

REPORT ON MACHINERY.

Port of *Hull*

FRI. MAR 9 1900

Received at London Office.

18

Survey held at *Hull* Date, first Survey *Aug 31/99* Last Survey *Feb. 1st 1900*
 on the *Steam Trawler "Swallow"* (Number of Visits *18*)
 Built at *Hull* By whom built *Carlisle & Co. L^{td}* Tons { Gross *200*
 { Net *72*
 When built *1900*
 Made at *Hull* By whom made *Carlisle & Co. L^{td}* when made *1900*
 Made at *Hull* By whom made *Carlisle & Co. L^{td}* when made *1900*
 Indicated Horse Power *62* Owners *Pioneer Stevedoring Co. L^{td}* Port belonging to *Guinsby*
 Is Refrigerating Machinery fitted *No* Is Electric Light fitted *No*

ENGINES, &c.—Description of Engines *Triple Compound* No. of Cylinders *Three* No. of Cranks *3*
 of Cylinders *10 1/2, 20, 32* Length of Stroke *23* Revs. per minute *6.339* Dia. of Screw shaft *6 1/2* Lgth. of stern bush *27 1/2*
 Tunnel shaft *6 3/8* Dia. of Crank shaft journals *6 1/2* Dia. of Crank pin *6 1/2* Size of Crank webs *6 1/2 x 4 1/2* Dia. of thrust shaft under
 Dia. of screw *8 x 2* Pitch of screw *11 x 0* No. of blades *4* State whether moveable *No* Total surface *24 sq*
 Feed pumps *one* Diameter of ditto *2 1/2* Stroke *10* Can one be overhauled while the other is at work *✓*
 Bilge pumps *one* Diameter of ditto *2 1/2* Stroke *10* Can one be overhauled while the other is at work *✓*
 Donkey Engines *one* Sizes of Pumps *2 1/2 x 5 x 5* No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room *Two 1 1/2* In Holds, &c. *One 2" to slush well, and*
one 2" to forward bilge
 Bilge injections *one* sizes *3 1/2* Connected to condenser, *Cond* Is a separate donkey suction fitted in Engine room & size *2 1/2 x 5 x 5*
 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 *✓*
 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*
 Are pipes carried through the bunkers *Slushwell 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*
 Were stern tube, propeller, screw shaft, and all connections examined in dry dock *now run* Is the screw shaft tunnel watertight *✓*
 Is it fitted with a watertight door *✓* worked from *✓*

BOILERS, &c.—(Letter for record *S*) Total Heating Surface of Boilers *1050 sq* Is forced draft fitted *No*
 and Description of Boilers *1 cylindrical multitubular* Working Pressure *200* Tested by hydraulic pressure to *400*
 of test *27-1-00* Can each boiler be worked separately *✓* Area of fire grate in each boiler *34.3* No. and Description of safety valves to
 boiler *2 Spring loaded* Area of each valve *3.140* Pressure to which they are adjusted *205* Are they fitted with easing gear *yes*
 Smallest distance between boilers or uptakes and bunkers or woodwork *7"* Mean dia. of boiler *135.9375* Length *9' 9"* Material of shell plates *Steel*
 Thickness *1 1/2"* Range of tensile strength *29632* Are they welded or flanged *✓* Descrip. of riveting: cir. seams *D.R. Lap* long. seams *T.R. dth. chaps*
 Diameter of rivet holes in long. seams *1 1/16"* Pitch of rivets *7 1/8"* Lap of plates or width of butt straps *15 1/2"*
 Percentages of strength of longitudinal joint *89.6* Working pressure of shell by rules *204* Size of manhole in shell *16 x 12*
 Length of compensating rim *2' 7 1/2" dia. x 1 1/2"* No. and Description of Furnaces in each boiler *2 Hobniss* Material *Steel* Outside diameter *39.0625*
 Length of plain part *16"* Thickness of plates *3 1/2"* Description of longitudinal joint *welded* No. of strengthening rings *4*
 Working pressure of furnace by the rules *205* Combustion chamber plates: Material *Steel* Thickness: Sides *1 1/16"* Back *1 1/16"* Top *1 1/16"* Bottom *1 1/16"*
 Pitch of stays to ditto: Sides *8 1/2 x 7 3/4"* Back *8 x 7 1/4"* Top *8 1/2 x 7 1/2"* If stays are fitted with nuts or riveted heads *nuts* Working pressure by rules *204*
 Material of stays *Steel* at smallest part *1.48* Area supported by each stay *51.531* Working pressure by rules *229* End plates in steam space:
 Material *Steel* Thickness *1 1/2"* Pitch of stays *13 3/8 x 15"* How are stays secured *Q nuts* Working pressure by rules *206* Material of stays *Steel*
 at smallest part *5.157* Area supported by each stay *230.625* Working pressure by rules *206* Material of Front plates at bottom *Steel*
 Thickness *3 1/2"* Material of Lower back plate *Steel* Thickness *1 1/16"* Greatest pitch of stays *12 1/2"* Working pressure of plate by rules *200*
 Diameter of tubes *3 1/4"* Pitch of tubes *4.625* Material of tube plates *Steel* Thickness: Front *3 1/2"* Back *3 1/4"* Mean pitch of stays *9 1/4"*
 Pitch across wide water spaces *13 1/4"* Working pressures by rules *203* Girders to Chamber tops: Material *Steel* Depth and
 Thickness of girder at centre *7 1/2 x 1 1/4"* Length as per rule *29"* Distance apart *7 1/2"* Number and pitch of Stays in each *2, 8 1/2"*
 Working pressure by rules *218* 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
 Pitch of rivets *—* Working pressure of shell by rules *—* Diameter of flue *—* Material of flue plates *—* Thickness *—*
 Stays *—* 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 *—*

DONKEY BOILER— No. Description

Made at By whom made When made Where fixed

Working pressure tested by hydraulic pressure to No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boiler enters the donkey boiler

Dia. of donkey boiler Length Material of shell plates Thickness Range of strength

Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

Lap of plating Per centage of strength of joint Rivets Thickness of shell crown plates Radius of do. No. of Stays to do

Dia. of stays. Diameter of furnace Top Bottom Length of furnace Thickness of furnace plates Description of joint

Thickness of furnace crown plates Stayed by Working pressure of shell by rules

Working pressure of furnace by rules Diameter of uptake Thickness of uptake plates Thickness of water tubes

SPARE GEAR. State the articles supplied:— *Two top end bolts. Two bottom end bolts. Two main bearing bolts. One set of coupling bolts. One set of feed pump valves. One set of bilge pump valves. One set of chuck valves. Safety valve spring &c. &c.*

The foregoing is a correct description,

FAIRBANKS
SHIPBUILDING & ENGINEERING CO. LIMITED Manufacturer.
F. H. Pearson

ANT. GENERAL MA-ABLE

Dates of Survey while building

During progress of work in shops— 1899:— Aug. 31 Sep. 13. 21 Oct. 9. 25 Nov. 8. 20 Dec. 12. 13. 18 1900:— Jan. 10. 12. 22.

During erection on board vessel — Jan. 23. 27. 29. 30. Feb. 1.

Total No. of visits 18

Is the approved plan of main boiler forwarded with R/L 13088

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

Workmanship good. The engines and boiler of this vessel have been constructed under Special Survey, and placed on board in accordance with the Society's Rules. They are now in my opinion in a safe working condition, and the case is respectfully submitted for the notification of L.M.C. 2-1900. In the Register Book

It is submitted that this vessel is eligible for THE RECORD. + LMC. 2.00.

Handwritten signature
9.3.00

The amount of Entry Fee £ 1 : 6 : 6/31 1900

Special £ 9 : 6 : 6/31 1900

Donkey Boiler Fee £ - : - : 25/5/01

Travelling Expenses (if any) £ - : - : -

When applied for, 27. 100 (how)

When received, 28/5/01

Committee's Minute TUES. 13 MAR 1900

Assigned + LMC. 2.00

Wm. C. Hammetton.
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Lloyd's Register Foundation