

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rec 2/10/96

Description *Compound Inverted Direct acting*
 Made by *John & James Thomson*
 When *1876* At *Glasgow*
 Diameter of cylinder *30" & 60"* Length of stroke *36"*
one of each
 No. of revolutions per minute *65 to 70*
 Point of cut off *Variable*
 Diameter of screw shaft *10 1/2"*
 Diameter of crank shaft journals *10 1/2"*
 Diameter of screw, *and paddle wheel* *13 ft*
 Pitch of screw *19 ft*
 No. of blades *four* Total surface
 No. of bilge pumps *Two* and sizes *5" dia x 18" 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" x 18" stroke*
 What gauges are there attached to the engines and boilers ... *One Steam One Vacuum & One Compound in Engine Room & One to each Boiler in stokehold*
 Description and size of Donkey Pumps ... *Double acting 5 1/2 dia x 11" stroke*
 Where do they pump from ... *From the Sea, Bilge & Ballast Tanks.*
 No. of bilge injections *One* and sizes *3 1/4"*
 Are they connected to air, or circulating pumps *& Circulating*
 Is there a hand pump in the engine room *Yes*
 Can it be worked by the main engines *Yes*
 Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS.

Number *Two* Description *Round Horizontal*
 Made by *John & James Thomson*
 When *1876* At *Glasgow*
 Working pressure *78 lbs*
 Tested by hydraulic pressure to *160 lbs*, Date
 Description of super-heating apparatus *Round Longitudinal Receiver erected in stokehold*
 Can each boiler be worked separately *Yes*

Can the super-heater be shut off and the boilers worked separately *No*
 Description and area of safety valves on each boiler *Two Direct Spring each 14 1/4" area & One 2 1/2" dia on superheater*
 No. of square feet of fire-grate surface in each boiler *50 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 *In stokehold at middle line*
 Working pressure *35 lbs.*

Tested by hydraulic pressure to *75 lbs.*, Date
 Description and area of safety valves *Direct Spring 4" area*
 No. of square feet of fire grate *About 12 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 and Cocks.*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates *Yes*
 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*

What pipes are carried through the bunkers *Bilge pipes to forehold*
 How are they protected *by strong wood casing*
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *On slip previous to being launched*
 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*

John & James Thomson Manufacturers

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (~~or Wood~~) Screw (~~or Paddle~~) Steam Vessel *"Amulet"* owned by *George Gibson & Coy*
 of the Port of *Rotterdam* of *614* Tons Register, and *150* Registered Horse Power,
 and that they have been carefully inspected and examined by me at *Glasgow*
 and found to be at this date, viz., *Sept. 29th 1876* in good order and safe working condition.

See L5. 57-32

James Molloy
 Engineer Surveyor to Lloyd's Register of Shipping.