of architect was Jon Mylne, a member of the important dynasty of King's masons. He was to come and go from Edinburgh to Stirling over the period of 15 years that it took to complete the building and, during that time, the Accounts record every nail bought, every wage paid, the names of the quarries from whence the stone was quarried, the journeys of the treasurer to St. Johnstoun of Perth and to Dundee to buy slates, to Leith and "the pow of Alloway" (Alloa) to buy timber, even the gift to Andrew Leckie, barrowman, for a pair of shoes "byand atour [over and above] his wadges (more than the rest gat) because he got all the hevie bak lifts." (Soon thereafter, a payment was made to his widow who must have rued sadly her spouse's zeal.)

At first all was bustle and enthusiasm but this was to falter. The ripples from any major event in Scotland (and sometimes, indeed in England) were inevitably felt in Stirling which, because it stood at the geographical cross roads of the country, was forced to adopt the politics of the Vicar of Bray. That almost a generation was to pass before John Cowane's dream was realised was at least partly due to the truly troublesome times. The National Covenant was signed in 1638 and Civil War had broken out by 1640 when the Covenanter's General Leslie passed through the town and was made an honorary burgess.

By then the Hospital had risen to roof level. (The Hospital treasurer purchased 60 great trees 36 feet long and 32 of 24 feet at Alloa, to be roof timbers. They were floated up the Forth with the help of two Dutchmen and a local sailor "being 3 tydes be the way.") The plague which swept the country in 1644 lasted for four years (Professor Smout suggests it may have been typhus, carried to and fro by the marching armies). Parliament fled before it from Edinburgh to Stirling and from there to Perth. From 1645 to 1647 there was no building at the Hospital and no accounts, though the Patrons met at long intervals, twice in the open air and once, in 1646, in the Hospital, now roofed. The tower had yet to be finished, its roof to be "theikit with lead" and the building to be harled. Eventually, Jon Mylne made his last visit, bringing with him the effigy of John Cowane to be set above the door and painted.



This however, was in the inauspicious year of 1649, six months after the execution of Charles I. In September of the next year Cromwell defeated Leslie at Dunbar and so got control of Edinburgh. Stirling was still free and the new king moved with his court to the castle there in 1651, harrying the Town Council for money which they had to borrow to pay, even in part. The King's departure for the south and subsequent defeat at Worcester did not end the strain but brought an English army under General Monk to demand the surrender of the burgh. Though the castle held out for another week, the Town Council accepted the inevitable and sent 2 quarts of wine, 12 pipes, a pound of tobacco and 2 glasses out to Monk's headquarters as a peace offering. The English occupation was a considerable financial burden to the town. From payments over a period of two years from 1657 to "John Buchanan for his pains in overseeing the Hospital house and attending the locking in of the doors every frayday efter the gairds removit furth of it" it may be assumed that the Hospital stood empty for some time after having been used for billeting the English troops.

With the Restoration, the way seemed open at last to fulfil the intention of the donor, and the Masters, in 1660, were instructed by the Town Council to "repair the Over Hospital in all things needful for better accommodation of the poor and decayed Guildbrethren." Repairs were made and the garden levelled in 1662 but it was only in the next year that "4 close beds and 7 loose beds" were made, 3 pairs of blankets and 4 coverings provided, Janet Luckison dressed feathers and washed clothes with "2lbs of sope" and feather beds were made with 16 ells of ticking. In the 30 years since the bequest, initial enthusiasm must have faded and the Patrons had got into the habit of sitting lightly to the terms of the Deed of Foundation in their disbursement of funds. Grants were indeed made to widows and indigent brethren "for their present necessities" and regular pensions began to be paid in the '60's but it is only after 1670 that there are signs of a settled policy of accommodating and maintaining pensioners as residents in the Hospital. Loads of peat were paid for, along with 2 water stoups and a washing tub, linen for sheets, pillow cases, table cloths and serviettes, 12 pair of plaiding blankets, feathers for beds and pillows, 4 pewter plates, 4 tin chamber pots, candles, 2 drinking cups, 2 pans, 3 pots and a goose iron for dressing the clothes. For a short period, all must have been as John Cowane had desired. The pensioners got 40/- a week and a measure of meal, "a load of coal to ilk chamber weekly in summer and two in winter" and candles plus £36 a year for clothes. A woman was paid to sweep the house and wash the clothes. Fresh straw for bedding, peat, coal, candles and extra utensils were provided annually. There are no accounts for food apart from the allowances of meal, so the inmates must have catered for themselves.

An inventory of the plenishings in 1679 describes the accommodation. There were 7 chambers, each of which could be occupied by 2 men, a hall, a dining room, a business room and servants' and keepers' quarters. Each bedroom had 2 fixed beds and blankets, 2 chests, a table and a supply of pots and pans. The hall had a heavy square table and four forms. The charter house was unfurnished and the victual house had a ginnall, a chimla and 2 lous beds (a meal chest, a fireplace and 2 truckle beds).

In 1675 Oliver Murray, the town clerk, was paid for writing "the orders of the Hospital" to be placed on boards in each chamber. These were the pains and penalties to be imposed for breaking a set of eleven rules anent attending daily prayers in the house and every available service in the church, being indoors by 9 o'clock in the summer, not being drunk, not "swearing, banning or flyting [cursing or wrangling], not presuming to marry or (as

god forbid) commit fornication." All these were to be enforced by the overseer who, if he himself transgressed, had to pay the "triple more". The first and last mentioned overseer, John Russell, was himself a pensioner and got an extra allowance. His wife was paid separately for washing and keeping the house clean.

By the 1680's the Hospital was a less comfortable place to live in. There are no expenses for peat and coal after 1680. Pensions were cut, as were clothing and furnishing allowances. It was admitted in 1685 that because of the town's debts, the revenues of the Hospital had been "a little encroached upon." In truth the Town Councillors who were, in effect also the Hospital Patrons, had come to see the Hospital funds as an extension of the Common Good and payments were made that were far from the intention of the founder. Many were, indeed, to Guildbrothers and their families in need, sometimes for sickness, sometimes for education but sometimes also in loans to the town or to answer appeals, properly the town's business - for example £12.12 to the minister of Orwell for helping to "build a kirk in a more central part of the parish" and, most extraordinary, £1500 as a first time payment to the Africa Company in 1695. The funds swung between black and red, due not only to such practices but also to external mishaps such as the "depredations" to the town during the '15 Rebellion, or the bad harvests around 1728 and 1740 which resulted in arrears of rents from the Hospital lands.

It is difficult to be sure how many residents lived in the Hospital. Many certainly preferred to have a pension in cash. There are also payments around 1700 for alimenter or boarding out weekly pensioners. It has been suggested that pensioners found the Hospital's regime oppressive but there is ample evidence that they were as adept at evading church attendance as other parishioners up and down the land and the rules, taking into account the ethos of the time, were not so unreasonable. There were sporadic attempts to enforce residence but the principle of pensions had been established long before the Hospital was ready to receive inmates and then, as now, institutional life was less attractive than a lodging with family or an accommodating neighbour. The Masters began to let out rooms in the Hospital and residence had stopped before the middle of the 18th century.

It might be expected that decayed Guildbrothers were not, on the whole, hale and hearty. On a solitary occasion, in 1684, the Provost and Conveners (of the Incorporated Trades) made an official visitation to the Hospital and ordered up a gallon of ale to the pensioners. They also apparently saw the need for a doctor's visit because Mr Patrick Mcarthur, a local physician, was paid eight guineas for attending some of the patients per council's order. Ten years earlier Mr Mcarthur "at the Dean of Gild's order was paid for drugs and his pains on waiting on a destitute and dying gildbrother." There are scattered payments to women for attendance and service on sick and dying pensioners, whether resident or not.

Illness and death are the most common cause of petition for relief and the complaints range from broken or paralysed limbs to being "in the pocks" or the more common vague diagnoses which reflected the boundaries of medical knowledge for the next two centuries - "sickness" or "extreme indisposition." Widows and orphans were regularly helped "in their present necessity" but even prosperous men of affairs could be dramatically reduced by illness. William Leask was one such. Over a period of fifteen years he was alternatively a baillie or the Dean of Guild but in January 1723 his family were "in extreme necessity because of his long continued indisposition by a most tormenting gravel." He was given a

grant to provide clothes for his daughter to take up an entrance to the Merchant Maiden Hospital (now Mary Erskine School) in Edinburgh. By the following June, he was dead and his widow was given money to help bury him and "to supply her extreme necessity in the lamentable circumstances whereby she had to put her sucking infant off her breast and give her out to nursing."

Funds were sometimes made available for sufferers to seek specialised treatment beyond the skill of the burgh doctors. The son of a merchant was sent to a doctor in Dalkeith who successfully "cut him for a stonie gravell." Payment was made to "a Hieland doctor" for an operation. Margaret Whytehead was helped "to go to Perth and getting her eyes the blindness thereof removed" in 1698 and in 1661 a merchant's wife was helped to take her daughter to London "to be touched by his majestie for the cruells" [i.e. scrofula or the "King's Evil"]. Presumably this went untreated during the Commonwealth!

Funeral expenses were regularly granted for both men and women though grants were always more lavish, and sometimes extravagant, for men. In 1681 a shirt and winding sheet were provided for John Cramond; "tobacco and pipes to his likewalk and dregie [wake and funeral feast]. To his likewalk 8 gallons ale and ane muchkin brandy at his chisting [coffining]; that night he deid 4½ pts wine and 3 muchkins brandy; item that night 3½ gallons ale; after he was interred, with the magistrates and bailies, wine, sack, tobacco and pipes." Total £24.9.8. A memorable, rather than a decent burial surely.

Cowane's elegant Hospital was no longer an almshouse in the later 18th century but it continued to be a valuable amenity to the burgh, providing accommodation for every sort of activity - for dancing classes, for balls, shows and theatrical performances, as a place of worship for a Baptist congregation, as a library for the local legal faculty, as a temporary Circuit Court and in 1832 it was designated as a hospital in a cholera epidemic. Most unfortunately, in 1852 the floor between the original sleeping and living apartments of the Hospital was removed to construct the present large panelled hall with its stained glass window and small balcony. This was a more convenient scene for the dancing and parties, for which it was much used into the early years of the present century, but it stole from future generations of Scots a unique example of a purpose-built Stewart almshouse. Now known as the Guildhall, it is still used for rarer social purposes and for the meetings of the Merchant Guildry. This is still an elite body but its function is now mainly social. The Dean still conducts business according to historic rites wearing the sable-furred, green gown of his predecessors and a replica of John Cowane's ring hangs on a chain round his neck. (The original is locked in the bank).

The administration of the Hospital and Guildry was inextricably woven into the fabric of the royal burgh. When that was abolished by the reorganisation of local government in 1975, Stirling District created a Cowane's Committee which only lasted for a few years. John Cowane's bequest might now seem to have been in vain but this is not really so. Besides the inheritance of an architectural treasure, Stirling still enjoys the fruits of the early Patron's land investment. Income was sometimes squandered, sometimes misused but it also accrued. By 1881, 121 pensioners drew benefits annually and the funds had risen to such an extent that if only the twelve guildbrethren of John Cowane's original

intent had been maintained, these would have been rich men. Under the Educational Endowments Act (Scotland) of 1882, a scheme was approved which gave half of the Hospital income for educational purposes and half to a pension fund for needy Guildbrethren and their dependants and these funds are available to this day.

Cowane bequeathed his money "furthe of his zeale to the glorie of God and out of the love he had to this burgh." He could not bestow happiness but through the centuries, his wealth ameliorated much misery and anxiety.

Honour his name.

Mrs Brodie's paper was followed by one from Dr. Neil Reid, who was Medical Officer for Health in Stirlingshire during the Second World War. Dr. Reid's paper was on

### **AIRTHREY CASTLE MATERNITY HOSPITAL 1939-1948**

On 2nd September 1939, the County Clerk handed me a letter, saying cryptically "This is your baby." It was a request from the Department of Health to set up urgently a Maternity Hospital and it noted that the Donaldsons of Airthrey Castle had spare accommodation available.

On that day, the total strength of my department was dealing with the problems of evacuation. This involved examining, cleansing and de-infesting 4000 mothers and children before billeting. Next day war was declared.

Mrs Donaldson was a joy to deal with. Bedrooms were cleared, the Billiard Room and Gunroom were dismantled. A large bedroom became the Delivery Room and the adjacent bathroom had planks laid along the bath to act as an examining couch, the planks being removed for a bath. The Department of Health stores supplied beds, bedding, furniture and crockery. On September 12th, with 25 beds available, a group of mothers was admitted, the first of the Airthrey Barrage Balloons.

The next problem was staff. Dr. Eva Cairns, a G.P. in charge of Stirling Infirmary Maternity Unit, who was highly competent, cheerful and willing, agreed to accept clinical charge. By sheer chance we found a matron, home from Kalipong Mission Hospital and a sister, a qualified midwife. Two registered midwives and two V.A.D. auxiliaries completed our team. Only official evacuees could be admitted. This limited numbers, and there were only 53 in 1939 from Glasgow, Clydebank, Edinburgh, Rothesay, Skye and Aldershot. Evacuee mothers found the countryside dull and uncivilised. There were no "pictures" or "chippies" and in West Stirlingshire, a shortage of pubs. In four months 4000 fell to 980 a year later, to about 600.

It should be remembered that 50 years ago, normal confinements were at home. In 1939, in 2000 deliveries, only 440 occurred in the Maternity Units of Stirling and Falkirk Infirmaries. The rest were delivered at home by doctors, Queen's Nurses, or Registered Midwives. These latter, skilled in various degrees by experience only, were frequently kindly women, much respected locally, who also looked after the family when the mother was unfit. They delivered, acting alone, about 500 babies a year, a quarter of the total. Ante-natal supervision was not yet generally accepted or practised, although as it gradually became considered essential, the demands on hospital increased.

Limited to official evacuees, Airthrey only had 43 confinements in 1940, at times there were only 4 or 5 mothers and babies resident. I therefore proposed, and the Department of Health agreed, to put it on a care and maintenance basis. Mrs Donaldson generously agreed to keep it available during her lease. Closure however was postponed. Requests came from naval families in Rosyth, from military families in Stirling, from the Gareloch developments, from the West Perthshire Home for Unmarried Mothers in Dunblane and from evacuees from London and surrounding areas. Following the 1941 Clydebank Blitz, Airthrey filled up immediately, some mothers bringing young children who were fed and sheltered until other provision could be made for them.

Mrs Donaldson's lease expired and was taken over in May 1941. The rental for the castle, garden and policies was £320, with shooting excluded and no disturbance to be caused. Mrs Donaldson left a warm and fragrant memory of her help and generosity. Demand for beds steadily increased with the Department of Health finally accepting non-evacuee local authority cases at 9/6d daily. Staffing was difficult. A staff nurse lured from the Simpson was a much valued member of the team. The long unlit drive along the loch from the main road was scary in the dark. Two cottages were renovated for nurses and were reasonably comfortable, but approached by tree-shaded paths, they were seasonably infested by migrations of small frogs and were peculiarly squelchy underfoot in the dark. Skating on the frozen loch was at first considered safe if the shepherd's dog frolicked on the ice, until the gamekeeper's labrador fell through. Tennis, fives and a boat for fishing were available and the nurses' Christmas parties in the fire-lit, panelled hall were memorable events. Staff cooperation was excellent. When a cook left suddenly, a staff nurse cooked so wonderfully better that she continued for some years.

It became increasingly obvious that the Maternity Service of the area was inadequate, with the Stirling and Falkirk units frequently being overcrowded. Representations were made that the two small units should be replaced by a single unit near to, but outwith the industrial fog-belt. Airthrey was suggested as an ideal site if a full time Consultant and assistant were to be appointed. The evacuation scheme ended on March 31st 1945, but the lease was extended by the Department to allow negotiations to take place. Purchase of Airthrey and a consultant appointment was agreed, with Falkirk opting out. The estate was eventually sold as a unit, but the new owner was willing to sell the castle, cottages, ancillary premises, policies, 10 fields, a wood, sawmill and certain houses and ground outside the policies walls. After arbitration, a deal was made for £30,127 instead of £49,714. On 31st March 1946, the hospital was taken over from the Department, with £1500 being paid for furnishings and equipment. Up until the end of 1945 there had been 2050 births, with 2 deaths.

All three units were now at times overcrowded, Airthrey having over 600 admissions in 1946. Staffing was still difficult, but with these numbers, recognition as a training school could be given if a resident was appointed. This was agreed and with a resident appointed in 1947, recognition came as a training school joined to the Stirling unit. Dr. Eva Cairns left to marry and Dr. Donald Greig was appointed as a consultant.

However, in April 1946, the N.H.S. bill had been laid before Parliament, nationalising the hospitals and Airthrey's future was uncertain. From scratch in 1939, we had set up a 25 bed hospital with minimal staff and facilities. 9 years later, we had handed over a 31 bed hospital and training school with consultant cover, a matron, 3 sisters, 6 staff nurses and 6 auxiliaries with an excellent clinical record and high in community esteem. I cannot pay

adequate tribute to the efficiency and cheerful devotion of Dr. Eva Cairns, the Matron Mrs Clark, Sister Taylor and Sister Bunyan in the difficult early times, creating order out of war-time chaos.

Dr. Rose took up duty in 1948 and lived in the castle for some time, contributing her trained skills and keen enthusiasm to further developments. On July 5th 1948, the castle and estate passed outwith my supervision to the new Regional Hospital Board and the local hospital committee. My direct part in this saga was not yet completed. The chairman, Sheriff Principal McConnachy, shrewd and experienced, and I as chairman of the Medical Committee, faced a serious development. Almost immediately, instructions arrived from the Government Property Department in Edinburgh to sell off all property apart from that immediately adjacent to the castle. By argument, procrastination and ceding the property outwith the castle walls, we were successful until 1964 when a direct command to sell was received. Before any action was taken, an equally imperative command not to sell any part came directly from the Scottish Office in London. A few weeks later, on July 17th 1964, the government announced that the first Scottish University for 400 years would be at Airthrey. Not what we had dreamed of, but well worth our efforts.

For the next 20 years, I will pass you onto Dr. Elizabeth Rose, who so worthily carried with enthusiasm and dedication the main clinical responsibility at Airthrey.

This paper was followed followed by one from Dr. Elizabeth Rose, formerly Consultant Obstetrician and Gynaecologist at Stirling Royal Infirmary, on "Airthrey Castle Maternity Hospital 1948-1969". An abbreviated version follows below:

### **AIRTHREY CASTLE MATERNITY HOSPITAL 1948-1969**

In February 1948, I started working at Airthrey Castle, living at first in a nurses' home in the castle, which I found was a lovely place to live in. Initially the work was busy, with three caesarean sections being transferred to Stirling Royal Infirmary and I wondered if I would be able to cope, but fortunately things did not continue at that pace.

There were at the time thirty beds, with two in the labour ward, one bathroom in admission and two others in the rest of the hospital. There was a nursery but no dayroom and smoking was allowed for one hour after meals. The staff included Miss Clarke as House Surgeon, Sisters Taylor and Bunyan, pupil midwives, Mr Jamieson the gardener and Jock Scott who looked after the boiler and was general factotum. A sewing lady mended the linen.

We delivered between 580 and 700 babies per year. Booked cases included primipara, high parity, poor domestic conditions and tinkers. We tried to exclude obvious obstetric problems such as contracted pelvis (of which we saw a lot in the young primipara of the 1950s, who had been children in the slump of the 1930s). We had blood and plasma available in the refrigerator and with Dr. Donald Greig as an expert dealt with forceps and breech deliveries. Patients requiring Caesarean Section were transferred to Stirling Royal Infirmary.

My work was mainly in Stirling Royal Infirmary, with clinics in addition at Kilsyth and Alloa, but I regularly did a round at Airthrey Castle on Tuesdays and Sundays when on

duty and on these days I had lunch. The food was excellent, plain but beautifully cooked and served. There were fresh vegetables and the cook made jam and bottled fruit. Patients and staff ate virtually the same food.

Christmas was a specially good time. I remember an early breakfast after carolling in the wards. Grapefruit, bacon and eggs and home made rolls, looking out from a gaily decorated dining room as the sun was rising over the Ochils. We always had a Christmas party in the panelled hall, decorated with masses of holly, an immense log fire and a huge Christmas tree. It seemed as if it would go on for ever, until in 1964 we learned that the estate was to be taken over for a University. Thereafter, though the work went on, the quality of life deteriorated, the gardener and the cook retired. There were still cows and sheep in the fields, but the bulldozers moved in.

Greenhouses, where there had been a beautiful peach tree, were taken down to be replaced by temporary offices. By 1967, the University was open, with students, a Barbara Hepworth statue in a courtyard and a maternity hospital still on the campus. A great storm in 1968 destroyed about a third of the trees on the estate. In September 1969, the new Maternity Unit in Stirling Royal Infirmary opened and a few weeks later the hospital at Airthrey Castle closed.

In my 21 years, about 13,000 babies had been delivered, 15,000 in the 25 years since its emergency beginning. I understand that some of the evacuee babies (now approaching the menopause) were christened Airthrey to remind them of their place of birth. Many of the young people in this area feel rather special because they were born here and there must be about 1500 middle aged and some elderly ladies who think they were lucky to be Confined in the Castle.

During Dr. Rose's paper there were murmurs of appreciation from the audience as others remembered with affection the catering standards that had existed formerly in some hospitals. Many members took advantage of a glorious summer day, after tea, to walk through the campus to visit the Castle, thus bringing to a happy end the 1986-1987 session of the Society.





# **The Scottish Society of the History of Medicine**

---

## **REPORT OF PROCEEDINGS**

SESSION 1987-88

---

### **THE THIRTY NINTH ANNUAL GENERAL MEETING**

The Thirty Ninth Annual General Meeting was held in Glasgow on 31st October 1987 in the Botany Department of the University of Glasgow. 51 Members or guests attended and the President, Dr. Masson was in the chair. Approval was given to the Council's recommendation that the Society should underwrite any outstanding cost of publication of the Proceedings of the 11th British Congress on the History of Medicine. Dr. Masson drew attention to the Presidential badge and chain of office, acquired through the Guthrie Bequest. Two further awards from the Guthrie Bequest were approved, one of £200 to Dr. Kenneth Collins to assist in the publication of his book on Jewish Medical Students and Graduates in Scotland, and one of £100 towards the restoration fund for the Stewart Memorial Fountain in Kelvingrove Park, Glasgow.

The retiring members of Council, Dr. Cunningham, Dr. Falconer, Dr. Garrey and Dr. Rose, were thanked for their contributions. Dr. Masson paid a special tribute to Dr. Cunningham who was stepping down after eight years of continuous service as President or Vice President. Professor Bernard Lennox, Dr. Sheila Milne, Dr. Harry Stalker and Dr. Scott Wilson were elected as new Council members. Dr. Masson then introduced the new President. Professor Waddell was the first professional historian to hold this position. In accepting office, Professor Waddell thanked his predecessor Dr. Masson for all his hard work as President and previously as Secretary of the Society.

### **THE ONE HUNDRED AND TWENTY SECOND ORDINARY MEETING**

This meeting directly followed the Thirty Ninth Annual General Meeting in the Botany Department of the University of Glasgow. Professor Waddell introduced Dr. Brian Moffat, Director of the Soutra Hospital Archaeoethnopharmacological Research Project (SHARP).

Supported by 200 scholars from a wide range of disciplines, the project team hoped to uncover valuable new evidence about Medieval Medicine in Scotland by careful excavation and detailed chemical and other analyses. In particular, it was hoped to relate the finds at Soutra Hospital to Mercer's Herbal, a text of which, numerous copies still survive and which is regarded as a medieval precursor of the "Home Doctor." Dr. Moffat explained in some detail both the theoretical framework of the project and the progress

made to date. This exciting new approach to medical history resulted in a lively discussion with members of the audience. The debate focussed particularly on the blood letting practices of the Augustinian monks of Soutra and the possibility of these being confirmed by the anticipated discovery of the hospital waste pits.

Dr. Moffat's work with others in SHARP has been published in a series of very interesting reports. Those wishing to buy copies of these reports or obtain further information about the project should contact Dr. Moffat at SHARP, 36 Hawthornvale, Edinburgh, EH6 4JN (tel. no. 031-551 1624).

Professor Waddell then introduced Professor A. D. Boney, Professor of Botany at Glasgow University, who gave a paper on

### **THE GLASGOW UNIVERSITY PHYSIC GARDEN 1704-1803**

The story of the Glasgow University Physic Garden covers some 100 years. It is the story of a small and intensively cultivated garden which waxed and waned over that time in the grounds of the 'Old College' of the University on its medieval site south of the Cathedral and fronting on the ancient High Street. Its beginnings owe much to James Sutherland, Professor of Botany at Edinburgh University and Superintendent of its Physic Garden. Sutherland started out his working life as an unknown gardener who in time established himself as Supervisor of a series of physic gardens in the town under the initial help of the two physicians who did so much for medicine in Edinburgh in the 17th century, Andrew Balfour and Robert Sibbald. There is some evidence, albeit in the nature of hearsay, which suggests that Sutherland may have been seeking to expand his sphere of influence to Glasgow some years before the Glasgow garden was initiated. This evidence lies in some correspondence in December 1701 between Robert Wodrow, Librarian of the University of Glasgow 1697 - 1701 and later Minister of Eastwood Parish near Glasgow, and Sutherland (1). In his letter Wodrow refers to a suggestion by Sutherland that, if the Physic Garden is started, he should leave his job as Librarian and become its Overseer after some prior training by Sutherland. Wodrow's reply states '... as to the proposal you make of my taking care of it, I know it preceeds from your respect of me, but I hope if once it were begun, a better hand shall be found to oversee it than I could ever hope to be'. It has been suggested that Sutherland was acting on an initiative of William Dunlop, Principal from 1690 - 1700, with regard to the establishment of such a garden. In none of the available University records, or in the existing Dunlop correspondence, can any trace of such a proposal be found. Perhaps the idea was discussed between Dunlop and other members of the Faculty of the 'Old College'. The Faculty was the Governing Body of the time, of which James Wodrow, Professor of Divinity, was a member, and he was the father of Robert Wodrow. Perhaps it was via such sources that the proposal came to the ears of James Sutherland. In the absence of any official documentation, these earlier proposals must remain in the nature of hearsay.

The first official reference to the Physic Garden comes in the Faculty minutes for the meeting on 4 July 1704 (2). Under the Chairmanship of John Stirling, Principal, it was resolved that some part of the University's grounds be set aside '... for the students improvement in the skill of Botany'. James Sutherland was invited over to view the grounds and advise. In September 1704, whilst the site of the garden was still undecided,

the first Overseer was appointed at a salary of £240 Scots (= £20 sterling). He was John Marshall, a Glasgow surgeon, and he was to remain Overseer of the garden and 'Teacher of Botany' until his death in September 1719 (3). Joseph Kennedy was the first gardener appointed to work under him, but he died in 1705 and was followed by John Hume, who served as gardener until he died in 1718. The site was decided on in October 1704 (4) when part of the University's ground between the Blackfriar's Kirk and the Blackfriar's Wynd, incorporating a bowling green was set aside. Development of the garden also entailed dismantling a cottage and rebuilding it on a fresh site nearby. The cottage became the gardener's residence. These changes, together with the enclosing of the garden in a wall and preparing the ground for new plantings, continued through 1705. At the end of the year Sutherland was sending plants to Marshall with planting instructions. The first batch included both decorative and medicinal plants, the latter including Tamarisks, Sumachs, the Bladder-Nut, Dog's-Bane, Cinquefoil, Elders, and Olive of Bohemia (5). Fruit trees (plums, cherries, pears, apples, medlars) were also planted within the walls in that first year. Sutherland promised more plants for the following Spring, but no documents survive on these later supplies. John Marshall's domain was about 7/10 of an Imperial acre in area, whilst the neighbouring much larger Great Garden covered some 9 Imperial acres. The latter was an attractive area of lawns, tree-lined grassed walks, shrub-filled borders, and with numerous fruit trees. For most of the 18th century this was the private amenity of the professors, together with some students 'of noble birth'. The student body in general was not granted limited access until the last quarter of the century.

John Stirling has been described as a 'masterful Principal'. During his term of office (1701-1727) the numbers of both professorships and students increased, although this growth was accompanied by some internal dissensions. His drive to establish a physic garden was part of the process of establishing medical education in the University. An abortive attempt in 1637 to establish a 'Professor of Physick' ended in 1642 when a Kirk Visitation decided that no such post was necessary, although the first holder, Robert Mayne, retained the title until his death in 1646. The Faculty of Physicians and Surgeons was already well established in the town after its foundation in 1599 by Peter Lowe. Rivalry was to persist between the emerging 18th century medical school in the University and the well established Faculty. The first Professor of the Practice of Medicine, John Johnstoun, was appointed in 1714. He has left behind the unfortunate reputation of being an 'inert' professor. He developed an aversion to teaching and left this activity to physicians from the town. These were paid via the class fees, Johnstoun meanwhile drawing the professorial salary (£480 Scots = £40 sterling), and continuing to practice in the town. The second appointment of significance came in 1720 with the installation of Thomas Brisbane as the first Professor of Botany and Anatomy. However, Brisbane refused to teach Anatomy; he could not stand the thought of dissecting cadavers, and claimed that this practical work formed no part of his Commission of Appointment. This viewpoint led to a long-standing feud in which little of a positive nature seems to have been accomplished on either side. Brisbane leaves a better reputation as botanist. He did take an interest in the Physic Garden, and whilst surgeons from the town coped with the Anatomy teaching, Brisbane expounded on the 'simples', with illustrative material from the garden.

As already pointed out, records of plantings for the Physic Garden are sparse. All too often an account refers collectively to 'fine plants furnished for the Physick Garden' without giving details. A 1706 account lists Fig trees, vines, *Althaea* (= Mallow), 'Bean-

Trifoliums' (probably the Buckbean) and *Rhamnus* (Buckthorn) (6), whilst from a 1719 account we read of seeds of Savoy cabbage, cauliflower, pumpkin and African marigold being supplied. This was probably John Marshall's last order before his death (7). A new gardener, William Craig, had been appointed meantime. A 1720 account in Craig's name, hut counter-signed by Brisbane, lists more vegetable seeds - cauliflower, cucumber, pumpkin, melon, lettuce, radish, turnip, cress, spinach, peas, broad bean, kidney bean, onion, leek, carrot, together with tobacco, Sunflower and African Marigolds (8). Whilst it is true that all the vegetables in the above list are quoted in herbals of the time for their various curative virtues, one suspects that we are here seeing some professorial perquisites! Craig's time as gardener was relatively short-lived. In July 1722 he was summarily sacked by John Stirling. He was under notice to leave the job, presumably for inefficiency, but he responded by behaving very rudely to the professor and destroying some of the plants in the garden. After a temporary replacement he was followed by William Galbraith, who remained in post until his death in 1750.

Some occasional glimpses of plantings emerge from Galbraith's time. A seed order for 1730 lists the following (quoted verbatim) (9):

Curled Endive	Small Blew lupines
Cardoons	Great Blew lupines
Summer Savoys	Yellow lupines
Basil	White lupines
Cress	Catch Fly
Amaranthus Bicolor	Musk Pease
French Mary Gold	Palma Christi
African Ditto	Snails & Caterpillers
Marvel de Peru	Horns & Hedgehogs
Noli me Tangere	Oak of Jerusalem
Belvidere	Scarlet Beans
Sweet Sultan	Red Candy Tuft
Rose lupines	Whit Ditto
Venus Looking-Glass	Sencibale plant
Humble plant	Whit Wallflower

#### French Honeysuckle

Besides the vegetables many of the plants listed are more of a decorative nature. 'Snails & Caterpillers' refer to plants having fruiting bodies resembling the animals, and 'Horns & Hedgehogs' are plants with spiny seed coats. 'Palma Christi' is the Castor Oil plant. Oak of Jerusalem (*Chenopodium botrys*) was used as a source of an expectorant. The 'Humble plant', *Mimosa pudica*, is well known for its collapsing leaves after being touched. It was also known as the Sensible plant, but this may also refer to the related species, *M.*

*sensitiva*. Later seed orders in 1731 included Double Anemonies, Double *Ranunculus*, Double-Clove Carnations, Pinks, Sweet Williams, Sweet Thyme and French Honeysuckle. There were also frequent bills over the years for implements, loads of manure ('dung for the hot bed'), and for 'fine flowers'. James Sutherland published his *Hortus Medicus Edinburgensis* in 1683, listing many hundreds of plants. No *Hortus Medicus Glasguensis* is possible from the sparse data which are available.

Thomas Brisbane died in 1742. With the appointment of Robert Hamilton as his successor the teaching of Anatomy improved appreciably. Another significant move for the future of medical education at Glasgow came with the association of William Cullen, who established a teaching connection in 1746. Cullen's standing in the history of medicine in Scotland needs no further emendation here. At Glasgow he commenced lectures on the Practice of Medicine (with Johnstoun's agreement) in 1746, and in 1747 instituted lectures on Chemistry and in 1748 on Botany (the latter in Latin). Under Hamilton and Cullen the faltering development of the medical school of earlier years showed a marked improvement. Both took a considerable interest in the Physic Garden. Cullen was something of an expert for the times on soil chemistry, and progressively the two became more dissatisfied with the state of the garden, Cullen succeeded Johnstoun as Professor of Medicine in 1751. In 1754 he and Hamilton wrote a joint letter to the Faculty complaining about the state of the Physic Garden, with its poor clayey soil and its exposure to 'the smoke and soot of the town', stating that it was unsuitable for the 'pursuance of Botany' (10). They proposed that the garden be moved to a better site elsewhere in the grounds, and also drew attention to the 'want of a good gardener'. After William Galbraith's death in 1750 Archibald Graham had been appointed gardener, but he seems not to have pleased his masters. However, despite the letter, Graham remained in post until 1757, and the Physic Garden remained on the same site. Cullen left Glasgow for the more remunerative Chair of Chemistry and Medicine at Edinburgh in 1755, whilst at Glasgow Robert Hamilton moved to the Chair of Medicine after Cullen. Joseph Black, more famous as a chemist, occupied the joint Chair of Botany and Anatomy from 1756-7, but made little imprint on the Physic Garden. With Robert Hamilton's death in 1757, Black moved to the Chair of Medicine, and was succeeded in the joint Chair by Thomas Hamilton, brother of Robert. Thomas Hamilton was another sound teacher, perhaps less interested in Botany, but the Physic Garden continued to flourish. Patrick Stevenson was its gardener from 1757-61, but seemingly not too efficient a one. Alexander Adams who followed him worked as gardener for the Physic Garden, and with some responsibility for the Great Garden, until his death in 1783. Adams was a highly efficient craftsman. Few records of plant orders survive from his time, but a good gardener with an established garden would be able to maintain his stocks by propagation methods and by building up his own seed collections, as well as exchanging both with other gardeners. In Adams's time the Physic Garden was divided into 6 plots, and it contained two greenhouses.

Thomas Hamilton retired through ill-health in 1781. He asked the Faculty that his son William be allowed to succeed him. William Hamilton had assisted his father in previous years, and by unanimous agreement he was appointed to the joint Chair in March 1781. His was a sound botanical and anatomical pedigree. After graduating both at Glasgow and Edinburgh (gaining much in his knowledge of Botany at the latter University), he had spent some time in London working as Assistant to William Hunter, the distinguished anatomist. William Hamilton taught Botany and Anatomy with great skill and enthusiasm. At the same time he ran a successful Midwifery practice in the town. William Hamilton's

lecture course at Glasgow is available in his own hand, giving titles and brief outlines of 58 lectures. Also available are the notes of one of his students, Robert Cowan, who attended his course in the 1787-8 session (11). From these sources it is evident that Hamilton gave a general Botany course with a high loading of taxonomy, and for which the Physic Garden would have served as a source of class material. There is very little reference to the use of plants as 'simples' - except for the last lecture in the series, and unfortunately Robert Cowan leaves no notes on this one lecture! After the death of Alexander Adams the next gardener was Robert Lang.

William Hamilton was an energetic supporter of the Physic Garden, purchasing new plants and installing a new greenhouse. However, it was during the time that he and Robert Lang were responsible for the garden that we see the first signs of its waning. Between 1784 - 90 there were repeated orders not only for plants but for manure, lime and, on occasions, fresh soil. William Hamilton died, largely from overwork, in March 1790, a sad loss to the University. James Jeffray followed him as holder of the joint Chair. A colourful personality, Jeffray was more interested in Anatomy than Botany. He did, however, pay proper attention to the upkeep of the Physic Garden, although again we see the orders, not only for plants, but for extra manuring etc. In 1799 Jeffray managed to install Thomas Brown as Lecturer in Botany whilst he himself concentrated his attentions on Anatomy. Brown was to occupy this position until 1815. He was a sound botanist and horticulturist, and it is through his correspondence that the steady failure of the Physic Garden becomes apparent, despite the efforts of Robert Lang. Lang died in December 1799, an overworked father of a large family. His son William, 19 years of age, followed him as gardener.

Why was the garden failing? To find an answer we must retrace our steps in time back to 1762. In that year the University agreed to erect a type foundry in its grounds, at the request of Alexander Wilson, Professor (unpaid) of Practical Astronomy, who also carried on his business as a type founder in association with the Foulis brothers, who ran a successful printing works within the confines of the University. Wilson's request was due to his increased work load, until then carried on outwith the University. The type foundry became so successful that it was extended in 1769 and 1785. Type founding in those days was a process of hand-casting involving the melting and remelting of mixtures of lead, tin and antimony, with copper added for hardening (12). The type foundry was built alongside the Physic Garden. William Hamilton and Robert Lang, with their frequent applications of manure, lime and the additions of fresh soil, were battling against the early stages of heavy metal poisoning of the ground and the plants from the fumes of the foundry, a problem which would have worsened with its increased size. The Faculty was forced to realise this in 1803, as indicated in a minute of a meeting on 14 March (13):

It having been stated that the smoke of the Foundry was very prejudicial to the Botany Garden the Faculty hereby express the intention of getting a new Botanic Garden in a suitable place as soon as convenient.

The nadir of the Physic Garden (the terms Physic and Botanic were interchangeable at that time) came in the early years of the 19th century. Robert Brown, writing to the Faculty in 1806, did not mince his words (14):

' . . . That plot of ground which is dignified with the name of Botanic Garden is now so very barren, that its produce can scarcely be of any advantage to the lecturer in Botany.'

The plant requirements for Brown's lectures were considerable. William Lang in a letter to the Faculty pointed out that 'several hundred' plants were required in a season, and the garden could only furnish about a hundred in perfect condition. In due course the Faculty purchased two sites in other parts of the town with the intention of creating a new garden, but no such development followed this initiative. Robert Brown had to rely on plants from his own garden, and on purchases from other gardeners, in order to maintain his lecture course requirements. William Lang resigned in 1807. He was at odds with the Faculty through failed attempts to improve his lot (and help support his mother and family) by setting up in business as an apothecary as well as running the gardens for the University. In the event he had been unable to cope with both, the apothecary business failed, and the gardens were not well cared for. After Lang's resignation future gardeners were appointed on a short-term basis.

About one hundred years in the making and destroying. Such was the fate of the small Physic Garden in Glasgow University's grounds. In 1815 the site was sold for building purposes. A few years later the University entered into an agreement with the Royal Botanic Institution of Glasgow to help establish a new Botanic Garden on the Sandyford estate in the west of the town. Robert Graham, who followed Brown as Lecturer in 1816, was to be closely involved in the planning of this new garden after his appointment in 1817 to the newly created Chair of Botany, now separate from Anatomy, in the University. This 8 acre and extensively stocked Sandyford garden, with its lecture room, was to become the scene of William Jackson Hooker's outstanding professorship of Botany from 1820 - 1841, Robert Graham having moved to the Chair of Botany at Edinburgh in 1820. In time this garden area became too small for the growing number of plants and in 1841-2 the stock was removed to a new and larger site on the outskirts of the city, and it is on this site that the present day Glasgow Botanic Gardens stand. Whilst the Physic Garden ceased to exist after 1815, the Great Garden (or College Garden) remained in its entirety. Over the years, however, the environmental deterioration of the environs of the attractive 'Old College', due to proliferation of factories and horrible slums, resulted in the grounds and the buildings being sold to a railway company, and the University moved to its present campus on Gilmorehill in 1870. The 'Old College' grounds, so attractively laid out and maintained in the 18th century, disappeared under railway works and warehouses.

## REFERENCES

FM = Faculty Minutes, University of Glasgow, together with the reference number of the volume, the date, and the page number.

GUA = A document in the Glasgow University Archives, together with its reference number.

1. L.W. Sharp (Editor), 1937. Early letters of Robert Wodrow 1698 - 1709.  
Edinburgh University Press, pp. 184-5
2. F M, 26632, 4 July 1704, p. 28.
3. F M, 26632, 7 September 1704, p. 29.
4. F M, 26632, 3 October 1704, p. 31.
5. A.D. Boney, 1988. The Lost Gardens of Glasgow University. Christopher Helm, London, pp. 57-8
6. GUA 45852
7. GUA 42338
8. GUA 42340
9. GUA 40307
10. GUA 5412
11. A.D. Boney, 1988. The Lost Gardens of Glasgow University, pp. 193-205
12. Ibid., p. 208
13. F M 26696, 14 March 1803, p. 170
14. GUA 1961

## THE ONE HUNDRED AND TWENTY THIRD ORDINARY MEETING

The One Hundred and Twenty Third Ordinary Meeting of the Society was held on 26th March 1988 in Hutcheson's Hall, Glasgow. The Hall had formerly been the home of Hutcheson's Hospital and was presently the West Regional Office of the National Trust for Scotland. 56 members or their guests attended and the President, Professor David Waddell was in the chair. He announced that Council had decided to make a grant of £500 to the Soutra Hospital Project, an account of which had been given to the Society at its last meeting. Professor Waddell noted that the Society had been founded almost exactly forty years previously and introduced Professor Cedric Wilson, with his wife, an original member. Professor Wilson gave a short resume of the early activities of the Society and its members.



The first of the two scheduled papers was then given by Professor Bernard Lennox. This paper, on "Information Handling Techniques and the Advance of Medicine" is summarised below by Professor Lennox under the heading "We are how we write."

## **WE ARE HOW WE WRITE**

Knowing not much more than the average doctor of the history of medicine I knew I would need an off-beat approach if I was to find a topic for this Society about which most of its members did not already know more than I did. I could recall only two directions of more or less unusual approach to the subject. One was a period as a prisoner of war in the far east during the '39-'45 war, during which I was a member of a small group of medical officers drafted in to attempt treatment of a polyglot mass of sick Asiatics conscripted to work on the notorious Siam-Burmese railway, and found it necessary to acquire a smattering of several oriental languages. The other was membership since then of a variety of medical committees and editorial panels of medical journals, for instance, and of hospital records - which are concerned with information handling in medicine.

These two activities seem on the face of it unrelated. But all sciences depend on the free exchange and efficient storage of information. Language is a necessary basis for handling information, and the existence of mutually unintelligible languages is a grave obstacle to its free exchange. Medical records are a good example of a complex information system that functions efficiently within the scope of one language, while medical journals clearly illustrate the difficulties imposed once one moves outside literature of one's own language.

There is a great deal of verbiage in medical writing between 3000 and 1000 BC, but very little evidence of anything that was either therapeutically effective or scientifically credible. Thereafter, in the Aegean area, credible accounts of disease and hygiene (together with similar progress in other fields) begin to appear, with steady progress up to the works attributed to Hippocrates in the 400's BC. It is surely no coincidence that in the same area and at the same time the true alphabet was invented and adopted as a means of writing. Basically, one must believe, the change to symbols representing the sound of the things named, represented an enormous reduction on the strain on one's memory. Instead of a minimum of a thousand symbols, one needs only twenty to thirty. One loses the advantage, illustrated in China even today, of having the same symbols intelligible in multiple languages, but in practice this has proved of lesser importance. (Japan it is true, uses successfully a strange blend of Chinese ideograms with phonetic script for grammatical endings, but I believe this results from two things: an extraordinary burst of enthusiasm faced by the challenge of the west, and the widespread adoption of English for communication with the rest of the world).

Alphabetical script written with a pen remained the standard until Gutenberg invented printing with movable type in 1490 - 1800 years after the alphabet surfaced. Books rapidly became objects of commerce and relatively cheap, and within a hundred years had prised learning out of the monasteries and made them the proud possessions of all who had a little money to spend and the intelligence to realise the worth of what they are buying. Among typical advantages we may count the preservation of nearly all the successful plays of the

Elizabethan heyday: without it we might have preserved only grubby handwritten imperfect scripts of a few of the plays, and individual players' parts of a few others. School books, treatises on farming and metal-working, histories, accounts of voyages, sailing directions, novels, philosophical and medical works poured out in a growing stream.

Speech to writing took about 70,000 years, hieroglyphics to alphabet 2000 years, alphabet to printing the same, printing to electronics (telephone radio, TV) about 400 years. The pace quickens: if we could regard the progress from the telephone to the computer as another comparable step it comes down to the length of a lifetime nearly. He would be a rash man who would guess where we will be in fifty years from now.

This paper was followed by one from Dr. J. B. Wilson of Lochmaben, which was a presentation on the life of Sir William Fergusson.

### **SIR WILLIAM FERGUSON, BART. (1808-1877)**

Sir William Fergusson Bart of Spittalhaugh, Fellow of the Royal College of Surgeons of Edinburgh, Fellow of the Royal Society of Edinburgh, Professor of Surgery and Surgeon to Kings College Hospital in London, President of the Royal College of Surgeons of England in 1870, Fellow of the Royal Society, President in 1873 of the British Medical Association and Sergeant Surgeon to Queen Victoria.

My interest in this remarkable man is two fold. First of all he comes of a long Lochmaben lineage and secondly his achievements and career were until 1977, the Centenary of his death, largely overlooked by medical historians. (1) (2) (3)

Though William Fergusson was born at Prestonpans, on his father's side he came of impeccable Lochmaben stock, the family claiming to go back to the time of Robert the Bruce. Certainly his grandfather John Fergusson was a burgess and freeman of the Royal Burgh, while in the seat letting list for Lochmaben Church of 1820 is a James Fergusson, Excise Officer, William's father. In that year William was 12, and still attending school in Lochmaben under the eye of the schoolmaster Mr. David Glover. (4) Thereafter young Fergusson proceeded to the Royal High School in Edinburgh with some financial help from his uncle and namesake Captain William Fergusson of the Royal Marines who after a notable and adventurous career in the Mediterranean was then living on half pay in Dumfries. (5)

Destined for the law, Fergusson after a short time turned to a career in medicine and graduated at Edinburgh University in 1828. As a student he had displayed so much interest and talent in the dissecting rooms that he was chosen demonstrator and subsequently first assistant to Dr. Robert Knox, who ran an immensely popular extramural anatomy class in Edinburgh at that time. Fergusson was in charge of the acquisition and payment for the bodies required for dissection for this class and thus became involved in the scandal which followed the notorious Burke and Hare murders. He had recognised at least one of their victims, a handsome young Irish woman of easy virtue called Mary Paterson, well known amongst the students for the perfection of her figure. He also appears, thinly disguised under the name of Anderson as the hero in James Bridie's play "The Anatomist."

A considerable number of bodies for dissection were required. Many were obtained locally but some came by sea and canal from as far away as Manchester, Liverpool, Dublin and Glasgow. Burke and Hare assisted their victims' demise by smothering them when they were intoxicated. The price given for a good young female body was 15 guineas and £2 for an elderly male. (6)

Hare, at their trial turned King's Evidence and Burke was hanged. His skeleton adorns the Anatomy Museum at Edinburgh University. After the trial, on his way home to Ireland, Hare was recognised by the Dumfries mob and forced to flee for his life, never to be heard of again!

Dedicated to his subject, Fergusson produced many beautiful dissections, some of which are still on display in the museum of the Royal College of Surgeons of Edinburgh. With this solid grounding in anatomy behind him he embarked on a career in surgery. According to his day book for this period, preserved in the Royal College of Surgeons of Edinburgh, Fergusson's private practice grew slowly, though eventually he was to share with Professor Syme the best surgical practice in Scotland. Though a surgeon, much of Fergusson's work was in the field of general practice and he performed in the home only a few operations each month. Fortunately, in his own home, the patient was at least free from the perils presented by deadly hospital infections. (7) In 1833 Fergusson married Miss Helen Rankin, heiress of Mr Rankin of Spittalhaugh, an estate near West Linton. Thereafter he had no further financial worries.

Meanwhile Fergusson had been working his way up the surgical hierarchy of the Royal Infirmary of Edinburgh but he had, like so many others, notably his friend J. Y. Simpson, fallen foul of the Professor of Surgery, James Syme. The story of their disputes runs through the Minutes of the Managers of the Infirmary and the mutual animosity of these two strong characters must have done much to encourage William Fergusson to apply in 1840 for the newly founded chair of Surgery at King's College Hospital in London.

Syme, a dry pedantic individual, of whom it was said he never wasted a word, a drop of ink, or a drop of blood, was a difficult man for his more outgoing colleagues to work with. At this distance in time the quarrels between Syme and Fergusson seem very petty but there is no doubt as to the bitterness which ensued. Syme originally complained to the Managers that Fergusson had "stood up and talked beside the operating table whilst he (Syme) was operating". Fergusson in his turn complained of Syme using "the most offensive and insulting language towards him in the operating theatre before a hundred pupils". On another occasion Fergusson reported to the Managers that Syme had disappointed his students by leaving the theatre without providing any explanation of the operations he had performed. He also complained that Syme had attended the ceremony to mark the opening of Granton Pier, and, contrary to the Rules of the Infirmary, had left his clerk, a Mr Sinclair, in charge of his wards. The unfortunate Sinclair had to amputate a sailor's arm during his chief's absence. At the subsequent meeting of the Managers, Professor Syme was reprimanded for not providing proper medical cover during his absence, much, presumably, to William Fergusson's gratification. (8)

So acute did the differences between the two men become that one day Fergusson waited for Syme on the steps of the Infirmary with a horse whip but Syme, warned of his presence, consigned him to the care of the police!

In London Fergusson's career prospered. A phenomenally hard worker, Fergusson, as well as operating and teaching at King's, built up a large private practice. So well known did he become that when 10 years after his arrival in London the Prince Consort asked

“Supposing I had to have my leg amputated, who is the best man to do it?”, the immediate reply was “Fergusson by all means”. “Then he shall be my surgeon” replied the Prince. In 1855 he was appointed Surgeon Extraordinary and then in 1867 Sergeant Surgeon to the Queen. Though never called to the Palace he was justifiably proud to note each year in his day book the payment of the £70.3.3. Fee for this office.

Not till 1846 did anaesthetics become available for surgical operations and Lord Lister did not announce his discoveries on the cause of sepsis and the introduction of antiseptics till 1865. Incidentally, Lord Lister succeeded Fergusson as Professor of Surgery at King’s College Hospital. The repertoire of the surgeons of Fergusson’s day was therefore limited to those procedures which could be carried out rapidly, such as amputations, opening of abscesses, drainage of hydrocoels, repair of hernias, setting of fractures and cutting for stone. They did not dare to open the peritoneal cavity. The success or otherwise of these operations depended as much on the speed and dexterity with which the surgeon worked as on the fortitude of the patient. Fergusson is said to have removed a stone from a boy’s bladder in 30 seconds and, as one student remarked, if you even winked you could miss the operation altogether. He could disarticulate a leg at the hip in less than 14 seconds. His well drilled surgical team worked in perfect silence.

Though no academic, Fergusson’s prowess as a practical surgeon was never in doubt and in 1866 he became Sir William Fergusson, Baronet of Spittalhaugh, taking his title from his late wife’s home. Each Autumn Fergusson and his family travelled North to spend September at Spittalhaugh. The remainder of the year, Saturdays, Sundays and even Christmas Day, was given over to his ever increasing private consulting practice.

Fergusson travelled about Dickensian London in a well equipped and brightly painted yellow carriage, known irreverently to his students as the “Mustard Pot”. On the back rode two postillions and between the back wheels ran two well trained dalmatians, as much for the protection of their master and his coach as for their appearance. If he wished to travel out of town most of his journeys were made by rail. On one occasion he even travelled to see a patient in Oxford by special train.

David Livingstone, the missionary explorer must have consulted Fergusson after being mauled by a lion on one of his African journeys. Livingstone described vividly how the lion had picked him up and shaken him like a terrier shakes a rat, leaving the explorer with an ununited fracture of his left humerus. This injury enabled Fergusson to make a positive identification of Livingstone’s body when, in 1874, it was returned home for interment in Westminster Abbey. (9)

No doubt Fergusson’s uncle, till 1851 Colonel Commandant of the Royal Marines at Chatham, would frequently visit the surgeon’s hospitable London home, for the old Royal Marine took a great interest in the career of his brilliant nephew. Fergusson himself was a sociable man, fond of entertaining his friends at the Albion Tavern in London. The editor of Punch on one occasion replied by telegram to Fergusson’s invitation, “Look out for me at seven. Look after me at Eleven!” Though so long resident in London Sir William must have retained his ties with Lochmaben for he became chairman of the London organisation to receive subscriptions for the sculpting and erection of the Bruce Statue which stands in front of Lochmaben Tolbooth.

Eventually Fergusson’s health began to fail and in 1876 he was confined to bed by his physicians for three months with nephritis. After a few weeks’ convalescence at his beloved Spittalhaugh he was able to walk a few miles each day and returned to London. He was however a spent man and died in February the following year.

A big man of great presence and handsome features, a kindly man who never lost his Scots accent, Fergusson must have exuded confidence to his patients. His portrait, painted in 1867, may be seen hanging on the grand staircase of the Surgeon's Hall in Edinburgh, while another portrait is exhibited in the National Portrait Gallery in Queen Street, Edinburgh. His energy must have been prodigious. One of the first surgeons to tackle aneurysms, whilst still in Edinburgh he tied off a subclavian aneurysm in one of his patients and five years later when the patient died he travelled through snow and ice to Kelso to obtain the much prized dissection of the anastomotic channels which had opened up.

Fergusson's influence on the advance of Surgery was considerable. He wrote a text book of Surgery and pioneered the concept of conservative surgery, invented surgical instruments and was especially interested in the treatment of hare lip and cleft palate. Even after the advent of anaesthesia he preferred to operate in these cases on a cooperative and conscious patient! His successful development of operations for this deformity led to his election as a Fellow of the Royal Society of London.

His daughters lived on in Spittalhaugh, the last, Jane, dying in 1938. She must have inherited some of her father's manual dexterity for she became a skilled carver in wood and many examples of her talent decorate the little Parish Church in West Linton, a few yards from where her father is interred.

Sir William Fergusson was described by Sir James Paget as "The great master of his craft, the greatest practical surgeon of our time"; (10) while his obituary in *The Lancet* stated, "Few men equalled and none probably surpassed him as an operator." (11)

## REFERENCES

- (1) Brian Hill "A Born Surgeon" *Practitioner* 1977, 907-911.
- (2) M. R. Ewing, "Sir William Fergusson" *J. R. Coll. Surg. Edin.* 1977, 22 127-135.
- (3) J. P. Bennett "Sir William Fergusson Bart" 1808-77 *Annals. R. Coll. Surg. Edin.* 1977, 484-487.
- (4) William Graham "Lochmaben 500 Years Ago" 1865 *Nimmo*, 143.
- (5) J. B. Wilson "Lieutenant General William Fergusson" *Trans. D. and G. Ant. and Nat. Hist. Soc.* 1984, 110-111.
- (6) K. F. Russell "William Fergusson and the Private School of Anatomy of Robert Knox" *Med. J. Aust.* 1967, 2, 875, 1-12.
- (7) John B. Wilson "A Surgeon's Private Practice in the Nineteenth Century" *Medical History* 1987, 31, 349-353.
- (8) John B. Wilson "Fergusson and Syme of Edinburgh" 1838, 1986 *J. R. Coll. Surgs. Edin.* 31, 6, 371-374.
- (9) Examination and Verification of the Body of the late D. Livingstone 1874 *Brit. Med. J.*, 527.
- (10) A. Miles "The Edinburgh School of Surgery before Lister" London AC Black 1918, 137.
- (11) Obituary, *Lancet*, 1877, 1, 258.

## THE ONE HUNDRED AND TWENTY FOURTH ORDINARY MEETING

The One Hundred and Twenty Fourth Ordinary Meeting of the Society was held at the Crichton Royal Hospital, Dumfries, on 4th June 1988. More than 30 members or guests attended and the President, Professor Waddell was in the chair.

The first speaker was Mr Alfred Truckell, an eminent local historian. He presented a breathless and at times breath-taking, account of medical care in Dumfries-shire up to the mid nineteenth century. This included discussion of Iron Age Celts who used psychedelic mushrooms to induce a frenzy prior to battle, of medieval witchcraft trials and of the Cholera epidemics of 1832 and 1848 which had devastating effects on Dumfries.

This was followed by an equally informative paper from Dr. Ian Gordon of Stranraer on the history of the town's Garrick Hospital. Founded as a 5 bed cottage hospital in 1892, the Garrick now has 44 beds and 2 cots. From its modest beginnings, the hospital was extended in the 1930s, mainly through the efforts of Dr. James Richard. Post war improvements have included the provision of a health centre (the second in Scotland) unique in its attachment to a hospital and, in 1982, the construction of an Accident and Emergency Unit to meet the needs of the major arterial route between Scotland and Northern Ireland. In concluding his survey of Stranraer's medical services. Dr. Gordon expressed the hope that an entirely new hospital and health centre might be provided at some time in the 1990s.

The audience was then entertained by a silent movie produced in 1935 as part of an ill fated campaign to raise £70,000 for the construction of a new Infirmary in Dumfries. The unintentional humour of the film, aided by Dr. J. B. Wilson's laconic comments, appealed greatly to the watchers.

The final paper of the afternoon was delivered by Mrs Morag Williams, archivist to the Dumfries and Galloway Health Board, who gave an informed account of the occupational therapy practised by Dr. W. A. F. Browne, appointed as the first Medical Superintendent of Crichton Royal Hospital in 1839. She also displayed numerous examples of art work done by these early patients relating their output to the pertinent case notes.

The afternoon finished, for those with energy and inclination, with a stroll in the sunshine, through the beautifully kept gardens and a tour of the chapel under the enthusiastic guidance of Mrs Williams.

This meeting brought the activities of the Society in the session 1987-1988 to a close.

# The Scottish Society of the History of Medicine

---

## CONSTITUTION.

1. The Society shall be called "THE SCOTTISH SOCIETY OF THE HISTORY OF MEDICINE," and shall consist of those who desire to promote the study of the History of Medicine.

2. A General Meeting of Members shall be held once a year to receive a report and to elect Office-Bearers.

3. The management of the affairs of the Society shall be vested in the Office-Bearers, who shall include a President, one or more Vice-Presidents, a Secretary, a Treasurer, and not more than ten other Members to form a Council. The Council shall have power to co-opt other Members who, in their opinion, are fitted to render special service to the Society.

4. All Office-Bearers shall be elected annually. The President shall not hold office for more than three successive years, but shall be eligible to serve again after one year. Not more than eight Members of Council, or two-thirds of the total number, shall be eligible for immediate re-election.

5. The Annual Subscription shall be fixed from time to time by the Council and reported to members of the Society.

6. The Secretary shall keep brief Minutes of the proceedings, shall prepare Agenda, and shall conduct the correspondence of the Society.

7. Meetings shall be held at least twice yearly, and the place of meeting shall be in any of the four University centres, or elsewhere, as the Council may decide.

8. This Constitution may be amended at any General Meeting of the Society on twenty-one days' notice of the proposed amendment being given by the Secretary, such amendment to be included in the Agenda circulated for the Meeting.

