

# REPORT ON MACHINERY.

No. 29103

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No. in Survey held at Hull Date, First Survey 16-6-15 Last Survey 8-1-16 19  
 Rep. Book. 42 Supr on the steel screw trawler *Gavina* (No 1098) (Number of Visits 52) Tons { Gross 289  
 Master Built at *Leiby* By whom built *Cochrane Bros Ltd* when made 1916-1  
 Engines made at Hull By whom made *C. D. Holmes & Co Ltd* when made 1916-1  
 Boilers made at Hull By whom made *C. D. Holmes & Co Ltd* when made 1916-1  
 Registered Horse Power Owners *J. Mann & Co Ltd* Port belonging to *Hleetwood*  
 Nom. Horse Power as per Section 28 84 Is Refrigerating Machinery fitted for cargo purposes *no* Is Electric Light fitted *yes*

ENGINES, &c.—Description of Engines *Triple Expansion* No. of Cylinders *Three* No. of Cranks *3*  
 Dia. of Cylinders *13"-23"-37"* Length of Stroke *24"* Revs. per minute *7.64* Dia. of Screw shaft as per rule *7.64"* 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 *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 *35 1/2"*  
 Dia. of Tunnel shaft as per rule *6.85"* Dia. of Crank shaft journals as per rule *7.19"* Dia. of Crank pin *7 1/2"* Size of Crank web *4 1/2" x 4 1/2"* Dia. of thrust shaft under  
 collars *7 1/2"* Dia. of screw *9'-3"* Pitch of Screw *11'-0"* No. of Blades *4* State whether moveable *no* Total surface *33 #*  
 No. of Feed pumps *one* Diameter of ditto *2 3/4"* Stroke *14 1/4"* Can one be overhauled while the other is at work *yes*  
 No. of Bilge pumps *one* Diameter of ditto *2 3/4"* Stroke *14 1/4"* Can one be overhauled while the other is at work *yes*  
 No. of Donkey Engines *one* Sizes of Pumps *6" x 4 1/4" x 6" dup* 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* sizes *3 1/2"* Connected to condenser, or to circulating pump *yes* Is a separate Donkey Suction fitted in Engine room & size *2 1/2" equal*  
 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 *no*  
 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 wooden 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: *15-7-15* of Stern Tube *15-7-15* Screw shaft and Propeller *15-7-15*

BOILERS, &c.—(Letter for record. S) Manufacturers of Steel *J. Corbille & Sons*

Total Heating Surface of Boilers *1370 #* Is Forced Draft fitted *no* No. and Description of Boilers *one single ended*  
 Working Pressure *200 lbs* Tested by hydraulic pressure to *400 lbs* Date of test *13-11-15* No. of Certificate *3112*  
 Can each boiler be worked separately *yes* Area of fire grate in each boiler *45.6 #* No. and Description of Safety Valves to  
 each boiler *two spring loaded* Area of each valve *4.9 #* Pressure to which they are adjusted *205 lbs* Are they fitted with easing gear *yes*  
 Smallest distance between boilers *8"* and bunkers *8"* Mean dia. of boilers *162"* Length *11'-0"* Material of shell plates *steel*  
 Thickness *1/32"* Range of tensile strength *28-32 tons* Are the shell plates welded or flanged *no* Descrip. of riveting: cir. seams *double*  
 long. seams *TRD.B.1* Diameter of rivet holes in long. seams *1 1/32"* Pitch of rivets *8 3/8"* Lap of plates or width of butt straps *16 5/8"*  
 Per centages of strength of longitudinal joint rivets *85.4* Working pressure of shell by rules *203 lbs* Size of manhole in shell *16" x 12"*  
 Size of compensating ring *7" x 1 1/32"* No. and Description of Furnaces in each boiler *3 plain* Material *steel* Outside diameter *40"*  
 Length of plain part *79 1/4"* Thickness of plates *2 13/16"* Description of longitudinal joint *welded* No. of strengthening rings *23 1/2"*  
 Working pressure of furnace by the rules *205* Combustion chamber plates: Material *steel* Thickness: Sides *23/32"* Back *23/32"* Top *3/4"* Bottom *23/32"*  
 Pitch of stays to ditto: Sides *10" x 8 1/2"* Back *10 1/2" x 8"* Top *11" x 8 1/2"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *216* End plates in steam space:  
 Material of stays *steel* Diameter at smallest part *2.4"* Area supported by each stay *100 #* Working pressure by rules *200* Material of stays *steel*  
 Material *steel* Thickness *1 3/16"* Pitch of stays *18 1/2" x 8"* How are stays secured *7.7.7.7* Working pressure by rules *234* Material of Front plates at bottom *steel*  
 Diameter at smallest part *7.5"* Area supported by each stay *333 #* Working pressure by rules *207* Working pressure of plate by rules *207*  
 Thickness *15/16"* Material of Lower back plate *steel* Thickness *29/32"* Greatest pitch of stays *14 1/2" x 8"* Working pressure of plate by rules *207*  
 Diameter of tubes *3 1/2"* Pitch of tubes *5 1/2" x 5"* Material of tube plates *steel* Thickness: Front *15/16"* Back *7/8"* Mean pitch of stays *10 1/2"*  
 Pitch across wide water spaces *14"* Working pressures by rules *249* Girders to Chamber tops: Material *steel* Depth and  
 thickness of girder at centre *12" x 1 3/4"* Length as per rule *38 7/8"* Distance apart *11"* Number and pitch of stays in each *three 8 1/2"*  
 Working pressure by rules *207* Superheater or Steam chest; how connected to boiler *yes* Can the superheater be shut off, and the boiler worked  
 separately *yes* Diameter *yes* Length *yes* Thickness of shell-plates *yes* Material *yes* Description of longitudinal joint *yes* Diam. of rivet  
 holes *yes* Pitch of rivets *yes* Working pressure of shell by rules *yes* 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 *yes* How stayed *yes*  
 Working pressure of end plates *yes* Area of safety valves to superheater *yes* Are they fitted with easing gear *yes*

If not, state whether, and when, one will be sent? In a Report also sent on the hull of the ship?

