

X 15753 Irons

# LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

## ENGINEER SURVEYOR'S CERTIFICATE & REPORT.

### ENGINES.

Rec 3/2/76

Description *Inverted, Compound, Surface Condensing,*  
Made by *Messrs Black Hawthorn & Co Gateshead,*  
In the year *1876.*  
Present condition *new.*  
Diameter of cylinder *5 one HP 32 & one LP 62,*  
Length of stroke *36.*  
No. of revolutions per minute *about 60.*  
Point of cut off *at 22,*  
Paddle, or Screw *Screw.*  
Nominal Horse Power *160.*  
Diameter of screw, or of paddle wheel *14' 9"*  
Pitch of screw *15' 6."*  
No. of blades, *4* total surface *56 sq. feet.*  
No. of bilge pumps *2* and size *3 1/2 dia. x 18 stroke single acting,*  
Do they pump from each compartment *yes.*  
Is there provision made for pumping }  
from the wings of the stoke hold } *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 each Bilge in Engine room*  
Common to both in stokehold  
No. of feed pumps *2* and sizes *3 1/2 dia. x 18 stroke single acting.*  
Description and size of } *Inverted Cyl. 6 dia. x 8 stroke*  
Donkey Engine... } *Pump 4 " x 8 " 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 *one* and sizes *4 1/2 diameter*  
Are they fitted with non return valves *yes.*  
Is there a hand pump in the engine room *No. (Donkey can be used as such)*  
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.

Are all connections with the sea }  
direct on the skin of the ship } *on Mr. Spruce's patent box craft*  
*Boiler Blow-off & Brine.*  
Are they Kingston valves or common cocks *stop valves & Cocks.*  
Are they fixed sufficiently high on }  
the ship's side to be seen } *yes.*  
without lifting the stoke hold }  
plates ..... }  
Are the discharge pipes above or } *above.*  
below the deep water line }  
Are they each fitted with a discharge } *yes.*  
valve on the plating of the vessel }

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

### BOILERS.

Number *Two.*  
Description *Cylindrical,*  
Made by *Messrs Black Hawthorn & Co.*  
In the year *1876.*  
Present condition *good.*  
When last extensively repaired *new.*  
Working pressure *65 lbs per sq. inch.*  
When tested by hydraulic pressure *700/75*  
To what pressure tested *130 lbs per sq. inch.*  
Any super-heating apparatus *none.*  
Describe it  
Can each boiler be worked separately *yes.*  
Is each 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. dia. 3 3/4 = 11.04.*  
No. of square feet of fire-grate } *42 1/2.*  
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 } *tunnel not watertight*  
tight and fitted with a } *sluice door fitted,*  
sluice door on bulkhead }  
Are all pipes, cocks, and roses in con- } *yes.*  
nection with these boilers acces- }  
sible to the engineer at all times }

for Black Hawthorn & Co Manufacturer.  
D. Mallan

I hereby certify that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle)  
Steam Vessel *"Monte Moro"* owned by *Messrs Hall, Blenkinsop & Co*  
of the Port of *South Shields* of *115.5* Tons Register, and *160* Nominal Horse Power,  
have been carefully inspected and examined by *me* at *Wallsend & Sunderland.* and found to be  
at this date, viz., *Jan'y 22<sup>nd</sup>* 18 *76.* in good order and safe working condition.

Survey fee £ 3. 3. 0

Certificate £ 5. 0

£ 3. 8. 0

Received  
22/1/76

William Allison,

Engineer Surveyor to Lloyd's Register of Shipping.

IRON 465-0004