

Spar, Awning or Part Awning Dk.

IRON OR STEEL STEAMER.

(Received at London Office)

MON. 23 5 1893

State if Report is also sent on the Machinery of the Vessel

Date of completion of Report 1 June 92 Port of Newcastle

Date, First Survey 1 June 92 Last Survey 3 Dec 92 1892

No. Survey held at Newcastle Date, First Survey 1 June 92 Last Survey 3 Dec 92 1892

On the Screw Steamer "Daku Standard" Rig Schooner

TONNAGE under Tonnage Deck 3332.38 SPAR, AWNING OR PART AWNING-DECKED VESSEL, Master Herbert S. Brown

Do. between Tonnage Dk. and 3rd, 4th, Spar or Awning Dk. 219.84 Year of Appointment 92

Total under Upper Dk. 3402.54 CLASS 100 A I

Do. of Poop 60.46 Half Breadth (moulded) 21.37

Do. of Raised Or Dk. or Break 60.46 Depth from upper part of keel to top of Main Deck Beams 25.06

Do. of Houses on Deck 60.46 Girth of Half Midship Frame (as per Rule) 42.50

Do. of excess of Hatchways 60.46 1st Number 88.93

Do. of Forecasts 60.46 Length 328.17

Do. above Crown of Engine Room 3402.54 2nd Number 29184.15

Gross Tonnage 10412 Proportions—Breadths to Length 7.67

Less Crew Space 10412 Depths to Length—Main Deck to top of Keel 13.09

Less above Crown of Engine Room 3402.54 Destined Voyage Batavia If Surveyed while Building, Afloat, or in Dry Dock

TONNAGE FOR FEES 3603.46 Register Tonnage 2376.18

Less Engine Room 1126.42 as cut on Beam 2376.18

Less Navigation Spaces 41.86

LENGTH on Deck 328 2 1/2 BREADTH Moulded 42 9 DEPTH, top of Floors to Spar on Main Dk. Beams 23 0 1/2

Dimensions of Ship per Register, Length 330.6 breadth 43.0 depth 29.9 Spar on Main Dk. Moulded depth, ft. 24 ins. 3/4 To Main Dk. Beam, Main Dk 12 ins.

FORGINGS AND CASTINGS KEEL, Bar or Side Plates, depth and thickness

STEM, moulding and thickness 11 x 2 1/2 11 x 2 3/4

STERN POST for Rudder do. do. 11 x 6 1/2 11 x 6 1/2

" " for Propeller 11 x 6 1/2 11 x 6 1/2

MAIN PIECE of Rudder, diameter at head 8 1/2 8 1/2

do. at heel 4 1/4 4 1/4

RUDDER, how constructed Cast Steel frame & single plate

Can the Rudder be unshipped afloat? Yes

FRAMING in oil compartments

FRAME Angles, or Bars for length amidships 6 x 3 1/2 x 3 10 6 x 3 1/2 x 3 10

Do. for 1/2 at each end 5 1/2 3 1/2 8 5 1/2 3 1/2 8

Do. in way of Double Bottoms 3 1/2 3 1/2 8 3 1/2 3 1/2 8

Distance of Frames from moulding edge to moulding edge, all fore and aft 21 21

REVERSED FRAME Angles 3 3 7 1/6 3 3 7 1/6

FLOORS, depth and thickness of Floor Plate 14 8 1/2 14 8 1/2

at mid-line for 1/2 length amidships 26 10 26 10

" in way of Engines and Boilers 60 8 60 8

" thickness at the ends of vessel 21 21

" depth at 1/2 the half-bdth. as per Rule 52 52

" height extended at the Bilges 8 8

FLOORS & BRACKETS, in Cell Dble Bottoms 24 24

Distance apart 60 12 60 12

CENTRE GIRDER, in Double bottom, depth and thickness 5 5 9 5 5 9

" Angles, Top 1 1 7 1/6 1 1 7 1/6

SIDE GIRDERS, number and thickness 3 1/2 3 1/2 8 3 1/2 3 1/2 8

" Angles 24 8 24 8

MARGIN PLATE, depth (exclusive of flange) 4 4 9 4 4 9

and thickness 54 8 1/2 54 8 1/2

" Angles 9 9 1/6 9 9 1/6

INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake 8 3 11 8 3 11

" thickness in Engine and Boiler space 24 24

" Remainder in Holds 6 1/2 3 9 6 1/2 3 9

BEAMS, Spar or Awning Deck, Single Angle, Bulb Angle, Plate or Tee Bulb 7 7 9 7 7 9

outside oil compartments 24 24

" Angles on upper edge 8 3 11 8 3 11

" Average space 24 24

BEAMS, Main Deck, Single Angle, Bulb Angle, Plate or Tee Bulb 8 3 11 8 3 11

" Angles on upper edge 24 24

" Average space 24 24

BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate or Tee Bulb 8 3 11 8 3 11

" Angles on upper edge 24 24

" Average space 24 24

BULKHEADS. No. in Vessel 13 No. Reqd. by Rule 13

Coiling betwixt Decks, thickness and material	Thickness	Angles	Spacing	Height up	Sagl. or Dbl. Frames
in hold do. do. Pine 2 1/2	10 1/2	Vrtel. 6 1/2 x 3 1/2	24	Main deck	Single
Number of Breasthooks 7	10	Horiztl. 12 x 3 1/2		as per drawing	
Crutches 4 & 3 Transoms	7 1/2	Vrtel. 6 1/2 x 3 1/2	24	Spar deck	

Are the outside Plates doubled two spaces of Frames in length? *as per sketch except collision*
The FRAMES extend in one length from *Centre line* to *Main deck* Riveted through Plates with *7/8* in. Rivets, about *5* apart.
The REVERSED ANGLE on floors and frames extend from *across floor in oil compartments & to Main deck and Spar deck alternately; to Spar deck about after Peak Bulkhead & Spar deck to fore-castle bulkhead.*

RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES, TIE PLATES, KEELSONS, &c.

Garboard, double riveted to *Bar-Keel* or Flat Plate Keel, with rivets *1* in. diameter, averaging *3 3/8* ins. from centre to centre.

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

Butts from Keel to turn of Bilge, worked carvel, *treble or double riveted*; treble for *length*; with rivets *7/8* in. dia., averaging *2 5/8* ins. from cr. to cr.

Butts of *all* Strakes at Bilge for *whole* length, *treble riveted* with Butt Straps *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* ins. from centre to centre.

Butts from Bilge to Main Sheerstrake, worked carvel, treble or double riveted; treble for *length*; with rivets *7/8* in. dia., averaging *2 5/8* ins. from cr. to cr.

Edges of Main Sheerstrake, double *or single riveted* Spar or *Awning Sheerstrake*, double *or single riveted*.

Butts of Main Sheerstrake, *treble riveted for whole length amidships.* Butts of Spar or *Awning Sheerstrake*, treble riveted *whole length amidships.*

Butts of Main Stringer Plate, treble riveted for *whole length amidships.* Butts of Spar or *Awning Stringer Plate*, treble riveted for *whole length.*

Butts of Inner Bottom Plating *double riveted for 2 1/2 spaces length.* Butts of Centre Girder *overlapped with rivets.*

Breadth of edge laps of Shell Plating in double riveting *6 x 5 1/4* Breadth of edge laps of Shell Plating in single riveting *Nil.*

Butt Straps of Shell Plating, breadth and thickness *1 1/2 x 5/16 outside & 3/16 inside* Butts, If Lapped, breadth of laps *11 to 13 1/2*

Butt Straps of Keelsons, Stringer and Tie Plates, treble or double, riveted *throughout.*

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c. *Bed frames by Colville and other angles Dorman, Long & Co; Beams by Palmers & Co; Keelsons by Colville & Co; Plates by John Spencer & Sons Ltd & Cantell & Co; Iron by Stockton & Co & River & Co.*

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

Is the riveted work properly closed? *Yes*

Are the liners between the frames and plates solid single pieces? *Yes*

to plate, &c., conform well to each other? *Yes very well*

from the faying surfaces? *Yes*

Are the butts of Plating, Stringers, &c., properly shifted and strapped? *Yes*

Do the holes for riveting plate to frames, butt straps, or plate Are the rivet holes well and sufficiently countersunk in the plate and punched

Do any rivets break into or through the seams or butts of plating? *No*

MASTS, SPARS, &c.

Masts	Material	Total length	DIAMETER AND THICKNESS		Head	No. of Plates in round	ANGLES		RIVETING	
			At Partners	Heel			Number	Size	Seams	Butts
Fore	Steel	50.0	23 x 8	22 1/2 x 8	15 1/2 x 7	2	-	-	double	treble
Main	do	52.0	23 x 8	22 1/2 x 8	15 1/2 x 7	2	-	-	do	double
Mizen	Pine	59.0	15	15	8	-	-	-	-	-

Bowsprit *✓*

Tomasts, Yards and Remainder of Spars *✓*

Rigging, Material and Size, Shrouds *galvanized iron wire 3"* Stays *4 1/4*

Sails. *one* Suit of Sails and the following spare sails *nil*

EQUIPMENT No. 35 *305* LETTER *RW* ANCHORS *prop mechanical tests J.C. Craig*

Number of Certificate	Description	WEIGHT, EX STOCK			TEST, PER CERTIFICATE			WEIGHT REQ. BY RULE			Description of Anchor	Makers	Where and when tested and Superintendent	
		Cwts.	qrs.	lbs.	Tons.	Cwts.	qrs.	lbs.	Cwts.	qrs.				lbs.
24223	1st Bower	50	1	5	42	12	0	21	50	0	0	Smith's pat.	J. Spencer	R.W.C. & S. 30/9-92
24228	2nd "	50	0	24	42	10	2	14	50	0	0	do	do	do
24224	3rd "	42	2	15	37	13	3	0	42	2	0	do	do	do
	4th "											Signed J. Hartness		
	Collective weight	142	0	16					142	2	0			
13331	Stream	12	1	0	14	1	3	14	12	0	0	Rodgers	Robt. & Co. L.P.H. & W.	24/8-92
13217	Kedge	6	1	0	8	10	0	0	6	0	0	do	do	2/5-92
13303	2nd Kedge	3	0	0	3	0	5	10	3	0	0	do	do	25/7-92

Signed Robert Burrell & Co. HAWERS AND WARPS.

CHAIN CABLES.

Number of Certificate	Fathoms	Size	Test per Certificate Tons	Wright of Chain Cable		Fathoms & Size Per Rule	Description	Makers of Cables	Where and when tested, and Superintendent	Material	Fathoms	Size	Fathoms & Size Per Rule
				Cwts.	qrs.								
6439	150	2 1/2	107 1/10	323	3	97	300-2 1/2 link	J. & A. Lloyd	L.P.H. & W. 30/7-92	Towline	90	3 1/4	90-3 1/4
6438	150	2 1/2	107 1/10	321	3	46	do	do	do 29/7-92	Hawser	90	9	90-9
				445	2	25	637-3-0	do	do	do	540	6	nil
	2 1/2	38	38	66	3	26	90-1 1/2	do	do 5/8-92	do			
	120	4 1/2	39	dear	30	1/2	do	Signed Robert Burrell					

Boats *11*

Pumps, Number *all steam throughout* Diameter of Barrel and Tail Pipe *✓*

The Windlass is *Clarke Chapman's Patent* Capstan *do*

Engine Room Skylights.—How constructed? *of Iron 4 ft above the Poop deck*

What arrangements for deadlights in bad weather? *Patent swivel lights & lights in each flap*

Coal Bunker Openings.—How constructed? *of iron* How are lids secured? *solid hatches* Height above deck? *19"*

Number of Scuppers, and number and dimensions of Freeing Ports, &c. *3 Ports 24" x 15" and 6 Scuppers on each side*

and part open Bulwarks

Cargo Hatchways.—How formed? *Channel steel*

State size No. 1 Hatch (Forward) *9.11 x 7.10* No. 2 Hatch *6.0 x 5.0* No. 3 Hatch *do* No. 4 Hatch *do*

Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch *✓*

Bulwarks, height above deck and description *Iron 4 ft* Main Rail, material and size *2 1/2 half rounds*

Order for Special Survey No. 2465
Date 25 June 92
Order for Ordinary Survey No.
Date
No. 597 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

June 8. 19. 27 July 17 12 18 20 25 27 28 29
Aug. 2. 10. 11. 29 Sept. 1. 2. 6. 7. 9. 12. 14. 15. 20. 25. 28.
29 Oct. 3. 5. 10. 11. 13. 17. 24. 26. 31. Nov. 1. 3. 4. 7. 8.
9. 11. 16. 17. 21. 23. 25. 28. 29. Dec. 1. 2. 6. 8. 10. 13. 13. 14. 15.
16. 17. 19. 22. 23. 25. 26. 28. 29. Jan. 5. 9. 11. 12. 17. 18. 19. 20. 24. 25. 26. 30. 31. Feb. 3. 8.
Total No. of Visits 81

State dates and initials of letters respecting this case M. 14 April; M. 22 April; M. 19 July; & M. 2 August 92.

General Remarks (State quality of workmanship, &c.) This Vessel has been built of steel in accordance with the rules, and approved tracings of midship section, Profile &c, for the purpose of carrying Petroleum in Bulk. The centre girder or lower strake of the centre line bulkhead is made continuous fore & aft, & increased in thickness, while the flat-keel plates are increased in breadth & thickness, with overlapped quadruple riveted Butts in lieu of doubling plates. The whole of the shell plating, from the keel to the spar deck sheerstrake is fitted with overlapped Butts, quadruple riveted fore & aft, except a few ribble butts at the extreme ends of the vessel. The overlapped Butts & seams of the centre line & transverse Bulkheads in the oil compartments are double chain riveted, and the Channel Steel side stringers are connected to the transverse Bulkheads with solid brackets extending through these Bulkheads 3 frame spaces on each side, and connected to the shell plating with double short angle bars between the frames, double keel riveted. The Coffin-dams are well secured, & the whole of the rivets throughout are of iron of the Can-headed type. The whole of the tanks tested to a head of water between 11 & 12 ft above the main deck & found very satisfactory.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 83 ft., R.Q.D. or Break ft., Bridge Dk 24 ft., F'castle 33 ft., (in feet and tenths) where the Poop is on top of the R.Q.D., or when the Poop or R.Q.D. is joined to the B.D., this should be distinctly stated

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as it should appear in the Register Book) 1 Deck Steel & Spar deck (iron) & Web frames
Official No. : Signal Letters

PARTICULARS OF WATER BALLAST—
Double bottom, aft, length and water capacity in tons Double bottom, forward, length and water capacity in tons
Double bottom, under engines and boilers, length 62 and water capacity in tons 139 If under Engines only, or Boilers only, state which
Double bottom, constructed on the cellular system, length and water capacity in tons
Fore peak tank, water capacity in tons 187 After peak tank, water capacity in tons
Midship deep tank, length and water capacity in tons Other tanks, if fitted, length and water capacity in tons
The above have all been tested as required by the Rules.
(If necessary, furnish further information by sketch.)
How are the surfaces preserved from oxidation? Inside Portland cement in 2 ft. spaces Outside 3 coats of paint

FREEBOARD assigned by the Committee, as per Secretary's Letter, dated 24 January 1893
Date if marked on Vessel's sides in accordance with Notice No. 572 Yes
In Summer 6 ft. 8 ins. Statutory dk line 1 1/2 above
In Winter 7 ft. 1 ins. To top of Wood, Iron or Steel Upper, Spar, Awnings or Part Awnings Deck.
For Winter in North Atlantic 7 ft. 6 1/2 ins.
Fresh Water above the centre of disc 5 1/2 ins.

The amount of Entry Fee £ 5 : 0 : 0 is received by me, M.S. 16 2 18 45
Special... £ 115 : 1 : 6
Certificate... £ 10 : 0 : 0
Travelling Expenses, if any £ : :
I am of opinion this Vessel should be Classed
Certificate to be sent to Newcastle Office
James Libur
Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute
Character assigned 100A1 Steel
Spar dk.
Carrying Petroleum in bulk.
+ 100A1 (Steel) Spar Bulk Carrying Petroleum in bulk.
+ 100A1 (Steel) Spar Bulk Carrying Petroleum in bulk.
1 DK (Steel) & Spar dk (Iron) & Web frames
7K
TUES. 14 FEB 1893
The report should be returned to the Surveyor for his statement as to the vessel's class.