

Report No 8121

LOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

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, Diagonal, or Oscillating Cylinders; No. of Cylinders, &c.

10785 Iron
Inverted Direct Acting Compound Surface.
Condensing Screw Engine
(2 Cylinders)

ENGINES, maker of *R & W Hawthorn*
age of *New*
last time taken out _____
present condition *New*
diameter of Cylinder *26" High Press, 52" Low Press*
length of stroke *2' 6"*
revolutions per minute of Engines *65*
diameter of Screw *65*
rated power *110*
effective power *450*
diameter of Screw (or Paddle Wheel) *12' 6" dia*
length of screw *13 ft to 16 ft*
of (or Blade) *4 Blades*
description of Screw (or Blade) *Right Handed Screw*
tightening down Bolts, size *2 1/2" dia*
present condition *New*

Bilge Pumps, No. (*2*) and size *4 1/2" dia X 12" Stroke*
Feed " No. (*2*) and size *4" dia X 15" do*
Spare gear, if usual quantity on board Vessel } *yes*
Fuel, where stowed *in Bunkers at Port & Starboard Side of Engine Room*
" space between Coal Bunkers and Boilers } *15*
" for what quantity is space provided *176 Tons*
Donkey Engine and Boiler *Water Ballast & Feed Donkey*
" if fitted in Engine Room or on Deck } *Donkey in Engine Room*
Donkey Boiler on Deck
" can pump be worked by hand } *yes*
" size of pump (*6" dia W.B.*) and stroke *10" Water Ballast*
4" Feed } *8" Feed*
" is hose of sufficient length to reach every part of the Vessel } *yes*
No. () and continuation of hand pumps, if fitted in Engine Room } *none*

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

Multitubular Boiler with 3 Furnaces fitted with
superheating Apparatus & Fired from Forward

BOILERS, maker of *R & W Hawthorn*
age of *New*
last time taken out _____
condition *New*
working pressure *65 lbs*
of surface Blow off Cocks to each Boiler } *one*

Can each Boiler be used separately *only one Boiler*
What clear space between top of Boiler and woodwork } *3' 6"*
What clear space between Funnel and woodwork } *Iron Casing*
Are Engine and Boiler Keelsons well connected fore and aft } *yes*

NEW SHAFT length *96' 9"* diameter *8"* Tunnel, thickness of plating *1/4"* height *5' 0"*
width *3' 9"* if water-tight door on Engine Bulkhead. *yes*

Port *Hartlepool* 11th day of *November* 1872

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) (or Paddle) Steam Vessel *Penedo* belonging to *The Brazil Steam Ship Company* is Master, *652 44/100* Tons Register, and *110* H.P. have been inspected and examined by *us* at *Hartlepool* and *we* found the *same* on this date, in good order and safe working condition.

R & W Hawthorn
Lloyd's Register
Marine Engineers.