

See No 11133 Dione

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S CERTIFICATE.

ENGINES.

Description *Common inverted (surface) Condensing* ✓
Made by *North Eastern Engine Works, Sunderland* ✓
In the year *1868* ✓
Present condition *good* ✓
Diameter of cylinder *38* ✓
Length of stroke *30 inches* ✓
No. of revolutions per minute *65* ✓
Point of cut off *$\frac{7}{8}$ of stroke* ✓
Paddle, or Screw *Screw* ✓
Nominal Horse Power *90* ✓
Diameter of screw, or of paddle wheel *12 ft* ✓
Pitch of screw *12 to 15 ft* ✓
No. of blades, *4* total surface *44 sq. ft* ✓
No. of bilge pumps *one* and size *3" x 30" single acting* ✓
Do they pump from each compartment *from engine room only* ✓
Is there provision made for pumping } *Yes (by Donkey)* ✓
from the wings of the stoke hole }

Are all the bilge suction pipes fitted with roses *yes* ✓
What vacuum and steam gauges are } *1 steam & 1 vacuum in engine room* ✓
there attached to the engines } *& 1 steam in stokehole* ✓
and boilers.....
No. of feed pumps *one* and sizes *3" dia x 30" stroke. single acting* ✓
Description and size of } *Vertical Cyl. 7" dia x 7" stroke* ✓
Donkey Engine... } *Pump 4" x 7" double acting* ✓
Will it feed the boilers, pump } *yes* ✓
from the bilges, and pump }
on deck
Can it be driven by steam } *no* ✓
from a separate boiler }
No. of bilge injections *one* and sizes *3" dia to Circulating pump* ✓
Are they fitted with non return valves *no* ✓
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 } *yes* ✓
to reach to any part of the vessel }

CONNECTIONS ON HULL.

Connections with the sea } *N.O. Brass Castings between* ✓
the skin of the ship } *Kingston for injection & between 2 sea cocks* ✓
Kingston valves or common cocks *Kingston & Common Cock* ✓
Are they fixed sufficiently high on } *no* ✓
the ship's side to be seen }
without lifting the stokehole }
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. *None* ✓
If so state how protected
When was the stern tube, } *May 1875* ✓
propellor, screw shaft, }
and all connections }
examined in dry dock }
How are the pipes, cocks, and valves } *Water can be let into ship by opening the Bilge* ✓
arranged so as to prevent } *Injection whilst sea injection is open. or* ✓
an unintentional connection } *by opening Bilge suction of Hand & Ballast* ✓
between the sea and the bilge } *traps pumps. whilst the sea cocks attached* ✓
Have the bilge suction non- } *to them are open.* ✓
return valves fitted or not } *Not* ✓

BOILERS.

No. *one* ✓
Description *Cylindrical* ✓
Made by *North Eastern Engine Works* ✓
In the year *1875* ✓
Present condition *good* ✓
When last extensively repaired *new* ✓
Working pressure *30 lbs per sq. inch* ✓
When tested by Hydraulic pressure *April 1875* ✓
To what pressure tested *60 lbs per sq. inch* ✓
Any super-heating apparatus *vertical steam dome* ✓
Describe it *round dome partly in uptake (see sketch)* ✓
Can each boiler be worked separately *only 1 boiler* ✓
Is each boiler fitted with a separate steam gauge *yes* ✓

Can the super-heater be shut off and } *no* ✓
the boilers worked separately }
No. of safety valves on each boiler *2* ✓
Description and area of each safety valve *direct weight 6" dia = 28.27 sq. inches* ✓
No. of square feet of fire-grate } *58 1/2* ✓
surface in each boiler }
Is there a separate blow off and } *yes* ✓
brine cock on each boiler, }
independent of those }
on the vessel's skin }
Is the screw shaft tunnel water } *yes* ✓
tight and fitted with a }
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 }

North Eastern Marine Engine Co. Ltd. (Ld.) Manufacturer.

W. J. Allison

hereby certify that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle)

Steam Vessel *"Dione"* owned by *J. Johnsonson*
of the Port of *London* of *537* Tons Register, and *90* Nominal Horse Power,
have been carefully inspected and examined by *me* at *Sunderland* and found to be
at this date, viz., *May 21st 1875* in good order and safe working condition.

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