

LLOYD'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.

Direct-acting, inverted, surface-condensing - compound engines - with two cylinders -

ENGINES, maker of *Denny & Co*
 „ age of *new*
 „ last time taken out _____
 „ present condition _____
 Diameter of Cylinder *35" & 60"*
 Length of stroke *36"*
 No. per minute of Engines _____
 „ of Screw _____
from H.P. indicated power 160
I.H.P. effective power 850
 Diameter of Screw (~~or Paddle Wheels~~) *12" 0'*
 Pitch of Screw *17" 3'*
 No. of Blades (~~Flats~~) *Four*
 Description of Screw *Round cast iron with*
irregular cast iron plain shaped blades
 Holding down Bolts, size *1 1/4"*
 „ present condition _____

Bilge Pumps, No. (*2*) and size *3 1/2" diam. 18" stroke*
 Feed „ No. (*2*) and size *3" diam. 18" stroke*
 Spare gear, if usual quantity on } *Yes*
 board Vessel }
 Fuel, where stowed *At sides of engine & boiler rooms*
 „ space between Coal Bunkers } *9"*
 and Boilers }
 „ for what quantity is space provided *10.5 tons*
 Donkey Engine and Boiler _____
 „ if fitted in Engine Room or } *Engine in engine room*
 on Deck } *Boiler in stokehole*
 „ can pump be worked by hand *No*
 „ size of pump (*4"*) and stroke *9"*
 „ is hose of sufficient length to } *Yes*
 reach every part of the Vessel }
 No. (*1*) 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.

One cylindrical tubular double-ended boiler with six furnaces fixed from forward & aft:

BOILER, maker of *Denny & Co*
 „ age of *new*
 „ when last taken out _____
 „ present condition _____
 „ working pressure *65 lb.*
 No. of surface Blow off Cocks to } *one*
 each Boiler }
 SCREW SHAFT length *21' 3"* diameter *10 3/4"* Tunnel thickness of plating *3/8"* height *5' 6"*
 width *4' 0"* if water-tight door on Engine Bulkhead. *Yes*

Can each Boiler be used separately _____
 What clear space between top of } *2' 6"*
 Boiler and woodwork }
 What clear space between Funnel } *2' 0"*
 and woodwork }
 Are Engine and Boiler Keelsons } *Yes*
 well connected fore and aft }

Port *Sumberton* 16th day of *March* 1875

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (~~or Wood~~)
 Screw (~~or Paddle~~) Steam Vessel *"Hawea"* belonging to *Harbour Steam Company*
 whereof *Wheeler* is Master, *461.5* Tons Register, and *160* H.P. have been
 carefully inspected and examined by *us* at *Sumberton* and *We* found the
 same, at this date, in good order and safe working condition.

Denny Ho
 Marine Engineers.



Lloyd's Register
 Foundation