

IRON SHIP. 16131

No. 13/4/76

No. 1245 Survey held at S. Shields Date, First Survey 25th Aug 1875 Last Survey 30th Dec 1876
 On the Paddle Steamer "Flying Fish" Master Griffiths

| | | |
|---|---|---|
| TONNAGE under Tonnage Deck } <u>301.45</u> | ONE, OR TWO DECKED, THREE DECKED VESSEL. | Built at <u>South Shields</u> |
| Ditto of Third Spar, or Lower Deck } <u>6.57</u> | SPAR, OR AWNING DECKED VESSEL. | When built <u>1876</u> Launched <u>5th Feb 76.</u> |
| Ditto of Poop, or Raised Or. Dh. } <u>6.57</u> | HALF BREADTH (moulded) <u>12.0</u> | By whom built <u>J. Readhead & Co.</u> |
| Ditto of Houses on Deck } <u>6.57</u> | DEPTH from upper part of Keel to top of Upper Deck Beams <u>13.6</u> | Owners <u>Messrs & Co.</u> |
| Ditto of Forecabin } <u>6.57</u> | GIRTH of Half-ship Frame (as per Rule) <u>22.4</u> | Port belonging to <u>Liverpool</u> |
| Gross Tonnage <u>308.02</u> | 1st NUMBER <u>48</u> | Destined Voyage <u>Liverpool</u> |
| Less Crew Space <u>44.14</u> | 1st NUMBER THREE DECKED VESSEL [deduct 7 feet] <u>✓</u> | <u>✓</u> Surveyed while Building, Afloat, or in Dry Dock. |
| Less Engine Room <u>263.88</u> | LENGTH <u>154</u> | |
| Less Engine Room <u>172.35</u> | 2nd NUMBER <u>7392</u> | |
| Register Tonnage as out on Beam <u>91.53</u> | PROPORTIONS —Breadths to Length <u>6.44</u> | |
| | Depths to Length—Upper Deck to Keel <u>11.3</u> | |
| | Main Deck ditto <u>✓</u> | |

PLANS

| | | | | | | |
|--|---|--|--|----------------------------------|--|--|
| LENGTH on deck as per Rule <u>154 0</u> | BREADTH —Moulded <u>24 0</u> | DEPTH top of Floors to Upper Deck Beams <u>12 6</u> | Power of Engines <u>180</u> | Horse. <u>180</u> | N^o. of Decks with flat laid <u>one</u> | N^o. of Tiers of Beams <u>one</u> |
|--|---|--|--|----------------------------------|--|--|

Dimensions of Ship per Register, length, 154.9 breadth, 24.35 depth, 12.5

| | Inches in Ship. | | Inches per Rule. | | Inches in Ship. | Inches per Rule. | | Inches in Ship. | Inches per Rule. | |
|--|--|----------|------------------|----------|-----------------|------------------|----------|-----------------|------------------|----------|
| | 16ths | per Rule | 16ths | per Rule | | 16ths | per Rule | | 16ths | per Rule |
| KEEL , depth and thickness | 6 | 2 | 6 | 2 | 6 | 2 | 6 | 2 | 6 | 2 |
| STEM , moulding and thickness | 6 | 2 | 6 | 2 | 6 | 2 | 6 | 2 | 6 | 2 |
| STERN-POST for Rudder do. do. | 6 | 2 | 6 | 2 | 6 | 2 | 6 | 2 | 6 | 2 |
| for Propeller | 6 | 2 | 6 | 2 | 6 | 2 | 6 | 2 | 6 | 2 |
| Distance of Frames from moulding edge to moulding edge, all fore and aft | 21 | | 21 | | 21 | | 21 | | 21 | |
| FRAMES , Angle Iron, for $\frac{2}{3}$ length amidships | 3 1/2 | 2 1/2 | 5/16 | 3 1/2 | 2 1/2 | 5/16 | 3 1/2 | 2 1/2 | 5/16 | 3 1/2 |
| Do. for $\frac{1}{4}$ at each end | 3 1/2 | 2 1/2 | 5/16 | 3 1/2 | 2 1/2 | 5/16 | 3 1/2 | 2 1/2 | 5/16 | 3 1/2 |
| REVERSED FRAMES , Angle Iron | 2 1/2 | 2 1/2 | 5/16 | 2 1/2 | 2 1/2 | 5/16 | 2 1/2 | 2 1/2 | 5/16 | 2 1/2 |
| FLOORS , depth and thickness of Floor Plate at mid line for half length amidships | 12 | 5/16 | 12 | 5/16 | 12 | 5/16 | 12 | 5/16 | 12 | 5/16 |
| thickness at the ends of vessel | 15 | 5/16 | 15 | 5/16 | 15 | 5/16 | 15 | 5/16 | 15 | 5/16 |
| depth at $\frac{3}{4}$ the half-bdth. as per Rule | 15 | 5/16 | 15 | 5/16 | 15 | 5/16 | 15 | 5/16 | 15 | 5/16 |
| height extended at the Bilges | 15 | 5/16 | 15 | 5/16 | 15 | 5/16 | 15 | 5/16 | 15 | 5/16 |
| BEAMS , Upper, Spar, or Awning Deck } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } | 5 | 3 | 6/16 | 5 | 3 | 6/16 | 5 | 3 | 6/16 | 5 |
| Single or double Angle Iron on Upper edge | 5 | 3 | 6/16 | 5 | 3 | 6/16 | 5 | 3 | 6/16 | 5 |
| Average space | 42 | | 42 | | 42 | | 42 | | 42 | |
| BEAMS , Main, or Middle Deck } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } | The above as per App ^t Mid Section | | | | | | | | | |
| Single or double Angle Iron, on Upper Edge | The above as per App ^t Mid Section | | | | | | | | | |
| Average space | The above as per App ^t Mid Section | | | | | | | | | |
| BEAMS , Lower Deck, Hold, or Orlop } Single or d'ble Ang. Iron, Plate or Tee Bulb Iron } | The above as per App ^t Mid Section | | | | | | | | | |
| Single or double Angle Iron on Upper Edge | The above as per App ^t Mid Section | | | | | | | | | |
| Average space | The above as per App ^t Mid Section | | | | | | | | | |
| KEELSONS Centre line, single or double plate, box, or Intercostal, Plates | 4 | 3 | 7/16 | 4 | 3 | 7/16 | 4 | 3 | 7/16 | 4 |
| " Rider Plate | fore and aft. | | | | | | | | | |
| " Bulb Plate to Intercostal Keelson | Box Keelson as per Mid Section through Engine & Bottom space | | | | | | | | | |
| " Angle Irons | Box Keelson as per Mid Section through Engine & Bottom space | | | | | | | | | |
| " Double Angle Iron Side Keelson | Box Keelson as per Mid Section through Engine & Bottom space | | | | | | | | | |
| " Side Intercostal Plate | Box Keelson as per Mid Section through Engine & Bottom space | | | | | | | | | |
| " do. Angle Irons | Box Keelson as per Mid Section through Engine & Bottom space | | | | | | | | | |
| " Attached to outside plating with angle iron | Box Keelson as per Mid Section through Engine & Bottom space | | | | | | | | | |
| BILGE Angle Irons | 4 | 3 | 7/16 | 4 | 3 | 7/16 | 4 | 3 | 7/16 | 4 |
| " do. Bulb Iron | 4 | 3 | 7/16 | 4 | 3 | 7/16 | 4 | 3 | 7/16 | 4 |
| " do. Intercostal plates riveted to plating for length | 4 | 3 | 7/16 | 4 | 3 | 7/16 | 4 | 3 | 7/16 | 4 |
| BILGE STRINGER Angle Irons | 4 | 3 | 7/16 | 4 | 3 | 7/16 | 4 | 3 | 7/16 | 4 |
| Intercostal plates riveted to plating for length | 3.3 | 6/16 | at ends | 3 | 6/16 | at ends | 3 | 6/16 | at ends | 3 |
| SIDE STRINGER Angle Irons | 3.3 | 6/16 | at ends | 3 | 6/16 | at ends | 3.3 | 6/16 | at ends | 3 |
| Transoms, material. Knight-heads. Hawse Timbers. <u>Iron</u> | | | | | | | | | | |
| Windlass <u>Eng Oak</u> Pall Bitt <u>Oak</u> | | | | | | | | | | |

| | Inches in Ship. | 16ths in Ship. | Inches per Rule. | 16ths per Rule. |
|--|-----------------|----------------|------------------|-----------------|
| Flat Keel Plates , breadth and thickness | 30 | 8/16 | 30 | 8/16 |
| PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied | 6/16 | | 6/16 | |
| fm up. part of Bilge to lr. edge of Sh'rstrake | 6/16 | | 6/16 | |
| Main Sheerstrake , breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Upr. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness | 36 | 8/16 | 36 | 8/16 |
| Butt Straps to outside plating, breadth & thickness | 9 1/4 | 8 | 20 | Section |
| Lengths of Plating | 8 | 9 | 8 | 9 |
| Shifts of Plating , and Stringers | 3 | 9 | 3 | 9 |
| Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness | 18 | 6/16 | 18 | 6/16 |
| Angle Iron on ditto | 3.3 | 5/16 | 3.3 | 5/16 |
| Tie Plates fore and aft, outside Hatchways | 6 | 6/16 | 6 | 6/16 |
| Diagonal Tie Plates on Beams No. of Pairs, Planksheer material and scantling | Teak | | | |
| Waterways do. do. | 3 | 5 | 3 | 5 |
| Flat of Upper Deck do. do. | 3 | 5 | 3 | 5 |
| How fastened to Beams | 3 | 5 | 3 | 5 |
| Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness | 3 | 5 | 3 | 5 |
| <i>In the Stringer Plate attached to the outside plating?</i> | | | | |
| Angle Irons on ditto, No. | | | | |
| Tie Plates , outside Hatchways | | | | |
| Diagonal Tie Plates on Beams, No. of pairs | | | | |
| Waterways materials and scantlings | | | | |
| Flat of Middle Deck do. do. | | | | |
| How fastened to Beams | | | | |
| Stringer Plates on ends of Lower Deck, Hold or Orlop Beams | | | | |
| <i>In the Stringer Plate attached to the outside plating?</i> | | | | |
| Angle Irons on ditto, No. | | | | |
| Stringer or Tie Plates , outside Hatchways | | | | |
| Flat of Lower Deck | | | | |
| Ceiling between Decks, thickness and material | | | | |
| in hold do. do. | | | | |
| Main piece of Rudder , diameter at head | 2 | 1/2 | 2 | 1/2 |
| do. at heel | 3 3/4 | | 3 3/4 | |
| Can the Rudder be unshipped afloat? <u>Yes</u> | | | | |
| Bulkheads No. <u>3</u> Thickness of <u>5/16</u> | | | | |
| Height up <u>2</u> deck | | | | |
| How secured to sides of ship <u>between double frames</u> | | | | |
| Size of Vertical Angle Irons <u>2 1/2</u> and distance apart <u>30</u> ins. | | | | |
| Are the outside Plates doubled two spaces of Frames in length? <u>Yes</u> | | | | |

The **FRAMES** extend in one length from Keel to Gunwale Riveted through plates with 5/8 in. Rivets, about 5 apart.
 The **REVERSED ANGLE IRONS** on floors and frames extend from middle line to Gunwale and doublets and to Bilge cleats 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 5/16 in. diameter, averaging 5 ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 5/8 in. diameter, averaging 2 1/2 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 5/8 in. diameter averaging 2 3/4 ins. from centre to centre.
 Butts of Strakes at Bilge for length, treble riveted with Butt Straps ✓ thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 5/8 in. diameter, averaging 2 7/8 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 5/8 in. diameter, averaging 2 7/8 ins. from cr. to cr.
 Edges of Main Sheerstrake, double or single riveted. **Upper Sheerstrake**, double or single riveted.
 Butts of Main Sheerstrake, double riveted for all length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.
 Butts of Main Stringer Plate, double riveted for all length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.
 Breadth of laps of plating in double riveting 6 times Breadth of laps of plating in single riveting 3 1/2 times

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Treble & Double
 Waterway, how secured to Beams nut & screw bolts (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? Bracket knees riveted to frame No. of Breasthooks, 3 Crutches, 3

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Store's Iron works for plates
 Manufacturer's name or trade mark, Amplex by Hopkins & Gillet

The above is a correct description.
 Builder's Signature, John Readhead Surveyor's Signature, T. Mowbray
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 465-0496

