



## SHIPS AND SHIPPING

### The Albert Dock – a Case Study

The information below comprises of a selection of key facts and extracts from source material. This could form the starting point for a project tracing the history and development of the dock from its original construction to its present day uses.

#### Introduction



In 1846 the Albert Dock was filled to overflowing with valuable cargoes from all over the world. The five blocks of five story buildings were the masterpiece of Jesse Hartley – chief engineer to the port between 1824 and 1860. From November 1841 hundreds of navies toiled night and day to drive foundations and build walls to provide the first fireproof dock warehousing in the country constructed solely of cast iron, stone and brick.

#### Original Construction

1837 Plans submitted by Jesse Hartley  
1841 Work began on construction

#### Materials included:

23.5 million bricks  
47,000 tons of mortar  
13,729 piles of beech timber (equivalent to 48 miles)  
Cast iron columns 4 feet in diameter and 25 feet high

The labour force in 1841 comprised 528 men made up of the following:

Blacksmiths	Blacksmiths assistant
Machine fitter	Millwrights
Carpenters	Shipwrights
Brass foundry	Painters
Plumbers	Masons
Sawyers	Paviours
Paviours assistants	Labourers
Office staff	Storekeeper

Hartley showed meticulous attention to detail. The S & J Holes contract for bricks stated specifically that they should be:

“manufactured of the Clay called the North Shore Clay... to be hard burned and well shaped.. and without any admixture of clinkers or of broken or of soft bricks or bricks containing lime pebbles...And it is hereby agreed that the surveyor of the said Docks shall have the sole and uncontrolled power...of rejecting all such of the aid bricks as he may in his own judgement deem soft, badly shaped or in the slightest degree defective.. or otherwise unsatisfactory to the surveyor of the said Docks in any manner howsoever”



## SHIPS AND SHIPPING

### **1845 Official opening by Prince Albert**

Surface area of dock:	21,390 square feet
Warehousing:	1.25 million square feet
Internal water area:	7 acres
Total cost:	£515,475.8s 1d

### **Impressions and Opinions**

“The sight was a character to be long remembered. The quays around the dock and warehouses above were lined with people...whilst, from every window, roof and point where they could be displayed, there floated in the wind, banners, flags and streamers of every colour and device”

“The works for strength and durability were unsurpassable but it is regrettable that no attention whatsoever has been paid to beauty as well as to strength. The enormous pile of warehouses which looms so large upon the river and in its vastness surpasses the pyramid of Cheops, is simply a hideous pile of naked brickwork”

James Picton “Memorials of Liverpool”, 1872

“I have heard of the greatness in Liverpool, but the reality far surpasses the expectation”

Prince Consort during his visit to Liverpool in 1845

“The design is one of uncompromising and elegant simplicity, carefully patronised, strongly stated and executed in materials that impart a warmth to the whole”

Deirdre Moreley, Liverpool – “Images of a great seaport”, 1989

Jesse Hartley

Described by a contemporary as: -

“Large build and powerful frame, rough in manner and occasionally rude, using expletives which the angel of mercy would not like to record: sometimes capricious and tyrannical, but occasionally where he was attached, a firm and unswerving friend. Professionally he had grand ideas and carried them into execution with a strength, solidity and skill which have never been exceeded”

James Picton, “Memorials of Liverpool”, 1872

Described at the time of his death: -

“as a dock engineer...he is admitted to have occupied a high, if not indeed the highest position of any man who has lived within the present century in the design

and construction of the numerous docks of Liverpool he has left monuments of his skills as an engineer at least as long as the fame and commercial prosperity of the port”

1972 – Albert Dock closed

“They were left open to the river and they silted up their gates rusted and rotting and their quaysides overgrown with grass and weeds. The warehouses were in a similar plight, completely derelict and decaying, all their windows broken and much of their brickwork damaged”

Extract from Derek Whale, “Bygone Merseyside”, 1989

### **Dock Restoration**

1982	Plans prepared
1983	Work commenced
1984	First phase opened
1988	Official opening by Prince Charles

Shops, cafes and vaults:	357,000 square feet
Offices and proposed hotel development:	462,000 square feet
Museums and Galleries:	252,00 square feet
Marina:	300 vessels
Estimated cost:	£100 million

### **Curriculum Tasks**

Building Technology – discuss the different types of materials used in building and how they have changed. Warehouses built prior to Hartley’s design were built of wood and thus susceptible to fire – what do warehouses look like today? There is opportunity for comparison with the warehouses at Liverpool Freeport?

Form and Function – discuss the relationship between the form and function of the building. How well has the form been adapted to today’s function? Think of ways in which other buildings could be readapted for other uses. Children could propose a new use for a derelict building in their area. Comparison of usage during 1800 and 1990.

Taste and Aesthetics – the quotations above could be used to introduce children to the concepts of taste and aesthetics. Discuss whether the building form of a warehouse can be pleasing to the eye – allow the children to discuss their personal feelings towards the building. This should relate to how people’s perceptions and tasks change over time. The Albert Dock is Grade 1 listed which reflects the level of its value to the nation. Discuss with the children the types of criteria that are used to make value judgements.

Tourism Development – the restoration of the Albert Dock as a tourist development means that millions of visitors are coming to Liverpool each year. This will make an important contribution to the local economy. However, not many people could afford to buy one of the apartments in the Albert Dock. Discuss the extent to which tourist

developments i.e. Liverpool Garden Festival can involve the local community and relate to their needs.

Art - the docks make excellent places to study the play of light and shade on contrasting and complementary textures such as brick, stone, iron, wood. Children could pick out particular features in painting, photography, framing etc – there is also a great variety of shapes such as pillars, bridges, capstans, cranes, chairs, lamp standards, and collards which could provide sensory experiences for younger children.

## **Additional Information**

### Site visits

The taped commentary on board Mersey Ferry provides an overview of the Liverpool skyline and the extent of the docks.

Merseyside Maritime Museum has many relevant exhibitions and there is a heritage trail around the Albert Dock complex.

Cammell Laird shipbuilders cater for small groups on written request.

Cammell Laird  
Shipbuilders Yard  
New Aleston Road  
Birkenhead  
Cheshire  
CH41 9BP

Pilkington Glass Museum has a lighthouse optic and related display. It provides comprehensive resource packs for primary and secondary levels relating to glass manufacture.

Pilkington Glass Museum  
Prescot Road  
St Helens  
Merseyside  
WA10 3TT

Proudman Oceanographic Laboratory at Bidston Observatory conducts research relating to the sea, coastal defence currents and turbulence for Great Britain. They welcome visits from school groups studying Maths, Science or Environment. They also provide a series of information leaflets and a careers pack relating to marine research.

Bidston Observatory  
Birkenhead  
Cheshire  
CH43 7RA

## **Publications**

T J Buckley "Port at War 1939 – 1945"  
Mersey Docks and Harbour Board, 1946

John G Cooper "Merseyside from the Mersey", Thomas Lyster 1990

Philip Browning "Liverpool Heritage Walk"  
Liverpool City Council 1990

Anthony Tibble Art and the Sea  
National Museums and Galleries on Merseyside, 1987

Paul Rees "A Guide to Merseyside's Industrial Heritage"

Peter W Woolley Liverpool – a portrait of the docks and the river Mersey (2 volumes)  
SB Publications 1989

Merseyside Port Panorama – an exhibition of marine paintings. Catalogue  
Maritime Museum 1986

N Richie-Noakes, "Jesse Hartley – Dock Engineer to the port of  
Liverpool 1824 – 1860"  
National Museums and Galleries on Merseyside 1980

F E Hyde "Liverpool and the Mersey –an economic history of the port 1700 – 1790"  
David and Charles 1971

L Moss, M Stammers "Liverpool's South Docks", 1981

Gomer Williams History of the Liverpool Privateers, 1897

Stuart Mountfield "Western Gateway – a history of the Mersey Docks and Harbour  
Board", Liverpool University Press, 1965