

King arthur 23670 Iron
LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Pen 9/6/79
10.25

Description *Vert^l inv^d. Compound Surface Condens^r* Are all the bilge suction pipes fitted with roses *Yes*
Made by *Blair & Co.*
When *1874* At *Stockton*
Diameter of cylinder *24 1/2" x 52"* Length of stroke *33"*
No. of revolutions per minute *65*
Point of cut off
Diameter of screw shaft *8 1/4" (in tunnel)*
Diameter of crank shaft journals *9" x 9"*
Diameter of screw, or of paddle wheel *12' 6"*
Pitch of screw *16' 0"*
No. of blades, *4* Total surface
No. of bilge pumps *2* and sizes *3 1/2" dia. x 24"*
Do they pump from each compartment *at Pump. Engine Bilge only*
Yes Pump. Engine Bilge and
also donkey connections, also (but not
to Boiler).

No. of feed pumps *2* and sizes *3 1/2" x 24"*
What gauges are there attached to the engines and boilers ... *2 Steam & 1 Vacuum*
Description and size of Donkey Pumps ... *One 4" dia. 10" stroke Pump.*
Where do they pump from ... *Bilge, Tanks, Sea & afterwale*
to deck, Boiler or overboard
(Sluice Valves on Bulkheads to run water out of holds to Engine Bilge)
No. of bilge injections *One* and sizes *4 inches*
Are they connected to air, or circulating pumps *Circulating*
Is there a hand pump in the engine room *No. but handle to donkey*
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 *One* Description *Cir. multitubular with 4 furnaces*
Made by *Blair & Co.*
When *1874* At *Stockton*
Retired Sept. '78
Working pressure *65 lb.*
Tested by hydraulic pressure to *Steam done*, Date
Description of super-heating apparatus *about 3' 6" not to be touched ends*
Can each boiler be worked separately

Can the super-heater be shut off and the boilers worked separately *Yes*
Description and area of safety valves on each boiler *2, sprung loaded Ea. 4" dia*
area = 25.13 Sq. in.
No. of square feet of fire-grate surface in each boiler *48 feet*
Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *Yes (no guard for opening)*
Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times *In E Room. Yes*

DONKEY BOILER.

Description *Vertical fire-tube*
Where fixed *On deck*
Working pressure *55 lb. at present on safety valve*
Tested by hydraulic pressure to *lever loaded*, Date
Description and area of safety valves *1 dead wt. Ea 2 1/2" dia. area = 7.5 Sq. in.*
No. of square feet of fire grate *12.5 Sq. feet*

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 ... *locked down valves*
Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates *No*
Are the discharge pipes above or below the deep water line *Below, except donkey discharge - a work*
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 *Yes*
When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *22 May, 1879*
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 *Iron tunnel standing on aft. tank. & 1/2" door on E.R. Bulkhead*
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 *"King arthur"* owned by *J. Turnbull & Son* of the Port of *Whitby* of *1007* Tons Register, and *99* Registered Horse Power, and that they have been carefully inspected and examined by me at *Hull* and found to be at this date, viz., *24 May* 18 *79* in good order and safe working condition.

Amount of Fee for Survey ... £
(Travelling Expenses, if any, £)

John B. Stuenkel
Engineer Surveyor to Lloyd's Register of Shipping
Lloyd's Register Foundation