

17046 Iron

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

Rec 2/10/76

Report (if any) on Hull of Vessel. Port Glasgow No. 4311

Description *Compound, mounted, direct action* Are all the bilge suction pipes fitted with roses *Yes*  
 Made by *Messrs J & W. Henderson Glasgow* No. of feed pumps *Two* and sizes *4 3/8" dia x 18" stroke*  
 When *18/76* At *Glasgow* 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*  
 Diameter of cylinder *36 1/2" dia* Length of stroke *36"*  
 No. of revolutions per minute *45*  
 Point of cut off *Variable* Description and size of Donkey Pumps ... *Double acting*  
 Diameter of screw shaft *12 1/4"* Where do they pump from ... *From the Sea, bilge, Hotwell*  
 Diameter of crank shaft journals *12 1/2"*  
 Diameter of screw, *and paddle wheels* *13"* No. of bilge injections *Two* and sizes *One 3 1/2" to Circulating & one 2 3/4" to bilge pump*  
 Pitch of screw *21"* Are they connected to air, or circulating pumps  
 No. of blades, *Four* Total surface *Not ascertained* Is there a hand pump in the engine room *Yes*  
 No. of bilge pumps *Two* and sizes *4 3/8" dia x 18" stroke* Can it be worked by the main engines *Yes*  
 Do they pump from each compartment *Yes* Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

### MAIN BOILERS.

Number *Two* Description *Oval, Horizontal* Can the super-heater be shut off and the boilers worked separately  
 Made by *J & W. Henderson Glasgow* Description and area of safety valves on each boiler ... *Two, Direct Spring each 15 1/2" dia*  
 When *18/76* At *Glasgow* No. of square feet of fire-grate surface in each boiler *55 ft.*  
 Working pressure *40 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 *140 lbs*, Date *August/76* Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times. *Yes*  
 Description of super-heating apparatus *None*  
 Can each boiler be worked separately *Yes*

### DONKEY BOILER.

Description *Round Vertical* Tested by hydraulic pressure to *40 lbs*, Date *Aug/76*  
 Is it fixed *On Line of Main Deck above forward stokehold* Description and area of safety valves *Two Direct weighted each 4" dia*  
 Working pressure *35 lbs* 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* What pipes are carried through the bunkers *None*  
 Are they Kingston valves } *Screw down valves & common cocks ...* } *Cocks* How are they protected  
 Are they fixed sufficiently high on ship's side to be seen without lifting the stoke hold plates *Yes* When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *In ship previous to being launched*  
 Are the discharge pipes above or below the deep water line *Below* 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*

*David W. Henderson Glasgow* 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 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 Mollin*  
Engineer Surveyor to Lloyd's Register of Shipping.

*cert. given*  
*5.10.76*