

REPORT ON MACHINERY.

NO. 13434

Port of Glasgow

Received at London Office _____ 18__

No. in Survey held at Reg. Book. _____

Date, first Survey _____

Last Survey _____

18__

on the S. S. "Barcelona" Supplementary Report II (Number of Visits _____)

Tons { Gross _____
Net _____

Master _____

Built at _____

By whom built _____

When built _____

Engines made at Donkey

By whom made _____

when made _____

Boilers made at Glasgow

By whom made Dunsmuir & Jackson

when made 1895

Registered Horse Power _____

Owners _____

Port belonging to _____

Nom. Horse Power as per Section 28 _____

ENGINES, &c. — Description of Engines _____ No. of Cylinders _____

Diameter of Cylinders _____ Length of Stroke _____ Revolutions per minute _____ Diameter of Screw shaft as per rule _____

Diameter of Tunnel shaft as per rule _____ Diameter of Crank shaft journals _____ Diameter of Crank pin _____ Size of Crank webs _____

Diameter of screw _____ Pitch of screw _____ No. of blades _____ State whether moveable _____ Total surface _____

No. of Feed pumps _____ Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____

No. of Bilge pumps _____ Diameter of ditto _____ Stroke _____ Can one be overhauled while the other is at work _____

No. of Donkey Engines _____ Sizes of Pumps _____ No. and size of Suctions connected to both Bilge and Donkey pumps _____

In Engine Room _____ In Holds, &c. _____

No. of bilge injections sizes _____ Connected to condenser, or to circulating pump _____ Is a separate donkey suction fitted in Engine room & size _____

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

Are all connections with the sea direct on the skin of the ship _____ Are they Valves or Cocks _____

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates _____ Are the discharge pipes above or below the deep water line _____

Are they each fitted with a discharge valve always accessible on the plating of the vessel _____ Are the blow off cocks fitted with a spigot and brass covering plate _____

What pipes are carried through the bunkers _____ How are they protected _____

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

Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges _____

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

No. and Description of Boilers One cylindrical return tubular Working Pressure 80 lbs Tested by hydraulic pressure to 160 lbs

of test 30495 Can this boiler be worked separately yes Area of fire grate in each boiler 249 W No. and Description of safety valves to boiler two spring loaded Area of each valve 4.94 in Pressure to which they are adjusted 80 lbs Are they fitted with easing gear yes Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean diameter of boilers 14"

Length 8' 6" Material of shell plates Steel Thickness 7/32" Description of riveting: circum. seams lap 2 Rivets long. seams lap 4 Rivets

Diameter of rivet holes in long. seams 1/8" Pitch of rivets 4 3/8" Lap of plates or width of butt straps 6 3/4"

Percentage of strength of longitudinal joint rivets 87.7 Working pressure of shell by rules 84 lbs Size of manhole in shell 12" x 16"

Size of compensating ring 7" x 5/8" No. and Description of Furnaces in each boiler two plain Material Steel Outside diameter 10 7/8"

Length of plain part top 5 1/4" Thickness of plates crown 3/16" Description of longitudinal joint weld No. of strengthening rings none

Working pressure of furnace by the rules 99 lbs Combustion chamber plates: Material Steel Thickness: Sides 1/2" Back 9/16" Top 1/2" Bottom 1/2"

Pitch of stays to ditto: Sides 9 3/4" Back 11 1/8" x 10 3/8" Top 9 3/4" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 84

Material of stays Steel Diameter at smallest part 1.22 in Area supported by each stay 115.54 in Working pressure by rules 84 lbs End plates in steam space: Material Steel Thickness 7/8" Pitch of stays 19" How are stays secured D Nuts Working pressure by rules 80 lbs Material of stays Steel

Diameter at smallest part 3.43 Area supported by each stay 19 x 21 Working pressure by rules 80 lbs Material of Front plates at bottom Steel

Thickness 1/16" Material of Lower back plate Steel Thickness 7/8" Greatest pitch of stays 1 1/8" Working pressure of plate by rules 109 1/2

Diameter of tubes 3" Pitch of tubes 4 1/8" Material of tube plates Steel Thickness: Front 7/8" Back 1/16" Mean pitch of stays 12 3/8"

Pitch across wide water spaces 14" Working pressures by rules 140, 110 lbs Girders to Chamber tops: Material Iron Depth and thickness of girder at centre 5' x 2 x 7/8" Length as per rule 22 1/2" Distance apart 9 3/4" Number and pitch of Stays in each one

Working pressure by rules 106 lbs 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 _____

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 _____

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