

Hawthorns

1174 3 Iron Ship

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.

One pair inverted direct acting Compound Screw Engines - fitted with Surface Condenser —

Engine Works Co

ENGINES, maker of *Converted by Victoria Locks*,, age of *New*

,, last time taken out

,, present condition *Good*Diameter of Cylinder *one 25" & one 48" dia*Length of stroke *2' 6"*No. per minute of Engines *65*,, of Screw *65*Estimated power *99*Effective power *405*Diameter of Screw (~~Paddle Wheel~~) *11 feet*Pitch of Screw *16 to 18 feet*No. of Blades (~~Flats~~) *three*Description of Screw (~~Flats~~) *Common*Holding down Bolts, size *2 inches*,, present condition *Good*Bilge Pumps, No. (*2*) and size *4" diameter*Feed ,, No. (*2*) and size *4" "*Spare gear, if usual quantity on board Vessel *Yes*Fuel, where stowed *Side Bunkers*

,, space between Coal Bunkers and Boilers

,, for what quantity is space provided *100 Tons*Donkey Engine ~~and Boiler~~ *Yes*,, if fitted in Engine Room or on Deck *Engine Room*,, can pump be worked by hand *Yes*,, size of pump (*4*) and stroke *8"*,, is hose of sufficient length to reach every part of the Vessel *Yes*No. (*0*) and continuation of hand pumps, if fitted in Engine Room *None*

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 force, or after end of Boiler, &c.

Two Cylindrical & Multitubular Boilers, with one Annular Superheater, two Furnaces in each Boiler, fired from forward —

BOILER, maker of *Victoria Locks Engine Works Co*,, age of *New*

,, when last taken out

,, present condition *Good*,, working pressure *75 lbs*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 *10 feet*What clear space between Funnel and woodwork *2 feet*Are Engine and Boiler Keelsons well connected fore and aft *Yes*SCREW SHAFT length *16 feet* diameter *8"*

width if water-tight door on Engine Bulkhead.

Funnel, thickness of plating — height —

Port *London* — *7th* day of *August* 18*73*

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (~~or Wood~~) crew (~~or Paddle~~) Steam Vessel *Hawthorns* belonging to *John Fenwick & Son* whereof *Geary* is Master, *576* Tons Register, and *99* H.P. have been carefully inspected and examined by us at *Victoria Locks* and we found the same, at this date, in good order and safe working condition.

for *Victoria Locks Engine Works Co*
E. Fenwick
 Marine Engineers.