

PORTRAIT PROWL

PRESENTED BY
DR CHARLES WATERSTON FRSE

Portraits in oils, Busts and Statuettes on display in the
Rooms of the Royal Society of Edinburgh

*** ATIYAH, SIR MICHAEL FRANCIS (1929–)**

Portrait by Juliet Wood, 2007

One of the world's greatest mathematicians, Sir Michael Atiyah has had a profound and beneficial effect on the development of mathematics and science, both in the UK and in Europe. One of the pioneers of K-theory, he was knighted in 1983 and received the Order of Merit in 1993. He was Master of Trinity College, Cambridge from 1990 to 1997, and served as President of the Royal Society, London from 1990 to 1995 (exactly one hundred years after William Thomson, Lord Kelvin, President of the Royal Society 1890–95).

Elected an Honorary FRSE in 1985, Sir Michael served as RSE President from 2005 to 2008. He is only the second person ever to have been sometime President of both the Royal Society of Edinburgh and the Royal Society in London – the first being Lord Kelvin.

During his Presidency of the RSE, Sir Michael was the driving force behind the commissioning of the James Clerk Maxwell statue, which now stands at the east end of George Street.

This portrait was commissioned by the RSE's Council, and unveiled by Lord Mackay of Clashfern on 5 June 2007. A small version was bought by the Scottish National Portrait Gallery.

BARTHOLOMEW, JOHN GEORGE (1860–1920)

Sketch portrait (c.1910) in oils by Edward Arthur Walton, presented by the artist's son Professor John Walton, FRSE, in 1954.

Geographer and cartographer, Dr Bartholomew succeeded to the full management of his father's firm of cartographic printers at the age of twenty-eight. He, with the assistance of other Fellows of the Society such as Alexander Buchan, W Eagle Clark and Percy H Grimshaw, was responsible for such famous productions as the Royal Geographical Society's *The Survey Atlas of Scotland* (1895), *The Atlas of Meteorology* (1899) and *The Atlas of Zoogeography* (1911). He introduced the well known series of half-inch to the mile maps of Scotland, having the contours distinguished in colour, in 1895, and a similar series for England and Wales in 1903. Bartholomew was one of the founders, and the first secretary, of the Royal Scottish Geographical Society. He was elected to Fellowship in 1887 and served on Council for several years.

The possibility that this sketch portrait by E A Walton might be donated to the Society was raised by the artist's son Professor John Walton, FRSE, in 1953 and the portrait was accepted in 1954.¹ It had remained in Professor Walton's possession having been prepared as a sketch for a portrait in oils by E A Walton which was exhibited at the Royal Scottish Academy Exhibition as item 76 in 1911² and presented to the Scottish National Portrait Gallery in 1962 (No. 1994).³

BERZELIUS, BARON JONS JAKOB (1779–1848)

Plaster bust by Christian Friedrich Tieck inscribed with the sculptor's name and the date 1822.

Swedish chemist, famous for his determinations of atomic and molecular weights which helped to establish the laws of chemical combination and the atomic theory. He discovered the elements selenium and thorium and introduced the system of chemical symbols used today.

Berzelius was elected a Fellow of the Royal Society of Edinburgh in 1820 and an Honorary Fellow in 1827.

The plaster bust is a reproduction of that prepared by Tieck for the Berlin Museum⁴. I have been unable to determine how the Society acquired the bust; it may have been presented at the time of Berzelius' election to Honorary Fellowship.

BREWSTER, SIR DAVID (1781–1868)

Posthumous portrait by Norman MacBeth painted in 1868 by order of the Society.

Brewster never occupied a university chair, but became Principal of St Andrews University (1838–59) and then Edinburgh University (1859–68). He was a prime mover in the foundation of the British Association for the Advancement of Science. He is credited with over 1200 published works⁵ and many of his scientific papers appeared in the Society's *Transactions and Proceedings*.

Sir George Airy described him as "the father of modern experimental optics", a subject which he worked in almost every branch. He invented the kaleidoscope and his work on the dioptric lens was important for lighthouse illumination. He published on the law of polarisation of light, double refraction and biaxial crystals. Brewster's interests were wide ranging as a physicist, administrator, scientific journalist, historian and churchman⁶. Although, according to Lyon Playfair, he "little understood the art of compromise", R S Westfall said of him "What an 'inexhaustible reservoir of vitality! What a fund of human sympathy!" How fortunate for the Society that for nearly sixty years Brewster's vitality was devoted to its service. He was elected in 1808, served as General Secretary from 1818 to 1828 and died as President, having been elected to that office in 1865.

Thomas Allan, the Treasurer, had suggested in 1828 that a portrait of Brewster should be painted for the Society⁷, but his suggestion was not taken up. So that when, forty years later, Sir David suddenly died, the Society possessed no portrait of its late President and Council remitted to a committee to consider the best mode of obtaining one⁸. It reviewed all the known portraits of Brewster and many of the existing photographs and consulted Sir David's family for their preference. The committee's final report⁹ recommended that "it would be better to employ an artist who has already studied the character of the late Sir David by having taken his Portrait and will be more likely to produce a good likeness than any one who merely studies the character and features of the Portraits of others or from a Photograph." The artist of their choice was Norman Macbeth¹⁰ and the cost of the portrait eighty guineas.

Brewster's son, Colonel D E Macpherson, writing to Norman Macbeth from Belleville House, Kingussie on 14th October 1868¹¹ advised the artist: "You certainly have painted *the* only likeness of my father, Sir David Brewster; all others, even one by Sir J Watson Gordon, are complete failures so I am glad you got the commission for the Royal Society portrait. I have written to Lady Brewster regarding the Costume & it seems to me that she should consult the Royal Society about it. A Top Coat implies that the individual is out of doors when a *Hat* wd also be required! I have suggested to her either his University Robes or a plain Evening Dress complete, white tie etc., or an indoor morning dress...."

In October 1868¹² Colonel Macpherson gave permission for Macbeth's portrait from life to be taken from the Dining Room of his home at Belleville to the artist's studio at 28 Saxe Coburg Place. By the following March the new portrait was ready to be hung in the Society's Hall¹³ and Fellows recognised a good likeness of their late President dressed in his academic robes and white tie.

It is unfortunate that Macbeth's original portrait, like so many other documents and apparatus associated with Sir David Brewster, which were stored in the family home at Belleville, was probably destroyed in the fire which consumed the house in 1903. Although the house, now known as Balavil, was rebuilt, the contents were largely lost.

BRISBANE, SIR THOMAS MAKDOUGALL, BART. (1773–1860)

(i) **Portrait** subscribed for by Fellows and painted by Sir John Watson Gordon in 1848.

Sir Thomas was born at the family home, Brisbane House near Largs, and succeeded to the Brisbane estate in 1812. In 1819 he married the only daughter of Sir Henry Hay Makdougall, baronet of Makerstoun, and added Makdougall to his own patronymic when he succeeded to that estate. He entered the army in 1790 and rose to the rank of General serving on the Continent, the Peninsula, the West Indies, India and America. In 1813 he received the thanks of parliament for his gallant conduct in the field of Orthes. He went to New South Wales as Governor in 1821. He explored the north of Australia and founded a penal settlement on the River Brisbane which, like the capital of Queensland which appeared later, took its name from him. He was a keen astronomer and in 1822, while in Australia, built the Parramatta Observatory at his own expense. On his return to Scotland he established a meteorological and magnetic observatory at Makerstoun near Kelso where he, with John Allan Broun, did outstanding observational work. As President of the Edinburgh Astronomical Institution in 1834 he was influential in the establishment of the Edinburgh Royal Observatory and the appointment of the first Astronomer Royal for Scotland¹⁴. Elected a Fellow of this Society in 1811, he succeeded Sir Walter Scott in the Presidency in 1832 and remained in office until his death 28 years later.

On 30th March 1848 Sir George Steuart Mackenzie of Coul, a Vice-President of the Society, wrote to Professor J D Forbes, the General Secretary, from Kinellan, Murrayfield¹⁵ "... I have been fellow of the Society in the reigns of all Presidents it has had; & I hesitate not to affirm that Sir Thomas Brisbane has proved himself second to none of them either in his qualifications for the office, or in the manner in which he performs its duties. Nor is it by any means a matter of indifference that his

private character sheds a lustre on the status in which the Royal Society of Edinburgh has placed him. In his person we behold the noble union of the Hero, the Philosopher & the Gentleman; & sure I am the general & ardent wish of the Society is that he may be long spared to preside over it. - But Sir Thomas is now far advanced in life; & being very strongly impressed by the propriety of the Society possessing his Portrait, I beg to suggest that a movement should now take place to procure it. . . ."

On his own authority Forbes took immediate action and on 14th April 1848 he reported to Council "the circumstances under which he had authorized a private meeting of Fellows of the Society for the purpose of obtaining a portrait of Sir Thomas Brisbane to be held in the Society's Hall on Monday next."¹⁶ The Secretary's conduct was approved and, as a result of that meeting, Fellows subscribed towards the portrait of their President.¹⁷

Sir George Mackenzie wrote again to Forbes from Murrayfield (undated): "...Dr Christison paid me a kind visit on Saturday, & he has no doubt of the object of the meeting being easily accomplished. . . I mentioned to you that Mr Watson Gordon's terms for a picture would be that he would take his chance of the subscription, whatever that might be, but would not take more, should it exceed it, than his usual charge of a picture of the required size, 95 guineas."¹⁸

In November Council heard that the portrait by Mr Watson Gordon was "long since completed in an admirable manner" and was expected to be framed and presented to the Society in December¹⁹. It was exhibited at the Royal Scottish Academy Exhibition of 1850 as item 364²⁰.

A duplicate by Watson Gordon of the Society's portrait is in the possession of Sir Hector Monro whose ancestor, Admiral Sir Charles Brisbane, inherited the estate from Sir Thomas whose family had predeceased him²¹.

(ii) **Plaster bust** by unidentified sculptor.

The Society also possesses a plaster bust of Sir Thomas Brisbane by an unidentified sculptor. Miss Fiona Pearson has kindly suggested, as her first thought, that stylistically the bust reminds her of the work of Patric Park but further work will be required before this attribution can be proved.

BROWN, ALEXANDER CRUM (1838–1922)

Portrait by Edward Arthur Walton presented to Professor Crum Brown by a number of former pupils and personal friends in 1909 and bequeathed by him in 1922.

Crum Brown was a pioneer in the study of the relationship between chemical constitution and physiological activity. An Edinburgh man descended from a line of distinguished theologians, he attended the Royal High School and then spent a year at Mill Hill School. In 1854 he returned to Edinburgh to study Arts and Medicine at the University where he graduated MA in 1858 and MD in 1861. At the same time he read for a science degree in London University and was awarded his DSc in 1862. He studied in Germany until becoming an Extra-academical lecturer in Chemistry at Edinburgh University in 1863 and succeeded to the Chair of Chemistry there in 1869 which he occupied until his retirement in 1908.

Crum Brown developed a system of graphic representation for the formulae of organic substances which, with minor modifications, is still used. With Thomas Fraser he did pioneer work on the correlation of molecular structure with pharmacological effect and with Sir James Walker he "effected an elegant and novel electrosynthesis of organic acids."²² As a Vice President and member of Council Crum Brown's service to the Society extended over 44 years. Sir D'Arcy Thompson recalled the Society's Hall at the Royal Institution thus: "...Half-way up the room on the window side was the President's chair, raised a little, and the table where the secretaries and other officers sat. On the far side, looking down the room towards the entrance, Tait sat for nearly forty years. I think of Crum Brown wearing his little velvet cap, sitting beside Tait; of Buchan at the opposite corner, stroking now and then his long red-brown beard; and Kelvin's eager, restless figure in the chair."²³

The portrait was exhibited at the Royal Scottish Academy Exhibition in 1910 as item 205²⁴ and a photogravure of it was presented to the Society by Mr J G Bartholomew in the following year²⁵. Intimation was received by Council in 1922 that the late Professor Crum Brown had bequeathed the portrait to the Society²⁶ and in the following month it was viewed by Council and hung in the Rooms²⁷.

BUCCLEUCH, 3rd DUKE of – See SCOTT, HENRY

CAMERON, JOHN, THE HONOURABLE LORD CAMERON, K.T. (1900–1996)

Portrait by Alan Sutherland, signed and dated 1956, presented by Lady Cameron in 1976.

A Senator of the College of Justice in Scotland, Lord Cameron was elected to Fellowship of the Society in 1949 and served as President from 1973 to 1976. In 1982 he was elected to Honorary Fellowship.

"In December (1976) the Society's Officers were happy to receive from Lady Cameron, at a small informal reception on 23 December, a portrait in oils of our immediate Past President, The Hon. Lord Cameron."²⁸

CHRISTISON, SIR ROBERT, BART. (1797–1882)

Portrait by Sir George Reid, painted 1874/5 at the request of the Society.

Christison, a leading toxicologist, was the son of Alexander Christison, Professor of Humanity at the University of Edinburgh. After graduating MD at Edinburgh in 1819, he studied in London and Paris and, in 1822, was appointed Professor of Medical Jurisprudence at Edinburgh. In 1832 he transferred to the Chair of Materia Medica which he occupied for 45 years.

An able administrator, he took an active part in the affairs of his University. He wrote *Treatise on Poisons* (1829) and, with T S Traill, the final edition of the *Edinburgh Pharmacopoeia* (1841) which led to his becoming Chairman of the Committee which compiled the first *Pharmacopoeia of Great Britain and Ireland* (1864). He is well known for his work on the chemistry of alkaloids and, among his discoveries, was the

isolation and physiological action of coniine, the active principle of hemlock. "His researches on snake poisons and immunization against them are noteworthy for they were carried out at a time when immunization was little understood."²⁹ Christison's interests covered botany, chemistry, mineralogy, archaeology and pharmacology. His fitness was legendary and it is reported that, at the age of fifty, he could run from the University to the top of Arthur's Seat in 22 minutes.

On the suggestion of the Society's Treasurer David Smith³⁰ it was agreed that a portrait of Sir Robert Christison should be painted and a committee was appointed to select the artist. Sir George Reid's portrait was uncovered at the meeting of the Society held on 3rd May 1875 and on the 7th May a note from Sir Robert Christison was read: ". . . expressing how much he felt the constant kindness of Council of the Royal Society towards himself and thanking them for the additional honour conferred on him by their placing his portrait on the Walls of the Society."

The portrait was exhibited as item 405 in the 1876 Exhibition of the Royal Scottish Academy.³²

CUVIER, BARON GEORGES (1769–1832)

Colossal head in plaster by P J David d'Angers inscribed "a la memoire de Georges Cuvier, P J David d'Angers".

Cuvier was an anatomist who was for many years professor at the Jardin des Plantes in Paris. Using his correlation theory, he was able to reconstruct extinct animals from their fossil bones and, in his *Récherches sur les ossements fossiles* (1812), created the science of vertebrate palaeontology in its modern sense. This led to theories of extinction and his formulation of the catastrophic theory. He was elected to Honorary Fellowship of this Society in 1813.

A bronze version of the same head is listed as having been donated to the Royal Society of London by P J David. The marble original is in the Galerie d'Anatomie Comparée of the Muséum National d'Histoire Naturelle in Paris and was made by David in 1833 after Cuvier's death mask. It is known that David made many copies of the bust and gave them to principal scientific societies of which Cuvier had been a member (Letter from Dr Cecile Poplin to C D Waterston 22nd October 1992).

DAVY, SIR HUMPHRY, BART. (1778–1829)

Portrait of Davy as President of the Royal Society. Said to have been painted by James Lonsdale. Purchased by the Society in 1849.

Born at Penzance, and for a time apprenticed to a surgeon-apothecary there, Davy became an assistant in the Pneumatic Institution at Clifton, Bristol. There he discovered the respiratory effects of nitrous oxide in 1799. In 1802 he became professor at the Royal Institution, London, where, by electrolysis, he discovered the metals sodium, potassium, calcium, magnesium, strontium and barium. He is well known for his design of the miner's safety lamp or "Davy Lamp". He was elected to Fellowship of this Society in 1808 and to the presidency of the Royal Society, London, in 1820.

In 1849³³ Council heard from the General Secretary that this framed portrait, said to be by Lonsdale, was for sale for 10 guineas. Having inspected the picture, Council agreed to purchase it for that sum.

FORBES, JAMES DAVID (1809–1868)

Portrait ordered by the Society and painted by Sir John Watson Gordon in 1860/61.

J D Forbes was the son of the banker Sir William Forbes, 7th Baronet of Pitsligo and of his wife, Williamina Belsches, Scott's first love. To satisfy his father's wishes he studied law at Edinburgh but hoped for a career in science and took courses under Hope in Chemistry, Jameson in Natural History and Leslie in Natural Philosophy. On Sir John Leslie's death, he was elected to the Chair of Natural Philosophy in 1833 and held it until 1860 when he succeeded Sir David Brewster as Principal of St Andrews University.

Following Melloni's detection of the refraction of thermal radiation, and using a thermopile made under his supervision, Forbes discovered the polarisation of radiant heat. He also demonstrated the double refraction of thermal radiation and then polarised heat in a circulatory manner in a Fresnel rhomb of rock salt. He was a noted Alpinist and between 1841 and 1851 pioneered studies on the nature of glacier flow;³⁴ his book *Travels through the Alps of Savoy ...* (1843) is well known. In a significant paper of 1846 he proved the former existence of land ice in Skye. Forbes' differences with two other distinguished alpine glaciologists, Louis Agassiz and John Tyndall have been widely publicised. His field career was terminated by the onset of consumptive tuberculosis. He served with distinction as General Secretary of the Society from 1840 to 1860 but ill-health forced him to decline the Presidency in 1867.

After Forbes' resignation as General Secretary, he was asked by Council to sit for his portrait.³⁵ Sir John Watson Gordon was the chosen artist and Professor Christison made the arrangements. Sittings took place during a fortnight spent by Forbes and his wife in Edinburgh at the end of December 1860. He wrote to his friend Dr Symonds:³⁶ "My chief and almost daily business was sitting for my picture, for the Royal Society, to Sir J Watson Gordon. Fortunately he is a pleasant informed old man, and I did not grudge him the time I spent, as he was well satisfied with his work and he took the greatest pains with it. It is considered a good work of art and some judges think the likeness excellent, but Alicia (Mrs Forbes) is not quite pleased in this respect. I believe myself it is too favourable. However, it is an honour of which I am very sensible, to be handed down to posterity in such good company as that of the worthies of the Royal Society."

The portrait appeared as item 249 at the Royal Scottish Academy Exhibition of 1869.³⁷ Forbes' biographers wrote that when it was painted, "He felt strongly the frail hold he had on life, and whatever his hand found to do he set himself to do it with his might."

When we look at the portrait we see only the embers of that fire which blazed so brightly in Forbes when, as a younger scientist and athletic mountaineer, he had revelled in meeting the physical and intellectual challenges presented by his beloved Alps.

GORDON, JAMES (1823–1904)

Original **plaster bust** by David Watson Stevenson, given to Mr Gordon by the artist and by him to the Society c.1902.

Gordon was Librarian of the Society from 1876 to 1902 and, since no obituary of him was published by the Society, this opportunity is taken to reproduce the notice which appeared in *The Scotsman* of February 6th 1904:

"DEATH OF AN EDINBURGH CELEBRITY.- Many who will readily recall his stately, old world figure will learn with regret of the death of Mr James Gordon, late librarian of the Royal Society, one of the most courtly gentlemen who ever trod the streets of Edinburgh. Born at Trinity when the last century was young, Mr Gordon was so enamoured of the period of his birth that he clung to it and its associations in many ways throughout his long life. This was most noticeable, perhaps, in his style of dress, which, never unbecoming, attracted attention latterly as belonging to a generation long since passed away. His elementary education, which was begun in the city, was continued at the Berwickshire village of Norham. Afterwards he attended the University of Edinburgh, with a view to entering the ministry, but for some reason or other he stopped short of the divinity classes, and though he never graduated, he became a fine classical scholar. As a man of very considerable scholarly attainments, a good linguist, and an omnivorous reader, he early attracted the notice of the late Sir William Fraser KCB, LLD whom he assisted in his historical studies and publications. His next appointment was chief assistant in the University Library, a post which he filled acceptably for some years, and vacated in 1876 to become librarian to the Royal Society, by the members of which he was held in the highest esteem. Some years ago, owing to failing health, Mr Gordon retired from the librarianship of the Royal Society, having been granted a superannuation allowance. Never married, Mr Gordon lived by himself in Ferry Road, Leith (No. 95), in a house that may not inaptly be described as a veritable "old curiosity shop". It was cram full of antiquities and antiquarian lore, the old man, up to the time of severing his connection with the Royal Society, constantly adding to his remarkable, if not very valuable, collection of curios, pictures, busts, books, &c. Having strong leanings towards the Jacobite cause, nothing afforded him greater pleasure than when, surrounded at home of an evening, as he frequently was, by literary friends, he listened to the singing of some of his favourite airs, particularly "He's ower the hills" and "A wee bird cam". Often on these occasions he was moved to tears, and gentle old man though he was, he seldom failed to express the contempt he cherished for some of the opponents of the cause which was so dear to him. Mr Gordon was in his eighty first year."

On the occasion of his retiral it is recorded³⁸ that Gordon was known for "his unflinching and fine courtesy of manner and his attainments in the knowledge of classical and modern languages". Sir D'Arcy Thompson wrote in his description of the rooms in the Royal Institution³⁹: "In the first room at a table which we use still an old man sat surrounded by books, reading all day long. It has been said of him that few men absorbed more learning, and exuded less! He was the Society's Librarian, Mr

James Gordon. He had obviously come out of another age. He wore an old fashioned swallowtail coat, and a black satin stock came close up to his clean-shaven chin. He had a shy but dignified manner, and a hesitation, almost a stammer, in his speech. He made you think of dominie Sampson, but he was a greater man. He was a little like his friend Veitch, the great Hellenist; but Veitch left, as Gordon could not, a monument of his learning. Gordon wrote to perfection the fluent sonorous Latin of the cosmopolitan scholar. He loved to write addresses for the Society to convey to a foreign university or academy . . . "

The esteem in which Gordon's memory was held by the Society inspired Council to undertake the repair of a small Celtic Cross of Marble on his grave in the Grange Cemetery in 1950.⁴⁰

The bust was exhibited by D W Stevenson at the Royal Scottish Academy Exhibition as item 604 in 1900.⁴¹ I am grateful to Miss Helen Smailes of the Scottish National Portrait Gallery for informing me that Messrs Lyon & Turnbull undertook a studio sale for D W Stevenson on 16th March 1903 which included a number of original plasters. It is probable that Gordon's bust had been given by Stevenson to the sitter prior to this date. It is stated in a list of busts belonging to the Society⁴² that the bust was bequeathed by Gordon in 1904. This is not so. By the time of Gordon's death the bust already occupied "a fitting place in one of the principal rooms of the library", in fact the Octagon Room, as may be seen from photographs. In Gordon's will, dated 1st February 1904, confirmed 14th March 1904, no mention of the bust is made, although part of his library was offered to the Society.⁴³

GREGORY, JAMES (1753–1821)

Plaster bust inscribed, "Published by Saml. Joseph 11th August 1821 " and presented by the sculptor in 1821.

Gregory succeeded William Cullen in the Chair of Medicine at Edinburgh University in 1790 which he occupied until his death. He was elected to the Fellowship in 1783. He was one of the remarkable Aberdeenshire family which, in two centuries, supplied nine professors to British universities. He was greatly appreciated by his students and Lord Cockburn wrote⁴⁴ that he was a curious and excellent man, a great physician, a great lecturer, a great Latin scholar, and a great talker; vigorous and generous; large of stature, and with a strikingly powerful countenance."

He was the author of a textbook *Conspectus Medicinae* which had a large circulation and his powder, containing magnesia, rhubarb and ginger, was well known as "Gregory Powder". He was of a contentious disposition and despite having been President of the Royal College of Physicians of Edinburgh from 1798 to 1801 he had a violent and public dispute with members of the College between 1805 and 1809 "enlivened" by a number of lengthy publications.⁴⁵ It was because of one of Gregory's campaigns that the medical officers were appointed permanently in the Infirmary instead of attending the hospital by a monthly rotation as previously. In Lord Cockburn's words "The controversies were rather too numerous; but they were never for any selfish end, and he was never entirely wrong ..."

It is recorded⁴⁶ that in 1821 the sculptor requested permission to present a copy of the bust of Dr Gregory, a request to which Council willingly and thankfully acceded.

Samuel Joseph's original, in marble, is in the collections of the University of Edinburgh.

HALL, SIR JAMES BART. OF DUNGLASS (1761–1832)

Portrait by Sir John Watson Gordon presented in 1829 by the sitter's son John Hall Esq.

James Hall, known as the Father of Experimental Geology, was the eldest son of Sir John Hall of Dunglass and, as a young man, was attracted to geology and became a close friend of Dr James Hutton and his circle. He was educated at Elin's Military Academy and spent two years at Christ's College, Cambridge after which he travelled in France and Switzerland before returning to Edinburgh where he attended the Natural Philosophy class of John Robison and that of Chemistry under Joseph Black.

He had met Lavoisier in France and in 1788 addressed the Society on three occasions supporting his theory of combustion, perhaps the first in the country to support Lavoisier's new theory of chemistry. He strongly supported Hutton's Theory of the Earth but, out of deference to Hutton, he did not publish his results until Hutton had died. His fusion and cooling experiments demonstrated that lavas and whinstones, when melted and cooled rapidly, gave glasses and, when re-melted and cooled slowly, gave crystallites. He then fused limestone under pressure and crystallised it into a substance resembling marble showing that, heated under pressure, calcium carbonate does not dissociate. He also conducted experiments on the folding of strata by compression.

Hall was elected to Fellowship in 1784 and was President from 1812 to 1820.

It was reported to a General Meeting in 1829 that the portrait had been received by the Society from John Hall Esq.⁴⁷ The portrait was used by the sculptor Patric Park in the preparation of a bust of Hall for the Museum of Practical Geology, London in 1849.⁴⁸ In Dr Douglas Guthrie's opinion "As a picture of the intent scholar, it is admirable."⁴⁹ It contrasts with the fire and vigour of the young Sir James Hall seen in the portrait painted by Sir Joshua Reynolds about 1783.⁵⁰

HUME, DAVID (1711–1776)

Bronze statuette by James Pittendrigh Macgillivray, stated to have been presented by the sculptor.⁵¹

The historian and philosopher David Hume died before the foundation of the Society but had been secretary of the Philosophical Society of Edinburgh, the immediate precursor of the Royal Society of Edinburgh. With Alexander Monro *secundus*, he was responsible for the production of *Essays and Observations, Physical and Literary* for the Philosophical Society of which the first volume appeared in 1754, the second in 1756 and the third in 1771. Hume's letters and miscellaneous papers were given to the Society by his nephew Professor David Hume (1757–1838) and remain the property of the Society. The RSE's David Hume Bequest is held on deposit at the National Library of Scotland.

This statuette is a miniature of the half-size model prepared by Pittendrigh

Macgillivray for the statue now mounted on the face of the North West Tower of Sir Rowand Anderson's building in Queen Street constructed between 1885 and 1890 for the Scottish National Portrait Gallery and the National Museum of Antiquities of Scotland. Miss Helen Smailes has kindly provided the information that the Board of Manufactures discussed the statuary and in the Board Minutes for 13th May 1897 (Scottish Record Office) it was reported that sketch models of figures of Hume and Raeburn had been submitted by Macgillivray. According to the Board Minutes for 8th July 1897, Macgillivray was advised, in preparing his half-size model for the Hume statue, to study Allan Ramsay's portrait of Hume (then in the National Gallery of Scotland) and another portrait 'in the possession of the Lord Justice Clerk.'⁵² The half-size model was exhibited by MacGillivray at the Royal Scottish Academy Exhibition in 1901 as item 395.⁵³

HUTTON, JAMES (1726–1797)

Plaster bust by Patric Park, duplicate of that made in 1849 for the Museum of Practical Geology, London.

Hutton was born in Edinburgh where he attended the High School and University before taking the degree of MD at Leyden in 1749. Having studied new farming practice in East Anglia and Flanders he farmed at Sligh Houses, Berwickshire, from 1754, where he applied these new methods and wrote a *Treatise on Agriculture* which remains in manuscript, a possession of the Edinburgh Geological Society, held on deposit at the National Library of Scotland.

He returned to Edinburgh in 1768 and became one of the most active of the founding members of the Royal Society of Edinburgh, publishing in *Transactions* a number of papers of universal philosophical concern such as "On the Philosophy of Light, Heat, and Fire", "The Theory of Rain" and, most famously, "The Theory of the Earth". The last was presented to the Society at two meetings in 1785 and published in the first volume of *Transactions* in 1788 before appearing as a two volume work together with *Proofs and Illustrations* in 1797. Hutton died before the third volume of this work appeared and it remained in manuscript until published by the Geological Society of London in 1899. Illustrations drawn for Hutton's third volume by John Clerk of Eldin and Lord Eldin were discovered in 1968 and published in 1978.⁵⁴

Patric Park's bust of Hutton was based on the Raeburn portrait, now in the Scottish National Portrait Gallery, lent to Park by Sir John Warrender, and on the medallion by James Tassie. The Society's bust is a duplicate of that supplied to the Museum of Practical Geology, London. That Museum's account book shows that Park was paid £21 for the plaster model of Hutton in 1849, and that Matthew Noble was paid £30 for producing a marble version of it in 1850. The same transactions were repeated for the bust of James Hall and it is likely that the Society was given the Hutton bust in return for lending Park their portrait of Hall (see above).⁵⁵

KELVIN, LORD – See THOMSON, WILLIAM

KENDALL, JAMES PICKERING (1889–1978)

Portrait by Miss Alice R Kendall, daughter of the sitter, purchased by the Society in 1956.

Educated at Farnham Grammar School and Edinburgh University, Kendall became interested in solution chemistry. He worked in Stockholm with Arrhenius and did practical work at the Technological Institute in St Petersburg before moving to New York where he attained a full professorship at Columbia in 1922. In 1926 he became Head of the Department of Chemistry at Washington Square College and in the following year Dean of the Graduate Faculty of New York University. In 1928 he was appointed to the Chair of Chemistry at Edinburgh University from which he retired in 1959. He is famous for his criticism of Ghosh's theory and he worked on addition compounds and the separation of rare earths by electrolysis. He was a well known educationalist, having prepared the revised editions of Alexander Smith's famous series of textbooks in chemistry and also as a writer and lecturer.

Professor Kendall was elected to Fellowship in 1929, served as General Secretary from 1936 to 1946 and as President from 1949 until 1954.

In February 1956 Council launched an appeal for a portrait of Professor Kendall. Miss Kendall had completed the painting by July when she made arrangements for it to be shown at a private exhibition in London. By October the necessary funds were in hand and the work was purchased from the artist.⁵⁶ It was formally handed over to the Society at the Ordinary Meeting held on 4th March 1957 when, in reply to the President's statement, Professor Kendall said: "Painted while I was on vacation in Cyprus it was completed on the height of Mount Olympus where I was only too happy to fill the canvas that had been intended for Archbishop Makarios."⁵⁷

* **MACKENZIE, HENRY (1745–1831)**

Portrait by Colvin Smith, on loan from the Scottish National Portrait Gallery.

Nicknamed "The Man of Feeling" (the title of his first and most famous work) the lawyer and author Henry Mackenzie held the position of Comptroller of Taxes in Scotland from 1804 to 1831.

A Founding Fellow of the RSE, he served as President of the Literary Section from 1812 to 1828 and as Vice-President from 1828 to 1831.

MACONOCHIE, ALLAN, LORD MEADOWBANK (1748–1816)

Plaster Bust modelled by Sir Francis Chantrey in the autumn of 1812.

Allan Maconochie, a distinguished lawyer, succeeded to the lands of Meadowbank or Kirknewton on the death of his father Alexander Maconochie. He attended Edinburgh University and was one of six students who originated the Speculative Society. He was Professor of the Laws of Nature and Nation (Public Law) from 1779 to 1796. In 1788 he was appointed Sheriff of Renfrewshire and in 1796 was raised to the bench as Lord Meadowbank. He was appointed one of the Lords Commissioners of Justiciary

in 1804 and in 1815 one of the Lords Commissioners of the Jury Court. Lord Brougham wrote of Lord Meadowbank ". . . one of the best lawyers, one of the most acute men- a man of large general capacity, of great experience, and with very few exceptions, if any, the most diligent Judge we can remember in the practice of Scotch Law."¹²²

He was elected to Fellowship in 1783 and was active in Society affairs such as in the drafting of the Second Charter and submissions to Government. He served as Vice-President until his death. He was a Director of the Astronomical Institution. He married Elizabeth Wellwood of Garvock and his son, Alexander Maconochie Wellwood (1777-1861), was also a judge under the title Lord Meadowbank and an active member of the Society.

In some of the inventories of the busts owned by the Society it is stated that one of them is a bust of Lord Meadowbank which Campbell and Smellie (1983) refer to as by Sir George Mackenzie (c. 1820), an attribution which I have been unable to verify and which appears unlikely. Since both the Lord Meadowbanks were active Fellows, the Society could have cause to own a bust of either.

According to Holland,¹²³ Chantrey was in Edinburgh in 1812 at the invitation of Alexander Maconochie Wellwood when he requested and obtained permission to mould a bust of Lord Meadowbank which was subsequently transferred to marble. This was exhibited at the Royal Scottish Academy in 1842¹²⁴ as item 532. In my opinion the Society's bust may be a plaster of this work. I am encouraged in that belief by Helen Smailes of the Scottish National Portrait Gallery who, from her knowledge of the portraiture of Allan Maconochie, believes the features of the bust to be consistent with those of the first Lord Meadowbank.

Chantrey also made a bust of the second Lord Meadowbank, a plaster of which is now in the Chantrey Bequest Collection at the Ashmolean Museum, Oxford. I am grateful to Mr Whiteley¹²⁵ of that Museum for supplying a photograph of their bust from which it is clear that it does not correspond to that of the Society.

*** MAXWELL, JAMES CLERK (1831–1879)**

Portrait after R H Campbell, Institution of Electrical Engineers.

James Clerk Maxwell's work on electromagnetism forms the foundation for today's telecommunications, and he is also famed for his pioneer work on colour photography and holography. In 2006 he was voted the greatest Scottish inventor of all time in the National Library of Scotland's Scottish Science Hall of Fame.

Maxwell held Professorships in Natural Philosophy (Marischal College, Aberdeen, 1856–60), Physics & Astronomy (King's College, London, 1860–5) and Experimental Physics (Cambridge, 1st Cavendish Professor 1871–9).

The first paper by Maxwell to be published in the RSE's *Transactions* was submitted when he was 15. Although Maxwell attended meetings of the Society, this first paper and another three years later were both 'Read' by Fellows, as it was apparently felt unacceptable that the Royal Society of Edinburgh should be addressed by a mere schoolboy. He was elected to Fellowship of the Society in 1856, at the age of 24.

The apparatus depicted in the portrait was designed by Lord Kelvin for the work of the British Association Committee which defined the electrical units of measurement. When Maxwell joined the committee, he made much use of the apparatus. A magnet was suspended inside the centre cylinder by a fine thread and the ring coil was rotated by means of a belt drive over a pulley near the top of the central cylinder. The drive to this pulley was controlled by a governor to drive the coil at uniform rotational speed. The governor was designed by Fleeming Jenkin, a Professor of Engineering at Edinburgh University. Out of the feedback considerations, Maxwell produced his paper *On Governors*, which is now considered to be the beginning of the subject of Cybernetics.

This portrait was gifted to the RSE by the James Clerk Maxwell Foundation, 14 India Street, Edinburgh.

(“Presented to the James Clerk Maxwell Foundation by David Scarth Ritchie, November 1991, for the Royal Society of Edinburgh”)

MURCHISON, SIR RODERICK IMPEY (1792–1871)

Marble bust by Henry Weekes made in 1871 and presented by Sir Roderick Murchison in the same year.

Born at Tarradale House on the Black Isle, Murchison entered the army at the age of 15 and fought in the Peninsular War. Some years after leaving the army Sir Humphry Davy encouraged him to take up science and he became one of the most distinguished geologists of his day, serving as Director-General of the Geological Survey of Great Britain from 1855 until his death. The Regius Chair of Geology at Edinburgh University was founded in 1871 through his generosity. Although based in London, he worked extensively in Scotland as well as in other parts of the United Kingdom, Europe and Russia. He was the author of over 100 published works 'in his own name as well as others of joint authorship. He is remembered for having named and defined the Silurian and Permian systems and, with Adam Sedgwick, the Devonian system 'in the stratigraphical table.

Murchison was elected to Honorary Fellowship in 1845 and was awarded the Society's first Makdougall Brisbane Prize in 1859.

In 1871, the year of Murchison's death, the British Association met in Edinburgh and the Society's President, Sir Robert Christison, received the following letter from Sir Roderick:⁵⁸

"16 Belgrave Square, 26 June 1871

My Dear Professor - As it is very improbable, nay almost a certainty, that I shall not be able to attend the meeting of the British Association at Edinr. this year, I wish to send as my representative a marble bust of myself executed by Mr Henry Weekes R.A., and which is on the point of completion.

I beg to be informed if the Council of the Royal Society of Edinburgh, over which you preside, will accept this bust as a donation from myself, in gratitude for the great honour they conferred on me many years ago by enrolling my name in their distinguished list of Honorary Members. Also in recollection of another great honour which they conferred on me by

granting to me the first Brisbane Gold Medal for my labours in Scottish Geology.

If you will assent to the proposal I shall direct Mr Weekes to transmit the Bust to the Secretary of your Royal Society in the hope that you will place it in the same building as the busts of our other scientific countrymen whom you have there honoured.

Yours sincerely

(Signed) Rod. I Murchison"

In replying on behalf of Council the General Secretary, Hutton Balfour wrote "They thankfully accept his offer of a Bust of himself by Weekes, and pledge themselves to do their best endeavour so to place it as to keep the remembrance by the Society of the personality of one who, by his arduous and brilliant labours in the fields of Geology and Geography, has erected for himself an enduring monument on the page of Scientific History".

MURDOCK, WILLIAM (1754–1839)

Portrait painted by John Graham (Gilbert) and presented in 1828 by the Edinburgh Gas Light Company.

Murdock was the first to contemplate carrying coal gas through pipes and using it for artificial lighting. He wrote⁵⁹ "I believe, I may without presuming too much, claim both the idea of applying and the first actual application of this gas to economic purposes". He was a native of Ayrshire and an employee, and later a partner, in the firm of Boulton and Watt. It was while supervising pumping stations in Cornwall for his firm that he changed the spelling of his name from Murdoch.⁶⁰ He was not a Fellow of the Society.

David Brewster, as General Secretary, received a letter from Mr W Trotter dated 11th June 1828 offering the portrait on behalf of the Edinburgh Gas Company to which his successor, Sir John Robison replied on 14th June.⁶¹

Council were pleased to accepted the donation⁶² and the thanks of the Society for the portrait of "our celebrated countryman" were voted at the General Meeting of 1st December 1828.⁶³ As noted below, under the entries for Watt and Robison. this portrait was the subject of comment by Thomas Charles Hope.

NAPIER, JOHN OF MERCHISTON (1550–1617)

Plaster bust inscribed "Peter Slater Edinburgh 18(41?)" presented by Mrs Robertson, Kirkton, Dumfries in 1939.

Napier is famous for the invention of logarithms described in his *Mirifici Logarithmorum Canonis Descriptio* and for 'Napier's Bones', a logarithmic calculating device for multiplication and division.

The bust was offered 'in 1939 by Mrs Robertson through Mr A Cameron Smith of Dumfries and, having been viewed by Mr Hugh Stewart Gladstone, FRSE, as to its

suitability, it was gratefully accepted.⁶⁴

The whereabouts of John Napier's grave has been described by W Pitcairn Anderson as "one of the perplexing problems in sepulture."⁶⁵ For long it was supposed that he had been buried in the Napier grave in St Giles but, in a paper read before the Society of Antiquaries in 1831, Professor William Wallace FRSE used an assertion in a treatise on trigonometry by James Hume of Godscroft, printed in Paris in 1617, to show that Napier "was buried without the West Port of Edinburgh in the Church of St Cuthbert". Registers of Burials have since revealed that some of Napier's descendants are buried in the West Kirk, or St Cuthbert's. That he should be buried there is entirely reasonable since, as a Minute of the Kirk Session of that church records⁶⁶, . . . John Napier, Baron of Merchiston (was) a native of, as well as an extensive Landward Heritor, in this Parish.". Professor Wallace convened a "Committee of Scientific Gentlemen" which was granted permission by the Kirk Session on 26th January 1841 to erect a monument in memory of Napier in the Porch of St Cuthbert's Church on condition, *inter alia*, that the Committee would meet all expenses. The monument, which is surmounted by a sculptured profile of Napier, was erected in 1842 and is situated in the entrance hall of the Church.

The Society's bust is a replica in plaster of one in marble shown in the Royal Scottish Academy exhibition of 1842 by Peter Slater as item 522 which was "executed for the Rt. Hon. Sir Alexander Johnston of Carnsalloch."⁶⁷

Sir Alexander Johnston (1775-1849), well known as the reorganiser of the government of Ceylon, was descended from Napier through his mother Helen, only daughter of Francis, fifth Lord Napier. Carnsalloch is in the parish of Kirkmahoe, Dumfriesshire, in which Mrs Robertson, the donor of the plaster bust, also resided.

The similarities between the Society's bust and the sculptured profile on the Napier monument in St Cuthbert's are striking, although the latter is slightly smaller than the former. These, together with the coincidence of date, makes it probable that Peter Slater was responsible also for the St Cuthbert's profile for which the bust may have been a pattern. I have been unable to prove the point because the papers of Professor Wallace's committee, which must have commissioned artists for the Monument, have not been traced. Perhaps the commissioning of the bust was Sir Alexander's response to Wallace's appeal, being his contribution towards honouring the memory of his famous ancestor.

NEILL, PATRICK (1776–1851)

Portrait by John Syme bequeathed by Miss Anna Neill 1869.

Patrick Neill was elected to the Fellowship in 1814 and did much for the Society. His father founded the firm, Neill & Co., printers to the Society from 1783 to 1970.

Neill was a well known pteridologist, botanist and horticulturalist and designed West Princes Street Gardens after the Nor' Loch had been drained. He wrote the article on 'Gardening' in the first edition of the *Encyclopaedia Britannica* and a book entitled *A Tour through Orkney and Shetland* published in 1806. He was a founder member, and for many years secretary of, the Wernerian Society and founded the Caledonian Horticultural Society of which he was Secretary for 40 years. By bequest he founded

the Neill Prize, awarded by the Society for distinction in Natural History.

Council was informed in 1869 of Miss Anna Neill's bequest of the portrait "of the late Dr Patrick Neill long in her possession. . ."⁶⁸

PLAYFAIR, JOHN (1748–1819)

Plaster bust after original in marble by Sir Francis Legatt Chantrey. Presented by Sir George S Mackenzie Bart. 1845.

Playfair was the minister of the parish of Liff and Benvie from 1773 to 1782 when he became tutor to the sons of Mr Ferguson of Raith. He entered Edinburgh University as joint professor of Mathematics with Adam Ferguson and, in 1805, succeeded John Robison as Professor of Natural Philosophy, a position he held until his death. Playfair stood in the tradition of mathematical Hellenism associated with Maclaurin and Simson as is evident in his appendix to his *Euclid* and his review of Laplace in 1808.⁶⁹

He was an enthusiast for James Hutton's new geology and his book *Illustrations of the Huttonian Theory* (1802) was influential. He was an early proponent of the former greater extent of Alpine glaciers. Elected in 1783, he was General Secretary from 1798 until his death. According to Lord Moncreiff "for the first two decades of the existence of the Royal Society Playfair was the soul and life of the institution"⁷⁰. For Lord Cockburn he was "that amiable philosopher".

The plaster bust was presented by Sir George S Mackenzie in 1845.⁷¹ Chantrey's original marble is in the collections of the University of Edinburgh. Another plaster copy was purchased by the Scottish National Portrait Gallery in 1889 (PG 244).

RITCHIE, JAMES (1882–1958)

Portrait by Captain Alfred Edward Borthwick, RSA, painted in 1950 and presented in 1958 by the sitter's son Professor A E Ritchie, FRSE.

Born at Port Elphinston, Aberdeenshire, Ritchie was educated at Robert Gordon's College and the University of Aberdeen before joining the staff of the Royal Scottish Museum in 1907 to become Keeper of the Department of Natural History in 1921. In 1930 he returned to Aberdeen as Professor of Natural History at the University and in 1936 was appointed to the Chair of Natural History at Edinburgh University from which he retired in 1952.

His interests were for the whole of the Animal Kingdom but especially birds. He had a major influence in legislation dealing with the protection of grey seals and wild birds. His book *The Influence of Man on Animal Life in Scotland: A Study of Faunal Evolution* (1920) brought international recognition. The work encouraged the growth of the study of animal ecology and of its application in conservation. Ritchie influenced the establishment of the Nature Conservancy Council with its separate organisation in Scotland.

Elected FRSE in 1916, Ritchie served on the Council of the Society in various capacities for 24 years (including three terms as a Vice-President) and as President

from 1954 until his death.

In 1958 Council was pleased to accept the portrait of his father donated by Professor A E Ritchie, FRSE for hanging in the Society's Rooms.⁷² Professor Anthony Ritchie has kindly informed me that diary entries for late 1950 mention sittings for Captain Borthwick. The portrait was exhibited in the 1950 Royal Scottish Academy Exhibition as item 400.⁷³

ROBISON, JOHN (1739–1805)

Portrait by Sir Henry Raeburn presented in 1828 by the sitter's son Sir John Robison, FRSE.

The son of a Glasgow merchant, Robison was born at his father's estate at Boghall, Stirlingshire. He was educated at the grammar school and University in Glasgow and became tutor to Admiral Knowles' midshipman son. He was in the same boat as General Wolfe at the Battle of Quebec. On Knowles' recommendation he was appointed to the Board of Longitude in 1762, but returned to Glasgow in the following year where he formed lasting friendships with James Watt and Joseph Black. When Black was called to Edinburgh, he succeeded him in Glasgow University as lecturer in Chemistry. In 1770 Knowles went to Russia to superintend the improvement of the navy and asked Robison to accompany him. This he did and in 1772 was appointed Inspector-General of the Marine Corps at Kronstadt.

On the recommendation of Principal William Robertson, Robison was elected to the Chair of Natural Philosophy in Edinburgh and took up his post in 1774. "Robison's contributions to knowledge include the invention of ball-headed magnets which have been much used in research and a paper entitled 'The Motion of Light as affected by Refracting and Reflecting Substances, which are also in Motion'⁷⁴ which is a pioneer investigation leading to the theory of relativity."⁷⁵ James Watt said of him "He was a man of the clearest head and the most science I have ever known."⁷⁶

Robison was the first General Secretary of the Society, serving from 1783 until 1798.

An interesting letter in the Society's archives⁷⁷ from Thomas Charles Hope, writing from Wardie Lodge, Edinburgh on 21st June (?1828), does not preserve the name of the addressee but, from the context, this may be assumed to have been John Robison jnr, then General Secretary:

"With regard to Mr Murdoch's portrait -
I have doubts to whether it ought to be hung up in the Ry Socy on the same day with Mr Watt & with the same distinction of being the first ... a far more proper companion for Watt's Portrait would be one of your Father - Mr Graham would do it under your eye all justice -
Permit me to remind you of your good intentions in that matter. . . "

Whether or not Hope's letter was the spur, we read in the report of the Extraordinary General Meeting of the Society held on 24th November 1828: "Mr Robison intimated to the Meeting that he intended to offer to the acceptance of the Society, a portrait of his Father, by the late Sir Henry Raeburn"⁷⁸

As General Secretary Robison modestly omitted to mention in his account of the

meeting the thanks which must have been expressed to him. Generations of Fellows since have been grateful for the gift which is rightly regarded as one of the most treasured possessions of the Society.

Another version of this portrait is owned by the University of Edinburgh in which Raeburn depicted the sitter in the same pose, with the same book and telescope, but dressed in a red gown and white turban. This has been described as "one of the most outstanding of Raeburn's portraits, marking the end of the master's second manner"⁷⁹. Professor Talbot Rice's opinion of the University's portrait and that of the Royal Society of Edinburgh was that "Both are striking examples of the artist's work." It is likely that both were painted at about the same time; the University version has been dated as c. 1798.

SANG, EDWARD (1805–1890)

Portrait, said to be by A R Moffatt, presented in 1914 by the sitter's daughters.

Sang was born in Kirkcaldy and, although he is known primarily for his exhaustive computation of logarithms and other mathematical tables (some of them to 28 places), he was a man of many talents, particularly in engineering design. He studied in Edinburgh under John Leslie and later acted as his assistant. In 1847 he went to Constantinople to teach mathematics and natural philosophy and helped to establish a school of civil engineering and to design railroads, an iron works and other projects. Returning to Edinburgh in 1854 he became the first official Lecturer at the Faculty of Actuaries. There he laid the foundation of scientific study for the Scottish school of actuaries⁸⁰ and is remembered for such tables of actuarial functions as *Life Assurance and Annuity Tables for every Combination of Two Lives*.

A Fellow of the Society (elected 1836), he was awarded the RSE's Keith Prize for his designs for ships hulls and his book *The New General Theory of the Teeth of Wheels* was recognised as a classic on the subject.

In 1914 Council heard that Miss Anna Wilkie Sang and Miss Flora Chalmers Sang had presented a portrait of their father.⁸¹ Guthrie attributes the portrait, perhaps a painting from a photograph, to A R Moffatt.⁸²

SCOTT, HENRY, 3rd DUKE OF BUCCLEUCH AND 5th DUKE OF QUEENSBERRY (1746–1812)

Posthumous portrait by Sir John Watson Gordon (1830) after an original by Thomas Frank Heaphy. Presented by the 5th Duke of Buccleuch in 1830.

First President of the Society, Duke Henry was the son of the Earl of Dalkeith and succeeded to the Dukedom in 1751, a year after his father's death. After schooling at Eton he was tutored by Adam Smith with whom he and his brother, the Hon Campbell Scott, left for a tour of the Continent in 1764. This ended in tragedy when the younger brother was assassinated on the streets of Paris in October 1766. On returning to Scotland the Duke devoted himself to administering his estates to which were added, towards the end of his life, the lands in Durnfriesshire associated with the Queensberry title to which he succeeded in 1810. His extensive power of patronage, coupled with his active interest in affairs, made Duke Henry one of the most

influential men in Scotland during the 'Dundas despotism'. It was through the Duke's influence that Scott was appointed Sheriff depute of Selkirkshire in 1799 and in 1806 one of the principal clerks of the Court of Session. Sir Walter wrote of the Duke "his name was never mentioned without praises by the rich and benedictions by the poor."⁸³

Seventeen years after Duke Henry's death, James Skene of Rubislaw suggested to Council that it would be desirable to have a portrait of the first President and it was agreed to write to the present Duke "to mention the wish of the Royal Society and to learn his Grace's pleasure on this subject."⁸⁴ Since the young Walter Francis, 5th Duke of Buccleuch, was then planning his wedding, which took place on 13th August, Council had to wait some time for a reply! In the following January, Skene was able to tell Council,⁸⁵ of the Duke's resolve to present a portrait of his Grandfather and to leave to the Society to choose an artist who should paint the portrait from an original by Heaphy in Dalkeith Palace. Watson Gordon was chosen and the portrait which he painted contains an engaging anachronism, since Duke Henry is shown seated in the Presidential chair supplied by William Trotter to the Society in 1826. Enquiries have indicated that the original Heaphy portrait is now missing. It is therefore of great interest that an engraving of it was presented to the Society by the 5th Duke in 1840.

SCOTT, SIR WALTER, BART. (1771–1832)

Portrait painted at the request of the Society in 1829 by John Graham (Gilbert).

Scott succeeded his friend Sir James Hall as President in 1820, the only member of the Literary Class of the Society to attain that office. In Dr Melville Clark's words⁸⁶ he did so: ". . . only after it had been urged upon him that it was proper to let the Literary Class occasionally supply the chief of the whole body. To tell truth, Scott was delighted by the honour as much as by any he ever received, with an engaging mixture of pride, surprise, and comic deprecation. He pretended to have become by his elevation all of a sudden 'a better judge of how the world is made than if I had been a looker (-on, i.e. at the Creation), and capable *ex officio* and without hesitation or study to resolve all doubts about stones flung from the moon, spots in the sun, green pastures at the pole, and all the other arcana of nature'

Of those who elected him to office Clark's opinion was that they: "...saw in him not only a great poet and novelist but also a many-sided and far-sighted man of affairs; not only as romantic, imaginative, and backward - looking, but also as wide-awake, practical, and forward-looking, with a lively interest in the world as it then was and was to be and not least in that growing end of knowledge which we call science."

At a meeting of the Society in 1828 Sir John Hay proposed that a portrait of Scott be painted and that he should be requested to sit to Mr Graham for that purpose.⁸⁷ In his *Journal*, Scott makes a number of references to sitting for Graham (1829, January 15th, 22nd, 27th, 31st, June 11th and 12th). On the first of these dates he says "disappointed Graham of a sitting for my picture". The reason was that he had called a special meeting of the Office-bearers to consider his objection to Robert Knox reading an essay on some dissections - "A bold proposal truly coming from one who has so lately the boldness of trading so deeply in human flesh."⁸⁸

Scott's own opinion of the portrait was that Graham was "making a good thing of it" (*Journal* 22nd January 1829) and in J G Lockhart's view the portrait is "Not destitute of merit." According to David Douglas,⁸⁹ Graham retained in his own collection a duplicate of the Society's portrait, with some slight variation, which his widow presented to the National Portrait Gallery, London, in 1867. This lady, prior to her marriage, had been Miss Gilbert and after their marriage her husband called himself John Graham Gilbert. The portrait was started exactly three years after the failure of Constable and the placing of Sir Walter's estate in trust. At the time of the sittings he was writing *Anne of Geierstein* which was published later in the year.

SHARPEY-SCHAFFER, SIR EDWARD (ALBERT) (1850–1935)

Portrait by William Walls, RSA, presented by the sitter's daughter, Miss Geraldine Sharpey-Schafer, in 1953.

Sharpey-Schafer has been described as "one of the greatest physiologists of all time". Born and educated in London he was influenced by Professor William Sharpey when studying at University College. He became MRCS in 1874, an assistant in physiology at University College and then Jodrell Professor of Physiology there in 1883. In 1899 he moved to Edinburgh as Professor of Physiology, retiring in 1933.

He did pioneer work on ductless glands and internal secretion and wrote *The Endocrine Organs* which was first published in 1916. He also worked on the central nervous system and on respiratory movements and the physiology of pulmonary circulation. He is well known for his interest in resuscitation in asphyxia and drowning and his prone pressure method of treatment, the Schafer Method, has been widely used in life saving. In addition to writing a number of medical texts, he was one of the founders of the Physiology Society (1876) and started the *Quarterly Journal of Experimental Physiology* which he edited until 1933.

Both his sons were killed in the 1914-18 War. One was named John Sharpey Schafer in honour of William Sharpey and shortly after John's death his father assumed the name Sharpey. Sharpey-Schafer was elected FRSE in 1900 and served as President from 1929 to 1934.

In 1953 Miss Geraldine Sharpey-Schafer offered Walls' portrait of her father to the Society and this was accepted with gratitude and cordial thanks.⁹⁰

SINCLAIR, SIR JOHN OF ULBSTER, BART. (1754–1835)

Stucco statuette by John Greenshields made in 1832 and presented by Daniel Reid Rankine of Carluke in 1875.

Sinclair was elected a Fellow in 1798 and is best known for organising the production of *The Statistical Account of Scotland*. He was an agricultural improver, promoting better farming on newly enclosed sheep farms. The improvement of his own estates changed the appearance of Caithness where he also designed and built the town of Thurso. He was responsible for the creation of the Board of Agriculture and was its first chairman. Except for a short interval he was a member of parliament from 1780 to 1811. He was active in politics and economics and nothing, however trivial, seemed to miss his attention. Sir Walter Scott said of him⁹¹ that his ". . . absurd vanity

bids him thrust his finger into every man's pie". In 1794 Sir John received letters of service to raise a fencible regiment in the counties of Ross and Caithness and it is in the uniform of his Caithness Fencibles that he is shown in the statuette, a uniform which he liked to wear long after the emergency.

In November 1875 "The Secretary intimated that Dr Rankin of Carluke ⁹² had presented the Society with a Model of the Statue of Sir John Sinclair Bart. (in his uniform of the Caithness Fencibles) erected at Thurso in 1832 by John Greenshields (the Clydesdale Sculptor)".⁹³

Greenshields' statue owes much to Raeburn's famous portrait of Sir John Sinclair which was painted in 1794.

SMITH, SIR WILLIAM WRIGHT (1875–1956)

Portrait (signed and dated 1945) by Stanley Cursiter, RSW, RSA, FRSE, and presented by the artist in 1945.

Born at Lochmaben, Smith received his education at Dumfries Academy and, as First Bursar, entered Edinburgh University where he studied Arts and qualified as a teacher. His interest in botany and zoology led Professor Sir Isaac Bayley Balfour to invite him to join the staff of the Botany Department of Edinburgh University in 1902.

In 1907 he went to Calcutta to take charge of the Royal Botanic Garden and, while there, he explored for plants in Sikkim, Nepal, Tibet and Bhutan. In 1911 he undertook the description of the extensive collections being received from collectors, such as George Forrest, then working in India and China.

In 1922 he succeeded Balfour as Regius Keeper of the Garden and Regius Professor of Botany and later became Queen's Botanist in Scotland. Wright Smith described 550 species new to science and did taxonomic work of particular value in his account of the lilies of China, Primulas and Rhododendrons. His work did much to establish the reputation of the Botanic Garden for the successful propagation and cultivation of plants especially those from the East.

Sir William was elected in 1919 and was President of the Society from 1943 to 1949.

In 1945, Stanley Cursiter, then a member of Council, offered to present a duplicate portrait of that recently presented to Sir William Wright Smith and this was gratefully accepted. The portrait was presented at an Ordinary Meeting of the Society.⁹⁴

Two portraits were presented to Sir William Wright Smith by staff of the Botany Department, the Royal Botanic Garden and friends on his seventieth birthday. That by Stanley Cursiter, of which the Society's is a duplicate, is now in the hands of Sir William's grand-daughter Mrs Susan How. It was exhibited at the Royal Scottish Academy Exhibition in 1945 as item 160.⁹⁵ The other, which is in the possession of Sir William's daughter Dr L Cooper, shows him seated in a brown overcoat.⁹⁶

SMYTH, CHARLES PIAZZI (1819–1900)

Portrait by John Faed, RSA, bequeathed by Professor Piazzì Smyth in 1900.

Smyth has been described as "one of the most fascinating personalities in the scientific world of the Victorian era."⁹⁷

The astronomer Giuseppe Piazzì was a friend of Smyth's father, Admiral William Henry Smyth, and his own godfather and he made a point of including his name in his own. After schooling at Bedford Grammar School he went to South Africa in 1835 to assist Thomas Maclear at the Cape Observatory. There he used his artistic talent to draw Halley's comet (1836) and the great daylight comet (1843) and studied polarising effects in the latter. He developed an interest in photography and took the earliest photographs known of South African scenes. Partly through Sir John Herschel's influence, he was appointed Astronomer Royal for Scotland and Professor of Practical Astronomy in Edinburgh in 1846, retiring from both posts in 1888.

He made notable contributions to solar spectroscopy and was a pioneer in mountain astronomy establishing observatories on summits in Tenerife. In Edinburgh he is remembered for making arrangements for the One O'clock Time Signal from Nelson's Monument and the firing of the gun at the Castle. His scientific reputation was damaged by his later mystical interest in the cubit, but he was the first to use magnesium flash photography when recording the interior of the Great Pyramid.

Smyth was elected to Fellowship in 1846 and served as a Council member for many years.

The RSE's Piazzì Smyth Archive, comprising sketchbooks, notebooks and photographic material, is held on deposit at the Royal Observatory Edinburgh.

Documentation concerning the receipt of the bequest of the portrait by John Faed from Piazzì Smyth in 1900 is inserted in a Council Minute of 1903.⁹⁸

TAIT, PETER GUTHRIE (1831–1901)

Portrait by Sir George Reid, PRSA, painted in 1892 and presented by a Committee of Subscribers in 1892.

Born at Dalkeith, Tait went to school there before entering Edinburgh Academy, in which he was dux of his class each year from 1841 to 1847. After a year under Kelland and Forbes in Edinburgh he went to Cambridge where he was the youngest Senior Wrangler on record in 1852. As a Fellow of Peterhouse he lectured in Mathematics and then became Professor of Mathematics at Queen's College, Belfast in 1854 and was elected to succeed Forbes at Edinburgh as Professor of Natural Philosophy in 1860. He was closely associated with Lord Kelvin and co-operated with him in the well-known text *Treatise on Natural Philosophy*.

Kelvin regarded Tait's work on the Kinetic Theory of Gases as of fundamental importance but he also worked on thermo-electricity, thermal conductivity of metals, impact and duration of impact and the compressibility of water, glass and mercury, the latter connected with his contribution to the HMS *Challenger* Report. His work on the trajectory of a golf ball and the varieties of knots were examples of his other enquiries.

Elected to Fellowship in 1861 he was General Secretary from 1879 to 1901 and served on Council in one capacity or another for 39 years.⁹⁹

In 1892 "arrangements were made for the presentation by Lord Maclaren on behalf of the Subscribers, of the portrait (by Sir George Reid) of the General Secretary."¹⁰⁰ A number of portraits of Tait were painted by Sir George Reid. The earliest, dating from 1882, was presented to the University of Edinburgh by Mrs Tait. Two replicas of the Society's portrait were made by Reid. One he gave in 1902 to the Scottish National Portrait Gallery (No. 600), the other is at Peterhouse College, Cambridge.¹⁰¹ The Society's portrait was exhibited at the Royal Scottish Academy Exhibition in 1892 as item 266.¹⁰²

THOMPSON, SIR D'ARCY WENTWORTH (1860–1948)

Portrait painted in 1938 by David S Ewart, ARSA, for the Society by subscription.

Thompson's father had taught at Edinburgh Academy before becoming Professor of Greek at Queen's College, Galway. D'Arcy returned to Edinburgh to attend the Edinburgh Academy and entered Edinburgh University as a medical student in 1877. In 1879 he went to Trinity College, Cambridge, where he took the Natural Science Tripos and in 1884 was appointed Professor of Biology at University College, Dundee. There he encouraged the study of arctic zoology through contact with the whaling captains who operated from Dundee. In 1917 he was translated to the Senior Chair of Natural History in the United College of St Andrews. In the same year his famous book *On Growth and Form* was published but quickly went out of print. The second edition did not appear until 1942. He served on many public bodies such as the Anglo-American Commission of Enquiry on the Bering Sea Seal Fishery and the Fishery Board for Scotland.

Not only was he known as a Biologist and Mathematician but D'Arcy Thompson was a noted Classical Scholar. Elected in 1885, he served on Council in a number of capacities for 29 years and was the Society's President from 1934 to 1939.

In 1937¹⁰³ it was suggested that an oil painting of D'Arcy Thompson, then President, be obtained for the Society's rooms. Stanley Cursiter, RSA, FRSE, was consulted regarding painters and from the list which he supplied Mr David S Ewart, ARSA, of the School of Art, Glasgow, was unanimously chosen. A successful appeal for funds was launched which enabled the purchase of the portrait together with a head and shoulders replica by the artist which was presented to Sir D'Arcy.¹⁰⁴ The portrait was completed by July 1938 and exhibited at the Royal Scottish Academy Exhibition as item 209 in 1939.¹⁰⁵

THOMSON, WILLIAM, LORD KELVIN (1824–1907)

Marble bust by Archibald McFarlane Shannan, made in 1912/13 and presented by Lady Kelvin in 1912.

Thomson entered Glasgow University at the age of ten and published a paper on Fournier's Theory when he was seventeen. He so distinguished himself at Glasgow and Cambridge that at the age of twenty-two he was elected to the Chair of Natural

Philosophy at Glasgow. His theoretical brilliance was shown in his famous series of papers on thermodynamics, his work on hydrodynamics and on the refraction and diffraction of light. With P G Tait he wrote *Treatise on Natural Philosophy*. His important practical contributions included his part in the laying of the first transatlantic telephone cable and the improvement of the mariner's compass. He is also recognised for inventions concerned with the generation, regulation and measurement of electric currents. Many of his papers were published in *Transactions and Proceedings* and Sir Alfred Ewing said of him "No other contributor has done so much to give our publications a worldwide and lasting fame"¹⁰⁶.

Elected in 1847, Lord Kelvin is unique in the annals of the Society in having served three separate terms as President, the first from 1873 to 1878, the second from 1886 to 1890 and the third from 1895 to 1907. Kelvin was elected a Fellow of the Royal Society in 1851 and served as its President from 1890 to 1895. He was also President of the Society of Telegraph Engineers (1874).

In March 1912 Council heard that Lady Kelvin intended to present a bust of her late husband to the Society and in May a further letter from her stated that the bust was in the hands of Mr Shannan the sculptor but would not be ready until January or February 1913. In July Mr J J Bottomley wrote to Council with the news that the bust was practically finished and arrangements were made that it should be formally installed in the Society's Rooms on the 27th October 1913.¹⁰⁷

It is of interest that Shannan had executed a bust of Lord Kelvin in bronze in 1896 which was purchased by the Scottish National Portrait Gallery in 1909 (No. 681).

* **TURNER, SIR WILLIAM (1832–1916)**

Portrait by Sir James Guthrie, PRSA. "Presented to the University by his Friends, 1913." On loan from the University of Edinburgh, 2009.

Born in Lancaster, England on 7 January 1832, Sir William was elected a Fellow of the Royal Society of Edinburgh (RSE) in 1861 and served successively as a Coucillor, Secretary to Meetings and Vice-President, before being elected President, serving as such from 1908 to 1913. He was also elected a Fellow of the Royal Society (1877), the Royal College of Surgeons (1893), the Royal College of Surgeons of Edinburgh (1861, President 1882–3) and the Anatomical Society of Great Britain (President 1891–2), and served as President of the General Medical Council (1898–1904) and the British Association for the Advancement of Science (1900). He was knighted in 1886 and made a KCB in 1901.

He graduated MB from London University in 1857. He became a senior demonstrator to John Goodsir, Professor of Anatomy at Edinburgh University and, on Goodsir's death in 1867, succeeded to the chair, holding it for thirty-six years. In 1903 he became Principal and Vice-Chancellor of Edinburgh University, a position he held until his death. He died in Edinburgh on 15 February 1916.

Sir William was RSE President when the Society moved into George Street in 1909 and played a key role in enabling it to move from its then home, in the Royal Institution on the Mound, to its present building (22-24 George Street) in which it has resided for more than 100 years.

WATT, JAMES (1736–1819)

Copy of portrait by Sir William Beechey (original painted *c.* 1801) made at the behest of James Watt Esq of Aston Hall, the son of the sitter, and presented by him in 1828.

Celebrated for his improvements to the steam engine, Watt was responsible for the invention of the separate condenser. In partnership with Matthew Boulton he produced many engines at their famous Soho Works, Birmingham for pumping and as power sources which incorporated many inventions such as the double acting engine, the governor, and devices for translating linear to rotary motion such as the sun and planet gear and parallel motion.

In his early years he made philosophical instruments at the University of Glasgow where he became the lifelong friend and correspondent of John Robison and Joseph Black. On hearing the outcome of Watt's legal case against Hornblower & Co. Black was delighted even to tears, saying "it is very foolish, but I can't help it, when I hear of anything good to Jamy Watt."¹⁰⁸ Scott described James Watt as "one of the most generally well- informed, but one of the best and kindest of human beings."¹⁰⁹

Watt was elected to the Fellowship in 1784.

In November 1827 "Mr Robison intimated, that he had received a Letter from Mr Watt, of Soho, mentioning that he was preparing (with the purpose of presenting to the Royal Society) a copy of Sir William Beechey's Portrait of his Father, the late Mr Watt."¹¹⁰

The portrait was delivered to Council in June 1828¹¹¹ and presented to the Society in the name of Mr Watt of Aston Hall at the General Meeting of 1st December¹¹² and the donation recorded in the printed record.¹¹³ As previously mentioned, T C Hope expressed his opinion to the General Secretary that "the distinction of being the first" portrait to be hung in the Society's rooms should be accorded solely to the Watt and not shared with that of Murdock which had just been acquired also.¹¹⁴

Beechey's portrait of "Mr Watt, of Soho, Staffordshire" was exhibited as item 101 at the Royal Academy Exhibition of 1802.¹¹⁵

The circumstances of its painting have been described by H. W. Dickinson and R. Jenkins.¹¹⁶ Watt himself thought highly of it: "There is no good portrait of me except that painted by Sir William Beechey" . . . although "not esteemed very like by my son and others".¹¹⁷

"On this point his son afterwards rather changed his opinion; and, indeed, came to prefer the portrait in question to any other paintings of his father."¹¹⁶

The Society's is one of a number of copies of the Beechey portrait which, during James Watt Jnr.'s lifetime, was hung in the Long Gallery of Aston Hall¹¹⁸ and remains in the possession of the Watt family.

WHITTAKER, SIR EDMUND TAYLOR (1873–1956)

Portrait head in bronze by Benno Schotz, RSA, made at the request of the Society and acquired by subscription of Fellows 1945.

Whittaker has been described as "one of the great mathematical scholars and teachers of the century."¹¹⁹ He was born at Southport and educated at Manchester Grammar School and Trinity College, Cambridge, where he was Second Wrangler in 1895. He was elected a Fellow of Trinity in 1896 where he produced the first edition of his books *Modern Analysis* (1902) and *Analytical Dynamics* (1904). In 1906 he became Royal Astronomer of Ireland and Professor of Astronomy in the University of Dublin where his *History of the Theories of Aether and Electricity ...* was published in 1910. In 1951 he revised and amplified this work and, in his eightieth year, published a second volume which brought the history up to 1926. In 1912 he was appointed to the Chair of Mathematics at the University of Edinburgh from which he retired in 1946. Here he founded a school of research and a mathematical laboratory which led to the publication of *The Calculus of Observations* with G. Robinson. His later concern was the reconciliation of science and cosmogony with revealed religion.

Elected to the Fellowship in 1912, he served on Council in various capacities for 22 years and as President from 1939 to 1943.

Council appointed a small committee in 1944 "to look into the question of a portrait or bust of Professor E T Whittaker, FRS, lately President of the Society". Mr Stanley Cursiter, RSA, was a member of this committee and guided it in its choice of sculptor and in the design of the pedestal and plate. Two bronze heads were prepared, one for the Society and the other was presented to Sir Edmund.¹²⁰ The head was exhibited at the Exhibition of the Royal Scottish Academy in 1946.¹²¹

***WILLIAMS, SIR ALWYN (1921–2004)**

Preparatory sketch and photograph of portrait by Donaldson.

The eminent palaeontologist Sir Alwyn Williams served as Pro-Vice-Chancellor of Queen's University Belfast (1968–74) and was Principal & Vice-Chancellor of Glasgow University from 1976 to 1988. He was a Fellow of the Royal Society (1967), a Member of the Royal Irish Academy (1959), and a Foreign Member of the Polish Academy of Sciences.

Elected FRSE in 1958, Sir Alwyn served as RSE President from 1985 to 1988.

The original portrait hangs in Glasgow University; the artist's preparatory sketch for the portrait was given to the Society by Sir Alwyn's widow, Joan.

The RSE also has a '**caricature**' image of Sir Alwyn, drawn by Emilio Coia.

References

- ¹ RSE Council Minutes of 26th October 1953, 1st February 1954 and 7th March 1955 refer.
- ² *The Royal Scottish Academy Exhibitions 1826-1990*. Ed. Charles Baile de Laperriere, 4 vols. Hilmartan Manus Press 1991.
- ³ Illustrated Catalogue of the Scottish National Portrait Gallery
- ⁴ Thieme-Becker, *Kunster Lexikon* xxxiii, Leipzig, Veb E A Seemann, p. 140.
- ⁵ A D Morrison Low, "Published Writings of Sir David Brewster: a Bibliography" in *Martyr of Science, Sir David Brewster 1781-1868*, Royal Scottish Museum Studies, Eds A D Morrison-Low and J R R Christie, 1984, pp. 107-136.
- ⁶ N Campbell & R M S Smellie, *The Royal Society of Edinburgh (1783-1983), The First Two Hundred Years*, 1983, pp.44-45
- ⁷ NLS Acc. 10000/17: RSE Council Minute of 1st December 1828.
- ⁸ NLS Acc. 10000/20: RSE Council Minute of 28th February 1868. The committee comprised the Treasurer David Smith (Convener) and General Secretary J Hutton Balfour, with Lyon Playfair, and C Piazza Smyth.
- ⁹ NLS Acc 10000/20: RSE Council Minute of 17th April and NLS Acc 10000/164.
- ¹⁰ MacBeth's Portrait of Sir David Brewster had been exhibited at the Royal Scottish Academy in 1865 as item 402, see C B de Laperriere 1991, op. cit., note 2.
- ¹¹ NLS Acc. 10000/164.
- ¹² NLS Acc. 10000/164: letter of N Macbeth to D Smith dated 16th October 1868.
- ¹³ NLS Acc 10000/21: RSE Council Minute of 12th March 1869.
- ¹⁴ H A Bruck *The Story of Astronomy in Edinburgh*, Edinburgh, 1983, pp. 17- 18.
- ¹⁵ NLS Acc 10000/356: Sir George Mackenzie was in ill health at the time of this correspondence and died in October of that year.
- ¹⁶ NLS Acc 10000/19: RSE Council Minute of 14th April 1848.
- ¹⁷ Minute of meeting in Forbes papers NLS Acc 10000/356.
- ¹⁸ NLS Acc 10000/356.
- ¹⁹ NLS Acc 10000/19: RSE Council Minute of 22nd November 1848.
- ²⁰ C B de Laperriere 1991, op. cit, note 2.
- ²¹ Letter of Sir Hector Monro to C D Waterston, 26th October 1993.
- ²² N Campbell & R M S Smellie 1983, op. cit., note 6, p.80.
- ²³ *Proceedings of the Royal Society of Edinburgh* 54, 1933-34, pp. 147-8.
- ²⁴ C B de Laperriere 1991, op. cit., note 2.
- ²⁵ NLS Acc 10000/25: RSE Council Minute of June 1911
- ²⁶ NLS Acc 10000/26: RSE Council Minute of 4th December 1922.
- ²⁷ *Proceedings of the Royal Society of Edinburgh* 43, 1922-23, p. 298.
- ²⁸ *RSE Year Book* 1978, p.83.
- ²⁹ N Campbell & R M S Smellie 1983, op. cit., note 6, p.99.
- ³⁰ NLS Acc 10000/21: RSE Council Minute of 20th March 1874.
- ³¹ NLS Acc 10000/21: RSE Council Minutes of 10th April 1874, 19th February, 23rd April, 7th May 1875 and 28th January 1876 refer. The committee consisted of the Treasurer David Smith (Convener), the General Secretary Hutton Balfour, with Sir Alexander Grant and Professor Kelland.
- ³² C B de Laperriere 1991, op. cit., note 2.
- ³³ NLS Acc 10000/19: RSE Council Minute of 13th April 1849.
- ³⁴ See F Cunningham, *James David Forbes Pioneer Scottish Glaciologist*, Edinburgh, 1990, 329pp.
- ³⁵ NLS Acc 10000/20: RSE Council Minute of 14th December 1860.

- ³⁶ Letter written from St Andrews dated 6th January 1861 and printed in *Life and Letters of James David Forbes, FRS* by J C Shairp, P G Tait and A Adams Reilly, London, 1873, p.406.
- ³⁷ C B de Laperriere 1991, ref cit., note 2.
- ³⁸ *Proceedings of the Royal Society of Edinburgh* **24**, 1901-03, p.601.
- ³⁹ *Proceedings of the Royal Society of Edinburgh* **54**, 1933-34, p. 147.
- ⁴⁰ RSE Council Minute of 6th March 1950.
- ⁴¹ C B de Laperriere 1991, ref. cit., 1991, note 2.
- ⁴² *Transactions of the Royal Society of Edinburgh General Index*, 1889-1908.
- ⁴³ NLS Acc 10000/24: RSE Council Minutes of 11th March 1904, 10th March and 24th March 1905 refer.
- ⁴⁴ H Cockburn, *Memorials of His Time*, Edinburgh, 1856, p. 105.
- ⁴⁵ W S Craig, *History of the Royal College of Physicians of Edinburgh*, 1976, pp.426-436.
- ⁴⁶ NLS Acc. 10000/16: RSE Council Minute of 19th November 1821.
- ⁴⁷ NLS Acc. 1000015: RSE Minute of General Meeting of 7th December 1829 and *Transactions of the Royal Society of Edinburgh* **11**, p.538, Proceedings for December 7th 1829, donations list.
- ⁴⁸ NLS Acc 10000/19: RSE Council Minutes of 16th March, 13th April and 19th November 1849 refer.
- ⁴⁹ D Guthrie "A List of Portraits of the Royal Society of Edinburgh with Biographical Notes" *Year Book* 1959-60, p.6.
- ⁵⁰ Reproduced in monochrome in G Y Craig, D B McIntyre and C D Waterston *James Hutton's Theory of the Earth: The Lost Drawings*, Edinburgh 1978, p.21, PI VI, by permission of the executors of Col. Sir Lionel Hall, Bt.
- ⁵¹ N Campbell & R M S Smellie 1983, ref. cit., note 6, p. 166.
- ⁵² See also H Smailes, *A Portrait Gallery for Scotland*, Edinburgh, 1985, 78pp.
- ⁵³ C B de Laperriere 1991, ref. cit., note 2.
- ⁵⁴ G Y Craig, D B McIntyre and C D Waterston 1978, ref. cit., note 50.
- ⁵⁵ Letter from J C Thackray, Archivist, The Natural History Museum, London to C D Waterston, 7th August 1992.
- ⁵⁶ RSE Council Minutes of 6th February, 2nd July, 22nd October, 5th November, 3rd December 1956 and 4th March 1957 refer.
- ⁵⁷ *RSE Year Book* 1958, p.59.
- ⁵⁸ NLS Acc. 10000/21: RSE Council Minute of 29th June 1871.
- ⁵⁹ *In the Philosophical Transactions of the Royal Society of London* **98**, 1802, p.124, *Edinburgh Review* **13**, 1809, p.477.
- ⁶⁰ D Guthrie 1960, ref. cit., note 49, pp. 17-18.
- ⁶¹ NLS Acc. 10000/160.
- ⁶² NLS Acc. 10000/17: RSE Council Minute of 19th June 1828.
- ⁶³ NLS Acc. 1000015: Minute of General Meeting of 1st December 1828 and *Transactions of the Royal Society of Edinburgh* **11**, p.538, Proceedings for December 1st, 1828.
- ⁶⁴ RSE Council Minutes of 1st May and 5th June 1939 refer.
- ⁶⁵ W Pitcairn Anderson, *Silences that Speak*, Edinburgh, 1931, pp. 45-49.
- ⁶⁶ Scottish Record Office CH2/718/28, Kirk Session Minute of 26th January 1841.
- ⁶⁷ C B de Laperriere 1991, ref cit., note 2.
- ⁶⁸ NLS Acc 10000/21: RSE Council Minute of 26th July 1869.
- ⁶⁹ see G E Davie, *The Democratic Intellect*, Edinburgh, 1961, pp. 112-3.
- ⁷⁰ *Proceedings of the Royal Society of Edinburgh* **12**, 1883-4, p.464.

- ⁷¹ *Transactions of the Royal Society of Edinburgh* **16**, 1844-49, p.627, List of Donations for 17th February 1844.
- ⁷² RSE Council Minute of 1st December 1958 and *Year Book* for 1959-60, p. 122.
- ⁷³ C B de Laperriere 1991, *ref cit.*, note 2.
- ⁷⁴ *Transactions of the Royal Society of Edinburgh* **2**, 1790, p.83.
- ⁷⁵ N Campbell & R M S Smellie 1983, *ref cit.*, note 6, p.4 1.
- ⁷⁶ Letter of Watt to R Muirhead of February 7th 1805 printed as letter 245 in *Partners in Science*, Eds E Robinson and D McKie, London, 1970, p.389.
- ⁷⁷ NLS Acc 10000/160.
- ⁷⁸ *Transactions of the Royal Society of Edinburgh* **11**, p.508, Proceedings of General Meeting of 24th November 1828.
- ⁷⁹ Armstrong quoted in D Talbot Rice and Peter McIntyre, *The University Portraits*, Edinburgh, 1957, pp. 186-7.
- ⁸⁰ A R Davidson, *The History of the Faculty of Actuaries in Scotland 1856-1956*, Edinburgh, 1956.
- ⁸¹ NLS Acc 10000/26: RSE Council Minute of 25th May 1914.
- ⁸² D Guthrie 1960, *ref. cit.*, note 49, p. 19.
- ⁸³ Quoted from D Guthrie 1960, *ref cit.*, note 49, p.6.
- ⁸⁴ NLS Acc. 10000/17: RSE Council Minute of 8th May 1829.
- ⁸⁵ NLS Acc 10000/17: RSE Council Minute of 18th January 1830.
- ⁸⁶ A M Clark "Sir Walter Scott FRSE. A Bicentenary Tribute to A Borderer between two Generations" *Year Book* 1969-71, pp.5-18.
- ⁸⁷ *Transactions of the Royal Society of Edinburgh* **11**, p.508, Proceedings of the Extraordinary General Meeting of 24th November 1828. Sir John Hay, Mr Skene and Mr Robison were the committee appointed to make the necessary arrangements.
- ⁸⁸ *The Journal of Sir Walter Scott* from the original manuscript at Abbotsford, Ed. David Douglas, Edinburgh, 1891, vol.2, p.217. See also A M Clark, 1971, *ref cit.*, note 86, p.14 and N Campbell & R M S Smellie 1983, *ref.cit.*, note 6, p.71.
- ⁸⁹ D Douglas 1891, *ref. cit.*, note 88, p.217 note 3.
- ⁹⁰ RSE Council Minute of 8th November 1953.
- ⁹¹ W Scott Ed. Douglas 1891, *ref.cit.*, note 88, entry for 20th January 1826.
- ⁹² Dr Daniel Reid Rankin (1805-1882) was a medical practitioner in Carluke and a keen amateur geologist and author on local history. An account is given of him in *Bygone Days some recollections* by Daniel Rankin Steuart, FRSE, printed in 1936 and circulated privately. In D R Rankin's *Notices, Historical, Statistical and Biographical relating to the Parish of Carluke from 1288 to 1874* (1874) he gives an account of the Clydesdale Sculptor.
- ⁹³ John Greenshields (1795-1835) was a native of Lesmahagow and lived at Willans in the Parish of Carluke. He was a hewing mason and self-taught sculptor who gained recognition when he presented a half-size figure of Byron to John Flaxman RA in 1827. He was visited by many famous people including Scott who considered him "a sensible strong-minded man" (Lockhart, *Memoirs of the Life of Sir Walter Scott Bart.* Edinburgh 1838, vol.7, p. 167). On the basis of these visits Greenshields produced a seated statue of Scott, now in Parliament Hall, which Lockhart considered "a most meritorious work" (*op. cit.* p.431). Other works by Greenshields include the statue on the Glenfinnan Monument and that of James Watt at the Mechanics Institute, Glasgow.
- ⁹⁴ RSE Council Minutes of 5th February, 4th June 1945 and 6th February 1950 refer.
- ⁹⁵ C B de Laperriere 1991, *ref. cit.*, note 2.

- ⁹⁶ Letter from Dr L Cooper to C D Waterston of 19th March 1992.
- ⁹⁷ H Brück, 1975, ref. cit., note 14, p.42.
- ⁹⁸ NLS Acc 10000/24: RSE Council Minute of 20th February 1903. See also *Proceedings of the Royal Society of Edinburgh* **23**, 1899-1901, p.440.
- ⁹⁹ See D Guthrie 1960, ref. cit., note 49, pp 15-16, and N Campbell & R M S Smellie 1983, ref. cit., note 6, pp.45-47.
- ¹⁰⁰ NLS Acc 10000/23: RSE Council Minute of 25th November 1892.
- ¹⁰¹ D Talbot Rice and P McIntyre, ref. cit., note 79.
- ¹⁰² C B de Laperriere 199 1, ref. cit., note 2.
- ¹⁰³ RSE Council Minute of 8th November 1937.
- ¹⁰⁴ RSE Council Minutes of 8th November, 6th December 1937, 10th January, 7th March, 6th June, 4th July, 24th October 1938 and 6th February 1939 refer.
- ¹⁰⁵ C B de Laperriere 1991, ref cit., note 2.
- ¹⁰⁶ This entry is based on biographical details published by D Guthrie 1960, ref. cit., note 49, pp.8-9; N. Campbell and R M S Smellie 1983, ref cit, note 6.
- ¹⁰⁷ NLS Acc 10000/25: RSE Council Minutes of 18th March, 6th May 1912 and 21 st July 1913 refer.
- ¹⁰⁸ "" E Robinson and D McKie 1970, ref cit, note 76, letter of J. Robison to J Watt, 11th December 1799, letter 211, p. 318.
- ¹⁰⁹ In the preliminaries of *The Monastery* as pointed out by Dr Melville Clerk 1971, ref. cit., note 86.
- ¹¹⁰ *Transactions of the Royal Society of Edinburgh* **11**, p.506, Proceedings of November 26th 1827.
- ¹¹¹ NLS Acc 10000/17: RSE Council Minute of 19th July 1828.
- ¹¹² NLS Acc 10000/5: RSE Minute of General Meeting of 1st December 1828.
- ¹¹³ *Transactions of the Royal Society of Edinburgh* **11**, p.538, Proceedings of meeting of Ist December 1828.
- ¹¹⁴ See entry for John Robison (1739-1805) and note 77.
- ¹¹⁵ A Graves, *The Royal Academy of Arts, A Complete Dictionary of Contributors and their works from its foundation in 1769 to 1904*, London, 1905.
- ¹¹⁶ H W Dickinson and R Jenkins. *James Watt and the Steam Engine*, 1927, pp. 82-83.
- ¹¹⁷ Quoted from J P Muirhead's *The Life of James Watt*, p. 517, ref cit., note 116, p.82.
- ¹¹⁸ Letter of Mrs Jane Farrington, Keeper, Department of Fine Art, Birmingham Art Galleries to C D Waterston dated 24th February 1992.
- ¹¹⁹ *Edinburgh University Journal* 1955-57, p.126.
- ¹²⁰ RSE Council Minutes of 4th December 1944, 8th January, 5th February, 7th May, 4th June, 2nd July 1945, 14th January, 6th May 1946 and 3rd May 1948 refer.
- ¹²¹ C B de Laperriere, 199 1, ref cit. note 2.
- ¹²² Quoted from Anon, *History of the Speculative Society of Edinburgh*, 1845, p.71
- ¹²³ John Holland, *Memorials of Sir Francis Chantrey RA. Sculptor*, Sheffield, 1851.
- ¹²⁴ C B de Laperriere, 1991, ref cit., note 2.
- ¹²⁵ Letter of J J L Whiteley to C D Waterston of 19th May 1992.

***Entries added February 2010 (VMH)**