

18625 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Re 26/5/77

Report (if any) on Hull of Vessel. Port Sunderland, No. 11,694.

Description Inverted, Compound, Surface Condensing
 Made by Mr. J. Dickinson
 When June 1877 At Sunderland
 Diameter of cylinder 28 x 53 Length of stroke 33
 No. of revolutions per minute about 60
 Point of cut off 1/2 stroke
 Diameter of screw shaft 9 1/4
 Diameter of crank shaft journals 9 1/4
 Diameter of screw, or of paddle wheel 12.9
 Pitch of screw 16.6
 No. of blades, 4 Total surface 44 sq. feet
 No. of bilge pumps 2 and sizes 3 1/2 dia x 16 1/2 stroke
 Do they pump from each compartment Engine room, aft well, fore hold

Are all the bilge suction pipes fitted with roses yes
 No. of feed pumps 2 and sizes 3 1/2 dia x 16 1/2 stroke
 What gauges are there attached to the engines and boilers ... 1 steam gauge on each boiler in stokehold
 Description and size of Donkey Pumps ... 2 inverted, large one double acting 8 dia x 10 stroke, small one 4 x 6 stroke
 Where do they pump from ... Condenser & bilges of engine room, aft well, fore hold, small one from sea & hotwell
 No. of bilge injections one and sizes 4 diameter
 Are they connected to air, or circulating pumps to circulating pumps
 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 (from iron pipe)

MAIN BOILERS.

Number Two Description Cylindrical & Multitubular
 Made by Mr. J. Dickinson
 When June 1877 At Sunderland
 Working pressure 70 lbs per sq. inch
 Tested by hydraulic pressure to 140 lbs, Date April 25/77
 Description of super-heating apparatus none
 Can each boiler be worked separately yes

Can the super-heater be shut off and the boilers worked separately
 Description and area of safety valves on each boiler 2 spring safety valves on Mr Dickinson's patent, see tracing
 No. of square feet of fire-grate surface in each boiler 28 1/2
 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 (except bilge suction in fore hold when full)

DONKEY BOILER.

Description Upright Cylindrical with 3 cross tubes
 Where fixed in the stokehold
 Working pressure 50 lbs per sq. inch

Tested by hydraulic pressure to 120 lbs (reported), Date June 20/76
 Description and area of safety valves 1 loaded direct 2 1/2 inch, 1 lever & weight 2 1/2 inch
 No. of square feet of fire grate 14

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 ... 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 above
 Are they each fitted with a discharge valve on the plating of the vessel yes

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 new
 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 Dickinson

Manufacturer. Except of the Donkey Boiler I was present when steam was raised, the engine worked, and safety valves adjusted & tested, satisfactory. June 5th & 6th 77 N. a.

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 "Annie" owned by Jennison, Taylor and others, of the Port of London of 784.9 Tons Register, and 110 Registered Horse Power, and that they have been carefully inspected and examined by me at Sunderland and found to be at this date, viz., June 18th 1877 in good order and safe working condition.

Amount of Fee for Survey ... £ 5:10:
 (Travelling Expenses, if any, £ 5:15 Certificate Received 19/6/77)

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