

# 20524 Iron LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Per 4/4/78

Description *Inverted direct acting Surface Condensing* Are all the bilge suction pipes fitted with roses *yes*  
 Made by *The North Eastern Marine Engineering Co* No. of feed pumps *2* and sizes *3" x 30" stroke*  
 When *1870* At *Sunderland* What gauges are there attached to the engines and boilers ... *1 steam gauge on boiler*  
 Diameter of cylinder *36.2"* Length of stroke *30* *1 vacuum gauge on Condenser*  
 No. of revolutions per minute *60* Description and size of Donkey Pumps ... *2 inverted double acting*  
 Point of cut off *5/8<sup>th</sup> of the stroke* *6" x 10" stroke and 4" x 6" stroke*  
 Diameter of screw shaft *8 1/4"* *The large one from the sea & the*  
 Diameter of crank shaft journals *8"* *and tanks. Small one from*  
 Diameter of screw, or of paddle wheel *11.6"* *sea. Tanks & bilge of engine room*  
 Pitch of screw *13.0"* No. of bilge injections *one* and sizes *3" dia*  
 No. of blades, *4* Total surface *40 sq. feet* Are they connected to air, or circulating pumps *to circulating*  
 No. of bilge pumps *2* and sizes *3 1/2 x 30 stroke* Is there a hand pump in the engine room *none*  
 Do they pump from each compartment *from Engine room & aft hold* 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 line pipe)*

### MAIN BOILERS.

Number *One* Description *Cylindrical Multitubular* Can the super-heater be shut off and the boilers worked separately  
 Made by *The North Eastern Marine Engine Co* Description and area of safety valves on each boiler *2 loaded direct 4 1/2*  
 When *1870* At *Sunderland* *dia = 31.8 sq ins area*  
 Working pressure *40 lbs* No. of square feet of fire-grate surface in each boiler *42*  
 Tested by hydraulic pressure to \_\_\_\_\_, Date \_\_\_\_\_ Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *yes*  
 Description of super-heating apparatus *None* Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times *yes. except roses in aft hold when full*  
 Can each boiler be worked separately *only 1 boiler*

### DONKEY BOILER.

Description *Upright Cyl. with 2 Cross tubes* Tested by hydraulic pressure to \_\_\_\_\_, Date \_\_\_\_\_  
 Where fixed *in the engine room* Description and area of safety valves *1 loaded direct 2 = 3.14*  
 Working pressure *25 lbs per sq. inch* No. of square feet of fire grate *9*

### PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *No. Cast iron pipes between ship side and Main & Sante filling valves* What pipes are carried through the bunkers *Air escape from the*  
 Are they Kingston valves or common cocks ... *stop valves & Cocks* How are they protected *above the load line under the deck*  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates *no* When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *from propeller fitted July 1878*  
 Are the discharge pipes above or below the deep water line *at the deep load line* Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *yes*  
 Are they each fitted with a discharge valve on the plating of the vessel *yes* Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *sluice door. Tunnel watertight*

Manufacturer.

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 *"John Johnasson"* owned by *John Johnasson*  
 of the Port of *London* of *331/490* Tons Register, and *80* Registered Horse Power,  
 and that they have been carefully inspected and examined by me at *Sunderland & Telling on Tyne*  
 and found to be at this date, viz., *February 18<sup>th</sup> 1878* in good order and safe working condition.

Amount of Fee for Survey ... £ : :

(Travelling Expenses, if any, £ )

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