

# IRON SHIP. 16286

No. 2630 Survey held at Middlesbrough Date, First Survey 5<sup>th</sup> Jan<sup>y</sup> Last Survey 26<sup>th</sup> April 1876  
On the S. S. "Damietta" Master Hawes

TONNAGE under Tonnage Deck 689.64  
Ditto of Third, Spar, or Awning Deck. 19.96  
Ditto of Prop, or Raised Or. Dk. 18.62  
Ditto of Houses on Deck 682.25  
Ditto of Forecastle 29.24  
Gross Tonnage 653.01  
Less Crew Space 218.32  
Less Engine Room 434.69  
Register Tonnage as cut on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL.  
SPAR, OR AWNING DECKED VESSEL.  
HALF BREADTH 13.58  
DEPTH from upper part of Keel to top of Upper Deck Beams 17.82  
GIRTH of Main Midship Frame (as per Rule) 28.00  
1st NUMBER 59.40  
1st NUMBER, if a THREE-DECKED VESSEL [deduct 7 feet] ✓  
LENGTH 207.3  
2nd NUMBER 12313  
PROPORTIONS—Breadths to Length 7.6  
Depths to Length—Upper Deck to Keel 11.6  
Main Deck ditto ✓

Built at Middlesbrough  
When built 1864 Launched 21<sup>st</sup> June/64  
By whom built Backhouse & Dixon  
Owners W. Taylor  
Port belonging to Middlesbrough  
Destined Voyage Norman  
If Surveyed while Building, Afloat, or in Dry Dock. While Building & Lengthening

LENGTH on deck as per Rule 207 3/4 BREADTH Moulded 27 2 DEPTH top of Floors to Upper Deck Beams 16 5 Power of Engines 90 Horse. 90 No. of Decks with flat laid One No. of Tiers of Beams Two

Dimensions of Ship per Register, length 208.1 breadth, 27.2 depth, 16.3

KEEL, depth and thickness 7 x 2 1/2  
STEM, moulding and thickness 7 1/2 x 2 1/2  
STERN-POST for Rudder do. do. 9 x 4  
for Propeller 9 x 4  
Distance of Frames from moulding edge to moulding edge, all fore and aft 21  
FRAMES, Angle Iron, for 3/4 length amidships 3 1/2 x 3  
Do. for 1/4 at each end 3 1/2 x 3  
REVERSED FRAMES, Angle Iron 3 x 2 1/2  
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships 17 x 8  
thickness at the ends of vessel 8 x 4  
depth at 3/4 the half-bdth. as per Rule 8 x 4  
height extended at the Bilges 42 in  
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 7 x 4  
Single or double Angle Iron on Upper edge 2 1/2 x 2 1/2  
Average space 42 in  
BEAMS, Main, or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 7 x 4  
Single, or double Angle Iron, on Upper Edge 2 1/2 x 2 1/2  
Average space 42 in  
BEAMS, Lower Deck, Hold, or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron 4 x 3  
Single or double Angle Iron on Upper Edge 3 x 2 1/2  
Average space 22 in  
KEELSONS Centre line, single or double plate, box, or intercostal, Plates 12 x 10  
" Rider Plate 13 x 10  
" Bulb Plate to Intercostal Keelson 10  
" Angle Irons 4 x 3  
" Double Angle Iron Side Keelson 4 1/2 x 3 1/2  
" Side Intercostal Plate 4 1/2 x 3 1/2  
" do. Angle Irons 4 1/2 x 3 1/2  
" Attached to outside plating with angle iron 4 1/2 x 3 1/2  
BILGE Angle Irons 4 x 3  
" do. Bulb Iron 6 x 4  
" do. Intercostal plates riveted to plating for length 6 x 4  
BILGE STRINGER Angle Irons 4 x 3  
Intercostal plates riveted to plating for length 6 x 4  
SIDE STRINGER Angle Irons 4 x 3  
Transoms, material. Knight-heads. Hawse Timbers. Plates & angles  
Windlass Butter Bell Bitt

Flat Keel Plates, breadth and thickness 30  
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied See over.  
fm up. part of Bilge to lr. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness 30  
Butt Straps to outside plating, breadth & thickness 9 x 1/2  
Lengths of Plating 110  
Shifts of Plating, and Stringers 44  
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness...  
Angle Iron on ditto 4 1/2 x 3 1/2  
Tie Plates fore and aft, outside Hatchways 10 1/2 x 4  
Diagonal Tie Plates on Beams No. of Pairs, 10 1/2 x 4  
Planksheer material and scantling 3 1/2  
Waterways do. do. Butter  
Flat of Upper Deck do. do. 3 1/2 new  
How fastened to Beams 3 1/2  
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness 20  
Is the Stringer Plate attached to the outside plating? yes in way of new part  
Angle Irons on ditto, No. 2 in way of new part  
Tie Plates, outside Hatchways 3 1/2 x 3 1/2  
Diagonal Tie Plates on Beams, No. of pairs 3 1/2 x 3 1/2  
Waterways materials and scantlings 2 1/2  
Flat of Middle Deck do. do. 2 1/2  
How fastened to Beams 2 1/2  
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams 2 1/2  
Is the Stringer Plate attached to the outside plating? yes in way of new part  
Angle Irons on ditto, No. 2 in way of new part  
Stringer or Tie Plates, outside Hatchways 2 1/2  
Flat of Lower Deck 2 1/2  
Ceiling betwixt Decks, thickness and material in hold do. 2 1/2  
Main piece of Rudder, diameter at head 5  
do. at heel 3  
Can the Rudder be unshipped afloat? yes  
Bulkheads No. 5 Thickness of 6  
Height up to main bk. line to load line  
How secured to sides of ship to double & single for with knees  
Size of Vertical Angle Irons 3 x 2 1/2 x 1/2 and distance apart 30 ins.  
Are the outside Plates doubled two spaces of Frames in length? yes

The FRAMES extend in one length from Keel to Gunwale Riveted through plates with 3/4 in. Rivets, about 5.6 apart.  
The REVERSED ANGLE IRONS on floors and frames extend from middle line to Hold Beam Stringer 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 1 in. diameter, averaging 3/4 ins. from centre to centre.  
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 3 ins. from centre to centre.  
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 3 1/2 ins. from centre to centre.  
Butts of Two Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/2 thicker than the plates they connect.  
Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4, 7/8 in. diameter, averaging 3, 2 1/4 ins. from cr. to cr.  
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4, 5/8 in. diameter, averaging 3, 2 1/4 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 ✓ length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.  
Butts of Main Stringer Plate, treble riveted for ✓ length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.  
Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 2 3/4

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double riveted  
Waterway, how secured to Beams Butter (Explain by Sketch, if necessary.)  
Beams of the various Decks, how secured to the sides? Solid welded knees No. of Breasthooks, four Crutches, three  
What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good  
Manufacturer's name or trade mark, Hopkins & Co, Stockton Malleable, Rolleston & Vaughan,

The above is a correct description.  
Builder's Signature, W. Taylor Surveyor's Signature, J. H. Dunnet  
Surveyor to Lloyd's Register of British and Foreign Shipping.



**Workmanship.**

Are the butts of plating planed or otherwise fitted? planed.

16236 Iron

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? a few in the butts.

Masts, Bowsprit, Yards, &c., are of Pine 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

Schooner Kissed.

Fore mast Extreme Length 49' 6" ft; base at deck 18 3/4.  
Main " " " " " 52' 9" " " " 20 1/4.

**NUMBER for EQUIPMENT** 13544

N <sup>o</sup> .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N <sup>o</sup> .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
		Chain						3 Bowers	1	12' 1/2 18.11.24	18.11.24	16-3-0	18.0-0-0
	Fore Sails,	Slender	24 1/2	1 1/2	3 1/2	240, 1 1/2	34.0-0-0	Same as chain	1	16' 3/4 18.2.3 1/2	18.2.3 1/2	16-3-0	18.0-0-0
	Fore Top Sails,	2 1/2	24 1/2	1 1/2	3 1/2								
	Fore Topmast Stay Sails	Ham Strm Cbl	90	1 1/2	3 1/2	90-14							
	Main Sails,	Hawser ...	90	1 1/2	3 1/2	90-8		Stream ...	1	11' 0.0	11' 0.0	4-0-0	4-0-0
	Main Top Sails,	Towlines ...	90	1 1/2	3 1/2	90-5		Kedges ...	1	3' 2.0	3' 2.0	1-3-0	1-3-0
	and	Warp ...	90	1 1/2	3 1/2								
		quality <u>Good</u>											

Standing and Running Rigging Wire & Denit sufficient in size and Good in quality. She has no Long Boats and no Jolly Boat

The Windlass is Good, and 3 Stm Capstan Good and Rudder Good Pumps Good

Engine Room Skylights. How constructed? Iron casing & wood How secured in ordinary weather? Full ones

What arrangements for deadlights in bad weather? Full ones

Coal Bunker Openings. How constructed? Iron & wood How are lids secured? Iron Height above deck? 6 ins.

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? 3 Scuppers and 3 Scuttlles 3' 1/2 x 1' 5" on each side before Bridge deck and 2 Scuppers & 2 Scuttlles on each side abaft.

Cargo Hatchways. How formed? Wood Headed & Formings to fore Hatchway and Iron do to main & Quarter Hatchways

State size Main Hatch 19' 10" x 9' 4 1/2" Comings 5' 11" x 6" 6" and Fore hatch 5' 11" x 6" 6" and Quarter hatch 13' 3" x 8' 0" Comings 7' 16" thick

If of extraordinary size, state how framed and secured? Plates & angles & deep web beam 7' 16" thick to main & Quarter Hatchways

What arrangement for shifting beams? Double angles on bormings 3 x 3 x 7' 16" and 2 1/2 x 2 1/2 x 7' 16"

Hatches, If strong and efficient? yes.

Order for Special Survey No.	1st.	On the several parts of the frame, when in place, and before the plating was wrought	1876 Jan 5, 6, 7, 10, 13, 14, 18, 24, 28, Feb 1, 3, 4, 7, 9, 11
Date	2nd.	On the plating during the process of riveting	11, 21, 25 March 1, 6, 8, 13, 16, 21, 22, 24, 30 April
Order for Ordinary Survey No.	3rd.	When the beams were in and fastened, and before the decks were laid....	3, 4, 6, 10, 12, 18, 20, 26
Date	4th.	When the ship was complete, and before the plating was finally coated or cemented..	
No. in builder's yard.	5th.	After the ship was launched and equipped	

General Remarks (State quality of workmanship, &c.) Workmanship and Materials Good.

now done on acct. of Damage, S.S. No 3, Lengthening & Change of Class from A.1. to 90A1.

This vessel has now been lengthened about 28 ft of Scantlings similar to her original construction in accordance with the accompanying tracings & the Comt's requirements, see Sect's Letter 7<sup>th</sup> Feb'y 1876. The deck str has been increased to 36 ins for 1/2 length and then gradually reduced, the strake of plating next below sheer str has been doubled with 7' 16" plating for 2/3 length & the strake of plating in way of hold ends has also been doubled with 7' 16" plating for 1/2 length amidships. The Rules for S.S. No 3 have been fully complied with, the whole of the Cement & Close Ceiling in holds & bunkers have been renewed, both surfaces of bottom beam & found good, together with the rivets, for &c. Shell plating drilled but found no perceptible diminution of original thickness. The Stern, Stern frame, one length of keel & 49 shell plates renewed together with the greater part of the rivets along flat of bottom and in transoms & Stern frs; An additional beam fitted in engine room, all floors in after hold doubled & 4 in eng room and the whole of main deck renewed.

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, forecastle, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside Cement & Paint Outside Paint

I am of opinion this Vessel should be Classed 90A1

The amount of the Entry Fee ... £ 5 : - : is received by me, May 1876

Special ... £ 15 : 15 : May 1876

Certificate ... : 5 : May 1876

(Travelling Expenses, if any, £ )

Committee's Minute 23<sup>rd</sup> May 1876

Character assigned 90A1

May 1876

90A1

May 1876

90A1

May 1876

90A1

May 1876