

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.

*Direct acting inverted Two Cylinders -
Compound Surface Condensing -*

1122 Iron

ENGINES, maker of *John Dickinson*
 „ age of *new*
 „ last time taken out
 „ present condition
 Diameter of Cylinder *29" x 54"*
 Length of stroke *36 Inches*
 No. per minute of Engines *60*
 „ of Screw *60*
 Estimated power *120*
 Effective power *510*
 Diameter of Screw (or Paddle Wheels) *13' 6"*
 Pitch of Screw *14' 2" to 16' 6"*
 No. of Blades (or Floats) *4 Blades*
 Description of Screw (or Floats) *Expanding pitch*
 Holding down Bolts, size *2 1/4"*
 „ present condition

Bilge Pumps, No. (*2*) and size *3 3/4" dia*
 Feed „ No. (*2*) and size *3 3/4" dia*
 Spare gear, if usual quantity on board Vessel *Yes*
 Fuel, where stowed *Between Boilers & Side of Ship & Athwartships*
 „ space between Coal Bunkers and Boilers *8"*
 „ for what quantity is space provided *250*
 Donkey Engine and Boiler *Yes*
 „ if fitted in Engine Room or on Deck *In Side Hole*
 „ can pump be worked by hand *No*
 „ size of pump (*4 1/2*) and stroke *6"*
 „ 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.

*2 Cylindrical multitubular Boilers 2 Furnaces in each - No superheaters
fired at fore end. —*

BOILER, maker of *John Dickinson*
 „ age of *new*
 „ when last taken out
 „ present condition
 „ working pressure *65 lb per sq inch*
 No. of surface Blow off Cocks to each Boiler *One*

Can each Boiler be used separately *Yes*
 What clear space between top of Boiler and woodwork *No wood work*
 What clear space between Funnel and woodwork *No*
 Are Engine and Boiler Keelsons well connected fore and aft *Yes*

SCREW SHAFT length *46' 9"* diameter *9"* Tunnel, thickness of plating *4/16* height *4' 9"*
 width *3' 9"* if water-tight door on Engine Bulkhead *Yes*

Port *Lund* *14th* day of *April* 18*73*

I hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *Nordsternen* belonging to *Copenhagen* whereof *J. Matthiesen* is Master, *794* Tons Register, and *120* H.P. have been carefully inspected and examined by me at *Lund* and I found the same, at this date, in good order and safe working condition.

John Goossens
Palmer Hall Engine Works Lund
 Marine Engineers.