

REPORT ON MACHINERY.

Port of Hull

TUES 3 NOV 1903

Received at London Office

No. in Survey held at Hull Date, first Survey Oct. 23rd Last Survey 31st Oct. 1903
 Reg. Book. on the "S.S. Earn" (Number of Visits 4)
 Master Built at Hull By whom built G. Cooper When built 1903
 Engines made at Yarmouth By whom made Crabtree Ltd when made 1903
 Boilers made at Milford By whom made John Fraser & Son when made
 Registered Horse Power 7 Owners Simpson & Farquhar Port belonging to Banff
 Nom. Horse Power as per Section 28 Is Refrigerating Machinery fitted Is Electric Light fitted

ENGINES, &c.—Description of Engines

No. of Cylinders

No. of Cranks

Dia. of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft ^{as per rule} Material of screw shaft _{as fitted}
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Is the after end of the liner made water tight
 in the propeller boss 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
 Dia. of Tunnel shaft ^{as per rule} Dia. of Crank shaft journals ^{as per rule} Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under
 collars Dia. of screw Pitch of screw No. of blades State whether moveable Total surface
 No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work
 No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room In Holds, &c.

No. of bilge injections sizes Connected to condenser, or to circulating pump Is a separate donkey suction fitted in Engine room & size
 Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible
 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 How are they protected
 Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times
 Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock Before launching Is the screw shaft tunnel watertight
 Is it fitted with a watertight door worked from

BOILERS, &c.—

(Letter for record)

Total Heating Surface of Boilers

Is forced draft fitted

No. and Description of Boilers Working Pressure Tested by hydraulic pressure to
 Date of test Can each boiler be worked separately Area of fire grate in each boiler No. and Description of safety valves to
 each boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear
 Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates
 Thickness Range of tensile strength Are they welded or flanged Descrip. of riveting: cir. seams long. seams
 Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps
 Per centages of strength of longitudinal joint ^{rivets} Working pressure of shell by rules Size of manhole in shell
 Size of compensating ring ^{plate} No. and Description of Furnaces in each boiler Material Outside diameter
 Length of plain part ^{top} Thickness of plates ^{crown} Description of longitudinal joint No. of strengthening rings
 Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom
 Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules
 Material of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space:
 Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays
 Diameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom
 Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules
 Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays
 Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and
 thickness of girder at centre Length as per rule Distance apart Number and pitch of Stays in each
 Working pressure by rules 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



