

IRON SHIP.

1882 JULY, 82

No. *5446* Survey held at *Dumbarton* Date, First Survey *4 Aug. 1881* Last Survey *6th July* 1882

On the *Screw Steamer* *Stratheden*.

ONNAGE under Tonnage Deck	<i>1127.19</i>
Net Tonnage	<i>30.00</i>
Ditto of Upper Spar, or Aft of Deck	<i>130.28</i>
Raised Or. Dk.	<i>130.97</i>
Ditto of Hold on Deck	<i>2.70</i>
Ditto of Forecastle	<i>35.97</i>
Gross Tonnage	<i>1462.11</i>
Less Crew Space	<i>60.37</i>
	<i>1401.74</i>
Less Engine Room	<i>467.88</i>
Register Tonnage as out on Beam	<i>933.86</i>

ONE, OR TWO DECKED, THREE DECKED VESSEL.	
SPAR, OR AWNING DECKED VESSEL.	
Half Breadth (moulded)	<i>18.95</i>
Depth from upper part of Keel to top of Upper Deck Beams	<i>17.75</i>
Girth of Half Midship Frame (as per Rule)	<i>32.4</i>
1st Number	<i>69.1</i>
1st Number, if 3-Decked Vessel deduct 7 feet	
Length	<i>261.6</i>
2nd Number	<i>18076</i>
Proportions— Breadths to Length	<i>6.9</i>
Depths to Length—Upper Deck to Keel	<i>14.7</i>
Main Deck ditto	<i>14.7</i>

Master *George Wilson*
 Built at *Dumbarton*
 When built *1881-82* Launched *6 May 82*
 By whom built *A. Murray & Co.*
 Owners *Jas. Hay & Son*
 Residence *Glasgow*
 Port belonging to *Glasgow*
 Destined Voyage
 If Surveyed while Building, Afloat, or in Dry Dock, *While Building & Afloat.*

Official Number

LENGTH	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH	Feet.	Inches.	Power of	Horse.	No. of Decks with flat laid	No. of Tiers of Beams
on deck as per Rule	<i>261</i>	<i>7</i>	Moulded	<i>37</i>	<i>11</i>	top of Floors to Upper Deck Beams	<i>14</i>	<i>9</i>	Engines	<i>200</i>	<i>one</i>	<i>two</i>
Dimensions of Ship per Register, length, <i>263</i> breadth, <i>38.2</i> depth, <i>14.65</i> moulded depth <i>17ft.</i>												
KEEL, depth and thickness	<i>36</i>	<i>15/8</i>	Inches in Ship	<i>36</i>	<i>15/8</i>	Inches per Rule						
STEM, moulding and thickness	<i>8 1/2</i>	<i>2 1/2</i>		<i>8 1/2</i>	<i>2 1/2</i>							
STERN-POST for Rudder do. do.	<i>8 1/2</i>	<i>5</i>		<i>8 1/2</i>	<i>5</i>							
" for Propeller	<i>24</i>	<i>ins</i>		<i>24</i>	<i>ins</i>							
Distance of Frames from moulding edge to moulding edge, all fore and aft	<i>24 ins</i>											
FRAMES, Angle Iron, for 1/2 length amidships	<i>4 1/2</i>	<i>3</i>	<i>7</i>	<i>4 1/2</i>	<i>3</i>	<i>7</i>						
Do. for 1/4 at each end	<i>3</i>	<i>3</i>	<i>7</i>	<i>3</i>	<i>3</i>	<i>7</i>						
REVERSED FRAMES, Angle Iron	<i>3</i>	<i>3</i>	<i>7</i>	<i>3</i>	<i>3</i>	<i>7</i>						
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships	<i>Cellular double</i>											
" thickness at the ends of vessel	<i>bottom constructed</i>											
" depth at 3/4 the half-bdth. as per Rule	<i>as approved on R. Quarter</i>											
" height extended at the Bilges	<i>sketch of mid sec.</i>											
BEAMS, Upper Spar or Awning Deck	<i>9 1/2</i>	<i>3</i>	<i>9</i>	<i>9 1/2</i>	<i>3</i>	<i>9</i>						
Single or double Angle Iron on Upper edge	<i>3 1/2</i>	<i>3</i>	<i>7</i>	<i>3 1/2</i>	<i>3</i>	<i>7</i>						
Average space	<i>48 ins</i>											
BEAMS, Main or Middle Deck	<i>6</i>	<i>3</i>	<i>9</i>	<i>6</i>	<i>3</i>	<i>9</i>						
Single or double Angle Iron on Upper edge	<i>6</i>	<i>3</i>	<i>9</i>	<i>6</i>	<i>3</i>	<i>9</i>						
Average space	<i>24 ins</i>											
BEAMS, Lower Deck	<i>10</i>	<i>10</i>	<i>10</i>	<i>10</i>	<i>10</i>	<i>10</i>						
Single or double Angle Iron on Upper edge	<i>4 1/4</i>	<i>9</i>	<i>4 1/4</i>	<i>9</i>	<i>4 1/4</i>	<i>9</i>						
Average space	<i>48 ins</i>											
BEAMS, Hold or Orlop Forecastle	<i>7</i>	<i>7</i>	<i>7</i>	<i>7</i>	<i>7</i>	<i>7</i>						
Single or double Angle Iron on Upper edge	<i>3</i>	<i>3</i>	<i>6</i>	<i>3</i>	<i>3</i>	<i>6</i>						
Average space	<i>48 ins</i>											
KEELSONS Centre line, single or double plate	<i>36</i>	<i>10</i>	<i>36</i>	<i>10</i>	<i>36</i>	<i>10</i>						
" Rider Plate	<i>46</i>	<i>8</i>	<i>46</i>	<i>8</i>	<i>46</i>	<i>8</i>						
" Bull Plate to Intercoastal Keelson	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>	<i>6</i>						
" Angle Irons <i>3 girders</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>						
" Double Angle Iron Side Keelson	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>						
" Side Intercoastal Plate	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>	<i>3</i>						
" do. Angle Irons	<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>						
BILGE Angle Irons <i>margin plate</i>	<i>22</i>	<i>7</i>	<i>22</i>	<i>7</i>	<i>22</i>	<i>7</i>						
" do. Bull Iron	<i>5</i>	<i>4</i>	<i>9</i>	<i>5</i>	<i>4</i>	<i>9</i>						
" do. Intercoastal plates riveted to plating for length	<i>5</i>	<i>4</i>	<i>9</i>	<i>5</i>	<i>4</i>	<i>9</i>						
BILGE STRINGER Angle Irons	<i>5</i>	<i>4</i>	<i>9</i>	<i>5</i>	<i>4</i>	<i>9</i>						
Intercoastal plates riveted to plating for half length	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>	<i>8</i>						
WIDE STRINGER Angle Irons	<i>5</i>	<i>4</i>	<i>9</i>	<i>5</i>	<i>4</i>	<i>9</i>						

State clearly where plating is of alternate thicknesses—and distinguish from diminished thickness at ends of vessel.

FRAMES extend in one length from *Bilge to Bilge and from Bilge to gunwale* Riveted through plates with *3/4 x 7/8* in. Rivets, about *6 1/8* apart.

REVERSED ANGLE IRONS on floors and frames extend from *Bilge* middle line to *hold beam stringer* and to *upper st* alternately

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

RIVETING. Garboard, double riveted to Keel, with rivets *1* in. diameter, averaging *4 1/4* ins. from centre to centre.

Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets *3/4 x 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 *3/4 x 7/8* in. diameter averaging *3 1/2* ins. from centre to centre.

Butts of *3* 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 *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. Upper Sheerstrake, double or single riveted.

Butts of Main Sheerstrake, treble riveted for *1/2* length amidships. Butts of Upper or Spar Sheerstrake, treble riveted *1/2* length amidships.

Butts of Main Stringer Plate, treble riveted for *1/2* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for *1/2* length.

Breadth of laps of plating in double riveting *5 1/4* Breadth of laps of plating in single riveting *5 1/4*

Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *Treble & Double* No. of Breasthooks, *4* Crutches, *Deep floors*

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

Manufacturer's name or trade mark, *Consett*

The above is a correct description

Builder's Signature, *Thomas Murray Hay* Surveyor's Signature, *C. J. Dodd*

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

Form No. 1 for Iron

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed*

5776 gns

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 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 *The two Iron Masts have been constructed in accordance with approved tracing attached herewith, see Secretary's letter 17 Oct. 1881.*

No.	SAILS.	CABLES, &c.	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.		
		Chain	135-3	1 1/8	5 1/2	270-1 1/8		Bower Anchors	1	28-3-16	27-17-2-0	27 3/4	
	Fore Sails,	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)	6 Jan 1882		7 3/4				1	5-3-20	26-18-0-0	total	
	Fore Top Sails,	Iron Stream Chain	75-4	1 1/8	20-3	75-1 1/8		6 Jan 1882	1	5-3-10	26-18-0-0	79	
	Fore Topmast Stay Sails,	or Steel Wire	24 Dec 1881		30-4				1	5-1-12	23-19-2-21	cut	
	Main Sails,	or Hempen Strm				90-11			1	8-2-9	10-15-0-0	8 3/4	
	Main Top Sails,	Cable				90-9			1	2-0-0	5-2-2-0	2 1/4	
	and	Towline, Hemp.				90-7			1	4-2-0	6-17-2-0	4 1/2	
		or Steel Wire							1	2-2-8	5-2-2-0	2 1/4	
		Hawser							1	2-2-8	5-2-2-0	2 1/4	
		Warp							1	2-2-8	5-2-2-0	2 1/4	
		quality <i>good</i>							1	2-2-8	5-2-2-0	2 1/4	

Standing and Running Rigging *wire & manilla* sufficient in size and *good* in quality. She has *2* Long Boat and *2* others

The Windlass is *Rapiers* Capstan *good* and Rudder *good* Pumps *good*

Engine Room Skylights. How constructed? *Leak on Iron* How secured in ordinary weather? *Bolted*

What arrangements for deadlights in bad weather? *Hinged*

Coal Bunker Openings. How constructed? *Wrought & Cast Iron* How are lids secured? *Hatches & Bayonet fixing* Height above deck? *2 1/2 ins & flush*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *open Bulwarks aft*

Forward 3 Ports, 3 scuppers & one mooring port

Cargo Hatchways. How formed? *8 1/8 plates - 3ft - 6 ins high*

State size Main Hatch *34ft x 14ft & 26 x 12 - 11"* Forehatch *15-11 x 12 ft* Quarterhatch *12 ft x 11 ft*

If of extraordinary size, state how framed and secured? *2 web plates and 10 1/8 Doubling round large hatchways*

What arrangement for shifting beams? *Yes*

Hatches, If strong and efficient? *Yes*

Order for Special Survey No.	Date	Order for Ordinary Survey No.	Date	No.	DATES of Surveys held while building as per Section 18.	1st.	2nd.	3rd.	4th.	5th.
1615	20 June 1881			108		On the several parts of the frame, when in place, and before the plating was wrought	On the plating during the process of riveting	When the beams were in and fastened, and before the decks were laid....	When the ship was complete, and before the plating was finally coated or cemented...	After the ship was launched and equipped
						<i>Specially Surveyed: - 1881: - Aug 4, 8, 11, 15, 18, 22, 29; Sep. 1, 5, 20, 26; Oct 3, 7, 10, 13, 17, 19, 24, 27, 31; Nov 3, 7, 10, 14, 17, 21, 28; Dec 1, 5, 8, 12, 16, 22, 27, 31; 1882: Jan 9, 12, 20, 15, 30; Feb 2, 6, 9, 14, 20, 23, 28; Mar 6, 13, 16, 20, 22, 27, 30; Apr 3, 10, 17, 24, 27; May 3, 4, 9, 11, 16, 31; June 14, 24, 27, July 3, 4, 6.</i>				

General Remarks (State quality of workmanship, &c.)
The workmanship is good, and the vessel has been built in accordance with the drawings, & in numbers, and with the instructions contained in the Secretary's letters of the 24th May, 24th June, 21st July, 29th Aug., 7th Sep. 1881, 17th Oct. and 28th Feb. 1882. She is built on the cellular bottom principle, and has ballast tanks all fore and aft, the Fore Tank is 88ft long and contains 119 tons; Midship tank is 60ft long and contains 130 tons, and the after tank is 68ft long with 118 tons. She also has a fore peak tank containing 34 tons and an after peak tank with 32 tons. These tanks have been tested with water pressure to the height required and found satisfactory.

Length of Raised Quarter Deck *95 1/2 ft*; Bridge *54 ft* and Forecastle *35 ft*.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecabin, 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 *+100 A.1.*

The amount of the Entry Fee ... £ *5:0:0* is received by me, *[Signature]*
Special ... £ *60:1:0* 15/4 1882
Certificate ... £ *65:1:0*
(to be sent as per margin)
(Travelling Expenses, if any, £)

Committee's Minute *Friday 21st July 1882*

Character assigned *100 A.1*
[Signature]
Surveyor to Lloyd's Register of British and Foreign Shipping.
This record appears eligible to be classed 100 A.1.
Lloyd's Register Foundation

Reference should be made to any correspondence connected with the case.