

STEEL IRON SHIP.

(Received at London office, TUESDAY 30 DEC 1894)

18

No. *647* Survey held at *Swansea* Date, First Survey *29 Feb 1894* Last SurveyOn the *Steel S.S. "Dunlop"*TONNAGE under *665.63*Tonnage Deck *5.65*Ditto of Third, Spar, or Awning Deck. *14.08*Ditto of Deck or Raised Or Deck *51.71*Ditto of Houses on Deck *737.46*Ditto of Forecastle *105.54*Gross Tonnage *686.53*Less Crew Space *288.84*Less Engine Room *407.69*

Register Tonnage as cut on Beam

ONE, OR TWO DECKED, THREE DECKED VESSEL,

SPAR, OR AWNING DECKED VESSEL.

Half Breadth (moulded) *16.00*Depth from upper part of Keel to top of Upper Deck Beams *16.95*Girth of Main Midship Frame (as per Rule) *29.90*1st Number *62.85*

1st Number if 3 Decked Vessel deduct 1 feet

Length *198.84*2nd Number *124.97*Proportions— Breadths to Length *8.21*Depths to Length—Upper Deck to Keel *11.72*

Main Deck ditto

Master *Shang*Built at *Swansea*When built *1894* Launched *3 Nov 1894*By whom built *Denny & Bros*Owners *Union Steam Ship Co (NZ)*Residence *Dunedin*Port belonging to *Dunedin*Destined Voyage *Dunedin*

If Surveyed while Building, Afloat, or in Dry Dock.

While Building & afloat

LENGTH on deck as *198* Feet. *10* Inches. BREADTH—Moulded... *32* Feet. *0* Inches. DEPTH top of Floors to Upper Deck Beams *15* Feet. *5* Inches. Power of Engines *92* Horse. N° of Decks with flat laid *one* N° of Tiers of Beams *one*

Dimensions of Ship per Register, length, *200* breadth, *32.15* depth, *15.4* Moulded depth *16.4*

KEEL, depth and thickness *Flat* ... *7x2 3/8* ... *7x2 3/8*

STEM, moulding and thickness... *7x4 3/4* ... *7x4 3/4*

STERN-POST for Rudder do. do. *7x4 3/4* ... *7x4 3/4*

" " for Propeller ... *22 in* ... *22 in*

Distance of Frames from moulding edge to moulding edge, all fore and aft ... *32* (Class *100A*)

FRAMES, Angle Iron, for $\frac{1}{2}$ length amidships ... *3* *3* *10* *3* *3* *10*

Do. for $\frac{1}{4}$ at each end ... *3* *3* *10* *3* *3* *10*

REVERSED FRAMES, Angle Iron ... *3* *3* *10* *3* *3* *10*

FLOORS, depth and thickness of Floor Plate at mid line for half length amidships ... *18* *15* *18* *15*

" thickness at the ends of vessel ... *Brackets 10* *Brackets 10*

" depth at $\frac{3}{4}$ the half-bdth. as per Rule ... *9* *36*

" height extended at the Bilges... *36* *36*

BEAMS, Upper, Spar, or Awning Deck Single or double Angle Iron, Plate or Tee Bulb Iron

Single or double Angle Iron on Upper edge ... *5 1/2* *3* *13* *5 1/2* *3* *13*

Average space... *22 in* *22 in*

BEAMS, Main, or Middle Deck Single or double Angle Iron, Plate or Tee Bulb Iron

Single or double Angle Iron on Upper edge ... *5 1/2* *3* *13* *5 1/2* *3* *13*

Average space... *22 in* *22 in*

BEAMS, Lower Deck Single or double Angle Iron, Plate or Tee Bulb Iron

Single or double Angle Iron on Upper edge ... *5 1/2* *3* *13* *5 1/2* *3* *13*

Average space... *22 in* *22 in*

BEAMS, Hold, or Orlop Single or double Angle Iron, Plate or Tee Bulb Iron

Single or double Angle Iron on Upper edge ... *5 1/2* *3* *13* *5 1/2* *3* *13*

Average space... *22 in* *22 in*

KEELSONS Centre line, single or double plate, box, or intercostal, Plates

" Rider Plate ... *9 1/2* *16* *9 1/2* *16*

" Bulb Plate to intercostal Keelson... *9 1/2* *16* *9 1/2* *16*

" Angle Irons ... *4 1/2* *3 1/2* *12* *4 1/2* *3 1/2* *12*

" Side Intercoastal Plate ... *4 1/2* *3 1/2* *12* *4 1/2* *3 1/2* *12*

" do. Angle Irons ... *4 1/2* *3 1/2* *12* *4 1/2* *3 1/2* *12*

" Attached to outside plating with angle iron ... *3* *3* *10* *3* *3* *10*

BILGE Angle Irons ... *4 1/2* *3 1/2* *12* *4 1/2* *3 1/2* *12*

" do. Bulb Iron ... *7 1/2* *12* *7 1/2* *12*

" do. Intercostal plates riveted to plating for length ... *4 1/2* *3 1/2* *12* *4 1/2* *3 1/2* *12*

BILGE STRINGER Angle Irons ... *4 1/2* *3 1/2* *12* *4 1/2* *3 1/2* *12*

" do. Bulb Iron ... *7 1/2* *12* *7 1/2* *12*

" do. Intercostal plates riveted to plating for length ... *4 1/2* *3 1/2* *12* *4 1/2* *3 1/2* *12*

SIDE STRINGER Angle Irons ... *4 1/2* *3 1/2* *12* *4 1/2* *3 1/2* *12*

" do. Bulb Iron ... *7 1/2* *12* *7 1/2* *12*

" do. Intercostal plates riveted to plating for length ... *4 1/2* *3 1/2* *12* *4 1/2* *3 1/2* *12*

FRAMES extend in one length from *middle line* to *gunwale*

The REVERSED ANGLE IRONS on floors and frames extend *across* middle line to *side stringer* and to *upper st* 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 *7/8 in* diameter, averaging *3 1/2* ins. from centre to centre.

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

" Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets *3/4 in* diameter averaging *3* ins. from centre to centre.

" Butts of all Strakes at Bilge for *whole* length, treble riveted with Butt Straps *3/4 in* diameter averaging *3* ins. from cr. to cr.

" Edges from Bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets *3/4 in* diameter, averaging *3* ins. from cr. to cr.

" Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets *3/4 in* diameter, averaging *3* 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 $\frac{1}{2}$ length amidships. Butts of Upper or Spar Sheerstrake, treble riveted $\frac{1}{2}$ length amidships.

" Butts of Main Stringer Plate, treble riveted for $\frac{1}{2}$ length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for $\frac{1}{2}$ length amidships.

" Breadth of laps of plating in double riveting *8 1/2* $\frac{1}{2}$ Breadth of laps of plating in single riveting *8 1/2*

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

What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? *Dalzell's Steel Co's*

Manufacturer's name or trade mark *Scottland "Parker" "Mossend"*

The above is a correct description.

Builder's Signature *Wm Denny & Bros* Surveyor's Signature *J. Dodd*

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

6784 Lys

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 *steel* 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 masts are built in accordance with the app^t tracing, attached herewith, and with the instructions contained in Secretary's letter of the 16th May 1884. The steel used ("Dalzell") was tested by the Society's Surveyors at the Manufacturers Works.*

NUMBER for EQUIPMENT		Fathoms.	Inches.	Test per Certificate.	Inches per Rule.	Machine where Tested & Suprntd.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	Wt. req'd per Rule.	Machine where Tested & Suprntd.
SAILS.							Bower Anchors					
CABLES, &c.							(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)					
N ^o .	Chain	105	1 9/16	31	2 1/8	Tipton	8824 17.0.2 1/2 18.5.0.0 18 3/4 Tipton					
	(State Machine where Tested, Date, or No. of Certificate, & Name of Superintendent.)						8825 16.3.2 1/2 18.5.0.0 total by					
Fore Sails,	Iron Stream Chain	42	7/16	48.5	1 5/16	by	8823 14.0.2 1/2 15.6.3.4 47 3/4 E.R.					
Fore Top Sails,	or Steel Wire ..	60 1/2	1 1/8	13.75	60 1/16	E.R.	8822 5.3.7 3/8 2.3.7 53 1/4 Isitt.					
Fore Topmast Stay Sails,	or Hempen Strm Cable	90	2	20.625	90.9	Isitt	8821 2.3.7 3/8 7.2.0 23 1/4					
Main Sails,	Towline, Hemp.	90	7		90.7		8820 1.3.7 3/8 7.0.21 13 1/4					
Main Top Sails,	or Steel Wire ..	90	5		90.5							
and spar	Hawser	90	6									
	Warp	90	4 1/2									
	quality	9d										

Standing and Running Rigging *wire hemp* sufficient in size and *9d* in quality. She has *2* Long Boats and *2* others.
The Windlass is *Paul 16* Capstan *good* and Rudder *good* Pumps *good*
Engine Room Skylights. How constructed? *Iron* How secured in ordinary weather? *Bolted*
What arrangements for deadlights in bad weather? *Iron shutters fitted with Bulleyes*
Coal Bunker Openings. How constructed? *Cast Iron* How are lids secured? *Bayonet fixing* Height above deck? *flush*
Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? *3 scuppers, 7 water ports.*
Cargo Hatchways. How formed? *Iron as usual*
State size Main Hatch *15ft x 9 1/2ft* Forehatch *11ft x 8ft* Quarterhatch *14 1/2ft x 9 1/2ft*
If of extraordinary size, state how framed and secured? *not of an extraordinary size*
What arrangement for shifting beams? *shifting Beams*
Hatches, If strong and efficient? *Solid 3" Pine*

Order for Special Survey No. *1925* Specially Surveyed: *1884: Feb 29, Mar 4, 11, 14, 18, 21, 25, 26, 7, 14, 18, 22, 25, 30, May 2, 6, 13, 16, 20, 23, 27, 30, June 3, 10, 13, 17, 20, 24, 27, July 1, 4, 10, 15, 22, 29, 31, Aug 6, 7, 12, 14, 20, 22, 26, 29, Sep 2, 5, 9, 12, 16, 20, 23, 26, 30, Oct 3, 7, 10, 14, 21, 28, Nov 5, 7, 11, 14, 18, 21, 25, 28, Dec 2, 5, 16, 17*
Date *26th January 1884*
Order for Ordinary Survey No. *205*
Date *24th Jan, 22nd Feb, 7th Mar 4th 16 May 1884*
No. *205* in builder's yard.
State dates of letters respecting this case *24th Jan, 22nd Feb, 7th Mar 4th 16 May 1884*

General Remarks (State quality of workmanship, &c.)
The workmanship is good and the vessel has been built in accordance with 5 tracings attached herewith, and with the instructions contained in the Secretary's letters above referred to, and otherwise in accordance with the Rules. She is a sister vessel to the "Shau", Glasgow Report N^o 6736, and like her is built on the ordinary system of construction in engine boiler space and on the cellular bottom system before & abaft each system scarping efficiently into each other. The fore ballast tank is 38ft long and contains 39 tons, & 2 in fore hold is 39ft long with 65 tons and & 3 in after hold is 53ft long with 51 tons of water. Each of these tanks has been tested according to Rule & found satisfactory. The fore & after peaks were filled with water & proved satisfactory. Lunk forecassle 27ft long. Open Bridge 42 1/2ft. House aft 34ft x 14ft.

State if one, two, or three decked vessel, or if spar, or awning decked; and the lengths of poop, bridge, forecassle, or raised quarter deck. (If double bottom, state particulars on separate form.)
How are the surfaces preserved from oxidation? Inside *Portland Cement* Outside *Paint*
I am of opinion this Vessel should be Classed *+100 A.1*
The amount of the Entry Fee *£ 3* is received by me, *W.D. Dodd*
Special *£ 3/4* 14: 22/12/ 1884
(to be sent as per margin). Certificate ...
(Travelling Expenses, if any, £ ...)
Committee's Minute *TUESDAY 30 DEC 1884 18*
Character assigned *100 A.1*
L.A. & P. Steel
1 Dk. Sheer

Reference should be made to any correspondence connected with the case.
The Surveyors are requested not to write on or below the space for Committee's Minute.

Surveyor to Lloyd's Register of British and Foreign Shipping.
It is submitted that this vessel appears eligible to be classed 100 A.1 Steel as recommended
Lloyd's Register Foundation