Port *West Hartlepool* 20th Nov. 1877

Rec 6/12/77

Details of Main Boilers of the Steam Ship *Castello* tons

Diameter	12' .. 0	Length	16' .. 2½

Thickness of shell plates 29/32 nd

Description of riveting of longitudinal joints Treble   of circumferential joints Double

Pitch of rivets ditto 4½   ditto 3¼

Diameter of rivets ditto 1 5/32   ditto 1 5/32

Lap of plating ditto 6½   ditto 5¼

Size of manholes in circular shell 16 × 11½

How compensated for Ring round hole 6" × ⅞.

Number of furnaces in boiler Four

Diameter of furnaces 3' .. 1"   Length of furnaces 5' .. 2"

Thickness of furnace plates ½

Description of joint of furnaces Double butt straps

Whether strengthened with rings No   Greatest length between rings

Thickness of combustion chamber plating ½

Diameter of screw stays to ditto 1½ over threads   pitch of stays 8¼ × 8¼

End plates, thickness 5/8

Diameter of longitudinal stays to end plates 1 ⅞ square   pitch of ditto 14 × 15 widest pitch

How stays are secured To double vertical angle irons

Diameter of tubes 3½   pitch of tubes 6 × 4¾

Thickness of tube plates ¾

Stayed by Stay tubes   pitch of stays 15 × 9½

Description of steam receiver Steam dome contracted at neck

Diameter of ditto 4' .. 0"   length of ditto 8' .. 6" overall

Thickness of plating of ditto ½   ends ½"

Ends, how stayed Four stays 1¾ square in dome

Shell $\dfrac{51520 \times 1 \, 3/16 \times .742}{144 \times 6.5}$ ℔ lbs. Working Pressure

Furnaces $\dfrac{89600 \times ½^2}{5.2 \times 3⅓}$ = 169 " " "

Flat plates in Combustion Chamber $\dfrac{100 \times 8^2}{8¼^2}$ = 95 " " "