

Report No 3362 S. S. "Madras"
LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.
13340 Lm
ENGINEER'S CERTIFICATE.

The following is a true Account of the Particulars of the Machinery and Boilers:—

ENGINES.—Here state description of Engines, whether Direct Acting or Geared, Inverted, Horizontal, or Oscillating Cylinders
No. of Cylinders, &c.

Compound Engines with direct acting, inverted
cylinders One High & One Low pressure.

ENGINES, maker of *Blair & Co Ltd*
,, age of *new*
,, last time taken out
,, present condition
Diameter of Cylinder *30 1/2" & 61"*
Length of stroke *39"*
No. per minute of Engines *about 60*
,, of Screw
Estimated power *140 HP*
Effective power *about 560 HP*
Diameter of Screw (or Paddle Wheels) *14' 6"*
Pitch of Screw *about 16 ft*
No. of Blades (or Floats) *4*
Description of Screw (or Floats)
Holding down Bolts, size *2 1/2" diam*
,, present condition *new*

Bilge Pumps, No. (*2*) and size *4 1/2" diam*
Feed ,, No. (*2*) and size *4 1/2" diam*
Spare gear, if usual quantity on } *yes*
board Vessel
Fuel, where stowed *In Bunkers*
,, space between Coal Bunkers } *12"*
and Boilers
,, for what quantity is space provided *366 Tons*
Donkey Engine and Boiler *Engine below*
,, if fitted in Engine Room or } *Boiler on deck*
on Deck
,, can pump be worked by hand *yes*
,, size of pump (*7 1/2"*) and stroke *9" double acting*
There is hose of sufficient length to } *deck*
reach every part of the Vessel
No. (*4*) and continuation of hand } *yes*
pumps, if fitted in Engine Room

BOILER.—Here state description of Boiler, and No.; if Tubular, or Flues; No. of Furnaces; if fitted with superheating apparatus; if Fired
athwartships, or from fore, or after end of Boiler, &c.

Two Tubular Boilers, each with three
furnaces fired from forward

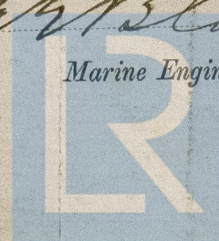
BOILER, maker of *Blair & Co Ltd*
,, age of *new*
,, when last taken out
,, present condition
,, working pressure *85 lb*
No. of surface Blow off Cocks to } *Surface & Bottom*
each Boiler } *Blow off cocks*
SCREW SHAFT length *18' 6"* diameter *10 1/2"* Tunnel thickness of plating *4/16* height *5 ft*
width *3' 6"* if water-tight door on Engine Bulkhead. *yes*

Can each Boiler be used separately *yes*
What clear space between top of } *3 ft*
Boiler and woodwork
What clear space between Funnel } *2' 3"*
and woodwork
Are Engine and Boiler Keelsons } *yes*
well connected fore and aft

Port *Stockton* 30th day of *September* 1874

we hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood)
Screw (or Paddle) Steam Vessel "*Madras*" belonging to *London*
whereof *Clark* is Master, *1069* Tons Register, and *140* H.P. have been
carefully inspected and examined by *us* at *Stockton on Tees* and *we* found the
same, at this date, in good order and safe working condition.

John Blair & Co Ltd
John Blair
Marine Engineers.



Lloyd's Register
Foundation

IRON 458-0393