

REPORT ON MACHINERY

No. 30290
HU 13 DEC 1917

Received at London Office
 Date of writing Report 19 When handed in at Local Office 4-12-17 Port of Hull
 No. in Survey held at Hull Date, First Survey 28-3-17 Last Survey 27-11-1917
 Reg. Book. on the Hull steam trawler "John Brooker" (Number of Visits 43) Gross 269
 Master Built at Beverley By whom built Cook, Wilson & Lummell When built 1917
 Engines made at Hull By whom made Amos & Smith L^d No. 2921. when made 1917-11.
 Boilers made at Hull By whom made Amos & Smith L^d No. 2919. when made 1917
 Registered Horse Power Owners British Admiralty Port belonging to
 Nom. Horse Power as per Section 28 83 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Triple expansion No. of Cylinders Three No. of Cranks 3
 Dia. of Cylinders 12 1/2" 21 1/2" 35 1/4" Length of Stroke 24" Revs. per minute 115 Dia. of Screw shaft as per rule 7.42" Material of screw shaft Iron
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight
 in the propeller boss Yes If the liner is in more than one length are the joints burned If the liner does not fit tightly at the part
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive If two
 liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 33"
 Dia. of Tunnel shaft as per rule 6.44" 6.63" Dia. of Crank shaft journals as per rule 6.97" 7 1/2" Dia. of Crank pin 7 1/4" Size of Crank webs 14 1/8" 4 1/2" Dia. of thrust shaft under
 collars 7 1/4" Dia. of screw 9.0" Pitch of Screw 11.3" No. of Blades 4 State whether moveable no Total surface 31.5 sq ft
 No. of Feed pumps one Diameter of ditto 2 3/4" Stroke 12" Can one be overhauled while the other is at work
 No. of Bilge pumps one Diameter of ditto 2 3/4" Stroke 12" Can one be overhauled while the other is at work
 No. of Donkey Engines one & 2 ejectors Sizes of Pumps 6 1/4" 4 1/4" 6" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Two 2" diam. In Holds, &c. one 2" diam. in each compartment
 all suction also connected to ejector.
 No. of Bilge Injections one size 3" Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size 2" ejector
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible none
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line Above
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes
 What pipes are carried through the bunkers Forward suction How are they protected strong casings
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 Dates of examination of completion of fitting of Sea Connections 4.7.17 of Stern Tube 4.7.17 Screw shaft and Propeller 20.6.17
 Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record S.) Manufacturers of Steel James Stewart & Lloyds L^d
 Total Heating Surface of Boilers 1450 sq ft Is Forced Draft fitted no No. and Description of Boilers one single ended
 Working Pressure 200 Tested by hydraulic pressure to 400 Date of test 22.8.17 No. of Certificate 3231 P.L.S.
 Can each boiler be worked separately Area of fire grate in each boiler 48 sq ft No. and Description of Safety Valves to
 each boiler Two spring loaded Area of each valve 4.9 sq in Pressure to which they are adjusted 205 Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 8" Mean dia. of boilers 13.0" Length 10.6" Material of shell plates Steel
 Thickness 1 1/4" Range of tensile strength 28.32 tons Are the shell plates welded or flanged no Descrip. of riveting: cir. seams Double
 long. seams S.P.S.B. Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 7.71" Lap of plates or width of butt straps 17 3/8"
 Per centages of strength of longitudinal joint rivets 91.1 plate 84.6 Working pressure of shell by rules 200 Size of manhole in shell 16" 12"
 Size of compensating ring 30" 40" 1 1/4" No. and Description of Furnaces in each boiler 3 plain Material S. Outside diameter 3' 2 1/8"
 Length of plain part top 7.8" bottom 7.3" Thickness of plates crown 13/16" Description of longitudinal joint Welded No. of strengthening rings
 Working pressure of furnace by the rules 217 Combustion chamber plates: Material S. Thickness: Sides 1/16" Back 1/16" Top 1/16" Bottom 1/16"
 Pitch of stays to ditto: Sides 8" x 10" Back 8 3/4" x 9" Top 8" x 9 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 200
 Material of stays S. Diameter at smallest part 2.4" Area supported by each stay 97 sq in Working pressure by rules 222 End plates in steam space
 Material S. Thickness 1 1/8" Pitch of stays 16 1/2" 17 1/2" How are stays secured D.P.T. Working pressure by rules 207 Material of stays S.
 Diameter at smallest part 6.10 Area supported by each stay 289 sq in Working pressure by rules 219 Material of Front plates at bottom S.
 Thickness 1 1/4" Material of Lower back plate S. Thickness 1 5/16" Greatest pitch of stays 14 1/4" x 9" Working pressure of plate by rules 203
 Diameter of tubes 3 1/2" Pitch of tubes 4 3/4" Material of tube plates S. Thickness: Front 1 1/4" Back 2 3/8" Mean pitch of stays 10"
 Pitch across wide water spaces 14" Working pressures by rules 202 Girders to Chamber tops: Material S. Depth and
 thickness of girder at centre 9 1/2" x 1 3/4" Length as per rule 34 Distance apart 9 1/4" Number and pitch of stays in each 3-8"
 Working pressure by rules 206 Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked
 separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet
 holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness
 If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed
 Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:—

Four top end bolts and nuts, two bottom end bolts and nuts, two main bearing bolts and nuts, one set of coupling bolts and nuts, one set of air feed and bilge pump valves, one safety valve spring, one main and one donkey check valve, one set of piston studs and nuts, four condenser tubes, three boiler tubes, one escape valve spring each size, two donkey pump suction and delivery valves, one impeller and shaft for circulating pump, a quantity of bolts and nuts and iron of various sizes.

The foregoing is a correct description,

FOR AMOS & SMITH LTD.

J. H. Hackett

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1917: Mar 28, Apr 2, 3, 23, May 5, 12, 14, 23, 25, Jun 2, 4, 8, 9, 13, 15, 16, 20, 25, Jul 2, 3, 4, 10, 11, 13, 16, 19, 25, 31
During erection on board vessel - - - Aug 13, 17, 22, 24, 27, 29, 31, Sep 1, 10, 14, 18, 20, Nov 6, 16, 22, 24, 27.
Total No. of visits 45

Is the approved plan of main boiler forwarded herewith

Yes

Dates of Examination of principal parts—Cylinders 19.7.17. Slides 19.7.17. Covers 19.7.17. Pistons 16.7.17. Rods 16.7.17. Connecting rods 16.7.17. Crank shaft 10.7.17. Thrust shaft 16.7.17. Tunnel shafts ✓ Screw shaft 20.6.17. Propeller 20.6.17. Stern tube 4.7.17. Steam pipes tested 14.9.17. Engine and boiler seatings 4.7.17. Engines holding down bolts 20.9.17. Completion of pumping arrangements 28.11.17. Boilers fixed 20.9.17. Engines tried under steam 24.11.17. Main boiler safety valves adjusted 24.11.17. Thickness of adjusting washers P. $\frac{5}{16}$ S. $\frac{3}{32}$. Material of Crank shaft S. Identification Mark on Do. 1827 G.A. Material of Thrust shaft Iron Identification Mark on Do. 1795 F.L.S. Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts Iron Identification Marks on Do. 1821 G.A. Material of Steam Pipes S.D.C. Test pressure 400 lbs.

Is an installation fitted for burning oil fuel

No

Is the flash point of the oil to be used over 150°F.

✓

Have the requirements of Section 49 of the Rules been complied with

Yes

Is this machinery duplicate of a previous case

Yes

If so, state name of vessel

"James Berry"

General Remarks

(State quality of workmanship, opinions as to class, &c.)

The machinery of this vessel

has been constructed under special survey in accordance with the approved plans and the rules of this Society, the material and workmanship are good, the Boiler and steam pipes have been tested as above and found sound and tight. The machinery has been properly fitted and secured on board the vessel and on completion tested under full power for two hours as required by the Admiralty and found satisfactory. The safety valves have been adjusted under steam and tested for accumulation which did not exceed 208 lbs.

In our opinion the vessel is eligible for the record * L.M.C. 11.17.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 11.17.

The amount of Entry Fee £ 1 0 0 When applied for, 12/12/17
Special £ 24 18 0
Donkey Boiler Fee £ - - - When received, 8-1-18
Travelling Expenses (if any) £ - 2 - 5-1-18

Committee's Minute

TUE. 18 DEC. 1917

Assigned

L.M.C. 11.17

Frank A. Stanger Geo. Allan
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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