

Even in the Stanley Dock the want of space overhead for ventilation and light is seriously felt, the men work with difficulty and the gangs require frequently to be relieved when weighing and sampling dry tobacco... That part of the warehouse where weighing, sampling, examining, repackaging etc. is carried on requires especially to be lofty and well lighted, as far as possible from the north.

In 1874, the Board instructed Hartley's successor, G. F. Lyster (1821-1899) to design a dedicated tobacco warehouse, close to the railway depot but the idea was dropped in 1875 when the board bought the one at King's Dock from the City Corporation. In 1895, the board again resolved to build a new purpose-built tobacco warehouse, this time at Stanley Dock, within the southern part of the dock, although initially it was to have 6 floors and a footprint of 630 ft x 165 ft. The construction of such a large building within a dock was a huge undertaking and a big financial risk and some members of the board were against it. However, in 1897, the Board increased the size of the intended warehouse to 723 ft and increased the floors from 6 to 14, with 12 "fireproof" upper floors. The eleven upper floors (excluding the top floor) had a floor-to-soffit height of approximately 7 ft, enough to enable one hogshead of tobacco to be manoeuvred into position. The overall capacity was intended to be 55,000 hogsheads although it is believed to have actually held 60,000 when completed, each weighing 1,000 lbs. By this time the Engineer in Chief to the Dock Board was A. G. Lyster and it is he who is credited with its design but Arthur Berrington, an architectural draughtsman in Lyster's office, almost certainly had a hand in the design, especially the brick and terracotta detailing at high level.

The contract for the construction of the warehouse was awarded to Messrs Morrison and Sons of Wavertree for a price of £223,952 and work commenced in January 1898. The project involved the construction of a new concrete quay wall on the South side of Stanley Dock, the demolition of the South Hydraulic Power Station (and the expansion of the surviving North Hydraulic Power Station), the formation of concrete pier foundations down to the bedrock, the infilling of the (then redundant) colonnade on the North side of the South Warehouse and the construction of three bridges at first floor level between the new Tobacco Warehouse and the South Warehouse.

Great care was taken with fire prevention in the new building, by dividing it into 6 compartments and, as the town mains water pressure was inadequate to rise to the top, by installing three huge tanks in the road between the Tobacco Warehouse and the South Warehouse (now known as Pneumonia Alley) for salt water from the docks/river. The water was then pumped by hydraulically powered motors on the West and East quays to enable Corporation fire-fighting engines to attach their hoses to delivery pipes connected to rising mains.

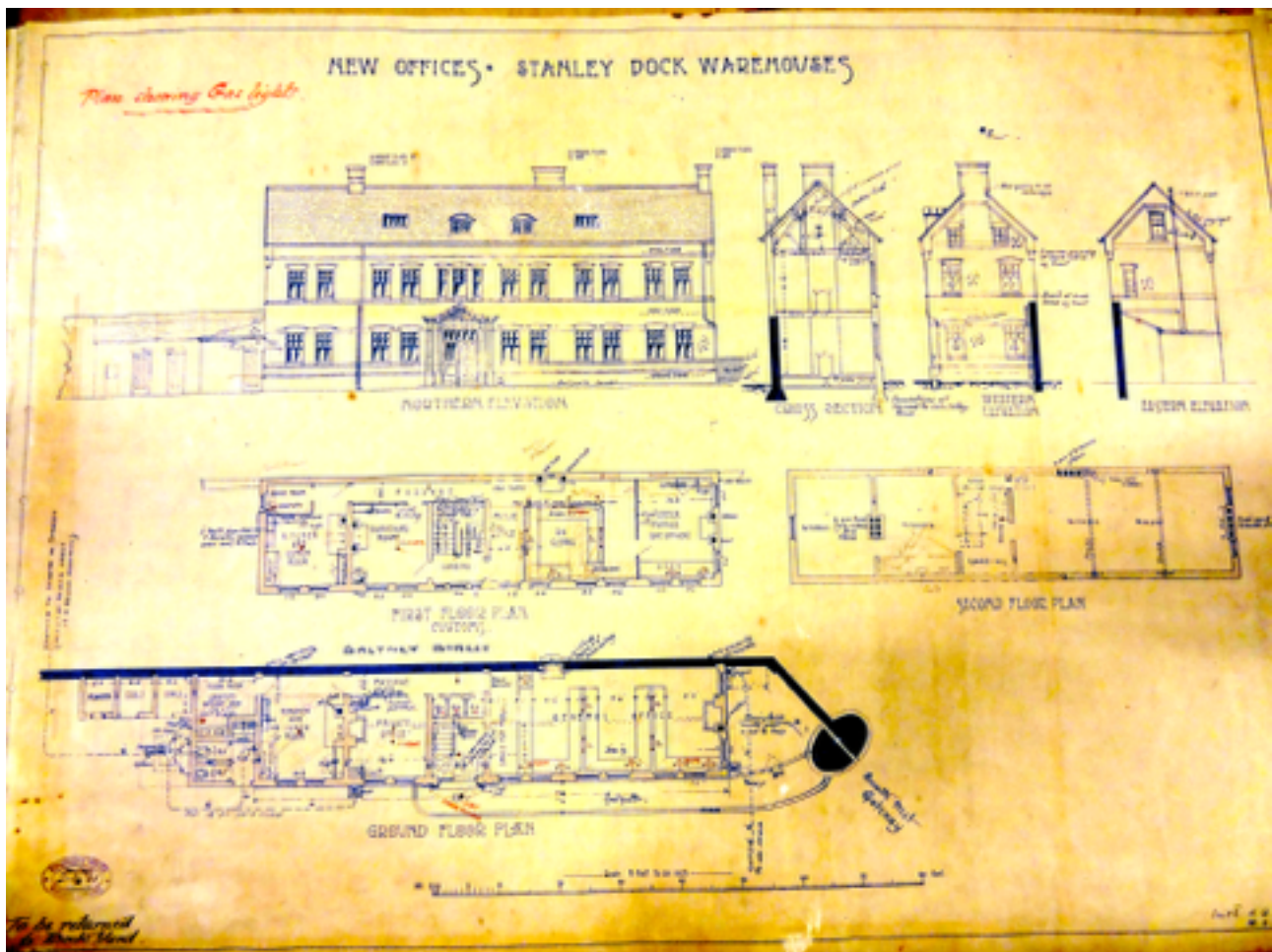
When completed in March 1901, it was the largest purpose-built tobacco storage facility in the world and the largest brick building in the world, with approximately 27 million bricks (common bricks, blue bricks and terracotta bricks used in a highly decorative polychromatic manner) in the external walls, although the warehouse had a frame of cast iron columns and beams, all wrapped in fire-proof clay, and concrete floors. It had 30,000 panes of glass and 8,000 tons of steel. It had hydraulic power for lifting the barrels and was lit by electricity from the beginning.

At the same time that the Tobacco Warehouse was under construction, the Warehouse Office was built to accommodate the Warehouse Manager, the Customs Surveyor and their staff.

In 1913 the tall Grain Silo was built at the south end of the east quay in re-inforced concrete to the designs of J. Appleby and Sons, almost to the same height as the Tobacco Warehouse. In 1915, the South Extension to the South Warehouse was built in re-inforced concrete with a flat roof, extending from the south elevation to the south boundary wall for most of the length of the South Warehouse. It was a single storey structure with a single internal void but it was effectively double height and so reached up to between the first and second floors of the South Warehouse.

In 1941, considerable damage was caused to the ensemble by enemy bomb raids, most notably the May Blitz. The main damage was to the roof of South Warehouse and to the east end of North Warehouse. The two east bays of the North Warehouse were subsequently demolished and it was replaced in 1953 with the Rum Warehouse.

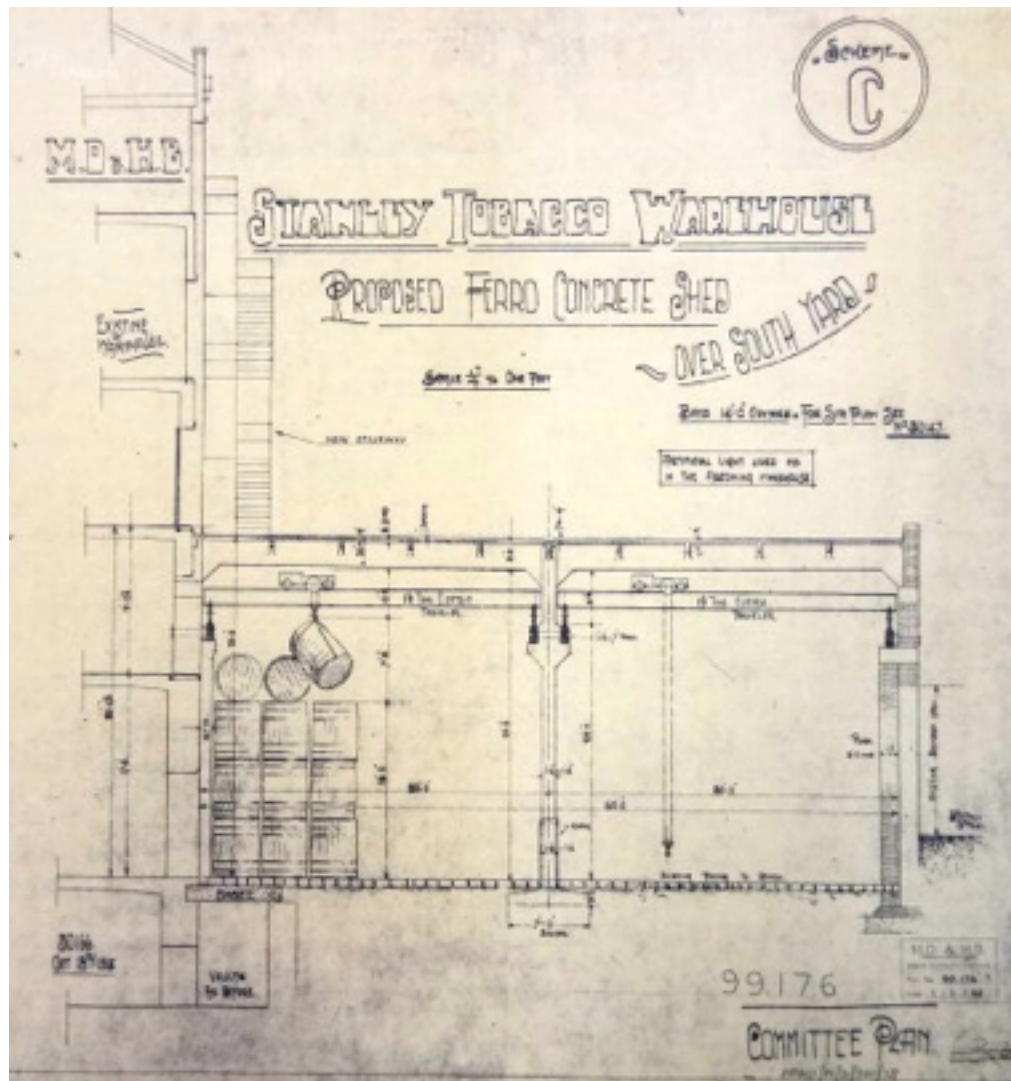
No further major construction work took place at Stanley Dock until the restoration of the North Warehouse and the Rum Warehouse by Stanley Dock Properties in 2013-14.



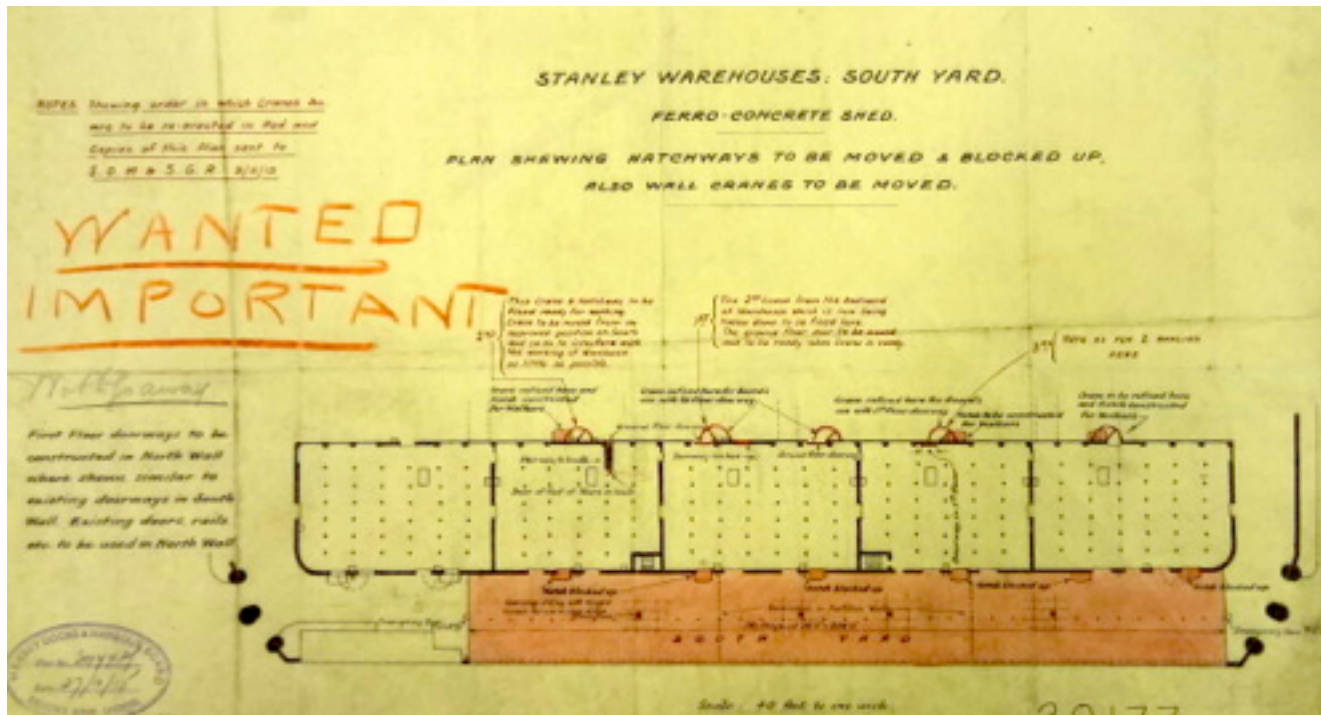
Plans of "New Offices" (c) MDHC



Grain Silo and East end of Tobacco Warehouse



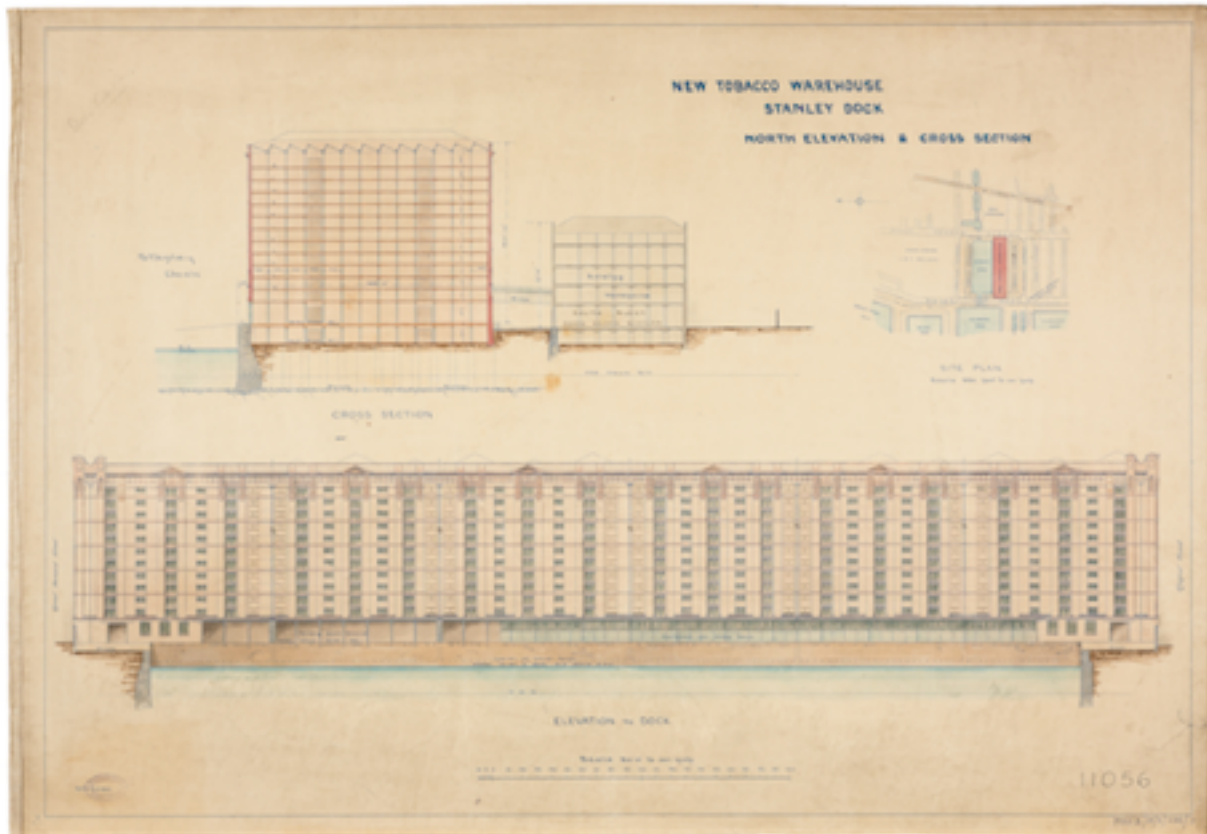
Section through South Extension
(c) MDHC



Plan of South Extension (c) MDHC



Work on barrel vaulted roof of Rum Warehouse around 1953 (c) MDHC



Section and North Elevation of Tobacco Warehouse (c) MDHC

Alterations to the Tobacco Warehouse

As with many industrial buildings, various alterations were made to the building during the course of its working life as a Tobacco Warehouse, to suit changing working practices and improved technology. Records of some of the alterations are provided in drawings and minutes in the extensive archives of the Merseyside Maritime Museum.

As early as 1902 a store-room for small packages and a labelling room were provided on the top floor in Section F (the W end) for Cavendish Tobacco. The lower part was constructed of corrugated iron and the upper part of wire guards.

In 1914, some new ventilators were installed in the weighing room of the Tobacco Warehouse.

In 1932, four new WCs were fitted in the Tobacco Warehouse and in 1933, 18 old WCs were demolished and replaced with four new ones.

Plans dated 1949 show proposals for new electric lifts for the Tobacco Warehouse to be provided by William Wadsworth and Sons Ltd.

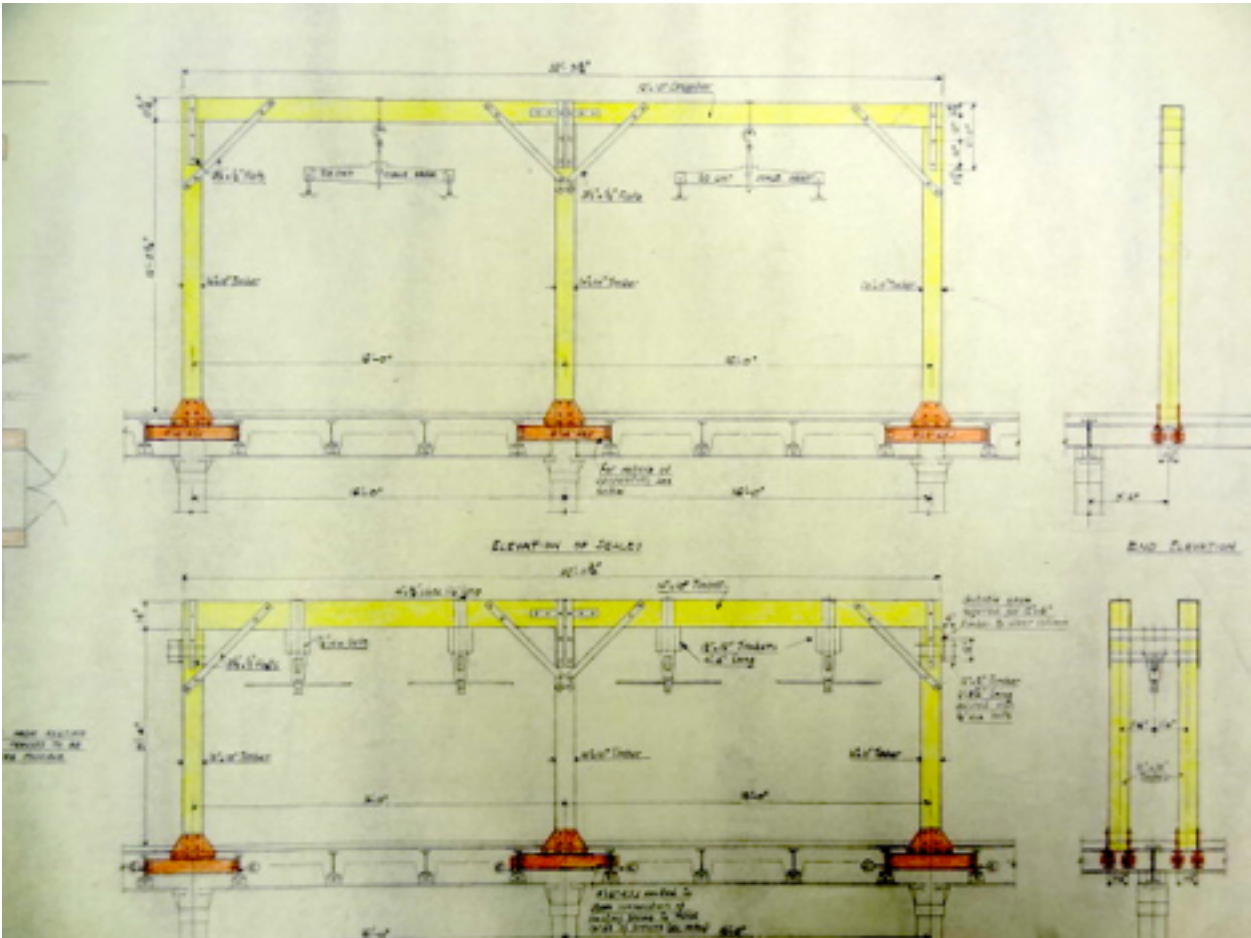
Plans of 1953 show the removal of steel doors at the east end of the ground floor of the dockside and the bricking up of the openings.

In February 1954, the charging stations (for electric trucks?) in the Tobacco Warehouse were extended.

The records suggest that in 1955, the roof of the Tobacco Warehouse was stripped, reboarded and re-slatted at a cost of £34, 875. The same year, the weighing frame and scales were moved from the top floor to the quay floor, due to the damage caused to the floor by the continual pounding by the machinery.

In 1959 further electric lifts were commissioned in Section A of the Tobacco Warehouse.

Records suggest that a new mechanisation programme was begun in 1961, with the introduction of 2 Dormant Platform scales by W.T. Avery and that in 1962 2 sets of roller conveyors were bought for the Tobacco Warehouse.



Weighing Frame moved from top floor to quay floor. Drawings (c) of MDHC

MERSEY DOCKS & HARBOUR BOARD			
ENGINEER'S OFFICE			OFFICE COPY
STANLEY DOCK - NEW TOBACCO WAREHOUSE,			
MOVING OF BRIDGE, SCALES & PASSES FROM THE 1ST FLOOR TO THE QUAY FLOOR			
REVISED	DATE	DESIGN	76.088
			DRAWING NO.
			76.088
			DATE 15-10-66
DESIGN BY	A-100		
DRAWN BY			
CHECKED BY			
Notes - 1/2" 3/4" 1" 1 1/2" 2" 3" 4" 6" 8" 10" 12" 14" 16" 18" 20" 22" 24" 26" 28" 30" 32" 34" 36" 38" 40" 42" 44" 46" 48" 50" 52" 54" 56" 58" 60" 62" 64" 66" 68" 70" 72" 74" 76" 78" 80" 82" 84" 86" 88" 90" 92" 94" 96" 98" 100"			ONLY SENT TO THE
			21/10/66

History of the use of the Tobacco Warehouse in the 20th Century

The Stanley Dock and warehouse ensemble was initially constructed primarily for imported general cargo but soon became to be dominated by the storage of tobacco. Partly as tobacco needs to “rest” for 2-3 years before it can be used, it became a secure bonded warehouse, where bonds were purchased in the stored tobacco. Bonds were repaid and taxes were collected when the tobacco finally left the site. HM Customs Officers kept a close watch on bonded warehouses to ensure that goods were not taken out without the payment of tax. The use of the warehouses for the storage of tobacco ceased in the early 1980s.

The storage of such large volumes of tobacco from various sources which arrived at various times and spread out over three large warehouses required meticulous record-keeping of which tobacco was stored where. The tobacco generally arrived in barrels (hogsheads) and each individual barrel was marked to identify its source and date. The record-keeping also required that each storage area in each floor of each warehouse had to be referenced or numbered and the numbers were simply painted on to the beams which formed part of the ceiling. Similarly for purposes of recording the bonds and who had bought them, detailed *Registers of Bonds* were kept as hand-written ledgers. An extensive set of these registers dating back to 1915 were found in the vault in the South Warehouse in 2013 from which it can be seen the reference numbers of shipments of tobacco, the name, address and occupation of the purchasers of the bonds, the amount purchased, the price paid at the time of import and the price paid back at the time of sale.



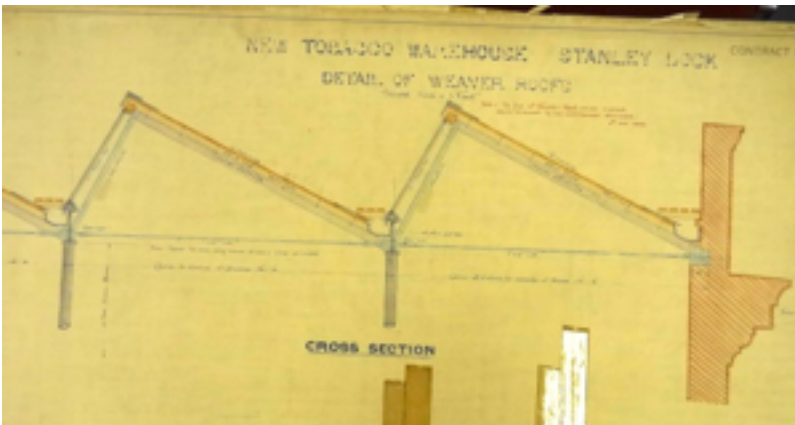
Register of Bonds



Numbered bays

In order to determine when the tobacco had rested sufficiently and was ready to be sold for use, sample barrels from each consignment had to be opened and the tobacco within had to be tested. The comments of Edward Samuelson (above) and the photograph below suggest that this sampling and testing was undertaken mostly on the top floor of the Tobacco Warehouse, where the North Lights or “Weaver Roofs” provided a relatively constant level of indirect light. After testing, the lids of the barrels had to be re-fixed but because the tobacco expanded upon opening, a certain level of forces was required to push the lids back down and so at least two types of presses were used to do this. A pair of double hydraulic presses and a further single hydraulic press survive on the first floor of the South Warehouse, although records in the Maritime Museum Archives show that these were originally designed for Albert Dock, as the drawings are headed “Hydraulic Press for Tobacco Warehouse Albert Dock” but have an added note “Transfer to Stanley”. The drawings suggest that these presses could generate pressure of “53 tons @ 600lbs pressure” (per sq in). The drawings illustrate that the presses incorporated rollers in the floor (although no such rollers were fitted at Stanley) and that their hydraulic rams extended up into the floor above (as found at Stanley). The second type of press was manually operated screw presses and again a drawing of this type is headed “Stanley Dock - New Tobacco Warehouse, Provision of Four Hand Presses - South Side, Top Floor, C Division”.

The photograph below shows 5 men examining the tobacco and working on the barrel and in the background is a timber weighing frame, which is very similar in structure to the hand press. A drawing found in the Maritime Museum Archives shows a similar frame and another drawing dated 29.12.1955 is headed “Moving of tobacco scales and presses from top to quay floor, Sections C & F”. A weighing frame survives in 2015 in Section F on the ground floor, together with several instructions for use.



“Weaver Roofs” (c) MDHC



Sampling of Tobacco (C) NML

At a weight of approximately 1,000lbs each, it was no easy task to load and unload move the barrels around the warehouses. The photographs below show that in the early 20th C some barrels were brought from ships in the main dock system by both horse-drawn carts and lorries before being lifted by the hydraulic cranes into the South Warehouse, from where they could stay or be transferred to the Tobacco Warehouse via one of the three connecting bridges at 1st floor level. The other photographs show the barrels being stacked up to three high on the ground floor by an early form of fork-lift truck and being rolled onto hand-pulled carts. Very little operational equipment survives in the Tobacco Warehouse but there are a few examples of timber ramps, wedges, resting blocks etc which are illustrated in a separate document, the *Schedule of Unfixed Historic Artefacts* dated 14.5.14. These all offer a fascinating insight of the working life in the Stanley Dock Warehouses.

Although tobacco remained the predominant produce to be stored in the Tobacco Warehouse, in 1923, Sections A and B (at the east end) were partially used for the storage of grain, in association with the adjacent Grain Silo in the SE corner of the Dock. Then in 1930 Section D was let for the storage of rubber.



Early fork-lift truck in ground floor of Tobacco Warehouse (C) NML



Delivery of hogsheads by horse-drawn cart and lorry to South Warehouse



Rolling of hogsheads in Ground floor of Tobacco Warehouse

World War II

Stanley Dock was used during WWII as US Base Number 1 Port Transit Depot and became the logistics base for the US Army in the region. Together with the nearby Silcocks Warehouse, it was responsible for the storage and shipment of large quantities of food, garments, medical supplies etc for the army. It was also used as a base to receive, process and send on to relatives, the personal effects of American soldiers who had lost their lives. A record of the American activity is reproduced by John Kerrigan in *Liverpool - Gateway to America* which states that "...All warehousing, inventorying, checking and record keeping is done by civilians and each floor has a civilian in charge who keeps a record of supplies on hand and its location on the floor." It goes on to state that "Subsistence depot - is situated on the first floor and contains a model stock for over 200,000 men for a two week period."

Anecdotal evidence is that the sixth of the Tobacco Warehouse was used as a field hospital for injured American soldiers and this is supported by graffiti which was drawn on to the walls and columns at the west end of that floor. There is also evidence of attempts at creating a more secure compound on the eighth floor, for more valuable goods. It was reported in the *Liverpool Echo* that Eleanor Roosevelt (the *First Lady* at the time) visited Stanley Dock on 8th November 1942 and that:

Mrs Roosevelt's first call was a large dockside warehouse (The Stanley Dock Tobacco Warehouse) where United States Army supplies are received for despatch, and it was here that the onlooker felt the impact of what is meant by American "hustle". A speedy jeep motor-car of the type now familiar on all Allied fronts, awaited Mrs Roosevelt, her secretary Miss Thompson, and her aide General Davison, and in this she inspected the warehouse from gallery to gallery and floor to floor. To reach the upper floor the jeep was driven into the lifts.!



American forces graffiti on 6th floor





Eleanor Roosevelt in a jeep in the Tobacco Warehouse (C) John Kerrigan



Goods unloaded into Tobacco Warehouse by Liverpool dockers, supervised by American forces (C) John Kerrigan

After the war, the Tobacco Warehouse returned to use for the storage of tobacco and for a short while it again became the pride of Liverpool's docklands. An article in a local magazine *Liverpool* 1969 described the Tobacco Warehouse: " Like a sheer cliff it rises from the waterfront - Liverpool's massive monument to the discovery of tobacco. The single biggest tobacco bond in the world. KING KONG OF DOCKLAND' It stated that it contained tobacco worth £340,000,000. The article describes the routine of a warehouseman who had to daily walk 10-12 miles a day checking the goods and opening 290 doors which had double padlocks - one held by the warehouseman and the other by the Customs Watcher. However the intensity of its use declined shortly afterwards and it ceased to be used for the storage of tobacco completely in 1985.

The Stanley Dock Heritage Market was operated on Sundays on the ground floor of the South Warehouse and Tobacco Warehouse from the 1980s until 2011. Whilst this use was never likely to be a sustainable use sufficient to generate the funds necessary to maintain the buildings, it did at least provide some income for minor maintenance and security and enabled the public to gain access to the site. Also in the 1990s, the west end of the South Warehouse was used for a short time as The Hard Dock Cafe, an atmospheric night club, with access from an external steel staircase - for further information, see www.mikeknowler.com/dock.info.html

Due to the site's high level of historic authenticity, it has been used on several occasions as a film set, for such productions as *Captain America*, *Sherlock Holmes* and in 2012 and again in 2014 for *Peaky Blinders*. Even so, Stanley Dock has remained largely empty and slowly decaying for approximately 30 years.

The entire complex has undergone some alterations during its lifetime of over 150 years to accommodate changing demands and technology, but it is still essentially an authentic,

evolved dock and warehouse system of high heritage significance on a massive scale with many interesting details and components. It retains a high degree of historic integrity, making it one of the most impressive groups of industrial buildings in Liverpool. The North Warehouse has now been converted to a hotel by the applicants for the current applications but the unconverted components of the ensemble remain one of the most challenging adaptive re-use opportunities in the country.



Extract from Liverpool 1969