

REPORT ON MACHINERY.

No. 18593

Port of Hull

Received at London Office

THUR. DEC 27 1906

No. in Survey held at Selby & Hull

Date, first Survey Mar 30thLast Survey Dec 6th 1906

Reg. Book.

21 up on the Screw Trawler "Ladysmith"

(Number of Visits 26)

Master

Built at Selby

By whom built Cochrane & Sons

Tons Gross 254

Net 109

Engines made at Hull

By whom made Charles D. Holmes & Co.

When built 1906

Boilers made at do

By whom made do

when made 1906

Registered Horse Power

Owners Bernstein, Staff & Taylor

Port belonging to Grimsby

Nom. Horse Power as per Section 28 69

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 $\frac{1}{2}$ ", 22", 35" Length of Stroke 24"

Revs. per minute 112

Dia. of Screw shaft

as per rule 7 $\frac{1}{8}$ "

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

liners are fitted, is the shaft lapped or protected between the liners

Length of stern bush 31"

Dia. of Tunnel shaft

as per rule 6.43

as fitted 6.2"

Dia. of Crank shaft journals

as per rule 6.75"

as fitted 7"

Dia. of Crank pin 7"

Size of Crank webs 13 $\frac{3}{4}$ " x 4 $\frac{3}{4}$ "

Dia. of thrust shaft under

collars 7"

Dia. of screw 8 $\frac{1}{2}$ "

Pitch of Screw 11'-0"

No. of Blades 4

State whether moveable No

Total surface 28 sq. ft.

No. of Feed pumps 1

Diameter of ditto 2 $\frac{1}{8}$ "

Stroke 24"

Can one be overhauled while the other is at work

No. of Bilge pumps 1

Diameter of ditto 2 $\frac{1}{8}$ "

Stroke 24"

Can one be overhauled while the other is at work

No. of Donkey Engines One

Sizes of Pumps 2 $\frac{3}{4}$ " 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 deck

No. of Bilge Injections 1

sizes 3"

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size 2 $\frac{1}{2}$ "

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 17.8.06 of Stern Tube 17.8.06 Screw shaft and Propeller 17.8.06

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

David Colville & Sons

Total Heating Surface of Boilers 1115 sq. ft. Forced Draft fitted No

No. and Description of Boilers One L.E. Cyl. & Hull

Working Pressure 180 lbs

Tested by hydraulic pressure to 360 lbs

Date of test 14.11.06

No. of Certificate 1528

Can each boiler be worked separately

Area of fire grate in each boiler 34.5 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 $\frac{1}{2}$ "

Mean dia. of boilers 13'-0"

Length 10'-0"

Material of shell plates Steel

Thickness 1 $\frac{3}{16}$ "

Range of tensile strength 29-32

Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams D.R. lap

long. seams D.R. 5 Rivets

Diameter of rivet holes in long. seams 1 $\frac{3}{16}$ "Pitch of rivets 7 $\frac{1}{2}$ "Top of plates or width of butt straps 17 $\frac{1}{8}$ "

Per centages of strength of longitudinal joint rivets 92.5%

plate 84%

Working pressure of shell by rules 206 lbs

Size of manhole in shell 16" x 12"

Size of compensating ring 7' x 1 $\frac{3}{16}$ "

No. and Description of Furnaces in each boiler Two Holmes

Material Steel

Outside diameter 3'-7"

Length of plain part top

Thickness of plates crown 2 $\frac{3}{32}$ "bottom 3 $\frac{1}{32}$ "

Description of longitudinal joint Welded

No. of strengthening rings

Working pressure of furnace by the rules 208

Combustion chamber plates: Material Steel

Thickness: Sides 3 $\frac{1}{4}$ "Back 2 $\frac{3}{32}$ "Top 2 $\frac{3}{32}$ "Bottom 3 $\frac{1}{4}$ "Pitch of stays to ditto: Sides 9' x 8 $\frac{1}{2}$ "Back 9' x 9 $\frac{1}{8}$ "Top 8 $\frac{1}{2}$ ' x 8"

If stays are fitted with nuts or riveted heads Nuts

Working pressure by rules 220

Material of stays Steel

Diameter at smallest part 1 $\frac{3}{4}$ "

Area supported by each stay 105"

Working pressure by rules 205

End plates in steam space: 2 screwed into end plates

Material Steel

Thickness 1 $\frac{3}{16}$ "

Pitch of stays 16' x 19"

How are stays secured On + W

Working pressure by rules 213

Material of stays Steel

Diameter at smallest part 7.5"

Area supported by each stay 304

Working pressure by rules 246

Material of Front plates at bottom Steel

Thickness 1"

Material of Lower back plate Steel

Thickness 1"

Greatest pitch of stays 14 $\frac{1}{2}$ "

Working pressure of plate by rules 200

Diameter of tubes 3 $\frac{1}{4}$ "Pitch of tubes 4 $\frac{3}{4}$ ' x 5"

Material of tube plates Steel

Thickness: Front 1"

Back 2 $\frac{3}{32}$ "Mean pitch of stays 9 $\frac{3}{4}$ "

Pitch across wide water spaces 15"

Working pressures by rules 200 lbs

Girders to Chamber tops: Material Iron

Depth and thickness of girder at centre 9' x 1 $\frac{3}{4}$ "Length as per rule 2'-7 $\frac{29}{32}$ "

Distance apart 8"

Number and pitch of stays in each 3 @ 8 $\frac{1}{2}$ "

Working pressure by rules 224

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

How stayed

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

Manufacturers of Steel

SPARE GEAR. State the articles supplied:—Two top + two bottom-end connecting rod bolts + nuts. Two main bearing bolts + nuts. One set of coupling bolts + nuts. One set of feed + bilge pump valves. Main + donkey feed check valves. Assorted bolts + nuts &c

PER PRO CHARLES D. HOLMES & Co.

Manufacturer.

No. 11101

Is the approved plan of main boiler forwarded herewith Yes

” ” ” *donkey* ” ” ”

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

It is submitted that
this vessel is eligible for
THE RECORD 4 L M C 12 06

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

THUR, DEC 27 1906

Assigned

+ L.M.B. 12 06

MACHINERY CERTIFICATE
WRITTEN.

Lloyd's Register
Foundation