

Report No. 3316 15188 *Iron* Rec 4.10.75

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.
Standard
ENGINEER SURVEYOR'S CERTIFICATE, & REPORT.
ENGINES.

Description *Inverted Compound Surface Condensing,*
Made by *Messrs J. Richardson & Sons, Hartlepool,*
In the year *1875.*
Present condition *new,*
Diameter of cylinder, *33HP 61LP*
Length of stroke *33,*
No. of revolutions per minute *65,*
Point of cut off *1/2 stroke,*
Paddle, or Screw *Screw*
Nominal Horse Power *150.*
Diameter of screw, or of paddle wheel *14 feet,*
Pitch of screw *15.9*
No. of blades, *4* total surface *70, sq. feet*
No. of bilge pumps *2* and size *7 1/2 dia. x 6 1/2 stroke single*
Do they pump from each compartment *yes,*
Is there provision made for pumping }
from the wings of the stoke hole } *yes,*

Are all the bilge suction pipes fitted with roses *yes,*
What vacuum and steam gauges are there attached to the engines } *1 vacuum gauge on Condenser,*
and boilers..... } *1 steam in engineroom,*
1 steam on each Boiler,
No. of feed pumps *2* and sizes *3 3/4 dia. x 2 1/2 stroke single acting,*
Description and size of } *Inverted Cyl. 6 1/2 x 7 stroke,*
Donkey Engine... } *Pump 3 1/2 x 7 double acting,*
Will it feed the boilers, pump }
from the bilges, and pump } *yes,*
on deck }
Can it be driven by steam } *yes,*
from a separate boiler }
No. of bilge injections *1* and sizes *3 1/2 dia.*
Are they fitted with non return valves *yes,*
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,*

CONNECTIONS ON HULL.

Connections with the sea } *yes,*
on the skin of the ship }
Kingston valves or common cocks *Common Valves & Cocks,*
Are they fixed sufficiently high on }
the ship's side to be seen } *yes,*
without lifting the stokehole }
plates }
Are the discharge pipes above or } *below,*
below the deep water line }
Are they each fitted with a discharge }
valve on the plating of the vessel } *yes,*

Are any pipes carried through the bunkers *no,*
If so state how protected
When was the stern tube, }
propellor, screw shaft, } *new,*
and all connections }
examined in dry dock }
How are the pipes, cocks, and valves }
arranged so as to prevent } *Non return valves & shell cock*
an unintentional connection } *with only 1 port in plug,*
between the sea and the bilge }
Have the bilge suctions non- } *not fitted,*
return valves fitted or not }

BOILERS.

Two,
on *Cylindrical,*
Made by *Messrs J. Richardson & Sons,*
In the year *1875.*
Present condition *good,*
Last extensively repaired *new,*
Working pressure *65 lbs per sq. inch.*
Tested by Hydraulic pressure *August 1875,*
To what pressure tested *130 lbs per sq. inch.*
Any super-heating apparatus *none,*
Describe it
Can each boiler be worked separately *yes,*
Boiler fitted with a separate steam gauge *yes,*

Can the super-heater be shut off and }
the boilers worked separately }
No. of safety valves on each boiler *2,*
Description and area of each safety valve *Spring 4 3/4 di 15.0 area,*
No. of square feet of fire-grate } *38,*
surface in each boiler }
Is there a separate blow off and }
brine cock on each boiler, } *yes,*
independent of those }
on the vessel's skin }
Is the screw shaft tunnel water }
tight and fitted with a } *Tunnel not watertight,*
sluice door on bulkhead } *sluice door fitted,*
Are all pipes, cocks, and roses in con- } *yes,*
nection with these boilers acces- }
sible to the engineer at all times }

Richardson & Sons Manufacturer.
Chas Smith

I hereby certify that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle)
Vessel *"Standard"* owned by *Messrs W. H. Wise & Co.,*
Port of *West Hartlepool* of *1074.* Tons Register, and *150.* Nominal Horse Power,
have been carefully inspected and examined by *me* at *Hartlepool* and found to be
at this date, viz., *September 7th 1875.* in good order and safe working condition.

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