

REPORT ON MACHINERY.

7478

No. 7478 Port of Hull Received at London Office WED 8 OCT 1890
 No. in Survey held at Hull Date, first Survey April 25th Last Survey Oct 1st 1890
 Reg. Book. on the Iron Steam Trawler San Pedro (Number of Visits 28)
 Master Brain Built at Hull By whom built Book Winton & Gemmell Tons Gross 130
Net 44 When built 1890
 Engines made at Hull By whom made Chas D Holmes & Co when made 1890
 Millers made at Hull By whom made Chas D Holmes & Co when made 1890
 Registered Horse Power 45 Owners Richard Lovett Collier Port belonging to Hull

ENGINES, &c.—

Description of Engines Simple Compound Inverted Direct Acting No. of Cylinders Three
 No. of Cylinders 11 1/2 Length of Stroke 22 Rev. per minute 116 Point of Cut off, High Pressure .56 I.P. .6
 Low Pressure .65
 Diameter of Screw shaft 6 1/2 Diam. of Tunnel shaft 5 1/2 Diam. of Crank shaft journals 5 1/2 Diam. of Crank pin 5 1/2 size of Crank webs 7 x 4 1/4
 Diameter of screw 7.6 Pitch of screw 11 1/2 No. of blades 4 state whether moveable No total surface 21.45 sq ft
 No. of Feed pumps Two diameter of ditto 1 3/4 Stroke 22 Can one be overhauled while the other is at work Yes
 No. of Bilge pumps One diameter of ditto 2 1/8 Stroke 22 Can one be overhauled while the other is at work -
 Where do they pump from Engine room Bilge & hold
 No. of Donkey Engines One Size of Pumps 3 1/2 x 5 duplex Where do they pump from Bilge, hold, sea & boiler
recharges to Boiler Condenser, Deck & Overboard, Also 3" Geyser with suction in
in room Bilge and discharge on deck
 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 -
 No. of bilge injections One and sizes 2 1/4 Are they connected to condenser, or to circulating pump Circulating Pump
 Are the pumps worked Direct from piston rod crossheads
 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
 Are all pipes carried through the bunkers Suction to forward How are they protected brass cased
 Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times Yes in Engine room
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilges Yes
 Were stern tube, propeller, screw shaft, and all connections examined in dry dock Yes How new Launched 4th Sept 1890
 Is the screw shaft tunnel watertight Yes and fitted with a sluice door Yes worked from Yes

BOILERS, &c.—

No. of Boilers One Description Cylindrical Multitubular Material Steel Letter (for record) S
 Working Pressure 160 lb Tested by hydraulic pressure to 320 lb Date of test 19th August 1890
 Description of superheating apparatus or steam chest None fitted
 Can each boiler be worked separately Yes Can the superheater be shut off and the boiler worked separately Yes
 Square feet of fire grate surface in each boiler 2529 sq ft Description of safety valves Spring loaded No. to each boiler Two
 Area of each valve 3.98 sq in 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 9' Diameter of boilers 9' 9"
 Description of riveting of shell long. seams all shop 3rd circum. seams all on lap Thickness of shell plates 14/16
 Diameter of rivet holes 15/16 whether punched or drilled drilled pitch of rivets 5 1/16 Lap of plating 14 1/4
 Tensile strength of longitudinal joint 89.5% working pressure of shell by rules 162 lb size of manholes in shell 16" x 12"
 Diameter of compensating rings 6" x 14/16 No. of Furnaces in each boiler Two Description of Furnaces Holmes Patent
 Diameter 35" length 6' 0" thickness of plates 14/16 description of joint beaded if rings are fitted Yes
 Length between rings 18" working pressure of furnace by the rules 160 lb combustion chamber plating, thickness, sides 9/16 back 9/16 top 9/16
 Stays to ditto, sides 7 1/4" back 7 1/8" top 7 1/4" If stays are fitted with nuts or riveted heads Yes working pressure of plating by
184 lb Diameter of stays at smallest part 1 1/4" working pressure of ditto by rules 187 lb end plates in steam space, thickness 16/16
 Stays to ditto 14 1/2" how stays are secured Secured with plates 10 lb working pressure by rules 171 lb diameter of stays at
 Smallest part 2' 3 1/4" working pressure by rules 184 lb Front plates at bottom, thickness 12/16 Back plates, thickness 12/16
 Pitch of stays 14" working pressure by rules 160 lb Diameter of tubes 3 1/2" pitch of tubes 4 3/4" thickness of tube
 Sides, front 12/16 back 13/16 how stayed Stayed pitch of stays 9 1/2" width of water spaces 10"
 No. of Superheater or Steam chest length thickness of plates description of longitudinal joint diam. of rivet holes
 No. of rivets working pressure of shell by rules 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 how stayed
 Superheater or steam chest; how connected to boiler

HUL403-0056

DONKEY BOILER— Description *None fitted*

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 _____ if fitted with easing gear _____ if steam from main boilers can
 enter the donkey boiler _____ diameter of donkey boiler _____ length _____ description of riveting _____
 Thickness of shell plates _____ diameter of rivet holes _____ whether punched or drilled _____ pitch of rivets _____ lap of pl _____
 per centage of strength of joint _____ thickness of crown plates _____ stayed by _____
 Diameter of furnace, top _____ bottom _____ length of furnace _____ thickness of 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 plates _____ thickness of water tube _____

SPARE GEAR. State the articles supplied:— *Two top end bolts Two bottom end bolts Two main
 bearing bolts. One set coupling bolts One set side bridge pinning valves Check
 valves Safety valve spring Eccentric sheave Propeller shaft Propeller
 The vessel efficient with masts and sails as a trawler.*

The foregoing is a correct description,

Charles D. Holmes Manufacturer.

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

*The Machinery and Boiler of this Steam
 Trawler have been constructed under special survey and
 placed onboard in accordance with the Society's Rules. They
 are now in my opinion in safe working condition and the
 case is respectfully submitted for the notification + L.M.C.
 10. 90. in the Register Book.*

*It is submitted that this vessel
 is eligible to have + L.M.C. 10. 90
 recorded. NA
 8-10-90*

*Machinery Certificate
 Written.*

The amount of Entry Fee . . . £ 1 : - : received by me,

Special . . . £ 0 : - : *H.R.*

Donkey Boiler Fee . . . £ 0 : - : *H.R.*

Certificate (if required) *Yes* £ 0 : - : *7/10/1890*

To be sent as per margin.

Travelling Expenses, if any, £ ()

Committee's Minute

FRI 10 OCT 1890

+ L.M.C. 10/90

Henry S. Silston

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