

M153 Competition design for buildings for the Glasgow International Exhibition 1901

Introduction

This was John Honeyman & Keppie's unsuccessful entry in the design competition for buildings to house the Glasgow International Exhibition 1901 in Kelvingrove Park. The surviving drawings are for the main exhibition building (the Industrial Hall), concert hall (the Grand Hall), refreshment rooms and a pedestrian bridge over the River Kelvin. All are in a highly individual style, with few references to historical precedent.

Authorship: The design was submitted in the name of John Honeyman & Keppie, but there is good evidence that it was the work of Mackintosh. The proposed buildings share many stylistic features with the Glasgow School of Art, Ruchill Free Church Halls and other projects firmly ascribed to him. The drawings are unmistakably in his hand. His role was acknowledged when the drawing of the N. elevation was shown at the Glasgow Institute of the Fine Arts in 1899, inscribed with his name alongside John Honeyman & Keppie's.

Alternative addresses: Dumbarton Road Gray Street Sandyford Street

Status: Unbuilt

Grid reference: NS 5690 6616

Chronology

1898

10 May: Conditions of architectural competition approved by the Executive Council of the Glasgow International Exhibition 1901. ¹

13 May: Conditions criticised by the *British Architect*. ²

27 May: John Honeyman & Keppie pay a deposit of one guinea for a copy of the competition conditions. ³

3 June: In response to criticism, the Subcommittee appointed to judge the competition will include professional members: J. J. Burnet, William Leiper, W. F. Salmon, James Thomson, Robert Whitson and A. B. McDonald. ⁴

15 August: Closing date for entries. 14 sets of plans have been received and will be displayed in the Glasgow Institute of the Fine Arts, for consideration by the Subcommittee. ⁵

9 September: The Subcommittee has selected designs by James Miller (first place), A. N. Paterson (second place) and John Campbell (third place). ⁶

12 September: The Building Committee confirms the Subcommittee's selection. ⁷

Description

Glasgow had mounted a highly successful international exhibition in Kelvingrove Park in 1888. Partly from the profits of this, a palatial municipal art gallery was subsequently built at one end of the site. The gallery was the subject of an architectural competition in which John Honeyman & Keppie were unsuccessful entrants, the prize going to an exuberant Renaissance design by the English architects J. W. Simpson & E. J. Milner Allen. As work on the gallery proceeded, it was decided to mark its completion by holding a second international exhibition on the same site in 1901. ¹



The competition

In May 1898 conditions were announced for an open architectural competition for the temporary exhibition buildings. They were to have a combined floor area of some 13 acres. The main building – the Industrial Hall – was expected to 'present architectural treatment in harmony with the design of the New Fine

Art Galleries', with which it was to stand side by side. There was to be a separate 4000-seat auditorium for 'musical entertainments &c.', known as the Grand Hall, plus a number of cafés and refreshment rooms. The Machinery Hall, for displaying works of engineering, was to be S. of Dumbarton Road, but linked to the main site by a bridge or tunnel.²

The cost of all these buildings was not to exceed £60,000, excluding the Grand Hall, which was to be estimated for separately. Materials were not specified, but wood and plaster were probably envisaged. However, 'alternative plans showing construction of the buildings in steel, iron, and glass' were also invited, so long as they did not greatly exceed the cost limit. These durable materials were particularly encouraged in the case of the Grand Hall, probably as a fire precaution, and possibly with a view to the building's retention after the exhibition. Monochrome drawings on a scale of 1 inch to 16 feet were to be submitted by 15 August, including longitudinal and transverse sections of the Industrial Hall and elevations of its four sides, plus the Dumbarton Road elevation of the Machinery Hall. A perspective was also required, taken from a view point indicated on the block plan supplied to competitors.

The *British Architect* immediately objected to the conditions, pointing out that the successful architect's commission was to be only 3%, rather than the 5% laid down by the Royal Institute of British Architects, and that there was no indication a professional assessor would be appointed.³ The organisers responded by setting up a subcommittee of architects and engineers to judge the entries, including J. J. Burnet, William Leiper, W. F. Salmon, James Thomson, Robert Whitson and A. B. McDonald.⁴ The rate of commission, however, remained unchanged.

Fourteen sets of plans were submitted, and were arranged in the Fine Art Institute in Sauchiehall Street for judging by the subcommittee, with Councillor John Shearer as convener and Thomas Mason as vice-convener.⁵ On 12 September, the subcommittee's recommendations were confirmed by the Building Committee, the Spanish Renaissance design of James Miller being placed first; A. N. Paterson and John Campbell were second and third respectively, also with Renaissance designs.⁶

No complete list of competitors appears to survive, but as well as the three premiated entries, designs are known to have been submitted by Malcolm Stark & Rowntree, R. F. Chisholm, F. W. Simon & A. Hunter-Crawford, Babbie, Bonn & Scott and John Honeyman & Keppie.

Mackintosh's design

Despite the low rate of commission in this particular case, the designing of exhibition buildings could be an attractive proposition. Popular and critical attention was guaranteed, and the temporary nature of the buildings favoured experimentation and gave free rein to the imagination. The 1888 exhibition had been designed – to great acclaim – by James Sellars (1843–1888), in whose office John Keppie had trained. It is not surprising therefore that John Honeyman & Keppie chose to enter the competition for the 1901 buildings, paying their guinea deposit to the Exhibition Secretary, H. A. Hedley, on 27 May.⁷ That Mackintosh was given responsibility for producing the firm's entry is a sign of his standing in the office and the confidence placed in him by the partners.

To preserve the anonymity of competitors, entries had to be left unsigned but marked with a 'device or motto'. Mackintosh used a stylised representation of a flower and leaves, in pencil on tracing paper, pasted to each of his drawings.⁸

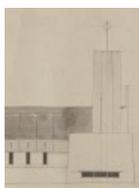
The surviving drawings are numbered, and from gaps in the sequence it is clear that some are missing. The required elevations of all four sides of the Industrial Hall survive, plus longitudinal and transverse sections, but there is no ground plan, and no elevation of the Machinery Hall. Of the subsidiary buildings, there are two alternative designs for the Grand Hall, and designs for one of the refreshment buildings and for a bridge. All these, except the N. elevation of the Industrial Hall, are inscribed with the initials 'J. S.' and 'T. M.', presumably added by Shearer and Mason during the judging process. The perspective submitted with the other drawings cannot now be traced, but it is known from a photograph taken by T. & R. Annan & Sons Ltd at the 1933 Mackintosh Memorial Exhibition, where it was displayed unframed, with creases and other evidence of damage. It was probably drawn by the professional perspectivist Thomas Raffles Davison, who was paid the considerable sum of £20 by John Honeyman & Keppie on 15 August 1898, the competition closing date.⁹

Industrial Hall

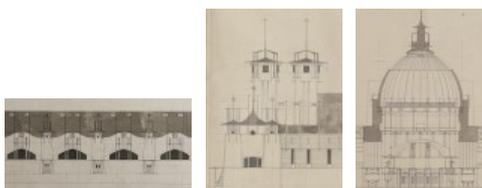
By 1898 the formula for exhibition buildings was well established: a huge, glass-roofed shed, timber- or metal-framed, wrapped in a richly decorated skin of more traditional architecture, often with a dome to supply an eye-catching central feature. Sellars's building for the 1888 Glasgow International Exhibition had followed this pattern, and in its basic form Mackintosh's design for the 1901 Industrial Hall is close to Sellars's. There is a high dome over the central space, from which a long avenue extends W. and E. and a shorter one leads S. Pairs of octagonal towers mark the ends of these avenues. The main entrance is on the N. side of the dome, as required by the competition conditions, approached across a forecourt flanked by an array of lower towers.



The most striking quality of the design is its relative plainness. It lacks the frothy ornament of both Miller's winning design and the other unsuccessful entries known from illustrations in the architectural press. Mackintosh's principal towers are smooth monoliths with slightly battered sides. They have no mouldings, and instead of being coped the top edges are softly rounded in a way that looks forward to the roughcast finish of his Artist's House and Studio in the Country and Artist's Town House and Studio. Much of the detailing is very unorthodox and impossible to label stylistically. The symmetry is classical, but there is not a single column or pediment which conforms to classical prototypes, and although the main windows are slightly pointed, they are not at all Gothic in their proportions. The variety of non-traditional window shapes is one of the outstanding features of the design. Particularly remarkable are the long, flat windows all along the S. front, and especially the larger one at the S. end of the W. front.



What decoration there is is wiry and linear, and the use of curves based on organic forms is comparable to Mackintosh's contemporary bedroom furniture for Westde, Glasgow.¹⁰ The intricate finials and flagstaffs contrast with the broad, plain surfaces of walls and roofs, much as the wrought ironwork at the Glasgow School of Art contrasts with the bare walls there. Glass inserts of various shapes in the doors are also paralleled at the School of Art and at Queen's Cross Church, and slightly later at Ruchill Free Church Halls. Above all, the decoration is extraordinarily varied. For so large a building, probably to be faced with precast plaster panels, it would have been simplest and cheapest to repeat the same ornaments again and again. On Mackintosh's drawings, however, almost every decorative motif is unique. A notable feature is the way the skeletal framework of the lanterns on the lower towers projects through the lantern roofs as decoration rather than structure. There is more exposed timber inside, where canopied balconies on tall posts occupy the angles under the dome.



Grand Hall

In line with the competition conditions, Mackintosh submitted two alternative designs for the Grand Hall, one apparently to be built in timber, the other in iron or steel and glass.

The first is a gabled oblong with corner towers. As at the Industrial Hall, skeletal timbers form the lanterns on top of the towers, and the front pair is decorated with triangular stylised trees, a motif Mackintosh would repeat three years later at the Daily Record Building. There are double doors all down the long sides, between deep, sloping buttresses. These would have ensured that the Hall could be emptied quickly – a convenience for audiences and a sensible precaution in case of fire.¹¹ Above the doors are segmental fanlights, but so flattened that they are no more than slivers of glazing, like the fanlight above the main door at Ruchill.



The pitched roof is carried on arched trusses, visible inside the Hall. Connected with these, but apparently serving no structural purpose, is a row of slender posts down each side of the auditorium, and a series of horizontal timbers like hammerbeams. The posts stretch up to pierce the roof, reappearing outside as tall, tapering masts, while the hammerbeams protrude externally just above the eaves. This show of posts and beams is purely for visual effect, blurring the distinction between interior and exterior, and hinting at the temporary, dismantlable nature of the building. Some 19th-century exhibition buildings – notably the magnificent ones erected for the 1893 World's Columbian Exposition in Chicago – were criticised for imitating permanent structures of stone rather than revealing their ephemeral character. The *British Architect* praised Sellars's 1888 building for 'giving full evidence of its temporary nature', and thought that in exhibition buildings generally, 'the appearance of permanent solidity in construction is not a feature to be desired or sought after.'¹²

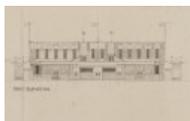
The second design has a circular plan. This in itself is not especially remarkable: Miller's winning design was also circular, and Paterson's was elliptical.¹³ However, while Miller's auditorium had an elaborate towered entrance front and Paterson's was combined with an oblong restaurant block at the back, the main axis of Mackintosh's design is less clearly defined. The front is only slightly emphasised, and apart from a protrusion for the stage, the circular plan is expressed externally and emphasised by deep, radial buttresses with vestibules between. The shallow curve of the dome has been likened to the Byzantine-style domes of J. F. Bentley's Westminster Cathedral, under construction in 1898.¹⁴ Mackintosh's dome was to be supported on steel or iron ribs, with their lower parts encased in the buttresses (the material is not named on the drawing, but the riveting of the metal is shown). Inscriptions on the drawing say the centre of the roof was to be glazed.



Both designs feature elaborate organ cases, comparable to Mackintosh's 1897 organ case for Thomas Mason at Craigie Hall, though very much grander in scale.

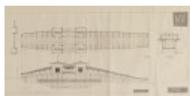
Bar and dining room

The intended location of the refreshment rooms is not shown on Raffles Davison's perspective drawing. The design is basically square, with a bowed projection at the front reflecting the position of the horseshoe bar. On the first floor there is only a long, narrow dining room running across the middle of the building, with access to a roof garden above the bar. Parapets conceal the roofs, and have what appears to be pierced decoration, like the staircase balustrades at the School of Art and at Ruchill.



Bridge

Mackintosh submitted a proposal for a bridge, but not the Dumbarton Road crossing mentioned in the competition conditions. Instead, it is a hump-backed pedestrian bridge across the River Kelvin, linking the Industrial Hall with the Grand Hall. It is roofed, and lined with shops and cafés, and it has an unusual, organic shape, the flanking buildings becoming gradually higher towards the crown as the bridge widens. The timber posts rising from the water and the deep eaves of the café-pavilions at the highest point suggest the influence of oriental examples, rather than the shop-lined bridges Mackintosh would have seen in Florence and Venice during his 1891 visit to Italy.



Critical reception

When Miller's design was shown at the Glasgow Institute of the Fine Arts in 1899, it was exhibited alongside some of its rejected rivals, including Paterson's second-placed scheme and Mackintosh's and Babbie, Bonn & Scott's unplaced ones. The *Glasgow Herald* commented: 'Messrs Honeyman & Keppie & Mackintosh show their elevation for the same subject (676) – an original and bold design, with perhaps a suggestion of Omdurman about it, and too severe to be popular'.¹⁵ It was evidently Mackintosh's principal, N., elevation that was shown: of the surviving drawings, this sheet has been trimmed to a more modest size than the others, and inscribed with the architects' names in addition to the stylised flower-and-leaves device. Although Mackintosh was not yet a partner in the practice, his name is included alongside John Honeyman & Keppie's, confirming the evidence of the design itself.

Some of the other unsuccessful designs were published in the *British Architect*. Malcolm Stark & Rowntree's was in Renaissance style, with smaller buildings in the grounds in a variety of national styles from Swiss to Chinese; R. F. Chisholm's was Indian; and F. W. Simon & A. Hunter-Crawford's was Renaissance again, with long external arcades flanking the entrance.¹⁶ All had the seemingly obligatory crowning dome, and all were more exuberant and richly decorated than Mackintosh's offering.

People

Other:

- Thomas Mason
- James Sellars

Job Book

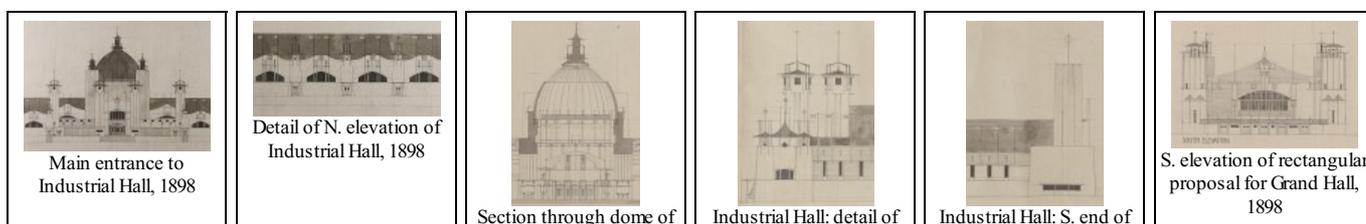
The job books of Honeyman & Keppie (later Honeyman, Keppie & Mackintosh) are now held by The Hunterian, University of Glasgow and include four volumes related to the Mackintosh period. The books were used by the firm to keep a project-by-project, day-by-day record of contractors, suppliers and expenditure. The name of a project and/or client is usually at the top of the left-hand page, followed by information about tradesmen who tendered. The name of the measurer (quantity surveyor) is usually at the top of the right-hand page, followed by information about payments to contractors and suppliers. All of the data for M153 is entered in the tables below.

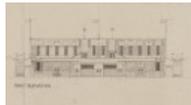
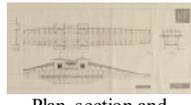
Page numbering is not consistent in the job books. Sometimes a single number refers to a double-page spread and sometimes each page is individually numbered. Here, each image of a double-page spread is identified by the number given at the top of the left-hand page. (Images of all of the pages from the four job books can be found at [Browse Job Books](#), [Visit Book and Cash Book](#).)

The following information about M153 has been extracted from the job books:

Documents

Images



		Industrial Hall, 1898	towers flanking entrance, 1898	W. elevation, 1898	
					
E. and W. elevations of rectangular proposal for Grand Hall, 1898	Cross section of rectangular proposal for Grand Hall, 1898	Plan, section and elevation of circular proposal for concert hall, 1898	Front elevation of bar and dining room, 1898	Plan, section and elevation of bridge, 1898	

Bibliography

Published

- Alan Crawford, *Charles Rennie Mackintosh*, London: Thames & Hudson, 1995, pp. 49–50
- Thomas Howarth, *Charles Rennie Mackintosh and the Modern Movement*, London: Routledge & Kegan Paul, 2nd edn, 1977, pp. 170–3
- Perilla Kinchin and Juliet Kinchin, *Glasgow's Great Exhibitions: 1888, 1901, 1911, 1938, 1988*, Wendlebury, Oxon: White Cockade Publishing, 1988, pp. 55–60
- James Macaulay, *Charles Rennie Mackintosh*, New York: W. W. Norton, 2010, pp. 182–6
- Robert Macleod, *Charles Rennie Mackintosh: Architect and Artist*, London: Collins, 1983, pp. 76–7
- *British Architect*, 47, 18 June 1897, p. 431
- *British Architect*, 49, 13 May 1898, pp. 323, 325; 27 May 1898, pp. 359–60
- *British Architect*, 50, 5 August 1898, p. 89; 26 August 1898, p. 144; 11 November 1898, p. 355; 9 December 1898, p. 417; 23 December 1898, pp. 476–9; 30 December 1898, p. 491
- *Glasgow Herald*, 11 May 1898, p. 11
- *Glasgow Herald*, 16 August 1898, p. 4
- *Glasgow Herald*, 9 September 1898, p. 6
- *Glasgow Herald*, 13 September 1898, p. 4
- *Glasgow Herald*, 22 September 1898, p. 8
- *Glasgow Herald*, 3 April 1899, p. 8

Unpublished

- Hiroaki Kimura, 'Charles Rennie Mackintosh: Architectural Drawings', unpublished PhD thesis, University of Glasgow, 1982, pp. 31–2
- Glasgow City Archives Collection: Glasgow International Exhibition 1901, Competition for Designs of Exhibition Buildings, Conditions of Competition, May 1898, D-TC 11/4, box 1
- The Hunterian, University of Glasgow: John Honeyman & Keppie cash book, GLAHA 53079, pp. 46–7

Notes:

- 1: *Glasgow Herald*, 11 May 1898, p. 11.
- 2: *British Architect*, 49, 13 May 1898, p. 323.
- 3: The Hunterian, University of Glasgow: John Honeyman & Keppie / Honeyman, Keppie & Mackintosh / Keppie Henderson cash book, 1889–1917, GLAHA 53079, p. 46.
- 4: *British Architect*, 49, 3 June 1898, p. 377.
- 5: *Glasgow Herald*, 16 August 1898, p. 4.
- 6: *Glasgow Herald*, 50, 9 September 1898, p. 6.
- 7: *Glasgow Herald*, 13 September 1898, p. 4.
- 8: Perilla Kinchin and Juliet Kinchin, *Glasgow's Great Exhibitions: 1888, 1901, 1911, 1938, 1988*, Wendlebury, Oxon: White Cockade Publishing, 1988, p. 55.
- 9: Glasgow City Archives Collection: Glasgow International Exhibition 1901, Competition for Designs of Exhibition Buildings, Conditions of Competition, May 1898, D-TC 11/4, box 1. A summary of the conditions is in *Glasgow Herald*, 11 May 1898, p. 11.

- 10:** 'A Scotch Competition', *British Architect*, 49, 13 May 1898, p. 323.
- 11:** *British Architect*, 49, 3 June 1898, p. 377.
- 12:** *Glasgow Herald*, 16 August 1898, p. 4.
- 13:** *Glasgow Herald*, 13 September 1898, p. 4.
- 14:** The Hunterian, University of Glasgow: John Honeyman & Keppie / Honeyman, Keppie & Mackintosh / Keppie Henderson cash book, 1889–1917, GLAHA 53079, p. 46. Their deposit was returned on 6 October.
- 15:** Besides the versions attached to the surviving drawings, there is a detached example in The Hunterian, University of Glasgow, GLAHA 41522.
- 16:** The Hunterian, University of Glasgow: John Honeyman & Keppie / Honeyman, Keppie & Mackintosh / Keppie Henderson cash book, 1889–1917, GLAHA 53079, p. 47.
- 17:** Roger Billcliffe, *Charles Rennie Mackintosh: The Complete Furniture, Furniture Drawings and Interior Designs*, Moffat, Dumfriesshire: Cameron & Hollis, 4th edn, 2009, pp. 51–5.
- 18:** Miller's Grand Hall design was praised for its virtually fireproof construction, and for the multiple exits which meant it could be evacuated quickly: *Building News*, 71, 16 September 1898, p. 389. The risk of fire became a reality during the 1901 Exhibition, when a blaze destroyed Miss Cranston's restaurant opposite the new art gallery: *Glasgow Herald*, 9 July 1901, p. 7.
- 19:** *British Architect*, 47, 18 June 1897, p. 431; 50, 5 August 1898, p. 89.
- 20:** *Glasgow Herald*, 13 September 1898, p. 4.
- 21:** Robert Macleod, *Charles Rennie Mackintosh: Architect and Artist*, London: Collins, 1983, p. 76.
- 22:** *Glasgow Herald*, 3 April 1899, p. 8. The reference to Omdurman was a topical allusion to the tomb of the Mahdi in Sudan, recently destroyed by the British. Its distinctive pointed dome had been illustrated in the *Graphic*, 24 September 1898, p. 418.
- 23:** *British Architect*, 50, 11 November 1898, p. 355; 9 December 1898, p. 417; 23 December 1898, pp. 476–9; 30 December 1898, p. 491.

Mackintosh Architecture: Context, Making and Meaning

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