

IRON SHIP.

19th OCT. 82

18

No. *5229* Survey held at *Shull* Date, First Survey *16 May* Last Survey *3rd Oct.*
 On the *Wm. Allen Steamship "Heldorn"* Master *Wm. Allen*
 Tonnage under *1226.53* ONE, OR TWO DECKED, THREE DECKED VESSEL.
 Ditto of *131.51* SPAR, OR AWNING-DECKED VESSEL.
 or Awning Deck. *102.66* HALF BREADTH (moulded)... *17.15*
 to of *2.43* DEPTH from upper part of Keel to top of Upper Deck Beams *19.45*
 Raised Qr. Dk. *16.41* GIRTH of Half Midship Frame (as per Rule) *33.76*
 uses *38.99* 1st NUMBER *40.36*
 Deck *1578.83* 1st NUMBER, if a 3-DECKED VESSEL, deduct 7 feet
 to of Forecastle *49.34* LENGTH *253.50*
 Gross Tonnage *1469.49* 2nd NUMBER *1483.26*
 Less Crew Space *486.03* PROPORTIONS—Breadths to Length *4.3*
 Less Engine Room *983.46* Depths to Length—Upper Deck to Keel *13.03*
 Register Tonnage as cut on Beam *983.46* Main Deck ditto *13.03*
 Built at *Shull*
 When built *1882* Launched *5th Aug.*
 By whom built *Wm. Allen & Co. Ltd.*
 Owners *Wm. Allen & Co. Ltd.*
 Residence *Shull*
 Port belonging to *Shull*
 Destined Voyage *Malta*
 # Surveyed while Building, Afloat, or in Dry Dock. *Building and afloat*

LENGTH on deck as per Rule *253.6* BREADTH—Moulded... *34.4* DEPTH top of Floors to Upper Deck Beams *19.4* Power of Engines *130* Horse. *130* No. of Decks with flat laid *1* No. of Tiers of Beams *1*

Dimensions of Ship per Register, length *253.1* breadth *34.6* depth, *17.4*

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>
STEM, moulding and thickness	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>
STERN-POST for Rudder do. do.	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>
" for Propeller	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>	<i>8 1/2</i>
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>
FRAMES, Angle Iron, for 2/3 length amidships	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>
Do. for 1/3 at each end	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>
REVERSED FRAMES, Angle Iron	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>
FLOORS, depth and thickness of Floor Plate	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>
at mid line for half length amidships	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>	<i>22</i>
thickness at the ends of vessel	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>
depth at 2/3 the half-bdth. as per Rule	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>	<i>11 inches</i>
height extended at the Bilges	<i>43 inches</i>	<i>43 inches</i>	<i>43 inches</i>	<i>43 inches</i>	<i>43 inches</i>	<i>43 inches</i>	<i>43 inches</i>	<i>43 inches</i>
BEAMS, Upper, Spar, or Awning Deck	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>
Single or double Ang. Iron, Plate or Tee Bulb Iron	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>
Single or double Angle Iron on Upper edge	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>	<i>4 1/2</i>
Average space	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>
BEAMS, Main, or Middle Deck	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>
Single or double Ang. Iron, Plate or Tee Bulb Iron	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>
Single or double Angle Iron, on Upper Edge	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>
Average space	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>	<i>24 inches</i>
BEAMS, Lower Deck, Hold, or Orlop	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>
Single or double Ang. Iron, Plate or Tee Bulb Iron	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>
Single or double Angle Iron on Upper Edge	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>	<i>9 1/2</i>
Average space	<i>20 feet</i>	<i>20 feet</i>	<i>20 feet</i>	<i>20 feet</i>	<i>20 feet</i>	<i>20 feet</i>	<i>20 feet</i>	<i>20 feet</i>
KEELSONS Centre line, single or double plate,	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>
box, or Intercoastal, Plates	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>	<i>18</i>
" Rider Plate	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>
" Bulb Plate to Intercoastal Keelson	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>	<i>11</i>
" Angle Irons	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>
" Double Angle Iron Side Keelson	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>
" Side Intercoastal Plate	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>
" do. Angle Irons	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>
" Attached to outside plating with angle iron	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>
BILGE Angle Irons	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>
" do. Bulb Iron	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>
" do. Intercoastal plates riveted to plating for length	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>	<i>5 1/2</i>
EDGE STRINGER Angle Irons	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>
Intercoastal plates riveted to plating for length	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>	<i>5</i>
SIDE STRINGER Angle Irons	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>

Transoms, material. Knight-heads. Hawse Timbers. *Iron*
 Windlass *Iron* Pall Bitt *Iron*

The FRAMES extend in one length from *Shull* to *Gunwale* Riveted through plates with *3/4* in Rivets, about *6* apart.
 The REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *Main deck* and to *Lower deck* 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 *1/8* in. diameter, averaging *1 1/2* ins. from centre to centre.
 " Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *1/8* in. diameter, averaging *1 1/2* ins. from centre to centre.
 " Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *1/8* in. diameter averaging *1 1/2* ins. from centre to centre.
 " Butts of *4* Strakes at Bilge for *1/2* 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 *1/8* in. diameter, averaging *1 1/2* ins. from cr. to cr.
 " Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *1/8* in. diameter, averaging *1 1/2* 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 *1/4* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted length amidships.
 " Butts of Main Stringer Plate, treble riveted for *1/4* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.
 " Breadth of laps of plating in double riveting *1 1/2* Breadth of laps of plating in single riveting *3*

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?
 Waterway, how secured to Beams (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? *Riveted* No. of Breasthooks, *4* Crutches, *4*

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Good*

Manufacturer's name or trade mark, *James Ramsay & Co. Ltd. Glasgow*

The above is a correct description.
 Builder's Signature, *Wm. Allen* Surveyor's Signature, *James Ramsay & Co. Ltd.*
 Surveyor to Lloyd's Register of British and Foreign Shipping

5900-5637M

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? *No*

Masts, Bowsprit, Yards, &c., are *throughout 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 *Fore and Main Lower Masts, of Iron as per*
Approved tracing attached. Length over all 64' 9", built with two plates
in the round. dia 19". plates 1/16, 5/16 and 1/4. Gams double riveted,
Butts twice riveted

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	No.	Weight. Ex. Stock.	Test per Certificate.	Wght req'd per Rule.	Machine where Tested & Suprntd.
SAILS.							Bower Anchors	1	26, 2, 14	26, 1, 3, 14	25, 2, 0	
Fore Sails,	CABLES &c. Chain <i>And...</i>	240	1 7/8	66 5/10	1 7/8		(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	1	24, 3, 12	24, 1, 3, 7	24, 2, 0	
Fore Top Sails,	Iron Str'm Chain	45	1"	24 9	1"			1	22, 3, 0	22, 1, 3, 0	22, 3, 0	
Fore Topmast Stay Sails,	Ditto do.			18 low			Stream	...	1	8, 1, 4	10, 10, 0, 0	8, 2, 0
Main Sails,	Hmpn Strm Cbl						Kedge	...	1	4, 2, 7	7, 0, 0, 0	4, 1, 0
Main Top Sails,	Hawser ...	120	5 1/2				Ditto	...	1	2, 1, 0	4, 15, 0, 0	2, 1, 0
and	Towlines	90	10	90	10							
	Warp	90	8 1/2	90	8 1/2							
	quality <i>Good</i>	90	6	90	6							

Standing and Running Rigging *See Sketch* sufficient in size and *Good* in quality. She has *Three* Long Boat and *Good*
The Windlass is *Good* and Rudder *Good* Pumps *Good*

Engine Room Skylights.—How constructed? *See Comings* How secured in ordinary weather? *...*

What arrangements for deadlights in bad weather? *And solid round top with bulwarks*

Coal Bunker Openings.—How constructed? *Iron* How are lids secured? *By pattern* Height above deck? *16 inches*

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Scuppers and hinged ports*
on each side

Cargo Hatchways.—How formed? *See Comings*

State size Main Hatch *30' x 12'* Forehatch *14' x 10'* Quarterhatch *14' x 12'*

If of extraordinary size, state how framed and secured? *...*

What arrangement for shifting beams? *Dep plate Beams fitted as required*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No. *212*

Date *11/12/81*

Order for Ordinary Survey No. *249*

Date *...*

No. *249* 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

Built under Special Survey & surveyed about once and once a week during construction

General Remarks (State quality of workmanship, &c.)

This one decked vessel, with Raised Quarter Deck 8 1/2 feet, Bridge 5 1/2 feet and Forecastle 3 1/2 feet long, has been built in accordance with the approved (Amended) Sketch of Midship Section; the other approved tracings attached, and in all other respects with the Rules for the 100. A. Class.

The iron work is efficiently protected from oxidation by cement and paint, and the workmanship is good

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 and paint* Outside *Paint*

I am of opinion this Vessel should be Classed *100. A.*

The amount of the Entry Fee ... £ 5: " " is received by me, *M. J. Neil*

on 1519 *See* Special ... £ 62: 19: 6 17/04 1882

Certificate *Gratis*

(Travelling Expenses, if any, £ ...)

Committee's Minute

Character assigned

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

Has submitted that this vessel appears eligible to be classed 100 A-1 as recommended provided the water ballast tanks have been tested as required by the Rules

Lloyd's Register Foundation