

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rev 5/10/96

Description _____
 Made by _____
 When _____ 18 _____ At _____
 Diameter of cylinder _____ Length of stroke _____
 No. of revolutions per minute *about 70.*
 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 _____

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.

Location _____
 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 } *yes.*
 on the skin of the ship }
 Key Kingston valves } *stop valves & Cocks.*
 common cocks... }
 fixed sufficiently high on ship's side to be seen } *yes.*
 without lifting the stoke hold }
 discharge pipes above or } *at the deep lead line.*
 below the deep water line }
 each fitted with a discharge } *yes.*
 on the plating of the vessel }

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.*
 I was present on June 3rd when steam was raised and the engines worked; and again on June 22nd 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 26th* 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 2nd /76
A. J. B.

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

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