## Hall of Fame

Landmark equipment that shaped the history of h&v

## 1856 – Gurney warm air stove

[Sir Goldsworthy Gurney]





Goldsworthy Gurney (later Sir) was born in Cornwall in 1793. In 1814, he settled in Cambourne where he practiced as a surgeon, moving to London in 1820 and developing his interest in engineering.

In 1825 he patented a steam carriage, and in 1852 Gurney was appointed to investigate the ventilation problems in the House of Commons where he flashed off large quantities of gunpowder to observe the motion of air currents. He was said to have posed a greater risk than Guy Fawkes.

His interest in heating led him to invent a new type of warm air stove, which he patented in 1856. The apparatus was described as a metallic vessel having a number of plates extending from its outer surface, standing with the plates vertical in a shallow trough of water. This was significant in attempting to provide humidification to offset the drying feeling caused by warm air. He soon after sold the rights for his invention to the London Warming & Ventilating Company which remained active until the 1950s.

The stove was made in three sizes, the largest being 1 metre in diameter with a height of 2.7m. It consumed about 200kg of coke a week and was said to be capable a heating a space of 120,000 cubic feet. It was very heavy, at a time when there was a popular belief that heat output depended on the mass of metal in the stove.

By 1897, the year of the founding of the Institution of Heating and Ventilating Engineers, a London Warming advertisement claimed "over 10,000 churches, schools, Government and other public and private buildings were being successfully warmed by our system." This included some 22 cathedrals and working examples (converted from solid fuel) can still be seen in Hereford, Chester and Ely Cathedrals.

