It was not the fire but continued involvement in the Antartic whaling industry by Charles Enderby that was the cause of the family downfall. About 1854, some five years after its founding, the Southern Whale Fishery Company was dissolved. The indications are that the family gradually died out in reduced circumstances. Its best known offshoot is General Gordon of Khartoum, whose mother was Elizabeth, grand-daughter of Samuel Enderby. While he lived at Woolwich and attended the Royal Military Academy there, Gordon may well have visited his relatives at Enderby House.

The building was damaged for the second time by enemy action during World War II. For many years it had been used as the staff dining rooms of the Telegraph Construction & Maintenance Company Limited, a BICC company that had taken over the site. In 1948, to provide more office accommodation, the company repaired and adapted the house. It was during that reconstruction that many of the original features were revealed, including the beautifully proportioned octagonal room on the first floor, with its cast iron domed roof.

In the recess over the main entrance there had been a tank for collecting rain water. The first floor bay window of the largest room had at one time been supported on wooden pillars. The ground floor bay window is a comparatively recent addition. From the upper room there are good views down river towards Blackwall Reach, and up river towards the Royal Naval College.

This room had at one time an ornate cast iron fireplace weighing about half a ton. The walls were decorated with four canvas panels, each measuring some seven feet by four feet. They may have come from the SS Great Eastern, when Brunel's famous ship was broken up, or from the old Greenwich Palace, they have however been lost or destroyed. Fortunately a major architectural feature of the octagon has survived: the magnificent cast iron and glass dome, with its decorative plaster work, in the centre of the ceiling. The cornice mouldings are also original features. Old craftsmanship is seen too in the arc-shaped wooden doors, made to line up with the perimeter of the landing at the top of the staircase.

STC acquired Enderby House in 1970, when the company purchased Submarine Cables Limited, from The GEC company. In 1978 STC's Submarine Systems Division was responsible for repairing and restoring the most appealing parts of the building.