

IRON SHIPS.

Rec 24/3/64

No. 4750 Survey held at Grunock
on the ship "Orana"Date 9th March18 64Master Walter GuthrieTonnage Gross 997.08 Engine Room

Register

Built at GrunockWhen Built 1864By whom built Scott & Co.Owners William PittPort belonging to GrunockDestined Voyage Glyde to Calcutta

Surveyed Afloat or in Dry Dock

While building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse No.
201	7	0	33	10	21	3	10	21	3	10
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	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	Inches in Ship	Inches required per Rule
Floors, Size of Angle Iron, and No. <u>single</u> bottom of Floor Plate	5	3	4	3	4	3	4	3	4	3
depth and thickness of Floor Plate at mid line	22	4	22	4	22	4	22	4	22	4
depth and thickness of Floor Plate at Bilge Keelson	9	4	9	4	9	4	9	4	9	4
Size of Reversed Angle Iron, and No. <u>single</u> at top of Floor Plate	3	4	3	4	3	4	3	4	3	4
Frames, Size of Angle Iron, single or double to every frame	5	3	4	3	4	3	4	3	4	3
Reversed Iron, <u>to every frame</u> and on every alternate frame	3	4	3	4	3	4	3	4	3	4
Beams, Deck (No. <u>double</u> Angle Iron Bulb Iron with double Angle Iron on top	3	4	3	4	3	4	3	4	3	4
depth & thickness of plate amidships	8	2	8	2	8	2	8	2	8	2
double or single Angle Iron, on lower edge	8	2	8	2	8	2	8	2	8	2
average space between	3	feet	3	feet	3	feet	3	feet	3	feet
if wood (No. <u>double</u>) sided & moulded	3	feet	3	feet	3	feet	3	feet	3	feet
Hold, or Lower Deck (No. <u>double</u> Angle Iron Bulb Iron with double Angle Iron on top	3	4	3	4	3	4	3	4	3	4
depth & thickness of plate amidships	8	2	8	2	8	2	8	2	8	2
double or single Angle Iron, on lower edge	8	2	8	2	8	2	8	2	8	2
average space between	3	feet	3	feet	3	feet	3	feet	3	feet
if wood (No. <u>double</u>) sided & moulded	3	feet	3	feet	3	feet	3	feet	3	feet
Paddle, wood, sided and moulded or if Iron, size of Plate	3	feet	3	feet	3	feet	3	feet	3	feet
Engine	25	4	25	4	25	4	25	4	25	4
Keelson, wood, sided & moulded, iron, size of plate, if Box, give sketch & dimensions	5	4	5	4	5	4	5	4	5	4
Side or Bilge	5	4	5	4	5	4	5	4	5	4
Number	2	feet	2	feet	2	feet	2	feet	2	feet

Transoms, material Iron or, if none, in what manner compensated for.Knight-heads IronHawse Timbers IronBulkheads, No. Two Thickness of 1/2are they free from defects? Yes how secured to the sides of the ship Between double framessize of vertical angle iron and their distance apart 3 1/2 x 3 1/2 inches apartThe Frames or Ribs extend in one length from Keel to Gunnwale rivetted through plates with (3/4 in.) rivets, about (7 inches) apart.The reverse angle irons on the floors extend in one length across the middle line from lower deck to Gunnwale alternatelyKeelson, how are the various lengths of plates or angle irons connected? By Angle Iron butt strapsPlates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1/2 in.) diameter averaging (4 1/2 in.) from centre to centre of rivet.Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 1/2 in.) from centre to centre of rivets.Butts from Keel to turn of bilge, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? NoEdges from bilge to planksheer, worked carvel with a lining piece (1/2 in.) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 1/2 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? NoButts from bilge to planksheers, worked carvel with a lining piece (1/2 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter averaging (3 1/2 in.) from centre to centre of rivets. Breadth of laps in double rivetting (4 1/2) Breadth of laps in single rivetting (4)Planksheer, how secured to the plating of the sides { Explain by sketch, } By Angle IronWaterway planksheer and to the Beams { if necessary. }

Side trussing breadth and thickness of plates how secured?

Deck trussing By plates all fore and aft each side of Hatchways 15 x 1 1/2 inches and diagonal plates where practicableDeck Beams, how secured to the side? By plate kneesHold or Lower Deck By plate kneesPaddle By plate kneesNo. of breasthooks Four crutches Four how are pointers compensated?What description of iron is used for the angle iron and plate iron in the vessel? Scott's Bridge Iron & Best boiler plates Builder's Signature Scott & Co.

3514. *Iron*

Workmanship. Are the lands or laps of the clenchwork in all cases in breadth at least five times the diameter of the rivets in double rivetted edges and butts, and at least three 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? *Solid*

Do the holes for rivetting plate to frames, lining pieces, 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, Yards, &c., are in *Good* condition, and sufficient in size and length. *Lower masts and main and fore yards Iron*

She has SAILS. CABLES, &c. ANCHORS, and their weights.

N ^o .			Fathoms.	Inches.		N ^o .	Weight.
	Fore Sails,	Chain <i>Admiralty test 5 1/2</i>	300	1 1/2	Bower, <i>Common Admiralty test 30 tons</i>	1	<i>cast as lbs 36.2.18</i>
	Fore Top Sails,	Hempen Stream Cable	90	10	<i>do do do 28 1/2</i>	1	<i>36.3.18</i>
<i>Two</i>	Fore Topmast Stay Sails,	Hawser	90	8	Stream, <i>Common</i>	1	<i>29.2.22</i>
<i>Sails</i>	Main Sails,	Towlines	90	6			
<i>Iron</i>	Main Top Sails,	Warp	90	5	Kedge, <i>ditto</i>	1	<i>16.1.2</i>
		All of <i>Good</i> quality.					<i>3-6</i>

and *rigging is wide*

Her Standing and Running Rigging *Hemp* sufficient in size and *Good* in quality.

She has *two life boats, & one* Long Boat and *big*

The present state of the Windlass is *Good* *two* Capstans *Good* and Rudder *Good with* Pumps *Four lead. Good*

General Remarks, Statement and Date of Repairs, extent of corrosion (if any) both internally and externally, and condition of rivets.

DATES of Surveys held while building, as per Section 17.

1st. On the several parts of the frame, when in place, and before the plating was wrought

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

Specially surveyed while building from 18th February 1863 to 9th March 1864 in all 52 visits

This vessel has been built under special survey as per order 277; is fitted with wood waterways and rougher stanchions, planksheds &c of East India Teak; and wood bulwarks. She has a full poop and forecastle.

In what manner are the surfaces preserved from oxidation? *Portland Cement in flat up to bilges, and three coats of Red lead inside and outside and two coats of Peacock's composition on bottom.*

I am of opinion this Vessel should be classed *A1*.

The amount of the Fee£ 5 : " : " is received by me,

Moh Special£ 49 : 17 : "

x Certificate (if required)£ " : " : "

Committee's Minute *24 March 1864*

Character assigned *A1*

I concur in the above recommendation

26 Mar 1864



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