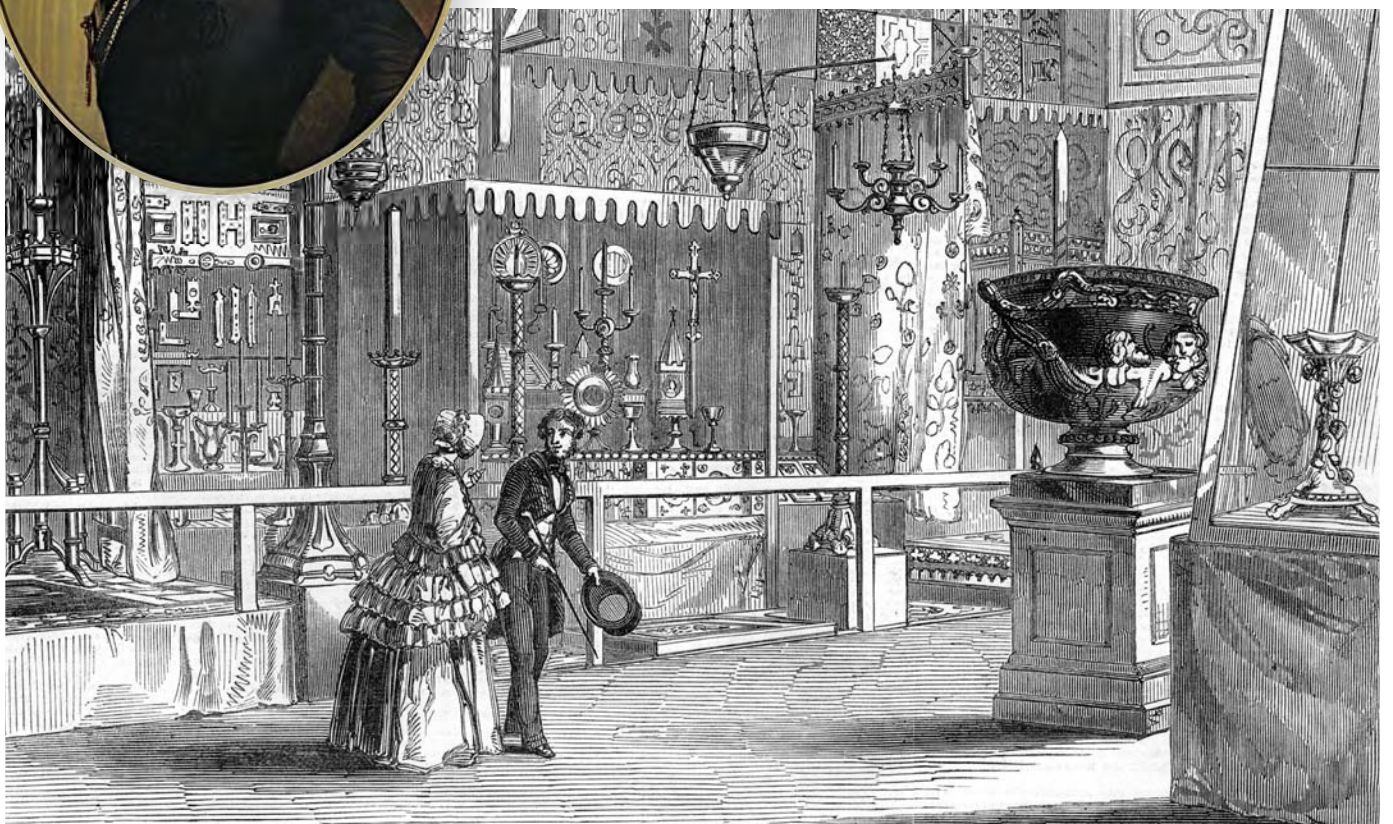


PRECURSOR OF THE GREAT EXHIBITION

BIRMINGHAM'S EXPOSITION IN 1849

Jo Prinsen

According to Elihu Burritt: 'Such an aggregation of mechanical products was unknown until it was presented in Birmingham...It was here that Prince Albert not only got the idea but practically the model of what was produced in the Crystal Palace' (*Walks in the Black Country*, 1868).



Hardman's works for church decoration featured in 'Birmingham Exposition of Arts and Manufactures', *Illustrated London News*, 15 Sept 1849.

Elihu Burritt was not alone among nineteenth-century commentators in bestowing the Birmingham Exhibition (or Exposition) of Manufactures and Art with such significance. Henry Cole in the *Journal of Design and Manufactures (JDM)*, Samuel Timmins' 1866 *Birmingham and Midland Hardware District* and Robert Dent, in his 1880 and 1894 histories of Birmingham, all recognised this little-remembered event as the forerunner of the famous exhibition of 1851.

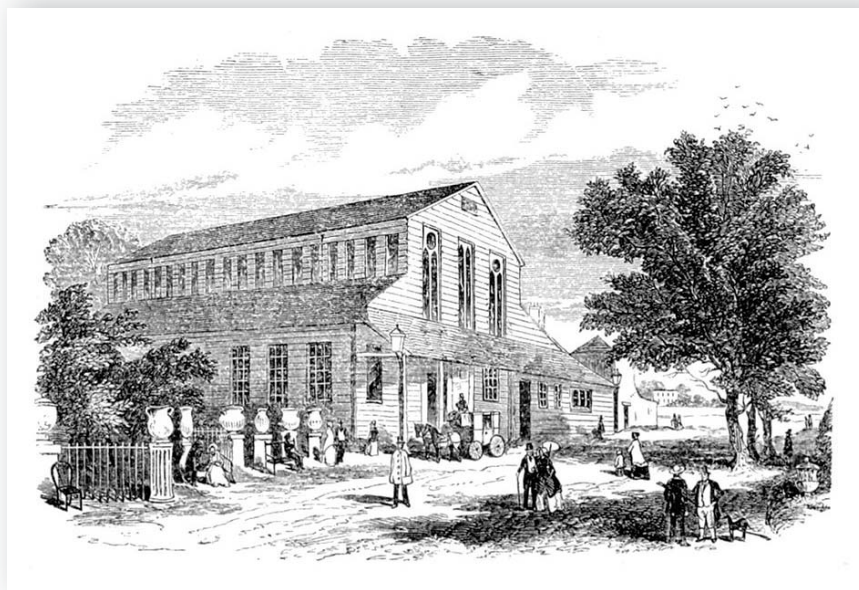
The Exhibition was open to the public from 10am to 10pm daily from 3 September until 15 December 1849, attracting more than 100,000 visitors. Admission cost 1 shilling (5p) or 5 shillings for a season ticket. It was held in connection with the British Association for the Advancement of Science's second meeting in the town (the first was in 1839, for which a much smaller exhibition was organised). Charles Darwin and the celebrated engineer Robert Stephenson were among those connected with the Association who visited the Exhibition.

This was both an industrial and cultural exhibition, in an age where the 'progress' of both were perceived as interrelated. Its opening was timed to coincide with other cultural events: the Society of Artists exhibition of modern artwork, the prestigious Triennial Music Festival at the Town Hall and a soiree where Professor Michael Faraday gave a talk on the electric light 'illustrated by experiments with Mr Gassiot's enormous battery of 100 plates'. A *Birmingham Journal* advertisement referred to 'the great Festivals of Music and Science'.

A Prototype for the Great Exhibition

The Exhibition was funded through private enterprise and organised by a committee, many of whom were also exhibitors, comprising key local industrialists; they consciously intended it to be a model for the Great Exhibition that Prince Albert and Henry Cole were planning for 1851.

Prince Albert visited the exhibition on 17 November 1849 and took a keen interest. The *Birmingham Journal* was struck by his interest in, along with the fine art



'View of the 1849 Birmingham Exposition building' from *The Crystal Palace: its Architectural History and Constructive Marvels* by Peter Berlyn and Charles Fowler Jnr, 1851.

manufactures, the 'common class of goods' including some raised tin items and an iron hinge. But '[T]he most natural expression of approbation and interest [from Albert and his accompanying party was] ... when the beautiful little knitting machine of Whitworth, of Manchester, was put in motion', with its 'almost intelligent operation, and imitation of the motion produced by the human hand'. They may have found it charming, but it is notable that technology with the potential to replace labour was being presented. A Whitworth knitting machine was later on display at the Great Exhibition 1851.

The Building and its Location

The Birmingham Exhibition building was 'the first building in the country intended solely for the purpose of an exhibition of manufactures'; as such it was featured alongside exhibition buildings in Paris and Berlin as a significant predecessor of the Crystal Palace in an 1851 publication on its architectural history.

The temporary two-storey wooden hall was built in the grounds of and adjoining Bingley House, the former residence of the Lloyd family, on Broad Street. Its location put it literally on the doorstep of Birmingham's manufacturing hub, and adjacent to the site (where the Library of Birmingham now stands) was RW Winfield's sprawling Cambridge Street Works. However, mention of the noise and smoke from the manufactories is absent in contemporary reports - on the contrary, the exhibition hall possessed a 'sensation of ample air', with impressive decoration and lighting creating a glittering 'palace of industry' (evoking the 'Crystal Palace').

In the approach road a large selection of obelisks and cast-iron vases created a grand impression on arrival, whilst carriages symbolically awaited near the retiring door, showcasing Birmingham's coach-building skills. The pleasant grounds of Bingley House were utilised with 'Fourdrinier's Patent [mining] Safety Apparatus' (later displayed at the Crystal Palace) in operation.

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The Displays

The main hall boasted 131 tables and stands showcasing hardware and fine art manufactures, the majority made in the Midlands – delicate lace being juxtaposed with guns, whilst japanned goods and the bronzes of Messenger and Sons flanked Thomas Edwards’ five-horse power patent direct action steam engine. Edwards is listed as an exhibitor with a similar engine manufactured at Islington Foundry, Birmingham in The Great Exhibition 1851 catalogue.

Models of a saw mill and sub-marine dredger contributed by James Hamilton of New York could be found in the adjoining Bingley House Gallery, along with E.W. Siemen’s Electric Telegraph – a detailed catalogue note by Prosser describes how it used a needle to point to the letters instead of Morse code. A lithographic printing press was operated by a ‘workman in the employ of Mr Underwood’ of Birmingham (again anticipating the later exhibition, where Underwood’s ‘lithographic colour press’ was among several presses on display).

Exhibitors were encouraged to illustrate production stages and raw materials – Cadbury Brothers, then based in Bridge Street, displayed cocoa – nuts, nibs and shell, chicory, and ‘homeopathic cocoa’, chocolate – ground, paste, and flake and (vanilla) eating chocolate, which was still relatively novel and a luxury item due to high import taxes on cocoa beans.

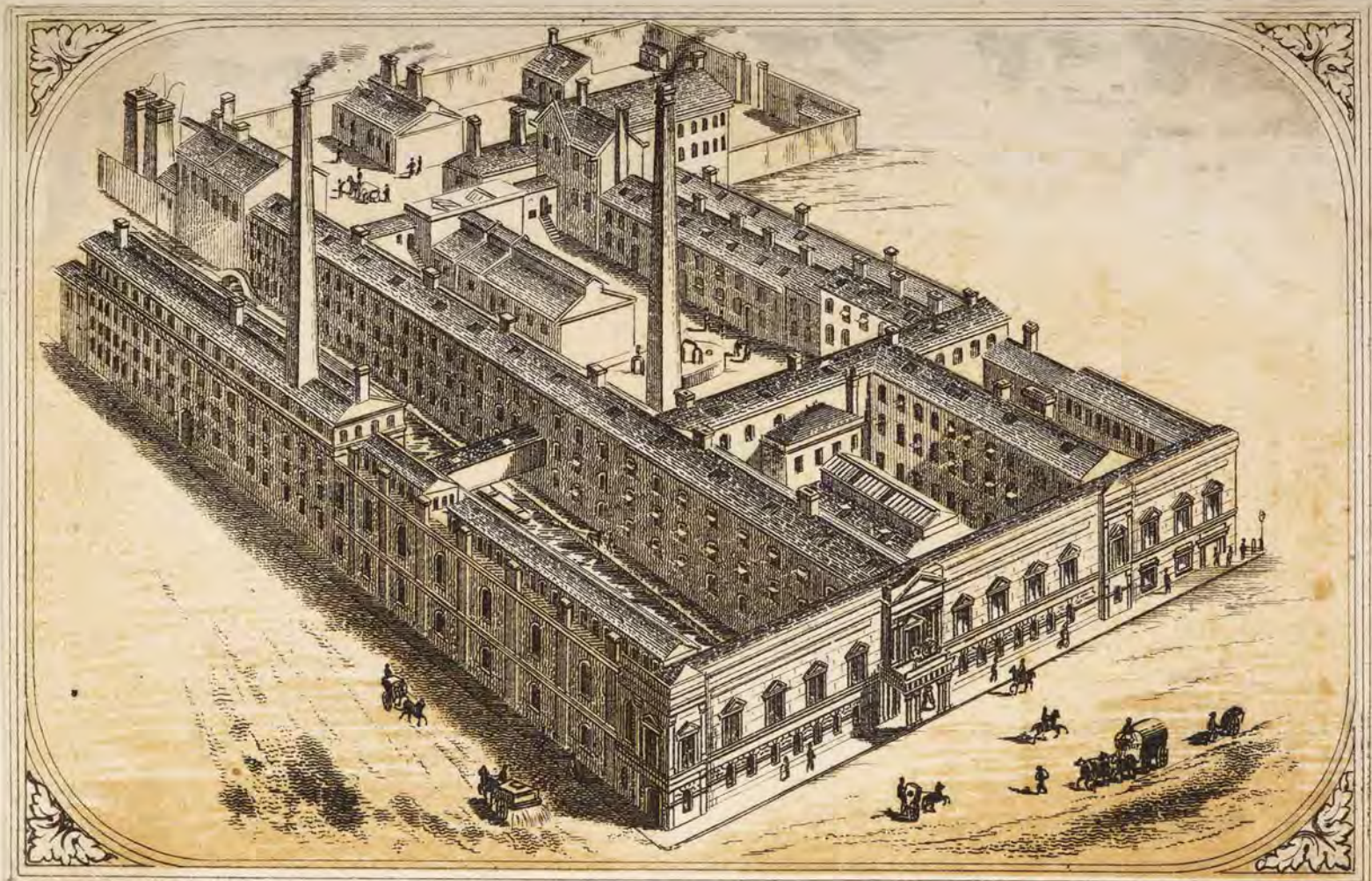
Hardman and Co. of Birmingham’s display of ecclesiastical furniture and decorations was the first public showcase of their work in association with designer A.W. Pugin. It exemplified a return to medieval principles in metal and glass work, which proved influential especially in Birmingham. Along with chalices, staffs and candlesticks were displayed stained glass windows destined for churches in Liverpool, Ramsgate and Durham. Positioned above RW Winfield’s stand were ‘three large painted windows’ by Chance Brothers and Co. of West Bromwich, the centre window, representing the Crucifixion, Resurrection, and Ascension, being ‘intended for the Gothic church of the New Birmingham Cemetery’ [Warstone Lane, Hockley].

Chance and Osler

An impetus towards perfection had been given to the glass trade when glass excise duty was repealed in 1845. Chance Brothers demonstrated ingenuity in mechanising the glass-making process, and great technical achievements in collaboration with the French glass-maker Georges Bontemps. Chance Brothers pioneered and improved plate glass and would go on to utilise it in a cutting-edge way to glaze the Crystal Palace; however, in Birmingham they displayed samples of optical, flint and crown glass, but not plate glass (which was displayed by The London Plate Glass Company).

Follett and Clarkson Osler utilised machinery in the pursuit of artistic excellence, and their glass-cutting room on Broad Street featured steam-powered precision cutting machines which facilitated more elaborate and ornate work. Follett Osler developed a new technique for building up solid glass around a metal core which meant the firm could put glass to novel and large-scale uses. Their famous cut Crystal Fountain centrepiece for the Great Exhibition 1851 weighed 4 tons.

The centrepiece at the Birmingham Exhibition was also a mammoth glass creation by Osler, a Crystal Glass Candelabrum, 20 feet high, with two tiers carrying 30 lights in total. Osler’s reputation was enhanced by his pioneering work as a meteorologist supported by the British Association. Commissions from Prince Albert following the 1849 exhibition can only have given weight to Osler’s claim to the 1851 commissioners that he would create ‘something really worthy, for which the cost and labour would not be worthwhile if it is to occupy a secondary place’.



F. Crew, lith. 105% Dale End.

Cornish Bro^r Imp & Publishers.

MESS^{RS} ELKINGTON, MASON & CO^S MANUFACTORY AND SHOW-ROOMS.

The manufactory and show rooms of Messrs Elkington, Mason and Co. Birmingham.

Elkington

Birmingham silversmiths Elkington, Mason & Co. were prominent exhibitors, occupying three stands and a glass case in the central section of the hall. As patentees of the 'electro-plate' (having capitalised on a process invented by Birmingham surgeon John Wright) they combined the renewed emphasis on skilled artisanship with mechanisation, new processes and the beginnings of mass production.

Prince Albert was impressed with Elkingtons silver electro deposited and gilt copy of a celebrated pewter dish in the Louvre (decorated with the four elements, Minerva and the seven Liberal Arts) - this had been 'restored and partly recomposed' for Elkingtons by the acclaimed Danish designer Benjamin Schlick. Albert purchased the dish and a student of

the Birmingham School of Design, George Stanton, was commissioned to incorporate it into a table which Albert presented to Queen Victoria on her birthday in 1850, and later loaned to the Great Exhibition.

'The commercial movement of the day', proclaimed the *JDM*, was electroplating and electrotyping (a chemical method for forming metal parts that exactly reproduced a model). At Birmingham Elkingtons exhibited electrotype 'copies of old silver chasings'. GR Elkington declared the process '[T]he most efficient way of spreading fine taste, and of educating the public mind to a due appreciation of the really beautiful'. It took antique works out of the confines of private collections, making fine art more accessible to the middle classes, and was credited with elevating the working classes too, or at least the artisans that produced it.

The Importance of Education

Training in this type of fine art production was portrayed as increasing the moral standing of the workman: so too was education in general. Around 1840, RW Winfield had established a night school at his brass works for the boys and youths he employed – some of the pupils obtained certificates from the Birmingham Government School of Design founded in Margaret Street in 1843 (which in 1885 was to become the first Municipal School of Art). Reading, writing and arithmetic were taught alongside drawing. Music provision included a works choir and organ. Winfield believed the educational provision fostered respect for authority and good order among his workforce. Other Midlands manufacturers, notably Chance Brothers, also championed education.

Cole and others promoted the idea that the consuming public needed to be educated in ‘taste’; the Birmingham Exhibition was seen as having great educational value to both the artisan and the public. Winfield’s had a reputation aided by their chief designer, WC Aitken, for applying artistic principles to utilitarian objects and brass furniture – for example, decorative metalwork and finishes were used in a patented portable travelling bedstead displayed at Birmingham.

Some brass lamps Winfield exhibited were criticised by the *JDM* for their naturalistic floral treatment on the grounds that metal was an unsuitable material to depict the fragility of the natural subject. One of Winfield’s naturalistic-style lamps c.1848 was later singled out as too imitative and not suited to purpose in Cole’s 1852 London exhibition, *Examples of False Principles of Decoration*. However, the public remained ‘uncultivated’ and the lamps were a commercial success.

Britain considered itself inferior to France in certain areas of fine art manufacture – particularly ornamental metal-work that modelled the human figure with detailed hands and faces – and the *JDM* urged manufacturers to educate their art-workmen in the belief that the more cultured would ‘enter into the feeling and spirit of the design’.

The French Connection

Charles Sallandrouze de Lamornaix of Paris was the main foreign contributor. His stand at Birmingham and simultaneous *Exposition of the Products of French Industry* in Hanover Square, London, afforded those unable to attend the Paris exposition the opportunity to examine items of French manufacture. This industrialist and French politician may well have helped to smooth the way for the Great Exhibition 1851, at which he served as a juror.

Sallandrouze’s Birmingham exhibits included hand-made tapestry carpets, chairs, and a clock representing the Rape of the Sabines modelled by order of the Emperor of Russia. Prince Albert is reported in the *Birmingham Journal* as remarking on examining Sallandrouze’s stand that ‘the difference between our own goods of the same class, and those manufactured on the continent, arose from the latter employing artists’.

The inclusion of foreign manufactures in industrial exhibitions was pioneered in Birmingham, although they were only a small percentage of overall exhibits. It proved controversial: *Berrow’s Worcester Journal* October 1849 reported that at a meeting in Worcester attended by Frances Fuller of Prince Albert’s deputation consulting on the proposed Great Exhibition 1851, Sir John Pakington (Tory MP for Droitwich) remarked on having ‘seen at the Birmingham Exposition, some beautiful specimens of foreign manufacture, and... had heard great dissatisfaction had been expressed at those specimens being admitted...’.

In Britain free trade was in its infancy; protectionism was popular amongst French and Belgian manufacturers, who at the French National *Exposition Industrielle* 1849 ‘declined to set their hardware and their steel near the manufacturers of Birmingham’ (in opposition to the French government’s plans to invite foreign manufacturers). Interestingly, as early as 1836 Birmingham merchant Theophilus Richards (cousin of Westley Richards) had been in talks with the Board of Trade about making an ‘Exhibition of *foreign* manufactures’.

Legacies

The Birmingham Exhibition 1849 was the catalyst for the Great Exhibition 1851 and all its legacies. Elkington, Winfield, Osler and others all went on to win awards at future national exhibitions. Samuel Timmins (1866) cited the Birmingham Exhibition as having given rise to ‘the great advance made by Birmingham in things ornamental’; art-workmen had seen for the first time their work juxtaposed with others, encouraging comparison and skills competition and acting as an impetus for further improvement.

The Exhibition’s success led to the permanent Bingley Hall being built on the site the following year, replacing the temporary building and the old House. Its internal structure was adaptable and it was in use for different types of events until it was demolished after being damaged by fire in 1984. The International Convention Centre and Symphony Hall now stand on the site. ●

Jo Prinsen is pursuing her passion for history having recently attained BA (hons) History from The Open University whilst working full-time in a busy school printroom.

Further Reading

The Catalogue of the Articles in the Birmingham Exhibition of Manufacturers and Art in connection with the meeting for the British Association for the Advancement of Science at Birmingham, September 1849 (printed at M. Billings steam press, Newhall Street, 1849, Birmingham).

The Journal of Design and Manufactures, Vol. ii, Chapman and Hall, 1850 No.7 September, 1849. ‘Original Papers: Birmingham: Its manufactures and approaching exposition of products of industry pp.1-17’.

No.8 October, 1849. ‘Original papers: Exhibition of arts and manufactures, Birmingham, pp.51-69’.

No.9 November, 1849. ‘Original papers: Exposition of arts and manufactures, Birmingham, pp.94-103’.

Samuel Timmins, *The Resources, Products and Industrial History of Birmingham and the Midland Hardware District...* (Robert Hardwicke, 1866).