

REPORT ON MACHINERY.

Port of Leith

FRI. 23 JUL 1897

Received at London Office 18

No. in Survey held at Leith
Reg. Book.Date, first Survey 6th January Last Survey 12th July 18 97(Number of Visits 25)on the S.K. "Innegellie"Tons { Gross 100.27
Net 15.22Master A. Gouley Built at Anstruther By whom built W. Jarvis When built 1897Engines made at Leith By whom made John Cairn & Co when made 1897Boilers made at do By whom made do when made 1897Registered Horse Power 38 Owners Kilenny & Fishing Co Ltd Port belonging to AnstrutherNom. Horse Power as per Section 28 38ENGINES, &c.— Description of Engines Compound No. of Cylinders 2Diameter of Cylinders 14" + 29" Length of Stroke 20" Revolutions per minute 120 Diameter of Screw shaft as per rule 5.5.9"
as fitted 5.5.8"Diameter of Tunnel shaft as per rule 5.3.1" Diameter of Crank shaft journals 5.5.8" Diameter of Crank pin 5.5.8" Size of Crank webs 12" x 4.3.16"
as fitted 5.5.2"Diameter of screw 7' 6" Pitch of screw 9' 0" No. of blades 4 State whether moveable no Total surface 15.6No. of Feed pumps 1 Diameter of ditto 2.1.4" Stroke 10" Can one be overhauled while the other is at work ✓No. of Bilge pumps 1 Diameter of ditto 2.1.4" Stroke 10" Can one be overhauled while the other is at work ✓No. of Donkey Engines 1 Sizes of Pumps 6" x 3" x 8" No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room One 2" dr. & ejector 1.5" dr. In Holds, &c. One 2" dr. & ejector 1.5" dr.No. of bilge injections 1 sizes 2.5" dr. Connected to condenser or to circulating pump yes Is a separate donkey suction fitted in Engine room & size yes 2"Are all the bilge suction pipes fitted with roses yes Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible noneAre all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks BothAre they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the discharge pipes above or below the deep water line AboveAre they each fitted with a discharge valve always accessible on the plating of the vessel yes Are the blow off cocks fitted with a spigot and brass covering plate yesWhat pipes are carried through the bunkers Bilge suction to hold How are they protected Wood casingAre all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times yesAre the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges yesWhen were stern tube, propeller, screw shaft, and all connections examined in dry dock new vessel Is the screw shaft tunnel watertight noneIs it fitted with a watertight door ✓ worked from ✓BOILERS, &c.— (Letter for record S) Total Heating Surface of Boilers 6606No. and Description of Boilers one multitubular single ended Working Pressure 120 lbs Tested by hydraulic pressure to 240 lbsDate of test 15/6/97 Can each boiler be worked separately ✓ Area of fire grate in each boiler 30.6 No. and Description of safety valves toeach boiler Two, Spring Area of each valve 4.9.0" Pressure to which they are adjusted 120 lbs Are they fittedwith easing gear yes Smallest distance between boilers or uptakes and bunkers or woodwork 6" Mean diameter of boilers 9' 6.7.6"Length 9' 0" Material of shell plates Steel Thickness 4.7.6" Description of riveting: circum. seams Lap & Rivet long. seams S.B.S. & RivetDiameter of rivet holes in long. seams 15.1.6" Pitch of rivets 4.1.7.6" Lap of plates or width of butt straps 10"Per centages of strength of longitudinal joint 90.5 Working pressure of shell by rules 126 lbs Size of manhole in shell 16" x 12"Size of compensating ring 7" x 1.1.6" No. and Description of Furnaces in each boiler 2- plain Material Steel Outside diameter 37.3.16"Length of plain part top 6.4 ft Thickness of plates crown 1.1.32" Description of longitudinal joint S.B.S. & Rivet No. of strengthening rings ✓Working pressure of furnace by the rules 130 lbs Combustion chamber plates: Material Steel Thickness: Sides 1.5.32" Back 1.5.32" Top 9.7.6" Bottom 1.5.32"Pitch of stays to ditto: Sides 9" Back 6.7.4" Top 9.7.4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 128 lbsMaterial of stays Steel Diameter at smallest part 7.6.0" Area supported by each stay 4.9.0" Working pressure by rules 123 lbs End plates in steam space:Material Steel Thickness 2.9.32" Pitch of stays 18" How are stays secured S.B.S. & Rivet Working pressure by rules 156 lbs Material of stays SteelDiameter at smallest part 4.7.7.6" Area supported by each stay 3.2.4.0" Working pressure by rules 132 lbs Material of Front plates at bottom SteelThickness 5.8" Material of Lower back plate Steel Thickness 2.4.32" Greatest pitch of stays 11.8" Working pressure of plate by rules 155 lbsDiameter of tubes 3.6" Pitch of tubes 4.7.4" x 4.7.6" Material of tube plates Steel Thickness: Front 5.8" Back 4.6" Mean pitch of stays 9.5"Pitch across wide water spaces 13" 1.2" Working pressures by rules 173 lbs Girders to Chamber tops: Material Iron Depth andthickness of girder at centre 5" x 1" Length as per rule 18" Distance apart 9.5" Number and pitch of Stays in each 2-7"Working pressure by rules 123 lbs Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler workedseparately ✓ Diameter ✓ Length ✓ Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. of rivetholes ✓ Pitch of rivets ✓ Working pressure of shell by rules ✓ Diameter of flue ✓ Material of flue plates ✓ Thickness ✓If stiffened with rings ✓ Distance between rings ✓ Working pressure by rules ✓ End plates: Thickness ✓ How stayed ✓Working pressure of end plates ✓ Area of safety valves to superheater ✓ Are they fitted with easing gear ✓

DONKEY BOILER Description None

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure _____ tested by hydraulic pressure to _____ No. of Certificate _____ Fire grate area _____ Description of safety valves _____

No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____

Diameter of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____

Description of riveting long. seams _____ Diameter of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____

Lap of plating _____ Per centage of strength of joint _____ Rivets _____ Thickness of shell crown plates _____ Radius of do. _____ No. of Stays to do. _____

Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____ Thickness of furnace plates _____ Description of joint _____

Thickness of furnace crown plates _____ Stayed by _____ Working pressure of shell by rules _____

Working pressure of furnace by rules _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

SPARE GEAR. State the articles supplied:— As per Rule

The foregoing is a correct description,
Schubert & Co Manufacturer.

General Remarks (State quality of workmanship, opinions as to class, &c. _____)

Dates of Survey while building
 During progress of work in shops— 1897. Jan 6. 11. 14. 21. 27 Feb. 2. 14. 19. Mar. 10. 16. 26. 31. Apr. 6. 13. 27. May 8. 18. 24. 29. June 2. 15.
 During erection on board vessel— 1897 June 23. 28 July 3. 12.
 Total No. of visits 25

The engines & boiler of this vessel have been constructed under special survey, the materials & workmanship are found & good. The engines have been tried & the boiler safety valves adjusted under steam at the working pressure. The machinery is now in good & safe working condition & eligible in my opinion to have the notation of **+LMC 7.97** The boiler tracing is retained for reference in dealing with the case of the boiler for the sister vessel.

It is submitted that
 this vessel is eligible for
THE RECORD. **+LMC 7.97**
TS
 23/7/97

Certificate (if required) to be sent to _____

The amount of Entry Fee. £ 1 : : + When applied for, 21st July 97
 Special £ 8 : : - 24/7/97
 Donkey Boiler Fee £ : : + When received, 23/7/97
 Travelling Expenses (if any) £ - : 8 -

Thomas Field
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute **FRI, 23 JUL 1897**
 Assigned **+LMC 7.97**

(The Surveyors are requested not to write on or below the space for Committee's Minute.)