

SHIP'S NAME

"Newfrewshire"

25588. Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rec 12/2/80

Description *Compound Inverted Sweet Oil*
 Made by *Messrs Blackwood & Gordon*
 When *18 70* At *Port Glasgow*
 Diameter of cylinder *25 1/4"* Length of stroke *30"*
 No. of revolutions per minute _____
 Point of cut off *1/2*
 Diameter of screw shaft *8 3/8"*
 Diameter of crank shaft journals *8 1/2"*
 Diameter of screw, ~~or of paddle wheel~~ *not ascertained*
 Pitch of screw _____
 No. of blades, ~~four~~ Total surface _____
 No. of bilge pumps *two* and sizes *3 x 15" Stroke*
 Do they pump from each compartment *Yes*

Are all the bilge suction pipes fitted with roses *Yes*
 No. of feed pumps *two* and sizes *3 1/4" dia x 15" Stroke*
 What gauges are there attached to the engines and boilers ... *One Steam One Vacuum & One Compound*
 Description and size of Donkey Pumps ... *Double acting 3" x 6"*
 Where do they pump from ... *From the Sea & Bilge*
 No. of bilge injections *One* and sizes _____
 Are they connected to air, or circulating pumps *to Circulating*
 Is there a hand pump in the engine room *Yes*
 Can it be worked by the main engines *No*
 Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS.

Number *One* Description *Round Horizontal*
 Made by *Blackwood & Gordon*
 When *18 70* At *Port Glasgow*
 Working pressure *50 lbs*
 Tested by hydraulic pressure to *75 lbs*, Date *22.1.80*
 Description of super-heating apparatus *None, a dome is fitted*
 Can each boiler be worked separately _____

Can the super-heater be shut off and the boilers worked separately _____
 Description and area of safety valves on each boiler *Two Direct loaded 23.75" area each*
 No. of square feet of fire-grate surface in each boiler *40 ft*
 Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *Yes*
 Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times. *Yes*

DONKEY BOILER.

Description *Round vertical*
 Where fixed *On Main Deck*
 Working pressure *30 lbs*

Tested by hydraulic pressure to *45 lbs*, Date *23.1.80*
 Description and area of safety valves *Direct loaded 3.9" area*
 No. of square feet of fire grate *4 ft*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *Yes*
 Are they Kingston valves or common cocks ... *Screw down valves & Cocks*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *The blow off cocks and donkey suction are below plates & platform Above*
 Are the discharge pipes above or below the deep water line *Above*
 Are they each fitted with a discharge valve on the plating of the vessel *Yes*
 Manufacturer. _____

What pipes are carried through the bunkers *None*
 How are they protected _____
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *January*
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *Yes*
 Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *Yes*

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (~~and Wood~~) Screw (~~or Paddle~~) Steam Vessel *"Newfrewshire"* owned by *Seligmann* of the Port of *Glasgow* of _____ Tons Register, and *100* Registered Horse Power, and that they have been carefully inspected and examined by me at *Glasgow* and found to be at this date, viz., *January 26 1880* in good order and safe working condition.

Amount of Fee for Survey ... £ *4* : *0* : *0*
 Travelling Expenses, if any, £ _____
See Repair toms appended
 James Morrison
 Engineer Surveyor to Lloyd's Register of Shipping.
 Clyde District

1880 - 06124