

SHIP'S NAME

*S.S. "Glenroy"*25322 *Iron*

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

*Recd 1/1/80*Description *Vert. comp. Compound, Surface condensing*Made by *London & Glasgow Engineering Co.*When *1871* At *Glasgow*Diameter of cylinders *21 40 & 70* Length of stroke *42*No. of revolutions per minute *60*Point of cut off *26"*Diameter of screw shaft *12 1/4"*Diameter of crank shaft journals *12 & 12 1/2 ins*Diameter of screw, or of paddle wheel *main bearings - 12 1/2*Pitch of screw *22 & 6"*No. of blades, *4* Total surfaceNo. of bilge pumps *2* and sizes *7 1/2" diam & 9"*Do they pump from each compartment *Yes*Are all the bilge suction pipes fitted with roses *Yes*No. of feed pumps *2* and sizes *6" diam & 15"*What gauges are there attached to the engines and boilers ... *Steam & Vacuum, and a set of water gauges in each stokehold*Description and size of Donkey Pumps ... *Vertical, double acting, 9" cy. 5 1/2" Ram & 10" Stroke*Where do they pump from ... *Compartment same as bilge pumps, from sea to deck, sea & Boiler*No. of bilge injections *one* and sizes *5 1/8" nm-return*Are they connected to air, or circulating pumps *Circulating*Is there a hand pump in the engine room *Yes*Can it be worked by the main engines *Yes*Is there a deck hose of sufficient length to reach to any part of the vessel *Yes*

MAIN BOILERS.

Number *Two* Description *Cir. multitubular*Made by *C. D. Holmes & Co.*When *Oct 1879* At *Hull*Working pressure *45 lbs per sq. inch*Tested by hydraulic pressure to *150 lbs*, Date *6/10/79*Description of super-heating apparatus *None*Can each boiler be worked separately *Yes*Can the super-heater be shut off and the boilers worked separately *Yes*Description and area of safety valves on each boiler *Two of 5" dia = 39.27 area, both to ease & to turn spring loaded*No. of square feet of fire-grate surface in each boiler *71.5 feet*Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin *Yes*Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times. *E. Room & under after hold, when cargo is in*

DONKEY BOILER.

Description *multitubular, flat sided, semi cir. top bottom*Where fixed *On deck*Working pressure *50 lbs*Tested by hydraulic pressure to *100 lbs*, Date *7/11/79*Description and area of safety valves *1. 3" dia & 7" area, spring loaded*No. of square feet of fire grate *12.75*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship *Yes*Are they Kingston valves or common cocks *Common cocks & screw valves*Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates *Yes*Are the discharge pipes above or below the deep water line *Below*Are they each fitted with a discharge valve on the plating of the vessel *Yes*What pipes are carried through the bunkers *None*How are they protected *Yes*When were the stern tube, propeller, screw shaft, and all connections examined in dry dock *15 December 1879*Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge *Yes*Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead *Yes*

Manufacturer.

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (or Wood) Screw (~~Paddle~~) Steam Vessel *"Glenroy"* owned by *A. C. Goss & Co.* of the Port of *Glasgow* of *1411* Tons Register, and *250* Registered Horse Power, and that they have been carefully inspected and examined by me at *Hull and Grimsby* and found to be at this date, viz., *17th December* 1879 in good order and safe working condition.

Amount of Fee for Survey ... £ : -

(Travelling Expenses, if any, £)

John B. Stuenkel
Engineer Surveyor to Lloyd's Register of Shipping.