

IRON SHIPS.

402 Survey held at Sunderland Date July 21st 1868

Screw Steamer "Good Hope"

Master Spence

Under tonnage deck 330.50

Built at Sunderland

When built 1868

Launched 4th June 1868

Net tonnage 1106 or spar deck 406.27

By whom built Mr J.P. Leung

Owners Cape of Good Hope Steam Ship Company

Engine room 285.14

Register tonnage 235.21

Port belonging to London

Destined Voyage Cape of Good Hope

Gross Tonnage 1235.55

Surveyed while Building, Afloat, or in Dry Dock Whilst Building

Length aloft	226	6	Extreme Breadth	32	2	Depth from top of Upper Deck Beam to top of Floor	17	8	Power of Engines	140	Horse	N ^o . of Decks	Two
<i>(Dimensions of Ship per Register, length 228.6 breadth 32.7 depth 17.65)</i>													

	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.	Inches in Ship.	Inches required per Rule.
Keel, if bar iron, depth and thickness	7 1/2 x 3	7 1/2 x 3						
if plate iron, breadth and thickness								
Stem, if bar iron, moulding and thickness	7 1/2 x 3	7 1/2 x 3						
if plate iron, breadth and thickness								
Stern-post, if bar iron, moulding and thickness	10 x 4 1/2	10 x 4 1/2						
if plate iron, breadth and thickness								
Distance of Frames from moulding edge to moulding edge, all fore and aft	23	23						
Frames, Size of Angle Iron, single or double	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3	4 1/2 x 3
Reversed Iron, to every frame								
Floors, depth and thickness of Floor Plate at mid line	23 3/4	23	9	9				
Ditto ditto at Bilge Keelson	11	9	9	9				
Size of Reversed Angle Iron, and No. single at top of Floor Plate	3	3	7	3	7			
Beams, Deck (N ^o . 149) double Angle Iron, Plate, Tee, or Bulb Iron	3	3	6	3	3	6		
double or single Angle Iron, on upper edge								
average space between								
Hold, or Lower Deck (N ^o . 31) double Angle, Tee, Plate, or Bulb Iron	3	3	7	3	7			
double or single Angle Iron, on upper edge								
average space between								
Paddle, sided and moulded, thickness of Plate size of Angle Iron								
Engine								
Keelson, single or double plate, box, or intercostal	16 1/2	13	15	13				
Size of Plates								
Size of Angle Irons	5 1/2	4 1/2	9	5 1/2	4 1/2	9		
Side, single or double, plate, box, or intercostal								
Bilge (No. One) at each Bilge, single, or double, plate, or box								

Plates in Garboard Strakes, breadth and thickness 36 11 30 11

Ditto from Garboard to upper part of Bilges 10 10

from upper part of Bilge to a perpendicular height from upper side of Keel of 3/4ths the entire depth of Hold 9 9

from 3/4ths depth of Hold to lower edge of Sheerstrake 9 8

Sheerstrake, breadth and thickness 36 12 30 12

Butt Straps to outside plating, breadth and thickness 10 1/2 thickness as plating

Gunwale Plate or Stringer on ends of Upper Deck Beams, breadth and thickness 32 11 32 11

Angle Iron on ditto 5 x 4 0 5 x 4 x 8

Stringer or Tie Plates fore and aft, on Upper Deck Beams, outside Hatchways 12 9 12 9

Diagonal Tie Plates on ditto 12 9 12 9

Planksheer, materials and scantlings

Waterway ditto ditto

Flat of Upper Deck, thickness and material

how fastened to Beams with screw bolts and nuts

Ceiling betwixt Decks and in Hold, thickness and material 2 1/2 of Red Pine

Clamps or Spirkotting ditto

Stringer Plates on ends of Hold or Lower Deck Beams, breadth and thickness 24 9 24 9

Stringer or Tie Plates fore and aft outside Hatchways, on Hold or Lower Deck Beams 12 9 12 9

Stringers in Hold 5 x 4 1/2 9 5 x 4 x 8

Flat of Lower Deck, thickness and material

Main piece of Rudder, diameter at head 6 6

at heel 3 1/2 3 1/4

(Can the Rudder be unshipped afloat) Yes

Bulkheads, N^o. 4 Thickness of 6/16

Height up to Main Deck

how secured to the sides of the ship rivetted through double frames

size of vertical angle irons 3 x 3 1/2 and their distance apart 30

The Frames extend in one length from Keel to Spar Deck Stringers rivetted through plates with (3/16 in.) rivets, about (6") apart

the reverse angle irons on the floors extend in one length across the middle line from above the Main Deck stringer angle irons

on the frames from and to the Spar Deck stringers on the alternate frames

Keelson, how are the various lengths of plates or angle irons connected? With long butt straps and the butts of the angle irons well shiffted

Plates, Garboard, double rivetted to Keel, double or at upper edge, with rivets (3/16 in.) diameter, averaging (4 1/2 in.) apart

Edges from Garboards to upper part of bilge, worked clencher, double or single rivetted; with rivets (3/4 in.) diameter, averaging (3 ins.) apart

Butts from Keel to turn of bilge, worked carvel with butt straps (1 1/8) thick, double or single rivetted; with rivets (3/8 in.) diameter, averaging (3 ins.) apart

Do the butt straps lap over and rivet through the lands of the strake below? No

Edges from bilge to sheerstrake, worked carvel with a lining piece () thick, or clencher, double or single rivetted; with rivets (3/8 in.) diameter, averaging (3 in.) apart

Do the butt straps lap over and rivet through the lands of the strake below? No

Edges of Sheerstrake, double or single rivetted At upper edge and double rivetted At lower edge

Butts from bilge to planksheers, worked carvel with butt straps (1 1/8) thick, double or single rivetted; with rivets (3/8 in.) diameter, averaging (3 ins.) apart. Breadth of laps in double rivetting (5 x 4 1/2) Breadth of laps in single rivetting (3)

Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? Double rivetted Keelson the hole rivetted

Planksheer, how secured to the plating of the sides Explain by sketch

Waterway " " planksheer and to the Beams if necessary.

Deck Beams, how secured to the side? With knee plates rivetted to the frames, and with stringers & angle irons

Hold or Lower Deck ditto The same as Deck Beams, the Spar Deck Beams are turned down at the ends & rivetted as before stated

Paddle " " No. of breasthooks Five crutches Five

What description of Iron is used for the Frames, Beams, Keelsons, Tie and Stringer Plates, Outside Plating, &c.? Angles by the Stockton makeable

Manufacturer's name or trade mark iron Comp^{rs} & Hawke's Crawshaw & Sons; The Plating by the Corbett Iron Company

We certify that the above is a correct description of the several particulars therein given.

Builder's Signature J. Leung Surveyor's Signature Thomas Lawrence

IRON 442-0373

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five and a half times the diameter of the rivets in double rivetted edges and butts, and at least three and a quarter times the diameter of the rivets where single rivetting is admitted? *Yes*

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? *Yes*

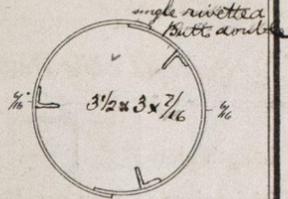
Do the fillings between the ribs and plates fill in solid with single pieces? or are they in short lengths of various thicknesses? *filled with single piece*

Do the holes for rivetting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes* and are the rivet holes well and sufficiently countersunk in the outer plate? *Yes*

Are there any rivets which either break into or have been put through the seams or butts of the plating? *a few*

Her Masts, Bowsprit, Yards, &c., are in *good* condition, and sufficient in size and length. (If they are of Iron or Steel give the Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of rivetting, quality of Materials, and if stamped with Maker's name.

Lower Masts of Iron. The Plates 12 feet long 1/16 thick. Edges single rivetted, butts double, with 3 angle iron 3 1/2 x 3 7/16



No.	She has SAILS.	CABLES, &c.	Fathoms.	Inches.	Test as per Certificate.	In. req'd per Rule.	Test req'd per Rule.	ANCHORS, &c	No.	Weight. Ex. Stock.	Test as per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
2	Fore Sails,	Chain	300	1 7/8	4 1/2	1 5/8	4 1/2	Bowers	3	25-2-14	25-3-3-2	25-2-0	25-3-3-0
/	Fore Top Sails,									25-2-0	25-3-3-0	25-2-0	25-3-3-0
/	Fore Topmast Stay Sails	Hempen Stream Cable	80	9				Stream	1	21-2-24	22-3-4-0	21-2-20	22-2-1-7
/	Main Sails,	Hawser	90	1 1/16						10-2-0			
/	Main Top Sails,	Towlines	80	7									
	and others well found	Warp	80	6									
		All of <i>good</i> quality.	80	4				Kedges	2	4-2-0		2-3-8	

Her Standing and Running Rigging *Wine & hemp* are sufficient in size and *good* in quality.

She has *2 Life Boats* Long Boat and *3 others*

The present state of the Windlass is *good* Capstan *good* and Rudder *good* Pumps *good*

Order for Special Survey No. *2079* Date *April 16/68* while building as per Section 18.

Order for Ordinary Survey No. _____ Date _____

1st. On the several parts of the frame, when in place, and before the plating was wrought *Built under Special Survey from 2. Nov. 1867 to the present date*

2nd. On the plating during the progress of rivetting

3rd. When the beams were in and fastened, and before the decks were laid

4th. When the ship was complete, and before the plating was finally coated

5th. After the ship was launched

State if she has a Spar Deck *Yes* Poop _____ or Forecastle _____

eral Remarks, *Spar Deck* The Beams are of bulb iron 6 1/2 x 7/16 spaced at every alternate frame with double angle iron on upper edge 2 1/2 x 2 1/2 x 7/16. The stringer plates on their ends are 30 x 7/16 and angle iron on do 4 x 3 1/2 x 7/16. The fore and aft and diagonal tie plates 9 x 7/16. The sheer strakes are 4 x 7/16. The strake below 7/16. The thickness of Main and Spar decks are reversed. The Spar deck being 3/4 and the Main deck 3/8.

Certificate for the Tests of Anchors and Chain Cables have been produced, issued from the Near Public Testing Machine and signed by John Hartney S.M.

In what manner are the surfaces preserved from oxidation? Inside *Portland Cement to upper turn of Bilges, & red-lead above*

Ditto ditto Outside *3 Coats of red-lead*

I am of opinion this Vessel should be Classed *A1*

The amount of the Fee£ 5 : : : is received by me, *Aug. 1868*

Special£ 62 : 15 : "

Certificate (if required)£ : : "

Committee's Minute *11th August 1868*

Character assigned *B*

The hull of this vessel was surveyed throughout by Mr. Lawrence, & the report made by him prior to his last illness but his signature was omitted until completion of report.

This vessel appears eligible for the B class. J. R. 10 Aug 1868