

St. KATHARINE DOCKS—2

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Photographs by
the Author

THE FIRST PART of this article outlined the history of the Docks until the present day. Now follows notes on the Docks at the time of closure and thoughts on the site's future.

It is for its buildings that perhaps St. Katharine's is most widely known. The warehouses particularly are of special merit and frequently feature in books and articles dealing with architecture. The G.L.C. say of the system, The architectural importance of St. Katharine Docks lies in the combination of utilitarian function and the classical discipline of its design. Such multi-storey buildings illustrate the change in scale brought about by the requirements of nineteenth century industry.¹ The early Hardwick warehouses, with their functional cliffs of brickwork, elegant proportions, and impressive quayside colonnade, form along with the later works of Jesse Hartley at Albert (1845) and Stanley (1857) Docks, Liverpool² a group of special importance in the development of the multi-storey industrial building.

Originally there were six main warehouses around the Docks, A, B, and C (brought into use 1828) lining the Western Dock, and D, E and F (1829) the Eastern Dock. None are now originally as built, due either to bomb-damage or alteration and addition. Indeed, the warehouses lining the Eastern Dock were so badly damaged during the air-raid on 7th September, 1940, that they were later almost completely demolished. Only a small portion of the North-West corner of D warehouse remains, minus its upper three storeys, along with one quayside column, minus cap. The vaults below D warehouse are however undamaged. E. warehouse was totally demolished, its vaults filled in, and the site later tarmaced and used by the P.L.A. until the closure for car-parking. The granite plinths along the quayside, on which the huge cast-iron Doric columns stood, are the only substantial remains. Warehouse F was likewise demolished, and again the plinths remain, but also the outline of the building is clearly traceable. The vaults remain, although the roof is collapsing in places.

However warehouses A, B and C are built almost identically³, the only difference noted being the granite plinths in the Western Dock are one foot six inches in depth, whereas in the Eastern Dock

the depth is one foot eleven inches. Built to the design of Philip Hardwick, the warehouses are six storeys high⁴, constructed of yellow brick with stone dressings, and have slate pitched roofs behind parapets. Internally cruciform cast-iron columns, spaced 18 feet by 14 feet support massive twin wooden beams which carry timber joists for each floor, the external walls being loadbearing brickwork. This is hardly advanced construction for the time, but was probably necessary on the grounds of cost. A hazard that always had to be considered in designing buildings of this type was fire, and as early as 1796 Charles Bage had built a completely fireproof iron-framed flax mill at Shrewsbury. However some fire precaution was taken, the warehouses being divided into portions by brickwalls, linked by iron-framed doorways, and iron fireproof doors. In the vaults below each warehouse cruciform iron columns are again used to support the brick arched ceilings.

The elevations are plain, but elegant due to their design and proportion. The quayside elevations, made up of a varying number of bays 18 feet wide, are relieved by a number of six foot deep recesses each two bays wide, at various points along the quayside. Each bay unit is denoted at ground level by the huge hollow cast-iron unfluted Doric columns, which convey a great feeling of strength, and provide an 18 foot high covered quay behind. This covered quayside occupies almost half the ground floor area of the warehouses. The most notable feature of the colonnade, the massive cast-iron Doric columns, are each approximately 16 feet 9 inches high overall including cap, and taper vertically from a base diameter of three feet nine inches. They are believed to be some two inches thick, and to have been cast at the Milton Foundry, Yorkshire⁵. The columns support a massive plain stone entablature with simple roll moulding, on which rests five storeys of brickwork, the whole being capped by a plain stone coping. Each bay unit is relieved by a giant round-headed recess the full height of the upper floors, within which at each floor level are small arched recesses, these being fitted with standard 18th century cast-iron window frames or left blank, as required. This pattern is only broken where a vertical series of loopholes⁶ is provided.

1. G.L.C. *Proposed redevelopment of St. Katharine Docks* (1969).
2. *The Brick Bulletin* 6, No. 12.
3. For actual ground plan, which varies to suit space available, see map *the London Archaeologist*, 1, 55.

4. Ground storey includes a mezzanine floor.
5. *The Times*, 27th October, 1828.
6. The term applied to a vertical series of doorways and flaps through which the goods are loaded and unloaded.

Fig. 1. During the Blitz A, B and C warehouses suffered varying degrees of bomb damage. Since the war all three have been used for tea storage. The buildings imposed severe limitations on the introduction of mechanised handling and right up to the closure 19th century methods were being employed.



The outward-facing elevations are more severe in character, and in warehouses A and B incorporate a blank Customs wall.

Where the granite-paved quayside received most wear, beneath the warehouses, down the central cartway, and around quay cranes, the floor is laid with cast-iron plates (4ins. x 2½ins.). In the 1850's parts of the mezzanine floors were extended by using cast-iron support girders, which slot into special clamp brackets designed for the job⁷, these being secured to the all-ready existing upright columns, some eight feet nine inches above sea level. The only other notable change to occur prior to World War Two was the necessity to re-align St. Katharine's Way for the construction of the approach roadway to the Tower Bridge (1886-94). The westernmost portion of A warehouse, along with the southern-most portion of B warehouse were cut back, but it was carried out with such skill that it is only apparent upon close observation. buildings imposed severe limitations on the introduction of mechanised handling, and right up to the closure 19th century methods were being employed

The three other warehouses remaining are architecturally not so well known. G warehouse, which is sited south-east of the Entrance Basin is a rather

ordinary four storey building of yellow stock brick with an interior constructed entirely of timber. Its date of building is unknown, but it is considerably older than the Docks themselves, and is probably about 1800. Originally it was part of the King's Distillery⁸, and it was later incorporated within the Docks. Its two hipped roofs, now clad in asbestos,⁹ clearly shown in the painting of the opening ceremony of St. Katharine Docks by W. T. Huggins¹⁰.

H warehouse, sited along the southern side of the Entrance Basin, is known as the Hide and Cane warehouse, and was built in 1852 to the designs of George Aitcheson, Senior. The Hardwick principle is adopted of building right up to the water's edge, with an open quay behind a colonnade. A plain four storey building of yellow brick, with standard cast-iron window frames, it has not the elegance of the earlier Hardwick buildings, due mainly to its unbalanced proportions. The two bay deep covered quay is two storeys high, and has two rows of thin, cast-iron Doric columns supporting the upper part by way of iron beams at second floor level. This gives the quayside elevation its unbalanced, but probably highly functional,

8. Plan of the proposed St. Katharine Docks, 1824. (P.L.A. St. Katharine Docks folder, Sheet 5.)
9. Probably due to bomb damage, World War 2.
10. P.L.A. Collection.

7. D. K. Smith, "St. Katharine Docks," *Architectural Association Journal* 73 172-181.

appearance. The interior has not as yet been viewed, but it is highly probable that the construction is of iron columns and beams, but with wooden floors. By far the most notable feature of this building is the starkly functional cliff of brickwork of the St. Katharine's Way elevation, which illustrates so well one of the main reasons for building the docks, to stop pilfering.

The remaining warehouse, I, is also by Aitcheson and was constructed 1858-60 to replace an earlier wooden building. Sited on the T-shaped peninsula projecting from the northern quay, it is of considerable architectural merit, although at present it is not listed by the Ministry. The building is five storeys high, built of yellow brick with a completely fireproof interior, iron columns and beams supporting brick-arched granite paved floors. The outward appearance illustrates well the amount of ornamentation that was creeping into industrial building design by 1860. The building occupies almost the total area of the peninsula and again an almost completely open ground floor area is provided. The main elevation, facing the Entrance Lock is some 14 bays wide, each bay being emphasised by a two storey arched recess at ground and first floor levels. The ground floor section of the arch is formed by cast-iron columns with cross-shaped heads supporting iron beams which carry the brickwork above. Within each recess at first-floor level are rectangular segmental arched window openings containing standard 19th century iron window frames, and having stone cills. Above this at second and third floor level identical window

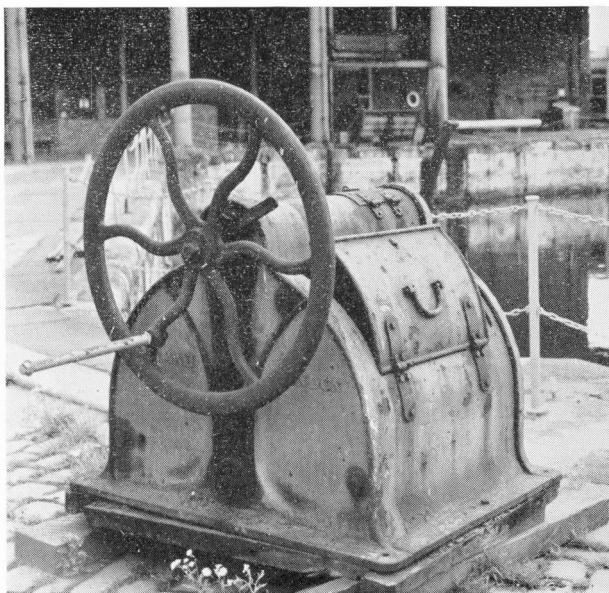


Fig. 2. One of the original winches.

openings are used, whilst at fourth floor level there are round-headed blank panels distinguished by a keystone, with the heavy stone cill forming a continuous band course around the building. Surmounting this is a brick and stone entablature with a stone cornice and high brick parapet above. The end-elevations of the main wing are two bays wide, with a gable treated as a pediment with heavy stone cornice. The two southernmost bays have loop-holes replacing the windows, each being served by a well-mounted crane adjacent to the top storey doorway. The rear wing (forming the bay of the T) is similar in appearance but is three bays wide and eight bays long. The pitched roof is now asbestos clad and set asymmetrically behind the main wing is a now empty clock tower rising some four stages above the main parapet, this being capped by a pyramidal slate-clad roof with a weathervane.

Several other smaller buildings remain within the Docks, but the only one of note is the Dockmaster's House a simple three storey house over a basement built of yellow brick below a slate-clad roof. This is situated adjacent to the river, on the eastern side of the Entrance Lock. Of note are its entrance doorway, centrally set with a round-headed fanlight, and the bow-fronted river elevation with tall sash windows. The house probably was erected very soon after the opening.

However it is not only the buildings at St. Katharines that merit attention. Some of the Dock equipment and furniture is also worth study. Perhaps most important is the vast array of wall-crane some of which date back to the time of opening. It is only possible here to mention the type of wall-mounted crane or "jigger" which was originally installed in the Hardwick warehouses at the top of a series of loopholes (see Fig. 3). These include some installed at the time of opening, the one illustrated being supplied by Joseph Bramah, an associate of Telford. Basically it consists of a manually operated winch, which can be put out of gear by the operator for quickness in use. Goods to be brought into the warehouse on an upper floor have to be winched up by hand, but when goods are taken out and downwards the winch can be disengaged and the goods allowed to descend by gravity, the rate of descent being controlled by a foot-operated braking mechanism applied to the main drum of the winch. This sort of wall crane is still very common in London's warehousing areas, but most are likely to disappear before long, and with their extinction another skill, that of the "jiggerman" will disappear. Another type of crane that warrants a mention is the hydraulic quay crane or "Devil" that stood adjacent to G warehouse up

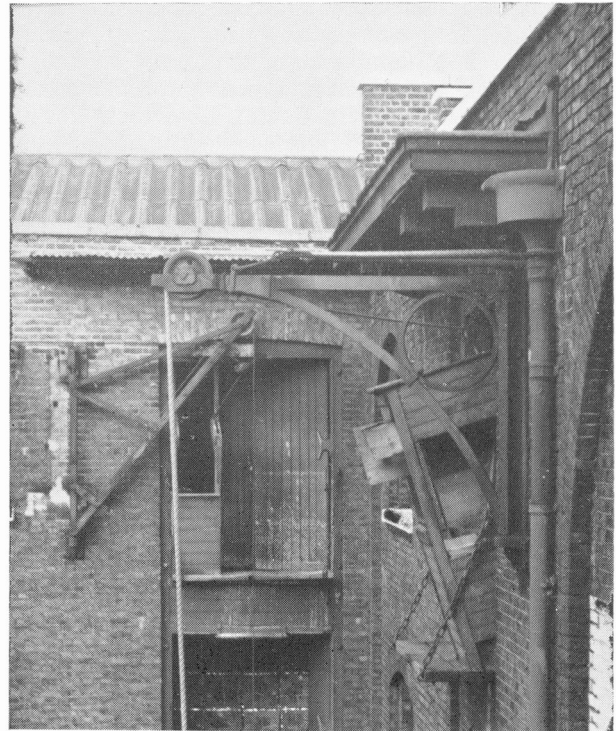
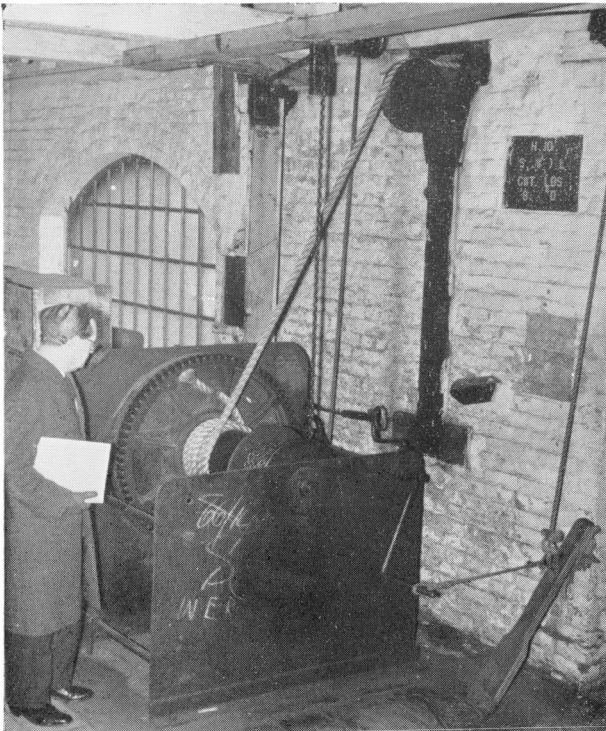


Fig. 3. Internal and external views of a 'jigger'.

until the closure¹¹. This consisted of a mobile hydraulic cylinder, the ram of which drove a huge flywheel, to which the handling rope was attached. Hydraulic power was first used in London's dockland about 1855, and until a water supply was built into the buildings, mobile equipment was employed. The example at St. Katharine's probably dates from about 1858-60 and is believed to have been manufactured by Armstrongs of Newcastle, at a cost of about £120 each. Both the St. Katharine and the London Dock Companies bought these type of quay cranes, and an example still remains in London Docks, though no longer mobile. The St. Katharine Docks' example has been presented to the Science Museum by the P.L.A.

Joseph Bramah also supplied much of the original machinery for the lock gates, and until recently one of the original twenty winches¹² for opening or closing the gates remained, though not in its original position (see Fig. 2). However, its present whereabouts is not known. Several other smaller items or dock equipment are also worthy of mentioning, including the hand operated retractable footbridge, which winds back into the quay linking I warehouse peninsular with the former Marble Quay, north of G warehouse. The twenty main bollards, four at each Dock entrance and twelve

around the Entrance Lock are probably the finest with the Port. Approximately three and a half feet high, they bear on the top the inscription "St. Katharine Docks, 1882," they being the only examples of bollards known to bear an inscription of this type. Another ingenious device is the sliding mooring rings provided in the quay walls, above the water level. They replace the more usual bollards and save space.

The whole site of St. Katharine Docks, except warehouse and the new Dock House, was purchased by the Greater London Council in January of this year, and it is now the subject of a re-development competition, the G.L.C. making some extremely interesting stipulations within the development proposals. These include the necessity to retain all the water area for use as a Yacht Basin, and the desire to retain some of the buildings, if at all possible¹³. However, if all the present buildings are demolished, they will not have gone totally unrecorded. The negatives of nearly 200 photographs taken by members of the Thames Basin Archaeological Observer's Group are housed with the National Monuments Record, London, and copies of the photographs, together with a brief report on the Group's findings are also to be found in the P.L.A. library.

11. Aubrey Wilson, *London's Industrial Heritage* (1967)
14. Unfortunately the example in the photograph is in London Docks, not St. Katharine's.

12. *Ibid* 144-5.
13. G.L.C. *Proposed redevelopment of St. Katharine Docks* (1969)