

REPORT ON MACHINERY.

Port of *Best Hartlepool*

THURS. 20 SEP 1894

Received at London Office

No. in Survey held at *Best Hartlepool* Date, first Survey *7th March* Last Survey *19th Sept. 1894*Book. on the *S.S. Saint Jerome* (Number of Visits *45*)ster *M. Pugh* Built at *B. Spoor* By whom built *Turner & Wigham & Co. Ld.* When built *1894*gines made at *B. Spoor* By whom made *J. Richardson & Sons Ld.* when made *1894*ilers made at *do* By whom made *do* when made *1894*gistered Horse Power *240* Owners *Ranpin Gilmour & Co* Port belonging to *Liverpool*n. Horse Power as per Section 28 *240.25* *British & Foreign S.S. Co. Ld.*GINES, &c.— Description of Engines *Triple expansion* No. of Cylinders *3*iameter of Cylinders *23½ 37½ 61½* Length of Stroke *39* Revolutions per minute *58* Diameter of Screw shaft *as per rule 10.83*iameter of Tunnel shaft *as per rule 10.29* Diameter of Crank shaft journals *11½* Diameter of Crank pin *11½* Size of Crank webs *17½ x 7½*iameter of screw *16.0"* Pitch of screw *16.0"* No. of blades *4* State whether moveable *no* Total surface *70.37 sq*o. of Feed pumps *2* Diameter of ditto *2½"* Stroke *25"* Can one be overhauled while the other is at work *yes*o. of Bilge pumps *2* Diameter of ditto *3¾"* Stroke *25"* Can one be overhauled while the other is at work *yes*o. of Donkey Engines *2* Sizes of Pumps *3½ 5 8½ x 7* No. and size of Suctions connected to both Bilge and Donkey pumpsn Engine Room *Two 3" Two 3½"* In Holds, &c. *Fore hold in well one 3½"*

main hold one 3½" Main hold aft one 3½" After hold one 3½" After well one 2½"

No. of bilge injections *1* sizes *6"* Connected to condenser, or to circulating pump *Pump Is a separate donkey suction fitted in Engine room & size yes 3½"*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 *all line*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 *none* How are they protected *—*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*When were stern tube, propeller, screw shaft, and all connections examined in dry dock *18.9.94* Is the screw shaft tunnel watertight *yes*Is it fitted with a watertight door *yes* worked from *Upper platform*BOILERS, &c.— (Letter for record (P.)) Total Heating Surface of Boilers *3664.5*No. and Description of Boilers *Two Single ended* Working Pressure *160* Tested by hydraulic pressure to *320*Date of test *9.6.94* Can each boiler be worked separately *yes* Area of fire grate in each boiler *45.5* No. and Description of safety valves toeach boiler *2 Spring* Area of each valve *7.06* Pressure to which they are adjusted *165* Are they fittedwith easing gear *yes* Smallest distance between boilers or uptakes and bunkers or woodwork *8"* Mean diameter of boilers *14.3"*Length *9.9"* Material of shell plates *Steel* Thickness *1½"* Description of riveting: circum. seams *Lap double long. seams R.B. Triple*Diameter of rivet holes in long. seams *1½"* Pitch of rivets *7½"* Lap of plates or width of butt straps *19½"*Per centages of strength of longitudinal joint rivets *85.76* Working pressure of shell by rules *164.5* Size of manhole in shell *ends 16" 13"*Size of compensating ring plate *83.3* No. and Description of Furnaces in each boiler *3 Morrison* Material *Steel* Outside diameter *3.6¾"*Length of plain part *top 6.0" bottom 6.6"* Thickness of plates *top ½" bottom ½"* Description of longitudinal joint *Welded* No. of strengthening rings *—*Working pressure of furnace by the rules *176.7* Combustion chamber plates: Material *Steel* Thickness: Sides *19½"* Back *5"* Top *19"* Bottom *13"*Pitch of stays to ditto: Sides *8½"* Back *8½"* Top *8½"* If stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *164*Material of stays *Steel* Diameter at smallest part *1½"* Area supported by each stay *720* Working pressure by rules *164* End plates in steam space:Material *Steel* Thickness *1½"* Pitch of stays *18½ x 16½* How are stays secured *Drawn* Working pressure by rules *160* Material of stays *Steel*Diameter at smallest part *2½"* Area supported by each stay *296* Working pressure by rules *164* Material of Front plates at bottom *Steel*Thickness *13"* Material of Lower back plate *Steel* Thickness *32* Greatest pitch of stays *12"* Working pressure of plate by rules *170*Diameter of tubes *3¼"* Pitch of tubes *4½ x 4½"* Material of tube plates *Steel* Thickness: Front *3½"* Back *¾"* Mean pitch of stays *9"*Pitch across wide water spaces *14½"* Working pressures by rules *165.5* Girders to Chamber tops: Material *Steel* Depth andthickness of girder at centre *7½ x 1¼"* Length as per rule *2.4* Distance apart *8½"* Number and pitch of Stays in each *2 - 8½" pitch*Working pressure by rules *206* Superheater or Steam chest; how connected to boiler *none* Can the superheater be shut off and the boiler workedseparately *—* Diameter *—* Length *—* Thickness of shell plates *—* Material *—* Description of longitudinal joint *—* Diam. of rivetholes *—* 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 *—*

DONKEY BOILER—

Description

Vertical with crop tubes

Made at

Sheffield

By whom made

J. Lindson & Co. Ltd.

When made

30.4.94

Where fixed

Stoke Newington

Working pressure

80

tested by hydraulic pressure to

160

No. of Certificate

839

Fire grate area

28.4

Description of safety valves

2 Spring

No. of safety valves

2

Area of each

6.94

Pressure to which they are adjusted

83.16

If fitted with easing gear

Yes

If steam from main boilers

enter the donkey boiler

No

Diameter of donkey boiler

7.0"

Length

14.0"

Material of shell plates

Steel

Thickness

15.3

Description of riveting long seams

Lap double

Diameter of rivet holes

13.16

Whether punched or drilled

Punched

Pitch of rivets

2

Lap of plating

4.4"

Per centage of strength of joint

68.8

Rivets

70.4

Thickness of shell crown plates

7.6

Radius of do.

5.9"

No. of Stays to do.

7

Dia. of stays

1.4"

Diameter of furnace Top

5.3"

Bottom

6.4 1/2"

Length of furnace

6.0"

Thickness of furnace plates

2.1/2"

Description

joint

Lap Single

Thickness of furnace crown plates

8"

Stayed by

Same as shell

Working pressure of shell by rules

83.16

Working pressure of furnace by rules

82.16

Diameter of uptake

15"

Thickness of uptake plates

7.6

Thickness of water tubes

8"

SPARE GEAR.

State the articles supplied:—

2 Main bearing bolts & nuts, 2 top end bolts & nuts, 2 bottom end bolts & nuts, 1 Set of Shaft coupling bolts & nuts, 1 Set of feed pump valves, 1 Set of bilge pump valves, propeller nuts, bolts & iron assorted.

The foregoing is a correct description,

For THOMAS RICHARDSON & SONS LIMITED,

Manufacturer.

General Remarks

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

The machinery has been Specially Surveyed during construction the material and workmanship good and renders the vessel eligible in my opinion to have the Record L.M.C. 9.94 in the Register Book of the Society.

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 9-94

20-9-94

Certificate (if required) to be sent to

The amount of Entry Fee..

£

2:

:

When applied for,

Special ..

£

32:

:

1.9.94

Donkey Boiler Fee ..

£

:

:

When received,

Travelling Expenses (if any) £

:

:

:

19.9.94

Richard Hirst

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

Committee's Minute

FRIDAY 21 SEP 1894

Assigned

+ L.M.C. 9.94



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