

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

IRON OR STEEL STEAMER.

State if Report is also sent on the Machinery of the Vessel *Yes*
Date of completion of Report *5th July 1909*

W.F.R. No. *24918*
Received at London Office *11/1/1909*

Survey held at *Newfrew*

Date, First Survey *30th October 1908*

Port of *Glasgow*

Last Survey *15th June 1909*

On the *Steel Twin Screw Hopper Dredger "SAND GROUSE"*

Rig *One pole mast*

ONE OR TWO DECKED VESSEL.

CLASS *A-1 Hopper dredger*

Master *-*

Year of appointment *-*

(1) As master in service of
owner of present vessel:—19
(2) As master of this
vessel:—19

TONNAGE under
Tonnage Deck *1926.83*

Do. of Poop *55.95*

Do. of Raised Or
Dk. or Break *78.17*

Do. of Bridge House *2068.95*

Do. of Houses on Deck *2068.95*

Do. of excess of Hatchways
Do. above Crown of
Engine Room *770.39*

Gross Tonnage *2068.95*

Less Crew Space

Less above Crown of
Engine Room

TONNAGE FOR FEES *2060.93*

Less Engine Room

Navigation Spaces

Net Tonnage *1290.56*

on Beam

Half Breadth (moulded) *22.50*

Depth from upper part of Keel to top of Main Deck Bms. *19.68*

Girth of Half Midship Frame (as per Rule) *39.87*

1st Number *82.05*

Length on deck from after part of stem to fore part of
stern post *278.33*

2nd Number *228.37*

Proportions—Breadths to Length *6.18*

Depths to Length—Main Deck to top of Keel *14.12*

Destined Voyage *Lagos*

Built at *Newfrew*

When built *1909* Launched *8th June 1909*

By whom built *Messrs. W. & A. Simons & Co.*

Owners *Govt. of Southern Nigeria*

Managers *-*

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

Residence *-*

Port belonging to *Glasgow*

If Surveyed while Building, Afloat, or in Dry Dock

TH on Deck as	Feet.	Inches.	BREADTH—	Feet.	Inches.	DEPTH, ACTUAL—	Feet.	Inches.	No. of Decks with Flat laid
rule.	278	4	Moulded	46	0	Top of Floors to top of Main Deck Beams	18	1 1/2	One

ons of Ship per Register, Length, *280.1* breadth, *45.2* depth, *18.1* Moulded Depth, *18* ft. *9* ins. Round of Beam, Actual *11 1/2* ins.

FRAMING.

	Inches in Ship.	Inches in Ship.	20ths in Ship.	Inches per Rule Or as Approved.	Inches per Rule Or as Approved.	20ths per Rule Or as Approved.
E, Angles, <i>7</i> or <i>8</i> Bars, for $\frac{1}{2}$ length amidships	5	3 1/2	8	5	3 1/2	8
or $\frac{1}{2}$ at each end	5	3 1/2	7	5	3 1/2	7
way of Double Bottoms at Solid Floors.						
" " at intermdt. Bkts.						
of Frames from centre to centre		24			24	
USED FRAME, Angles	3 1/2	3	8	3 1/2	3	8
FRAMING, depth of girder		23	9		23	9
S. depth and thickness of Floor Plate at mid-line for $\frac{1}{2}$ length amidships		19	8		19	8
way of Engines and Boilers		10			10	
thickness at the ends of vessel		7			7	
depth at $\frac{1}{2}$ the half breadth, as per Rule						
eight extended at the Bilges						
S & BRACKETS, in Cell Dble Bottoms						
" state if flanged (top & bottom)						
" Spacing						
GIRDER, in Double Bottom, depth and thickness						
" Angles, Top						
" " Bottom						
RDERS, number on each side & thickness						
" state if flanged (top & bottom)						
Angles						
PLATE, depth (exclusive of flange) and thickness						
Angles to Outside Plating						
" Floors						
Height of Floors at the Bilges						
OTTOM PLATING, breadth and thickness of Middle Line Strake						
thickness in Engine and Boiler space						
" Remainder in Holds						
Main and Raised Quarter Deck, Angle, Bulb Angle, Plate or Tee Bulb	7 1/2	3	9	7 1/2	3	9
les on Upper Edge						
ing <i>in way of well</i>		24			24	
ower Deck, Single Angle, Bulb	7	3	9	7	3	9
gle, Plate or Tee Bulb						
gles on Upper Edge						
acing <i>in way of well</i>		24			24	
id, Plate or Tee Bulb	18	9			18	9
gles on Upper Edge	4	3	9	4	3	9
ing		24			24	
up Deck, Angle, Bulb Angle, Plate	7	3	9	7	3	9
ee Bulb						
gles on Upper Edge						
ing		48			48	
idge or Pt. Awng. Deck, Angle, Bulb Angle, Plate, or Tee Bulb						
gles on Upper Edge						
ing						
ecastle Deck, Angle, Bulb Angle, Plate or Tee Bulb	7	3	9	7	3	9
gles on Upper Edge						
ing						
Spacing		24			24	
PILLARS, In 'tween Decks, Size and Spacing						
" " Hold						
" Quarter, 'tween Dks., " "						
" " in Hold						
WEB FRAMES, In Fore Body, No. and Spacing						
" " Brdth. & Thickness						
" No. of Side Stringers						
WEB FRAMES, In E. & B. Space, No. & Spacing						
" " Brdth. & Thickness						
WEB FRAMES, In After Body, No. and Spacing						
" " Brdth. & Thickness						
" No. of Side Stringers						
" Size of Angles on Tee Bars to Web Frames						
BRACKET PLATES to Stringers between Web Frames, Depth and Thickness						

FORGINGS AND CASTINGS.

	Inches in Ship.	Inches in Ship.	16ths in Ship.	Inches per Rule Or as Approved.	Inches per Rule Or as Approved.	20ths per Rule Or as Approved.
KEEL, Bar or Side Plates depth and thickness				Flat Plate Rule		
STEM, moulding and thickness						
STERN-POST for Rudder do. do.				10 x 4 1/2		10 x 4 1/2
" for Propeller						
MAIN PIECE of Rudder, diameter at head, do. at heel				7 3/4		7 3/4
RUDDER, how constructed <i>Forged from frame single plate</i>						
Can the Rudder be unshipped afloat? <i>Yes</i>						
KEELSONS AND STRINGERS.						
CENTRE LINE KEELSON, Vertical Plate above floors, Through Plate, or Intercoastal Plate		12	10		12	10
" Rider Plate		9	11		9	11
" Bulb Plate to Intercoastal Keelson		28	8		28	8
" Horizontal Plates on Floors <i>top of keel</i>	4	3 1/2	9	4	3 1/2	9
" Angles <i>20 x 10 x 12</i>	5	3	8	5	3	8
SIDE KEELSON, Angles	5	3	8	5	3	8
" Bulb or Plate above floors for lng.						
" Intercoastal Plate for length						
" Attached to outside plating with Angle	3	3	8	3	3	8
BILGE KEELSON, Angles	5	3	8	5	3	8
" Bulb or Plate above floors for half lng.		8	8		8	8
" Intercoastal Plate for length						
" Attached to outside plating with Angle	3	3	8	3	3	8
BILGE STRINGER Angles <i>in way of bulkhead</i>						
" Bulb Plate for <i>4 pipes well</i>						
" Intercoastal Plate for length						
" Attached to outside plating with Angle						
SIDE STRINGER Angles						
" Bulb or Intercoastal Plate for lng.						
" Attached to outside plating with Angle						

Main and Raised Quarter Deck Stringer Plate, breadth and thickness	56	11	56	11
" Angle on ditto	4 x 4	12	4 x 4	12
" Tie Plates, outside Hatchways				
" Diagonal Tie Plates on Bms., No. of Pairs				
" Main Dk* Iron or Steel for full lng.		7		7
" R. Q. Dk* Iron or Steel for full lng.		6		6
" Wood Deck, Material & thickness <i>Teak 2 1/2</i>				
Lower Deck Stringer Plate, breadth and thickness	24	8	24	8
" Angles on ditto, No.	3 1/2 x 3	8	3 1/2 x 3	8
" Tie Plates, outside Hatchways	12	7	12	7
" Deck* Material and thickness <i>P.P.</i>	1 1/2		1 1/2	
Hold Stringer Plate				
" Angles on ditto, No.				
Poop Deck Stringer Plate, breadth & thickness				
" Angle on ditto				
" Tie Plates				
" Deck, Material and thickness				
Bridge or Pt. Awning Deck Stringer Plate, breadth and thickness				
" Angle on ditto				
" Tie Plates				
" Deck, Material and thickness				
Forecastle Deck Stringer Plate, brdth & thcknss				
" Angle on ditto	3 x 3	9	3 x 3	9
" Tie Plates				
" Deck, Material and thickness <i>Teak 2 1/2</i>				

* If Iron or Steel Deck, state if whole or part, and if wood deck is laid thereon.

BULKHEADS.	Number.	In Vessel.	Per Rule.	Thickness.	STIFFENERS.				Single or Double Frames.	Height up.
					Horizontal.	Vertical.	Size.	Spacing.		
W.T. BULKHEADS	5	4	7	5 x 3 1/2	48	5 x 3 1/2	30	66	OK	
PARTITION										
LONGITUDINAL										

Are the outside Plates doubled two spaces of Frames in length? *Yes*
Are the Sluice Valves and Watertight Doors in efficient working order? *Yes*

PLATING.										RIVETING.											
STRAKES.	AS IN SHIP.					PER RULE OR AS APPROVED.					EDGES.					BUTTS.					
	AMIDSHIP.		FORWARD.		AFT.	AMIDSHIP.		FORWARD.		AFT.	Ordinary or Joggled.		RIVETS.		Double or Triple and for what Length.	RIVETS.		STRAPS.		IF LAPPED.	
	Breadth.	Thickness.	Thickness.	Thickness.		Breadth.	Thickness.	Single or Double.	Breadth of Lap.		Diam.	Spacing or to cr.	Diam.	Spacing or to cr.		Breadth.	Thickness.	Breadth.	For what Length.		
																				Inches.	Thickness.
FLAT PLATE KEEL	42	14		11	42	14	Double	54	75	3 3/4	Full										
GARBOARD OF A Strake ...	52	11		9	52	11	"	"	"	"	"	"	"	"	"	75	3 3/4	19	17	9	Full
State actual thickness in way of Double Bottom.	"	"	10	8	8	10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
B	"	"	10	8	8	10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
C	"	"	10	8	8	10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
D	"	"	10	8	8	10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
E	"	"	10	8	8	10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
F	"	"	11	9	9	11	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
G	"	"	10	8	8	10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
H	"	"	10	8	8	10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
J	"	"	10	8	8	10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
sheer K	"	40	13	10	10	40	13	"	"	"	"	"	"	"	"	"	"	16 3/4	16	9	"
L	"																				
M	"																				
N	"																				
O	"																				
P	"																				
DOUBLING OF Flat Plate Keel																					
Length and thickness of Bilges																					
Length and thickness of Sheerstrakes																					
Length and thickness of Strake below POOP SIDES																					
RAISED QUARTER DECK SIDES	7																				
BRIDGE SIDES																					
FORECASTLE SIDES	7																				
LENGTHS OF PLATING	8 frame spaces																				

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. ? *Openheart process.*

Steel used, *Steel Co. of Scotland, Glasgow, The Lanarkshire Steel Co., The Glasgow & S.W. P. & C. Co., W. Dunlop & Co.*

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

FRAMES extend in one length from *middle line, hoppers, side well side to deck* state if ordinary or joggled *Ordinary*

REVERSED FRAMES on floors and frames extend from *to upper side stringer, side alternately* state if ordinary or joggled *Ordinary*

before side of hopper, in way of hopper, all to height of upper stringer

MASTS, SPARS, &c.									
LOWER MASTS...	Material.	Total length.	DIAMETER AND THICKNESS.				No. of Plates in round.	ANGLES.	
			At Partners.	Heel.	Hounds.	Head.		Number.	Size.
Fore	<i>P. Pine</i>		<i>11 1/2</i>	<i>20 0</i>	<i>10 0</i>				
Main									
Mizen									
Bowsprit									
Topmasts, Yards and Remainder of Spars									
Rigging, Material and Size, Shrouds	<i>2 1/2 gal steel wire</i>								
Sails, <i>Q. m. stay sail</i>	<i>Suit of</i>								

ANCHORS.									
Number of Certificate.	Anchors.	WEIGHT, <i>As Shown</i>		WEIGHT OF STOCK.		TEST, PER CERTIFICATE.		Description of Anchor.	Makers.
		Cwts. qrs. lbs.	lbs.	Cwts. qrs. lbs.	lbs.	Cwts. qrs. lbs.	lbs.		
<i>62055</i>	1st Bower ..	<i>66</i>	<i>0 13</i>	<i>Stockless</i>	<i>51 13</i>	<i>0 14</i>	<i>45</i>	<i>Widened Head</i>	<i>Hugay Hens</i>
<i>62056</i>	2nd ..	<i>65</i>	<i>0 14</i>		<i>51 10</i>	<i>0 14</i>	<i>45</i>	"	"
<i>62057</i>	3rd ..	<i>65</i>	<i>0 19</i>		<i>51 7</i>	<i>0 0</i>	<i>35</i>	"	"
<i>62058</i>	Collection weights	<i>45</i>	<i>0 0</i>		<i>39 7</i>	<i>0 14</i>	<i>35</i>	"	"
<i>62059</i>	Stream	<i>45</i>	<i>0 0</i>		<i>39 7</i>	<i>0 14</i>	<i>35</i>	"	"
<i>62060</i>	Kedge	<i>35</i>	<i>0 17</i>		<i>33 2</i>	<i>0 0</i>	<i>25</i>	"	"
<i>62061</i>		<i>35</i>	<i>0 21</i>		<i>33 2</i>	<i>0 0</i>	<i>25</i>	"	"
<i>62062</i>		<i>35</i>	<i>0 22</i>		<i>33 2</i>	<i>0 0</i>	<i>25</i>	"	"
<i>62063</i>		<i>35</i>	<i>0 23</i>		<i>33 2</i>	<i>0 0</i>	<i>25</i>	"	"
<i>62064</i>		<i>35</i>	<i>0 23</i>		<i>33 2</i>	<i>0 0</i>	<i>25</i>	"	"

HAWERS AND WARPS.									
Number of Certificate.	Length and size supplied.	Status per Certificate.	WEIGHT OF CHAIN CABLE.		Length and size per Table 22.	Description.	Makers of Cables.	Where and when tested and Superintendent.	Material.
			Supplied.	Per Table 22.					
<i>42844</i>	<i>120</i>	<i>1 1/2</i>	<i>213 2 6</i>	<i>213 2 6</i>	<i>120</i>	<i>1 1/2</i>	<i>Hugay Hens</i>	<i>27/10/09 H. Green</i>	<i>Iron</i>
<i>42845</i>	<i>120</i>	<i>1 1/2</i>	<i>213 2 6</i>	<i>213 2 6</i>	<i>120</i>	<i>1 1/2</i>	"	"	"
<i>42846</i>	<i>120</i>	<i>1 1/2</i>	<i>213 2 6</i>	<i>213 2 6</i>	<i>120</i>	<i>1 1/2</i>	"	"	"
<i>42847</i>	<i>120</i>	<i>1 1/2</i>	<i>213 2 6</i>	<i>213 2 6</i>	<i>120</i>	<i>1 1/2</i>	"	"	"
<i>42848</i>	<i>120</i>	<i>1 1/2</i>	<i>213 2 6</i>	<i>213 2 6</i>	<i>120</i>	<i>1 1/2</i>	"	"	"
<i>42849</i>	<i>120</i>	<i>1 1/2</i>	<i>213 2 6</i>	<i>213 2 6</i>	<i>120</i>	<i>1 1/2</i>	"	"	"
<i>42850</i>	<i>120</i>	<i>1 1/2</i>	<i>213 2 6</i>	<i>213 2 6</i>	<i>120</i>	<i>1 1/2</i>	"	"	"
<i>42851</i>	<i>120</i>	<i>1 1/2</i>	<i>213 2 6</i>	<i>213 2 6</i>	<i>120</i>	<i>1 1/2</i>	"	"	"
<i>42852</i>	<i>120</i>	<i>1 1/2</i>	<i>213 2 6</i>	<i>213 2 6</i>	<i>120</i>	<i>1 1/2</i>	"	"	"

Boats *Two ships boats none other*

Pumps, Number *14 (including 8 to hoppers)* Diameter of Barrel *4 1/2* State whether they are in efficient working order *yes*

Windlasses are by *Clarke Chapman & Co.* Capstans are by *Clarke Chapman & Co.*

Engine Room Skylights. How constructed? *Leak proof steel casing*

What arrangements for deadlights in bad weather? *Leak proof with brass guards over glass*

Coal Bunker Openings. How constructed? *Leak proof* How are lids secured? *By one locking* Height above deck? *7 ft. 6 in.*

Number of Scuppers, and number and dimensions of Freeing Ports, &c. *2 Scuppers & 4 Freeing Ports 2 1/2 x 1 1/2 each side*

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

Cargo Hatchways. How formed? *Plates & angles* Hatches. If strong and efficient? *yes 2 1/2 ft. 6 in.*

State size No. 1 Hatch (Forward) *14' 0" x 4' 0"* No. 2 Hatch *14' 0" x 3' 6"* No. 3 Hatch *14' 0" x 3' 6"* No. 4 Hatch *14' 0" x 3' 6"*

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

No. of Breasthooks *Four* No. of Crutches *Keyp floor*

Bulwarks, height above deck and description *3' 3" steel plates, fore & aft, Main Rail and Stays, material and size Rail 7 x 3, stays 1 1/2 x 3/4*

The above is a correct description. *Yes*

Builder's Signature *J. D. Mares* Surveyor's Signature *J. D. Mares*

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 2879/08 *W.F.H. 7 JUL 1909* *6 21/12/08*

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* 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*

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 *Satisfactory*

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

This vessel has been built in accordance with the approved plans, the Secretary's letters of above dates and in general conformity to the Rules for the Class contemplated.

3 Plans

4 Reports on ship fittings & castings.

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

PARTICULARS FOR RECORD in the REGISTER BOOK. Length of Poop *28 1/2* ft., R.Q.D. or Break *28 1/2* ft., Bridge Dk. *29* 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 STK (all part cast steel)*

Official No. *1511*; Signal Letters *None* State if Machinery is fitted aft *yes*

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

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

Where fitted.	*Length.	Water Capacity.	Where fitted.	*Length.	Water Capacity.
	Feet.	Tons.		Feet.	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,	✓	
Double bottom, if under Boilers only,	✓		Deep tank, forward	6 feet 6 in.	87
Double bottom, forward,	✓		Other tanks, if fitted,		

Total capacity of double bottom *6 1/2 tons* (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. *4351*

Date *16-10-08*

No. *485* in builder's yard

Dates of Surveys held while building *1908: Oct. 30, Nov. 3, 6, 10, 12, 16, 20, 25, 30, Dec. 2, 9, 14, 22, 31. 1909: Jan. 14, 19, 20, 25, Feb. 2, 9, 16, 23, 26, Mar. 4, 11, 16, 25, 28, April 8, 13, 16, 20, 24, 30, May 3, 4, 10, 13, 14, 21, 28, June 4, 7, 9, 22, 28.*

Total No. of Visits *46*

The amount of Entry Fee *5* : : : Fees applied for, *6/4/1909*

Special *246* : : : Received by me, *J. D. Mares*

Travelling Expenses, if any £ : : : *8.7/1909*

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

I am of opinion this Vessel should be Classed *A-1 Hopper dredger*

With, or without Freeboard, as condition of Class *Without*

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

Committee's Minute *GLASGOW 6 JUL 1909*

Character assigned *+ A1 (Steel)*

Hopper dredger

6.09

Lloyds Assoc

+ LMC 7.09.

Mares