

# REPORT ON MACHINERY.

No. 18719

Port of *Hull*

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No. in Survey held at *Selby & Hull* Date, first Survey *Aug 22<sup>nd</sup> '06* Last Survey *Jan. 29<sup>th</sup> 1907.*  
 Ref. Book. *B 58* on the *Screw Trawler "Argonaut"* (Number of Visits *25*)  
 Master *Selby* Built at *Selby* By whom built *Bochraane Sons* When built *1907*  
 Engines made at *Hull* By whom made *Charles D. Holmes & Co.* when made *1907*  
 Boilers made at *do* By whom made *do* when made *1907*  
 Registered Horse Power *66.4* Owners *Consolidated S. F. Ho. Linn -* Port belonging to *Gimby*  
 Nom. Horse Power as per Section 28 *66.4* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *No*

**ENGINES, &c.**—Description of Engines *Triple* No. of Cylinders *3* No. of Cranks *3*  
 Dia. of Cylinders *12", 21", 34"* Length of Stroke *24"* Revs. per minute *110* Dia. of Screw shaft as per rule *7 7/8"* 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 *✓* If two liners are fitted, is the shaft lapped or protected between the liners *✓* Length of stern bush *31"*  
 Dia. of Tunnel shaft as per rule *6 3/4"* Dia. of Crank shaft journals as per rule *6 6/8"* Dia. of Crank pin *6 7/8"* Size of Crank webs *13 1/2" x 4 5/8"* of thrust shaft under collars *6 7/8"* Dia. of screw *8 1/2"* Pitch of Screw *10 1/2"* No. of Blades *4* State whether moveable *No* Total surface *27.5 sq. ft.*  
 No. of Feed pumps *1* Diameter of ditto *2 1/8"* Stroke *24"* Can one be overhauled while the other is at work *✓*  
 No. of Bilge pumps *1* Diameter of ditto *2 1/8"* Stroke *24"* Can one be overhauled while the other is at work *✓*  
 No. of Donkey Engines *One* Sizes of Pumps *2 3/4" x 5"* No. and size of Suctions connected to both Bilge and Donkey pumps  
 In Engine Room *Two 2" dia.* In Holds, &c. *Three 2" dia.*  
 Ejector suction from all bilges & discharge on ducts. *✓*  
 No. of Bilge Injections *1* sizes *3"* Connected to condenser, or to circulating pump *pumps* as a separate Donkey Suction fitted in Engine room & size *2 1/2" 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 *21.9.06* of Stern Tube *21.9.06* Screw shaft and Propeller *21.9.06*  
 Is the Screw Shaft Tunnel watertight *None* Is it fitted with a watertight door *✓* worked from *✓*

**BOILERS, &c.**—(Letter for record. *(5)*) Manufacturers of Steel *Stewart's & Lloyd's Ltd.*  
 Total Heating Surface of Boilers *1096 sq. ft.* Forced Draft fitted *No* No. and Description of Boilers *One S. E. Cyfr. Mult.*  
 Working Pressure *180 lbs* Tested by hydraulic pressure to *360 lbs* Date of test *17.12.06* No. of Certificate *1536*  
 Can each boiler be worked separately *✓* Area of fire grate in each boiler *32.8 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 *185 lbs* Are they fitted with easing gear *yes*  
 Smallest distance between boilers or uptakes and bunkers or woodwork *6 1/2"* Ext. Mean dia. of boilers *12-6"* Length *10-0"* Material of shell plates *Steel*  
 Thickness *1 1/2"* Range of tensile strength *28 1/2 - 32* Are the shell plates welded or flanged *No* Descrip. of riveting: cir. seams *DR lap*  
 long. seams *DR 5 Rivets* Diameter of rivet holes in long. seams *1 1/2"* Pitch of rivets *7"* Lap of plates or width of butt straps *15"*  
 Per centages of strength of longitudinal joint rivets *86.5* Working pressure of shell by rules *182 lbs* Size of manhole in shell *17" x 12"*  
 Size of compensating ring *7 1/2" x 1 1/2"* No. and Description of Furnaces in each boiler *Two plain* Material *Steel* Outside diameter *3-7"*  
 Length of plain part top *5-10"* bottom *5-3 1/2"* Thickness of plates crown *4 1/2"* Description of longitudinal joint *Welded* No. of strengthening rings *✓*  
 Working pressure of furnace by the rules *184* Combustion chamber plates: Material *Steel* Thickness: Sides *2 3/32"* Back *1 1/16"* Top *2 3/32"* Bottom *2 3/32"*  
 Pitch of stays to ditto: Sides *9" x 9"* Back *9" x 8 3/4"* Top *8 3/4" x 8 1/2"* stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *208*  
 Material of stays *Steel* Diameter at smallest part *1 5/8"* Area supported by each stay *81"* Working pressure by rules *230* End plates in steam space: *+ screwed into end plates*  
 Material *Steel* Thickness *1 3/32"* Pitch of stays *17 1/2" x 17 1/2"* How are stays secured *on 1 w.* Working pressure by rules *185* Material of stays *Steel*  
 Diameter at smallest part *2 1/16"* Area supported by each stay *306"* Working pressure by rules *202* Material of Front plates at bottom *Steel*  
 Thickness *7/8"* Material of Lower back plate *Steel* Thickness *15/16"* Greatest pitch of stays *15" x 9"* Working pressure of plate by rules *192*  
 Diameter of tubes *3 1/4"* Pitch of tubes *4 3/4" x 4 5/8"* Material of tube plates *Steel* Thickness: Front *7/8"* Back *7/8"* Mean pitch of stays *9 3/8"*  
 Pitch across wide water spaces *17 1/2"* Working pressures by rules *180 lbs* Girders to Chamber tops: Material *Steel* Depth and thickness of girder at centre *9" x 1 3/4"* Length as per rule *2-8"* Distance apart *8 3/4"* Number and pitch of stays in each *3 @ 8 1/2"*  
 Working pressure by rules *213* Superheater or Steam chest; how connected to boiler *None* 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 *✓*

