

Steel IRON SHIP.

(Received at London Office)

No. 406

Survey held at

Aberdeen

Date, First Survey

Dec 14

1888

Last Survey

March 3rd

1890

Bonaccord

On the

TONNAGE under } 1024.34
Tonnage Deck }
Dist. of Third Spar, Bridge 219.46
of Awning Deck }
Dist. of Poop, 49.64
used Cr. Dk. } R&D 89.53
Dist. of Houses } 6.89
on Deck }
Dist. of Forecastle Hatch 30.13
Tonnage } 1412.02
Crew Space } 50.42

ONE, OR TWO DECKED, THREE DECKED VESSEL,
SPAR, OR AWNING-DECKED VESSEL.

Half Breadth (moulded) ... 16.92
Depth from upper part of Keel to top of Upper Deck Beams ... 18.45
Girth of Half Moulded Frame (as per Rule) ... 32.4
1st Number ... 68.34
1st Number of a 3-Decked Vessel .. deduct 7 feet
Length ... 243.4
2nd Number ... 1666.4
Proportions— Breadths to Length ... 4.2
Depth to Length—Upper Deck to Keel ... 12.9
Main Deck ditto ...

Master *C. R. Davidson*
Built at *Aberdeen*
When built *1889* Launched *Nov 23/89*
By whom built *Messrs A. Hall & Co*
Owners *Messrs J. A. Davidson*
Residence *Provost Mackenzie Quay, Aberdeen*
Port belonging to *Aberdeen*
Destined Voyage *Not fixed*
If Surveyed while Building, Afloat, or in Dry Dock.
While building & afloat

LENGTH on deck as per Rule ... 243 9
BREADTH— Moulded ... 33 10
DEPTH top of Floors to Upper Deck Beams ... 15 9
Do. do. Main Deck Beams ...
Dimensions of Ship per Register, length, 244.85 breadth, 34.2 depth, 15.45

	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	Centre line plate 4 1/2 x 7/8	side plates 9 x 1		8 1/2 x 2 1/2	8 1/2 x 2 1/2						
STEM, moulding and thickness											
STERN-POST for Rudder do. do.				8 1/2 x 5	8 1/2 x 5						
" " for Propeller				2 1/4	2 1/4						
Distance of Frames from moulding edge to moulding edge, all fore and aft											
FRAMES, Angle Iron, for 1/2 length amidships	4 1/2	3	4 1/2	3	4 1/2	3	4 1/2	3	4 1/2	3	4 1/2
Do. for 1/4 at each end	4 1/2	3	4 1/2	3	4 1/2	3	4 1/2	3	4 1/2	3	4 1/2
REVERSED FRAMES, Angle Iron	3	3	4	3	3	4	3	3	4	3	3
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships											
" thickness at the ends of vessel											
" depth at 1/2 the half-bath, as per Rule											
" height extended at the Bilges											
BEAMS, Upper, Spar, or Awning Deck											
Single or double Ang. Iron, Plate or Tee Bulb Iron											
Single or double Angle Iron on Upper edge											
Average space	24		24								
BEAMS, Main, or Middle Deck											
Single or double Ang. Iron, Plate or Tee Bulb Iron											
Single or double Angle Iron on Upper Edge											
Average space	48		48								
BEAMS, Lower Deck											
Single or double Ang. Iron, Plate or Tee Bulb Iron											
Single or double Angle Iron on Upper Edge											
Average space	15		15								
BEAMS, Hold, or Orlop											
Single or double Ang. Iron, Plate or Tee Bulb Iron											
Single or double Angle Iron on Upper Edge											
Average space	16		16								
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates											
" Rider Plate											
" Bulb Plate to Intercoastal Keelson											
" Angle Irons	4	4	8	4	4	8					
" Double Angle Iron Side Keelson											
" Side Intercoastal Plate											
" do. Angle Irons	3	3	4	3	3	4					
" Attached to outside plating with angle iron	3	3	4	3	3	4					
BILGE Angle Irons											
" do. Bulb Iron											
" do. Intercoastal plates riveted to plating for length											
BILGE STRINGER Angle Irons	3	3	4	3	3	4					
Intercoastal plates riveted to plating for length	15x16		15x16								
SIDE STRINGER Angle Irons	3	3	4	3	3	4					

The FRAMES extend in one length from *hank side* to *gunwale*
The REVERSED ANGLE IRONS on floors and frames extend from *middle line* to *upside stringer* and to *stringer below* 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 1/8* in. diameter, averaging *5 1/2* 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 *30* 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 Upper or Spar Sheerstrake, treble riveted length amidships.
Butts of Main Sheerstrake, treble riveted for *2* length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for length.
Butts of Main Stringer Plate, treble riveted for *2* length amidships.
Breadth of laps of plating in double riveting *4 1/2* x *5 1/2* Breadth of laps of plating in single riveting *4 1/2*
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? *treble* No. of Breasthooks, *4* Crutches, *4*
What description of *steel* is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Siemens, Markins*
Manufacturer's name or trade mark, *Dalzell, Glasgow Parkhead, Messrs Steel Co of Scotland*
The above is a correct description.
Builder's Signature, *A. Hall* Surveyor's Signature, *G. L. Hindmarsh*
Surveyor to Lloyd's Register of British and Foreign Shipping.

4061 *Abn.*
Planned

Workmanship. Are the butts of plating planned or otherwise fitted?

Do the edges of the curvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies?

Are the fillings between the ribs and plates solid single pieces?

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other?

Are the rivet holes well and sufficiently countersunk in the plate and punched from the facing surfaces?

Do any rivets break into or through the seams or butts of the plating?

Masts, Bowsprit, Yards, &c., are *steel* in *good* condition, and sufficient in size and length. If of Iron or Steel give scantlings of Plating, Angle Iron, &c., and further explain by a sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Iron, mode of riveting, quality of Materials, and if stamped with Maker's name.
State also Length and Diameter of Lower Masts and Bowsprit. *For auxiliary purposes as per enclosed sketch*

NUMBER for EQUIPMENT 185269		Material	Length	Thickness	Weight	Remarks	ANCHORS	N ^o .	Weight	Ex. Stock	Remarks	Weight	Ex. Stock	Remarks
SAILS.		CABLES, &c.					Bower Anchors							
N ^o .		Chain	135 1/2 ft	1 1/2 in	270-1 1/2	10205	Stockless		25560	31.3.6	29 1/2	29.1.26	29.1.26	29.1.26
Fore Sails,		Iron Stream Chain	135 1/2 ft	1 1/2 in	270-1 1/2	10205	Hingleys		25560	31.3.6	29 1/2	29.1.26	29.1.26	29.1.26
Fore Top Sails,		or Steel Wire	45	1	18 x 24	45-1	Stockless		25560	31.3.6	29 1/2	29.1.26	29.1.26	29.1.26
Fore Topmast Stay Sails,		or Hempen Strm					Stockless		25560	31.3.6	29 1/2	29.1.26	29.1.26	29.1.26
Main Sails,		Towline, Hemp	90	2 3/4	36	90-3 3/4	Stream Anchor		25560	31.3.6	29 1/2	29.1.26	29.1.26	29.1.26
Main Top Sails,		or Steel Wire	90	2 3/4	36	90-3 3/4	Kedge		25560	31.3.6	29 1/2	29.1.26	29.1.26	29.1.26
and		Warp	90	2 3/4	36	90-3 3/4	2nd Kedge		25560	31.3.6	29 1/2	29.1.26	29.1.26	29.1.26
		quality good	90	2 3/4	36	90-3 3/4								

Standing and Running Rigging *Wire & Manila* sufficient in size and good in quality. She has *two* Long Boats and *two* others.

The Windlass is *Napier's* Capstan *good* and Rigger *good* Pumps *good*

Engine Room Skylights. How constructed? *Iron & Oak* How secured in ordinary weather? *bulks eyes*

What arrangements for deadlights in bad weather? *slide rods & pins*

Coal Bunker Openings. How constructed? *Iron comings* How are lids secured? *cleats & battens* Height above deck? *18"*

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *2 freeing ports 21 x 24; one scupper and one mooring pipe each side of well*

Cargo Hatchways. How formed? *Iron comings*

State size Main Hatch. *22 ft x 15 ft 2"* Fore Hatch *15 ft 11" x 15 ft 2"* Quarter Hatch *Two 16 ft 1 x 15 ft 2 & 16 ft 1 x 15 ft 3"*

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

What arrangement for shifting beams? *Main Hatch 3 fore & afters & 3 shifting beams; Fore Hatch 3 fore & afters; Quarter Hatch 1 shifting beam & 3 fore & afters*

Hatches, if strong and efficient? *Yes 3 solid*

Order for Special Survey No. 615

Date *Dec 3 1888*

Order for Ordinary Survey No.

Date

No. *333* in builder's yard

State dates of letters respecting this case

1st. On the several parts of the frame, when in place, and before the plating was wrought. *1888 Dec 14, 21, 1889 Jan 7, 16, 23, 30, Feb 1, 6, 8, 13, 19, 22, 24, Mar 1*
2nd. On the plating during the process of riveting *1888 Dec 14, 21, 1889 Jan 7, 16, 23, 30, Feb 1, 6, 8, 13, 19, 22, 24, Mar 1*
3rd. When the beams were in and fastened, and before the decks were laid. *24, 30, June 3, 6, 11, 13, 18, 24, July 1, 4, 8, 15, 17, 30, Aug 6, 9, 13, 14, 21, 24, 27*
4th. When the ship was complete, and before the plating was finally coated or cemented. *Sept 2, 4, 10, 13, 18, 24, 28, Oct 3, 7, 10, 14, 15, 17, 21, 23, 24, 26, 28, 31, Nov 2, 6, 13, 19, 21*
5th. After the ship was launched and equipped *23, 24, Dec 4, 5, 10, 12, 14, 17, 20, 24, 1890 Jan 7, 10, 15, 20, Feb 3, 10, 13, 19, 21, 25, Mar 3*

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

This is a steel built vessel constructed under special survey on the cellular double bottom principle in accordance with the Rules and the approved tracings. The material and workmanship are good. The ballast tanks and peaks have been tested in accordance with the Rules with satisfactory result.

The freeboard assigned by the Committee in their letter of Jan 2/90 has been marked on the vessel's sides and verified as follows: In winter 1' 6" In summer 1' 4". Height of fresh water line above centre of disc 1' 4".

The midship section tracing was forwarded on the 10th of Dec last and the long plan of masts, and pumping plans are now enclosed together with forging certificates of rudder frame and stern posts.

State if one, two, or three decked vessel, or if spar, or sailing 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 *100 A1 Steel*

The amount of the Entry Fee

Is received by me

Special *59 0 6* 8/3/18

(To be sent as per margin) Certificate *grates*

(Travelling Expenses if any) *grates*

Committee's Minute

Character assigned

FRIDAY 7 MARCH 1890

100 A1 Steel

10k (Lan) & Web frames

Well deck

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

It is submitted that this vessel appears eligible to be Classed 100 A1 Steel as recommended by the Committee.
Lloyd's Register Foundation