

REPORT ON MACHINERY.

No. 481 (Received in London Office 3/5/80)
 No. in Survey held at Swiduland Date, first Survey Nov 6. 1879 Last Survey April 26 1880
 Reg. Book. on the S.S. "Florence" Tons 2056.97
 Master J. Farguhar Built at Swiduland When built 1880
 Engines made at Swiduland By whom made R.E. Manie Eng'g Co. when made April 1880
 Boilers made at do By whom made do when made do
 Registered Horse Power 200 Owners Messrs Gordon & Stamps Port belonging to London

ENGINES, &c.—

Description of Engines Inverted Compound Surface Condensing
 Diameter of Cylinders 34" & 68" Length of Stroke 42" No. of Rev. per minute 56 Point of Cut off, High Pressure 1/2" Low Pressure 1/2"
 Diameter of Screw shaft 12" Diameter of Tunnel shaft 11 1/4" Diameter of Crank shaft journals 12" Diameter of Crank pin 12" size of Crank webs 8 1/2" x 13 1/2"
 Diameter of screw 15" x 6 Pitch of screw 22' to 24 1/2" No. of blades 4 state whether moveable No total surface 65 sq. ft.
 No. of Feed pumps 2 diameter of ditto 4" Stroke 42" Can one be overhauled while the other is at work No
 No. of Bilge pumps 2 diameter of ditto 4" Stroke 42" Can one be overhauled while the other is at work No
 Where do they pump from Port & P. from Sea Tanks, & all Compartments of Vessel. Starboard Engine Room Bilges
 No. of Donkey Engines Two Size of Pumps 10" x 14" & 5" x 6" Where do they pump from Sea Tanks, Condensers
Hotwell. After Well and Bilges of all Compartments of the Vessel
 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 1 and sizes 4" dia Are they connected to condenser, or to circulating pump. Circulating
 How are the pumps worked Direct from Crank heads of both Engines
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Stop Valves & Cocks
 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 None How are they protected _____
 Are all pipes, cocks, valves, and pumps in connection with the machinery accessible at all times Yes except in hold when loaded
 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 Never put in dry dock
 Is the screw shaft tunnel watertight Yes and fitted with a sluice door Yes worked from Main Deck

BOILERS, &c.—

Number of Boilers Two Description Cylindrical & Multitubular
 Working Pressure 80 lbs per sq in Tested by hydraulic pressure to 160 lbs per sq in Date of test 21. 2. 80
 Description of superheating apparatus or steam chest Vertical dome with No. 1
 Can each boiler be worked separately Yes Can the superheater be shut off and the boiler worked separately No Superheater
 No. of square feet of fire grate surface in each boiler 50 sq. ft. Description of safety valves Spring Valves. Adams Patent
 No. to each boiler 2 area of each valve 12.56 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 18" Woodwork covered with Non-conducting Compositions
 Diameter of boilers 14' 6" Length of boilers 10' 4" description of riveting of shell long. seams Exp. Riv. Riveted circum. seams Exp. Riv. Riveted
 Thickness of shell plates 1 1/16" diameter of rivet holes 1 1/4" whether punched or drilled drilled pitch of rivets 4 5/8"
 Lap of plating 7 1/4" per centage of strength of longitudinal joint Plate 43. Riv. 48. working pressure of shell by rules 80 lbs
 Size of manholes in shell 15" x 11" size of compensating rings Flange of some No. 1 3/4" x 5" d. r.
 No. of Furnaces in each boiler 3 outside diameter 3' 4" length, top 4' 0" bottom 9' 9"
 Thickness of plates 1 1/32" description of joint Double Butt if rings are fitted Yes T. from 6' 3" x 7 1/2" greatest length between rings 4' 0"
 Working pressure of furnace by the rules 90 lbs per sq. in
 Combustion chamber plating, thickness, sides 1/2" back 1/2" top 1/2"
 Pitch of stays to ditto sides 8 1/8" x 8 1/8" back 8 1/4" x 8 1/4" top Circular 1.9 Rad.
 If stays are fitted with nuts or riveted heads Riveted heads working pressure of plating by rules 94 lbs
 Diameter of stays at smallest part 1 3/8" working pressure of ditto by rules 130 lbs
 End plates in steam space, thickness 7/8" pitch of stays to ditto 15" x 14" how stays are secured Double Nuts
 Working pressure by rules 94 lbs diameter of stays at smallest part 2 1/8" working pressure by rules 85 lbs
 Front plates at bottom, thickness 5/8" Back plates, thickness 5/8" greatest pitch of stays 12" x 8 1/4" working pressure by rules 83 lbs



