

APPENDIX 7 – Fixtures & Fittings

Information and background research to inform final interpretative fit-out of HMS Warrior

PART 1: Upper Deck

1. **Blackboards**: - with frame to show daily activities on board and timings.

2. **Helmsman's telegraph to be added to the Fwd bridge**; - NMRN holds file with patent details (to be supplied on appointment).

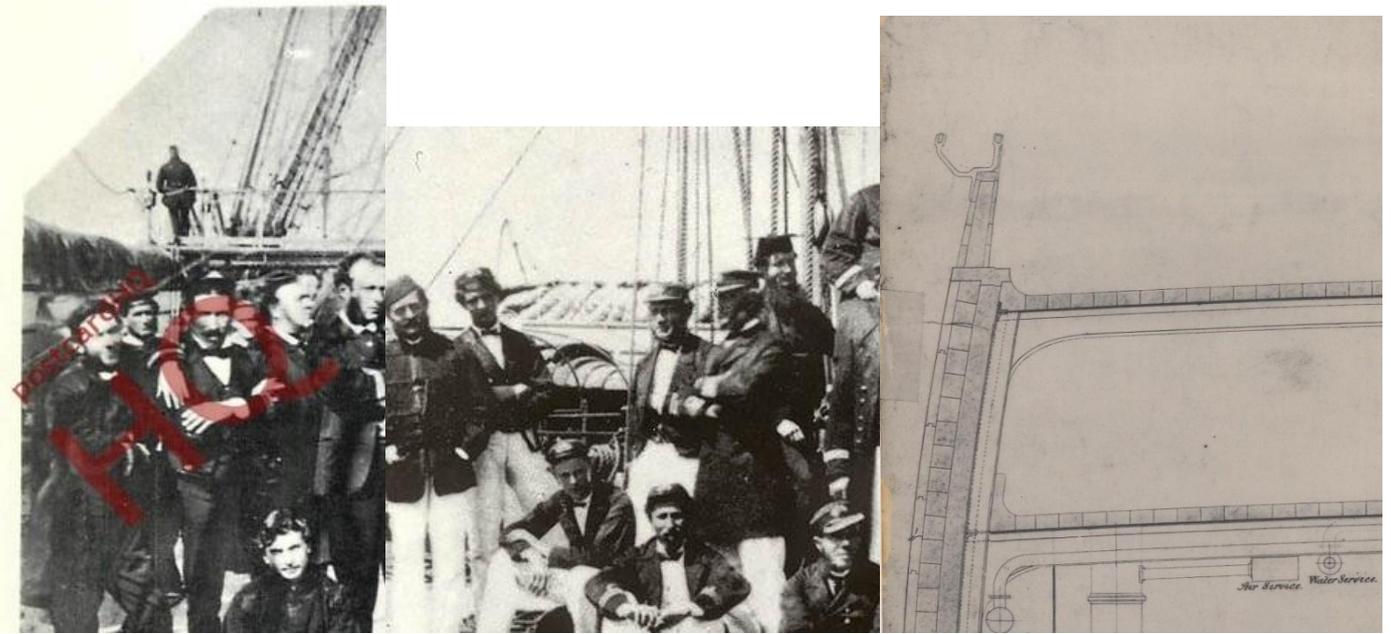
3. **Hammock Stowage Display** – A short section of the Hammock Stowage atop of the bulwarks to be opened up to show how hammocks were stowed. This will help demonstrate the purpose of the stowage units.



Typical Hammock Stowage and cover

Contractor to allow for:

- Minor adjustments to existing covers to the canvas cover to the Hammock Stowage so that this can be opened easily on a daily basis and placed back in position quickly during wet weather.
- 4 or 5 x hammocks tied up and stowed in the Hammock Stowage unit. (The Hammocks to be marked with watch numbers and broad arrows. Seamen's in white numbering on a black patch or black numbering on a white patch. Marines in red numbering on a black patch or red numbering on a white patch. Admiralty Broad arrow in blue).



Warrior's officers, also showing hammocks in stowage in background left



Reference Illustrations: Hammock stowage without hammocks in:

[https://en.wikipedia.org/wiki/HMS_Wolverine_\(1863\)#/media/File:HMS_Wolverine_\(1863\)_cutlass_drill.jpg](https://en.wikipedia.org/wiki/HMS_Wolverine_(1863)#/media/File:HMS_Wolverine_(1863)_cutlass_drill.jpg)

Hammocks side by side in pairs along the ship sides in hammock stowage: HMS Minotaur 1868

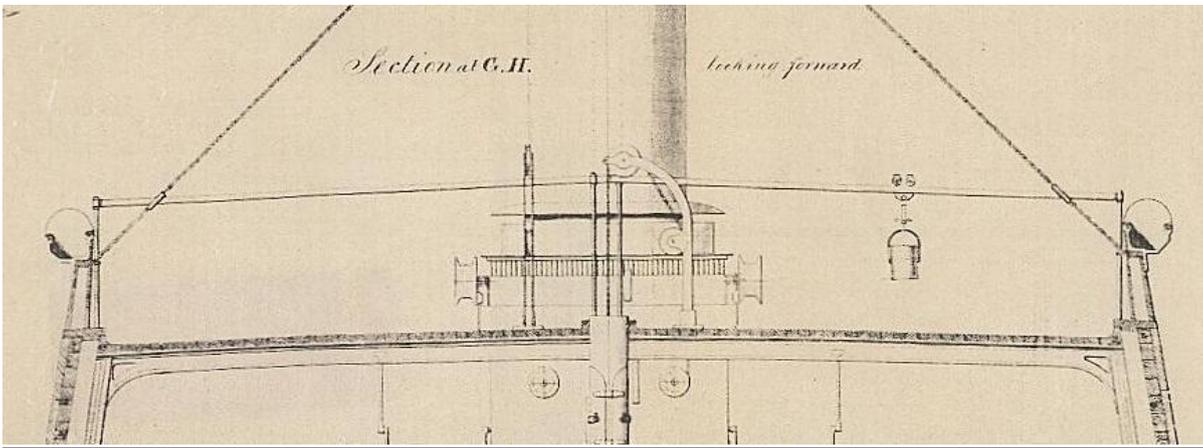
https://www.worldnavalships.com/ship_photo.php?ProdID=100174

Covered with hammock cloths and sometimes nets over these, but not seemingly in the Warrior photo above:

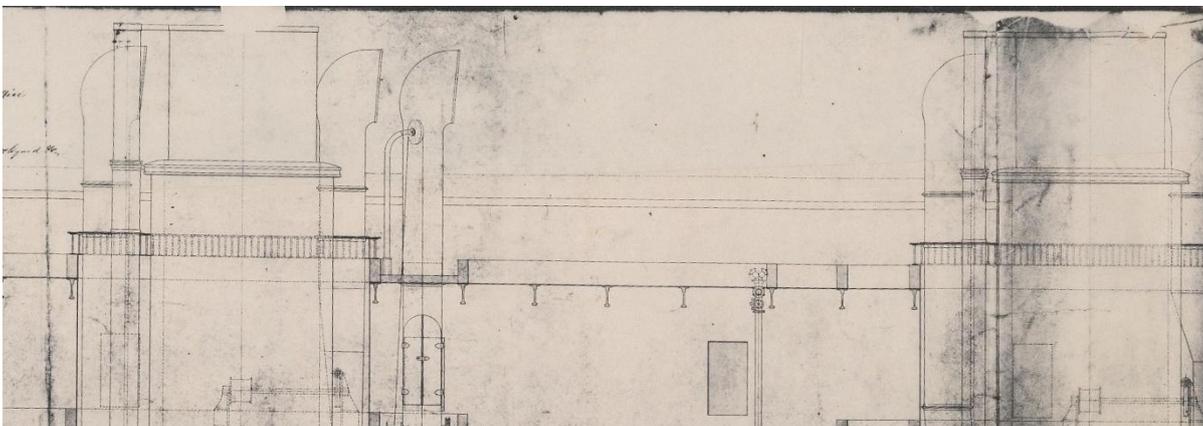
HMS Tourmaline 1896 https://www.battleships-cruisers.co.uk/hms_tourmaline.htm

Released slaves aboard a ship c 1890 –<http://collections.rmg.co.uk/collections/objects/261989.html>

4. Ash hoist/crane - upper deck section



The ash was removed via vertical shafts on the ship's centreline. One for each stokehold. These shafts with cowls on the top usually acted as extra ventilation shafts most of the time. Therefore removal of the ash from the stokehold involved removing the cowl from top of the ash shaft and temporarily setting up a hoist and gantry as per the illustration above (from HMS Black Prince plans) to transfer the ash to the ash shoot at the side of the ship. There was an ash shaft forward of each of the two funnels.

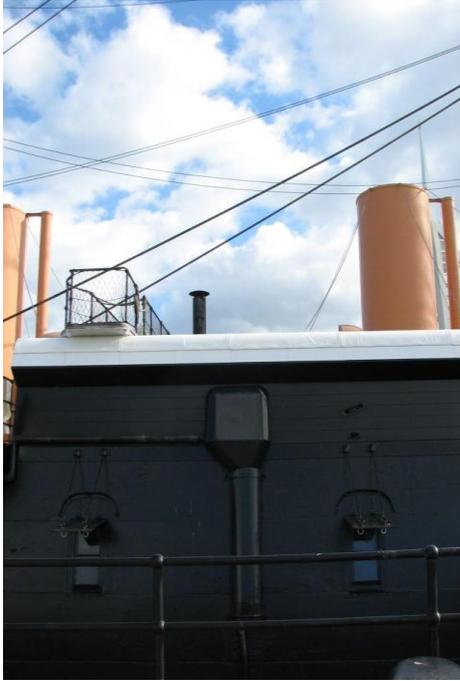


From Warrior's plans the hoists and shafts are located just forward of the after funnel and its air intakes.

The NMRN would like to consider recreating this structure but recognise that the level of detail is potentially insufficient at this stage. However, additional information will be made available in due course and a firm cost for this can be agreed at that point. The detail of how this item is commissioned also needs to be agreed upon appointment. For the purposes of tendering the contractor needs to be aware that this item is a desirable.

The works are likely to include fabrication of the (tbc):

- Hoist and pulley
- Gantry/overhead railway (possibly similar to that in the stokehole for the ash bucket).



Ash shoot on the side of the ship and the galley skylight with the ash chute/vent shaft with cowl immediately behind it.

5. Ash hoist, Galley -main deck section

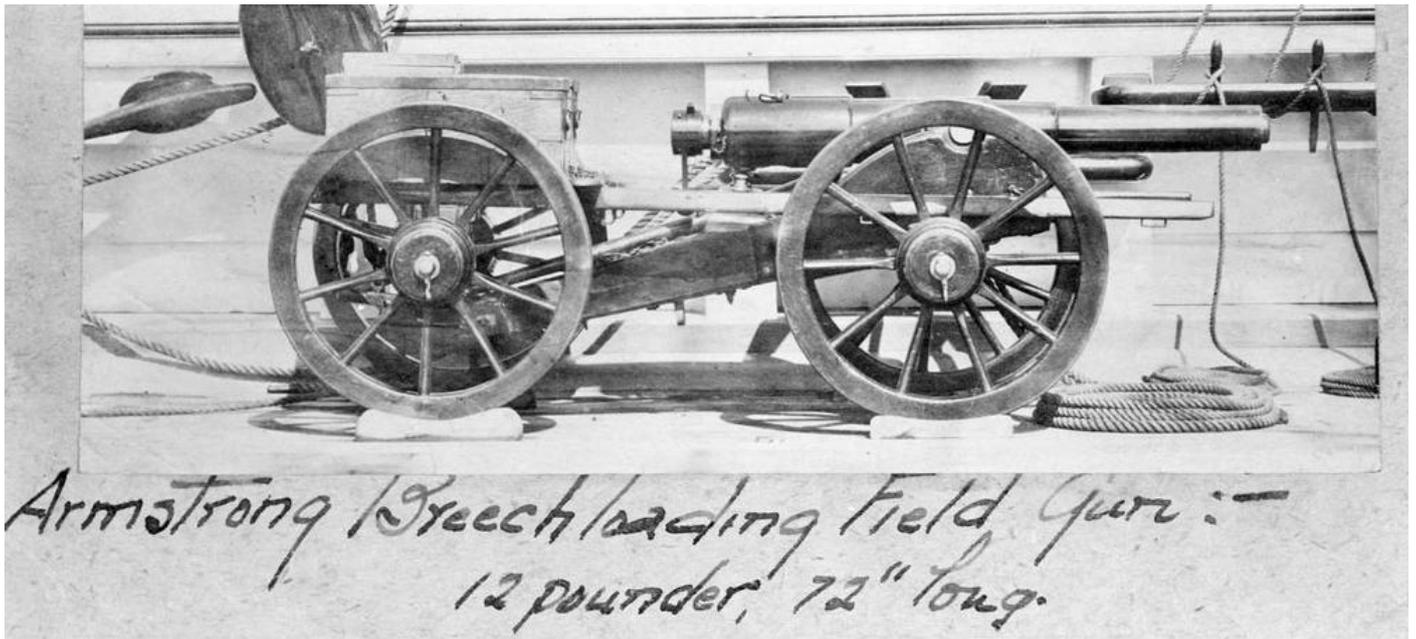
One ash shaft goes through the galley and, as can be seen in the photo below, this has a door in the side to allow the ash from the galley stove to be added for removal. Door to be opened and a suspended ash bucket with ash to be added.



Contractor to allow for:

- Opening door (currently painted shut) and making good paintwork
- Add suspend ash bucket in the shaft (there are two buckets in the boiler rooms which could be copied)

6. Field gun carriage and limber – The ship's 12 pounder Rifled Breech Loading 8cwt gun was removed in May 1864 to be shortened and otherwise improved to the new specification. Therefore we would like to reconstruct this gun in its original format.



<https://search-bcarchives.royalbcmuseum.bc.ca/armstrong-breech-loading-field-gun-12-pounder-72-gun> picture of the 72 inch shorter version on deck

The carriage and limber for the Armstrong guns were apparently very similar to those made for similar sized smooth bored/rifled muzzle loading field guns.

Waterproof covers were approved for use in protecting gun carriages and wagons for field artillery from the weather, also canvas covers for Armstrong guns. (List of changes paragraph 41 & 42, submitted by Superintendent Royal Carriage Department, Approved March 1860 & Jan 1860).

Despite the note saying "Armstrong guns for field service are to be polished then browned", we should go with the latter part of the note "Armstrong guns for Garrison & siege purposes and naval service are to be painted and not polished before painting". (List of changes para. 88, approved 17th sept 1860).

Firepower: The Royal Artillery Museum has a 12 pounder RBL Armstrong gun probably on a land carriage. The museum is currently relocating to Larkhill and the collection is held in storage in Wiltshire.

Supporting information:

http://www.wikiwand.com/en/RBL_12_pounder_8_cwt_Armstrong_gun

[https://commons.wikimedia.org/wiki/File:Armstrong_12_Pounder_Field_Gun_\(16764537194\).jpg](https://commons.wikimedia.org/wiki/File:Armstrong_12_Pounder_Field_Gun_(16764537194).jpg) Shows the garrison and field carriage of the 72 inch long Version.

These are sources of people who have restored or had restored/reproduced field carriages, land versions for 12 and 6 pounder RBL Armstrong guns.

http://www.wikiwand.com/en/RBL_12_pounder_8_cwt_Armstrong_gun

http://silverhawkauthor.com/artillery-preserved-in-canada-5-ontario-kingston-fort-henry_428.html

<http://joecalnan.com/Armstrong-field-gun-carriage-restoration.php>

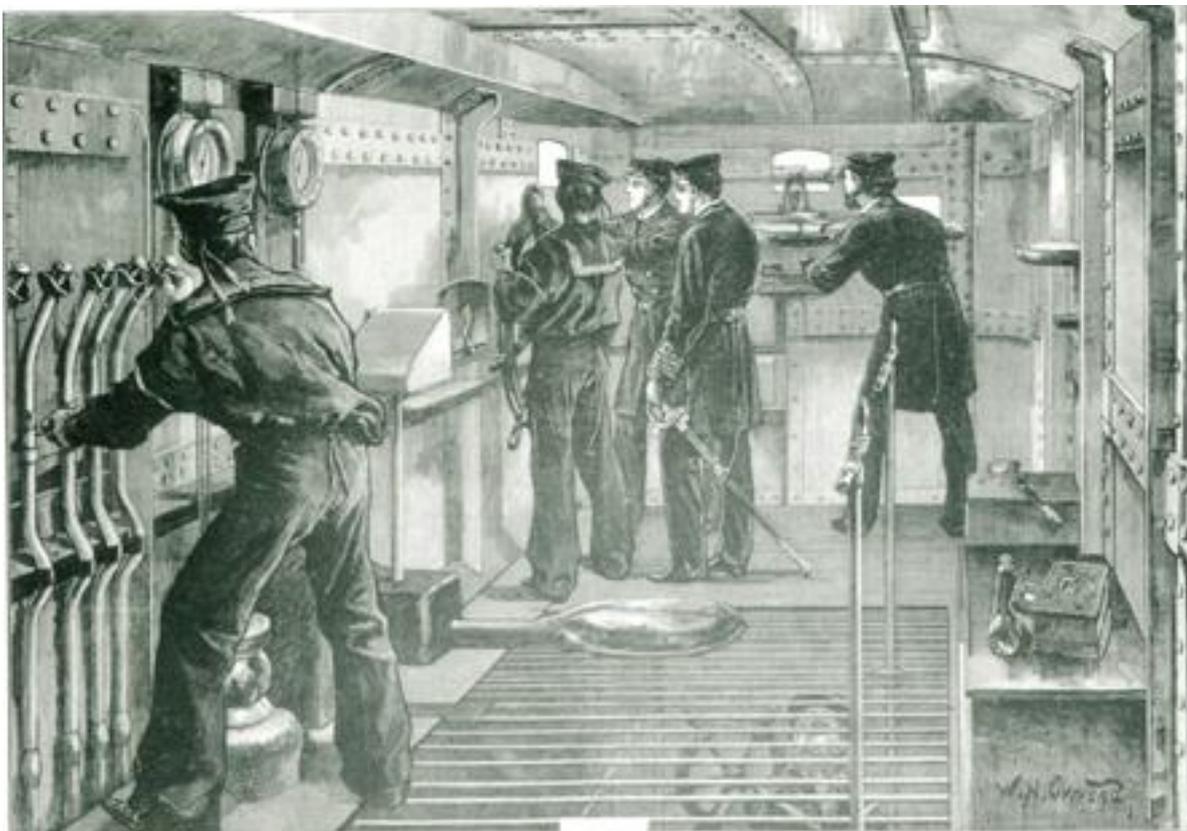
7. Voice-pipes

Fabricate and install three voice tubes to the Conning (Rifle) Tower.

HMS Defence plans 5th May 1868 (Plan no.40 in Warrior files) This shows the voice pipes running from the rifle tower to a point on the deckhead, to the main deck at which point it says it goes to the engine room. No other drawings show the route it took to get to the engine room. Even without the full route being understood at this stage the conning tower could still be given its voicepipes. As the conning tower is open probably need a lid to the voice pipe probably similar to the ones seen on open bridged RN ships in the 2nd World War.



HMS Defence plan showing location of voice-pipe tube from conning tower along main gun deck then down about half way long the engine-room hatch.



W1989/47/41 The enclosed conning tower HMS Thunderer 1878 (or Temeraire) showing a row of voice-tubes/pipes.



The photo above shows a 3 inch diameter hole on the starboard side of the ship coming from the lower edge of the Rifle Tower, through the iron beam crossing the deck-head immediately forward of the rifle tower. This is possibly the route of a voice-pipe from the rifle tower. The hole could be used to show a voice-pipe to the helmsman's position.

Warrior ship log 22nd November 1862 :- "Fitting new copper deck voice tubes"

Warrior ship log 24th November 1862 :- "Fitting new voice tube to upper deck"

According to the Rate Book for 1915-16 the standard diameter for fixed voice-pipe tubing in 1915 was 3 inches.

APPENDIX 7 – Fixtures & Fittings

Information and background research to inform final interpretative fit-out of HMS Warrior

PART 2: Main Deck/Gun Deck

1. Captain's day cabin:- Basic approach is to tweak the current presentation (not too fussy with covers). Table cloths only and possibly * door curtains?



New curtains?

www.iwantfabric.com/100-cotton-ashridge-david-easton-7-4m-roll.html for captain's cabins

*Not too much **furniture** and not too many styles – early in the commission Capt. Cochrane requests three rather than the two **easy chairs** supplied to him. As they came from stores then they should also all be the same.

RN no. 8 pattern easy chair c 1890 and probably earlier. To be sorted in-house.



On the table

Facsimile Cochrane plan of ship: produced in-house

Anemometer? (vane type or cup type both around at the time. details to follow. Made by one of the ship's assistant engineers for the captain in May 1863 (see ship's log).

Copies of **Robert Fitzroy's books on weather** reproductions available of at least one

Other papers and ship's books: to be produced in house - see list in **QR & AI 1861 under Captain section**

Perhaps **circular no. 46 June 1863** list of books for ships school reading books, arithmetic not to be issued to vessels already in commission. ADM 7/891 XC/A/51825: produce in-house

Bulkhead to Captain's day cabin: Add **Marine Barometer** and **Aneroid barometer** alongside the facsimile of the clinometer Cochrane uses on the first major voyage in December 1861.

2. Captain's night cabin: - Basic approach is to tweak the current presentation

3. Master's cabin:- No access but visitors can see in

Key Cupboard – to hold keys to the spirit room, the aft hold, and the chronometer and compass room etc. To match style below.

- Made from 3/4 inch thick wood
- External dimensions ; 12 inches square, by 3.5 inches deep
- Internal dimensions: 10.5 square by 2 inches deep
- Door is 3/4 inch thick



New frame and canvas bedplace and brackets as per cabin model (see NMM - <http://collections.rmg.co.uk/collections/objects/68091.html>)

Chest of charts for Home Waters:- wooden box with brass plaque stating Charts for Home Waters on the lid. (Check title and confirm)

Mathematical/geometry instruments: -

Personal Books: Almanac(s)

Ship's books under his care: - to be produced in-house

- Ship's log (fair copy)
- Old deck log books
- Captain's night order book

- Remark book – Master’s remark book
- Observations & Calculations book
- Chronometer Journal, - see QR & AI (possibly put this in the chronometer room?, also the compass journal)

Chart out on top of drawers or on a table with a track chart? To be produced in-house.

4. Paymaster’s Office:

Current desk is slightly different in style to the original but useable. Three lids instead of 2 and not the curved corner you see in the plans, but other than that acceptable. Add fixed row of little boxes on the flat part at the back of the desk with stacks of forms in.

Currently the cupboards beneath the desk house electrical boxes and the tannoy. There are no shelves in the cupboards at the moment. Need to add shelves inside one of the cupboards with ability for the public to open and see large books like the muster book kept here (or put on hold open display).

Add a sconce and wooden bracket with candle lamp closer to the door, to match existing.

Large money box required.



Stools, tall (2ft 5.5 inches) x 2

Facsimile Copy of muster book : to be produced in-house

Facsimile Copy loose forms/reports empty & filled: to be produced in-house

Other Ship’s books & forms: to be produced in-house (see examples below for detail)

Stationary: a selection from the following list - from ordnance yard as example Regulations Home 1855 e.g. sealing wax, pounce pot, blotting paper, rolling ruler, 12 inch wooden ruler, string i.e. select, some ordinary and some unusual items.

DESCRIPTION OF THE ARTICLES.		Stock on hand at the date of making the last demand.	Since received.	Remaining on hand.	Now required.	Number and pack of articles from the previous period.	Balance.
Paper, Quires.	Blotting - - - -						
	Blue - - - - -						
	Brown or Imperial Cap -						
	Cartridge - - - -						
	Demy or Estimate - - -						
	Envelopes { Demy, or Estimate second - Foolscap - - - -						
	Foolscap { Ruled, 13 lbs per Ream Plain, 13 ditto -						
	Post { Octavo { Thick Thin -						
	{ Quarto { Thick Thin -						
	Whited Brown or Lumber-hand - - - - -						

SMALL STORES.

Almanacks, Sheet - - - -						
Books { Memorandum { Demy Octavo, } Red Leather. { 12 sheets plain }						
Boxes, Ivory or Pounce - - -						
Boards, Milled, 13 x 8 inches - - -						
Calendars, Imperial Court, No. 2 - - -						
Cards, Packs - - - - -						
Files, for Papers - - - - -						
Folders, Paper - - - - -						
Glasses for Inkstands - - - - -						
India Rubber, Pieces - - - - -						
Ink Powder, Papers { Black - - - Red - - -						
Inkstands - - - { Ebony, No. 3 - Pewter, No. 3 - Square Fountain						

No. 1—continued.

DESCRIPTION OF THE ARTICLES.		Stock on hand at the date of making the last demand.	Since received.	Remaining on hand.	Now required.	Number and rank or designation of persons.	Remarks.
Knives -	{ Erasing - - - - - Pen - - - - -	{ Clasp, 1 blade Desk - - - - -					
Needles	- - - - -						
Pencils	- - - - -						
Pens	- - - - -	{ Goose Steel - - - - -					
Holdings for Steel Pens	- - - - -						
Portfolios with Lock and Key, No. 1	- - - - -						
Pounce, Boxes of	- - - - -						
Pressers, Lead, No. 2	- - - - -						
Rulers	Flat -	24 Inches -					
		18 " -					
		12 " -					
	Round	24 " -					
		18 " -					
		12 " -					
Scissors, No. 2, Pairs	- - - - -						
Silk Cord, Skeins	- - - - -						
Seals	- - - - -	{ Ordnance Wafer, No. 2					
Straps, Leather, with Buckles	- - - - -						
Strops	- - - - -						
Stands, Taper	- - - - -						
Tapers, Wax	- - - - -						
Tape, Red, pieces	-	Broad - -					
		Middling - -					
		Narrow - -					
Thread, Pack, Half lb. Balls	- - - - -						
Sealing Thread, lbs.	- - - - -						
Wafers, Boxes of	- - - - -						
Wax, Sealing, Red, Sticks	- - - - -						

Signed _____

Referred to by Arts. 190, 192, & 195.
pages 51, 52, & 53.

Form S.—No 1.

STOREKEEPERS OR DEPUTY-STOREKEEPERS.

No.	Officers.	Men.	Horses.	Patients.	Insert out-stations, also, if any.	Station _____ 18
The Barracks						
Constructed for						
Occupied by						Date _____ 18

DEMAND for stationery articles for carrying on the duties of the _____ department at this station, for the year ending 31st December 18 _____

DESCRIPTION OF THE ARTICLES.		Stock on hand at the date of making the last demand.	Since received.	Remaining on hand.	Now required.	Number and rank or designation of persons.	Remarks.
Books*	Demy, Vellum Half Bound, Cloth sides.	6 Qrs. { Ruled faint lines - Plain - -					
		5 Qrs. { Ruled faint lines - Plain - -					
		4 Qrs. { Ruled faint lines - Plain - -					
		3 Qrs. { Ruled faint lines - Plain - -					
		2 Qrs. { Ruled faint lines - Plain - -					
		1 Quire Ruled faint Lines - - - -					
		Ficcap, Vellum Bound { 4 Quires, Plain - 2 ditto 1 ditto					
		Guard. { Demy, Vellum half bound, 2 Quires } Foolscap ditto, 4 Quires - - -					
		Mem. Quar. Bound Basil. { Demy Quarto, 1 Quire - - - - Foolscap - - -					

* If an alphabetical index be required, or ruling different from the pattern, it must be so stated in the column of remarks, and a specimen of the ruling sent.

The Chief Clerk,
Store Account Office.

5. Gun Deck, Main crew area:-

beds - the existing hammocks on display need beds (i.e. mattresses) inside them not just blankets (mattresses which would be filled hair filling with coir similar texture but not eaten by moth).



ww1/ww2 bed/mattress inside bedcover

Bedcovers – brown linen bed covers for the beds/mattresses.



ww1/ww2 bed cover with bed inside

The Hammocks need to be marked with watch numbers and blue broad arrows. Seamen's in white on a black patch or black on a white patch. Marines in red on a black patch or red on a white patch.

Half completed sewing/embroidery tapestry in progress

Sailor's housewife/sewing kit: size and photo to follow

Ditty box



Follow the style of others on board

Dominoes set (bone and wooden box)

Concertina (" a sailor played a concertina to a group of admirers" Newcastle Daily Chronicle describing the public's visit to HMS Warrior on Sunday 26th July , published Tuesday 28th July 1863 N.B. 5,568 visitors to the ship that day.)

Facsimile Newspaper – lots of copies covering the Liverpool/Edinburgh visit

Teapot with strainer for four persons for the display table near the galley. Not in use, just stored away visibly ("Tea materials", paymaster opened 3 containers each containing 50 sets in 1861? Where stored in mess trap inside one of the wooden vessels?)

Blackboard on A–Frame showing crew positions and instructions for great gun drill or small arms drill.

NOTE: the aft three tables each side were the Marines mess tables. N.B. The original detachment of RMA sent to Warrior on 3rd August 1861 comprised 1 captain, 2 lieutenants, 3 sergeants, 3 bombardiers, 2 drummers and 114 gunners.

6. Galley (see also Item 5 in Part 1 regarding ash chute):-

Dress as if meal being produced – a meal with fresh meat & veg as ship is in harbour. The forward side of the galley being dressed is for the ship's crew, the other side is for the officers. In the surgeon's report on the HMS Lord Warden he states that messes regularly took it in turns to have a special meal, using extra ingredients acquired by the mess and using more range space. Need to identify exact dishes to be produced. Allow for use of smells for cooked food.

Extra tools for crew side display – for stove & cooking

wrought iron shovel and tongs to match existing rake/poker on board

1 large flesh fork

1 cooks ladle (there is one in situ)

1 each wire brush, nut wrench and 2 x cock turners (these possibly kept in a cupboard so not visible)

Bread tins/pans to fit ovens one set to each oven (possibly in cupboards)

Messes usually of 12 men. The Boy's Manual (c 1870) say that ironclads had two messes between the guns on the main deck.

New mess trays for the new galleys with ovens. Possibly the ship gets the Blake oven currently in the galley towards the end of this commission c 1864. However, we should show both the older boil in a bag style of mess food and the newer bake in an oven type.

The ship was being supplied quite regularly when in ports with fresh beef and fresh vegetables, beef usually in 4lb and 8lb joints.

Meals to make up: - Those in bags with a mess number on a metal/wooden tag. Those in trays the trays have a mess number on them.

Either all cooked coming out or uncooked going in. I suggest the former as then we could do smell as well. Consider use of smells in this area.

Veg bags filled mainly potatoes but a bit of other veg all thrown together in some. On top of/inside the boilers above the ovens.



fine mesh veg net

Devonport collection 16.5 inches long and 5.5 inches at the mouth, measured on the flat.



wide mesh veg net Devonport collection 16

inches long and 12.75 inches at the mouth, measured on the flat

Meat bags: net bag to hold several joints for boiling. Canvas bags to boil meat cut from the bone & mixed with veg.

Schooner on the rocks : - Beef joint or joints sat in a sea of batter in a metal baking tin. (1923 list of seaman's meal names)

Steerage hammock: - a meat roly poly usually made of the pork ration rolled up in dough and lashed up like a hammock. To be boiled in the smaller boiler. But could be made of beef and if wrapped you will not see it anyway. (1923 list of seaman's meal names)

Joint(s) surrounded with potatoes 2 to 3 beef joints in metal tray

Bags of fresh vegetables to boil in the main boiler

Meat and fresh veg pie (carrots & pease) in metal mess tray

Bacon & eggs - mess treat in a frying pan

Beef stew in a metal mess tray

Beef Curry - a special mess treat, in a large saucepan on the hotplate, beef, onion, an cooking apple or 2, water, & curry powder. To be served with **rice** done in a canvas bag in the boiler with the vegetables?

Spotted Dick / Plum pudding

Smell, mixture of cooking smells assuming that we are showing the dishes cooked.

7. Routine Desk:

Re-create the **ship's summer and winter in-harbour daily routines** to put up on routine desk: to be done in-house. Copy/base on surviving possibly slightly later ones

Ships log book (rough copy filled in daily by officer of the watch): to be done in-house

8. Wardroom water closet:- This currently houses a fire hose which will be re-sited by the NMRN. Create wooden surround & ceramic pan and flush mechanism.

Add smell of carbolic acid used to clean the toilet, "to keep the heads shaft sweet" from report by surgeon of the HMS Lord Warden in 1870.

<http://collections.rmg.co.uk/collections/objects/85345.html> Buffalo re-designed as an emigrant ship 1835

One of the Warrior ship drawings (for works in Dec 1863) shows water pipes under the upper deck labelled water closet. The water closets emptied down the ship's side. Drawings do not show any

cistern which there must have been, possibly within the toilet cubical itself, or above it, to keep it out of the way of the guns

Copy of a patent for a self acting ship's water closet by William Thrift & Adam High dated 1858 - copy in Warrior collection photocopies folder 4

https://www.tripadvisor.com.ph/Attraction_Review-g2148183-d256371-Reviews-or30-South_Australian_Maritime_Museum-Port_Adelaide_Greater_Adelaide_South_Austr.html#photos;aggregationId=101&albumid=101&filter=7&ff=185604841

<https://www.maritimequeenscliffe.org.au/latest-exhibit/> 1860s from a wreck .

<https://www.livescience.com/17972-1850s-bathroom-preserved.html>

APPENDIX 7 – Fixtures & Fittings

Information and background research to inform final interpretative fit-out of HMS Warrior

PART 3: Lower Deck

1. Sick bay:- dress

Hammock bars: As the Sick Bay was originally built to take hammocks rather than the steel beds requested by the surgeon early in this first commission. Three of the 5 sets of bars hanging from the deck head in-situ. Create and re-instate 2 missing central bars.

Mess rack: wooden mess rack with iron basins and plates & spoons as per the mess racks on the Gun Deck.

Wash stand: Complete wash basin in stand in situ: – remove ceramic bowl and replace with inset sheet metal square/rectangular basin made to fit with drain in the centre. Also need a sheet metal receiver container in cupboard beneath, make cupboard openable and receiver removable.

Stove: same pattern as that in the captain's cabin: purchase or fabricate

(Pattern & plans for this in the 1912 Firehearths book; - stove used in sick bays & other areas of WW1 ships)

Coal scuttle & tools - there is a coal scuttle in one of the current officers' cabins, therefore re-home

Possibly some Medical comforts being made up for the sick.

Secure surgeons instruments: secure in drawers of dispensary cabinet

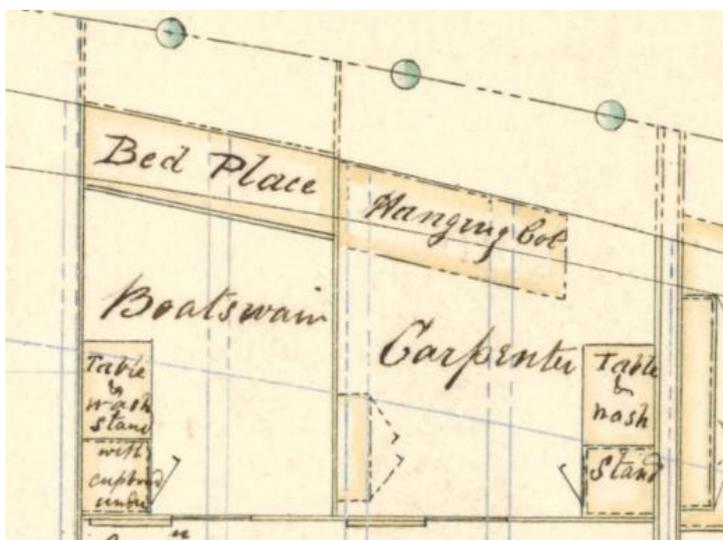
Facsimile report/sick returns: see below details to follow: produce In- House?

Books & forms: produce in- house

Possibly a mess table stowed up against the ship's side at the far end of the bench. Copy from Main Deck.

2. Carpenter's cabin:

James Davidson, Carpenter, who joined the ship 1st Aug 1861 left the ship sometime in 1864. The plan below, unlike all the others which show this cabin with a bedplace, has it with a hanging cot, which suggests this is possibly a more accurate description of this cabin circa December 1863.



J8605 plan drawn 12th Dec 1863 signed off Feb 1864 after December 1863 alterations /refit.

Dividing wall needs to be constructed between this and the Boatswain's cabin (to be done in-house)

Flooring as per other Officers' cabins

Curtains with brass rings and brass curtain rail and fittings for the 2 portholes

Hanging cot, similar to that currently in the captain's cabin <http://collections.rmg.co.uk/collections/objects/201246.html> WW1 cot with extensions to the sides which fasten over the top to keep injured patients secure/dry. Without these extensions is a normal cot.

Sea Chest: for clothing rather than a chest of drawers

Narrow, double doored cupboard:- labelled cupboard in one of the other early plans possibly for some of his tools.

Tool chest

Table, possibly folding attached to side of cabin

Wooden cupboard type washstand, possibly with basin in hole in top and ewer inside the cupboard (similar to the captain's)

Mirror (same as officers)

Towel rail (same as officers) & linen towel

Chair, plain not padded: supplied in-house from stock

Shelf: same as officers cabins

Books:- Defects reports, forms notes etc. : Produce in-house

"Abstract statement of receipts Guard book for vouchers" Queen's regulations & Admiralty Instructions 1861

3. Boatswain's cabin: Charles Beaton, Boatswain (who joined the ship 1st Aug 1861 left ship in 1864) as officer's cabins as per model with paper work etc. <http://collections.rmg.co.uk/collections/objects/68091.html>

Flooring

Curtains with brass rings and brass curtain rail and fittings

Bedplace as other officers metal frame with canvas body. & Fittings slightly swinging (see <http://collections.rmg.co.uk/collections/objects/68091.html>

Sea Chest: for clothing rather than a chest of drawers: possibly from store?

Table, possibly folding attached to wall

Wooden cupboard type washstand, possibly with basin in hole in top and ewer inside the cupboard (similar to the captain's)

Mirror, Towel Rail, shelf, sconce & lamp, brass clothes hook (same as officers cabins)

Chair, plain not padded: from In-house store

Books: to be produced in-house

Abstract Statement of Receipts and Issues.
Expense Book.
Rough Expense and Supply Book.
Indent or First Supply.
Report of Survey of Remains.
Demands for Stores.
Supply Notes.
Return Notes.
Certificate of Conversion.
Ditto Fixtures.
Guard Book for Vouchers.

4. Gunner's cabin: William Dore, joined the ship on 24th June 1863 from HMS Excellent (left Warrior 22.11.1864) He took over from Daniel Colinburn, Gunner, who had been Gunner on board from 1st August 1861.

Flooring

Curtains with brass rings and brass curtain rail and fittings for portholes

Bedplace as other officers metal frame with canvas body. & Fittings slightly swinging (see <http://collections.rmg.co.uk/collections/objects/68091.html>

Sea Chest: for clothing rather than a chest of drawers possibly from store?

Table, possibly folding attached to washstand?

Wooden cupboard type washstand, possibly with basin in hole in top and ewer inside the cupboard (similar to the captain's)

Mirror, Towel Rail, shelf, sconce & lamp, brass clothes hook (same as officers cabins)

Chair, plain not padded: in-house from store

Books including the following three supplied to the ship:

Instructions for the Exercise and Service of Great Guns etc. 1858 edition available in facsimile paper back or leather bound hardback on abebooks)

Instructions for Small Arms Drill (I haven't found a repro. of this)

Naval Gunnery (possibly the treatise by Douglas 5th edition 1860 available in facsimile paper back or leather bound hardback on abebooks)

Facsimile of Dicken's note/article about being taken round the ship by the Gunner: to be produced In-House

Ships books & forms: better details to follow: to be produced in-house.

When a ship's shells are ordered to be returned, the Civil Officers will receive a notification, upon which they will send their shell vessel alongside, and a blank form, as-subjoined, to the captain of the ship, who will fill it up and send it ashore with the shells.

655.

RETURN of SHELLS landed from H.M. ship _____
 this _____ day of _____ 18__.

Description of shells.	Filled.	Empty.	Total.	Remarks.
10-inch { Common - -				
{ Moorsom's - -				
8-inch { Common - -				
{ Moorsom's - -				
32-Pndr. { Common - -				
{ Moorsom's - -				

To the Ordnance Storekeeper, _____

 Commanding Officer.

From Ordnance regulations: Home 1855

Referred to by Art. 613.
 page 158.

FORM S.—No. 39.

Office of Ordnance,
 _____ 18__.

AN account of stores supplied to Mr. _____
 Gunner of H. M. Ship, _____

Pursuant to _____

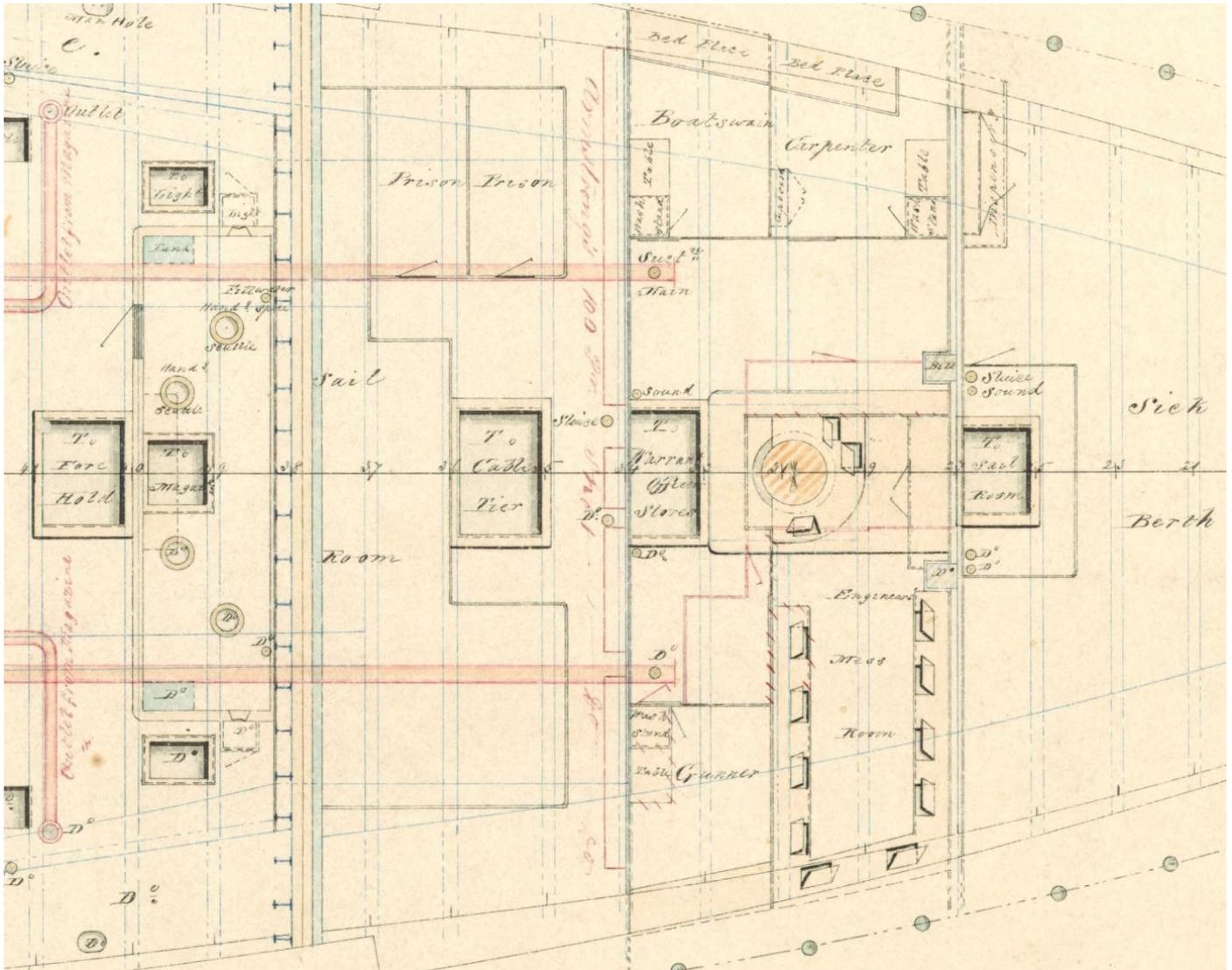
The Chief Clerk,
 Store Account Office.

c c

Example of the sort of form used by the Ordnance for their files. Following the request from the ship's captain for certain items. They would have been given a receipt from the Ship's gunner upon his receipt of the items.

5. Warrant officer's pantry label over door only to match existing style on board.

N.B. The ship had two commissioned chief engineers who had cabins opening onto the wardroom and presumably messed in the wardroom. The engineers and assistant engineers 1st and 2nd class were classed as warrant officers. They may have messed separately to the gunner, carpenter and boatswain or with them, or at least shared the table with them? December 1863 saw the pantry and engineer's mess re-modelled thereby enlarging the engineer's mess and giving the warrant officer's pantry two access doors.



J8596 december 1863 works in the engineers mess & warrant officers area

6. Engineer's mess:- 12 men; label over door only to match existing style on board.

Access doorway through wall to sick bay.

Partition Wall: Reconstruct the port side wall of the Warrant Officer's Pantry

Seat Lockers (see HMS Shah gun room images under gun room info) wooden with hinged lids, and leather cushions on top. Fewer lockers than drawing due to access hole in wall to Sick Bay.

Padded leather back rails as in HMS Shah photos see under Gunroom info.

Table : possibly use one from the gunroom if the correct size?

Brass hanging lamp (or lamps) as in the other officer's areas

Engineering drawings (William Milln (Miller?) drawing facsimiles on wall or table)

*Possibly drawings of the anemometer made by one of the ship's assistant engineers for the captain in May 1863 or an actual copy of an **anemometer** of the period in the engineer's mess possibly better as something for the engineer interpreter to talk about on the technology & professionalism of the navy (always good to have an artefact to talk about or more particularly for the public to ask you about thereby starting the conversation)?

**The screw model (currently in the bread room) could be in the engineer's mess on the table for the engineer interpreter to demonstrate to the public (as he might have done during the 1863 tour?)

..

7. Warrant Officers' Mess:- In abeyance for the moment

8. **Cells**: open to public with oakum

Remove the steel/iron water tanks and stand. Relocate one to the warrant officers area and the other to the aft wardroom cabin flat.

9. **Sail room**: Not publically accessible, look into only.

Wooden battens on forward bulkhead : needs some more verticals and several horizontals against the forward bulkhead to protect the sails from condensation from the iron bulkhead

Sewing machine: move the sewing machine to the Slop's Room.

10. Wash & Washing machines area:

Install new floor covering to represent original lead flooring. Sluices down into coalbunkers to keep down the dust

Smells

soap – what sort?

Salt water to wash with both bodies & clothes

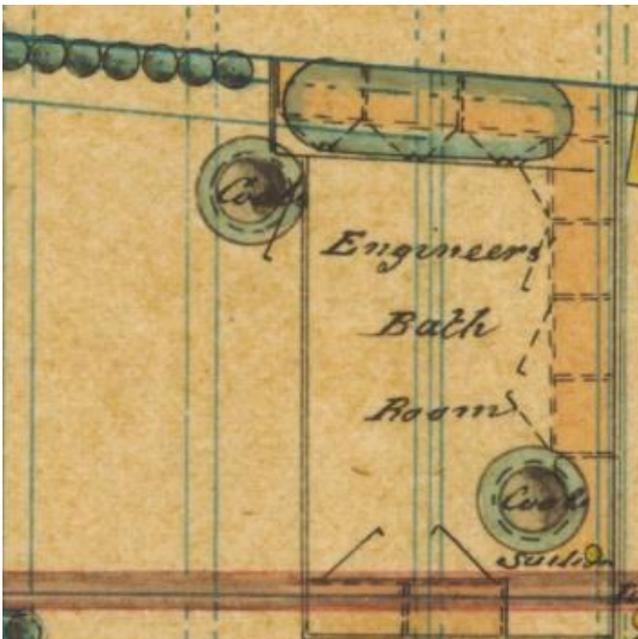
Retain the wooden wash tubs against the ship side

Retain the washing machines

Make **white cotton duck trousers** & frock (working type with plain collar) dirty from coal, display on floor under or half inside one of the washing machines

Canvas or woven Vaucher's hose from pipe (not leather) to fill baths & washing machines

11. Engineer's bathroom:- (salt water used and "when steam is up it can be injected into the baths) This area should have a single bath and several wash places (Cochrane July 1864 letter check drawings, also Murray's drawing says bath singular for this area as opposed to baths plural for boys and stokers).



Lead floored with scuttle to coal bunker in the corner to keep coal dust down.

Single bath when in use placed at an incline to make easier to empty. Keep 1 bath move the other 2 to the boy's bathroom

12 washplaces as on plan. Cupboards wooden possibly on metal legs, probably to store a bowl, ewer, soap dish and the washing items, and possibly clean clothes belonging to each of the engineers. (a slightly later plan shows a small fresh water tank outside their bathroom near the door suggesting that the engineers had asked for fresh water to shave with.)

Possibly 12 mirrors?: one above each washstand

12. Boys bathroom:- salt water was used and "when steam is up it can be injected into the baths". How was the steam conveyed to the baths?

Lead floored

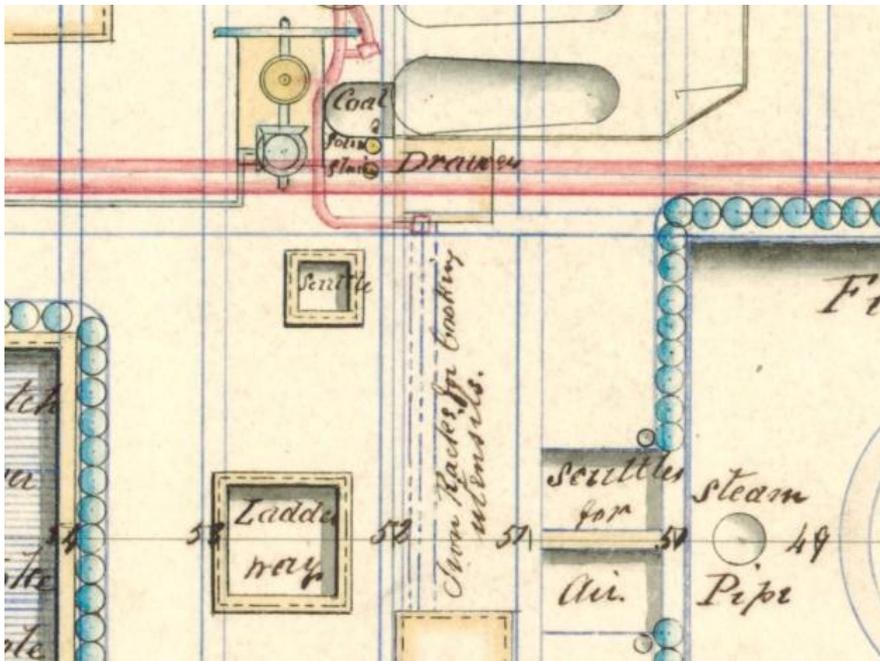
5 baths (from Cochrane letter 1864) placed at inclines -possibly one bath up ended emptying into sluice, another with a scum line and bar of soap. Move 2 baths from Engineer's bathroom to make up the correct numbers in each area

Remove some of the louvres on the starboard side: to make it more visible to visitors accessing the area from the seaman's flat.

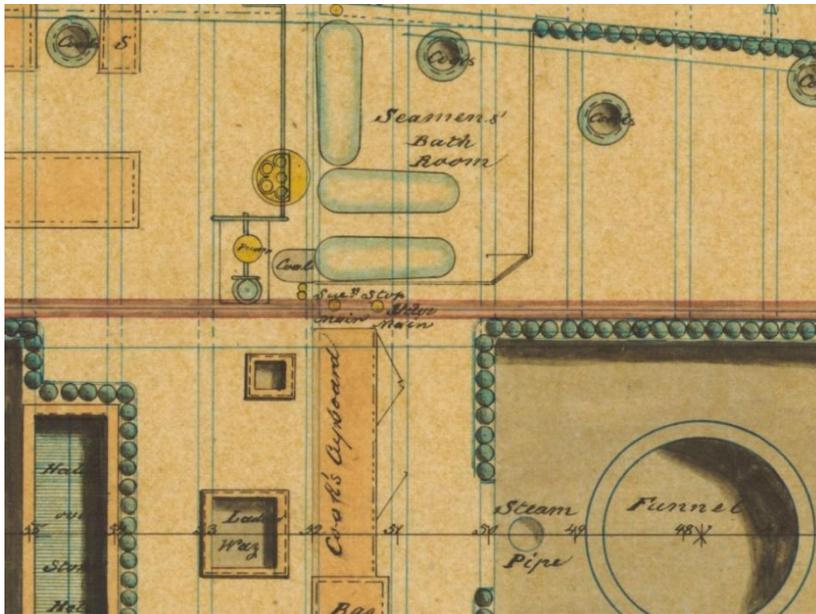
13. Cooks Scullery: by the current doorway through to the seaman's flat was the Cooks' scullery. Shown on Murray's and other plans variously as cupboard, drawers & metal rack.(see plans below). Cleaning pots and pans with steam or just hot water? This would be quite fun to do to show another use for the hot water/steam and also show where the washing up was done

Metal racks for hanging cooking utensils: a short bit of racking to left and right of the access doorway through to the seaman's flat. To give an idea of the area's use.

Large Spoon, and other flat-ish utensils: to hang on the racking, a couple of bulkier items on the boy's bathroom side.



J8605 Dec 1863 plan



J8609



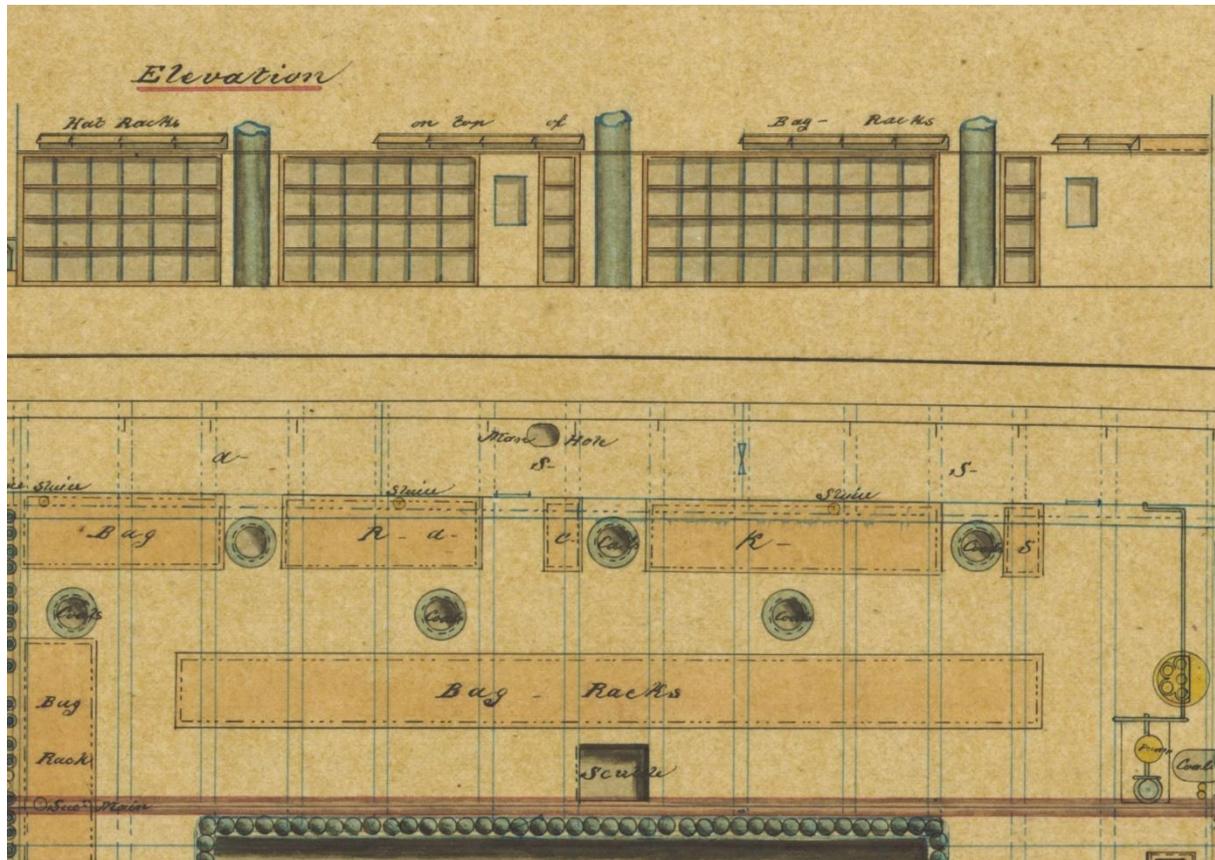
14 Seaman's flat:-

Bags :- Turn bags around and mark with name & c.service number, see National Maritime Museum example.

<http://collections.rmg.co.uk/collections/objects/18173.html>

Mark the **bag racks** with the watch numbers.

Hat rack for sennit hats were they kept in bags as well at this stage inside the rack.



Plan J8609

HMS Warrior plan above shows the hat racks on top of the bag racks. HMS Minotaur, also built by the Thames Iron Works, in 1865, had galvanised iron racks for seaman's hats under the spar deck installed as an extra to its original specification.

15. Cable locker flat /stores:-

Diving outfit x 2?-(Joseph Hemming diver 1st Class)

"Aide memoire to Military Science Parts D to F" link below has both text and illustrations for suit, helmet & air pump c 1846.

<https://archive.org/stream/in.ernet.dli.2015.278553/2015.278553.Aide-Memoire#page/n1/search/357>

Instructions for the exercise and service of great guns.etc. aboard Her majesty's Ships, 1858, p 128-130 gives details in using the diving apparatus but no images.

Consider Historical Diving Society for advice.

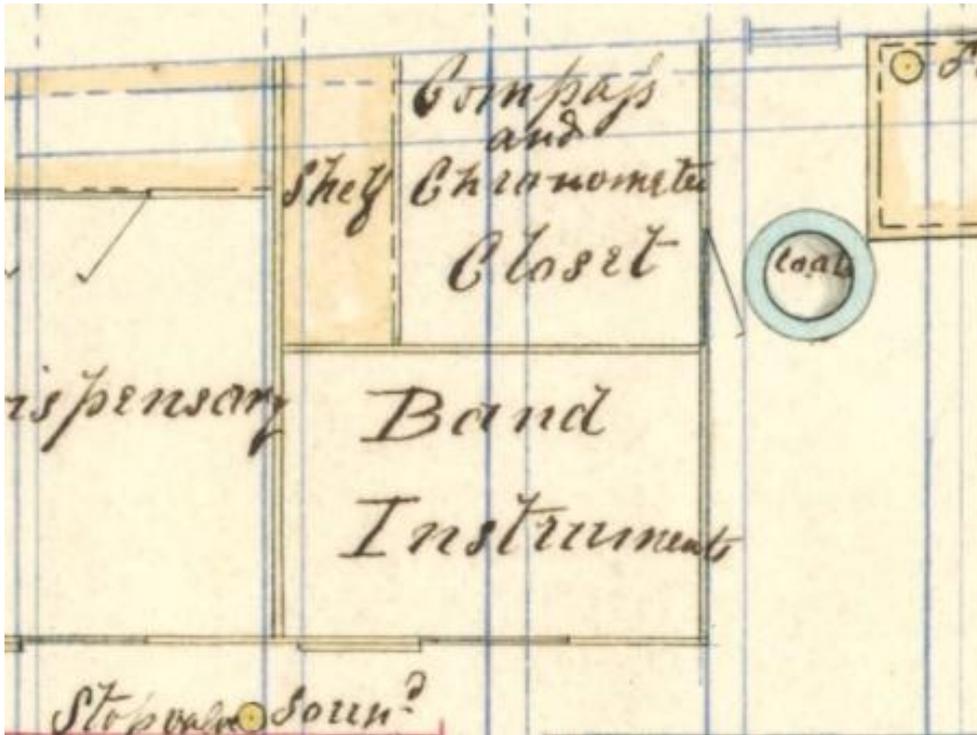
16. Marine's flat: -

Retain lathe & sharpening stone in situ.

Marines bags turned round like the seamen's ones and marked. How were they marked? (from looking at later ones they are very similar in size and manufacture).

Bag racks marked with watch numbers

17. Chronometer and compass closet - the plans just show a wooden work-top at aft side? The room has an outward opening door with a lock. Both the chronometer journal and compass journal may have been kept with the items in this store. Need to re-site a rack of rifles to allow access to the door.



best image for this area, same layout as the slightly earlier plans J8596 & J8609 but more labelling.

Chronometers : 3 in number.

They were cased and protected inside the cases with fearnought or baize cloth. They were not to be put on the deck. (1859/65 instructions ADM 128/9)

marine chronometer made by John poole c 1858

<http://collections.rmg.co.uk/collections/objects/79190.html>

chronometer with its carrying case and cover, Russian.

<http://collections.rmg.co.uk/collections/objects/79656.html>

wooden chronometer carrying case , Russian

<http://collections.rmg.co.uk/collections/objects/618581.html>

cloth cover for chronometer Russian

<http://collections.rmg.co.uk/collections/objects/618583.html>

Compasses? Boats compasses , how many what sizes (details to follow)

Chronometer journal (example of journal pgs. in QR & AI for reproduction)

Compass journal (example of journal pgs. in QR & AI for reproduction)

Label to room above the door "Chronometer and compass closet".

18. Band instruments room: - To prevent bottlenecks in this area Band Instruments room is locked and displayed with a couple of the louvres on the starboard side removed so visitors can look in. The ship had a brass band, (which was stationed on the upper deck and played during the afternoon of Sunday 26th July 1863 to the public on board, in Sunderland (Newcastle daily Chronicle Tues 28th July 1863).

Piccolo (1) , Flute (1) , Clarionets (3) for service wind bands rather than brass bands were stored in black enamelled leather cases. Cornets and trumpets may also have been stored in black enamelled leather cases.

Other instruments could include 2 cornets, 2 saxhorns, 1 baritone, 1 euphonium and one bombardon (bass tuba). Also Bugles in Bflat & possibly the 2 Marine drummers' drums may also have been stored in this room. Some may have been hung on the walls or stacked on the floor.

The early pattern bugles in Bflat were smaller than later ones and had crooks and rings for strings.

The early pattern trumpets also supplied had small un-attached mouthpieces and a ball for the hand.

Mid 19th century wind and brass instruments often had different key and/ or valve arrangements to modern ones.

https://en.wikipedia.org/wiki/Saxhorn#/media/File:Adolphe_Sax_instrument_catalogue.jpg

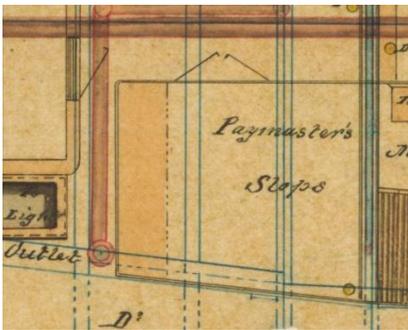
The earliest ship's bands photos identified to date are:

HMS Tenedos 1885 <http://www.ibew.org.uk/vbbp-ukh.htm>

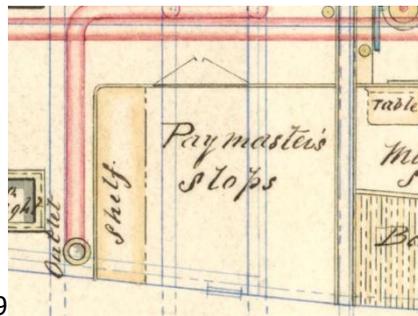
Sailors orphans home band hull between 1878-1906 <http://www.ibew.org.uk/vbbp-uks.htm>

19. Slop room:- Mirror image of the Issuing Room, double half-height doors, with work- top against aft wall. No bins or shelves marked so I believe we have the items in the boxes, chests, barrels, whatever the clothing & bedding was transported in, to be opened when needed. All seamen's clothing (and bedding) was stored in the paymaster's slop room (with older stock to the front and newer to the back. At this time most of the sailor's clothing was made on board, apart from shoes, hats, caps, comforters, shirts & stockings. The paymaster opened the fabric bundles and had the ship's tailors make up the clothing for the paymaster to then issue. (By WW1 victualling stores are marked with green bands was this the same earlier not sure). "Every cask and package of provisions sent on board His Majesty's Ships are to have the contents thereof, as to species and quantity, marked thereon, together with a number and the time when and place where packed; observing that the casks are to be marked on the heads, and the packages on some proper and conspicuous part of them. " Regulations and orders 1808 (anthology).

(By WW1 victualling stores are marked with green bands (of paint or woven into the canvas of the wrappers) was this the same earlier not sure. To be checked.



J8609



J8605

Wooden boxes, chests, casks with contents marked on them, packaging based on 1908/1915 manual of seamanship stowage information:- Casks for shoes; bags for beds/hair mattresses; ditty boxes in wooden cases; hats in wooden cases and caps in casks; serge, Blue cloth, duck, drill, and blue jean fabrics supplied in specific lengths folded and wrapped possibly in both paper and canvas wrappings; woollen comforters in canvas wrappers; and hat ribbons in cardboard boxes, mess traps (plates, basins, spoons) in casks.

Labels for boxes, parcels etc.

Smell of camphor – when opening the woollen items bin to keep away the moth. (not sure when naphthalene started to be used but it is carcinogenic and other nasties, banned in EU since 2008 so not good to use anyway)

Uniforms for kids & adults? - Laid out on the work top:-

Dress white cotton drill frock with badges & white duck trousers

<http://collections.rmg.co.uk/collections/objects/75155.html> or working suit probably both frocks and trousers in duck without the blue jean covered collar and cuffs (similar to the WW1 working suit) for wearing by stokers at work or canvas coaling suits (I believe that these were the same as those worn for the same purpose during WW1, button fly trousers with belts attached and four button jackets both made out of canvas).

spare hammocks (with or without nettles & clews etc.)

20. Issue room: - tweak and add paperwork.

Paperwork/ledger to be done in-house

Remove key board and move keys to Paymaster's Office

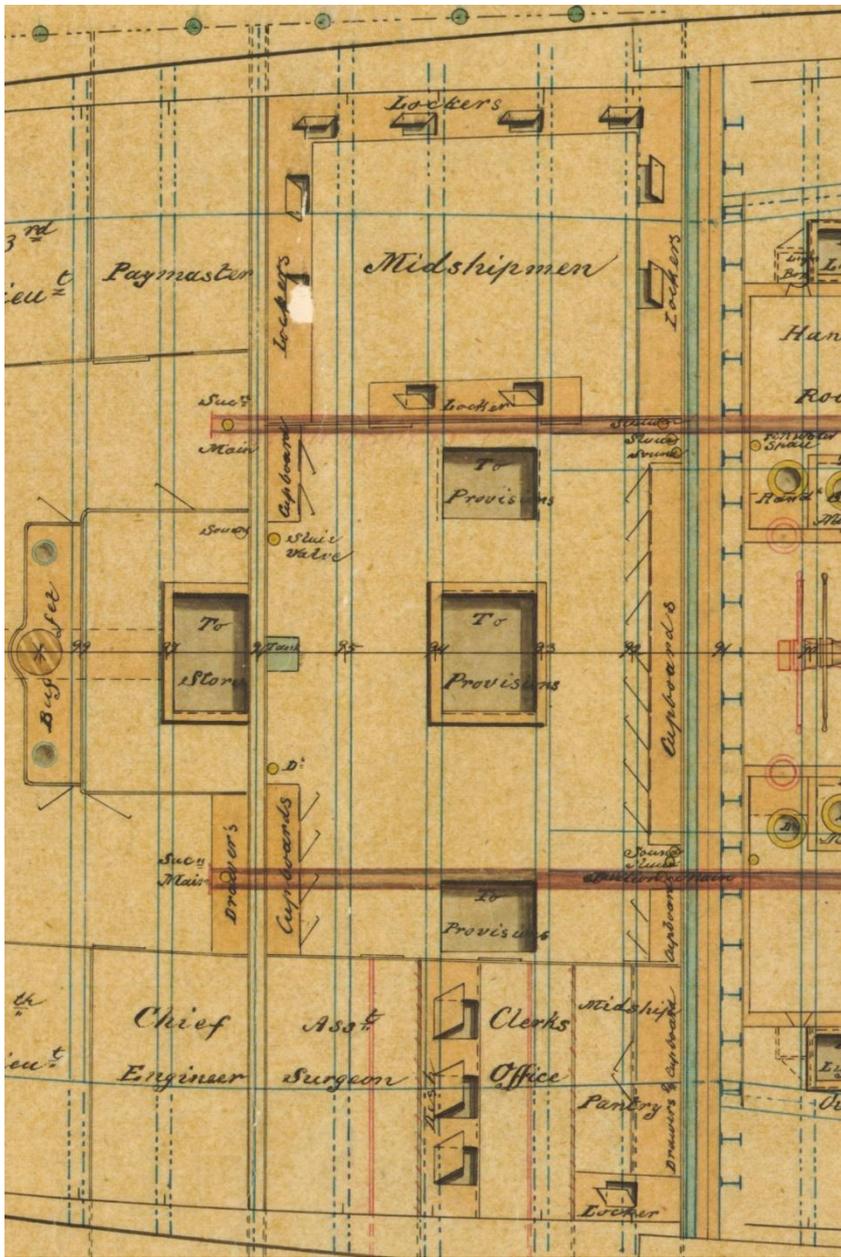
21. Seaman's library:-

ADM 1/5796 gives the sizes of the books as well as titles & publishers.

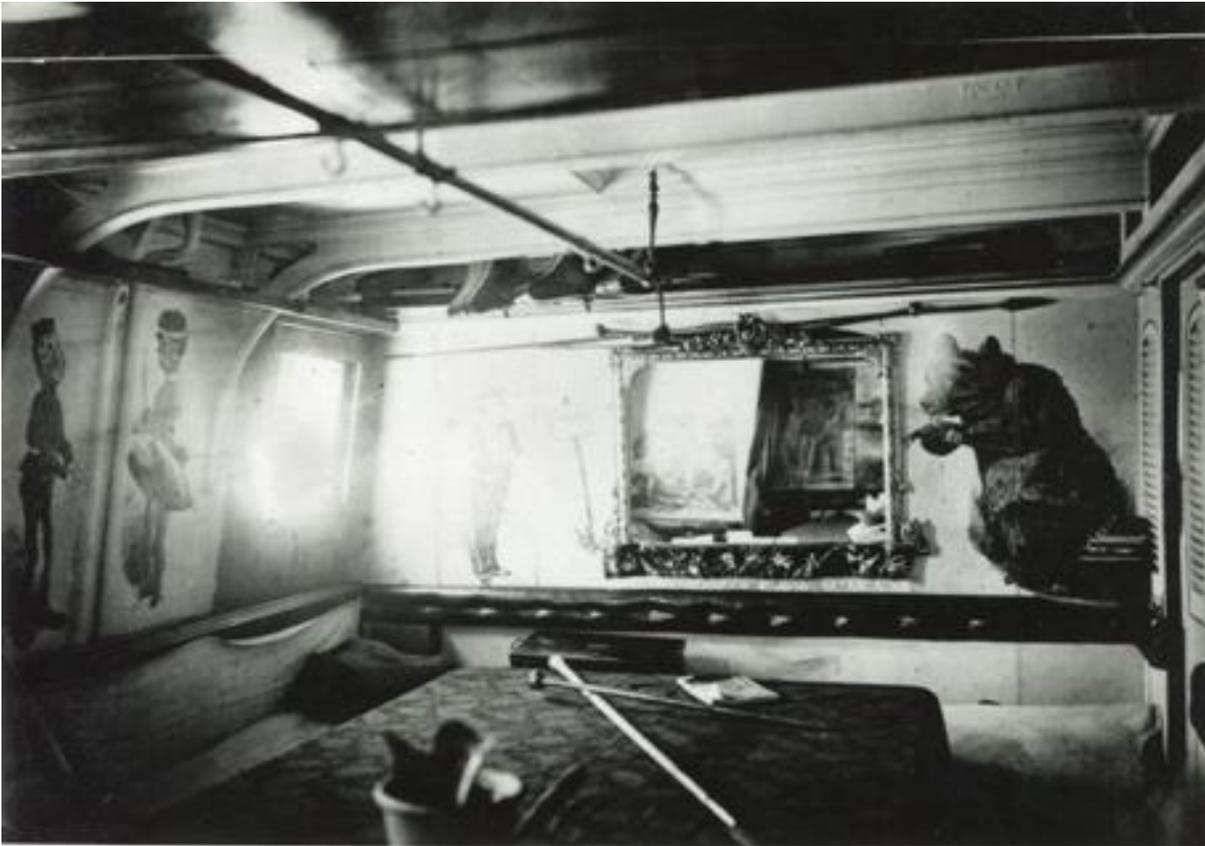
Shelves - One set of shelves exists in situ on board the ship. Including a framed letter from the captain stating the times at which the library was available. Use these. Possibly add bolts to the door on one side so we only need enough books for one side.

Books: suitable surplus books may be available in-house to spread amongst some dummy books.

22. Gun room:- two sliding doors to gun room. see photo of gunroom of HMS Shah 1880s getting copy



J8609



HMS Shah, built 1873, photos sometime after her involvement in the Anglo Zulu war of 1879.

Blackboard with instructions on using a sextant

Seat Lockers (see:- plan and pantry model.) wooden lockers with hinged top lids.

Leather cushions:- long leather removable cushions on top of the seat lockers. (see HMS Shah photos)

Padded leather back rails on the walls. (see HMS Shah photos)

Door curtains & rails above the two doors as in HMS Shah photos (to keep the warmth in, Cochrane requests a stove for the gun room but no plans show one).

Table – single large table? Instead of the two smaller ones

Lighting OK:- retain those in situ.

Red baize table cloth: - www.simonlucasbridgesupplies.co.uk/product/burgundy-baize-per-metre/ and treat against moth with Constrain or go for a cotton instead.

Facsimile copy Murray's journal: produce in-house

Cupboards - The area outside the room (still part of the Gunroom) has on the plan "cupboards" and a small water tank. I believe that these are wash-places, one for each junior officer (sub-lieutenant, midshipman, cadet, clerk). They would have been wooden with a single door with one shelf inside, to contain a basin and ewer and other washing items. Recreate three of these, space permitting. (The fact that another slightly later December 1863 signed off Feb 1864 plan shows piped water and labelled wash stands in this area I think confirms this idea.)

Water tank: - small fresh water tank against aft bulkhead needs to be made copy the style of the larger ones and the brass tap.

23. Midshipman's pantry:-



J8609

Seat locker - see model <http://collections.rmg.co.uk/collections/objects/68392.html>

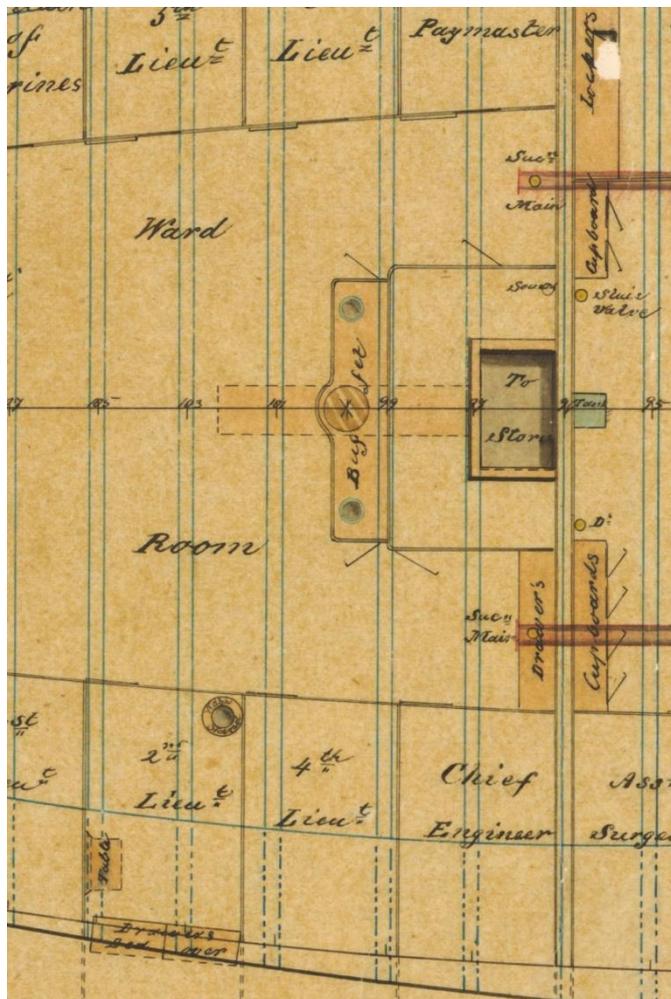
Drawers and cupboard – similar to LH side of model but with drawer either side of the central double doors. The central doors having central partially open panels, possibly this was the area for pots and pans.

Contents based on the mess trap list below dated Dec 1862 to be used in ship's commissioning from that date. Warrior was commissioned earlier but many of the items would have been the same or similar. See Mess Utensils list for 13-23 people.

Early tin opener as one is listed. (NOT the bulls head that is a few years later than 1863.

24. Clerks office & Assistant Surgeon's cabin: closed and just labelled as per style elsewhere

25. Wardroom: table & chairs as they are. Remove the butler tray & stand currently behind the rails as this will be easily knocked over by the public.



J8609



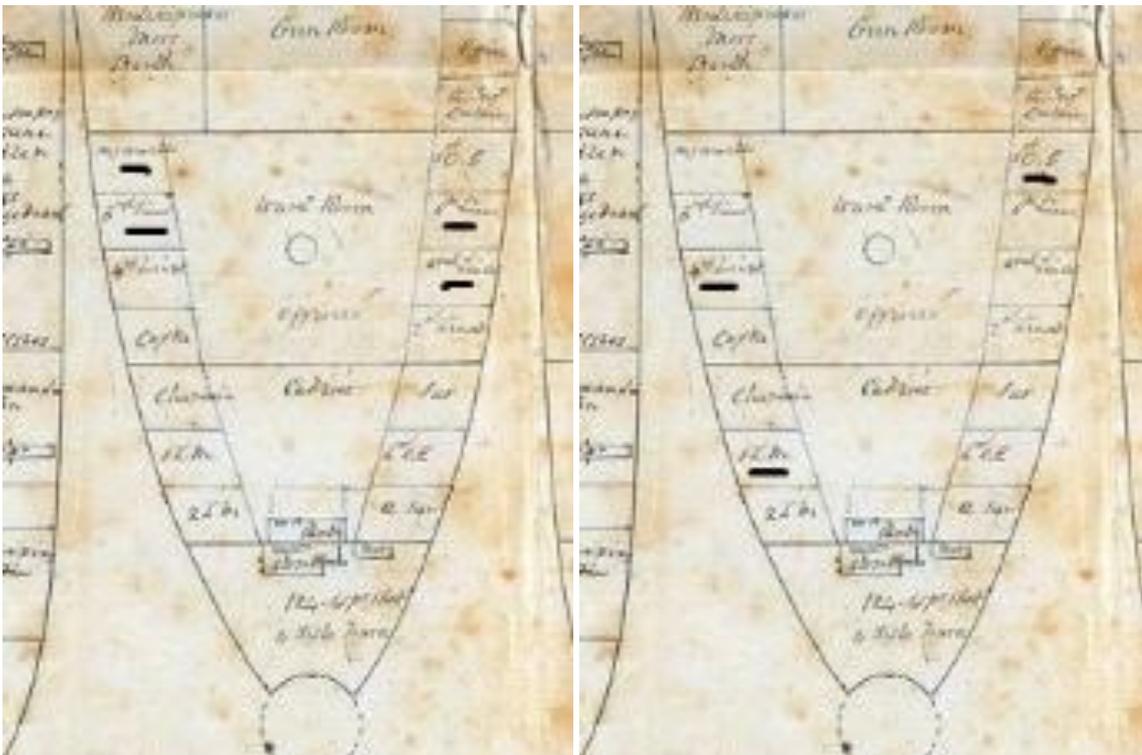
sideboard/drawers with brass rails HMS Temeraire W 1989_47_13

Buffet : - built around existing ships pipework. This has been made, need to dress possibly also add a brass rail to the top as a retainer. Put on top of this the items removed from the butler tray & stand.

Drawers : - made as cupboards rather than the drawers as on the plan but keep as is, possibly add brass retainer rail if this is being done for the buffet.

Currently the area is accessed via the staircase into the lobby or via the doorway from the gun room. Coming down the stairs the first thing you see through the lobby door is the paymaster's cabin, which is currently open. We will be adding a new access point from the aft cabin area. Close current cabins and open new. (spare items not suitable for warrant officer's cabins can be kept to cover damages)

Current cabins open to view through removed louvres see left hand image, new opened cabins see right hand image. This is going with Murray's labelling.



26. Chief engineer's cabin (top right cabin on RH image). William Buchan

As officer cabin model any added information relating to the people in those positions in the third quarter of 1863. & paper work relating to their roles; see cabin model <http://collections.rmg.co.uk/collections/objects/68091.html>

New Canvas bodied metal frame swinging bed frame on wooden brackets - see officers cabin model

Flooring : possibly the same lino & carpet from current display

Brass curtain rail & Curtain & fittings

Dress rest of cabin as per model, round three level wash stand, shelves, 2 x chests of drawers, folding table, 1 x plain chair, mirror, towel rail & towel, sconce & lamp, etc., Items listed already available from current officer's cabin displays

Books reports etc. : details to follow but done in-house

27. 4th Lieutenant's cabin (mid cabin marked on left hand side of RH image).

Jackie Fisher joined the ship 28th March 1863, as the gunnery lieutenant, 4th Lieutenant in seniority on the ship.

See cabin model <http://collections.rmg.co.uk/collections/objects/68091.html>

New Canvas bodied metal frame swinging bed frame on wooden brackets - see officers cabin model

Flooring : possibly the same lino & carpet from current display

Brass curtain rail & Curtain & fittings

Dress rest of cabin as per model, round three level wash stand, shelves, 2 x chests of drawers, folding table, 1 x plain chair, mirror, towel rail & towel, sconce & lamp, etc., Items listed already available from current officer's cabin displays.

Books reports etc. : details to follow but done in-house

28. 1st Lieutenant of Marines (left hand side middle of the aft cabins see RH image above).

1st Lieutenant Royal Marine Artillery Herbert Everitt joined the ship on 4th August 1861 and left the ship in 1864. He returned to the ship for another spell on board later in the 1860s.

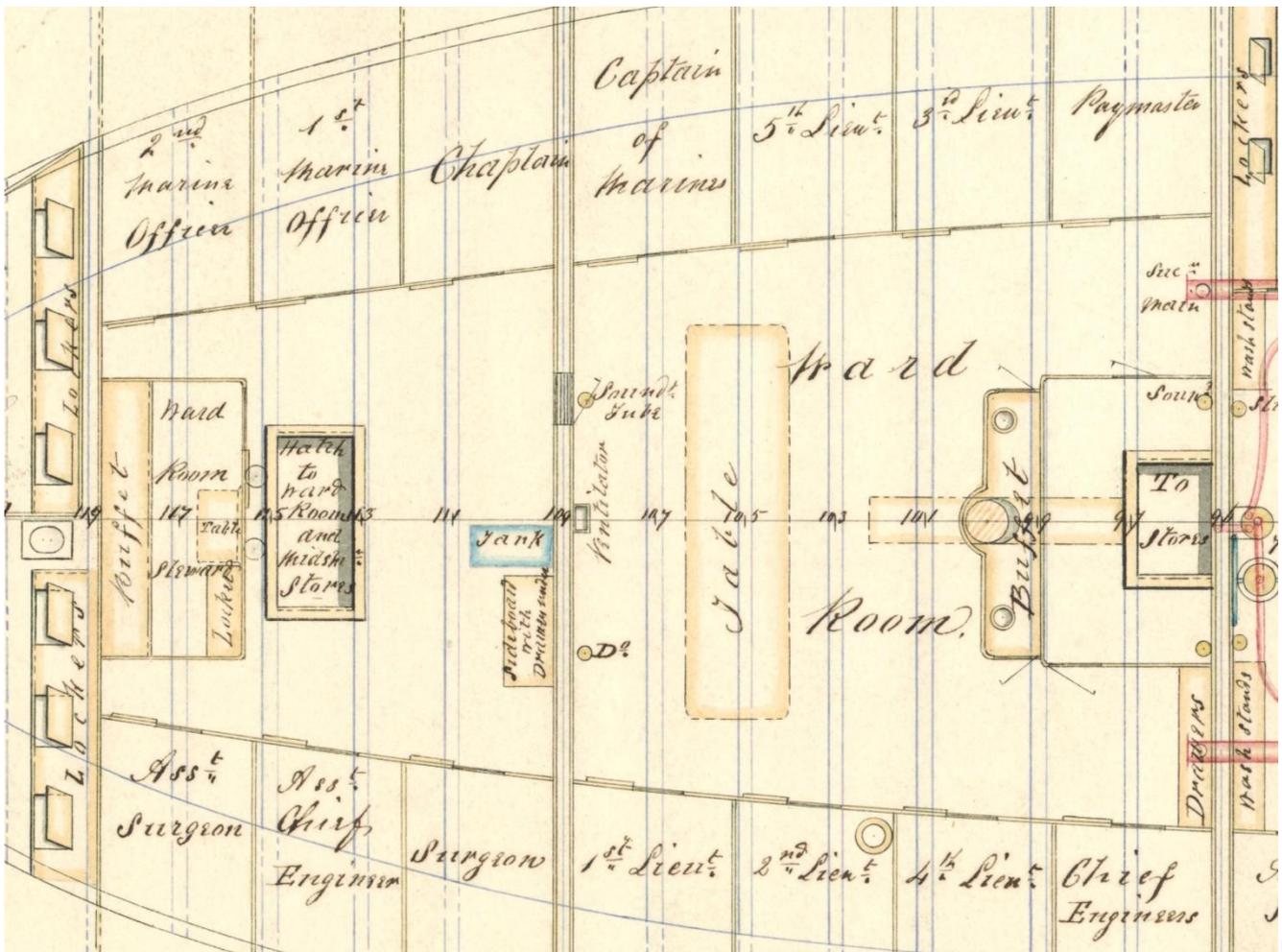
Officers cabin model <http://collections.rmg.co.uk/collections/objects/68091.html>

New Canvas bodied metal frame swinging bed frame on wooden brackets - see officers cabin model

Dress rest of cabin as per model, round three level wash stand, shelves, 2 x chests of drawers, folding table, 1 x plain chair, mirror, towel rail & towel, sconce & lamp, etc., Items listed already available from current officer's cabin displays.

Possibly a **Door curtain with rail** as seen on the HMS Shah gunroom doors? (bearing in mind that Capt. Cochrane requests stoves for Sick Bay and the Gun room, so ship not that warm)

Books reports etc. : details to follow but done in-house



J8605

29. Wardroom pantry & other aft cabins, apart from the 1st Marine Lieutenants cabin : closed just label over the doors

30. Aft officers cabin flat:

Water tank : - use one of the water tanks from the cell flat as not needed there. Need to make a new lid and find & fit a tap.

Sideboard with drawers under: similar to that next to the chief engineer's cabin but give this one some drawers.

APPENDIX 7 – Fixtures & Fittings

Information and background research to inform final interpretative fit-out of HMS Warrior

PART 3: Orlop Deck

1. Aft handing area & lamp rooms NMRN to remove current Curatorial Store to open the area up. Add small water tank in each forward port and starboard and lead floor if not already there : to view only

Lead floor to handing area

Small water tank in corner of handing room.

2. Aft Water tank room:

Change roping area: to allow closer access to the lamp rooms & handing room i.e. from clipped net stanchion to upright to right of loading hatch in handing room and across the front of the rest of the handing area and the light room.

3. Aft Magazine (visible through plastic in floor of aft water tank room). The aft magazine has been set up as per after the magazine refit in 1865, allowing it to contain rectangular boxes as well as the pentagonal. Tweak to reflect the 1863 fit out.

Retain the view down to the aft magazine.

Add a contents board similar to the image attached below. Actual wording of text to be finalised.



Need to re-stack: On a closer look at the aft magazine it seems to me too shelfy, and with not enough cartridge boxes. The boxes should be retained in position with slotted up-rights, a single shelf and slide in retaining battens. This room is shown on the plan as housing stacks 7 pentagonal boxes high. It should either be stacked full of boxes, or be empty or be being emptied or filled. Also the cartridge boxes should have lids on and no cartridges should be out unless just about to be put into a leather cartridge case, or having just been filled using the Caffin machine (N.B. neither of which would be being done with the handing room door open).

As we are now recreating part of the forward magazine that we can light the aft magazine with the light levels that the crew would have had. This also possibly allows for a little less detail in the dressing.

Need more pentagonal boxes: Also at this date, 1863, most if not all of the gun powder either in cartridge format or loose is stored in pentagonal boxes, not the rectangular ones, some of which are in the current aft magazine. Check sight lines for numbers of boxes needed & what sides can be seen. To calculate numbers of pentagon boxes needed. (see forward magazine for details of boxes)

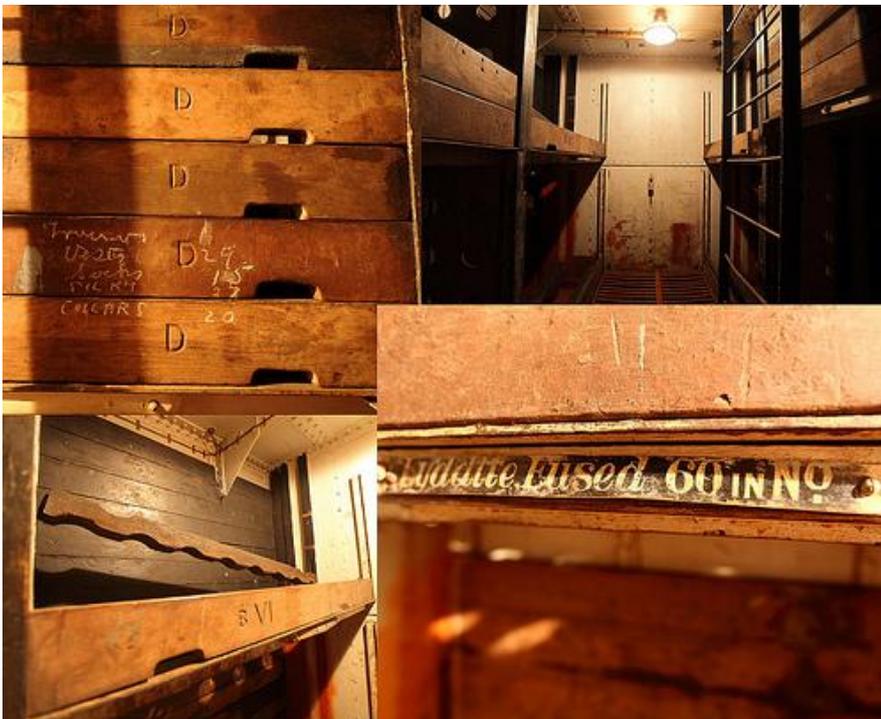
For the aft magazine some sort of dummy front for each stack of pentagonal cases with the addition of real wooden retaining battens set diagonally in front, between the closed lids of the boxes. The end of the bay running across the room should be open to allow them access to the half boxes at the ends of the rows. So another dummy piece here with battens. (The half boxes must have had lids on the largest side.) This magazine viewed from above will also need dummy tops of stacks.

The forward magazine could also be made up with good dummy stack fronts, ends and tops.

It would be good to have some actual complete boxes, if affordable. The shortened middle double bay would be the one to do this way I think and to have one or two openable boxes with cartridges in here. The openable boxes with cartridges could add both to adult understanding of the area and as an activity for the children along with the cartridge bags and the handing out sleeves. This bay is also the first thing seen on coming through the doorway from the stokehold and is out of the way of the general flow of traffic through this area.

Otherwise regarding openable boxes we could make one or two lids in a dummy front that do actually open with an individual internal inside the bigger dummy.

It should look a bit like a wooden version of HMS Caroline shell room and a bit like the earlier powder magazines in the National maritime museum models.



HMS Caroline





Air inlets in the magazine floor covered with a brass grating there should be two visible circular domed gratings see the two small red circles joined by red dotted lines on the plan below.

Tanned leather hides or wadmill tilts - The wooden magazine floor should be covered with either tanned leather hides or wadmill tilts (Treatise on ammunition 1877). Wadmill tilts were coarse woollen woven cloth, made in pieces 14ft 6 inches long, by 11ft 6 inches wide and weighed 50 lbs the piece. The oil that was added to the wool to assist spinning and weaving was left in the fabric rather than being washed out, giving it water resistant qualities. Used in the late 18th and 19th centuries for waggon and barge covers and in magazines and explosives laboratories, tilts were still being made in the 20th century for use as horse covers and as anti-spark safety floor coverings in explosive factories and the magazines of Royal Navy vessels.

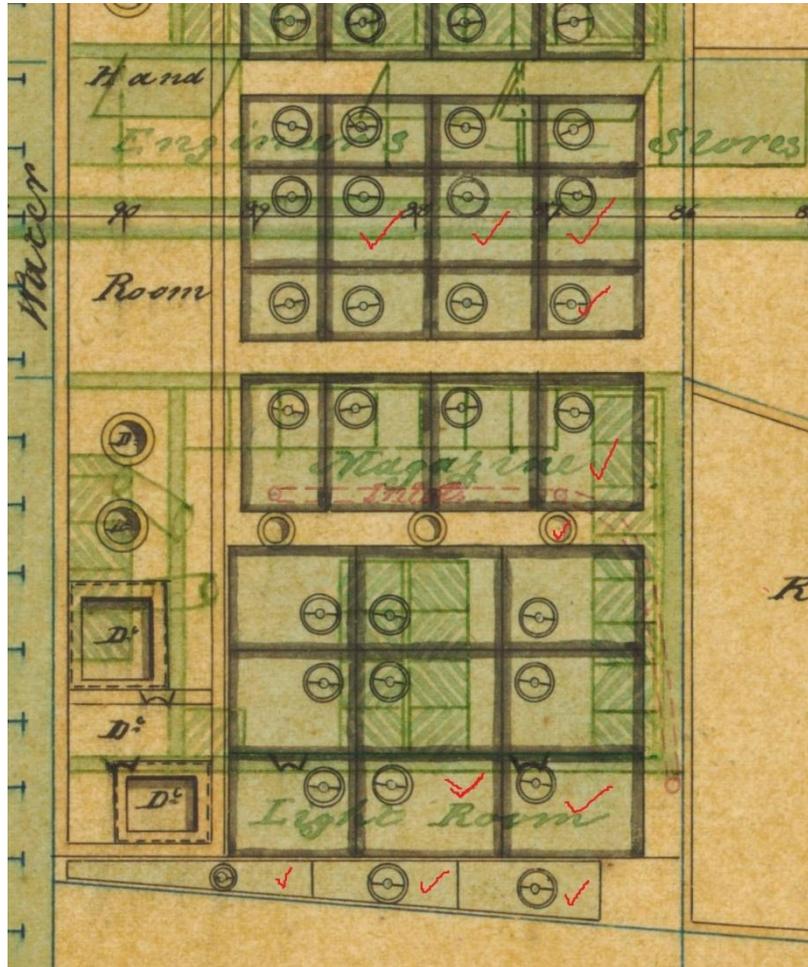
<http://www.witneyblanketstory.org.uk/wbp.asp?navigationPage=Other%20products>. So they were pieces of quite thick closely woven waterproof fabric made from thick coarse yarn.

4. Water Tank room:

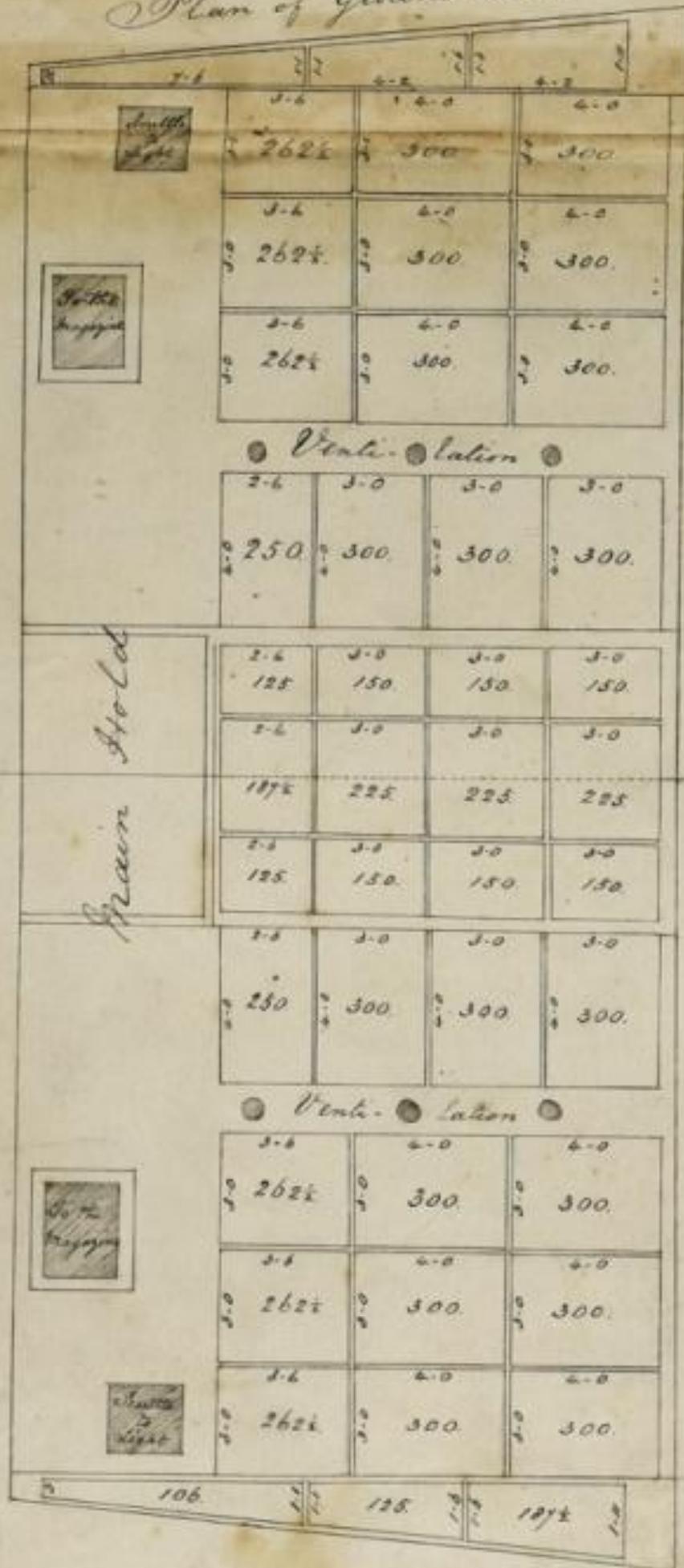
Steel riveted water tanks with round lids on top (existing one on Trincomalee and some on board Warrior) sizes and layout from Cochrane's drawing & the Ship's Log book. This water tanks room held riveted iron tanks 4ft tall, see pencil drawing (ship's log book) below for further measurements.



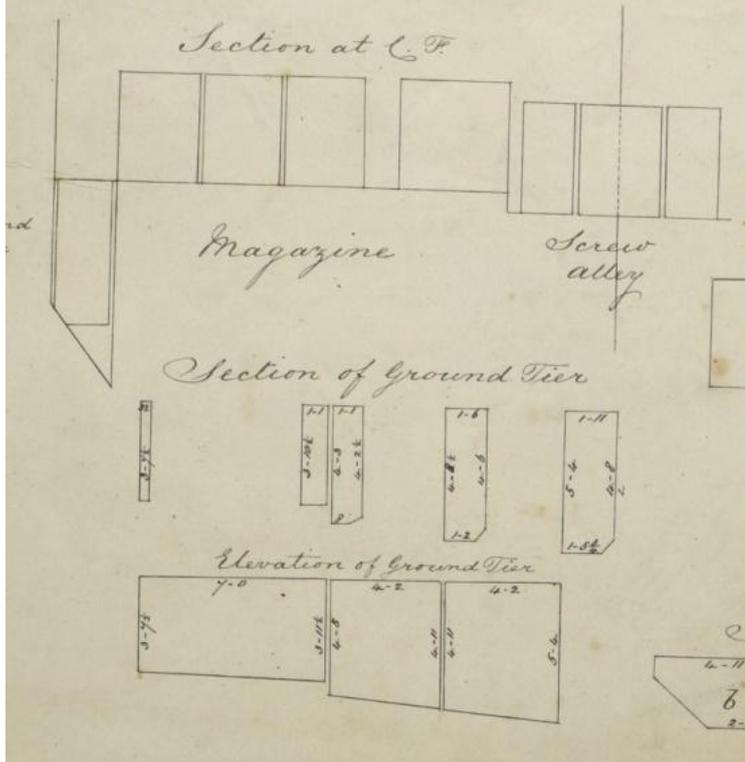
The plan immediately below shows with red ticks the likely tanks and partial tanks to recreate and re-instate. The top row may be partial tanks due to a current wall having been built to cut the tanks room in half. Half tanks will show how the room used to be wider. This plan I believe allows for the staircase, fire door to bread room, the cutaway in the deck to see the magazine below, and allows access to the lamp room and handing room (I may be wrong with the tank under the letters "om" which may be in the way of the fire door).

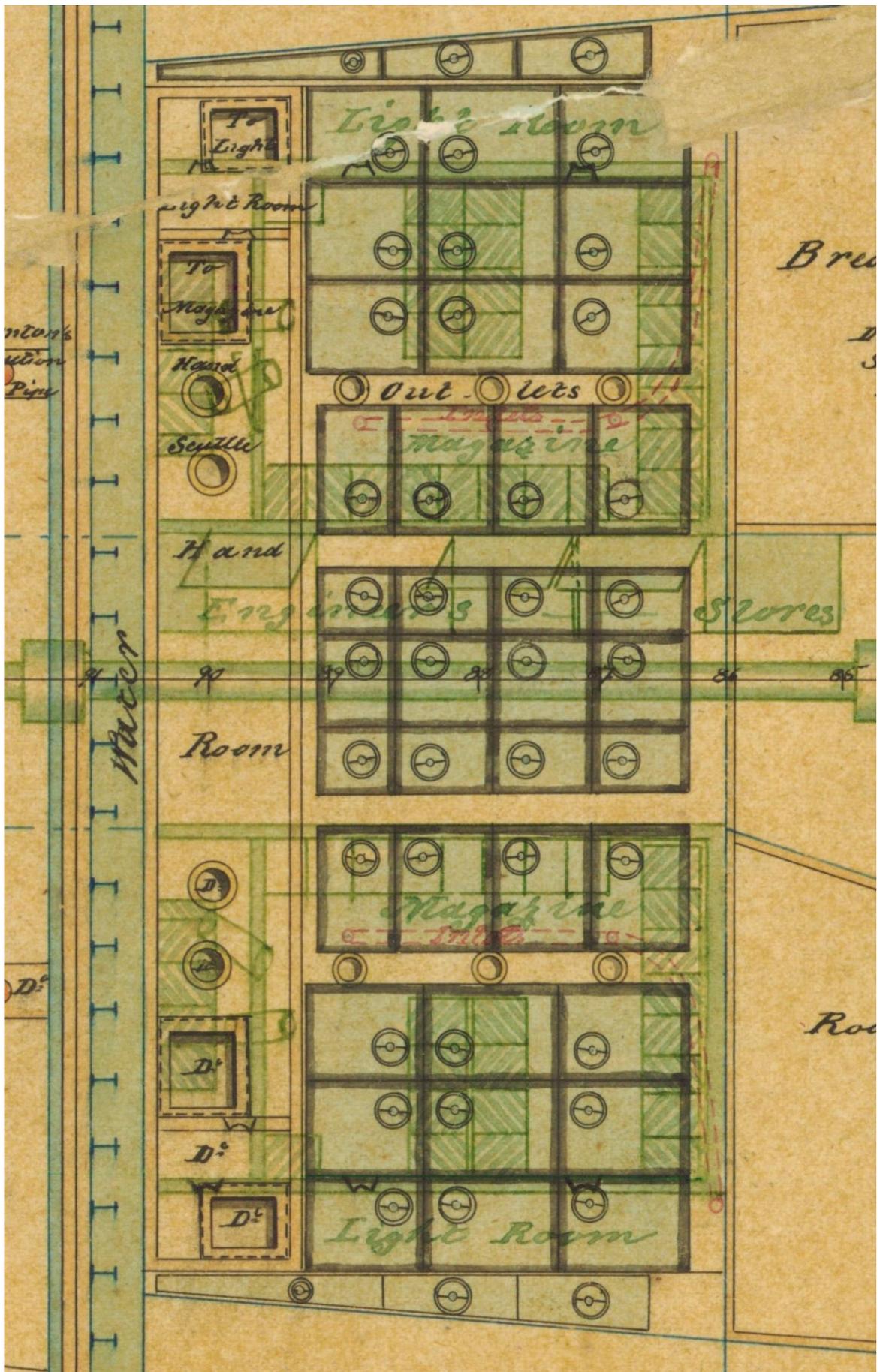


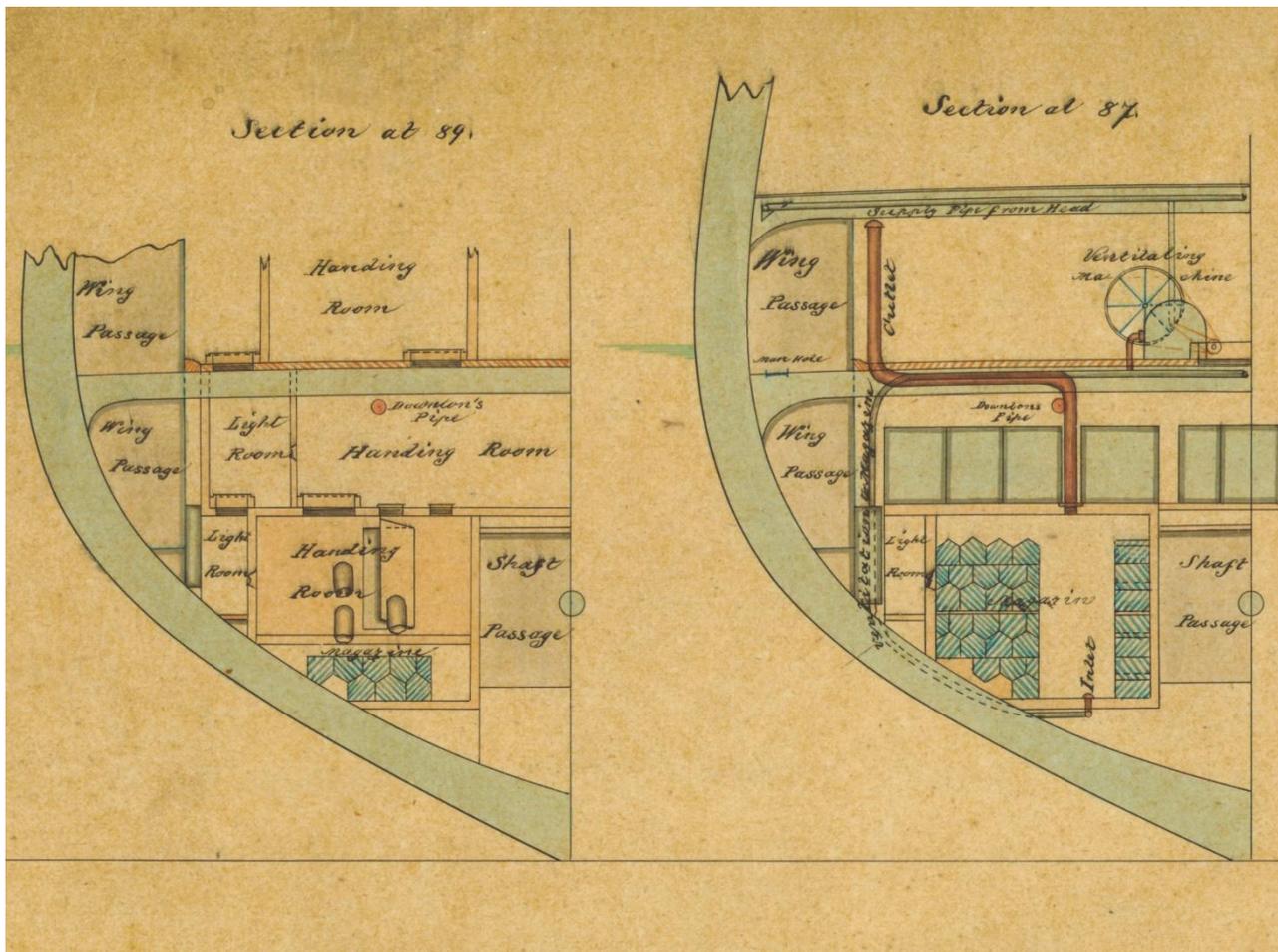
Plan of Ground Tier



M. S. Warrior Sketch showing
 the position of Tanks.
 Scale 1 in to 4 ft.







Canvas hoses (or Vaucher's hoses): - to fill the tanks from the condensors or from supplies from shore (were the aft fresh water tanks expected to be filled from shore and the forward ones by the condensors).

5. Bread room:-

Remove the wheelbarrow and sacks leave the hoist and rope.

Remove the info about the engine builder and the screw model. The screw model could be put in the engineer's mess on the table for the engineer interpreter to demonstrate to the public (as he might have done during the tour?)

Bread bags, see Dartmouth & NMRN same as 1805 period?

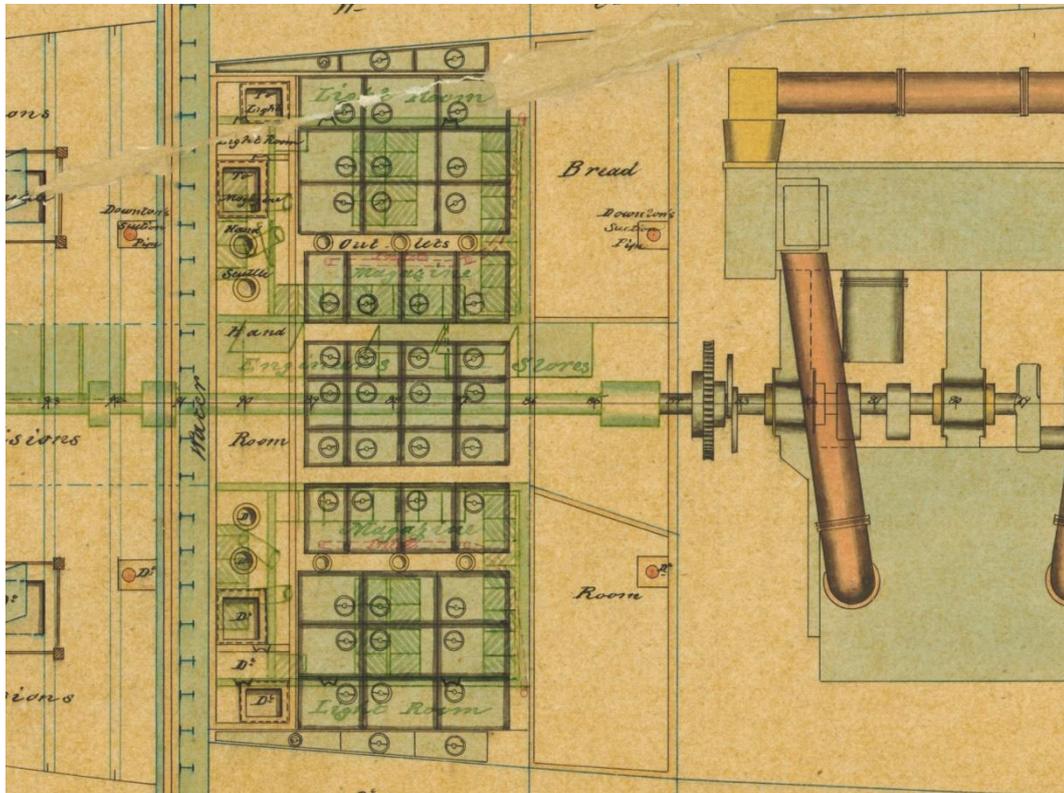
Photos of Royal Navy Museum reproduction bag c 1805



"Every cask and package of provisions sent on board His Majesty's Ships whether wet or dry (bread only excepted, which generally is to be in bags containing one hundred and twelve pounds each) are to have the contents thereof, as to species and quantity, marked thereon, together with a number and the time when and place where packed..." Regulations and orders 1808 (anthology)

Ship's log early Aug 1863 mention of receiving 4 months supply of salt provisions and 600 bread bags.(is this the 4 month supply of biscuit?)

Bread room plan J8611



This plan shows the bread room walls in cream the same as the magazine indicating wood as opposed to blue for iron/steel. Another slightly later plan show notes that the bread room is double height on the port side only. The cream lines on the above plan indicate to me the possibility of a central lobby at the bottom of the metal stairs/ladder with a smaller single deck room to starboard and a large double height room to port to which the lobby acted as a mezzanine floor to allow for hoisting out bags from the deep store. This deep store would probably only ever be used if the ship was going on a long voyage. The smaller room therefore possibly held about a 4 month supply of biscuit. I don't think that the deep store would be easy to show to the public.

I suggest that we reinstate the diagonal wall shown on the plan and put a single door, 18 inches wide, in the centre, opening out into the lobby. I suggest that we keep that door open so people can see the ladder. Then we create a central aisle 18 inches wide with a two bag wide battened stack around the three walls. The filled bread bags are approx. 18 inches in diameter. I also suggest we use battening similar to that seen in the magazine model shown below. The Bread room is 90 inches deep from front to back.



The public walk through this area on a ramp (with rails either side) due to floor height differences. This is probably good as the central aisle I am proposing would not allow any passing.

6. Engine room: ship's log 24th -27th July 1863 "Engine-room cleaned and lighted up for public inspection." So more lighting in this area is ok.

Tidy space

Add **smell** of mutton fat & tallow,

Remove models

7. Auxiliary engine space: leave as is

8. Boiler rooms: -Tidy

Add smell of coal burning

Heat possibly one open furnace with heat?

Lower light levels?

9. Forward magazine: re-instate so public can walk through the magazine.

The following section contains a number of ideas regarding potential recreation of missing features and structure. These proposals are at a very early stage and require much greater discussion with the successful contractor in order to determine whether the proposals are achievable or affordable. Further detail and information will be provided to the successful contractor in an initial project briefing workshop.

For the purposes of this tender this element does not need to be priced at this stage.

10. Interactive for the Forward Magazine

Create a working reproduction of a Caffin machine and cartridge bags for the Public/volunteers to use.

Caffin cartridge filling machine :- (N.B. They did carry loose powder in pentagon boxes and were expected at this time to replace the cartridges they'd used by making up more on board. Using the Caffin Cartridge filling machine (see instructions to the gunner in the Queen's Regulations and Admiralty Instructions 1860/61.)



Caffin machine in the collection at Explosion, Museum of Naval Firepower (Gosport). I have not had a chance for a proper look at the sizes of the measures so I am not sure if this is a small machine or a large machine. The cartridge sizes range from 12 lb for the 110 pdr guns, through 16 lb, 12 lb and 8 lb for the 68pdr guns to 5lb for the 40pdrs and 12 oz for the 6 pdr field gun.

MACHINES, CAFFIN.—These are for filling cartridges. There are two sorts, large and small, for cannon cartridges, and are used on board ship. The large machine has sixteen measures, two of each from 6 lb. to 2 lb. The small machine has twelve measures, two of each from 3 lb. to 8 oz.

Materiel for smooth bore guns.... Fraser, 1864 HRO 109 M91 box 29