

18384 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

No 23/577

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Report (if any) on Hull of Vessel. Port Dundee. No. 4057

Description *Two 64 Oscilating Vertical*
 Made by *Mr W.B. Thompson*
 When *May 1877* At *Dundee*
 Diameter of cylinders *16" x 16"* Length of stroke *36"*
 No. of revolutions per minute *40.*
 Point of cut off *7/16*
 Diameter of screw shaft *—*
 Diameter of crank shaft journals *6 1/2"*
 Diameter of ~~crank~~ of paddle wheel *12 feet*
 Pitch of screw *—*
 No. of blades, *8* Total surface *149.6 feet*
 No. of bilge pumps *one* and sizes *3 1/2" Dia 9 1/2" Stroke*
 Do they pump from each compartment *Engine Room*

Surface Condensing
 Are all the bilge suction pipes fitted with roses *Yes*
 No. of feed pumps *one* and sizes *3 1/2" Dia 9 1/2" Stroke*
 What gauges are there attached to the engines and boilers ... *one water on Boiler one each Pressure and Vacuum on Engines*
 Description and size of Donkey Pumps ... *Vertical direct-acting 5" Cy 5" St. 2 3/8" Plunger*
 Where do they pump from ... *Sea Bilge to Boiler and on deck*
 No. of bilge injections *one* and sizes *2 1/2" Bore*
 Are they connected to air, or circulating pumps *Circulating Suction*
 Is there a hand pump in the engine room *no*
 Can it be worked by the main engines *Donky can be worked by Hand*
 Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS.

Number *one* Description *Circular Tubular*
 Made by *Mr W.B. Thompson*
 When *May 1877* At *Dundee*
 Working pressure *65 lbs*
 Tested by hydraulic pressure to *130*, Date *12/4/77*
 Description of super-heating apparatus *Vertical Domb*
 Can each boiler be worked separately *—*

Can the super-heater be shut off and the boilers worked separately *—*
 Description and area of safety valves on each boiler ... *Two Spring Safety by W.B. Thompson 14 area*
 No. of square feet of fire-grate surface in each boiler *22.34 feet*
 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*

DONKEY BOILER.

Description *None*
 Where fixed *—*
 Working pressure *—*

Tested by hydraulic pressure to *—*, Date *—*
 Description and area of safety valves *—*
 No. of square feet of fire grate *—*

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 ... *Cocks & Valves*
 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 *—*
 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 *bulkhead water tight*

W.B. Thompson 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 "*Kaffrarian*" owned by *Kaffrarian Steam Landing Shipping and Forwarding Coy.* of the Port of *East London* of *96* Tons Register, and *40* Registered Horse Power, and that they have been carefully inspected and examined by me at *Dundee* and found to be at this date, viz., *21st May* 1877 in good order and safe working condition.

Fees £ 2-0-0
 Rec^d for Mr Sturrock.
21 May 1877. J.S.

John Sturrock
 Engineer Surveyor to Lloyd's Register of Shipping.