

16457 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

Rev 5/16/76

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Report (if any) on Hull of Vessel. No. 3638.

Description *Inverted Compound, Surface Condensing*
 Made by *Messrs Blair & Co*
 When *May 1876* At *Stockton*
 Diameter of cylinder *3 1/2 x 59* Length of stroke *36*
 No. of revolutions per minute *65*
 Point of cut off *1/2 stroke*
 Diameter of screw shaft *10 1/4*
 Diameter of crank shaft journals *10 1/4*
 Diameter of screw, or of paddle wheel *13.6*
 Pitch of screw *14 feet*
 No. of blades *4* Total surface *48 sq. feet*
 No. of bilge pumps *2* and sizes *4 dia x 26 stroke single actg*
 Do they pump from each compartment *yes*

Are all the bilge suction pipes fitted with roses *yes*
 No. of feed pumps *2* and sizes *4 dia x 26 stroke single actg*
 What gauges are there attached to the engines and boilers ... *1 vacuum gauge on Condenser & 1 steam on each boiler in stokehole & 1 in the engine room*
 Description and size of Donkey Pumps ... *2 inverted double acting. Large one 7 1/2 dia x 9 stroke. Small one 4 dia x 8 stroke. The large one draws from the tanks*
 Where do they pump from ... *4 bilges. Small one from sea. hull and bilges*
 No. of bilge injections *one* and sizes *4 1/2 dia*
 Are they connected to air, or circulating pumps to *Circulating pumps*
 Is there a hand pump in the engine room *No. (Donkey can be used)*
 Can it be worked by the main engines
 Is there a deck hose of sufficient length to reach to any part of the vessel *yes*

MAIN BOILERS.

Number *2* Description *Cylindrical & Multitubular*
 Made by *Messrs Blair & Co*
 When *May 1876* At *Stockton*
 Working pressure *75 lbs per sq. inch*
 Tested by hydraulic pressure to *150 lbs*, Date *April 20/76*
 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 valves 3 1/4 dia = 16 1/2 sq. ins area*
 No. of square feet of fire-grate surface in each boiler *30 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 the bilge suction of the fore hold when filled)*

DONKEY BOILER.

Description *Upright Cyl. with 3 water tubes across flame box*
 Where fixed *in the stokehole*
 Working pressure *65 lbs per sq. inch*

Tested by hydraulic pressure to *150 lbs per sq. inch*, Date *April 7/76*
 Description and area of safety valves *2 loaded with 2 1/2 dia = 9.8 area*
 No. of square feet of fire grate *15 3/4*

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 ... *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 *at the deep load line*
 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. by non return valves & shell cock*
 Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *yes*

Rob Blair Ho & Co
J W Blair

Manufacturer. *except of the donkey boiler*

I was present when the steam was raised and the Engines worked Steam 75 lbs. vacuum 28 in revs 68 all worked satisfactory. May 6/76 W. 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 *"Teal"* owned by *The General S. N. Co.*
 of the Port of *London* of *538.28* Tons Register, and *135* Registered Horse Power,
 and that they have been carefully inspected and examined by me at *Stockton*
 and found to be at this date, viz., *May 19th* 18 *76* in good order and safe working condition.

Survey fee *6.15.0*
Certificate *5.0*

Received at Hartlepool by *[Signature]*

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

elling expenses *£2.10.0*

