

15578 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S CERTIFICATE & REPORT.

ENGINES.

Rev 3/12/75

No. of Shields
Port
Report (if any) on Hull of Vessel.

Description *Inverted, Compound, Surface Condensing* Are all the bilge suction pipes fitted with roses *yes*
 Made by *Messrs Palmer & Co. Jarow* What vacuum and steam gauges are there attached to the engines } *Vacuum on Condenser & 1 Compound on piece in Engine room Common to both boilers and boilers..... 1 " on Superheater in stokehold,*
 In the year *1871*
 Present condition *good*
 Diameter of cylinder *One HP. 30 and One LP 54*
 Length of stroke *33*
 No. of revolutions per minute *about 57*
 Point of cut off *1/2 stroke*
 Paddle, or Screw *Screw*
 Nominal Horse Power *120*
 Diameter of screw, or of paddle wheel *13.6*
 Pitch of screw *15.0*
 No. of blades, *4* total surface *47 sq. ft.*
 No. of bilge pumps *2* and size *6 x 6 stroke single acting*
 Do they pump from each compartment *all except forward*
 Is there provision made for pumping from the wings of the stoke hold } *no*
 Description and size of Donkey Engine... } *Inverted Cyl 8 x 8 stroke Pump 4 x 8 " double acting*
 Will it feed the boilers, pump from the bilges, and pump on deck } *yes*
 Can it be driven by steam from a separate boiler } *yes*
 No. of bilge injections *1* and sizes *6 dia*
 Are they fitted with non return valves } *yes*
 Is there a hand pump in the engine room } *no (donkey can be used as such)*
 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*

CONNECTIONS ON HULL.

Are all connections with the sea direct on the skin of the ship } *yes*
 Are they Kingston valves or common cocks } *Common stop valves & 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 } *below*
 Are they each fitted with a discharge valve on the plating of the vessel } *yes*
 Are any pipes carried through the bunkers } *no*
 If so state how protected
 When was the stern tube, propeller, screw shaft, and all connections examined in dry dock } *November 1875*
 How are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge } *non return valves and shell coaks with only 1 port in plug*
 Have the bilge suctions non-return valves fitted or not } *not fitted*

BOILERS.

Number *Two*
 Description *Cylindrical*
 Made by *Messrs Palmer & Co*
 In the year *1871*
 Present condition *good*
 When last extensively repaired *have had no extensive repairs*
 Working pressure *66 lbs per sq. inch*
 When tested by hydraulic pressure *1871*
 To what pressure tested *87 in 120 lbs*
 Any super-heating apparatus } *yes*
 Describe it *Annular*
 Can each boiler be worked separately } *yes*
 Is each boiler fitted with a separate steam gauge } *no*
 Can the super-heater be shut off and the boilers worked separately } *no*
 No. of safety valves on each boiler *2*
 Description and area of each safety valve *Lower weight 3 1/2 dia = 9.6 area*
 No. of square feet of fire-grate surface in each boiler } *3 1/2*
 Is there a separate blow off and brine cock on each boiler, independent of those on the vessel's skin } *yes*
 Is the screw shaft tunnel water tight and fitted with a sluice door on bulkhead } *No Tunnel. Engines are in aft end of ship*
 Are all pipes, cocks, and roses in connection with these boilers accessible to the engineer at all times } *yes*

I was present when steam was raised & Engines worked slowly in Tyne Dock. Nov. 27th steam 66 lbs vacuum 27 inches reads about 30. all worked satisfactory. W.A.

Wm. Leitch for Messrs Palmer & Co. Manufacturer.

I hereby certify that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *"Cantago Nova"* owned by *J. Hall (Hall Brothers Newcastle)* of the Port of *London* of *1336* Tons Register, and *120* Nominal Horse Power, have been carefully inspected and examined by *me* at *Jarow and Tyne Dock* and found to be at this date, viz., *Nov. 27th 1875* in good order and safe working condition.

William Allison,
Engineer Surveyor to Lloyd's Register of Shipping.