

## IRON SHIP.

No. *41997* Survey held at *London* Date, First Survey *April 3<sup>rd</sup> 1882* Last Survey *December 2<sup>nd</sup> 1882*  
On the *Iron Screw Steamer "Cormorant"*

TONNAGE under Tonnage Deck *658.72*  
Ditto of Upper Deck *4.13*  
Ditto of Poop, or Raised Or. Dk. *251.54*  
Ditto of Houses *3.95*  
Ditto of Forecastle *28.28*  
Gross Tonnage *926.62*  
Less Cargo Space *32.38*  
Less Engine Room *894.24*  
Register Tonnage as out on Beam *185.54*  
*708.70*

ONE, OR TWO DECKED, THREE DECKED VESSEL,  
SPAR, OR AWNING DECKED VESSEL.

Half Breadth (moulded) *15.0*  
Depth from upper part of Keel to top of Upper Deck Beams *16.45*  
Girth of Half Midship Frame (as per Rule) *28.55*  
1st Number *60.00*  
1st Number, if a 3-Decked Vessel deduct 7 feet  
Length *194*  
2nd Number *11640*  
Proportions— Breadths to Length *6.333*  
Depths to Length—Upper Deck to Keel *11.792*  
Main Deck ditto *11.792*

Master *James Brown Randall*  
Built at *Deptford Greenyard*  
When built *1882* Launched *14 October*  
By whom built *W. Walker & Co*  
Owners *General Steam Navigation Co*  
Residence *London*  
Port belonging to *London*  
Destined Voyage *Hamburg*  
If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule *194* Feet. Inches. BREADTH—Moulded *30* Feet. Inches. DEPTH top of Floors to Upper Deck Beams *15* Feet. Inches. Power of Engines *95* Horse. N° of Decks with flat laid *One* N° of Tiers of Beams *Two*

Dimensions of Ship per Register, length, *195* breadth, *30.1* depth, *15*.

KEEL, depth and thickness *8 x 2 3/8* Inches in Ship. *7 1/2 x 2 1/4* Inches per Rule.  
STEM, moulding and thickness *7 x 2 3/8* *7 x 2 1/4*  
STERN-POST for Rudder do. do. *8 x 5* *7 x 4 1/2*  
" " for Propeller *8 x 5* *7 x 4 1/2*  
Distance of Frames from moulding edge to moulding edge, all fore and aft *22 inches* *22 inches*  
FRAMES, Angle Iron, for  $\frac{3}{4}$  length amidships *3 1/2 x 3* *3 1/2 x 3*  
Do. for  $\frac{1}{4}$  at each end *3 1/2 x 3* *3 1/2 x 3*  
REVERSED FRAMES, Angle Iron *3 x 2 1/2* *3 x 2 1/2*  
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships *1 1/2 x 8* *1 1/2 x 8*  
thickness at the ends of vessel *1 1/2 x 8* *1 1/2 x 8*  
depth at  $\frac{3}{4}$  the half-bdth. as per Rule *9* *8 1/4*  
height extended at the Bilges *35* *35*  
BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron *5 1/2 x 3* *5 1/2 x 3*  
Single or double Angle Iron on Upper edge *3 x 3* *3 x 3*  
Average space *44* *44*  
BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron *3 x 3* *3 x 3*  
Single or double Angle Iron on Upper Edge *3 x 3* *3 x 3*  
Average space *44* *44*  
BEAMS, Lower Deck or Hold Single or double Angle Iron, Plate or Tee Bulb Iron *4 x 3* *4 x 3*  
Single or double Angle Iron on Upper Edge *4 x 3* *4 x 3*  
Average space *44* *44*  
BEAMS, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron *3 x 3* *3 x 3*  
Single or double Angle Iron on Upper Edge *3 x 3* *3 x 3*  
Average space *44* *44*  
KEELSONS Centre line, single or double plate, box, or intercostal, Plates *12* *10*  
Rider Plate *10* *10*  
Bulb Plate to Intercostal Keelson *4 1/2 x 3* *4 1/2 x 3*  
Angle Irons *4 1/2 x 3* *4 1/2 x 3*  
Double Angle Iron Side Keelson *4 1/2 x 3* *4 1/2 x 3*  
Side Intercostal Plate *4 1/2 x 3* *4 1/2 x 3*  
do. Angle Irons *4 1/2 x 3* *4 1/2 x 3*  
Attached to outside plating with angle iron *4 1/2 x 3* *4 1/2 x 3*  
BILGE Angle Irons *4 1/2 x 3* *4 1/2 x 3*  
do. Bulb Iron *4 1/2 x 3* *4 1/2 x 3*  
do. Intercostal plates riveted to plating for length *4 1/2 x 3* *4 1/2 x 3*  
BILGE STRINGER Angle Irons *4 1/2 x 3* *4 1/2 x 3*  
Intercostal plates riveted to plating for length *4 1/2 x 3* *4 1/2 x 3*  
SIDE STRINGER Angle Irons *4 1/2 x 3* *4 1/2 x 3*

Flat Keel Plates, breadth and thickness *32* *8* *32* *8*  
PLATES in Garboard Strakes, br'dth & thickness *32* *8* *32* *8*  
From Garboard to upper part of Bilges *32* *8* *32* *8*  
Of Bilge to Bilge, increased thickness, and length applied for half length *9* *9* *9* *9*  
From up. prt of Bilge to lr. edge of Sh'rstrake *33* *10 x 1* *33* *10 x 1*  
Main Sheerstrake, breadth and thickness *33* *10 x 1* *33* *10 x 1*  
Of Bilge at Sh'stk. & lng. applied *50 ft* *50 ft*  
From M'n. to Up. or Spar Dk. Sh'rstrake *33* *10 x 1* *33* *10 x 1*  
Up. or Spar Dk Sh'rstrake, br'dth & thckn'ss *33* *10 x 1* *33* *10 x 1*  
Butt Straps to outside plating, breadth & thickness *33* *10 x 1* *33* *10 x 1*  
Lengths of Plating *6 spaces of frames* *6 spaces of frames*  
Shifts of Plating, and Stringers *2 spaces of frames* *2 spaces of frames*  
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness *24* *6* *24* *6*  
Angle Iron on ditto *3 x 3* *3 x 3* *3 x 3* *3 x 3*  
Tie Plates fore and aft, outside Hatchways *8* *8* *8* *8*  
Diagonal Tie Plates on Beams No. of Pairs *3* *3* *3* *3*  
Flat of Up. Spar, or Awning Dk. *3* *3* *3* *3*  
How fastened to Beams *galvanised iron with screws* *galvanised iron with screws*  
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness *42* *8* *42* *8*  
Is the Stringer Plate attached to the outside plating? *yes* *yes*  
Angle Irons on ditto, No. *4 1/2 x 3* *4 1/2 x 3* *4 1/2 x 3* *4 1/2 x 3*  
Tie Plates, outside Hatchways *10* *8* *10* *8*  
Diagonal Tie Plates on Beams, No. of pairs *3 1/2* *3 1/2* *3 1/2* *3 1/2*  
Flat of Middle Deck do. *3 1/2* *3 1/2* *3 1/2* *3 1/2*  
How fastened to Beams *galvanised iron with screws* *galvanised iron with screws*  
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams *25* *7* *25* *7*  
Is the Stringer Plate attached to the outside plating? *yes* *yes*  
Angle Irons on ditto, No. 2 *4 1/2 x 3* *4 1/2 x 3* *4 1/2 x 3* *4 1/2 x 3*  
Stringer or Tie Plates, outside Hatchways *4 1/2 x 3* *4 1/2 x 3* *4 1/2 x 3* *4 1/2 x 3*  
Flat of Lower Deck *4 1/2 x 3* *4 1/2 x 3* *4 1/2 x 3* *4 1/2 x 3*  
Ceiling betwixt Decks, thickness and material *2 1/4* *2 1/4* *2 1/4* *2 1/4*  
in hold do. *2 1/2* *2 1/2* *2 1/2* *2 1/2*  
Main piece of Rudder, diameter at head *5* *5* *5* *5*  
do. at heel *3* *3* *3* *3*  
Can the Rudder be unshipped afloat? *yes* *yes*  
Bulkheads No. *5* No. per Rule *3* *3*  
Thickness of *5 1/8* *5 1/8* *5 1/8* *5 1/8*  
Height up to Main deck *5 1/8* *5 1/8* *5 1/8* *5 1/8*  
How secured to sides of ship *double frames* *double frames*  
Size of Vertical Angle Irons *3 x 2 1/2 x 3/8* and distance apart *30 ins.* *30 ins.*  
Are the outside Plates doubled two spaces of Frames in length? *yes* *yes*

The FRAMES extend in one length from *Keel* to *Gunwale* Riveted through plates with  $\frac{3}{4}$  in. Rivets, about *5* apart.

The REVERSED ANGLE IRONS on floors and frames extend from middle line to *above lower D's or Keelsons* and to *Gunwale* alternately

KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? *yes* And butts properly shifted? *yes*

PLATING. Garboard, double riveted to Keel, with rivets  $\frac{1}{8}$  in. diameter, averaging *5* ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets  $\frac{3}{4}$  in. diameter, averaging *3 1/2* ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets  $\frac{3}{4}$  in. diameter averaging *2 1/4 to 3* ins. from centre to centre.

Butts of *Two* Strakes at Bilge for *half* length, treble riveted with Butt Straps  $\frac{1}{16}$  thicker than the plates they connect.

Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets  $\frac{3}{4}$  in. diameter, averaging *3 1/8* ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets  $\frac{3}{4}$  in. diameter, averaging *2 1/4 to 3* ins. from cr. to cr.

Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, treble riveted for *half* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.

Butts of Main Stringer Plate, treble riveted for *half* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.

Breadth of laps of plating in double riveting *4 1/2* Breadth of laps of plating in single riveting *per Rule* No. of Breasthooks, *Stringers & Gratches at the ends.*

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *per Rule* No. of Breasthooks, *Stringers & Gratches at the ends.*

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Angle iron from H.P. & Co.*

Manufacturer's name or trade mark, of *H.P. & Co.* and the plates from *Thames Iron Works, & Walker Iron & Steel Company*

The above is a correct description of the Iron used for the ship.

Builder's Signature, *W. Walker & Co* Surveyor's Signature, *John Miles*

Surveyor to Lloyd's Register of British and Foreign Shipping.



Workmanship. Are the butts of plating planed or otherwise fitted? *planed*  
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*  
Are the fillings between the ribs and plates solid single pieces? *yes*  
Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *yes*  
Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *yes*  
Do any rivets break into or through the seams or butts of the plating? *very few*

Masts, Bowsprit, Yards, &c., are *all* in *good* condition, and sufficient in size and length. If of Iron or Steel give 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 riveting, quality of Materials, and if stamped with Maker's name.  
State also Length and Diameter of Lower Masts and Bowsprit

*This vessel is fitted with two pole masts of wood sufficient in length and diameter.*

one part complete

NUMBER for EQUIPMENT	12804	Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Machine where Tested & Suprntd.	
SAILS.	CABLES, &c.						Bower Anchors	3					
Fore Sails,	Chain .....	240	1 1/2	34 x 31	240 1/2	34 x 31	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	Certif. N° 13896	from Vetherton signed D. J. Lewis	17. 2. 26	18. 16. 1. 0	16. 3. 0	18. 0. 0. 0
	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	Certificates from Vetherton dated 19 <sup>th</sup> Feb 1882 signed by D. J. Lewis.											
Fore Top Sails,	Iron Stream Chain	60	7/8	13. 15. 2. 0	60 1/2	7/8	The Certif. catd for the Stream Chain	Certif. N° 13895	from Vetherton signed D. J. Lewis	16. 2. 5	17. 18. 1. 28		
	<del>Steel Wire</del> ..	Certificate 18 <sup>th</sup> Oct. 1882 from Vetherton signed by D. J. Lewis.											
Fore Topmast Stay Sails,	<del>Hempen Steel Cable</del> .....						Stream Anchor	Certif. N° 13903	from Vetherton signed D. J. Lewis	14. 0. 2	15. 14. 2. 21	14. 0. 2	
	Towline, Hemp.	90	9		90 1/2	9	19 <sup>th</sup> Feb 1882 from Vetherton signed D. J. Lewis.						
	or Steel Wire ..												
Main Sails,	Hawser .....	90	7		90 1/2	7	Stream Anchor	1	5. 1. 24	7. 16. 1. 0	5. 2. 0	7. 16. 0. 0	
Main Top Sails,	Warp .....	90	5		90 1/2	5	Kedge ...	1	2. 3. 2	5. 10. 0. 0	2. 3. 0	5. 5. 0. 0	
and	quality	good	90	5 1/2			2nd Kedge ...	1	1. 2. 4	4. 1. 2. 7	1. 2. 0	3. 18. 0. 0	
Standing and Running Riggers	Wire & Hemp	sufficient in size and good in quality.											
		She has three Long Boats and											

Standing and Running Rigging *Wire & Hemp* sufficient in size and *good* in quality. She has *three* Long Boats and  
The Windlass is *Iron, Patent, Good* Capstan *Good* and Rudder *Good* Pumps *Good*  
Engine Room Skylights. How constructed? *Iron Coachings & Leak painting* How secured in ordinary weather? *bolts*  
What arrangements for deadlights in bad weather? *Solid wood Dashes with Bulls Eyes*  
Coal Bunker Openings. How constructed? *Cath. Iron Deck plates* How are lids secured? *locked by turning* Height above deck? *flush with the*  
Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *ports being with hinges in the bulwarks, and scuppers through sheerstrakes level with deck beam stringers.*  
Cargo Hatchways. How formed? *framed with half beam, deep plate Coachings, four x aft Coachings & plates of the*  
State size Main Hatch *19' 8" x 11' 0"* Fore hatch *8' 11" x 7' 11"* Quarter hatch *21' 6" x 11' 6"* on Poop &  
If of extraordinary size, state how framed and secured? *at Main deck has stringer plates outside 40 inches wide*  
What arrangement for shifting beams? *2 web plates to N° 2 & Main hatch, 2 d at N° 3 on Poop & 4 shifting beams at Main Deck*  
Hatches efficient? *they are sufficient.*

Order No. <i>12804</i>	Date <i>1882</i>	No. <i>62</i> in builder's yard.	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	2nd. On the plating during the process of riveting	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 or cemented..	5th. After the ship was launched and equipped
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General Remarks (State quality of workmanship, &c.) *The general quality of the workmanship is good. This vessel has a Double Bottom or ballast tank in the after hold 49.6 long, constructed on the M. E. Putty principle, centre girder 7/16 thick other girders 5/16 as per approved section and the plating of the top 5/16; and a fore peak Ballast tank 12.6 long up to the height of the hold beams. Has a Poop Deck extending 119 ft before the sternpost and to before the Engine Room & Boiler Space Enclosures. with an Iron bulkhead at the front; also has a Topgallant Forecastle 29.6 long inclusive of the wings.*

*This vessel has been Built under special Survey while in process of construction and fitting out between the 3rd of April, 1882, and the present date.*

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecastle, or raised quarter deck. (If double bottom, state particulars on separate form.)  
How are the surfaces preserved from oxidation? Inside *Portland Cement to Blue Paint* Outside *Oxide of Iron & other Paint*

I am of opinion this Vessel should be Classed *90 A 1*  
The amount of the Entry Fee ... £ 5 : : is received by me, *J. W. Miles*  
Special ... £ 46 : 7 : *30th Dec 1883*  
Certificate ... *Greater*  
(Travelling Expenses, if any, £ )  
Committee's Minute *Tuesday, 5th December, 1883*  
Character assigned *90 A 1*  
*Surveyor to Lloyd's Register of British and Foreign Shipping.*  
*This vessel has been built in accordance with approved plans and appears worthy of the favour consideration of the Committee to be classed as recommended provided the ballast tanks have been tested as required by the Rules.*  
*The 3rd Bower is slightly light but the collection weight is in excess of the Rule requirements.*  
*1 deck Double Bottom 57 1/2 ft 76 ft*