

Mr. Hoos's No. 754⁶

754

REPORT ON MACHINERY.

No. 46.

No. in Survey held at Flushing.

Date, first Survey Oct 30 - 83 Last Survey 14 June 1884

Reg. Book.

(Number of Visits) 13

Tons 620
397.

on the Iron Screw Steamer "Wolf."

Master J. H. Brown Built at Flushing By whom built Royal Ship building When built 1884
Engines made at Flushing By whom made S & Engineering Co., when made 1884
Boilers made at A. By whom made "the Scheldt". when made 1884
Registered Horse Power 90 Owners Edward A. Cohan - London
Port belonging to Liverpool

ENGINES, &c.-

Description of Engines Compound Inverted surface Condensing

Diameter of Cylinders 22" x 41" Length of Stroke 30" No. of Rec. per minute 85 Point of Cut off, High Pressure 60% Low Pressure 55%

Diameter of Screw shaft 8" Diam. of Tunnel shaft 7 1/4" Diam. of Crank shaft journals 8" Diam. of Crank pin 8 1/2" size of Crank webs 10" x 5 7/8"

Diameter of screw 10 feet Pitch of screw 15 feet No. of blades four state whether moveable Not total surface 32 ft²

No. of Feed pumps 2 diameter of ditto 3 1/4" Stroke 12" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 diameter of ditto 3 1/4" Stroke 12" Can one be overhauled while the other is at work Yes

Where do they pump from Eng. room Port, 103 & Midships and all compartments of ship

No. of Donkey Engines 18 I phls. Size of Pumps 10" x 8" dbl. gear Where do they pump from As above & from sea.

Pulrometer as above, ballast tanks and condenser.

Are all the bilge suction pipes fitted with roses Yes Are the roses always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes

No. of bilge injections One and sizes 4 1/2" Are they connected to condenser, or to circulating pump to condenser.

How are the pumps worked by levers from L. F. Crosshead.

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 Circ: below air: 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 None

How are they protected

Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times Yes

Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges Yes

When were stern tube, propeller, screw shaft, and all connections examined in dry dock

Is the screw shaft tunnel watertight Yes and fitted with a sluice door Yes worked from Engineer room platform.

BOILERS, &c.-

Number of Boilers One Description Cylindrical tubular Whether Steel or Iron Steel

Working Pressure 95 lbs Tested by hydraulic pressure to 190 lbs Date of test 20th May 84 Cert No. 34

Description of superheating apparatus or steam chest Cylindrical Horizontal

Can each boiler be worked separately

Can the superheater be shut off and the boiler worked separately

No. of square feet of fire-grate surface in each boiler 55 ft² Description of safety valves Adm. Spring No. to each boiler two

Area of each valve 14.19 ft² Are they fitted with easing gear Yes No. of safety valves to superheater area of each valve

Are they fitted with easing gear Smallest distance between boilers and bunkers or woodwork 10" Diameter of boilers 15'-1 7/8"

Length of boilers 9' 4 1/4" description of riveting of shell long. seams Quad. Lap circum. seams Dbl. Lap Thickness of shell plates 1 1/16

Diameter of rivet holes 1 1/8" whether punched or drilled Drilled pitch of rivets 5 5/8" Lap of plating 6 1/2"

Percentage of strength of longitudinal joint 49 1/2% working pressure of shell by rules 98 lbs size of manholes in shell 15" x 12"

Size of compensating rings 6" x 13/16" No. of Furnaces in each boiler 3

Outside diameter 3'-2" length, top 6' bottom thickness of plates 1/2" description of joint dbl. but, 1/2 riv if rings are fitted No

Greatest length between rings working pressure of furnace by the rules 98 combustion chamber plating, thickness, sides 1/2" back 1/2" top 1/2"

Pitch of stays to ditto, sides 7/8" x 8" back 7/8" x 8" top 7/8" x 8" If stays are fitted with nuts or riveted heads Riveted h. working pressure of plating by

rules 100 Diameter of stays at smallest part 1 1/4" working pressure of ditto by rules 153 end plates in steam space, thickness 3/4"

Pitch of stays to ditto 15" x 15" how stays are secured dbl. & m. working pressure by rules 107 lbs diameter of stays at

smallest part 2" working pressure by rules 111 lbs Front plates at bottom, thickness 7/8" Back plates, thickness 7/8"

Greatest pitch of stays 8" x 10" working pressure by rules 100 Diameter of tubes 3 1/4" ext pitch of tubes 4 1/2" thickness of tube

plates, front 3/4" back 3/4" how stayed 101. tub pitch of stays 13 1/2" width of water spaces 1 1/4"

Diameter of Superheater or Steam chest 3'-6 3/4" length 5'-6" thickness of plates 3/8" description of longitudinal joint 1/4" dbl. diam. of rivet holes 3/4"

Pitch of rivets 2 3/4" working pressure of shell by rules 130 diameter of flue thickness of plates If stiffened with rings

Distance between rings working pressure by rules end plates of superheater, or steam chest; thickness 1/2" how stayed one stay

"Mallot" Diam. Nuts & Washers Superheater or steam chest; how connected to boiler Iron neck -

x discharge valve circulating pump & pulrometer in one.

DONKEY BOILER — Description Vertical boiler with three water tubes.
 Made at Flushing by whom made same firm when made 1884 where fixed Form. Stockholm
 Working pressure 70 lbs tested by hydraulic pressure to 160 No. of Certificate 41 fire grate area 14.18 ft² description of safety
 valves lever & weight valve No. of safety valves two area of each 3.98 if fitted with easing gear Yes if steam from main boilers can
 enter the donkey boiler for return diameter of donkey boiler 5'-6" length 8'-2" description of riveting double lap.
 Thickness of shell plates $\frac{1}{2}$ " diameter of rivet holes $\frac{3}{4}$ " whether punched or drilled punched pitch of rivets 2 $\frac{1}{2}$ " lap of plating 3 $\frac{1}{4}$ "
 per centage of strength of joint 40% thickness of crown plates $\frac{1}{2}$ " stayed by 6- 1 $\frac{3}{4}$ " stays to top.
 Diameter of furnace, top 4'-1" bottom 4'-7" length of furnace 4'-6" thickness of plates $\frac{1}{2}$ " description of joint single riv. lap.
 Thickness of furnace crown plates $\frac{1}{2}$ " stayed by above stays working pressure of shell by rules 32 lbs
 Working pressure of furnace by rules 95 lbs diameter of uptake 15 $\frac{1}{2}$ " thickness of plates $\frac{7}{16}$ " thickness of water tubes $\frac{5}{16}$ "

SPARE GEAR. State the articles supplied: — 2 Safety valve springs; 2 D. for escapes; 1 set of coupling bolts; 1 H.P. slide spindle; 1 set crankpin braces; 2 bolts for main bearings; 2 D. for connectingrod top & bottom ends; 2 feedpump valves & seats; 1 propeller.

The foregoing is a correct description,
 ROYAL SHIPBUILDING & ENGINEERING CO. Manufacturer.
 "THE SCHELDT" *J. van Reeth*

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

The materials used and the workmanship being of a first class quality and the engines and boiler proving to work satisfactory on a trial at sea this vessel is eligible in my opinion to be recorded in the Society's Register book with: **I.M.C. 6.84.*

The amount of Entry Fee £ 2: received by me,
 Special £ 13:10:
 Donkey Boiler Fee £ 2:2:
 Certificate (X required) £ 2:6 18
 To be sent as per stamp
 (Travelling Expenses, if any, £ 6-4-11)

W.F. D. van Alphen
Engineer Successor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

17 June 1884