

1 or 2 Dks. R. Q. Dk.
and Pt. Awng. Dk.

IRON OR STEEL STEAMER.

SAT. 1 No. 11502

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

Received at London Office.

Date of completion of Report

Port of LIVERPOOL

Date, First Survey

Last Survey

1909

Survey held at

Birkenhead
Steel Turn

LEVATHAN

Rig

Sloop

On the

ONE OR TWO DECKED VESSEL.

Master

R. Lee

TONNAGE under

8284.28

CLASS 1-100 A1 HOPPER DREDGER

Year of appointment

(1) As master in service of
owner of present vessel - 18
(2) As master of this
vessel - 19

Do. of Poop

169.39

Do. of Raised Gr.

Do. of Bridge House

121.08

Do. of Forecastle

15.38

Do. of Houses on Deck

Do. of excess of Hatchways

Do. above Crown of

Engine Room

8590.13

Gross Tonnage

171.96

Less Crew Space

Less above Crown of

Engine Room

8418.11

TONNAGE FOR FEES

2748.84

Less Engine Room

4279.16

Less Navigation Spaces

Register Tonnage

5552.70

as cut on Beam

Half Breadth (moulded)

34.5

Depth from upper part of Keel to top of Main Deck Bms.

32.02

(with the normal round up of beam)

Girth of Half Midship Frame (as per Rule)

63.75

1st Number

123.27

Length on deck from after part of stem to fore part of

462.92

2nd Number

57064.16

Proportions—Breadths to Length

6.7

Depths to Length—Main Deck to top of Keel

14.4

Destined Voyage

If Surveyed while Building, Afloat, or in Dry Dock

Built at

Birkenhead

When built

1909

By whom built

Camell Laird & Co.

Owners

Messy Dock Harbour Board

Managers

Cotnam Dock

(Where necessary to be entered in Reg. Book.)

Residence

Liverpool

Port belonging to

Liverpool

LENGTH on Deck as per Rule	Feet.	Inches.	BREADTH—Moulded	Feet.	Inches.	DEPTH, ACTUAL—Top of Floors to top of Main Deck Beams	Feet.	Inches.	No. of Decks with Flat laid	No. of Tiers of Beams
462	11		69	0		28	11	4	One	3

Dimensions of Ship per Register, Length, 465.0 breadth, 69.35 depth, 28.95. Moulded Depth, 30 ft. 7 ins. Round of Beam, Actual 17 1/2 ins.

FRAMING.						FORGINGS AND CASTINGS.					
	Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as Approved.	Inches per Rule Or as Approved.		Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as Approved.	Inches per Rule Or as Approved.
FRAME, Angles, L E Bars, for 1/2 length amidships	9	3 1/2	12	9	3 1/2	12	KEEL, Bar or Side Plates depth and thickness	12 x 3 1/2	12	3 1/2	12 x 3 1/2
Do. for 1/2 at each end	9	3 1/2	11	9	3 1/2	11	STEM, moulding and thickness	13 x 4 1/2	13	4 1/2	13 x 4 1/2
Do. in way of Double Bottoms at Solid Floors	5	3 1/2	10	5	3 1/2	10	STERN-POST for Rudder do. do.	11	11	11	11
at intermdt. Bkts.							MAIN PIECE of Rudder, diameter at head	8 1/4	8 1/4	8 1/4	8 1/4
do. at heel							do. at heel	8 1/4	8 1/4	8 1/4	8 1/4
Spacing of Frames from centre to centre	4 1/2	27	4 1/2	27	4 1/2	10	RUDDER, how constructed	Single plate 22/20	(As app.)		
REVERSED FRAME, Angles	4 1/2	4	10	4 1/2	4	10	Can the Rudder be unshipped afloat?	Yes			
DEEP FRAMING, depth of girder											
FLOORS, depth and thickness of Floor Plate at mid-line for 1/2 length amidships	37	10	37	10			KEELSONS AND STRINGERS.				
in way of Engines and Boilers	11 x 12	8	11 x 12	8			CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate	24	11	24	11
thickness at the ends of vessel	37	10	37	10			Rider Plate	13 1/2	13	13 1/2	13
depth at 1/2 the half breadth, as per Rule	37	10	37	10			Bulb Plate to Intercoastal Keelson	12	11	12	11
height extended at the Bilges	37	10	37	10			Horizontal Plates on Floors	16 1/2	4 1/2	16 1/2	4 1/2
FLOORS & BRACKETS, in Cell Dble Bottoms							Angles	12 x 3 1/2	12	3 1/2	12 x 3 1/2
state if flanged (top & bottom)							SIDE KEELSON, Angles	12 x 3 1/2	12	3 1/2	12 x 3 1/2
Spacing							Bulb or Plate above floors for lng.	9 1/2	8	9 1/2	8
CENTRE GIRDER, in Double Bottom, depth and thickness							Intercoastal Plate for 1/2 length	3 1/2	3 1/2	10	3 1/2
Angles, Top							Attached to outside plating with Angle				
Bottom							BILGE KEELSON, Angles				
SIDE GIRDERS, number on each side & thickness							Bulb or Plate above floors for lng.				
state if flanged (top & bottom)							Intercoastal Plate for length				
Angles							Attached to outside plating with Angle				
MARGIN PLATE, depth (exclusive of flange) and thickness							BILGE STRINGER Angles				
Angles to Outside Plating							Bulb Plate for length				
Floors							Intercoastal Plate for length				
Height of Floors at the Bilges							Attached to outside plating with Angle				
INNER BOTTOM PLATING, breadth and thickness of Middle Line Strake							SIDE STRINGER Angles				
thickness in Engine and Boiler space							Bulb or Intercoastal Plate for lng.				
Remainder in Holds							Attached to outside plating with Angle				
BEAMS, Main and Raised Quarter Deck, Single Angle, Bulb Angle, Plate on Tee Bulb	7	3 1/2	9	7	3 1/2	9	Main and Raised Quarter Deck Stringer Plate, breadth and thickness	66 x 16	66	16	66 x 16
Angles on Upper Edge							Angle on ditto	55 x 9	55	9	55 x 9
Spacing							Tie Plates, outside Hatchways	6 x 6 x 15	6	6	15
BEAMS, Lower Deck, Single Angle, Bulb Angle, Plate on Tee Bulb	10	3 1/2	12	10	3 1/2	12	Diagonal Tie Plates on Bms., No. of Pairs				
Angles on Upper Edge							Main Dk* Iron or Steel for Full lng.	12	6	8	12
Spacing							R. Q. Dk* Iron or Steel for lng.				
BEAMS, Hold, Plate on Tee Bulb	10	3 1/2	12	10	3 1/2	12	Wood Deck, Material & thickness	R.P. 5 x 3 1/2	5	3 1/2	5 x 3 1/2
Angles on Upper Edge							Lower Deck Stringer Plate, breadth and thickness	40	9	40	9
Spacing							Angles on ditto, No.	4 x 4	9	4 x 4	9
BEAMS, Poop Deck, Angle, Bulb Angle, Plate on Tee Bulb	12 x 3 1/2	3 1/2	14	12 x 3 1/2	3 1/2	14	Tie Plates, outside Hatchways				
Angles on Upper Edge							Deck* Material and thickness	40	9	40	9
Spacing							Hold Stringer Plate	40	9	40	9
BEAMS, Bridge or Pt. Awng. Deck, Angle, Bulb Angle, Plate, or Tee Bulb							Angles on ditto, No.	4 x 4	9	4 x 4	9
Angles on Upper Edge							Poop Deck Stringer Plate, breadth & thickness	4 x 4	9	4 x 4	9
Spacing							Angle on ditto	4 x 4	9	4 x 4	9
BEAMS, Forecastle Deck, Angle, Bulb Angle, Plate on Tee Bulb	12 x 3 1/2	3 1/2	14	12 x 3 1/2	3 1/2	14	Tie Plates	10 1/2	7	10 1/2	7
Angles on Upper Edge							Deck, Material and thickness	PP 5 x 3	PP	5 x 3	PP 5 x 3
Spacing							Bridge or Pt. Awng. Deck Stringer Plate, breadth and thickness				
PILLARS, In 'tween Decks, Size and Spacing							Angle on ditto				
Hold Double Channels	12 x 3 1/2	3 1/2	14	12 x 3 1/2	3 1/2	14	Tie Plates				
Quarter, 'tween Dks.							Deck, Material and thickness				
in Hold							Forecastle Deck Stringer Plate, brdth & thcknss	44	8	44	8
WEB FRAMES, In Fore Body, No. and Spacing	12-9-0			12-9-0			Angle on ditto	4 x 4 x 9	4 x 4	9	4 x 4 x 9
No. of Side Stringers							Tie Plates	10 1/2	8	10 1/2	8
WEB FRAMES, In E. & B. Space, No. and Spacing	(6)-9-0	6-9	(6)-9-0	6-9			Deck, Material and thickness	PP 5 x 3	PP	5 x 3	PP 5 x 3
Brdth. & Thickness											
WEB FRAMES, In After Body, No. and Spacing	(9)-9-0			(9)-9-0							
Brdth. & Thickness											
No. of Side Stringers											
Size of Angles or Tee Bars to Web Frames	6 1/2	4 1/2	15	6 1/2	4 1/2	15					
BRACKET PLATES to Stringers between Web Frames, Depth and Thickness	36	9	36	9							

PLATING.

STRAKES.	AS IN SHIP.				PER RULE OR AS APPROVED.		EDGES.		BUTTS.					
	AMIDSHIP.	FORWARD.	AFT.	AMIDSHIP.	AMIDSHIP.	Thickness.	Single or Double.	Breadth of Lap.	RIVETS.	Double or Triple and for what Length.	RIVETS.	STRAPE.	IF LAPPED.	
	Breadth.	Thickness.	Thickness.	Thickness.	Breadth.	Thickness.		Inches.	Inches.	Inches.	Diam.	Spacing or to cr.	Breadth.	Thickness.
FLAT PLATE KEEL (If Bar Keel, state Riveting)	48	20	15	16	48	20	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
GARBOARD OR A STRAKE	9 1/2	15	14	14	9 1/2	15	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
State actual thickness in way of Double Bottom.	9 1/2	14	14	11	9 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
B	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
C	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
D	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
E	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
F	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
G	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
H	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
J	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
K	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
L	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
M	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
N	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
O	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
P	6 1/2	14	11	11	6 1/2	14	D	6 1/2	1 1/2	4 1/2	1 1/2	4	21 1/2	4 1/2
DOUBLING OF Flat Plate Keel														
Length of Bilges	3 1/2	3 1/2	1 1/2	1 1/2	3 1/2	3 1/2								
Length of Sheerstrakes	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2								
Length of Strake below	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2								
POOP SIDES														
RAISED QUARTER DECK SIDES														
BRIDGE SIDES														
FORECASTLE SIDES														
LENGTHS OF PLATING	About	28'-2"			28'-2"									

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, outside Plating, &c. *Siemens Martin Steel*

Plates, outside Plating, &c. *Siemens Martin Steel*

Inner Bottom Plating, riveting of Edges *Butts*

Centre Girder Butts, riveted *Keelson Butts*

Frames, riveted through Plates with *1"* in Rivets, about *6'* apart.

Rivets, state whether of Iron or Steel *Iron*

Has the Steel been tested as required by the Rules *Yes*

FRAMES extend in one length from *Top of floor to Main deck* state if ordinary or joggled *joggled*

REVERSED FRAMES on floors and frames extend from *across top of floor in Eng. B-space* state if ordinary or joggled *ordinary*

MASTS, SPARS, &c.

LOWER MASTS...	Material.	Total length.	DIAMETER AND THICKNESS.			No. of Plates in round.	ANGLES.		RIVETING.	
			At Partners.	Heel.	Hounds.		Number.	Size.	Seams.	Butts.
Fore	<i>Oregon P</i>	<i>90'-0"</i>		<i>16"</i>	<i>4 1/2"</i>					
Main	<i>do</i>	<i>68'-0"</i>		<i>12"</i>	<i>4 1/2"</i>					
Mizen	<i>do</i>	<i>50'-0"</i>		<i>10"</i>	<i>3 1/2"</i>					

Bowsprit

Topmasts, Yards and Remainder of Spars *Sails*

Rigging, Material and Size, Shrouds *Sails*

Sails, Suit of *Sails*

Equipment No. *61571* Letter *C+*

Tonnage U.D.K. or Plating No. for Trawlers

ANCHORS.

Number of Certificate.	Anchors.	WEIGHT, EX-STOCK.			TEST, PER CERTIFICATE.			WEIGHT REQUIRED BY TABLE 22.			Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.			
<i>7377</i>	1st Bower	<i>77</i>	<i>1</i>	<i>21</i>	<i>57.3</i>	<i>✓</i>	<i>✓</i>	<i>77</i>	<i>0</i>	<i>0</i>	<i>Stockless</i>	<i>✓</i>	<i>Bariff 22 Oct 1908</i>
<i>7376</i>	2nd "	<i>77</i>	<i>1</i>	<i>14</i>	<i>57.3</i>	<i>✓</i>	<i>✓</i>	<i>77</i>	<i>0</i>	<i>0</i>	<i>do</i>	<i>✓</i>	<i>do</i>
<i>7389</i>	3rd "	<i>76</i>	<i>2</i>	<i>14</i>	<i>57</i>	<i>✓</i>	<i>✓</i>	<i>65</i>	<i>2</i>	<i>0</i>	<i>do</i>	<i>✓</i>	<i>do</i>
	Collective weight	<i>231</i>	<i>1</i>	<i>21</i>				<i>219</i>	<i>2</i>	<i>0</i>			<i>Geo. H. Penn</i>
<i>7324</i>	Stream	<i>23</i>	<i>2</i>	<i>7</i>	<i>23</i>	<i>10</i>		<i>33</i>	<i>2</i>	<i>0</i>	<i>Ordinary</i>	<i>✓</i>	<i>Bariff 15 Sept 1902</i>
<i>7325</i>	Kedge	<i>11</i>	<i>2</i>	<i>0</i>	<i>13</i>	<i>7</i>	<i>2</i>	<i>11</i>	<i>0</i>	<i>0</i>	<i>do</i>	<i>✓</i>	<i>Geo. H. Penn</i>

CHAIN CABLES.

Number of Certificate.	Length and size supplied.	Test per Certificate.	WEIGHT OF CHAIN CABLE.			Length and size per Table 22.	Description.	Makers of Cables.	Where and when tested and Superintendent.
			Supplied.	Per Table 22.	Per Table 22.				
<i>8504</i>	<i>150 2 1/2</i>	<i>112.5 157.5 471.3</i>	<i>112.5</i>	<i>157.5</i>	<i>471.3</i>	<i>300 2 1/2</i>	<i>do</i>	<i>do</i>	<i>do</i>
<i>8505</i>	<i>150 2 1/2</i>	<i>112.5 157.5 471.3</i>	<i>112.5</i>	<i>157.5</i>	<i>471.3</i>	<i>300 2 1/2</i>	<i>do</i>	<i>do</i>	<i>do</i>

HAWSERS AND WARPS.

Number of Certificate.	Length and size supplied.	Test per Certificate.	WEIGHT OF CHAIN CABLE.			Length and size per Table 22.	Description.	Makers of Cables.	Where and when tested and Superintendent.
			Supplied.	Per Table 22.	Per Table 22.				
<i>8504</i>	<i>150 2 1/2</i>	<i>112.5 157.5 471.3</i>	<i>112.5</i>	<i>157.5</i>	<i>471.3</i>	<i>300 2 1/2</i>	<i>do</i>	<i>do</i>	<i>do</i>
<i>8505</i>	<i>150 2 1/2</i>	<i>112.5 157.5 471.3</i>	<i>112.5</i>	<i>157.5</i>	<i>471.3</i>	<i>300 2 1/2</i>	<i>do</i>	<i>do</i>	<i>do</i>

Boats *Three in number & one motor launch*

Pumps, Number *Three & 1 Downton* Diameter of Barrel *4 1/2* State whether they are in efficient working order *Yes*

Windlass is *Harfield's Patent Steam* Capstan *none*

Engine Room Skylight's—How constructed? *Iron Coamings, leak cover.*

What arrangements for deadlights in bad weather? *Hinged flaps and bulls eyes.*

Coal Bunker Openings.—How constructed? *Steel coamings* How are lids secured? *Hatches tarpaulins* Height above deck? *30'*

Number of Scuppers, and number and dimensions of Freeing Ports, &c. *3 and 1/2 in way of bulwarks; three and 3'-0" x 1'-3"*

Ceiling in Holds, thickness and material *Cargo Battens, thickness and material*

Cargo Hatchways.—How formed? *Steel coamings* Hatches.—If strong and efficient? *Yes*

State size No. 1 Hatch (Forward) *11'-3" x 10'-0"* No. 2 Hatch *11'-3" x 10'-0"* No. 3 Hatch *11'-3" x 10'-0"* No. 4 Hatch *11'-3" x 10'-0"*

Number of Web Plates, Shifting Beams, and Fore and Afters to each Hatch *No. 1 Hatch: 1 fore & after, No. 2: Centre line Bld.*

No. of Breasthooks *do* No. of Crutches *do*

Bulwarks, height above deck and description *3'-3" 1/2 Steel, open rails amidships* Main Rail and Stays, material and size *2 1/2" x 3 1/2" 1/2" 1 1/2" 1 1/2"*

The above is a correct description.

Builder's Signature (here only) *M. W. P.* Surveyor's Signature *S. W. P.* Surveyor to Lloyd's Register of British and Foreign Shipping.

Correspondence.—State dates and initials of letters respecting this case (Reference should be made to any correspondence connected with the case)

M 14/07 - M 27/07 - M 29/07 - M 18/07 - M 14/07 - M 14/07 - M 17/07 - M 26/07 - M 27/07 - M 28/07

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? *No*

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

Have all the upper and weather decks been tested as required by the Rules (Sec. 23, par 24)? *Yes* State results of tests *Satisfactory*

Have all the gutterways been tested as required by the Rules (Sec. 23, par 25)? *Yes* State results of tests *do*

General Remarks (State quality of workmanship, &c.) *This vessel has been built in accordance with the approved plans, and otherwise in conformity with the Rules. The workmanship and materials are good.*

The Surveyor should state the Number of Report and Name of any Sister Vessel.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop *40* ft., R.Q.D. or Break *✓* ft., Bridge Dk. *✓* ft., F'castle *68.5* 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 DK STR (WS)*

Official No. *24*; Signal Letters *✓* State if Machinery is fitted aft *Yes*

How are the surfaces preserved from oxidation? Inside *Bitumastic & Portland Cement* Outside *Paint*

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system or with girders on floors.

Where fitted.	*Length. Feet.	Water Capacity. Tons.	Where fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,			Fore peak tank,		
Double bottom, under Engines and Boilers,			After peak tank,		
Double bottom, if under Engines only,			Deep tank, aft,	<i>18-0</i>	<i>120</i>
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,			Other tanks, if fitted,		

Total capacity of double-bottom *✓* (If necessary, furnish further information by sketch.)

* The wells are not to be included in the lengths of the tanks. State whether the above have been tested as required by the Rules *Yes*

Order for Special Survey No. *1026*

Date *24 Sept 07*

No. *286* in builder's yard.

Dates of Surveys held while building *1907. Sept 27, Oct 1, 2, 4, 19, 21, 28, 31, Nov 12, 20, 23, Dec 9, 10, 17, 23, 1908. Jan 15, 22, Feb 13, 18, 24, 26, 27, 28, March 5, 10, 11, 19, 23, 26, 31, April 6, 13, 16, 22, 24, 27, 29, May 1, 5, 8, 11, 12, 19, 24, 27, 29, June 2, 9, 15, 24, 26, 29, July 1, 4, 10, 13, 18, 22, 28, 31, Aug 1, 15, 24, Sept 2, 5, 15, 16, 22, 24, 26, 29, Oct 5, 8, 12, 13, 14, 15, 19, 20, 23, 26, 27, Nov 3, 7, 11, 19, 14, 16, 21, 25, 28, Dec 2, 7, 11, 21, 1909. Jan 4, 5, 11, 18, 21, 27, 30, Feb 6, 12, 22, April 5, 7, 14.*

Total No. of Visits *114*

The amount of Entry Fee *5 : 0 : 0* Special *5 : 0 : 0* Received by me *15/19*

Travelling Expenses, if any £ *15/19*

State whether the Vessel has been built under Special Survey *Yes*

I am of opinion this Vessel should be Classed *100 A.1 Hopper Dredger*

With, or without Freeboard, as condition of Class

Committee's Minute *LIVERPOOL. 30 APR 1909*

Character assigned *100 A.1 HOPPER DREDGER*

Surveyor's Signature *S. W. P.* Surveyor to Lloyd's Register of British and Foreign Shipping.

Builder's Signature (here only) *M. W. P.*

cert issued 17.5.09.