

# IRON SHIPS.

age under main deck 795.74  
 80.94  
 19.93  
 Houses 896.61

Surveyed at Midleshro Date 27th September 1864  
 on the Screw Steamer "Koina" Master Trott  
 Tonnage 896 Engine Room 109 Register 706 Built at Midleshro  
 When Built 1864 Launched 31st August By whom built Candlish Hay & Co.  
 Owners Raynolds Mann & Co. Port belonging to Liverpool Destined Voyage India  
 Surveyed Afloat or in Dry Dock Specially Surveyed while building

Length aloft	Feet.	Inches.	Extreme Breadth	Feet.	Inches.	Depth from top of Upper Deck	Feet.	Inches.	Beam to top of Floor	Feet.	Inches.	Power of Engines	Horse.
227	11		30	3		17	6					120	

  

	Inches in Ship.	Inches required per Rule.	16ths required per Rule.		Inches in Ship.	Inches required per Rule.	16ths required per Rule.
Distance of Frames or Ribs from moulding edge to moulding edge, all fore and aft	21	21		Stem, if bar iron, moulding and thickness	7 1/4	2 3/4	2 3/4
<u>Double cross keel 4 ft. in</u>				" if plate iron, breadth and thickness	9 1/2	4 1/2	5 1/2
Floors, Size of Angle Iron, and No. <u>one</u> at bottom of Floor Plate	4 1/4	3 1/4	0 1/16	Stern-post, if bar iron, moulding and thickness	7 1/4	2 3/4	2 3/4
" depth and thickness of Floor Plate at mid line	20	9 1/16	19 1/4	" if plate iron, breadth and thickness	7 1/4	2 3/4	2 3/4
" depth and thickness of Floor Plate at Bilge Keelson	10	9 1/16	10	Keel, if bar iron, depth and thickness	7 1/4	2 3/4	2 3/4
" Size of Reversed Angle Iron, and No. <u>one</u> at top of Floor Plate	3	2 3/4	7 1/16	" if plate iron, breadth and thickness	7 1/4	2 3/4	2 3/4
Frames, Size of Angle Iron, single or double	4 1/4	3 1/4	0 1/16	Garboard Plates, Breadth and thickness	30	1 1/16	30
" Reversed Iron, if to every frame or every other frame	3	2 3/4	7 1/16	From Garboard to upper part of Bilge	10 1/16		10 1/16
Beams, Deck (No. <u>63</u> ) double Angle Iron, Plate, or Bulb Iron	7 1/2	7 1/2	7 1/16	From upper part of Bilge to Sheerstrakes	9 1/16		9 1/16
" double or single Angle Iron, on <u>top</u> edge	3	2 3/4	6 1/16	Sheerstrakes, Breadth and thickness	30	1 1/16	30
" average space between	3 ft. 6 in.	13 ft. 6 in.		Butt Straps to outside plating, Breadth and thickness	9	4 1/2	10 1/2
" if wood (No. <u>36</u> ) sided & moulded	7 1/2	7 1/2	7 1/16	Planksheers	40	9 1/16	32
Hold, or Lower Deck (No. <u>36</u> ) double Angle Iron, Plate, or Bulb Iron	7 1/2	7 1/2	7 1/16	Gunwale Plate or Stringer on ends of Up. Dk Beams	11 1/2	9 1/16	11 1/4
" double or single Angle Iron, on <u>top</u> edge	3	2 3/4	6 1/16	Angle Iron on ditto	11 1/2	9 1/16	11 1/4
" average space between	3 ft. 6 in.	13 ft. 6 in.		Diagonal Tie Plates on Beams	3 1/2		3 1/2
" if wood (No. <u>36</u> ) sided & moulded	7 1/2	7 1/2	7 1/16	Waterway (Gutter) <u>at ends of hold</u>	3 1/2		3 1/2
Paddle, wood, sided and moulded, or if Iron, size of Plate				Deck	2 1/2		2 1/2
Engine				Ceiling in Hold	2 1/2		2 1/2
Keelson, single plate, box, or intercostal	13	13	11 1/16	Ceiling betwixt Decks	2 1/2		2 1/2
" Size of Plates	3 1/2	3 1/2	0 1/16	Beam Clamps or Spirketting			
" Size of Angle Irons	3 1/2	3 1/2	0 1/16	" Shelf			
Ditto Bilge (No. <u>two</u> ) double Angle Irons	5	5	0 1/16	" Stringer Plates on ends of Hold or Lower Dk Beams	3 1/2	9 1/16	24
Transoms, material <u>Plate</u> or, if none, in what manner compensated for				Ceiling between Decks	11 1/2	9 1/16	11 1/4
Knight-heads, and Hawse Timbers <u>Blocks Iron &amp; Oak</u>				Stringer or Tie Plates outside Hatchways			
The Frames or Ribs extend in one length from <u>Keel</u> to <u>Gunwale</u>				Deck Beam Clamps or Spirketting			
The reverse angle irons on the floors extend in one length across the middle line from <u>upper part of bilge</u> to <u>upper part of bilge</u>				" Shelf			
" " " on the frames " " " from <u>bilge</u> to <u>gunwale</u> on alternate frames				Stringers in Hold	5	3 1/2	0 1/16
Keelson, how are the various lengths of plates or angle irons connected?				Deck, Lower	2 1/2		2 1/2
Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1 1/16 ins.) diameter averaging (4 1/2 ins.) from centre to centre of rivet.				Deck, Upper, how fastened to Beams	0 1/16	9	from rivet bolts
" Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 1/2 ins.) from centre to centre of rivets.				Bulkheads, No. <u>four</u> Thickness of <u>4 1/16</u>			
" Butts from Keel to turn of bilge, worked carvel with a lining piece (9 1/16) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 1/2 ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? <u>no</u>				" how secured to the sides of the ship			<u>double frames &amp; bond beams</u>
" Edges from bilge to sheerstrake, worked carvel with a lining piece (1 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? <u>no</u>				" size of vertical angle iron and their distance apart			<u>3 x 2 3/4 x 7 1/16 spaced 30 in.</u>
" Edge of Sheerstrake, double or single rivetted? <u>Double</u>				The Frames or Ribs extend in one length from <u>Keel</u> to <u>Gunwale</u> rivetted through plates with (3/4 in.) rivets, about (6 in.) apart.			
" Butts from bilge to planksheers, worked carvel with a lining piece (9 1/16) thick, double or single rivetted; rivets (3/4 in.) diameter averaging (3 1/4 ins.) from centre to centre of rivets. Breadth of laps in double rivetting (4 1/2) Breadth of laps in single rivetting (2 3/4)				The reverse angle irons on the floors extend in one length across the middle line from <u>upper part of bilge</u> to <u>upper part of bilge</u>			
Butt Straps of Keelsons, Stringer and Tie Plates, double or single rivetted? <u>Double</u>				" " " on the frames " " " from <u>bilge</u> to <u>gunwale</u> on alternate frames			
Planksheers, how secured to the plating of the sides				Keelson, how are the various lengths of plates or angle irons connected?			<u>Butts of angle iron &amp; plates shifted &amp; stepped &amp; rivetted</u>
" " " planksheer and to the Beams				Plates, Garboard, double or single rivetted to keel & at upper edge, with rivets (1 1/16 ins.) diameter averaging (4 1/2 ins.) from centre to centre of rivet.			
Beams, how secured to the side?				" Edges from Garboards to upper part of bilge, worked carvel with a lining piece (1 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 1/2 ins.) from centre to centre of rivets.			
or Lower Deck				" Butts from Keel to turn of bilge, worked carvel with a lining piece (9 1/16) thick, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 1/2 ins.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? <u>no</u>			
breasthooks				" Edges from bilge to sheerstrake, worked carvel with a lining piece (1 in.) thick, or clencher, double or single rivetted; rivets (3/4 in.) diameter, averaging (3 in.) from centre to centre of rivets. Do the lining pieces lap over and rivet through the lands of the strake below? <u>no</u>			
how are pointers compensated?				" Edge of Sheerstrake, double or single rivetted? <u>Double</u>			
Description of iron used for the angle iron and plate iron in the vessel				" Butts from bilge to planksheers, worked carvel with a lining piece (9 1/16) thick, double or single rivetted; rivets (3/4 in.) diameter averaging (3 1/4 ins.) from centre to centre of rivets. Breadth of laps in double rivetting (4 1/2) Breadth of laps in single rivetting (2 3/4)			



3766 Iron  
Are the lands or la

edges and butts, and at least three times the diameter of the rivets where single rivetting is admitted: 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 in one length

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  
She has SAILS.

Fathoms.	Inches.
1	12
2	24
3	36
4	48
5	60
6	72
7	84
8	96
9	108
10	120
11	132
12	144
13	156
14	168
15	180
16	192
17	204
18	216
19	228
20	240
21	252
22	264
23	276
24	288
25	300
26	312
27	324
28	336
29	348
30	360
31	372
32	384
33	396
34	408
35	420
36	432
37	444
38	456
39	468
40	480
41	492
42	504
43	516
44	528
45	540
46	552
47	564
48	576
49	588
50	600
51	612
52	624
53	636
54	648
55	660
56	672
57	684
58	696
59	708
60	720
61	732
62	744
63	756
64	768
65	780
66	792
67	804
68	816
69	828
70	840
71	852
72	864
73	876
74	888
75	900
76	912
77	924
78	936
79	948
80	960
81	972
82	984
83	996
84	1008
85	1020
86	1032
87	1044
88	1056
89	1068
90	1080
91	1092
92	1104
93	1116
94	1128
95	1140
96	1152
97	1164
98	1176
99	1188
100	1200

No.	Weight.
1	100
2	100
3	100
4	100
5	100
6	100
7	100
8	100
9	100
10	100
11	100
12	100
13	100
14	100
15	100
16	100
17	100
18	100
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92	100
93	100
94	100
95	100
96	100
97	100
98	100
99	100
100	100

No.							
2	Fore Sails,	Chain <i>tested to 40 1/2 tons</i>	270	1	9/16	Bower,	22.00
2	Fore Top Sails,	<i>See Cert. No. 24, 19, 18</i>	90	7	10	Stream,	1
2	Fore Topmast Stay Sails,	<i>See Cert. No. 24, 19, 18</i>	90	10	12	Kedge,	2
2	Main Sails,	<i>See Cert. No. 24, 19, 18</i>	90	9	7		
2	Main Top Sails,	<i>See Cert. No. 24, 19, 18</i>	90	7	5		
	and <i>others as usual</i>	All of <i>good</i> quality.	90	3	0		

Her Standing and Running Rigging Two Masts sufficient in size and four  
 She has Two Cutters long-Boat and Two Life Boats One Guy

The present state of the Windlass is Good Capstan Washed and Rudder Good Pumps Surf of

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

<b>DATES of Surveys</b> held while building, as per Section 17.	1st.	On the several parts of the frame, when in place, and before the plating was wrought	Special Survey No 4 of Order 192
	2nd.	On the plating during the progress of rivetting	
	3rd.	When the beams were in and fastened, and before the decks were laid	First Survey 15th Feby. 1864
	4th.	When the ship was complete, and before the plating was finally coated	2nd Survey 27th Sept. 1864
	5th.	After the ship was launched	

Has a Roof & Forecastle, frames all to the top height. Plating  $6 \times 16$  the  
single riveted at edges double at butts. with  $3 \frac{1}{4}$  rivets. Roof beams double  
angle Irons  $6 \times 3 \times 10 \times 16$  &  $3 \times 3 \times 7 \times 16$ . Forecastle beams double angle Irons  $5 \times 3 \times 9 \times 16$   
&  $3 \times 2 \times 3 \frac{1}{4} \times 7 \times 16$ . Waterways of Deck <sup>or</sup> Flat of Deck 3 in Y. Pine  
Additional longitudinal strengthening. Sheerstrakes doubled with plates  
 $10 \times 0 \times 16$  for three-fourths the length. upper edge flush with upper edge  
of gunwale angle iron. Main Deck stringer plates on beam ends  
increased in width to 40 inches for half the length. Bulb plates fitted  
between bilge angle Irons  $7 \times 2 \times 0 \times 16$  for half the length amidships

Sandwich, Is. of

Mr. J. S. Martin's recommendations of the 26th. May have been carried out in every particular.

In what manner are the surfaces preserved from oxidation?

Cement, other parts, with paint

I am of opinion this Vessel should be classed

The amount of the Fee .....£ 5<sup>0</sup> : 0 : 0 is received by me

Special ..... £44: 16: 0

Certificate (if required) .....£ : :

Committee's Minute 30<sup>th</sup> September 1864

*Character assigned*

Flat of gold cemented with Parkland

The anchors not being tested at a  
Public machine, The Builders state  
they have had some correspondence  
with the Secretary upon the subject

J. P. Gladstone

I am a person who  
is fit to be classed as uncommon  
and beg to draw attention to the fact  
that bearing date 15-4-16<sup>th</sup> July