

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S REPORT ON MACHINERY.

### ENGINES.

*Rev 5/10/96*

Port (if any) on Hull of Vessel. No. Sunderland

Description \_\_\_\_\_  
 Made by \_\_\_\_\_  
 When \_\_\_\_\_ 18 \_\_\_\_\_ At \_\_\_\_\_  
 Diameter of cylinder \_\_\_\_\_ Length of stroke \_\_\_\_\_  
 No. of revolutions per minute *about 40.*  
 Point of cut off \_\_\_\_\_ *1/2 stroke.*  
 Diameter of screw shaft \_\_\_\_\_  
 Diameter of crank shaft journals \_\_\_\_\_  
 Diameter of screw, or of paddle wheel \_\_\_\_\_  
 Pitch of screw \_\_\_\_\_  
 No. of blades, \_\_\_\_\_ Total surface \_\_\_\_\_  
 No. of bilge pumps \_\_\_\_\_ and sizes \_\_\_\_\_  
 Do they pump from each compartment *yes.*

Are all the bilge suction pipes fitted with roses *yes.*  
 No. of feed pumps \_\_\_\_\_ and sizes \_\_\_\_\_  
 What gauges are there attached to the engines and boilers ... *1 steam gauge on boiler & 1 Compound for Condenser & Receiver*  
 Description and size of Donkey Pumps ... \_\_\_\_\_  
 Where do they pump from ... *the large one from the sea tanks and bilges of fore hold, engine room and after well. the small one from the sea & bilges.*  
 No. of bilge injections \_\_\_\_\_ and sizes \_\_\_\_\_  
 Are they connected to air, or circulating pumps \_\_\_\_\_  
 Is there a hand pump in the engine room *yes.*  
 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.*

### MAIN BOILERS.

Number \_\_\_\_\_ Description \_\_\_\_\_  
 Made by \_\_\_\_\_  
 When \_\_\_\_\_ 18 \_\_\_\_\_ At \_\_\_\_\_  
 Working pressure \_\_\_\_\_  
 Tested by hydraulic pressure to \_\_\_\_\_, Date \_\_\_\_\_  
 Description of super-heating apparatus \_\_\_\_\_  
 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 \_\_\_\_\_  
 No. of square feet of fire-grate surface in each boiler *45.*  
 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. ... *all, except the bilge suction in fore hold, when Cargo is in.*

### DONKEY BOILER.

Description \_\_\_\_\_  
 Fixed *in the stokehold.*  
 Working pressure \_\_\_\_\_

Tested by hydraulic pressure to \_\_\_\_\_, Date \_\_\_\_\_  
 Description and area of safety valves \_\_\_\_\_  
 No. of square feet of fire grate *9.6*

### PIPES, COCKS, AND CONNECTIONS.

Connections with the sea or on the skin of the ship *yes.*  
 Are they Kingston valves or common cocks ... *stop valves & cocks.*  
 Are they fixed sufficiently high on ship's side to be seen without lifting the stoke hold plates ... *yes.*  
 Are discharge pipes above or below the deep water line *at the deep lead line.*  
 Are each fitted with a discharge pipe 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 *new.*  
 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.*

Manufacturer. \_\_\_\_\_

*I was present on June 3<sup>rd</sup> when steam was raised and the engines worked; and again on June 22<sup>nd</sup> when the safety valves were tested with steam, and found correct at 65 lbs. W. A.*

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (or Wood) or Paddle Steam Vessel *"Dawn"* owned by *File & Co*  
 Port of *London* of *328.45* Tons Register, and *75* Registered Horse Power,  
 and that they have been carefully inspected and examined by me at *Sunderland*  
 and found to be at this date, viz., *Sept 26<sup>th</sup>* 18 *76* in good order and safe working condition.

*Survey fees £3.15 Received at Sunderland  
 Certificate 0.5 by W. Allison  
 £4.0 Oct 2<sup>nd</sup> /76*

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