

3 Decks.

IRON OR STEEL STEAMER.

(Received at London Office)

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

Date of completion of report

Port of

No. 370

Survey held at

Middlesbrough

Date, First Survey

Aug 26-1896

Last Survey

March 2nd 1897

On the

Steel Screw Steamer

OIL RIVERS

Rig Schooner

TONNAGE under 2500.60

THREE DECKED VESSEL.

CLASS 100 A

FEET.

Master Rattray.

Year of appointment

Built at Middlesbrough

When built 1890-1 Launched Dec 3rd 1890

By whom built Raylton Dixon & Co

Owners Alfred L. Jones

Managers

Residence 14 Castle Street Liverpool

Port belonging to Liverpool

Tonnage Deck... 2500.60

between Tonnage Dk. and 3rd and 4th Dk.

Total under Upper Dk.

of Poop 21.74

of Bridge House 137.81

of Houses on Dk. 17.66

of excess of Hatchways 10.14

of Forecastle 55.14

above Crown of Engine Room 33.46

Gross Tonnage 2776.55

Less Crew Space 72.01

Less above Crown of Engine Room 33.46

Tonnage for Fees 2671.08

Less Engine Room 888.50

Less Navigation Spaces 24.51

Register Tonnage 1791.53

as cut on Beam

Half Breadth (moulded) 19.45

Depth from upper part of Keel to top of Upper Deck Beams 28.25

Girth of Half Midship Frame (as per Rule) 43.05

deduct 7 feet 83.75

1st Number 83.75

Length 310.08

2nd Number 25969

Proportions - Breadth to Length 7.92

Depth to Length - Upper Deck to top of Keel 10.97

Main Deck ditto 15.28

Destined Voyage

Surveyed while Building, Afloat, in Dry Dock

LENGTH on Deck as per Rule 310 1 BREADTH Moulded 38 11 DEPTH top of Floor to Upper Deck Beams 24 11 Do. do. Main Deck Beams 16 5 Power of Horse Engines 240 No. of Decks with flat laid 2 No. of Tiers of Beams 2 m/b.

Dimensions of Ship per Register, Length 312 breadth 39.2 depth 24.65 Moulded depth, ft. 27 ins. 5 1/2 To Upper Dk. Beam, Upper Dk. 9 3/4 ins.

FORGINGS or CASTINGS.

EL, Bar or Side Plates, depth and thickness

EM, moulding and thickness

ERN-POST for Rudder do. do.

for Propeller

MAIN-PIECE of Rudder, diameter at head

do. at heel

RUDDER, how constructed

Can the Rudder be unshipped afloat?

FRAMING.

AME, Angles, or Bars for 1/2 length amidships

Do. for 1/2 at each end

Do. in way of Double Bottoms

Distance of Frames from moulding edge to

moulding edge, all fore and aft

EVERSED FRAME Angles

LOORS, depth and thickness of Floor Plate

at mid-line for 1/2 length amidships

in way of Engines and Boilers

thickness at the ends of vessel

depth at 1/2 the half breadth, as per Rule

height extended at the Bilges

FLOORS & BRACKETS in Cell Dble Bottoms

Distance apart

ENTRE GIRDER, in Dbl Btm, depth & thickness

Angles, Top 4x4x20 Bottom

DE GIRDERS, number and thickness

Angles

MARGIN PLATE, dpth (excl. of flange) & thickness

Angles

INNER BOTTOM PLATING, breadth and

thickness of Middle Line Strake

in Engine and Boiler space

Remainder in Holds

BEAMS, Upper Deck, Single Angle, Bulb

Angle, Plate or Tee Bulb

Angles on upper edge

Average space

BEAMS, Middle Deck, Single Angle, Bulb

Angle, Plate or Tee Bulb

Angles on upper edge

Average space

BEAMS, Lower Deck, Single Angle, Bulb

Angle, Plate or Tee Bulb

Angles on upper edge

Average space

BEAMS, Hold, or Orlop, Plate or Tee Bulb

Angles on upper edge

Average space

BEAMS, Poop and Bridge Deck, Angle, Bulb

Angle, Plate or Tee Bulb

Angles on upper edge

Average space

BEAMS, Forecastle Deck, Angle, Bulb

Angle, Plate or Tee Bulb

Angles on upper edge

Average space

PILLARS, In 'tween Decks, Size and Spacing

Hold

WEB FRAMES, In Fore Body, No. and spacing

Br'dth. & Thickness

No. of Side Stringers

WEB FRAMES, In After Body, No. and spacing

Br'dth. & Thickness

No. of Side Stringers

Size of Angles on Tee Base to Web Frames

BRACKET PLATES to Stringers between

Web Frames, Depth and Thickness

KEELSONS & STRINGERS.

CENTRE LINE KEELSON, Vertical Plate above

floors, Through Plate, or Intercoastal Plate

Kider Plate

Bulb Plate to Intercoastal Keelson

Horizontal Plates on Floors

Angles

SIDE KEELSON, Angles

Bulb or Plate above floors, for length

Intercoastal Plate, for length

Attached to outside Plating with Angle

BILGE KEELSON, Angles

Bulb or Plate above floors, for length

Intercoastal Plate, for length

Attached to outside Plating with Angle

BILGE STRINGER Angles

Bulb Plate for length

Intercoastal Plate, for length

Attached to outside Plating with Angle

SIDE STRINGER Angles

Bulb or Intercoastal Plate for length

Attached to outside Plating with Angle

Upper Deck Stringer Plate, breadth & thickness

Angles on ditto, No. 2

Tie Plates outside Hatchways

Diagonal Tie Plates on Deck, No. of pairs

Flat of Dk. * Iron or Steel, for length

Wood P. Pine Material and thickness

How fastened to Beams

Middle Deck Stringer Plate, breadth & thickness

Angles on ditto, No. 2

Tie Plates outside Hatchways

Flat of Deck * Material and thickness

How fastened to Beams

Hold or Orlop Stringer Plate, breadth & thickness

Is the Stringer Plate attached to the outside Plating?

Angles on ditto, No.

Tie Plates outside Hatchways

Flat of Deck * Material and thickness

How fastened to Beams

Poop Deck Stringer Plate, breadth & thickness

Angle on ditto

Tie Plates

Flat of Deck, Material and thickness

Bridge Deck Stringer Plate, breadth & thickness

Angle on ditto

Tie Plates

Flat of Deck, Material and thickness

Forecastle Deck Stringer Plate, breadth & thickness

Angle on ditto

Tie Plates

Flat of Deck, Material and thickness

PLATING.

FLAT PLATE KEEL, breadth and thickness

D'bling or inc. thickness & len. appl'd

PLATES in Garboard Strakes, breadth & thickness

from Garboard to lower part of Bilges

State Thickness of Plating in way of Double Bottom.

Bilges, number of Strakes and thickness

Of doubling at Bilge, or increased thickness, and length applied

from up. prt. of Bilge to lr. edge of Sh'rstrake

Sheerstrake, breadth and thickness

Of d'bling at Sh'rstk. & length appl'd

Poop Sides

Bridge do.

Forecastle do.

Lengths of Plating

Form No. 1 B

Ceiling betwixt Decks, thickness and material *2 1/2" Pine*
" in hold do. do. *2 1/2" Pine*
Number of Breasthooks *4*
" Crutches *deep floors*

BULKHEADS. No. in Vessel *5* No. Reqd. by Rule *5*
Thickness Angles Spacing Height up. Singl or Dble. Frames
W. T. BULKHEADS { *2 1/2" x 6"* Vrtel. *52 3/4" x 8"* *30* *upper deck* *double*
PARTITION { *✓* Hrzntl. *"* *48*
LONGITUDINAL { *✓* Vrtel. *✓* Hrzntl. *✓*

Are the outside Plates doubled two spaces of Frames in length? *Yes*
The **FRAMES** extend in one length from *Centerline bilge, & bilge to upper keel* Riveted through plates with *7/8* in. Rivets, about *6 1/2* apart.
The **REVERSED ANGLE** on floors and frames from *Centerline to tank side, & from bilge to upper deck & 8" above keel*
alternates. All 5 1/2" in diam & 2 1/2" full of keel. All 15 upper deck on after peak.

RIVETING OF EDGES AND BUTTS OF SHELL PLATING AND BUTTS OF STRINGER PLATES, TIE PLATES, KEELSONS, &c.
Garboard. double riveted to *Keel* Flat Plate Keel, with rivets *1* 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 *3/8* in. diameter, averaging *3 1/2* ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, treble *double* riveted; treble for *3/4* length; with rivets *3/8* in. dia., averaging *3 1/2* ins. from cr. to cr.
" *2 1/2" x 1/2"* overlapped for *3/4* length, treble riveted for *3/4* length; with rivets *3/8* in. dia., averaging *3 1/2* ins. from cr. to cr.
Butts of *Stakes at Bilge for* length, treble riveted with Butt Straps *thicker than the plates they connect.*

Edges from Bilge to Sheerstrake, worked clencher, double riveted; with rivets *3/8* in. diameter, averaging *3 1/2* ins. from centre to centre.
Butts from Bilge to Sheerstrake, worked carvel, treble *double* riveted; treble for *3/4* length; with rivets *3/8* in. dia., averaging *3 1/2* ins. from cr. to cr.
" *1 1/2" x 1/2"* overlapped for *3/4* length, treble riveted for *3/4* length; with rivets *3/8* in. dia., averaging *3 1/2* ins. from cr. to cr.
Edges of Sheerstrake, double riveted. **Butts of Sheerstrake,** treble riveted for *3/4* length amidships. *dble strapped*

Butts of Middle Deck Stringer Plate, treble riveted for *3/4* length amidships. **Butts of Upper Deck Stringer Plate,** treble riveted for *3/4* length.
lapped " Single or Double Straps for *✓* lgth. amidships. *lapped* " Single or Double Straps for *✓* lgth.
Butts of Inner Bottom Plating *double* riveted for *1/2* length. **Butts of Centre Girder** *treble* riveted.
Breadth of edge laps of Shell Plating in double riveting *5 1/2"* **Breadth of edge laps of Shell Plating** in single riveting *✓*
Butt Straps of Shell Plating, breadth and thickness *1 1/2" x 1/4"* **Butts if Lapped, breadth of laps** *9"*

Butt Straps of Keelsons, Stringer and Tie Plates, treble *double* riveted.
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.? *Robertson Vaughan & Co., Concise, Moor St. S.C. Dorman Long & Co. Steel C. & Steel Plate*
Edwin Jardine & Co. Siemens Martini Steel.

Workmanship. Are the butts of plating planed or otherwise fitted? *Yes*
Is the riveted work properly closed? *Yes*
Are the liners between the frames 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*
Are the butts of Plating, Stringers, &c., properly shifted and strapped? *Yes*

MASTS, SPARS, &c.												
	Material.	Total Length	DIAMETER AND THICKNESS.				No. of plates in round	ANGLES.		RIVETING.		
			At Partners.	Heel.	Hounds.	Head.		Number.	Size.	Seams.	Butts.	
LOWER MASTS....	Fore	Steel 79.6	22 1/2 "	17 1/2 "	19 1/2 "	15 1/2 "	2	✓	✓	single	treble	
	Main	" 77.0	21. "	16. "	16 1/2 "	13 1/2 "	2	✓	✓	"	"	
	Mizzen	✓										

Bowsprit *✓*
Topmasts, *Yards and* Remainder of Spars *Iron*
Rigging. Material and Size, *Shrouds* *Wire 3 1/2"* *Stays* *Iron stay 4 1/2" Iron stay 4 1/2"*
Sails. *One* Suit of Sails, and the following spare sails *✓*

EQUIPMENT No. 29877 LETTER T ANCHORS.

Number of Certificate.	Weight, Ex. Stock.	Weight of Stock.	TEST, PER CERTIFICATE.				WEIGHT REQ. PR RULE.				Description of Anchor.	Makers.	Where and when tested, and Superintendent.
	Cwts. qrs. lbs.	Cwts. qrs. lbs.	Tons. Cwts. qrs. lbs.	Tons. Cwts. qrs. lbs.	Tons. Cwts. qrs. lbs.	Tons. Cwts. qrs. lbs.	Cwts. qrs. lbs.	Cwts. qrs. lbs.	Cwts. qrs. lbs.	Cwts. qrs. lbs.			
<i>12278</i>	<i>1st Bower</i>	<i>34 2 14</i>	<i>9 0 0</i>	<i>32 1 3</i>	<i>14</i>	<i>34 0 0</i>	<i>34</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>Common</i>	<i>Abbott & Co.</i>	<i>8.10.90</i> <i>Sm Walker</i>
<i>12279</i>	<i>2nd "</i>	<i>34 1 0</i>	<i>9 1 0</i>	<i>31 16 1</i>	<i>0</i>	<i>31 16 1</i>	<i>31</i>	<i>16</i>	<i>1</i>	<i>0</i>	<i>"</i>	<i>"</i>	<i>13.10.90</i> <i>Do</i>
<i>12298</i>	<i>3rd "</i>	<i>29 0 0</i>	<i>7 1 14</i>	<i>27 17 2</i>	<i>0</i>	<i>27 17 2</i>	<i>27</i>	<i>17</i>	<i>2</i>	<i>0</i>	<i>"</i>	<i>"</i>	<i>10.9.90</i> <i>do</i>
	<i>4th "</i>										<i>"</i>	<i>"</i>	<i>17.7.90</i> <i>do</i>
	<i>Collective weight</i>	<i>97 3 14</i>				<i>97 0 0</i>	<i>97</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>"</i>	<i>"</i>	<i>5.9.90</i>
<i>12217</i>	<i>Stream</i>	<i>11 0 7</i>	<i>3 0 7</i>	<i>13 0 0</i>	<i>0</i>	<i>10 3 0</i>	<i>10</i>	<i>3</i>	<i>0</i>	<i>0</i>	<i>"</i>	<i>"</i>	<i>17.7.90</i> <i>do</i>
<i>12091</i>	<i>Kedge</i>	<i>5 3 14</i>	<i>1 2 0</i>	<i>8 2 3</i>	<i>7</i>	<i>5 2 0</i>	<i>5</i>	<i>2</i>	<i>0</i>	<i>0</i>	<i>"</i>	<i>"</i>	<i>5.9.90</i>
<i>12211</i>	<i>2nd Kedge</i>	<i>2 2 0</i>	<i>2 0</i>	<i>5 0 0</i>	<i>0</i>	<i>2 2 0</i>	<i>2</i>	<i>2</i>	<i>0</i>	<i>0</i>	<i>"</i>	<i>"</i>	

CHAIN CABLES.

Number of Certificate.	Fathoms.	Size.	Test per Certificate Tons.	Weight of Chain Cable.	Fathoms & size per Rule.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Fathoms.	Size.	Fathoms & Size per Rule.
<i>6134</i>	<i>135</i>	<i>1 1/8</i>	<i>63 1/2</i>	<i>228.1.1</i>	<i>270 x 1 1/8</i>	<i>Steel</i>	<i>Abbott & Co</i>	<i>See Walker</i>	<i>Towline*</i>	<i>75</i>	<i>4 1/2</i>	
<i>6135</i>	<i>135</i>	<i>"</i>	<i>"</i>	<i>226.2.12</i>				<i>Do</i>	<i>Hawser</i>	<i>90</i>	<i>9 1/2</i>	<i>90.9 1/2</i>
								<i>21.8.90</i>		<i>90</i>	<i>7 1/2</i>	<i>90.8</i>
								<i>30.7.90</i>				
	<i>75</i>	<i>1 1/8</i>	<i>22 3/4</i>	<i>49.1.7</i>	<i>75 x 1 1/8</i>	<i>"</i>	<i>"</i>	<i>30.7.90</i>				
	<i>90</i>	<i>4</i>	<i>33</i>		<i>100 x 4</i>							

Boats *2 life boats & 2 others.*
Pumps, Number *as per plans* Diameter of Barrel and Tail Pipe *5" x 2 1/2"*
The Windlass is *Iron. Steam* Capstan *✓*
Engine Room Skylights.—How constructed? *Casing (iron) 7' high above bridge house, tank top & flaps with 2 round glass lights*
What arrangements for deadlights in bad weather? *glass lights*
Coal Bunker Openings.—How constructed? *plate casing* How are lids secured? *Cleats/batten* Height above deck? *15"*

Number of Scuppers, and number and dimensions of Freeing Ports, &c. *3 scuppers each end, no ports, having open railed gangways at each hatch*
Cargo Hatchways.—How formed? *Plate casing* **Hatches,** if strong and efficient? *Yes*
State size No. 1 Hatch (Forward) *15' 10" x 12' 0"* No. 2 Hatch *21' 9" x 11' 11"* No. 3 Hatch *15' 10" x 9' 11"* No. 4 Hatch *16' 1" x 9' 11"*
Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch *Nos 1, 3 & 4 1 beam 3 fore & afters*
" 2 web & 3 fore & afters.

Bulwarks, height above deck and description *Iron 48" high. of plate* Main Rail, material and size *Iron 5 1/2" x 3"*
The above is a correct description.
Builder's Signature (here only) *W. M. Williams* Surveyor's Signature *W. M. Williams*
Surveyor to Lloyd's Register of British and Foreign Shipping.

Order for Special Survey No. 15
Date Aug 5th 1890
Order for Ordinary Survey No. ✓
Date ✓
No. 330 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

Build under Special Survey

1st visit Aug 26th 1890
last " March 2nd 1891

Total No. of Visits 34

State dates and initials of letters respecting this case. July 25th Nov 6th 1890 M Nov 10th 1890 P.

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

The vessel has been built under Special Survey in accordance with the plans approved, and the rules for steel vessels. The workmanship and materials are good, steel tested in accordance with the Rules. The main deck is iron in way of engine room, and as the width of boiler casing extends to the edge of the main deck stringer, the stringer plate has been doubled, efficiently scarphing the engine room space and into the fore hold.

The vessel is fitted with the electric light. see report by the Electric Engineer attached.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 31 ft., R.Q.D. or Break ✓ ft., Bridge Dk. 94 ft., F'castle 41 ft. (in feet and tenths) where the Poop 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 dk. stl sheathed, 1 dk. pt iron pt mws. 2 trs beams trch.

Official No. 97845 ; Signal Letters MCDS

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 ✓ and water capacity in tons ✓ . If under engine only, or boilers only, state which both
Double bottom, constructed on the cellular system, length 26 ft and water capacity in tons 527
Fore peak tank, water capacity in tons ✓ . 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, paint above Outside Paint.

FREEBOARD assigned by the Committee, as per Secretary's

Letter dated Feb 27th 91 M

State if marked on Vessel's sides in accordance with Notice No. 572 New Act 1890

In Summer 5 ft. 3 ins.
In Winter 5 ft. 7 1/2 ins.
For Winter in North Atlantic 6 ft. 0 ins.
Fresh Water above the centre of disc 5 1/2 ins.

To top of Wood Iron or Steel Upper Deck.

Statutory deck line
see verification report.

The amount of Entry Fee £ 5 : : : is received by me, R.H.W.

Special £ 91 : 15 : 6 11.3 1891

Certificate* £ : : :

Travelling Expenses, if any £ : : :

I am of opinion this Vessel should be Classed + 100 A 1 3dk rule Steel.

H. M. Williams.

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

Committee's Minute

Character assigned

L.A.C.T. ✓

th. mch. 3/91

100 A 1 Stl

2 Dks (1 Stl - w.) + web frames

It is submitted that this vessel appears eligible to be Classed 100 A 1 (Stl) as recommended 2 Dks (1 Stl - w.) + web frames. Call D.B. (particulars above) F.R.

14/3/91