

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

17475 Iron
Rev 21/12/46

Description *Compound Inverted Direct Acting* Are all the bilge suction pipes fitted with roses *Yes*
Made by *The London & Glasgow Engineering & Shipbuilding Coy* No. of feed pumps *Two* and sizes *4" dia.*
When *1846* At *Glasgow* What gauges are there attached to the engines and boilers... *Three Steam, One Vacuum, One Compound*
Diameter of cylinder *36 x 66* Length of stroke *3.6*
No. of revolutions per minute *Not Ascertained*
Point of cut off *Variable*
Diameter of screw shaft *11"*
Diameter of crank shaft journals *11"*
Diameter of screw, *on the propeller* *16" 6*
Pitch of screw *19.0*
No. of blades, *4* Total surface *Not Ascertained*
No. of bilge pumps *Two* and sizes *5" dia x 21" Stroke*
Do they pump from each compartment *Yes*
Description and size of Donkey Pump... *Double Acting 5" x 10" Stroke*
Where do they pump from *From the Sea, Bilge, Hotwell & Ballast Tanks*
No. of bilge injections *One* and sizes *4 3/4"*
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* Can the super-heater be shut off and the boilers worked separately *No*
Made by *The London & Glasgow Coy* Description and area of safety valves on each boiler *Two Direct Spring each 15.9 area*
When *1846* At *Glasgow* No. of square feet of fire-grate surface in each boiler *60 1/4*
Working pressure *65 lbs* Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *Yes*
Tested by hydraulic pressure to *130 lbs* Date *Aug 5 1846* Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times... *Yes*
Description of super-heating apparatus *Round Horizontal Receiver enclosed in smokebox*
Can each boiler be worked separately *Yes*

DONKEY BOILER.

Description *Round Vertical* Tested by hydraulic pressure to *100 lbs* Date *Aug 1846*
Where fixed *In Stowhold at middle line* Description and area of safety valves *Direct loaded 8.295*
Working pressure *50 lbs* No. of square feet of fire grate *16 ft.*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *Yes* What pipes are carried through the bunkers *Bilge pipes to Forehold*
Are they Kingston valves or common cocks... *Screw down Valves & Cocks* How are they protected *By strong wood casing*
Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates... *Yes. They are fitted on turn of the bilge* When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *Dec 11th 1846*
Are the discharge pipes above or below the deep water line *Under* 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 *Yes*
Rosher London & Glasgow Engineering & Shipbuilding Coy. Limited Manufacturer.
W. Kelly

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (on Wood) Screw (on Paddle) Steam Vessel *"Radnorshire"* owned by *J. L. Jenkins*
of the Port of *London* of *1201* Tons Register, and *250* Registered Horse Power,
and that they have been carefully inspected and examined by me at *Glasgow*
and found to be at this date, viz., *Dec 19th 1846* in good order and safe working condition.

Amount of Fee for Survey ... £ 5 : - : *Ja*

(Travelling Expenses, if any, £)

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