

Port West Hartlepool 21 February 1878
 20274 Iron
 81/53 tons

Tails of Main Boilers of the Steam Ship

Diameter $11' 8''$ Length $10' 1''$
 Thickness of shell plates $15/16$
 Description of riveting of longitudinal joints welded of circumferential joints Double
 Pitch of rivets ditto ditto $3 5/16$
 Diameter of rivets ditto ditto $1 1/8$
 Lap of plating ditto ditto $5 1/4$
 Size of manholes in circular shell $15'' \times 11 1/2''$
 How compensated for Rectangular plate $24 \times 27 1/2 \times 1 1/16$
 Number of furnaces in boiler Three
 Diameter of furnaces $2 \times 9 1/2$ Length of furnaces 6×10 over tube plates
 Thickness of furnace plates Crown $1/2$ bottom $9/16$
 Description of joint of furnaces Butt single riveted
 Whether strengthened with rings No Greatest length between rings
 Thickness of combustion chamber plating $1/2''$
 Diameter of screw stays to ditto $1 1/2$ over threads pitch of stays $1 1/4 \times 1 1/4$
 End plates, thickness $13/16$
 Diameter of longitudinal stays to end plates $2 3/8$ over threads pitch of ditto $14 1/2 \times 13 1/4$
 How stays are secured With nuts and washers
 Diameter of tubes $3 1/2$ pitch of tubes $4 7/8 \times 4 3/4$
 Thickness of tube plates $13/16$
 Stayed by Stay tubes pitch of stays $14 5/8 \times 9 1/2$
 Description of steam receiver Vertical steam dome. Contracted at neck
 Diameter of ditto $3' 0''$ length of ditto $5' 0''$
 Thickness of plating of ditto $1/16$ ends $5/8$
 Ends, how stayed Four stays in dome $2 3/8$ dia over threads
 All longitudinal seams of shell plating welded except of one plate in inner course of shell plating
 Shell $51520 \times 1 7/8 \times .10 = 14.4$ lbs Working Pressure
 140×6.5

Combustion Chamber plating $\frac{100 \times 8^2}{4 1/2^2} = 121$

James Bain

Engineer Surveyor to Lloyd's Register of Shipping.