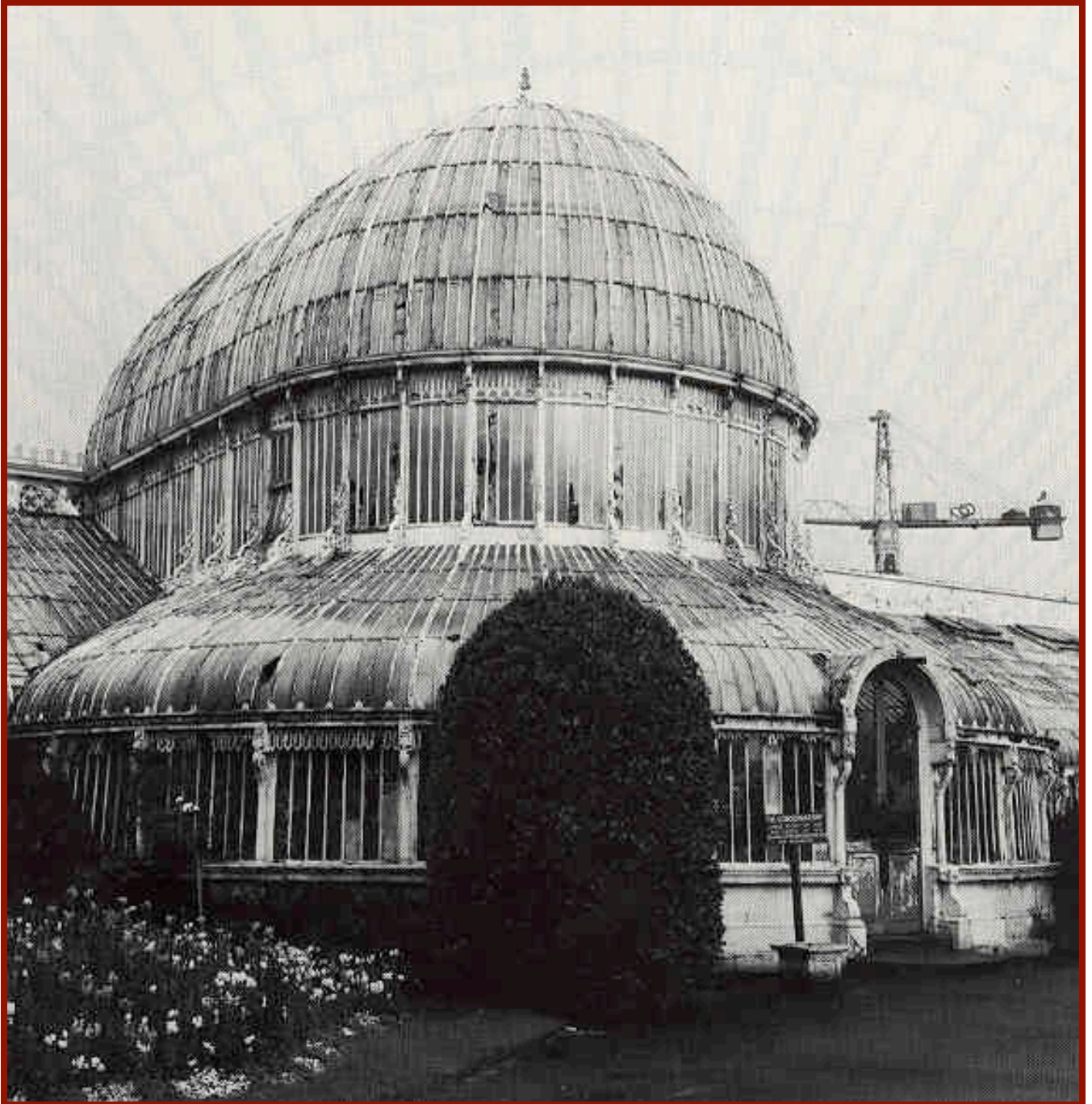
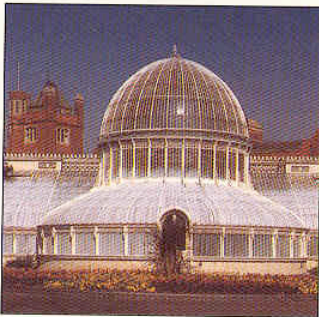


# *The Palm House, Belfast*







The Pavilion

### ***PALM HOUSE, BELFAST***



Woodcut of 1853



Richard Turner

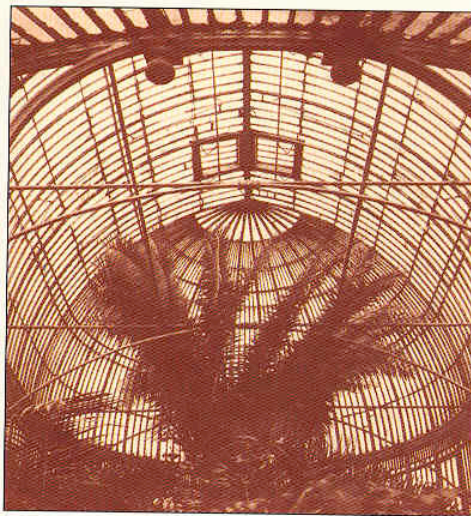
### **Palm House, Belfast, 1839-40**

The architect for the Palm House was Charles Lanyon, but the design was changed during construction by Richard Turner of Hammersmith Works in Dublin who pioneered the use of curved ribs and curved glass and later took on the building of the Palm House at Kew. The Belfast Palm House was 175 ft long by 46 ft high; the dome was 67 ft wide. In 1862 the heating, effected by two brick flues, was deemed unsatisfactory. The firm of Musgrave Bros was engaged to provide a new boiler and hot water heating system. It is recorded that the boiler was *Cockey's Patent*. In severe weather, the old brick flues were also utilised. It is said that new boilers were installed in 1871 and 1881. Also, gas lighting was provided in 1881. It is recorded that two Hartley & Sugden boilers were installed in 1892 by John Hall of Queen Street. [One report says these were called *Red Rose* but the most famous H&S boilers were the *White Rose* series.] A new aboveground boiler house was built in 1982.



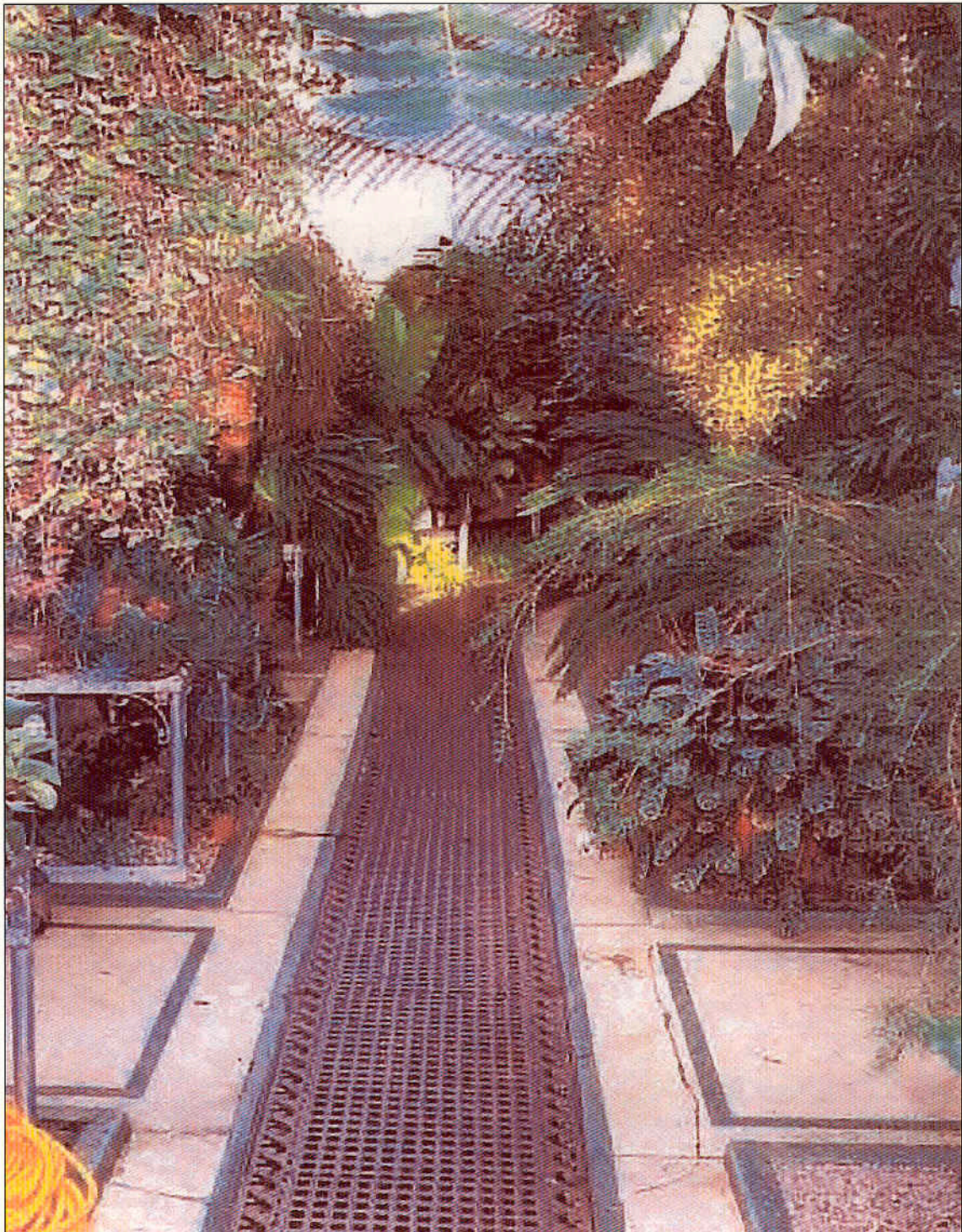
Gallery around dome

The Palm House is described in "Houses of Glass," G Kohlmaier & B von Sartory, MIT Press, Cambridge, Mass, 1990, 158-160.]



The Dome





Heating duct with grating cover



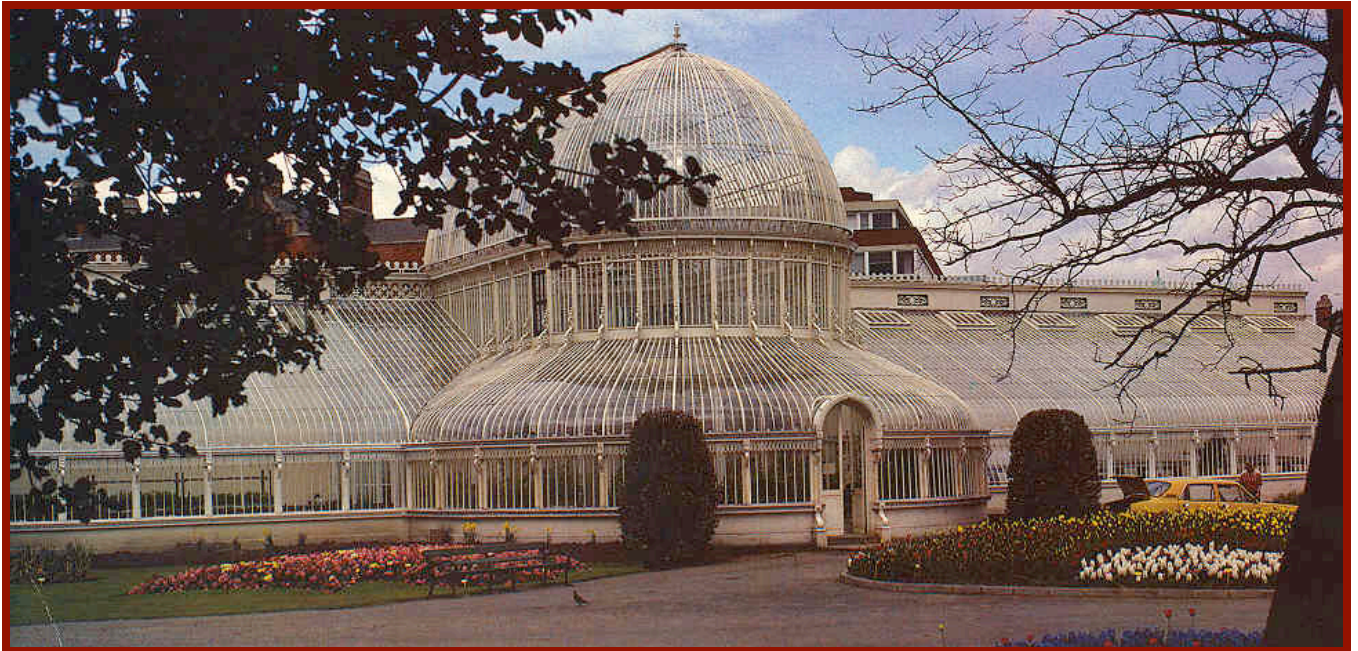
## **HOT WATER**

In 1862 the curator complained to the Directors of the new limited Company of being unable to keep away the frost in the house, the heating at that time being effected by means of two brick flues. As a result a hot water pipe and boiler system was installed by Musgrave Brothers that year to alleviate the

problem, although in severe weather the brick flues had to be lit in addition to this. Several boiler changes were made over the years with two Red Rose boilers being installed in 1892. The boilers have been renewed frequently since then, their average life being 12 to 15 years.

In 1881 gas lighting was introduced and four years later the front entrance was enhanced by encaustic tiles laid into the floor. The Company went to great lengths to maintain an extensive plant collection within their hothouses and the Palm House was always a great source of interest and attraction.





Although the dome is different from that of the large palm house in Kew Gardens, completed by Turner in 1848, it is more like the Kew Gardens dome than Lanyon's original design. It is probable that Lanyon was influenced by the palm houses that Turner had built. The dome of the Belfast palm house was not built by Turner's company but by that of Thomas Young in Edinburgh. The hothouse was originally heated by two brickwork flues. Hot-water heating equipment and a "Cockey's Patent Boiler" were installed in 1862. New boilers were installed in 1871 and 1881. Before the central dome was built, the west wing served as a temperate house and the east wing as a hothouse. When the dome was built, tall palms could be put on display.