

## BRISTOL AND THE 1851 EXHIBITION

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The first national trade exhibition held in this country took place in London during 1756-7. It was organised by the Society of Arts and displayed examples of fine manufacturers, such as tapestry, porcelain and carpets. Nothing like this was repeated for nearly a century, but in France similar national exhibitions were held from 1788-1806 and from 1819 were organised on a systematic basis. During the first thirty years or so of the nineteenth century most of the manufacturing areas of Britain saw the opening of exhibitions of machinery and manufacturers<sup>1</sup>, and in 1828 an exhibition under Royal patronage was held in London, at the King's Mews, Charing Cross. This was met with much apathy and undoubted hostility on the part of the Press, and it was not until some twenty years later that the venture was repeated.

The leading proponent of exhibitions of this type was the Society of Arts. In 1845 it organised one in Covent Garden Theatre, London, and in the same year revived the idea of periodical exhibitions of industrial products in England, on a similar plan to the French Expositions. The Society instituted a Prize Fund and offered premiums and medals for the production of manufactured articles. The results of the first two years' awards were exhibited in 1847, and this exhibition was a great success. This led the Society to repeat the venture the following year, and the greatly increased success of this exhibition caused them to decide to hold an international Exhibition in 1851.

The details of the organisation which lay behind the success of the 1851 exhibition, as recorded in the 'Official Illustrated Catalogue, and its voluminous appendices, show that an incredible amount of forethought and ability of high order went into making the arrangements. In the autumn of 1849 Members of the Council of the Society of Arts visited the main manufacturing centres of the country, where they addressed public meetings and canvassed the opinion of leading manufacturers. In the manufacturing centres and large cities, local committees of assistance were formed and more than 5000 influential persons formally registered their willingness to act as promoters of the Exhibition. The result of this gratifying response was the publication of a Royal Commission which authorised the setting up of the exhibition, under the direct control of Commissioners, drawn from public life. The Commission set about raising funds, through the local committees, and in making very detailed arrangements for the form the exhibition was to take.

At that time, it soon became clear that no existing public building was suitable to house the exhibition, and so a competition was advertised to obtain a design

for a new one. Contrary to Continental practice the 1851 Exhibition was organised and financed entirely on a self-help basis, with no government intervention of any sort.

The local committees were charged with the duty of encouraging local manufacturers to exhibit products, and also to ensure that all the goods from a particular locality were representative of that area's manufacturers. They were also to be responsible for discovering the amount of space needed by the exhibitors, for ensuring that each exhibitor did the necessary paperwork and met the various dead-lines.

The information given in the **Official Catalogue** is so detailed, and the Statistical Tables are so complete, that it would be tempting to try to use this to compile a study of manufacturing life in Britain<sup>2</sup>. However, when the exhibitors from Bristol are compared with the manufacturers known to have been working in the City at that time, it is discovered that many well-known names are missing, and in some cases whole industries are not represented at all<sup>3</sup>. It is possible that this is yet another example of the Bristolian's well known apathetic attitude to anything new, and his customary habit of looking inward to the City and himself, but part of the reason must have been the state of the Patent Laws at that time. On the engineering side, in particular, a great many firms throughout the Country refused to cooperate, because of the fear of piracy of designs. This fear was partly overcome by the introduction of the Designs Act of 1850 and the Protection of Inventions Act of 1851. Both of these were hastily drawn up specially for the Exhibition. A general revision of the Patent Law in 1852 resulted in far more engineering firms exhibiting at the 1862 Exhibition, in comparison with the proportion at the 1851 Exhibition.

It is possible to use the illustrations in the **Catalogue** and other books associated with the Exhibition to gain an insight into the standard of design and workmanship. It must be remembered that a great many exhibitors regarded the Exhibition as something of a shop-window for their wares, and so the most extravagant designs were put forward, to tempt potential customers. While it is true to say that some of the excesses of the later Victorian era stemmed from the Exhibition, it should not be thought that the average English home of 1851 contained much by way of extravagance in its furnishings.

The Bristol Committee was under the Chairmanship of Mr W.H.Gore Langton<sup>4</sup>, its secretary was J,Wilkson, and treasurer Sir J.K.Haberfield<sup>5</sup>. At the

time of the meetings arranged by the speakers from the Society of Arts, in 1849, some 65

Bristolians signified that they would support the venture, and eventually 143 persons did so. In total they subscribed £788.5.6, of which £650 went to the Commissioners, the remaining balance being retained for local expenses. Initially 62 concerns asked for space, and eventually 65 actually sent goods. Unfortunately no original records of the activities of the local committee appear to have survived, and so it is not known who the local promoters were. They gathered support by direct personal contact, by public meeting, by newspaper advertisements and by distributing circulars.

As is well known, the design for a suitable building to house the exhibition was put out to competition, being eventually won by Joseph Paxton. Two Bristol men, W Bell, of Clift Cottage, Coronation Road, and S.C.Fripp, address unknown, sent unsuccessful designs.

The British part of the Exhibition was arranged in six main divisions, namely raw materials; machinery; manufacturers: textiles; manufacturers: metallic, vitreous and ceramic; miscellaneous and fine arts. These main groups were further divided to give a total of thirty classes. Each class had its own jurors, whose duties were to examine the goods in each class and award medals for excellence of design, cheapness of manufacture and utility of purpose. The Council Medal was awarded solely for novelty of design, while the Prize Medal was awarded for excellence of workmanship or production. In addition, the Jurors were able to award the distinction of Honourable Mention, for which no medal was given.

## The Bristol Exhibitors<sup>6</sup>

### Class 1 Mining and Mineral Products

Thomas Howard<sup>7</sup>, CE exhibited a collection of minerals, rocks and building stones from the Bristol region. He was awarded an Honourable Mention.

### Class 2 Chemical and Pharmaceutical Products

Thomas Cadby Ponting, 32 High Street, Bristol, inventor and manufacturer, exhibited marking ink, shaving cream and a medicinal vegetable extract.

### Class 3 Substances used as food

Joseph Storrs Fry and Sons<sup>8</sup>, producers, exhibited samples of the cocoa tree, cocoa beans, cocoa products and a drawing showing the processes by which cocoa was manufactured. They were awarded a Prize Medal.

J Jones, of Redland, exhibited a specimen of wheat, grown by spade culture and dibbing.

### Class 4 Animal and vegetable substances used in manufactures

No entries.

### Class 5 Machines for direct use, including carriages, railway and marine mechanisms

Stothert and Slaughter & Co, Avonside Iron Works, exhibited an example of their patent combined propeller engine. They were awarded an Honourable Mention.

Chard and Munro exhibited a Coburg conveyance.

Fowler and Fry<sup>9</sup>, exhibited a low-bodied dog cart with convertible bodies for different uses.

William Heath Jordan<sup>10</sup>, Cumberland Basin, Clifton, exhibited a three-wheel chair, with a reclining seat for persons with spinal conditions.

### Class 6 Manufacturing machines and tools

No entries.

### Class 7 Civil engineering, architectural and building contrivances

C H Harris exhibited a model shop front.

B E Fioberts<sup>11</sup>, 2 Nelson Place, Clifton, exhibited a newly invented window sash, which could be bodily removed from the frame for painting or cleaning.

T Allan<sup>12</sup>, of Clifton exhibited a model and a drawing of his fire-proof iron roof.

### Class 8 Naval Architecture, Military Engineering, Guns and Weapons

John Lavars<sup>13</sup>, Bridge Street, exhibited a model of his floating buoyant settee for use in shipwreck.

William Patterson<sup>14</sup>, entered a model in the competition organised by the Northumberland Lifeboat Committee.

George Gibbs<sup>15</sup>, of Clare Street exhibited his improved registered shot gun. This has provision for keeping damp out of the shot and the mechanism.

### Class 9 Agricultural and horticultural machines and implements

W J Gingell, Nelson Street, exhibited a model corn and seed meter.

John Fowler Jr, Temple Gate Implement Factory, inventor and Proprietor, exhibited a model of his improved draining plough. He was awarded an Honourable Mention.

Fowler and Fry, Temple Gate Implement Factory, designers and manufacturers, exhibited a farm cart, capable of tipping its load.

Joseph Amos, King Street, manufacturer, exhibited a barrel churn, with improvements.

Chard and Munro, Manufacturers, exhibited a one horse harvest cart, a light pony cart and a Coburg.

William Cambridge<sup>16</sup>, Temple Gate, exhibited a patent press-wheel roller, or clod crusher, used for killing wire worm.

Charles Philips & Co<sup>17</sup>, Baptist Mills Foundry, Bristol, manufacturer, exhibited his patent turnip cutter. The Jurors did not think much of it.

### Class 10 Philosophical, Musical Horological and Surgical Instruments

J H Allis<sup>18</sup>, Inventor and Manufacturer, exhibited a bracket regulator clock, with a new type of compound pendulum.

Dell Brothers<sup>19</sup>, Inventors and Manufacturers, exhibited specimens of clockwork, an illuminated clock, specimens of gear cutting, pattern making, and a Swiss musical box.

Thomas D King, Designer and manufacturer, exhibited a compound achromatic microscope, for which he was awarded an Honourable Mention, students' microscopes and an illuminator for microscope work.

John Braham<sup>20</sup>, 17 St Augustine's Parade, manufacturer and inventor, exhibited various spectacles.

John Sweet Wellway, 7 Denmark Street, inventor and manufacturer, exhibited a siphon trough for draining galvanic batteries, and device containing a coil of rubber hose, allowing a portable gas lamp to be carried about a room. When not in use a spring automatically re-wound the hose.

Abraham Dimoline, Denmark Street, Inventor and manufacturer, exhibited a seven octave pianoforte, the case decorated in mother of pearl on glass, and another semi-cottage piano-forte, with a papier-mache case with inlaid mother of pearl in the Italian style.

C Church<sup>21</sup>, 12 Berkeley Place, exhibited a wrist supporter for ensuring a good position whilst playing the piano, an improved guitar, and an improved finger board for the violin.

J Gordon<sup>22</sup>, Producer, exhibited an anatomical figure (see Class 30).

H Owen<sup>23</sup>, 3 Somerset Terrace, Bristol, producer, exhibited a series of views in the area, by the calotype process, from paper negatives. The jury thought they were heavy and black.

## **Class 11 Cotton Textiles**

No entry.

## **Classes 12 and 15 - Woollen and Worsted material (considered together in the catalogue)**

Daniel Peters<sup>24</sup>, 44 College Green, Bristol, Manufacturer, exhibited black single-milled kersymere.

## **Class 13 Silk textiles**

No entries.

## **Class 14 Manufacturers from Flax and Hemp**

No entries.

## **Class 16 Leather, including saddlery, harness, skins, furs, feathers and hair**

No entries.

## **Class 17 Paper and Stationery, printing and bookbinding**

No entries.

## **Class 18 Miscellaneous fabrics shown as specimens of printing or dyeing**

No entries.

## **Class 19 Tapestry, carpets, floorcloths, lace and embroidery etc.**

Mary Cross, Paul Street, Designer, exhibited a crochet counter-paine.

John Hare & Co<sup>25</sup>, designers and manufacturers, exhibited five floorcloth compositions. The Jury thought the designs were 'first rate', and accordingly awarded a Prize Medal.

Read and Humphreys, 21 Clare Street, exhibited a folding screen of canvas, with a needlework design of two figures playing chess.

## **Class 20 Articles of clothing**

Walsh and Co<sup>26</sup>, producers exhibited an embroidered over-coat.

Charles Minifie<sup>27</sup>, Inventor and manufacturer, exhibited a registered coat sleeve shirt.

## **Class 21 Cutlery and edge tools**

No entries.

## **Class 22 General Hardware, including locks and grates**

Thomas Hale & Co.<sup>28</sup> Designers and manufacturers, exhibited ornamental gas brackets, chandeliers, beer cocks, musical clock bells, a model steam lacquering machine, brass and copper tea kettles, newly invented kettle, new designs for coal scoops, and a bath tub in copper, designed to follow the contour of the body whilst sitting, and heated underneath by gas or some other means. They also exhibited cast brass figures of Classical figures, to show a new method of lacquering.

## **Class 23 Works in precious metals, jewellery etc.**

Thomas Wall<sup>29</sup>, Stokes Croft, Bristol, designer and manufacturer, exhibited various objects made from woven human hair, including a wreathed medallion of Prince Albert, a Tuscan column, surmounted by a bronze statue of Britannia, holding a medallion portrait of Queen Victoria, bracelets, ear drops, watch guards and a purse.

## **Class 24 Glass**

John Wesley Hall, Manufacturer, exhibited an ornamental cut glass window, enamelled and embossed letters and embossed plate glass for ornamental doors.

Zebedee Jones<sup>30</sup>, 17 Park Place, Clifton, designer and manufacturer

exhibited a table top, in 'Vitrilapis' a new style of ornamental glass for decorative use.

Coathupes and Co, Nicholas Street, designers and manufacturers, exhibited glass water pipes, plain jointed and angular and Glass curtain poles.

Hall and Sons<sup>31</sup>, Manufacturer, exhibited an ornamental leaded stained glass window.

## **Class 25 Ceramic manufacture, china, porcelain, earthenware etc.**

No entries.

## **Class 26 Furniture, upholstery paper hangings, papier mache and japanned goods**

Johnston & Co, Quay Street, designers and manufacturers, exhibited a straw mattress for lath and iron bedsteads.

C. Spurrier<sup>32</sup>, designer and manufacturer, exhibited a cabinet chiffonniere in walnut wood, with a carved centre, a vase of flowers of pearl inlaid with ivory, an adjustable easy chair, covered in satin damask, and a spring stuffed ottoman, covered in brocatelle.

John Wood, 59 Milk Street, manufacturer, exhibited a marquetry table, 5ft diameter, containing a representation of the Battle of the Nile. Included in this were a portrait of a Chelsea pensioner, the flags of the various ships engaged, some of the ships in action, and a Fame crowning Nelson.

Cotterell Brothers<sup>33</sup>, manufacturers, exhibited specimens of paper hangings for a dining room.

H. Trapnell & Son, 2 St James Barton, exhibited a console chiffonniere in English Walnut, with a marble top and shelves of coloured glass with mirror backings.

## **Class 27 Manufactures in Mineral substances for building or decoration**

Lane and Lewis, Clifton, designers and executors, exhibited a statue of St Peter, in a canopied niche, with the four Evangelists and angels as supporters. They were awarded a Prize Medal.

## **Class 28 Manufacturers from animal and vegetable substances**

School of Industry for the Blind, Bristol<sup>34</sup>, manufacturers, exhibited worsted hearth rugs, worsted and coconut fibre door mats, basket-weave nursery chair, child's cradle, fire screens, work baskets of various shapes.

## **Class 29 Miscellaneous manufactures and small wares**

J Brindley, Milk Street, exhibited a small cask of peculiar construction.

R Brison<sup>35</sup>, inventor and manufacturer, exhibited models of feet from which shoe lasts might be made.

## **Class 30 Sculpture, models and plastic arts mosaic, enamels etc.**

Edward Edwin Pearce, Nailsea, Nr Bristol, exhibited a pair of models in glass of houses, one showing plain brick work and the other freestone.

James Gordon, 46 Park Street, carver, exhibited a carved vase in boxwood, and a carved Belisarius. He also exhibited an anatomical figure in ivory, which displayed the muscles, bones and ligaments, arteries, veins and nerves etc. Various parts were removable. He was awarded a Prize Medal.

## **Colonies and Dependencies - West Africa**

R & W King<sup>36</sup>, exhibited three cushions from the King of Dahomy and two pieces of cotton cloth.

Lack of space prevents a full discussion of the effects the Exhibition had on Bristol's inhabitants at large. From the statistical tables in the Catalogue, it can be seen that five Bristol schools sent a total of 293 pupils to the exhibition in organised parties, while large Bristol firms, such as Wills's did the same for their workers. Very little is known about the private family parties and individuals

who also went there. From the few printed accounts<sup>37</sup>, nothing can be gleaned, other than that everyone marvelled at what they saw.

And after it was all over? The effects of the exhibition were many, the most important benefit being the financing of the museum quarter of Kensington, in London. The profits from the exhibition were used to purchase land on which the Victoria and Albert, Science, Natural History and Geological Museums, Imperial College, and the Royal College of Art and Music were built. The residue was invested, and to this day provides scholarships.

Less tangible benefits were the revision of international postal communications; the reform of the patent laws; and a spread of international understanding. The exhibitions also was the parent of excursion travel for the masses at cheap rates.

The building itself was dismantled and re-erected at Sydenham, where it became the centre, in Victorian England, for many more trade fairs, exhibitions, musical festivals and similar events. It burnt down in 1936.

### Acknowledgements

Grateful thanks are due to Miss Mary Williams, City Archivist; to Mr Geoffrey Langley, Reference Librarian, both of Bristol; to Mr C. A. H. Janes, Secretary to the Commission for the Exhibition of 1851. They all made extensive searches for original records. Thanks are also due to Mr Michael Lane, for information on John Fowler Junior, and to Mr John Cornwell for his prints from the Catalogue illustrations.

### Bibliography

Contemporary sources used in the preparation of this paper were:-

**Official Descriptive and Illustrated catalogue**, 4 vols, 1851. Reports of the Juries, 1 Vol, 1852.

**The Art Journal Illustrated Catalogue**, 1 Vol, 1851. (This deals with applied art.)

**The Illustrated Exhibitor**, 1 Vol, 1851 (A well-illustrated, but badly printed periodical, containing many illustrations not found in any other source).

Wyatt, M Digby, **Industrial Arts of the Nineteenth Century, at the Great Exhibition**. 2 Vols, 1851-3 (Contains more than 150 large chromolithographs of applied art and sculpture exhibits).

Charles Tomlinson ed. **Cyclopaedia of Useful Arts and Manufactures** 2 Vols, c1852. (Vol 1 contains a good introduction to the industrial exhibits)

**Official Catalogue of the 1862 Exhibition**, 2 Vols, 1862 (Vol I contains a useful study of earlier trade exhibitions, both in this country and abroad).

The best modern introduction to the Exhibition is C. H. Gibbs-Smith **The Great Exhibition, a commemorative album**, 1950.

### Notes

- 1) No evidence has been found that any trade exhibitions were held in Bristol during this time.
- 2) Several studies have been made of the fine arts exhibited, but little on the industrial exhibits.

The Dominie, 'That Wonderful Year' in **Model Engineer**, Vol 104,1951, pp 497, 594, and Vol 105,1951, pp 57, 92,141, 205, 525.

A. P. Woolrich, 'Ornamental Turning at the 1851 Exhibition' in **Bulletin, Society of Ornamental Turners**, Vol XI, 1974, p 34.

- 3) Surprising omissions are pottery, domestic glass, shipbuilding, mining, engineering, locomotives and machine tools, and commerce representing the City's imports and exports.
- 4) W. H. Gore Langton (1802-1875).
- 5) J. K. Haberfield, (1785-1857), Mayor. Knighted March 1851. Grateful citizens of Bristol presented him with a dessert service of plate. It is reputed that proofs from this were on exhibition at the Crystal Palace. On Haberfield's death the service was presented to the Corporation, and now forms part of the Mansion House plate.
- 6) A complete transcription of the Catalogue entries, and comments of the Juries, together with photographs of goods illustrated, has been deposited in the Bristol Archives Office. It should be noted that the exhibitor's description, often gives a clue to his status, thus 'proprietor' means he owned an artefact, and was not the manufacturer or inventor.
- 7) Thomas Howard, 1815-1896, Engineer to Bristol Docks, 1855-1882. A. B. Beavan, **Bristol Lists**, 1899; R. A. Buchanan, **Nineteenth Century Engineers of the Port of Bristol, Bristol**, 1971,13ff.
- 8) Frys are still in existence, having moved to Somerdale in the 1920's.
- 9) The Fowler of the partnership was John Fowler Junior (1826-1864). Later to become famous as maker of traction and ploughing engines. The Fry was Albert Fry (c1830-c1910), member of the Bristol Quaker Family, but not active in the chocolate making business. He was later to become a partner in the Bristol Wagon Works, and was instrumental in the formation of University College, later to become Bristol University. For details of the partnership, see M. R. Lane's forthcoming biography of John Fowler.
- 10) Manufacturer of Bath Wheel Chairs, Great Western Coach manufactory, Cumberland Basin. Mathews's **Bristol Directory**, 1845, p143.
- 11) Venetian, parlour, wire and spring blind manufacturer. Mathews, loc cit 185.
- 12) Furnishing ironmonger, bellhanger, kitchen range and wrought iron manufacturer. Factory, Clifton Hill. Mathews, loc cit, 63.
- 13) Possibly a Lavars associated with the well-known Bristol Lithographers and Printers, Lavars and Ackland, 18 Bridge Street. Mathews, loc cit, 48.
- 14) William Patterson (1795-1869), builder of the **Great Western** and **Great Britain** steamships.
- 15) Gibbs, the gunsmiths are still in existence.
- 16) Possibly the William Cambridge of Market Lavington, Wilts, who was building portable steam engines for agricultural use in 1840's. Wm. Fletcher, 'The evolution of the portable engine' in **Fielden's Magazine**, Vol. 2, 1900, p 618.
- 17) Phillips, Hayward & Co., iron founders and patentees of agricultural implements. Baptist Mills. Mathews, loc. cit. p174.
- 18) Chronometer, watch and clock maker, Albion Chambers, Small Street, Mathews loc cit, p 62.
- 19) Isaac Dell, 15 John Street. Dells also made lathes, an example of which has recently been presented to Bristol Museum, together with parts of a 2-part geometric chuck. Mathews loc cit, 101 **Bulletin, Society of Ornamental Turners**, Vol X, pp 59, 91.
- 20) Later incorporated into Dunscombes, still in St Augustine's Parade.
- 21) Musical instrument and improved guitar maker, 12 Lower Berkeley Place, Clifton. Mathews, loc cit, 88.
- 22) Surgeon dentist. Mathews loc cit, 116.
- 23) Hugh Owen, (1808-1897), Railway official and amateur photographer. The Jury report claims that Owen was able to execute ten large-size Talbotypes of local scenery in a day, each paper being prepared on the spot. He was also one of the official photographers to the Exhibition Commissioners, taking photographs which were used to extra-illustrate the

presentation copies of the Catalogue and Jury Reports. Reece Winstone, **Bristol's Earliest Photographs**, 1970, pp 38-39.

- 24) Woollen draper, mercer, tailor, habit maker, undertaker - general funeral furnishing warehouse. Mathews loc cit, 173.
- 25) Temple Gate. Hares were well known floor-cloth manufacturers, as well as making paints and chemical products. The firm survived until after the second world war, but is now defunct.
- 26) D. H. Walsh & Co., tailors, drapers and outfitters, 25 High Street. Mathews, loc cit, 214.
- 27) Charles Minifie, maker of the Corazza shirt, stock, braces &c. hosier, glover and outfitter. 36 College Green. Mathews loc cit 160.
- 28) Brass founder, Narrow Wine Street. Mathews, loc cit, 121.
- 29) Hairdresser, 55 Stokes Croft. Mathews loc cit, 214.
- 30) Wholesale and retail portmanteau, trunk and fancy cabinet maker, 9 Corn Street, established in 1770. Mathews loc cit 143.

- 31) Broadmead, established 1788. Mathews loc cit, 121.
- 32) Charles Spurrier, cabinet maker, upholsterer, carver, gilder and looking glass maker, 39 Park Street. Mathews loc cit 198.
- 33) Cotterell, J. F. cabinet maker, upholsterer, paper hanger, appraiser and undertaker, 46 Broadmead. Mathews loc cit 93.
- 34) Situated roughly where the Museum is now. Founded in 1793. Mathews loc cit 321.
- 35) Robert Brison, last maker, 27 Host Street. Mathews loc cit, 78.
- 36) Richard and William King, merchants. Counting House, behind 2 Redcliff Parade. Mathews loc cit 145.
- 37) See, for example, Godfrey Harrison, **Bristol Cream**, 1955. p 93 (Study of Harveys, the wine merchants) and P. K. Griffiths, 'The Diary of a Bristol Merchant', 1850-1853, in Trans. **Bristol and Gloucestershire Archaeological Society**, Vol XC, 1971, p 230.



The Console Cheffonier exhibited by Messrs Trapnell and Son of Bristol