



THE WILLIAM SHIPLEY GROUP

FOR RSA HISTORY

Newsletter 28 June 2011

A message of respect and admiration was sent on behalf of the WSG to HRH Prince Philip, Duke of Edinburgh, KG, KT on the occasion of his retirement as President of the RSA in March 2011.

Forthcoming meetings

Thursday, 28 July 2011 at 1.00pm. *The Eastlakes, the National Gallery and the Victorian Art World.* Research Curator and WSG member Dr Susanna Avery-Quash, together with her co-writer Julie Sheldon, will introduce the new Room 1 exhibition on the life and work of the National Gallery's first director, Sir Charles Lock Eastlake (1793-1865). Admission free. No booking required.

Exhibitions

Peter Blake: A Museum for Myself. Holburne Museum, Bath, 14 May-4 September 2011

Elected a member of the RSA's Faculty of RDI's in 1981, Sir Peter Blake has provided many extraordinary objects from his collections, together with some of his important works, for the opening show of the renewed and transformed Holburne Museum.

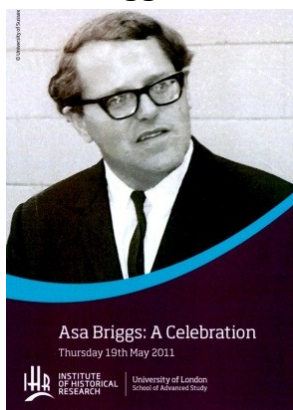
<http://www.holburne.org/peter-blake-a-museum-for-myself/>



Royal Society luncheon in honour of H.R.H. Duke of Edinburgh

Following the RSA's celebratory dinner, on 10 March, commemorating over fifty-eight years of Prince Philip's Presidency the Royal Society held a lunch on 1 June to pay tribute to H.R.H.'s longstanding commitment to science, technology and education.

Asa Briggs: A celebration



On Thursday 19th May the Institute of Historical Research, in conjunction with the British Association of Victorian Studies, held a one-day colloquium to mark the 90th birthday of one of the country's most distinguished living historians, Lord Briggs of Lewes. During the course of the day the meeting considered his remarkable contributions to the development of Victorian studies and the history of communication as well as his role in the growth of the modern universities. During the discussions that followed Lord Briggs stressed that how one event leads to another chronologically is of great interest and importance. His account of the five years he worked as a code breaker alongside Alan Turing in Hut 6, *Secret Days. Codebreaking in Bletchley Park*, which had just been published to coincide with his ninetieth birthday, was made available to delegates.

The House of Dollond

On Tuesday 17th May Neil Handley, Curator of the British Optical Association Museum gave a talk to WSG members at the College of Optometrists in Craven Street on the Dollond family of opticians and scientific instrument makers.

In 1760 John Dollond discovered that he could remove chromatic defects from lenses by fusing flint and crown glass, thereby producing effective optical instruments. For many years telescopes were referred to in much the same way as Hoovers were for vacuum cleaners in the 20th century. It has been recorded that Admiral Lord Nelson made a special visit to the shop to buy a Dollond. Such was the importance of John Dollond's invention of the achromatic lens that he was awarded the Royal Society's Copley medal and elected to their Fellowship.

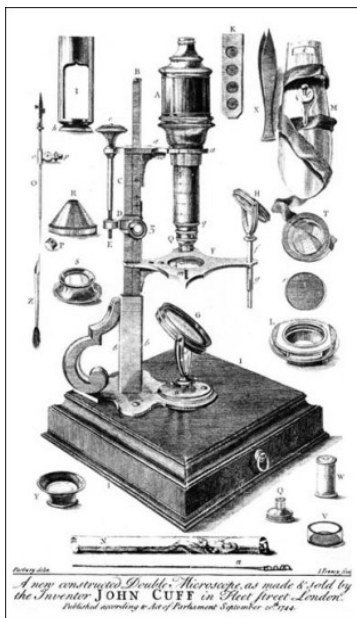


Detail from J. Gillray, *The Death of Admiral Lord Nelson in the Moment of Victory*, 1805 showing his Dollond telescope by his side

John Dollond was elected a member of the Society of Arts in 1761, shortly before his death in that same year. Four years later his eldest son Peter was elected and he proposed his younger brother John for membership in 1773. Five years after Peter's nephew, George Huggins (who changed his name by licence to Dollond) became a partner in the family business, in 1805, he too joined the ranks of the members of the Society.

The House of Dollond also made the improved microscope, which fellow optician John Cuff designed following advice by founder member of the Society of Arts, Henry Baker FRS who featured this new microscope in his important book *Microscopes Made Easy* (1744)

The Society offered prizes for the production of high-quality glass in the years after Dollond's invention but only made two awards in 1770 and 1771 for 'attempts'. However in the 19th century it played a leading role in the design of the whole instrument. Jabez Hogg in *The Microscope* (1855) said that the Society's Transactions had been 'the vehicle through which nearly all the improvements in the construction of telescopes and microscopes have been made known to the world'.



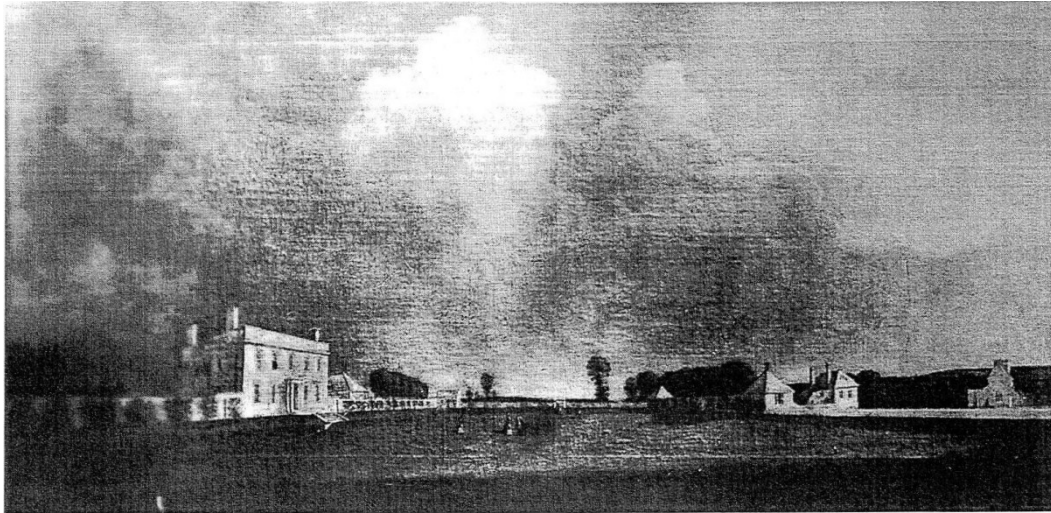
Following his talk the Curator then took the WSG members on a tour of rooms of the College of Optometrists, pointing out objects from the museum's collection, such as a large Meissen figurine of Count Bruhl's tailor astride a bespectacled goat, as well as many fine oil portraits hanging on the walls, including that of Sir Joshua Reynolds wearing his wig glasses. The tour concluded in the packed museum in the basement where visitors can feast their eyes on all sorts of optical related material, including the spectacles said to have belonged to Dr Samuel Johnson.

If you wish to visit the museum by prior appointment and/or book a tour of the College meeting rooms please contact the Curator, Neil Handley on 020 7766 4353 or email museum@college-optometrists.org. The museum website provides information on the collections and exhibitions, including online exhibitions, etc at <http://www.college-optometrists.org/museum>

Benjamin Franklin and the Shipley Family

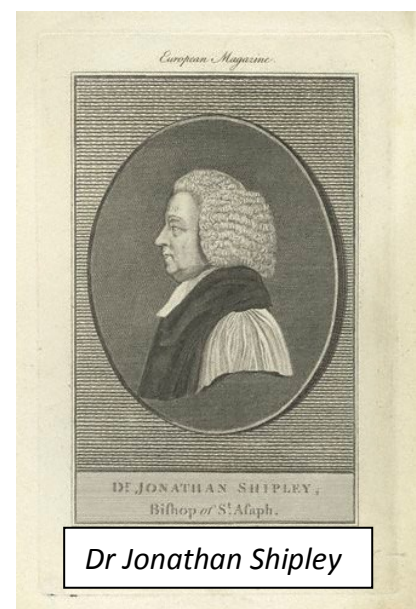
On Monday 23rd May Dr David Allan gave a talk at Benjamin Franklin House, 36 Craven Street, on Benjamin Franklin and the Shipley family.

Jonathan Shipley (1676-1719) was born in Leeds and came to London to be apprenticed to [Sir] Joshua Sharp of the Livery Company of Leathersellers but who was in business as a Stationer. Sharp made Jonathan and William Davies (1680-1765) his partners and successors. Jonathan married William Davies's sister Martha. They had four children, three of whom survived Jonathan's death in 1719. William Davies's father was a Hampshire gentleman who lived at Twyford House near Winchester, where the Shipley children were sent to live.



William Shipley, *Twyford House* (from a photograph of a now lost painting)

When he was thirteen Jonathan junior (1715-88), the eldest of the Shipley children, was apprenticed in the Stationers's Company to his uncle William Davies but at the same sent to the historic Grammar School of Reading, which counted amongst its alumni Archbishop Laud. He was then steered towards Oxford and the Church, he was at St John's College and then Christchurch, BA in 1735 MA in 1738. Tutor to the family of the Hon. George Mordaunt, brother of the late Earl of Peterborough. He wooed and married in 1743 Anna Maria Mordaunt, George's daughter and Maid of Honour at Court. He was made Rector of Silchester and Sherborne St John, Prebendary of Winchester and Chaplain General to the Duke of Cumberland at the battle of Fontenoy (1745); DD in 1748; Canon and Dean of Winchester in 1760 and Rector of Chilbolton in 1765. He inherited Twyford House and in 1769 became Bishop of Llandaff and then of St Asaph. In 1770 he preached and wrote in favour of the American colonies.



In the meantime the Bishop's younger brother, William Shipley (1715-1803) had obtained celebrity as the Founder of the Society of Arts and had recruited Benjamin Franklin into its membership in 1755. At Maidstone in 1786 William founded a society to encourage agriculture and the arts in Kent and Benjamin Franklin lent his name to the project.



Richard Cosway, *William Shipley*



Benjamin Franklin judging entries for the Society of Arts' polite arts premiums

It is possible that William had introduced Franklin to Bishop Jonathan, who of course shared his concern for the rights of the colonies. Certainly they became great friends and Franklin stayed with the family at Twyford House. There is extant a charming letter written by him to the Bishop's wife describing the coach journey he had taken in 1771 from Twyford to London with her eleven year old daughter Betsy (Elizabeth Shipley) who was being sent to boarding school. Franklin also became close to an older daughter, Georgiana Shipley (1755-1806) who inherited the family's skill in drawing. The romance and tragedy of Georgiana's later life was described and the Shipley family's connection with the great Orientalist Sir William Jones (1746-94) was also mentioned.



Georgiana Hare-Naylor (nee Shipley) with her son Augustus William Hare

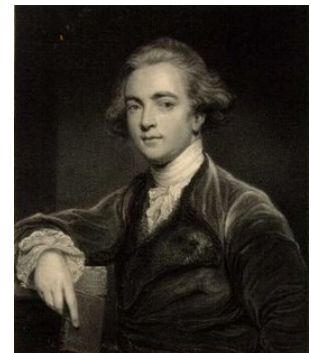
Dr Allan concluded by referring to two historical puzzles. The engraving of the Parish Church of Ecton in Northamptonshire (the Franklin family came from Ecton) which bore the signature 'J. Shipley' but was much in the style of William Shipley's work, and the relationship between Franklin and John Walter I (1739-1812) founder of *The Times* and printer to the Society, who had been a pioneer of mechanical printing.

THE SOUTH-WEST VIEW OF THE PARISH CHURCH OF ECTON IN NORTHAMPTONSHIRE.



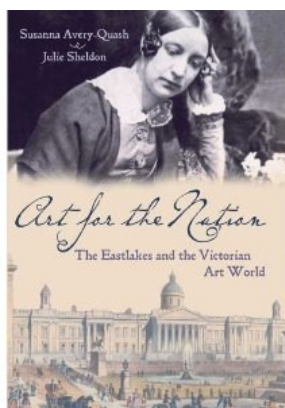
Historical Puzzle 1:

J. Shipley, *Parish Church of Ecton, Northamptonshire*



Sir William Jones (1746-94)

Lady Joan Reid, Trustee of Benjamin Franklin House and Franklin scholar, who took the chair, gave the WSG a warm welcome to the House and made several useful contributions to the discussion.



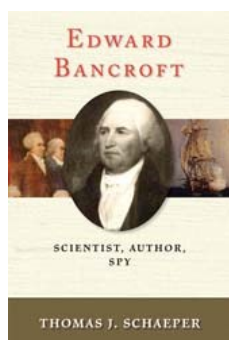
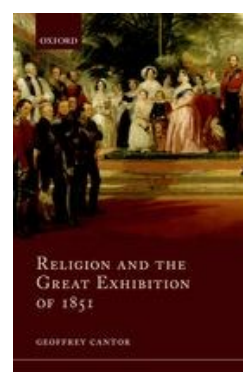
Susanna Avery-Quash & Julie Sheldon, *Art for the Nation: The Eastlakes and the Victorian Art World*, National Gallery London, 2011

At the age of sixteen Charles Eastlake was awarded the Society's Silver Medal for a drawing of Cupid and Psyche in 1810. Elected a member in 1847 he took an active interest in the Society's work, particularly on the subject of artistic copyright. He chaired the Society's Committee which succeeded in procuring the passing of the 'Art Copyright' Act of 1862. This book accompanies the gallery's exhibition on Eastlake which runs from 27 July to 30 October 2011, and WSG member Dr Avery-Quash will be giving a free public lecture on the Eastlake

transformation of the National Gallery, in the Sainsbury Wing Theatre, National Gallery on Thursday 28 July at 1.00pm. No booking required

Geoffrey Cantor, *Religion and the Great Exhibition of 1851*, OUP, 2011

The 1851 Exhibition was not only a celebration of Victorian Britain's scientific and economic pre-eminence but also a hymn to the religion that underpinned it, argues Geoffrey Cantor in his recently published book *Religion and the Great Exhibition of 1851*. Cantor draws on sermons and extensive source material to demonstrate that it was widely understood by contemporaries that the exhibition possessed a religious dimension. Jews, Unitarians, Quakers, Congregationalists and a wide spectrum of Anglicans generally welcomed the exhibition – but all for different reasons.



Thomas J. Schaeper, *Edward Bancroft. Scientist, Author, Spy*, Yale University Press, 2011

Schaeper has made a keen analysis of Bancroft's correspondence and diplomatic records to reveal in this biography whether Bancroft should ultimately be considered a traitor to America or a patriot to Britain.

In the following article WSG member Dr Sarah Lowengard, writer and historian of science and technology considers Bancroft's association with the Society of Arts.

A Letter from Edward Bancroft

Edward Bancroft was elected to the Society of Arts in 1787. He was a reasonably active member, sitting on committees, serving as Secretary of the Committee on Correspondence, sponsoring new members and adjudicating or consulting the submissions of others. Election was not the beginning of Bancroft's involvement with the Society of Arts, however. Fifteen years earlier, he had submitted an invention of his own for consideration. His letter and related materials are preserved in the Archives of the Royal Society of Arts. The letters and related information provide a glimpse into the workings of the Society of Arts during the middle years of the eighteenth century.

Bancroft as petitioner

As far as we know, Bancroft first contacted the Society in May 1771, via a letter addressed to Samuel More, Secretary of the Society of Arts.¹ According to Thomas J. Schaeper, Bancroft had only recently returned to London from a trip to Surinam and New England (where he had no doubt been prospecting for new materials he might bring to Europe).² The timing of the letter suggests that at least some of the work leading up to his invention had been undertaken during the voyage. Bancroft's presentation is direct and confident, neither self-deprecating nor aggrandizing as other petitioners were. Bancroft has knowledge he wishes to share with appropriate colleagues. It is not clear whether Bancroft and More were already acquainted. It is possible: In addition to his duties for the Society of Arts, More worked as an apothecary and had been an assistant to the William Lewis, one of the pre-eminent chemists in London.

The subject of Bancroft's letter is dyeing fabric. Undaunted by an earlier failure to convert a red stain used in Guyana into a commercially viable red dyestuff, Bancroft notes, he continued to search for and study colouring materials.³ He was especially interested in the problems of dyeing cotton fibres, native to Central and South America and an important commodity in Europe. Bancroft's goal was identical to that of many eighteenth-century investigators into dyes and dyeing: materials and processes that would yield attractive colours, ones that resisted fading and were not too expensive.⁴

Mid-eighteenth century understanding of cotton dye techniques lagged far behind that of wool and silk, and interest in improving knowledge was widespread. The chemistry of cotton dyeing is sufficiently different that successful results demanded special attention. The higher temperatures needed in the dye bath could add significantly to the expense. Cotton dyed or printed by even the best manufacturers were seldom as permanent as the same colours on wool: Colour was lost in washing and even use. Extra problems arose when attempting to make good black-coloured cloth as certain ingredients—especially the iron sulphates and sulphuric acid—weakened or destroyed the fibres if not carefully employed. Less deleterious methods relied on multiple dyeings, often blue, red and yellow in sequence, adding further time and expense.

Bancroft brought from America a "cheap vegetable growing spontaneously and in great plenty," the subject of his letter to Samuel More. According to Bancroft, his experiments showed that an extract of his substance, when added to the dye bath, improved adherence of the colouring molecules to the fibre. Dyers who used this assistant (as they are now called) obtained a better-quality colour. No longer would it be necessary to first dye with blue and then over dye with other colours to achieve a good, rich black. The addition of this assistant to the dye bath improved colour take-up even in lower temperatures. Fibres were less likely to be damaged and cottons could be coloured with substances that ordinarily could not withstand higher temperatures. The result would be an increased range of colours, a more permanent result and one obtained at a lower cost.

Bancroft, in his letter, explained to More that he wished to receive a premium and to publish the discovery for the public good. A patent "would be repugnant to the vigour & extension of those arts

¹ Edward Bancroft to Mr. [Samuel] Moore, 20 May 1771, [R]SA PR.GE/110/29/85. Other documents in this exchange are John Arbuthnot to Samuel More, 4 April 1772, [R]SA PR.GE/110/29/88; Committee Minutes of the Chemistry Committee for March, 1773 Minutes of Various Premium Committees 1772–1773 [R]SA PR.GE/112/12/14; Great Britain. Parliamentary Act in Favor of Dr. Edward Bancroft, 30 May 1785 (London, 1785).

² Thomas J. Schaeper, *Edward Bancroft, Scientist, Author, Spy* (New Haven Conn.: Yale University Press, 2011), 24, 30.

³ This red color is described in *Natural History of Guyana* (London, 1769), 256.

⁴ Sarah Lowengard, "Parameters of Color Quality," *The Creation of Color in Eighteenth-Century Europe* 0-231-50369-5. Gutenberg<e> (New York, NY: Columbia University Press. 2006), http://www.gutenberg-e.org/lowengard/B_Chap01.html. Accessed June 2011.

and of that commerce which are the natural sources of British wealth & power.”⁵ Bancroft’s statement makes obvious the purpose of his letter. An award would compensate Bancroft for his work without requiring that he give up his claim to the discovery this substance.

Bancroft included samples of cotton coloured with his reformulated dye liquor. One set offers nine different yellow-brown to black shades that (we assume) he obtained from his formula. Bancroft also sent four larger pieces of the darker- and lighter-coloured cottons. These samples could be used for assessment, leaving the smaller, numbered samples intact as a separate reference tool. By including both sample chart and larger pieces, Bancroft displayed an understanding of the needs and workings of the Chemistry Committee unusual among petitioners. Many similar letters have samples attached. Few are numbered and frequently only tiny pieces remain, as the single example was halved or quartered so that tests could be made.



Bancroft's nine numbered sample colours. In his letter to More, he singled out No. 7 as similar to the nankeen colour then popular in Europe, and noted that the others would be very suitable for use in tropical climates.¹



Two of Bancroft's four larger-sized fabric samples. The odd shape of each piece indicates the cuttings taken for testing.⁶



Samples, after testing.⁶

Bancroft’s samples were given to the calico printer John Arbuthnot for testing, and Arbuthnot’s letter to More is also in the RSA archive.⁶ In his letter, Arbuthnot describes the tests used to assess Bancroft’s claims. Pieces were boiled in vinegar (to simulate damage from the air) or soapy water (a quick way to test the effect of multiple washings). The result, Arbuthnot noted, was little or no alteration to the colour of the cotton. Arbuthnot neglected to return the samples to the Chemistry Committee, an omission he noted in his letter. Normally, this would mean that the committee could see for themselves Arbuthnot’s assessment but the extra fabric provided by Bancroft meant that the Chemistry Committee was able to repeat the tests. Together, they confirmed the statements of both Bancroft and Arbuthnot. This set of test samples is also in the RSA archive.

⁵ Bancroft to More, cited above.

⁶ Arbuthnot to More, cited above. John Arbuthnot (1728/9-1797), owner of the Ravensbury printworks, was a frequent judge of submissions relating to textiles.

Conclusions

Despite the positive reports, Bancroft received no award from the Society and this dye assistant was not made available to the public in this form. The Chemistry Committee minutes for March 1773 indicate that Bancroft withdrew his work from consideration at that time.⁷ No explanation exists for this action, and there are a number of possible reasons. I have suggested elsewhere that the adjudication process was, for Bancroft, a means to bring his discovery to the attention of the manufacturers most likely to use it.⁸ As an outsider—a colonial with no formal training as a dyer and, in 1772, someone still making his name as a natural philosopher—approval of the Society would enhance the credibility of his discovery. It may be that the reward, mentioned to Bancroft informally, did not meet his financial needs. He may have discovered that it was impossible to obtain the substance in sufficient quantity. Perhaps, caught up in other work, Bancroft found he had no time to oversee dissemination of a new dye method or that it was similar to something recommended by William Lewis.⁹ Or perhaps continued chemical research led Bancroft to consider quercitron, the subject of his 1775 patent, a more viable and valuable commodity. Whatever the reason, Bancroft's later participation in the Society of Arts proves the episode did not end in rancour. And Bancroft's early encounter with the Society of Arts perfectly highlights the approach of the Society in that period: open-minded, deliberate and equally encouraging to individuals and industry.

Dr Sarah Lowengard

Nuffield Place

Nuffield College has presented the former home of William Morris, Lord Nuffield, between Wallingford and Nettlebed to the National Trust. The founder of Morris Motors brought this country house designed by the architect Oswald Milne (1881-1968) in 1933 and lived here until his death in 1963.

Despite his extraordinary philanthropy – he gave away more than £30million (equivalent of £11bn today) - to support education, hospitals and medical research, Lord Nuffield never



foresaw that there would be interest in him and the life he led at home, but Richard Henderson, the Trust's General Manager, said that 'this acquisition is important; it is all about the man and the spirit of the place. The house remains just as the great industrialist left it. It retains most of the furniture acquired by Lord and Lady Nuffield together with the robes worn to official functions, personal letters, books, framed cartoons and photographs. The National Trust is calling on its supporters to help them raise £600,000 to provide visitor facilities to enable the property to be opened to the public as soon as possible. Kevin Minns, Chairman of the Friends of Nuffield Place and great-great

⁷ [R]SA Committee Minutes for the Chemistry Committee, 18 Feb 1773, cited above.

⁸ Sarah Lowengard, "Cultures of Science, Cultures of Technology," *The Creation of Color in Eighteenth-Century Europe* 0-231-50369-5. Gutenberg<e> (New York, NY: Columbia University Press. 2006), http://www.gutenberg-e.org/lowengard/A_Chap02.html#39. Accessed June 2011.

⁹ Lewis was the author of the *Commercium Philosophico-Technicum* (London, 1763), which included a significant section on black dyeing.

nephew of Lord Nuffield, said that by accepting this property the National Trust had provided a wonderful opportunity to preserve the legacy of William Morris and his home 'once and for all'.

Lord Nuffield's remarkable philanthropic activities were recognised by the RSA in 1937 when the Duke of Connaught, President of the RSA, took great pleasure in presenting him with the gold Albert Medal 'for services to industry, transport and medical science'. The Duke congratulated Lord Nuffield on being 'a great employer of labour, even in the most depressed periods, and had improved the transport powers of the world and thereby increased the facilities of commerce, especially in your own country'. Your wealth you have applied not to yourself but to the improvement of trade, commerce and science, all of them aiding the happiness and well-being of all classes of people'. In returning thanks Lord Nuffield said that the award of the medal 'had touched him almost more than anything in his life'. He added that 'one of his earliest memories was of his parents' admiration for the Prince Consort, and that impression had remained with him through his life. To receive a medal instituted in his memory from the hands of his son...was an honour which he appreciated more than any he had yet received.

Obituary

Robert Heritage CBE, RDI 1927 - 2010

The death in 2010 of the distinguished designer, Robert Heritage, was largely overlooked in the world of obituaries. Robert's wide ranging and varied career as a furniture and product designer represents a major contribution to 20th century design, ranking alongside that of Robin Day OBE RDI

Robert, or Bob, as he was widely known, trained at the Birmingham College of Art from 1942 through to 1946 before going on to the Royal College of Art where he trained under the direction of Professor R D Russell RDI in the School of Wood, Metals and Plastics. After leaving the College he eventually went on to set up his own design practice, and began to work as a consultant to many of the leading British, high quality, modern furniture manufacturers of the day, notably Archie Shine, Beaver & Tapley, Gordon Russell and Heals, mainly designing domestic living and dining room furniture.

His work for Beaver and Tapley included a very successful range of wall hung storage units. The Tapley SL group had a unique selling feature - each unit was supplied with a wall fixing batten with an integral spirit level!

In 1967 Bob was commissioned by Cunard to design a dining chair for the QE2. The innovative design he conceived employed new technology in the use of adhesives in the bonding together of aluminium castings. The chair was made by the Ernest Race Company.



Robert Heritage, Dining chair commissioned by Cunard for QE2 and made by the Race Company, 1967

He was also well respected for his work as a product designer, which included lighting for Concord Lighting, Rotaflex, GEC and Technolyte, cutlery for Yote and clocks for Smiths Industry. His timeless designs remain classics of the period.

A highly talented and modest man, he was appointed a Royal Designer for Industry (RDI) in 1963, and some years later he was appointed Professor of the School of Furniture at the Royal College of Art - 1974 - 1985

He received the CBE in recognition of his outstanding achievements as a Designer and for his work for British Industry for over 50 years.

Ray Leigh
Former Chairman, Gordon Russell Ltd

Loan from RSA collection



The RSA will be lending its portrait of *The Queen* painted by Justin Mortimer in 1998 to the National Portrait Gallery's touring exhibition of sixty of the most remarkable portraits of Elizabeth II to mark the monarch's Diamond Jubilee in 2012. The exhibition will open in Edinburgh in June before moving onto Belfast in October. It will then show at the National Museum of Wales in Cardiff from 4 Feb to 29 April 2012 before being put on show in London from May to October 2012.

2011 marks the **centenary** of the death of Sir William John Crossley. At the age of twenty-three he set up, with his brother, the engineering firm of Messrs Crossley Bros Ltd in Manchester. They soon made a reputation as gas-engine manufacturers. In 1885 they were awarded the gold medal offered under the Howard Trust by the Society of Arts at the International Inventions Exhibition for the 'Otto' gas-engine and in 1889 the Society awarded them another medal. Sir William found time for much public work. He became President of the Manchester Young Men's Christian Association, treasurer of the United Kingdom Alliance, chairman of the Manchester Hospital for Consumption and Diseases of the Throat, a member of the Cheshire County Council and a Justice of the Peace for Manchester and Cheshire. He was also one of the original promoters of the Manchester Ship Canal, of which he was elected a director. He stood for the Altrincham Division at the General Election in 1906 and defeated Coningsby Disraeli as candidate.

Sir William built and furnished, at his own expense, a sanatorium in Delamere Forest, Cheshire for the treatment of consumptive patients from Lancashire town. In recognition of his public services he was awarded the freedom of the city of Manchester, and in 1909 he was created a baronet. He was elected a member of the Society of Arts in 1884.

Honorary Patron: Lord Asa Briggs of Lewes FRSA. *Honorary President:* Dr David Allan, FRSA; *Honorary Vice-Presidents:* Gerry Acher, CBE, LVO, FRSA; Sir Paul Judge, FRSA; Professor Franz Bosbach, Director, University of Duisburg-Essen. *Honorary Benefactor:* Ronald Gerard OBE, KStJ, FRSA. *Honorary Member:* Hermione Hobhouse MBE; *Committee:* Dr Nicholas Cambridge FRSA (Chair); Dr David Allan FRSA (Director of Studies); Prof John Davis FRSA (Deputy Chair); Anthony Burton, FRSA; Mrs Susan Bennett, MA, FRSA (Honorary Secretary and Treasurer); Observer; Rob Baker, RSA Head of Archives and Library