

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rec 2/10/76

Description *Compound, inverted, direct acting*
 Made by *Messrs J & W. Henderson & Co*
 When *1876* At *Glasgow*
 Diameter of cylinder *36 1/2" dia* Length of stroke *36"*
 No. of revolutions per minute *45*
 Point of cut off *Variable*
 Diameter of screw shaft *12 1/4"*
 Diameter of crank shaft journals *12 1/2"*
 Diameter of screw, *and paddle wheel* *13"*
 Pitch of screw *21"*
 No. of blades, *four* Total surface *not ascertained*
 No. of bilge pumps *two* and sizes *4 3/8" dia x 18" stroke*
 Do they pump from each compartment *yes*

Are all the bilge suction pipes fitted with roses *yes*
 No. of feed pumps *two* and sizes *4 3/8" dia x 18" stroke*
 What gauges are there attached to the engines and boilers ... *One Steam, one Vacuum & one compound in Engine Room and one to each boiler in stokehold*
 Description and size of Donkey Pumps ... *Double acting*
 Where do they pump from ... *From the Sea, bilge, Hotwell*
 No. of bilge injections *two* and sizes *one 3 1/2" to Circulating, one 2 3/4" to live pump*
 Are they connected to air, or circulating pumps *yes*
 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 *Coal, Horizontal*
 Made by *J & W. Henderson & Co*
 When *1876* At *Glasgow*
 Working pressure *40 lbs*
 Tested by hydraulic pressure to *140 lbs*, Date *August 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 *yes*
 Description and area of safety valves on each boiler *two, direct spring each 159"*
 No. of square feet of fire-grate surface in each boiler *55 ft*
 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 *Round Vertical*
 Is it fixed *On line of Main Deck above forward stokehold*
 Working pressure *35 lbs*

Tested by hydraulic pressure to *40 lbs*, Date *Aug 76*
 Description and area of safety valves *two direct weighted each 7 area*
 No. of square feet of fire grate *9 ft*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *yes*
 Are they Kingston valves *screw down valves & common cocks*
 Are they fixed sufficiently high on ship's side to be seen without lifting the stoke hold plates *yes*
 Are the discharge pipes above or below the deep water line *below*
 Are they each fitted with a discharge valve on the plating of the vessel *yes*
David W. Henderson & Co Manufacturer.

What pipes are carried through the bunkers *none*
 How are they protected *none*
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *On ship previous to being launched*
 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*

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (or Wood) Screw (or Steam) Vessel *"South Australian"* owned by *Alexander McCoy* of the Port of *Adelaide* of *353* Tons Register, and *436* Registered Horse Power, and that they have been carefully inspected and examined by me at *Glasgow* and found to be at this date, viz., *Sept. 29th* 18 *76* in good order and safe working condition.

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

Lloyd's Register
 Foundation

120468-0228