

REPORT ON MACHINERY.

No. 19285

Port of Hull

WED. 14 AUG 1907

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No. in Survey held at Hull & Selby Date, first Survey Apr 6th Last Survey July 19th 1907
 Reg. Book. 4 on the Steam Drifter "Fraserburgh" (Number of Visits 22)
 Master Selby Built at Selby By whom built Cochrane & Sons Tons { Gross 83
 Engines made at Hull By whom made Amos & Smith Net 24 When built 1907
 Boilers made at do By whom made do when made 1907
 Registered Horse Power 32 Owners British Coal S. F. Co Ltd Port belonging to Hull
 Nom. Horse Power as per Section 28 32 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Compound No. of Cylinders 2 No. of Cranks 2
 Dia. of Cylinders 11 1/4", 25" Length of Stroke 16" Revs. per minute 150 Dia. of Screw shaft as per rule 5.3" 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 buried yes 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 yes If two liners are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 26"
 Dia. of Tunnel shaft as per rule 4.7" Dia. of Crank shaft journals as per rule 5 1/4" Dia. of Crank pin 5 1/4" Size of Crank webs 10 1/2 x 3 1/2" Dia. of thrust shaft under collars 5 1/4" Dia. of screw 6.6" Pitch of Screw 7.6" No. of Blades 4 State whether moveable No Total surface 15 sq. ft.
 No. of Feed pumps 1 Diameter of ditto 2 1/4" Stroke 8" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 1 Diameter of ditto 2 1/4" Stroke 8" Can one be overhauled while the other is at work yes
 No. of Donkey Engines One Sizes of Pumps 5 x 2 1/2 x 5" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room One 2" dia. In Holds, &c. One 2" dia.
Ejector suction from hold & engine room bilges & discharge overboard.
 No. of Bilge Injections 1 sizes 2 1/2" Connected to condenser, or to circulating pump lump 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 Hold suction How are they protected Wood casing
 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 27.5.07 of Stern Tube 27.5.07 Screw shaft and Propeller 27.5.07
 Is the Screw Shaft Tunnel watertight None Is it fitted with a watertight door yes worked from yes

BOILERS, &c.—(Letter for record (5)) Manufacturers of Steel Wm. Beardmore & Co.
 Total Heating Surface of Boilers 6304 sq. ft. Forced Draft fitted No No. and Description of Boilers One S.E. by O. Mull.
 Working Pressure 140 lbs Tested by hydraulic pressure to 280 lbs Date of test 2.7.07 No. of Certificate 1572
 Can each boiler be worked separately yes Area of fire grate in each boiler 27 1/2 sq. ft. No. and Description of Safety Valves to each boiler Two spring Area of each valve 3.9" Pressure to which they are adjusted 145 lbs Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 6 1/2" Mean dia. of boilers 9.6" Length 9.0" Material of shell plates Steel
 Thickness 11/16" Range of tensile strength 28-32 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams SR Lap
 long. seams AB.S.R. Rivet Diameter of rivet holes in long. seams 29/32" Pitch of rivets 4.77" Lap of plates or width of butt straps 9 1/2"
 Per centages of strength of longitudinal joint rivets 87.5 Working pressure of shell by rules 140 lbs Size of manhole in shell 16 x 12"
 Size of compensating ring 3.7 1/2 dia x 11/16" No. and Description of Furnaces in each boiler Two plain Material Steel Outside diameter 34 1/4"
 Length of plain part top 5.10 3/4" crown 5/8" Description of longitudinal joint welded No. of strengthening rings yes
 bottom 5.4 1/4" Thickness of plates bottom 5/8" Working pressure of furnace by the rules 170 lbs Combustion chamber plates: Material Steel Thickness: Sides 5/8" Back 19/32" Top 5/8" Bottom 5/8"
 Pitch of stays to ditto: Sides 9 1/2 x 7 1/2" Back 8 3/4 x 8 3/4" Top 10 1/2 x 7" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 159 lbs
 Material of stays Steel Diameter at smallest part 1 3/8" Area supported by each stay 76.5" Working pressure by rules 155 lbs End plates in steam space:
 Material Steel Thickness 13/16" Pitch of stays 16 1/2 x 10 1/2" How are stays secured S.N.+W. Working pressure by rules 163 lbs Material of stays Steel
 Area at smallest part 3.43 Area supported by each stay 173.25" Working pressure by rules 197 Material of Front plates at bottom Steel
 Thickness 13/16" Material of Lower back plate Steel Thickness 13/16" Greatest pitch of stays 14" Working pressure of plate by rules 140 lbs
 Diameter of tubes 3 1/4" Pitch of tubes 4 1/2 x 4 1/2" Material of tube plates Steel Thickness: Front 13/16" Back 11/16" Mean pitch of stays 9"
 Pitch across wide water spaces 13 1/2" Working pressures by rules 148 lbs Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 8 x 1 1/2" Length as per rule 2-2" Distance apart 10 1/2" Number and pitch of stays in each 20 y"
 Working pressure by rules 167 lbs Superheater or Steam chest; how connected to boiler Riveted can the superheater be shut off and the boiler worked separately No Diameter 2.5" Length 2.0" Thickness of shell plates 1/2" Material Steel Description of longitudinal joint S.R. Lap Diam. of rivet holes 29/32" Pitch of rivets 2 1/8" Working pressure of shell by rules 208 Diameter of flue yes Material of flue plates yes Thickness yes
 If stiffened with rings yes Distance between rings yes Working pressure by rules yes End plates: Thickness 3/4" How stayed Two 2" stays & flanged
 Working pressure of end plates 140 lbs Area of safety valves to superheater yes Are they fitted with easing gear yes

