

IRON SHIP

No. 16900 Survey held at Newcastle Date, First Survey 14th March 82 Last Survey 19th June 1883

On the Iron Sn. Rigged Screw Steamer "Anglo-Indian"

TONNAGE under Tonnage Deck 2034.73 ONE, OR TWO DECKED, THREE DECKED VESSEL, and SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) 18-6

Depth from upper part of Keel to top of Upper Deck Beams 18-5

Girth of Half Midship Frame (as per Rule) 32-8

1st Number 69-9

1st Number, if a 3-Decked Vessel deduct 7 feet

Length 275-5

2nd Number 19257

Proportions— Breadths to Length 7.4

Depths to Length— Upper Deck to Keel 14.8

Main Deck ditto 14.8

Master C. H. Hillcoat

Built at Newcastle

When built 1882-83 Launched 21st April 83

By whom built Campbell Macintosh & Co. Ltd.

Owners C. H. Hillcoat & Co.

Residence 44 Chapel St., Liverpool.

Port belonging to Liverpool.

Destined Voyage to load for Queensland

If Surveyed while Building, Afloat, or in Dry Dock, While building & Dry Dock.

| LENGTH | Feet. | Inches. | BREADTH— | Feet. | Inches. | DEPTH | Feet. | Inches. | Power of | Horse. | Nº. of Decks with flat laid |
|---------------------|-------|---------|------------|-------|---------|-----------------------------------|-------|---------|-------------|--------|-----------------------------|
| on deck as per Rule | 275 | 6 | Moulded... | 37 | 3 | top of Floors to Upper Deck Beams | 24 | 4 | Engines ... | 240 | Two |
| | | | | | | Do. do. Main Deck Beams | 16 | 9 | | | Three |

Dimensions of Ship per Register, length, 277 breadth, 37.6 depth, 24.2

| KEEL, depth and thickness | Inches in Ship. | Inches per Rule. |
|--|-----------------|------------------|
| Flat Plate | 9 x 2 1/2 | 9 x 2 1/2 |
| STEM, moulding and thickness | 9 x 5 | 9 x 5 |
| STERN-POST for Rudder do. do. | 9 x 5 | 9 x 5 |
| " for Propeller | 24 | 24 |
| Distance of Frames from moulding edge to moulding edge, all fore and aft | | |

| FRAMES, Angle Iron, for 1/2 length amidships | Inches in Ship. | Inches per Rule. |
|--|-----------------|------------------|
| Do. for 1/2 at each end | 4 1/2 x 3 | 4 1/2 x 3 |
| REVERSED FRAMES, Angle Iron | 3 x 3 | 3 x 3 |
| FLOORS, depth and thickness of Floor Plate at mid line for half length amidships | 21 | 21 |
| " thickness at the ends of vessel | 2 1/2 | 2 1/2 |
| " depth at 3/4 the half-bdth. as per Rule | 10 1/2 | 10 1/2 |
| " height extended at the Bilges | 4 1/2 | 4 1/2 |

| BEAMS, Upper, Spar, or Awning Deck | Inches in Ship. | Inches per Rule. |
|---|-----------------|------------------|
| Single or double Ang. Iron, Plate or Tee Bulb Iron | 6 x 3 | 6 x 3 |
| Single or double Angle Iron on Upper edge | 24 | 24 |
| Average space... | 6 | 6 |
| BEAMS, Main, or Middle Deck | Inches in Ship. | Inches per Rule. |
| Single or double Ang. Iron, Plate or Tee Bulb Iron | 6 x 3 | 6 x 3 |
| Single, or double Angle Iron, on Upper Edge | 24 | 24 |
| Average space... | 6 | 6 |
| BEAMS, Lower Deck | Inches in Ship. | Inches per Rule. |
| Single or double Ang. Iron, Plate or Tee Bulb Iron | 6 x 3 | 6 x 3 |
| Single or double Angle Iron on Upper Edge | 24 | 24 |
| Average space... | 6 | 6 |
| IRONS, Hold, or Orlop | Inches in Ship. | Inches per Rule. |
| Single or double Ang. Iron, Plate or Tee Bulb Iron | 4 x 4 | 4 x 4 |
| Single or double Angle Iron on Upper Edge | 11 3/4 | 11 3/4 |
| Average space... | 10 | 10 |
| ELSONS, Centre line, single or double plate, box, or Intercoastal, Plates | Inches in Ship. | Inches per Rule. |
| Rider Plate | 11 3/4 | 11 3/4 |
| Bulb Plate to Intercoastal Keelson | 5 1/2 | 5 1/2 |
| Angle Irons | 9 x 4 | 9 x 4 |
| Double Angle Iron Side Keelson | 9 x 4 | 9 x 4 |
| Side Intercoastal Plate | 5 1/2 | 5 1/2 |
| do. Angle Irons | 3 x 3 | 3 x 3 |
| Attached to outside plating with angle iron | 5 1/2 | 5 1/2 |
| do. Bulb Iron | 9 | 9 |
| do. Intercoastal plates riveted to plating for length | 5 1/2 | 5 1/2 |
| LGE STRINGER Angle Irons | 5 1/2 | 5 1/2 |
| Intercoastal plates riveted to plating for 1/2 length | 8 | 8 |
| DE STRINGER Angle Irons | Inches in Ship. | Inches per Rule. |
| | | |

FRAMES extend in one length from Keel to Gunwale Riveted through plates with 7/8 in. Rivets, about 6 1/2 apart.

The REVERSED ANGLE IRONS on floors and frames extend across middle line to M.D.S.A. 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 1/2 in. diameter, averaging 4 ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from centre to centre.

Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 3 1/2 ins. from centre to centre.

Butts of Three Strakes at Bilge for half length, treble riveted with Butt Straps 1/16 thicker than the plates they connect.

Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 3 1/2 ins. from cr. to cr.

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

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

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

Breadth of laps of plating in double riveting 5 1/2 to 6 1/2 Breadth of laps of plating in single riveting 5

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Yes No. of Breasthooks, 6 Crutches, 3

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Angles & Bulbs: - Dorman

Manufacturer's name or trade mark, Long & Co., Stockton Tinsmiths & Iron Co., & Hawks Crawshaw & Sons. Plates: - Corisett & Sons

The above is a correct description.

Builder's Signature, Campbell Macintosh & Co. Ltd. Surveyor's Signature, J. H. Corrie

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? *A few*

Masts, Bowsprit, Yards, &c., are *Iron* in *Good* condition, and sufficient in size and length. If of Iron or Steel give Scantling, 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 Mate and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit *Foremast length extreme 84 ft., diameter at the partners 24 in. Mainmast length extreme 71 feet diameter 23 in. plate masts 6/16 to 5/16 in thickness. Ridges double riveted, and butts tre and double riveted. masts doubled at the partners for a length of 7 feet with 6/16 plates. Makers of Iron Conssett Iron Co.*

| NUMBER for EQUIPMENT 23445 | | 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. | | | | | | | Bower Anchors | 1 | 30-1-0 | 28-16-1-0 | 30-0-0 | |
| Nº. | CABLES, &c. | | | | | | (State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.) | 1 | 29-3-21 | 28-11-2-7 | 30-0-0 | |
| Fore Sails, | Chain | 270 | 1 3/4 | 55 5/8 | 270-1 1/2 | | | 1 | 25-3-0 | 25-8-0-14 | 25-2-0 | |
| Fore Top Sails, | Iron Stream Chain | 75 | 1 1/16 | 20 3/10 | 75-1 1/16 | | | | | | | |
| Fore Topmast Stay Sails, | or Steel Wire .. | 90 | 11 | 30 4/10 | 90-11 | | | | | | | |
| | or Hempen Strm | | | | | | | | | | | |
| | Cable | 90 | 3 1/2 | | 90-9 | | | | | | | |
| | Towline | 90 | 7 1/2 | | 90-7 1/2 | | | | | | | |
| Main Sails, | or Steel Wire | 90 | 5 1/2 | | | | | | | | | |
| Main Top Sails, | Hawser | 90 | 4 1/2 | | | | | | | | | |
| and | Warp | 90 | | | | | | | | | | |
| Standing and Running Rigging | quality | 90 | | | | | | | | | | |
| The Windlass is | Hemp | | | | | | | | | | | |

Engine Room Skylights.—How constructed? *Iron trunk to bridge deck & iron* sufficient in size and *Good* in quality. She has *2* Life Long Boats and *4* others.
What arrangements for deadlights in bad weather? *Iron gratings and Canvas covers.*
Coal Bunker Openings.—How constructed? *Cast-Comings* How are lids secured? *By studs & harpauls* Height above deck? *6 in & flush*
Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Flush decked Wood & Iron*
Cargo Hatchways.—How formed? *Iron comings & headledges riveted together*
State size Main Hatch *16 ft. x 12 ft* Forehatch *16 ft. x 12 ft.* Quarterhatch *14 ft. x 12 ft. & 12 ft. x 12 ft.*
If of extraordinary size, state how framed and secured? *Ordinary size*
What arrangement for shifting beams? *Bulk plate shifting beam and wood fore & after in each hatch*
Hatches. If strong and efficient? *Yes (Solid hatches)*

| | | |
|--|---|---|
| Order for Special Survey No. <i>1658</i> | 1st. On the several parts of the frame, when in place, and before the plating was wrought | 1882 Mar. 14. Apr. 5. 18. 24. 27. May 3. 9. 16. 19. 23. June 1. 8. 12. 15. 23. July. |
| Date <i>13th Decr/81</i> | 2nd. On the plating during the process of riveting | 19. 21. 24. Aug. 3. 9. 15. 17. 21. 23. 29. 30. 31. Sep. 7. 8. 11. 12. 13. 15. 16. 21. 22. 25. 27. |
| Order for Ordinary Survey No. <i>—</i> | 3rd. When the beams were in and fastened, and before the decks were laid.... | Oct 9. 10. 11. 15. 16. 17. 18. 20. 21. 23. 24. 25. 26. 27. 30. Nov. 1. 3. 7. 9. 13. 15. 17. 18. 21. |
| Date <i>—</i> | 4th. When the ship was complete, and before the plating was finally coated or cemented.. | 29. 30. Dec. 1. 2. 4. 12. 16. 18. 19. 20. 21. 29. 1883 Jan. 5. 10. 19. 23. 25. 29. 31. |
| No. <i>8</i> in builder's yard. | 5th. After the ship was launched and equipped | Feb 2. 7. 12. 16. 20. 22. 24. 28. Mar. 2. 6. 12. 15. 21. 29. Apr. 2. 4. 7. 11. 14. |

General Remarks (State quality of workmanship, &c.) *23 May 3. 21. 22. 25. 29 June 1. 6. 8. 9. 11. 14. 15. 19*

This is a Spar decked vessel built in accordance with approved plans forwarded herewith and otherwise in conformity with the Rules. She has two complete iron decks, and a 3 in Yellow Pine deck is fitted upon the iron spar deck. She has an open bridge 54 feet. Water-tank tanks are fitted before & abaft the Engine and boiler space of the length & capacity set forth in form hereto attached. Tanks tested with water to the height of load line and found satisfactory, and the general quality of the workmanship is good.

She sustained damage by contact with the buttress of the high level bridge while proceeding on Tyne from Sunderland, and the following repairs have been effected:— Six stem plate and butt straps on the starboard side and four on the port side renewed. The stem framed and stem head rivets renewed. The lower part of fore frame each side and floor plate to the same, two lower breasthooks, breasthook angle iron shoe, a few stringer and rivets renewed. Two plates on the luff of the Port bow taken off, fired, framed, refitted, and one plate framed in place. Four frames & three reverse frames repaired with angle iron doubling pieces, and several rivets in plating renewed & all made efficient.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, fore-castle, or raised quarter deck. (If double bottom, state particulars on separate form.)

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

I am of opinion this Vessel should be Classed *100A1 Spar decked Two decks (Iron) and three tiers of beams.*
The amount of the Entry Fee ... £ 5 : — : — is received by me, *W. H. B.*
Special Certificate *46 : 5 : 6* 5th July 1883
(to be sent as per margin).

Committee's Minute *TUESDAY 10 JULY 1883* 18

Character assigned *100A1 Spar Decked Two Decks (Iron) and three tiers of beams.*
W. H. B.
J. H. Cooke
Surveyor to Lloyd's Register of British and Foreign Shipping