

12612 Iron

LOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER'S CERTIFICATE.

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.

The engines are inverted direct acting compound with surface condenser, one high & one low pressure cylinder. The engines & boilers have been thoroughly overhauled this year, and have had new crankshafts, Thrust block, outer end of screw shaft & cast.

Builder, maker of *Jalmers Shipbuilding*
built 1867 *& Iron Co. Ltd*

Time taken out *Compound 1871*

Present condition *In thorough repair*

No. of Cylinders *2 5 & 48*

Stroke *30*

Revolution of Engines *70*

Screw *70*

HP power *99 HP nominal*

Indicated power *400 HP indicated*

No. of Screw (or Paddle Wheels) *11.3*

Screw *15.0 increasing to 17.0*

Blades (*or Paddle*) *4*

Material of Screw (*or Paddle*) *fixed blades*

Down Bolts, size *2 1/2 diam*

Present condition *In good repair*

Bilge Pumps, No. (*2*) and size *4 1/2 dia 15 stroke*

Feed „ No. (*2*) and size *4 1/2 15*

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

Fuel, where stowed *In side bunkers*

„ space between Coal Bunkers and Boilers *7 1/2*

„ for what quantity is space provided *95 tons*

Donkey Engine and Boiler *yes*

„ if fitted in Engine Room or on Deck *Donkey in Engine room, boiler on Deck*

„ can pump be worked by hand *yes*

„ size of pump () and stroke *2 Ballast donkey in*

„ 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 fore, or after end of Boiler, &c.

The boilers are two in number, tubular, cylindrical with four circular furnaces, dry uptake and an annular superheater on top round base of funnel. The boilers are fired from their forward ends.

Builder, maker of *Jalmers Shipbuilding*
built 1871 *& Iron Co. Ltd*

When last taken out *In thorough repair*

Present condition *75 lbs per sq in*

Working pressure *one*

Surface Blow off Cocks to Boiler *one*

Can each Boiler be used separately *yes*

What clear space between top of Boiler and woodwork *6.1 1/2*

What clear space between Funnel and woodwork *1.10*

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

Length *75.10* diameter *7 3/4 & 8* Tunnel thickness of plating *height 3.7 to 5.0*

Depth *4.0* if water-tight door on Engine Bulkhead *none - the tunnel is water tight*

Port *Newcastle on Tyne* 29th day of *March* 1874.

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (~~or Wood~~) *Steam Vessel* *"Dorley"* belonging to *James Thompson* is Master, *700.20* Tons Register, and *99* H.P. have been inspected and examined by us at *Farron on Tyne* and we found the *this date*, in good order and safe working condition.

Jalmers Shipbuilding & Iron Co. Ltd
Wm. H. H. H. H.
Marine Engineers.