AIA Bulletin

The ASSOCIATION for INDUSTRIAL ARCHAEOLOGY

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# Dedication rewarded

**The Surrey Industrial History Group Award for 1986** was made to Tony Harcombe, who over the past twenty years has been acquiring and restoring internal combustion engines at his Westcott Stationary Engine Museum in Dorking. The collection, which has been featured in a television film in an Open University technology series, may be viewed by private arrangement.

Tony is pictured here with a "Jack-of-all-Trades" made in 1909 by Fairbanks Morse & Co of Chicago. The engine is 2 hp, runs on petrol and has low tension magneto ignition. The large drum contains water for cooling. The engine formerly drove machinery for preparing cattle feed on a local farm.

SIHG began presenting annual awards in 1983 for outstanding contributions to industrial archaeology in the country. Previous recipients have restored Cosford Mill, which is a watermill near Thursley, Outwood windmill and Baynards railway station.

The Historical Model Railway Society's *Newletter* Number 147 (March 1986) carried a very useful Note by Paul Bartlet on **Copyright Law.** AIA Council member Bob Carr thought this would form a valuable aide-memoire for Association members and we are grateful to the HMRS for permission to reprint it. There is an 800 page tome on the subject *Copinger and Skone James on Copyright*, but it is not very suitable for casual "dipping into". A very useful alternative is *Copyright law concerning works of art, photographs and the written and spoken word* by C.H. Gibbs-Smith, a Museums Association Information Sheet No. 7 pub. by Museums Association, 87 Charlotte St. London WIP 2BX.

Some comments based on his notes may be of interest to members but, to paraphrase his comments, the laws are very badly drafted and case law has not sorted out all of the ambiguities.

Copyright is a right of property but it is an abstract entity. Copyright is automatically conferred and covers virtually every way that an idea can be recorded, but note ideas and fact cannot be copyrighted; it is the form of words which surround the ideas or facts that can be copyrighted. If facts are tabulated, the way the facts are set out can be copyrighted, but once they are reorganised there is no longer any protection. The copyright in unpublished written work is perpetual until it is first published, then the copyright runs for 50 years, either after the death of the author (or last author for a joint work) or after publication, whichever is longer.

Photographs are more complex because of commissioning of work and also because the law has changed. If a photograph is commissioned (payment for taking a photograph) the copyright belongs

to the commissioner. But the commissioner does not necessarily own the negative, thus the owner of a negative does not necessarily own the copyright. It is common practice for a photographer to keep the negative but he has no right to publish or reproduce prints from it, though he can take one for his own private study (but not for use by another). A photographer can self-commission a photograph and thus owns the copyright.

The duration of copyright in photographs varies. If taken before 1st June 1957 it is 50 years from when it was taken (irrespective of whether it has ever been published or not). If taken after this date the copyright remains perpetual until it is first published, it then runs for a further period of 50 years. (The Act is soon to be revised and it seems likely that this will change again, but, if it does, it cannot change the copyright in retrospect so this perpetual right will remain). Listing the photographs in a catalogue does not constitute publication and I don't believe that neither does letting another have a copy for private use. If someone else takes a photograph with your camera the copyright belongs to you because they are your materials. This is contrary to the spirit of most copyright law because it is the 'art' which is normally being protected. Copy-negatives do not alter copyright and have no copyright status of their own. However it should be noted that any of the foregoing can be changed by written agreements between a commissioner, photographic subject and photographer.

There are many other facets to copyright, some worth noting are:

a) That there is no infringement of copyright by exhibition or by copying for and projecting a slide of a copyrighted work in a talk.

b) Crown copyright is similar to other copyright. 50 years from publication or perpetual until published and then 50 years. Copyright in Bills, Acts and the like, Hansard and other Parliamentary papers is nor normally enforced because it is in the public interest that the information is made available.

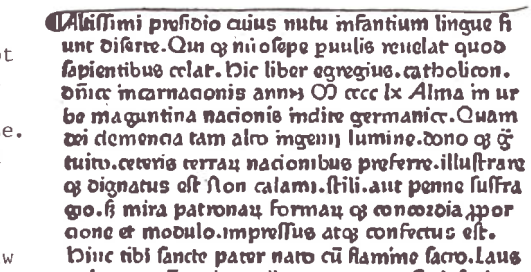
c) The copyright of letters belongs to the author and is perpetual if not written for publication. If published it continues to have 50 years copyright or, if the author is still alive 50 years from the death of the author. Note receiving a letter conveys no right to publish.

d) It is acceptable to make copies of published works for private study. This can be entire 'papers' from Journals in periodicals but only a reasonable amount from a book. Similarly for purposes of criticism, quotations can be published, though there are limitations on how much of this is done.

Copyright law is complex and I hope my brief notes do not mislead anyone, if you are involved in publishing or purchasing collections of documents or photographs I would advise you to read a copy of Gibbs-Smith for yourself.

*Paul W Bartlett*

Regular readers will have noticed that **this** *Bulletin* is different. Since September 1974 it has been typeset on an IBM Selectric Composer; now we move to a daisy-wheel typewriter having been overtaken by the 'new technology'. The Composer, and the era of 'cold composition' it represented is industrial archaeology. It is perhaps timely to comment on developments in type origination since Johann Gutenberg (1394-1486) produced his *Catholicon* in 1450, the first piece of print produced with moveable type.



*Catholicon, printed by Gutenberg in Mainz, 1460*

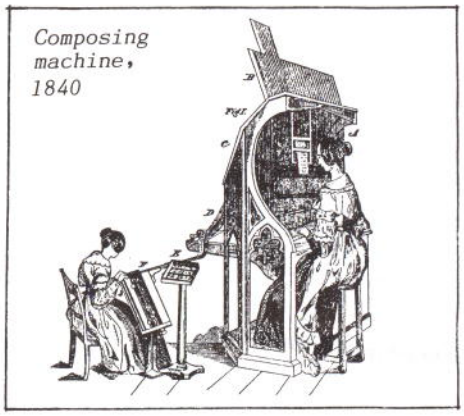
It was four hundred and sixteen years before Robert Hattersley (1866) and Karl Kasterbein (1869) finally produced practical composing machines. This was not for the want of trying for as early as 1682, Johann Joachin Becher had produced an unsuccessful design and by 1900 more than 1,500 composing machine patents had been filed in the USA. The Hattersley/Kasterbein machines were taken up by British printers and almost predictably, the *Times* newspaper was the first London daily to begin mechanical typesetting when it installed a Kasterbein in 1873. There had been some labour difficulties with the London Society of Compositors strenuously opposing the employment of unskilled men and it is not without significance that the *Times* was then the only non-union newspaper in the capital city.

In 1886 the first Linotype machine, developed by Ottmar Mergenthaler and James Clephane, was installed at the New York Tribune and as the names suggests, this cast a 'line of type'. Until recently, nearly every newspaper in the world used Linotype machines, now more sophisticated but basically the same.

In 1889 Tolbert Lanston perfected his Monotype machine, which producing individual letters assisted correction, and these two machines have dominated 'hot-metal' type origination. Both used 'type-metal', an alloy of lead, antimony and tin, with a typical composition being: 74% Pb, 16% Sb and 10% Sn. This combination combines ease and accuracy of casting with a melting point, around 500°C.

Hot metal composition started in the fifteenth century and is used to provide printed impressions by pressing paper on an inked page layout. Made up of 'lead soldiers' forming words, sentences and paragraphs, it is known as 'letter-press printing'.

The other familiar method of printing is known as 'offset-litho' and although developed from Alois Senefelder's eighteenth century invention which used litho stones, did not become popular until well into the twentieth century.



*Composing machine, 1840*

Introduced from America by such firms as Addressograph-Multigraph and A B Dick in the 1940s and 50s, small offset presses capitalised on the advances made in photography and chemical engineering. Offset-Litho uses a zinc or aluminium plate for its printing method and this is produced photochemically from a facsimile page layout put together, or 'pasted-up', using printed impressions, typed sections, line drawings and suitably treated photographic prints. Thus, it does not need metal type and quite soon it became obvious that ordinary typewriters could 'originate' work for offset litho paste-ups.

It came as no surprise when one or two office and printing equipment manufacturers produced 'super typewriters' capable of using interchangeable type-bars and/or 'golf-balls', and 'cold composition' was developed. Probably the best known examples of this technology are represented by the IBM Selectric Composer and the Addressograph-Multigraph Varityper which were available from the 1950s and 60s. Both 'hot' and 'cold' have disadvantages. Hot metal type casting being a potentially hazardous process involving heavy plant and considerable financial investment. Cold copy produced by, for example an IBM Composer, is restricted to

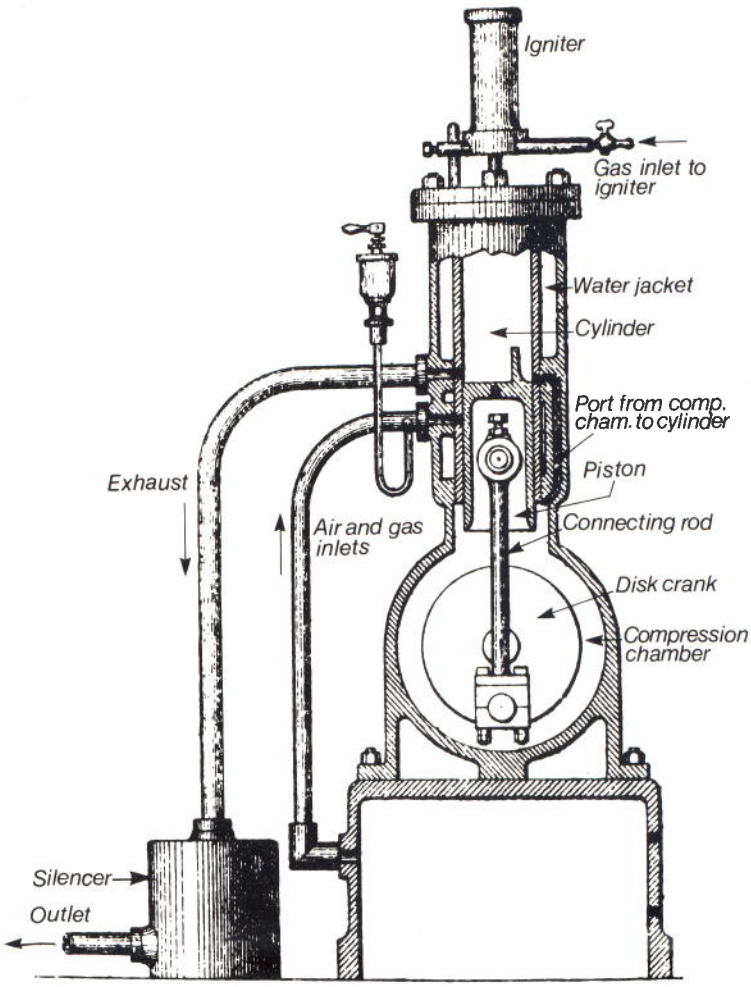
a small number of typefaces and is a 'one-off' production necessitating a re-type should it become inadvertently damaged. Not unknown!

In 1948 a new piece of equipment was introduced to the British print trade, the phototypesetter. Cumbersome and expensive at first, it incorporated an entirely new concept and from the outset looked likely to supercede both existing methods.

Basically, a beam of light is projected through letter forms to a light-sensitive surface which produces a photographic image of a word, sentence or paragraph, the matrix being manipulated to allow letters to appear in the correct sequence. Nowadays the 'matrix' is usually a disc which carries round its circumference a complete fount, with bold, medium, light, italic and various accents or symbols. Using a combination of lenses this image can be enlarged or reduced and, as it is fed to the phototypesetter through a computer, is stored on tape or floppy disk. Once the copy has been 'keyed-in', it is available to make additional copies (with different column widths, typefaces and typesizes) until the master disk or tape is wiped clean.

Since the advent of the micro-chip, phototypesetters have become smaller and relatively cheaper. But the combination of electronic 'keying' and precision electro-mechanical optics, means that capital costs cannot be compared with such machines as the IBN Composer. Certainly, at the moment, phototypesetting is not an economic way of producing the AIA *Bulletin* although the laser-printer may alter the situation.

Readers who maintain continuous runs of the *Bulletin* should note that we have altered the numbering system in order to re-adjust publication to coincide with our financial year. All volume 14 will now be published by the end of June 1987.




*The Day valveless two-stroke engine as exhibited to the Institution of civil engineers on 10th January 1893. It was described as a possible prime mover for electricity generation.*

**Joseph Day (1855–1946) two-stroke engine pioneer.** In 1952 staff of the Science Museum appealed - without success - for any information about an English pioneer of the internal combustion engine called Joseph Day. He designed a valveless two-stroke gas engine of considerable significance, which was patented in 1891-2. Examples survive in the Science Museum and the Deutsches Museum in Munich.

He was born in 1855 in Bayswater, and became one of the first engineers to train at the Crystal Palace School of Practical Engineering. After a 3 year pupilage at Stothert and Pitt's engineering works in Bath, he established himself as an engineer in 1878. After various partnerships and the first of a series of patents granted over 1878-1908, he built the Victoria Ironworks in Spring Gardens, Bath in 1883. He was elected AMICE in 1887.

An attempt to raise capital in 1892 to develop his Gas Engine patents failed to attract share-holders and Day and his last partner went bankrupt in 1893. Day then moved to Weston-Super-Mare where he remained active, as an inventor if not as a manufacturer until 1902. By 1904 he was in London and with the help of his father - a noted London lawyer - he recommenced the manufacture of Day "valveless" two-stroke stationary and marine engines by 1906. These were later produced by the Day Motor Co Ltd. of Putney in 1908. The engines had only three moving parts and would run equally well forwards or backwards. They achieved world wide sale, as petrol and paraffin models. Day was also an inspiration behind the two-stroke engined Trojan car of 1912. The First World War interrupted this work as the firm became busy on Government contracts. In 1923 his firm was reformed as the Day Foundry and Engine Co Ltd. in Richmond, Surrey and Day engines had ceased manufacture by 1927. He died, on Christmas Day in 1946 aged 91, near Twickenham, apparently quite forgotten.

He showed that the two-stroke engine could compete, especially in the field of marine engines, with the Otto four-stroke cycle, and he deserves proper recognition. Information on any aspect of Day's life and work is sought for a planned biography, in particular data on the evolution of the marine boat engine. News of the survival of any Day engines or other artifacts would be particularly welcomed.

H S Torrens
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**Lobby the media.** A note from Colin Evans of Pickering in North Yorkshire, comments that in a recent discussion with Anthony Burton over tv coverage of stationary steam engine activities, it was suggested

that a multiple approach to the appropriate broadcasting authorities might result in some improvement. This is obviously a situation where AIA members, either individually or as members of an organised group, could help considerably and Colin has taken some trouble to search out the relevant addresses. A letter emphasising the importance of the stationary steam prime mover in the industrial history of this country would help the corporate cause and should be sent to:
**For BBC 1 and 2**, Mr A W Wyatt, Head of Documentary Features, BBC Television, Kensington House, Richmond Way, Shepherds Bush, London W14 OAX. **ITV**, Mr R Clarke, Manager of Documentaries and Features, Thames Television, 306/316 Euston Road, London NW1 3BB and **Channel 4**, Mr N Hart-Williams, Commissioning Editor of Documentaries and Features, Channel 4 Television, 60 Charlotte Street, London WIP 2AX.

# BIRMINGHAM RAILWAY MUSEUM

On 6th August the **Birmingham Railway Museum** acquired a new working steam locomotive, *Henry* owned by Messrs. Courtaulds and latterly in the care of the City of Coventry.

Originally built in 1901 by Hawthorn Leslie to the order of Websters Brick and Lime Works in Coventry, at a cost of £1,104, this little engine is a representative of one of the all-time classic Tyneside locomotive designs.

It was named *Rosabel* after the daughter of Henry Webster, the Managing Director and was used to haul bricks along Websters Brickworks Railway for despatch over the LNWR Coventry-Nuneaton Line.

During the Great War, it was used on shunting work on the adjacent Ordnance Factory hauling massive 15" naval guns.

After the war the engine passed into the ownership of Courtaulds Ltd and worked for them until 1926 when it was part exchanged for a new shunting engine from Peckett & Sons of Bristol. This was *"Rocket"* now also in the Museum collection.

*Rosabel* was then overhauled by Peckett and Sons and in 1928 was sold to British Celanese of Spondon, near Derby. Here it was renamed *Henry* after the Swiss chemist Dr. Henri Dreyfus, chairman of British Celanese.

In 1974 *Henry* moved to Courtaulds factory at Foleshill, Coventry, eventually being preserved by them as a static exhibit.

In 1983 restoration of the locomotive was begun by a team working on a Manpower Services Commission Scheme. This very soon expanded in scope to permit restoration of the engine to full working order. The overhaul was carried out at the Edgwick Centre in Coventry.

*Henry* was inaugurated at the Museum's Autumn Steam Festival on Sunday, 5th October and will form part of the active steam fleet at the Museum.

The Museum has recently acquired BFK No.17018 Mark I coach for use as its locomotive support vehicle on main line steam excursions.

Whilst the existing first class compartment seating has been retained and refurbished, the brake compartment has been modified to contain a small galley, storage facilities and a souvenir sales counter.

The exterior of the coach has been repainted in BR (WR) chocolate and cream colours to match the Museum's existing stock.

The BFK joins GWR Saloons 9001 and 80972 to make three main line certified coaches in the Museum's collection, all of which are available for private hire and which ran recently on the Charter Train *"Mile Post 65"* Birmingham to Stratford for Mr. Derek Mayman's 65th birthday.

**English Heritage Grants.** The Government has allocated £5.7m. for rescue archaeology in England in the 1986-87b financial year - including £4m. to aid nearly 300 separate projects on sites of all archaeological ages. 200 of these are said to relate to post-excavation study and the preparation of work for publication. A further 26 are sites and monuments records, forming local or regional data banks. Excavations for the year account for only 32 of 292 projects - although there is a reserve fund of £459,000 to deal with unexpected threats to important sites. The Association has recently approached English Heritage's Chairman, Lord Montagu, to enquire how the total available funds are divided amongst sites of different age groups and classes, i.e. prehistory, medieval, industrial etc.

The June 1986 issue of *British Archaeological News* - published by the Council for British Archaeology - gives details of the launch of the code of practise developed to provide a framework for the relationship between developers and archaeologists. It is hoped that implementation of the code will actually prove to be cost-effective for both sides. The British Property Federation took an active interest and conducted negotiations on behalf of the industry. Copies of the code are available (price £1) from the Department of Urban Archaeology, Museum of London, London Wall, London EC2Y 5HN.

London's canals are receiving a boost with the publication of a full-colour promotional leaflet *Explore London's Canals*. Produced by British Waterways Leisure it describes the capital's canals, their history, and the varied and often unexpected opportunities that they offer for leisure.

These 54 miles of waterway provide a green corridor for wildlife, a resource for youth and activity centres, a good selection of fish for anglers, and a wide variety of architectural settings for artists and photographers; all within a central London location. There are regular boat trips, particularly popular being those through Regent's Park to London Zoo, while other boats offer cruising restaurant facilities for Sunday lunch or evening meals.

These and other leisure activities were featured at the annual Inland Waterways Association's National Waterways Festival held at Boston Manor Park, Brentford Middlesex, over the Bank Holiday weekend, 23-25 August 1986.

For those interested in the history of Britain's canals, the Festival offered the opportunity to buy a newly available video compilation of three much sought after classic canal films. The video cassette, *Canals - Commercial carrying this century*, captures the last stage of commercial carrying on Britain's canal network.

Both the *Grand Union Canal Carrying Company Film* (1930s, silent) and *Inland Waterways* (1950s) feature narrowboat carrying on the Grand Union Canal between London and Birmingham and, together, provide a fascinating insight into the third title, *There Go The Boats* (1950s), is an affectionate look at the last days of commercial carrying in the 1950s, from the working pairs of traditional narrowboats on the narrow canals to the barges and tankers of the broad waterways. the details of and changes to methods of narrowboat carrying this century. The third title, *There Go The Boats* (1950s), is an affectionate look at the last days of commercial carrying in the 1950s, from the working pairs of traditional narrowboats on the narrow canals to the barges and tankers of the broad waterways.

Copies of the video cassette, and the *Explore London's Canals* leaflet are available from: Information Centre & Canal Shop British Waterways Board, Melbury House, Melbury Terrace, London NW1 6JX. Telephone: 01-262-6711 The video film is available in both VHS and Betamax formats.

The London's Canals Project Officer can provide information on all leisure opportunities on London's canals, including useful contact addresses and leaflets and brochures.

Contact: Wendy Varcoe, British Waterways Board, Canal Office, Delamere Terrace, London W2 6ND Telephone: 01-289-9897.