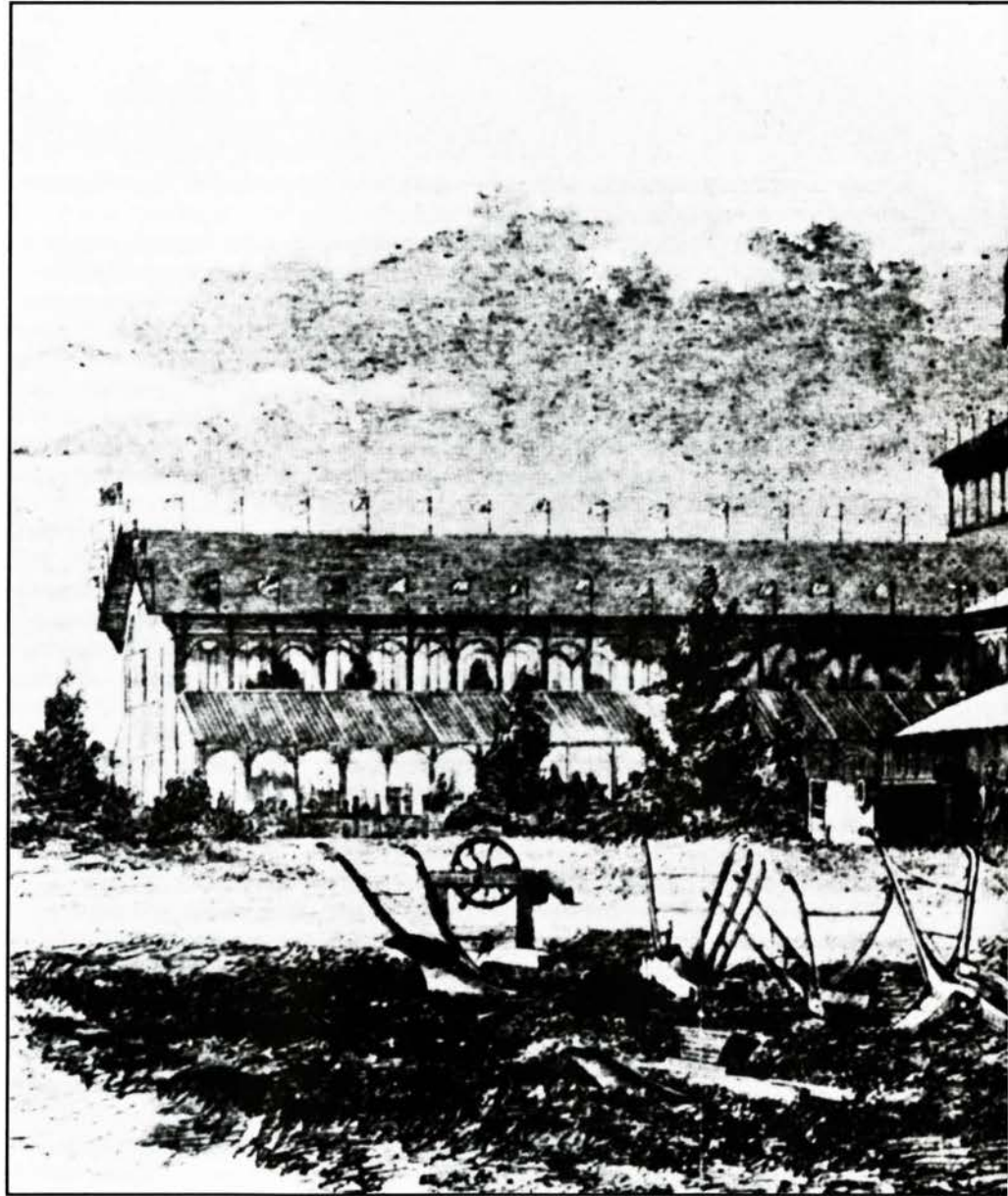


KINGSTON'S "LILLIPUTI Canada's First Perm

*"For the first time in the province [of Canada West], a permanent and elegant edifice is erected for the purpose of [the Provincial Agricultural Fair]; a sort of miniature Crystal Palace is fast verging towards completion the sides of which are of glass, the roof, for the present, of shingles. The design is neat, and exhibits much taste and judgment; the form is that of a cross."*¹



¹ C.W. Cooper, *Prize Essay: Frontenac, Lennox & Addington* (Kingston: James Creighton, 1856), 100.

AN" CRYSTAL PALACE: *anent Exhibition Hall*

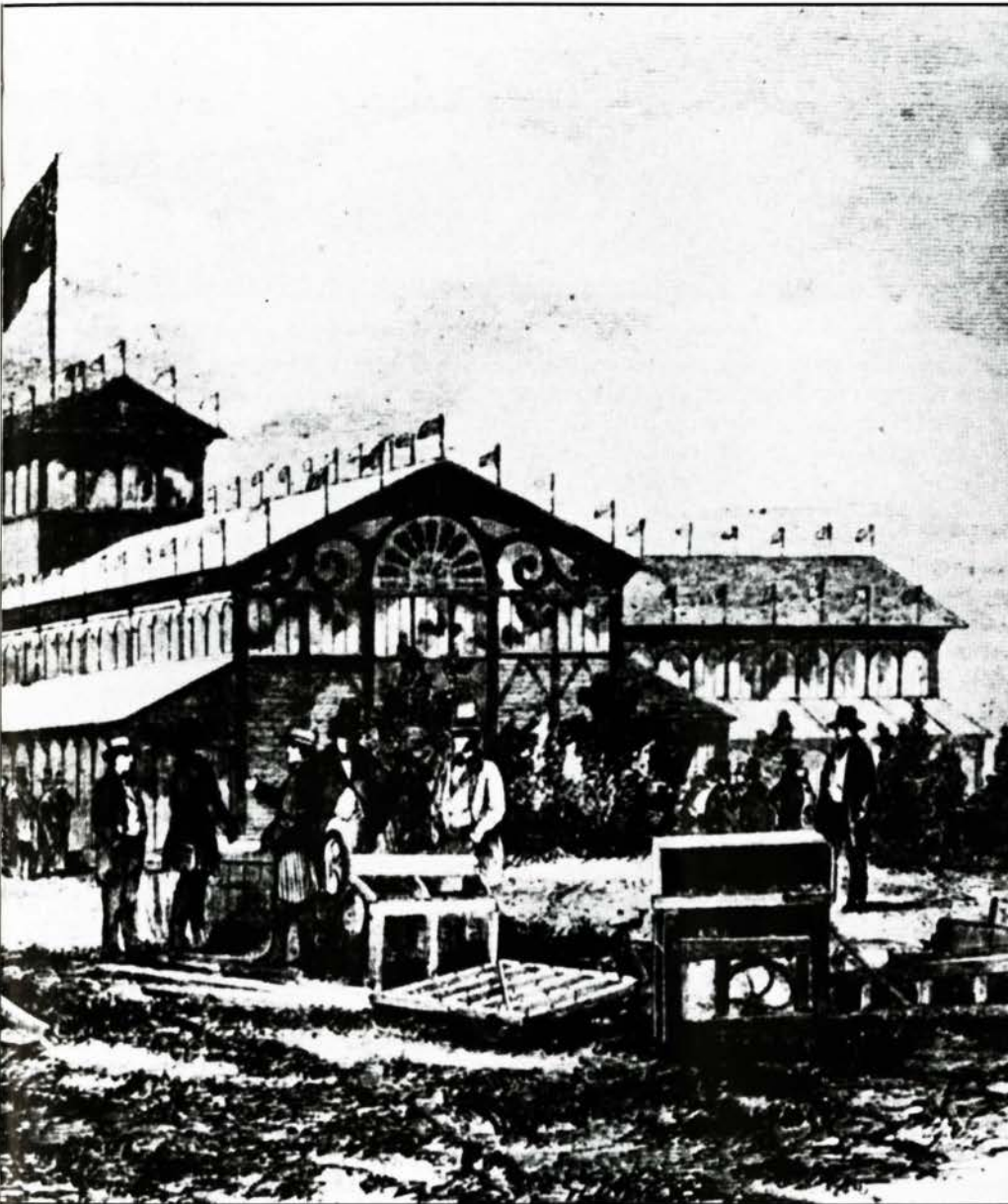


Figure 1. Crystal Palace, Kingston, 1856, Henry Horsey, architect-engineer. (Frank Leslie's Illustrated Newspaper 3 (New York, 20 December 1856), 33)

By Jennifer McKendry

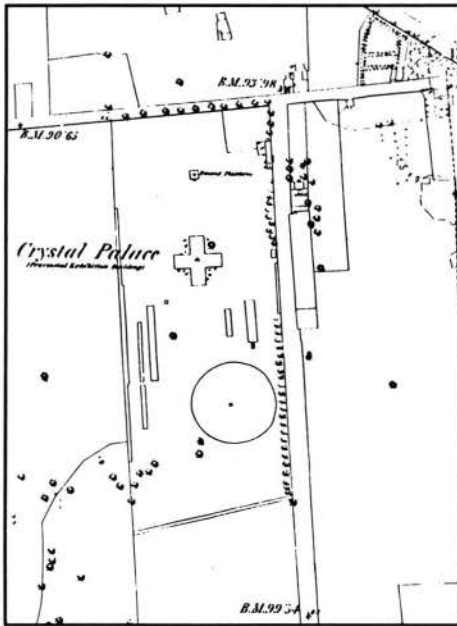


Figure 2 (above). Site of the Crystal Palace, Kingston, in 1869. (Ordnance Map, Special Collections, Queen's University)

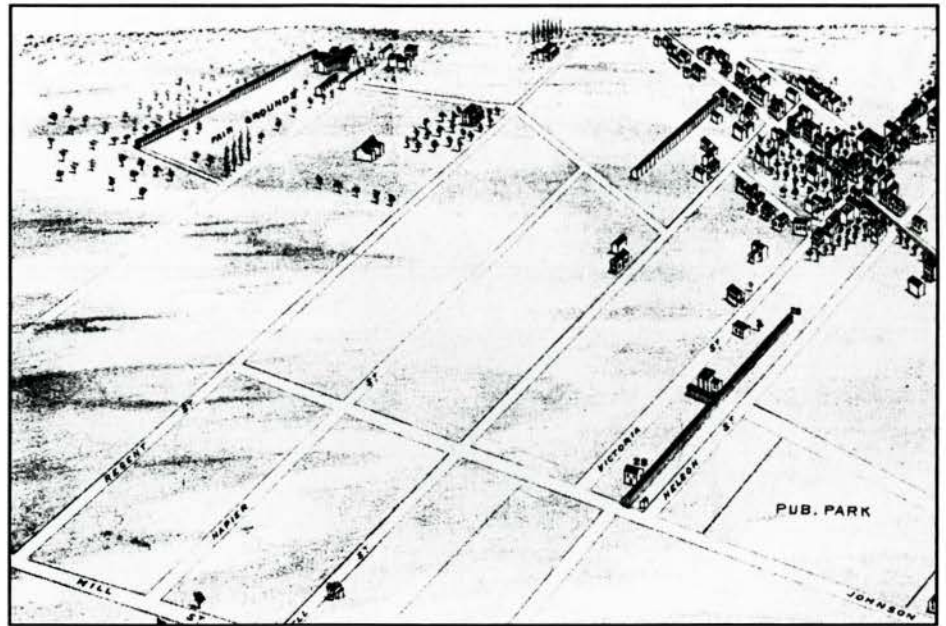


Figure 3 (above right). Bird's-eye view of the Fair Grounds, Kingston, in 1875. (Brosius, Special Collections, Queen's University)

Kingston's Crystal Palace, surely one of the most unusual public buildings of the day in all British North America, opened in time for the provincial agricultural exhibition of 1856. It was the first permanent exhibition hall in Canada (figure 1),² and was constructed five years after its famous namesake in London, England, to be followed shortly by other halls in Toronto, Ottawa, Hamilton, and Montreal. Yet this important building has been largely ignored in architectural histories.

A brief look at Kingston's history will indicate why this moderately-sized city sponsored the erection of Canada's first Crystal Palace. Kingston is one of the earliest settlements in Canada. It was established as a trading post known as Fort Frontenac by the French in 1673 — a western outlet for the furs that were trapped by Indians and forwarded to Montreal and Quebec. Produce from France and New France was sent west to Fort Frontenac via flat-bottomed bateaux that had to negotiate the St. Lawrence River rapids. Goods were then transferred onto sailing vessels moving throughout the Great Lakes system and south into what is now American territory. This transshipment business remained central to Kingston's economic stability well into the nineteenth century. Technological changes included steam-powered vessels, railroads, and canals.

Kingston became an United Empire Loyalist town in 1784, prospered during the War of 1812, and benefited from an influx of industrious British emigrants during the decades after the war. The city's pinnacle of glory came in 1841 when chosen as the capital of Canada East and Canada West. George Browne designed her splendid City Hall at this time, but early in 1844 Kingston was abandoned as the capital. Despite the depression this caused, commerce improved in the 1850s as the city's industrial base expanded through the efforts of entrepreneurs such as James Morton (a supporter of the Crystal Palace), whose business interests were spread across southern Ontario. He operated distilleries, breweries, and transportation systems, raised cattle, dealt in land, and manufactured locomotives.

In this decade Kingston's population was around 13,000, moderately less than Hamilton's and less than half of Toronto's. Kingston's port was busy with mail packets from Toronto laden with passengers and produce from the West. There were barges and steam boats bound for Montreal and smaller vessels plying the Rideau Canal system. American steam boats moved people and goods across Lake Ontario. A local newspaper captured the panorama: "All these, with the beautiful class of sailing vessels which frequent this port present a most interesting scene, and this of daily occurrence."³ Although the first passenger train from Toronto to Montreal arrived in Kingston a month after the Crystal Palace fair, the general enthusiasm for railways was symptomatic of the love of progress that contributed to the desire to erect a permanent exhibition hall. Kingston was, therefore, geographically well-located to draw visitors from Ontario, Quebec, and the northern United States at a time of economic well-being.

Henry H. Horsey, son of architect Edward Horsey (Edward is best known as the designer of the Frontenac County Court House of 1855-58 at Kingston) was the architect-

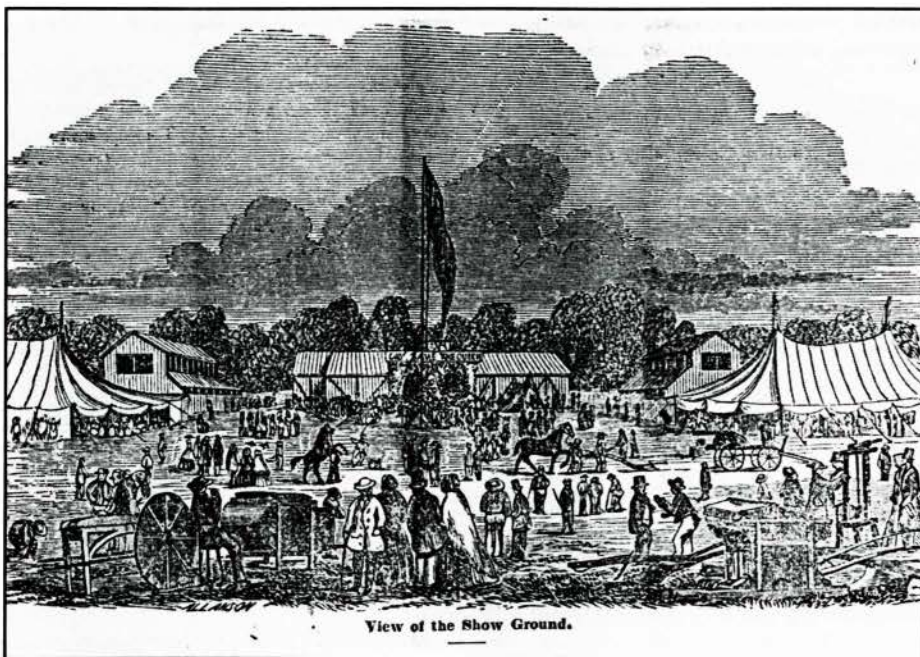
2 Kingston's Crystal Palace is shown in *Frank Leslie's Illustrated Newspaper* 3 (New York, 20 December 1856), 33, where it is misidentified as a Toronto exhibition building of 1856. The only exhibition in 1856 was held in Kingston, and the building illustrated corresponds closely to written descriptions and Brosius's 1875 view of Kingston (figure 3).

3 *Chronicle & Gazette*, Kingston, 14 May 1845.



Figure 4. Second Crystal Palace, Kingston, 1888, William Newlands, architect. (*Daily British Whig Special Number*, May 1895)

Figure 5. Temporary buildings for the 1852 Provincial Agricultural Fair in Toronto. (*Canadian Journal of Science*, 1852)



engineer of the Kingston exhibition building.⁴ The fair was located on the most northerly portion of the Provincial Penitentiary grounds, then on the western outskirts of the city (at Bath Road and Palace Road, figures 2, 3). The land was leased — through the intervention of John A. Macdonald — from the government. Dismantled in the late 1880s, the Crystal Palace was rebuilt in a new form (figure 4) by the Newlands firm (on the site now occupied by the Memorial Centre).⁵

The provincial agricultural exhibition was held in a different city each year, with the products of industry, commerce, agriculture, arts, and crafts displayed in temporary quarters built for the week-long event; such a frame-and-canvas fair was held in Toronto in 1852 (figure 5). But in February 1856 William Ferguson, treasurer of the United Counties of Frontenac, Lennox, and Addington, and Alexander Campbell, a lawyer and partner of John A. Macdonald, called for “permanent structures ... chiefly of glass and iron” and ornamental to Kingston as an enticement for the exhibitions to return and a means of obtaining a building for Kingston that would be partly funded by the province and county.⁶ The cost eventually ran to £3,624, one-third of which was subsidized by the province.⁷ Ferguson became chairman of the Building Committee. After the exhibition he was singled out for praise; Ferguson’s biographer characterizing him as “the first person in the Dominion to cause to be

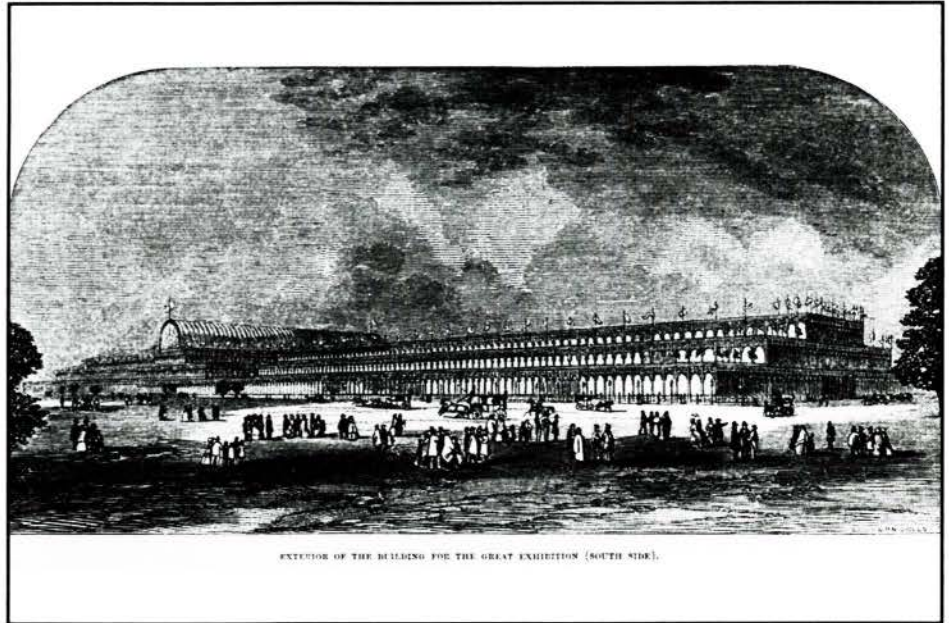
4 *Daily British Whig*, Kingston, 4 April 1857. My thanks to Rick Neilson for drawing my attention to this story on the presentation of a gold watch to Horsey by the grateful Managing Committee of the Crystal Palace.

5 For this second Crystal Palace (demolished 1946), see Fern MacKenzie Graham, “The Wooden Architecture of William Newlands” (M.A. thesis, Queen’s University, 1987), 42-5, 71 n. 5, and figures 1-3.

6 *Chronicle & News*, Kingston, 22 February 1856.

7 See *Daily British Whig*, 28 June 1856, and Bureau of Agriculture and Statistics in Account with the Province of Canada, #54, 31 December 1857, in Canada (Province) Dept. of Finance, *Public Accounts for the Province of Canada for the Year 1857* (Toronto, 1858), 282.

Figure 6. Crystal Palace, London, 1850-51, Sir Joseph Paxton and Fox & Henderson, architects. (The Crystal Palace Exhibition Illustrated Catalogue, London, 1851, xiv)



erected permanent structures for the use of the Provincial Agricultural Exhibition.”⁸ He may even have influenced Horsey’s design.

Although plans were not approved by the Board of Agriculture for Canada West until June, Ferguson’s Local Committee had already decided upon a design, and by then had ordered glass “of great strength and thickness” from Chance & Son, the same firm which had supplied glass for London’s Crystal Palace.⁹ The *Chronicle & News* promoted iron framing for a “glass house, fragile as a proverb,” and noted that “buildings of glass and iron, constructed on the plan of Sir Joseph Paxton at Chatsworth, Chiswick, Kew and ... in the great exhibitions, may now be obtained at from one hundred to many thousands of pounds.” Even if such a prefabricated structure was imported, the labour of assembling the parts would be local.

The same spirit of materialism that had motivated the Great Exhibition of 1851 was at work in Canada West:

The Provincial Exhibition is one of the tests of our improvement in all that relates to material wealth and solid progress. It is an annual examination of the state of our industry, intelligence, activity and knowledge.¹⁰

Kingston’s Crystal Palace, described by the Baron de Longueuil as “a splendid building [erected] with noble determination to keep pace with the spirit of the times,”¹¹ attempted to imitate some of the decorative aspects of London’s Crystal Palace — adorned, for example, by the British flag on the cupola and the flags of the other nations on the exterior walls — but architectural features deviated significantly (figure 6).

Instead of a massive rectangle of more than 1,850 feet in length, this “lilliputian” version¹² was “in the form of a Greek cross, each of the transepts being 190 feet in length, and 56 feet in breadth. The general height is 34 feet, that of the cupola 60 feet.”¹³ One of the dimensions, 56 feet, may have referred to the year of construction, 1856, in imitation of the length of London’s Palace representing the year 1851.

The Kingston building was not framed of iron but built of wood. In fact the cost of iron (including nails) was the smallest expenditure, £50, whereas the timber framing cost £200, the glass (and priming the sash) £800. The roof was intended to be glazed, but was shingled temporarily.

If iron appeared anywhere, it was internally. The interior columns, decorated with national colours and arms of various nations near their capitals, were likely iron. It was Henry Horsey’s father, Edward, who had used iron columns in the dining hall of the Provincial Penitentiary, Kingston, six years earlier. And Kingston architect William Coverdale was framing large display windows with iron in his local commercial buildings at the very time the Palace was being planned.¹⁴

Despite the timber framing and shingled roof, observers were struck by the Palace’s “spacious airy and light” appearance.¹⁵ The substitution of framed glass for solid walls pierced by windows was a novelty, and was treated unconventionally, as if of metal: large central arches appeared in the gable ends flanked by fanciful scrolls associated with the fluid nature

8 George MacLean Rose, ed., *A Cyclopaedia of Canadian Biography* (Toronto, 1886), 506-7.

9 The plans and site were inspected at a meeting on 10 June 1856, as reported in *Chronicle & News*, 20 June 1856 and *Canadian Agriculturalist* 8 (1856): 181. Tenders for timber appeared as early as February (*Chronicle & News*, 22 February 1856).

10 *Journal of the Board of Arts and Manufactures for Upper Canada*, 7 vols. (Toronto, 1861-67), 1 (1861): 253.

11 *Journal and Transactions of the Board of Agriculture of Upper Canada*, 6 vols. (Toronto, 1846-), 2 (1858): 124.

12 *Chronicle & News*, 14 March 1856.

13 *Board of Agriculture*, 2: 113.

14 Horsey’s Penitentiary dining hall and Coverdale’s commercial work are discussed in Jennifer McKendry, “William Coverdale and the Architecture of Kingston 1835 to 1865” (Ph.D. thesis, Art History, University of Toronto, 1991), 51-60, 270-82, figures II-7 and VI-11.

15 *Daily British Whig*, 30 September 1856, quoting the *Hamilton Spectator*.

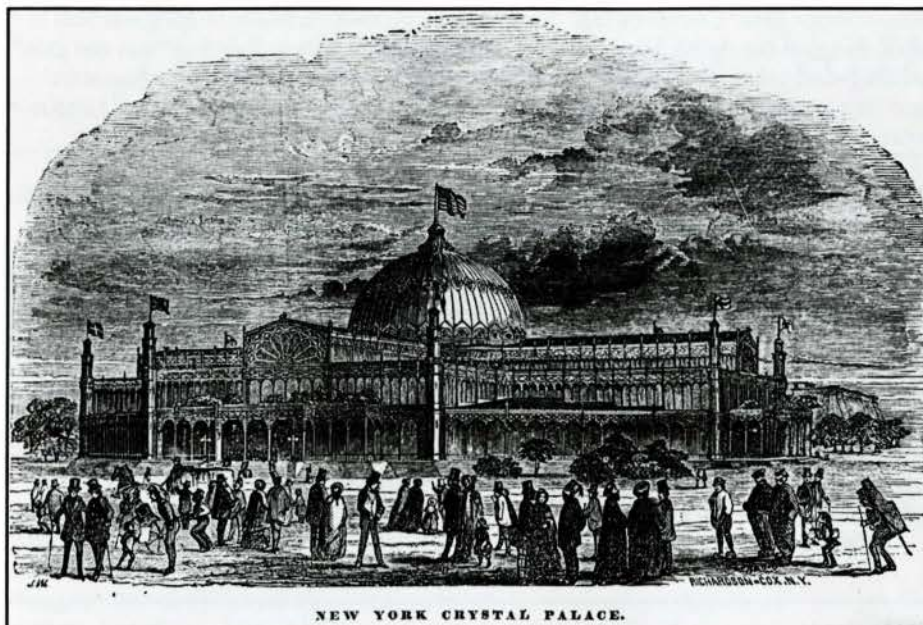


Figure 7 (top). Crystal Palace, New York, 1852-53, Carstensen & Gildemeister, architects. (*Canadian Journal of Science*, 1852)

Figure 8 (bottom). Provincial Exhibition Building, Montreal, 1873, architect unknown. (*Canadian Illustrated News*, 27 September 1873)



of metal rather than wood. New York's Crystal Palace of 1853 by Carstensen & Gildemeister also featured round arches — derived from London's vaulted transepts — in its gable ends (figure 7). Illustrated in the *Canadian Journal of Science* of 1852, it may have been a model for Kingston's palace: both plans were Greek crosses, whereas the nave of London's Palace greatly outdistanced the transepts.

Light streaming through the clerestoreys and cupola created "halls of dazzling light" that complemented the central fountain and surrounding greenery derived from London's Palace.¹⁶ This would have been even more striking had the roofs of the colonial version been glazed instead of shingled. How different must the Montreal exhibition building of 1873 have appeared (figure 8). Although it was based on Kingston's model of a Greek cross plan surmounted by a rectangular cupola, it was as opaque as the Kingston building was transparent.

A reporter for the *Canadian Agriculturalist* touring Kingston commented that "the convenience, safety and ornamental appearance of this structure, suggest the propriety of similar erections at other points where the Provincial Shows are likely to be frequently held." Two years later, Fleming & Schreiber submitted the winning design for a permanent exhibition building in Toronto. The plans called for a building of iron and glass on a stone foundation with a glazed roof, the curved portion tinned. Egerton Ryerson in his *Journal of*

¹⁶ *Daily News*, Kingston, 1 October 1856; *Daily British Whig*, 30 September 1856, quoting the *Spectator*.

Education for Upper Canada of 1859 noted that the Toronto exhibition building was built in wood and glass like the Kingston example. This suggests that most reports on “iron and glass” buildings exaggerate the quantity of metal. In 1860 Hamilton built a wood-and-glass structure on a permanent foundation based on an octagonal shape with four transepts.¹⁷ London was next with an octagonal building of white brick.

THE KINGSTON BUILDING WAS THE EARLIEST in this series of palaces sharing a common characteristic: a light and airy appearance — whether framed in iron or wood — due to the extensive use of glass in place of traditional pierced bearing walls. Designed to attract large numbers from across the province, the palaces played an important role in broadening the public’s awareness of the potential for new concepts and materials in architectural design.

The End of an Era?

The last large-scale exhibition hall of this type in Canada, the Aberdeen Pavilion at Lansdowne Park in Ottawa (built in 1898), is currently under threat of demolition by the city. It has been declared a national historic site by the Historic Sites and Monuments Board of Canada and a designated heritage building by the city itself. Architect Moses C. Edey’s pavilion was technically innovative, with a framework of steel trusses spanning an area 310 x 130 feet. The building, clad in highly ornate pressed metal, has great expanses of glass, including a clerestory and Palladian windows in the entrance facades.

None of this is sufficient to convince the present council that the pavilion ought to be preserved: its fate has been debated by council more than 25 times during the past decade. Its future finally seemed assured last year when plans were approved to incorporate “the Aberdeen” in a new trade show complex in the park, but when that project collapsed early in August this year, council decided to clear the park of heritage buildings once and for all. Applications to demolish the Aberdeen Pavilion and the Horticulture Building, designed by Francis Sullivan, are now being processed.

Council has one final opportunity to reverse its decision when it considers the recommendations of its Local Architectural Conservation Advisory Committee, which will occur in late September or October. Both buildings could disappear before the municipal election on 12 November.

Heritage Ottawa, the local heritage activist organization, is now trying to block the demolition by means of a legal challenge (donations to Heritage Ottawa are tax deductible), and to make this an election issue. Meanwhile, local business people are proposing to lease the buildings from the city for a private venture.

The implications of a city demolishing its own designated properties — one of them a National Historic Site — are enormous, and the precedent is very dangerous. Ironically, the only other National Historic Site to have been demolished, the Rideau Street Convent Chapel, was also in Ottawa. That demolition generated much interest in Ottawa’s built heritage, and spawned Heritage Ottawa, which is now leading the fight for the Aberdeen Pavilion.

Ed.

¹⁷ A history of provincial shows to 1861 is given in volume one of *Journal of the Board of Arts and Manufactures for Upper Canada*, 7 vols. (Toronto, 1861-67), 1: 253-62.

Jennifer McKendry lives in Kingston and is preparing a manuscript on 19th-century architecture of south-eastern Ontario. She is the recipient of the Helen Simpson Lynett Fellowship from Queen's University.