

REPORT ON MACHINERY.

No. 20

No. 7923

No. 5323

Port of *Dundee*

Received at London Office

JAN 23 1890

No. in Survey held at
Reg. Book.

Date, first Survey *15 July*

Last Survey *8 January 1890*

Number of Visits *7*

Tons

749.04

on the

Screw Steamer "Croydon"

Master

Built at

Middleton

By whom built

W. Harkness & Son

When built

1890

Engines made at

Arbroath

By whom made

A. Shanks & Son

when made

1890

Boilers made at

Newcastle

By whom made

James Wilson & Co. Ltd.

when made

1890

Registered Horse Power

128

Owners

W. F. Connally

Port belonging to

London

ENGINES, &c.—

Description of Engines

Triple expansion, Surface Condensing.

Diameter of Cylinders

17" x 28" x 47"

Length of Stroke

33"

No. of Rev. per minute

80

Point of Cut off, High Pressure

1/2

Low Pressure

1/2

Diameter of Screw shaft

9"

Diam. of Tunnel shaft

8 1/4"

Diam. of Crank shaft journals

9"

Diam. of Crank pin

9"

size of Crank webs

6 1/2" x 18"

Diameter of screw

13"

Pitch of screw

14 1/2"

No. of blades

4

state whether moveable

fixed

total surface

48 sq ft

No. of Feed pumps

2

diameter of ditto

2 1/2"

Stroke

18"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

diameter of ditto

3"

Stroke

18"

Can one be overhauled while the other is at work

Yes

Where do they pump from

Engine Room (P. S. & C. S.) after well, sea.

No. of Donkey Engines

2

Size of Pumps

6" x 4" x 12" & 8" x 8" x 12"

Where do they pump from

Two donkeys - one on, No. 1, No. 2, No. 3, No. 4, No. 5, No. 6, No. 7, No. 8, No. 9, No. 10, No. 11, No. 12, No. 13, No. 14, No. 15, No. 16, No. 17, No. 18, No. 19, No. 20, No. 21, No. 22, No. 23, No. 24, No. 25, No. 26, No. 27, No. 28, No. 29, No. 30, No. 31, No. 32, No. 33, No. 34, No. 35, No. 36, No. 37, No. 38, No. 39, No. 40, No. 41, No. 42, No. 43, No. 44, No. 45, No. 46, No. 47, No. 48, No. 49, No. 50, No. 51, No. 52, No. 53, No. 54, No. 55, No. 56, No. 57, No. 58, No. 59, No. 60, No. 61, No. 62, No. 63, No. 64, No. 65, No. 66, No. 67, No. 68, No. 69, No. 70, No. 71, No. 72, No. 73, No. 74, No. 75, No. 76, No. 77, No. 78, No. 79, No. 80, No. 81, No. 82, No. 83, No. 84, No. 85, No. 86, No. 87, No. 88, No. 89, No. 90, No. 91, No. 92, No. 93, No. 94, No. 95, No. 96, No. 97, No. 98, No. 99, No. 100, No. 101, No. 102, No. 103, No. 104, No. 105, No. 106, No. 107, No. 108, No. 109, No. 110, No. 111, No. 112, No. 113, No. 114, No. 115, No. 116, No. 117, No. 118, No. 119, No. 120, No. 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898, No. 899, No. 900, No. 901, No. 902, No. 903, No. 904, No. 905, No. 906, No. 907, No. 908, No. 909, No. 910, No. 911, No. 912, No. 913, No. 914, No. 915, No. 916, No. 917, No. 918, No. 919, No. 920, No. 921, No. 922, No. 923, No. 924, No. 925, No. 926, No. 927, No. 928, No. 929, No. 930, No. 931, No. 932, No. 933, No. 934, No. 935, No. 936, No. 937, No. 938, No. 939, No. 940, No. 941, No. 942, No. 943, No. 944, No. 945, No. 946, No. 947, No. 948, No. 949, No. 950, No. 951, No. 952, No. 953, No. 954, No. 955, No. 956, No. 957, No. 958, No. 959, No. 960, No. 961, No. 962, No. 963, No. 964, No. 965, No. 966, No. 967, No. 968, No. 969, No. 970, No. 971, No. 972, No. 973, No. 974, No. 975, No. 976, No. 977, No. 978, No. 979, No. 980, No. 981, No. 982, No. 983, No. 984, No. 985, No. 986, No. 987, No. 988, No. 989, No. 990, No. 991, No. 992, No. 993, No. 994, No. 995, No. 996, No. 997, No. 998, No. 999, No. 1000, No. 1001, No. 1002, No. 1003, No. 1004, No. 1005, No. 1006, No. 1007, No. 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1108, No. 1109, No. 1110, No. 1111, No. 1112, No. 1113, No. 1114, No. 1115, No. 1116, No. 1117, No. 1118, No. 1119, No. 1120, No. 1121, No. 1122, No. 1123, No. 1124, No. 1125, No. 1126, No. 1127, No. 1128, No. 1129, No. 1130, No. 1131, No. 1132, No. 1133, No. 1134, No. 1135, No. 1136, No. 1137, No. 1138, No. 1139, No. 1140, No. 1141, No. 1142, No. 1143, No. 1144, No. 1145, No. 1146, No. 1147, No. 1148, No. 1149, No. 1150, No. 1151, No. 1152, No. 1153, No. 1154, No. 1155, No. 1156, No. 1157, No. 1158, No. 1159, No. 1160, No. 1161, No. 1162, No. 1163, No. 1164, No. 1165, No

DONKEY BOILER— Description *Cylindrical Vertical Fine cross water tubes.*
 Made at *Manchester* by whom made *J. Turner & Co* when made *1889* where fixed *Stokehold.*
 Working pressure *98 lbs* tested by hydraulic pressure to *200 lbs* No. of Certificate *2030* fire grate area *17 Sq. ft.* description of safety valves *Spring loaded* No. of safety valves *1* area of each *9.62* if fitted with easing gear *yes* if steam from main boilers can enter the donkey boiler *no* diameter of donkey boiler *5'-9"* length *11'-6"* description of riveting *Lap double riv.*
 Thickness of shell plates *7/16* diameter of rivet holes *13/16* whether punched or drilled *punched* pitch of rivets *2 1/4* *2 1/4* lap of plating *1 1/4*
 percentage of strength of joint *71.0%* thickness of crown plates *5/8"* stayed by *6 stays 1 1/2" dia.*
 Diameter of furnace, top *4'-6"* bottom *5'-2"* length of furnace *6'-0"* thickness of plates *5/8"* description of joint *Lap single riv.*
 Thickness of furnace crown plates *5/8"* stayed by *Same as crown of boiler.* working pressure of shell by rules *97 lbs.*
 Working pressure of furnace by rules *98 lbs.* diameter of uptake *12"* thickness of plates *7/16* thickness of water tubes *3/8"*

SPARE GEAR. State the articles supplied:— *2 pistons & bolts + nuts, 1 set of coupling bolts, 6 packing bolts, 6 condenser valves, 2 connecting rods, 1 set of air pump valves, 1 set of feed pump valves, 2 main bearings, 1 set of circulating pump valves, 1 set of bilge pump valves, 1 safety valve spring. Iron of various sizes.*
 The foregoing is a correct description,

Manufacturer.

A. L. Hunt & Son

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

The machinery of this vessel has been built under special survey; the workmanship and material are good.

The boiler of this vessel has been built under special survey the material and workmanship good. Tested by hydraulic pressure to 200 lbs. found satisfactory.

*Heating Surface 1964 sq. ft.
 H.P. 128 H.P.*

The main and donkey boilers of this vessel have been examined under steam and found satisfactory, and their safety valves adjusted under steam to 164 lbs & 98 lbs respectively.

*The engines have been examined under steam and found to work satisfactorily and are now in a safe and efficient working condition, and eligible in my opinion to have the certification **L.M.C. 3.90** recorded in the Register Book.*

It is submitted that this vessel is eligible to have + L.M.C. 3.90 recorded
W.A. 29.3.90

Fee for Survey of Boiler (Proc.) £5.5.0 not yet received. Applied for
paid at Reg. 18/3/90

The amount of Entry Fee £ 2 : 0 : received by me,

Special £ 9 : 12 :

Donkey Boiler Fee £ : :

Certificate (if required) .. £ : : 20 Jan. 1890

To be sent as per margin.

(Travelling Expenses, if any, £ - 4/-)

Committee's Minute

TUES 1 APRIL 1890

+ L.M.C. 3/90

Herbert M. Rogers
Richard H. King
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



Lloyd's Register Foundation