



Diameter of tubes  $3\frac{3}{16}$  pitch of tubes  $4\frac{1}{8} \times 4\frac{1}{8}$  thickness of tube plates, front  $3\frac{1}{16}$  back  $3\frac{1}{16}$   
 How stayed *Stay tubes* pitch of stays  $9\frac{1}{2} \times 9\frac{1}{2} \times 14\frac{1}{2}$  width of water spaces  $6$   
 Diameter of Superheater or Steam chest  $5\frac{1}{2}$  length  $14\frac{1}{2}$   
 Thickness of plates  $9\frac{1}{16}$  description of longitudinal joint *Lap tubes* diameter of rivet holes  $1\frac{1}{16}$  pitch of rivets  $1\frac{1}{8}$   
 Working pressure of shell by rules  $118\frac{1}{2}$  Diameter of flue *no flue* thickness of plates —  
 If stiffened with rings — distance between rings — Working pressure by rules —  
 End plates of superheater, or steam chest; thickness  $5\frac{1}{8}$  How stayed *no stays*  
 Superheater or steam chest; how connected to boiler *by copper pipes*

**DONKEY BOILER—** Description *Round Upright*  
 Made at *Greenock* By whom made *Caird & Co* when made *1881*  
 Where fixed *on Deck* working pressure  $60$  lbs Tested by hydraulic pressure to  $120$  lbs No. of Certificate *84*  
 Fire grate area  $12$  sq feet Description of safety valves *Direct spring* No. of safety valves *one* area of each  $7.06$  sq  
 If fitted with easing gear *yes* If steam from main boilers can enter the donkey boiler *no*  
 Diameter of donkey boiler  $4\frac{1}{2}$  length  $9\frac{1}{2}$  description of riveting *double in long seams & single in cir*  
 thickness of shell plates  $7\frac{1}{16}$  diameter of rivet holes  $1\frac{3}{16}$  whether punched or drilled *punched*  
 pitch of rivets  $2\frac{3}{16}$  lap of plating  $4\frac{1}{2}$  per centage of strength of joint  $70$   
 thickness of crown plates  $5\frac{1}{8}$  stayed by *three 1\frac{1}{16} dia stays & uprights*  
 Diameter of furnace, top  $3\frac{1}{2}$  bottom  $4\frac{1}{2}$  height of furnace  $4\frac{1}{2}$   
 thickness of plates  $7\frac{1}{16}$  description of joint *Lap single*  
 thickness of furnace crown plates  $2$  stayed by *two stays & uprights*  
 Working pressure of shell by rules  $87\frac{1}{2}$  working pressure of furnace by rules  $45$  lbs  
 diameter of uptake  $12$  thickness of plates  $3\frac{1}{8}$  thickness of water tubes  $3\frac{1}{8}$  *Two tubes 8" diam*

The foregoing is a correct description,  
*Caird & Co* Manufacturer.

**General Remarks** (State quality of workmanship, opinions as to class, &c., *The Engines and Boilers were*)  
*inspected during construction by Mr Alchin, and fitted on board and*  
*tested under steam by me. the workmanship in my opinion is of*  
*good quality. the Machinery and Boilers are now in good order and*  
*safe working condition and are in my opinion eligible to be noted in*  
*the Register Book LLOYD'S M.C. 11.81.*

*It is submitted that*  
*this vessel is eligible to*  
*have the notification*  
*& Lloyd M.C. recorded*  
*M. 29/11/81*

The amount of Entry Fee £ 3 : : : received by me,  
 Special .. £ 22 : 10 :  
 Certificate (if required) .. £ Gratia 25/11/1881  
 To be sent as per margin.  
 (Travelling Expenses, if any, £ )

*Andrew V. Hemm*  
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.  
 Clyde District

Committee's Minute Tuesday, November, 22<sup>nd</sup>. 1881.

