

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.

One pair of Inverted cylinder Compound Surface Condensing Screw Engines.

ENGINES, maker of *Walker Henderson & Co.*

„ age of *new*

„ last time taken out

„ present condition

Diameter of Cylinders *24" & 2" Inverted, direct acting*

Length of stroke *30"*

No. per minute of Engines *65*

„ of Screw *65*

Estimated power *90*

Effective power *450*

Diameter of Screw (or Paddle Wheels) *10ft 9in*

Pitch of Screw *18 feet*

No. of Blades (or Fins) *four*

Description of Screw (or Fins) *ordinary screw propeller*

Holding down Bolts, size *1 3/4" diameter*

„ present condition

Bilge Pumps, No. (*2*) and size *3 1/2" dia. & 15" stroke*

Feed „ No. (*2*) and size *3 1/2" & 15"*

Spare gear, if usual quantity on board Vessel *Yes*

Fuel, where stowed *amidships*

„ space between Coal Bunkers and Boilers *6 inches*

„ for what quantity is space provided *100 tons*

Donkey Engine and Boiler

„ if fitted in Engine Room or on Deck *Engine room*

„ can pump be worked by hand *No*

„ size of pump (*4"*) and stroke *12" double acting*

„ is hose of sufficient length to reach every part of the Vessel *Yes*

No. (*1*) 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.

One round horizontal tubular Boiler, 3 furnaces fired from after end.

BOILER, maker of *Walker Henderson & Co.*

„ age of *new*

„ when last taken out

„ present condition

„ working pressure *65 lbs*

No. of surface Blow off Cocks to each Boiler *One*

Can each Boiler be used separately

What clear space between top of Boiler and woodwork *4 feet*

What clear space between Funnel and woodwork *4 "*

Are Engine and Boiler Keelsons well connected fore and aft *Yes*

SCREW SHAFT length *65 feet* diameter *8 inches* Tunnel, thickness of plating

width *4 ft* if water-tight door on Engine Bulkhead *Yes.*

height *4 ft 6 in*

Port of *Glasgow* *12th* day of *March* 18*72*.

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *"Cynthia"* belonging to *Mr Watkins Esq. London* whereof *Langlois* is Master, Tons Register, and *90* H.P. have been carefully inspected and examined by *us* at *Port Glasgow* and *we* found the same, at this date, in good order and safe working condition.

Walker Henderson & Co.
Bishop St. Engineering Works
Marine Engineers, Glasgow.