

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.

Compound, Inverted, Direct acting.

ENGINES, maker of *Caird & Co*
 „ age of *new*
 „ last time taken out *—*
 „ present condition *new*
 Diameter of Cylinder *32" x 54"*
 Length of stroke *36*
 No. per minute of Engines *70*
 „ of Screw *70*
 Estimated power *(130) 130 H.P.*
 Effective power *100 H.P.*
 Diameter of Screw (or Paddle Wheels) *13 feet*
 Pitch of Screw *17 feet*
 No. of Blades (or Floats) *four*
 Description of Screw (or Floats) *Ordinary*
 Holding down Bolts, size *1"*
 „ present condition *new*

Bilge Pumps, No. (*2*) and size *4 1/2"*
 Feed „ No. (*2*) and size *4 1/2"*
 Spare gear, if usual quantity on board Vessel *yes*
 Fuel, where stowed *forward of Boilers*
 „ space between Coal Bunkers and Boilers *8 feet*
 „ for what quantity is space provided *23 1/2 tons*
 Donkey Engine and Boiler *yes*
 „ if fitted in Engine Room or on Deck *on deck*
 „ can pump be worked by hand *yes*
 „ size of pump (*4 1/2*) and stroke *10 ins.*
 „ is hose of sufficient length to reach every part of the Vessel *yes*
 No. (*3*) and continuation of hand pumps, if fitted in Engine Room *yes*

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.

*Flat sided multitubular, 2 furnaces with furnaces in each fitted with
one superheater and fired from forward end.*

BOILER, maker of *Caird & Co*
 „ age of *new*
 „ when last taken out *—*
 „ present condition *new*
 „ working pressure *60 lbs*
 No. of surface Blow off Cocks to each Boiler *two*

Can each Boiler be used separately *yes*
 What clear space between top of Boiler and woodwork *15 ins*
 What clear space between Funnel and woodwork *8 feet*
 Are Engine and Boiler Keelsons well connected fore and aft *yes*

SCREW SHAFT length *19' 9 1/2"* diameter *10"* Tunnel thickness of plating *1/4"* height *4' 8"*
 width *4'* if water-tight door on Engine Bulkhead *yes*

Port *Greece* 11 day of *June* 1875

Mr hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood)
 Screw (or Paddle) Steam Vessel *"Umballa"* belonging to *The British India S.N. Co.*
 whereof *Morris* is Master, *240 100* Tons Register, and *130* H.P. have been
 carefully inspected and examined by *us* at *Greece* and *was* found the
 same, at this date, in good order and safe working condition.

Caird & Co.
 Marine Engineers.