No. 2174

THE BRITISH CORPORATION FOR THE SURVEY AND REGISTRY OF SHIPPING.

Report No. 2024 No. in Register Book 3364

S.S. "JOHN. H. PRICE"

Makers of Engines Smiths Dock Co Ld.

Works No. 299.

Makers of Main Boilers Central Marine Engine Wks.

Works No. R 322.

Makers of Donkey Boiler –

Works No. –

MACHINERY.

No.

THE BRITISH CORPORATION FOR THE SURVEY AND REGISTRY OF SHIPPING.

Report No. ..... No. in Register Book .....

Received at Head Office 17th August 1927

Surveyor's Report on the New Engines, Boilers, and Auxiliary Machinery of the ~~Triple~~ Single ~~Quadruple~~ Twin Screw Steamer "John H. Price"

Official No. 147788 Port of Registry Montreal.

Registered Owners Hall Corporation of Canada.

Engines Built by Smiths Dock Co Ld.

at South Bank-on-Tees.

Main Boilers Built by Central Marine Engine Works.

at Hartlepool.

Donkey " " ✓

at ✓

Date of Completion 4-27.

First Visit 16-12-26 Last Visit 21-4-27 Total Visits 40

RECIPROCATING ENGINES.

Works No. 299 No. of Sets 1 Description Triple expansion S.C. 3 cyls.

No. of Cylinders each Engine 3 No. of Cranks 3

Diars. of Cylinders 15" - 25" - 40" Stroke 33"

Cubic feet in each L.P. Cylinder 23.65

Are Spring-loaded Relief Valves fitted to Top and Bottom of each Cylr.? yes.

" " " each Receiver? yes.

Type of H.P. Valves, Piston.

" 1st I.P. " Slide.

" 2nd I.P. " Slide

" L.P. " Slide

" Valve Gear Stephenson link.

" Condenser Surface. Cooling Surface 850 sq. ft.

Diameter of Piston Rods (plain part) 4 1/4" Screwed part (bottom of thread) 2.743"

Material " M. Steel.

Diar. of Connecting Rods (smallest part) 4" Material M. Steel.

" Crosshead Gudgeons 3 7/8" Length of Bearing 4 1/16" Material "

No. of Crosshead Bolts (each) 4 Diar. over Thrd. 1 3/4" Thrds. per inch 5 Material M.S.

" Crank Pin " " 2 " 2 1/4" 6 " "

" Main Bearings 6 Lengths 8 3/8"

" Bolts in each 2 Diar. over Thread 2" Threads per inch 7 Material M.S.

" Holding Down Bolts, each Engine 52 Diar. 1 1/4" No. of Metal Chocks 52

Are the Engines bolted to the Tank Top or to a Built Seat? Tank top.

Are the Bolts tapped through the Tank Top and fitted with Nuts Inside? yes.

If not, how are they fitted?

Connecting Rods, Forged by Brown Bros. ~~Darlington Forge & Eng. Co.~~

Piston " " Brown Bros.

Crossheads, " "

Connecting Rods, Finished by Cunitho Dkd.

Piston " " "

Crossheads, " "

Date of Harbour Trial 13-4-27

" Trial Trip 25-4-27

Trials run at In Lees Bay.

Were the Engines tested to full power under Sea-going conditions? yes.

If so, what was the I.H.P.? 741.5 Revols. per min. 100

Pressure in 1st I.P. Receiver, 50.2 lbs., 2nd I.P., lbs., L.P., 6.5 lbs., Vacuum, 25 ins.

Speed on Trial no speed taken.

If the Conditions on Trial were such that full power records were not obtained give the following estimated data:—

Builders' estimated I.H.P. Revols. per min.

Estimated Speed

TURBINE ENGINES.

Works No. Type of Turbines

No. of H.P. Turbines No. of I.P. No. of L.P. No. of Astern

Are the Propeller Shafts driven direct by the Turbines or through Gearing?

Is Single or Double Reduction Gear employed?

Diar. of 1st Reduction Pinion

" 1st " Wheel } Width Pitch of Teeth

Estimated Pressure per lineal inch

Diar. of 2nd Reduction Pinion

" 2nd " Wheel } Width Pitch of Teeth

Estimated Pressure per lineal inch

Revols. per min. of H.P. Turbines at Full Power S.H.P.

" " I.P. " "

" " L.P. " "

" " 1st Reduction Shaft

" " 2nd "

" " Propeller Shaft

Total Shaft Horse Power

Date of Harbour Trial

" Trial Trip

Trials run at

Speed on Trial Knots. Propeller Revols. per min. S.H.P.

Turbine Spindles forged by

" Wheels forged or cast by

Reduction Gear Shafts forged by

" Wheels forged or cast by

DESCRIPTION OF INSTALLATION.

TURBO-ELECTRIC PROPELLING MACHINERY.

No. of Turbo-Generating Sets Capacity of each

Type of Turbines employed

Description of Generators

No. of Motors driving Propeller Shafting

Are the Propeller Shafts driven direct by the Motors or through Gearing?

Is Single or Double Reduction Gear employed?

Description of Motors

Diar. of 1st Reduction Pinion
" 1st " Wheel } Width Pitch of Teeth

Estimated Pressure per lineal inch

Diar. of 2nd Reduction Pinion
" 2nd " Wheel } Width Pitch of Teeth

Estimated Pressure per lineal inch

Revols. per min. of Generators at Full Power

" Motors "

" " 1st Reduction Shaft

" " 2nd "

" " Propellers at Full Power

Total Shaft Horse Power

Date of Harbour Trial

" Trial Trip

Trials run at

Speed on Trial Knots. Propeller Revols. per min. S.H.P.

Makers of Turbines

" Generators

" Motors

" Reduction Gear

Turbine Spindles forged by

" Wheels forged or cast by

Reduction Gear Shafts forged by

" Wheels forged or cast by

DESCRIPTION OF INSTALLATION.

SHAFTING.

Are the Crank Shafts Built or Solid? Built.

No. of Lengths in each 4 Angle of Cranks 120°

Diar. by Rule 8.249 Actual 8 3/8" In Way of Webs 8 3/8"

" of Crank Pins 8 3/8" Length between Webs 8 1/2"

Greatest Width of Crank Webs 15 5/8" Thickness 5 3/16"

Least " " 12 1/2" " 5 3/16"

Diar. of Keys in Crank Webs 1 1/2" Length 4"

" Dowels in Crank Pins 1" Length 3 1/2" Screwed or Plain plain.

No. of Bolts each Coupling 6 Diar. at Mid Length 2" Diar. of Pitch Circle 12 1/2"

Greatest Distance from Edge of Main Bearing to Crank Web 1/8"

Type of Thrust Blocks Horseshoe type.

No. " Rings 4.

Diar. of Thrust Shafts at bottom of Collars 8 3/8" No. of Collars 4

" " Forward Coupling 7 7/8" At Aft Coupling 7 7/8"

Diar. of Intermediate Shafting by Rule — Actual — No. of Lengths —

No. of Bolts, each Coupling — Diar. at Mid Length — Diar. of Pitch Circle —

Diar. of Propeller Shafts by Rule 8.83" Actual 9" At Couplings 8 3/8"

Are Propeller Shafts fitted with Continuous Brass Liners? yes.

Diar. over Liners 10 3/16" Length of After Bearings 3'-4"

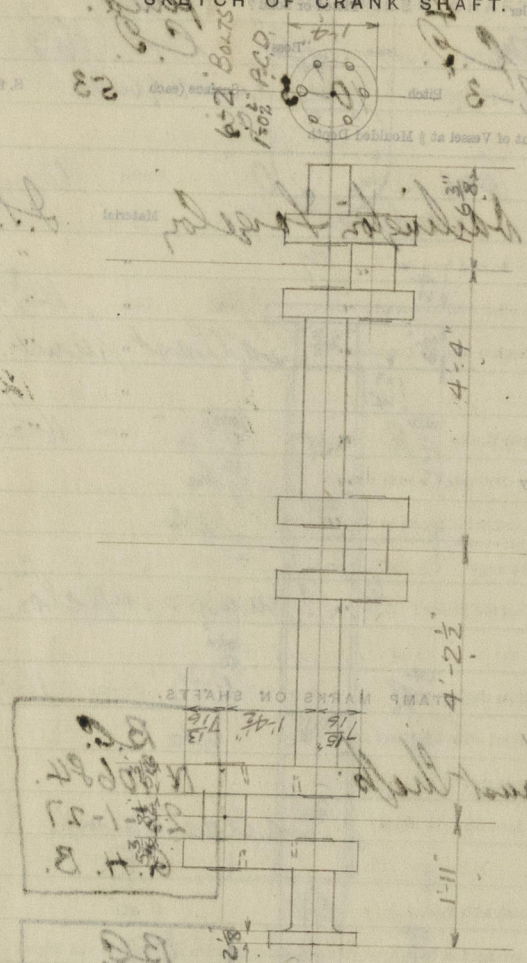
Of what Material are the After Bearings composed? Lignum Vitae.

Are Means provided for lubricating the After Bearings with Oil? no

" " to prevent Sea Water entering the Stern Tubes? no.

If so, what Type is adopted?

SKETCH OF CRANK SHAFT.



No. of Blades each Propeller 4 Fitted or Solid? fitted.

Material of Blades C.P. Boss C.P.

Diar. of Propellers 12-3" Pitch 10'-3" Surface (each 53 S. ft.

Coefficient of Displacement of Vessel at ⅔ Moulded Depth .85

Crank Shafts Forged by Darlington Forge Co. Material I.P.

" Pins " " " "

" Webs " " " "

Thrust Shafts " " " "

Intermed. " " " "

Propeller " " " "

Crank " Finished by " " "

Thrust " " "

Intermed. " " "

Propeller " " "

STAMP MARKS ON SHAFTS.

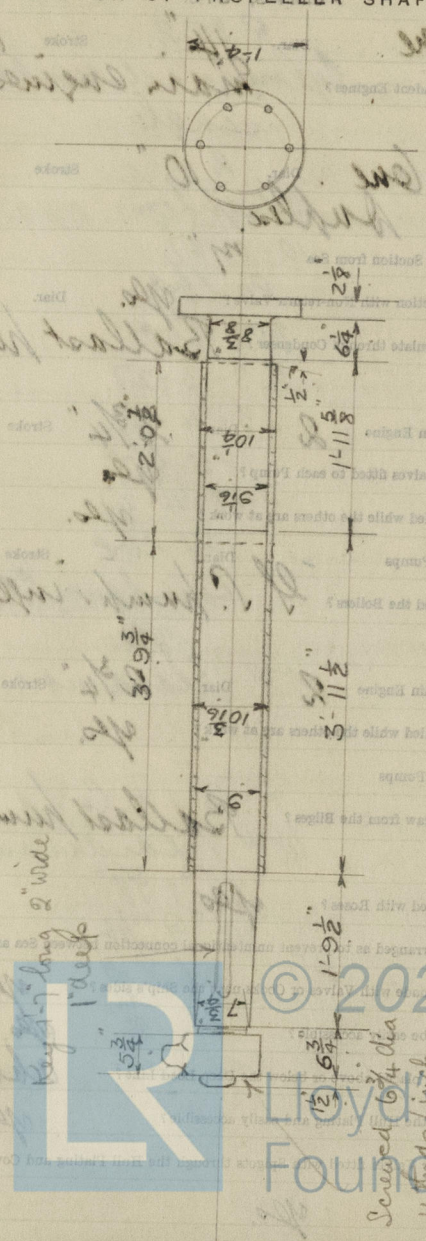
Crank & Thrust Shafts:-

B.C.
N° 10684.
25-1-27
G.H.B.

Tail Shaft:-

B.C.
N° 10684
4-2-27
G.H.B.

SKETCH OF PROPELLER SHAFT.



PUMPS, ETC.

No. of Air Pumps One Diar. 14" Stroke 16½"

Worked by Main or Independent Engines? main engines.

No. of Circulating Pumps One Diar. 10" Stroke 10"

Type of " Duplex.

Diar. of " Suction from Sea 7"

Has each Pump a Bilge Suction with Non-return Valve? yes. Diar. 4¾"

What other Pumps can circulate through Condenser? Ballast pump.

No. of Feed Pumps on Main Engine 2 Diar. 2¾" Stroke 16½"

Are Spring-loaded Relief Valves fitted to each Pump? yes

Can one Pump be overhauled while the others are at work? yes.

No. of Independent Feed Pumps — Diar. — Stroke

What other Pumps can feed the Boilers? G. S. pump & injector.

No. of Bilge Pumps on Main Engine 2 Diar. 2¾" Stroke 16½"

Can one Pump be overhauled while the others are at work? yes.

No. of Independent Bilge Pumps

What other Pumps can draw from the Bilges? Ballast pump.

Are all Bilge Suctions fitted with Roses? yes.

Are the Valves, etc., so arranged as to prevent unintentional connection between Sea and Bilges? yes.

Are all Sea Connections made with Valves or Cocks next the Ship's sides? yes.

Are they placed so as to be easily accessible? yes.

Are the Discharge Chests placed above or below the Deep Load Line? above.

Are they fitted direct to the Hull Plating and easily accessible? yes.

Are all Blow-off Cocks or Valves fitted with Spigots through the Hull Plating and Covering Plates or Flanges on the Outside? yes.

BOILERS.

Works No.	R. 322.
No. of Boilers 2 Type	Cylindrical multitubular
Single or Double-ended	single.
No. of Furnaces in each	2
Type of Furnaces	Deighton.
Date when Plan approved	10-1-27.
Approved Working Pressure	180 lbs
Hydraulic Test Pressure	320 lbs.
Date of Hydraulic Test	23-3-27.
" when Safety Valves set	13-4-27.
Pressure at which Valves were set	185 lbs.
Date of Accumulation Test	13-4-27.
Maximum Pressure under Accumulation Test	188 lbs.
System of Draught	Howdens C.A.
Can Boilers be worked separately?	yes.
Makers of Plates	Wm Beardmore & Co.
" Stay Bars	"
" Rivets	R. B. & Co Ld.
" Furnaces	Wm Beardmore & Co.
Greatest Internal Diar. of Boilers	10'-1 3/8"
" " Length "	10'-9 15/16"
Square Feet of Heating Surface each Boiler	1068 ☐'
" " Grate " "	32 ☐'
No. of Safety Valves each Boiler 2	Rule Diar. Actual 2½"
Are the Safety Valves fitted with Easing Gear?	yes.
No. of Pressure Gauges, each Boiler 2	No. of Water Gauges 1
" Test Cocks " 3	" Salinometer Cocks 1

Are the Water Gauges fitted direct to the Boiler Shells or mounted on Pillars? ~~direct~~ pillars.

Are the Water Gauge Pillars fitted direct to the Boiler Shells or connected by Pipes? by pipes.

Are these Pipes connected to Boilers by Cocks or Valves? – cocks.

Are Blow-off Cocks or Valves fitted on Boiler Shells? valves.

No. of Strakes of Shell Plating in each Boiler one.

" Plates in each Strake ~~Two~~. one.

Thickness of Shell Plates Approved 13/16"

" " in Boilers 13/16"

Are the Rivets Iron or Steel? steel.

Are the Longitudinal Seams Butt or Lap Joints? butt.

Are the Butt Straps Single or Double? double.

Are the Double Butt Straps of equal width? yes.

Thickness of outside Butt Straps 5/8"

" inside " 3/4"

Are Longitudinal Seams Hand or Machine Riveted? machine.

Are they Single, Double, or Treble Riveted? treble.

No. of Rivets in a Pitch 5

Diar. of Rivet Holes 7/8" Pitch 6 1/8"

No. of Rows of Rivets in Centre Circumferential Seams –

Are these Seams Hand or Machine Riveted? –

Diar. of Rivet Holes – Pitch –

No. of Rows of Rivets in Front End Circumferential Seams 2

Are these Seams Hand or Machine riveted? Back machine, Front hand.

Diar. of Rivet Holes 1" Pitch 3 1/2"

No. of Rows of Rivets in Back End Circumferential Seams 2

Are these Seams Hand or Machine Riveted? machine.

Diar. of Rivet Holes 1" Pitch 3 1/2

Size of Manholes in Shell 16" × 12"

Dimensions of Compensating Rings 3'-1" × 2'-9 1/2 × 13/16"

Thickness of End Plates in Steam Space Approved 1 1/32"

" " " " " in Boilers 1 1/32"

Pitch of Steam Space Stays 14" × 18"

Diar. " " " " Approved 2 3/4" Threads per Inch 6

" " " " " in Boilers 2 3/4" 6

Material of " " " Steel.

How are Stays Secured? double nuts.

Diar. and Thickness of Loose Washers on End Plates –

" " Riveted " " " –

Width " " Doubling Strips " –

Thickness of Middle Back End Plates Approved 1 1/32"

" " " " " in Boilers 1 1/32"

Thickness of Doublings in Wide Spaces between Fireboxes –

Pitch of Stays at " " " " 13 1/2 × 9"

Diar. of Stays Approved 1 7/8" Threads per Inch 9

" " in Boilers 1 7/8" "

Material " steel.

Are Stays fitted with Nuts outside? yes.

Thickness of Back End Plates at Bottom Approved 1 1/32"

" " " " " in Boilers 1 1/32"

Pitch of Stays at Wide Spaces between Fireboxes 13 1/2 × 9"

Thickness of Doublings in " " –

Thickness of Front End Plates at Bottom Approved 1 1/32"

" " " " " in Boilers 1 1/32"

No. of Longitudinal Stays in Spaces between Furnaces one.

Diar. of Stays Approved 2½" Threads per Inch 6

" " in Boilers 2½ " 6

Material " steel.

Thickness of Front Tube Plates Approved 1 1/32"

" " " " in Boilers 1 1/32"

Pitch of Stay Tubes at Spaces between Stacks of Tubes 13½ × 2½"

Thickness of Doublings in " " "

" Stay Tubes at " " " ¼"

Are Stay Tubes fitted with Nuts at Front End? no.

Thickness of Back Tube Plates Approved ⅞"

" " " in Boilers ⅞"

Pitch of Stay Tubes in Back Tube Plates 11¼" × 7½"

" Plain " 3¾" × 3¾"

Thickness of Stay Tubes ¼" / 2/16"

" Plain " 9 W.G.

External Diar. of Tubes 2½"

Material " W. Iron.

Thickness of Furnace Plates Approved 7/16"

" " " in Boilers 7/16"

Smallest outside Diar. of Furnaces 2'-9 5/8"

Length between Tube Plates 7'-6"

Width of Combustion Chambers (Front to Back) 2'-9 15/16"

Thickness of " " Tops Approved 11/16"

" " " in Boilers 11/16"

Pitch of Screwed Stays in C.C. Tops 9" × 10"

Diar. of Screwed Stays Approved 1 3/4" Threads per Inch 9

" " " in Boilers 1 3/4"

Material " " steel.

Thickness of Combustion Chamber Sides Approved 11/16"

" " " " in Boilers 11/16"

Pitch of Screwed Stays in C.C. Sides 10" × 9"

Diar. " " Approved 1 3/4" Threads per Inch 9

" " " in Boilers 1 3/4"

Material " " steel.

Thickness of Combustion Chamber Backs Approved 11/16"

" " " " in Boilers 11/16"

Pitch of Screwed Stays in C.C. Backs 9 3/4" × 9"

Diar. " " Approved 1 7/8 + 1 3/4" Threads per Inch 9

" " " in Boilers " "

Material " " steel.

Are all Screwed Stays fitted with Nuts inside C.C.? yes.

Thickness of Combustion Chamber Bottoms 11/16"

No. of Girders over each Wing Chamber 4

" " " Centre " 5

Depth and Thickness of Girders 8 3/4" × 1 1/4"

Material of Girders steel.

No. of Stays in each 2

No. of Tubes, each Boiler 340

Size of Lower Manholes 15" × 11"

MAIN STEAM PIPES.

No. of Lengths	2			
Material	Copper.			
Brazed, Welded or Seamless	S. D.			
Internal Diar.	3 1/4"			
Thickness	8. W.G.			
How are Flanges secured ?	Brazed.			
Date of Hydraulic Test	9-4-27			
Test Pressure	400 lbs.			

No. of Lengths				
Material				
Brazed, Welded or Seamless				
Internal Diar.				
Thickness				
How are Flanges secured ?				
Date of Hydraulic Test				
Test Pressure				

No. of Lengths				
Material				
Brazed, Welded or Seamless				
Internal Diar.				
Thickness				
How are Flanges secured ?				
Date of Hydraulic Test				
Test Pressure				

EVAPORATORS.

No. Type Tons per Day

Makers

Working Pressure Test Pressure Date of Test

Date of Test of Safety Valves under Steam

FEED WATER HEATERS.

No. one Type Exhaust Steam.

Makers Halpen & Broske.

Working Pressure 180 lbs. Test Pressure 400 Date of Test

FEED WATER FILTERS.

No. one Type High Pressure Size 2¼"

Makers Maccall & Pallock.

Working Pressure 180 lbs. Test Pressure 400 lbs. Date of Test

LIST OF DONKEY PUMPS.

Feed & General Service Pump, Vertical Duplex D.A. by Maccall & Pallock 6"×4"×6"

Ballast Pump Vertical Duplex by Maccall & Pallock. 9½"×11½"×11"

Circulating Pump, Vertical Duplex by Maccall & Pallock. 9"×10"×10"

Capilan Pump, Horizontal Duplex by A. D. Mumford Ld. 3½"×3½"×4"

Fresh water Pump, Horizontal Duplex by A. D. Mumford Ld. 3½"×3½"×4"

SPARE GEAR.

No. of Top End Bolts.	2	No. of Bot. End Bolts.	2	No. of Cylinder Cover Studs	
„ Coupling Bolts	6	„ Main Bearing Bolts	2	„ Valve Chest „	
„ Junk Ring Bolts	3	„ Feed Pump Valves	1 set.	„ Bilge Pump Valves	1 set.
„ H.P. Piston Rings		„ I.P. Piston Rings		„ L.P. Piston Rings	
„ „ Springs		„ „ Springs		„ „ Springs	
„ Safety Valve „	1.	„ Fire Bars	1/2 set.	„ Feed Check Valves	2.
„ Piston Rods		„ Connecting Rods		„ Valve Spindles	
„ Air Pump Rods		„ Air Pump Buckets		„ Air Pump Valves	1/2 set.
„ Cir. „		„ Cir. „		„ Cir. „	
„ Crank Shafts		„ Crank Pin Bushes		„ Crosshead Bushes	
„ Propeller Shafts		„ Propellers		„ Propeller Blades	2
„ Boiler Tubes	3	„ Condenser Tubes	3	„ Condenser Ferrules	20.

OTHER ARTICLES OF SPARE GEAR:—

24 Boiler tube protectors
6 Gauge glasses
1 doz rubber rings for do.
2 sheets of tin
1 [illegible]
1 set feed donkey water valves
1 set Ballast donkey water valves
1 set Sanitary pump water valves
1 escape valve spring for each size fitted

REFRIGERATORS.

No. of Machines Capacity of each

Makers

Description

No. of Steam Cylinders, each Machine No. of Compressors No. of Cranks

Particulars of Pumps in connection with Refrigerating Plant and whether worked by Refrigerating Machines or Independently

System of Refrigeration

,, Insulation

Are Brine and other Regulating Valves placed so as to be accessible without entering the Insulated Spaces?

Are all Pipes, Air Trunks, &c., well secured and protected from risk of damage?

Are all Bilge, Sounding, and Air Pipes in Insulated Spaces properly insulated?

Are Thermometer Tubes so arranged that Water cannot enter and freeze in them?

Date of Test under Working Conditions

RESULTS OF TRIALS.

COMPARTMENT.	Temp. at beginning of Trial.	Temp. at end of Trial.	Time required to obtain this Result.	Rise of Temp. after hours.
Refrigerator				
Capacity	91	110	350	
Continuous				
Double				
Engine Room				
Irrigation	9	3.6	7.039	1.038	10 1/2	1250
Ignored	38	9.6	7.039	1.044		700
Engine Room	16	3.8	7.039	1.038		1250
Refrigerator	39					

Articles of Spare Gear for Refrigerating Plant carried on board:—

ELECTRIC LIGHTING.

Installation Fitted by R. Pickersgill & Sons.

No. and Description of Dynamos One Compound Wound.

Makers of Dynamos Sunderland Forge Eng. Co. Ld.

Capacity " 91 Amperes, at 110 Volts, 350 Revols. per Min.

Current Alternating or Continuous Continuous.

Single or Double Wire System Double.

Position of Dynamos Starb'd side Engine Room.

" Main Switch Board " " " "

No. of Circuits to which Switches are provided on Main Switch Board 4

Particulars of these Circuits:—

Circuit.	Number of Lights.	Candle Power.	Current Required. Amps.	Size of Conductor.	Current Density.	Conductivity of Conductor.	Insulation Resistance per Mile.
Navigation	9	360 watts.	3.6	7/.029	.038	100%	1250
Forward.	32	960 watts	9.6	7/.044	.044	"	900
Engine Room.	16	380 watts	3.8	7/.029	.038	"	1250
Aft. Accom:	39	1170 watts.	11.7	7/.044	.044	"	900

Total No. of Lights 97 No. of Motors driving Fans, &c. — No. of Heaters —

Current required for Motors and Heaters —

Positions of Auxiliary Switch Boards, with No. of Switches on each —

Are Cut-outs fitted as follows?— yes

On Main Switch Board, to Cables of Main Circuits yes

On Aux. ,, ,, each Auxiliary Circuit yes

Wherever a Cable is reduced in size yes.

To each Lamp Circuit

To both Flow and Return Wires of all Circuits when the Double-Wire System is adopted yes.

Are the Fuses of Standard Sizes? yes.

Are all Switches and Cut-outs constructed of Non-inflammable Material? yes.

Are they placed so as to be always and easily accessible? yes.

Smallest Single Wire used, No. 1/.044 S.W.G., Largest, No. 7/.044 S.W.G.

How are Conductors in Engine and Boiler Spaces protected? Lead covered / Armoured.

,, Saloons, State Rooms, &c., ,, ? Lead covered.

What special protection is provided in the following cases?—

(1) Conductors exposed to Heat or Damp Lead covered / Armoured.

(2) ,, passing through Bunkers or Cargo Spaces ,, ,,

(3) ,, ,, Deck Beams or Bulkheads ,, ,,

Are all Joints in Cables properly soldered and thoroughly Insulated so that the efficiency of the Cables is unimpaired? none.

Are all Joints in accessible positions, none being made in Bunkers or Cargo Spaces? —

Are all Hull Connections for Single-Wire Systems made with Screws of large Surface? —

Are the Dynamos, Motors, Main and Branch Cables, so placed that the Compasses are not injuriously affected by them? yes.

Have Tests been made to prove that this condition has been satisfactorily fulfilled? yes.

Has the Insulation Resistance over the whole system been tested? yes.

What does the Resistance amount to? 1 megohm. Ohms.

Is the Installation supplied with a Voltmeter? yes.

,, ,, ,, an Ampere Meter? yes.

Date of Trial of complete Installation 25-4-27 Duration of Trial 6 hours.

Have all the requirements of Section 42 been satisfactorily carried out? yes.

GENERAL CONSTRUCTION.

Have the Machinery and Boilers been constructed in accordance with the requirements of the Rules and the Approved Plans? yes.

If not, give details of the points of difference, and state when these were sanctioned by the Chief Surveyor.

Are the Materials used in the Construction of Engines and Boilers, so far as could be seen, sound and trustworthy? yes.

Is the Workmanship throughout thoroughly satisfactory? yes.

The above correctly describes the Machinery of the S.S. "JOHN. H. PRICE" as ascertained by ~~me~~ me from personal examination

J. Clickson

Engineer Surveyor to the British Corporation for the Survey and Registry of Shipping.

Fees—

			£	s.	d.
MAIN BOILERS.					
H.S. 2136	Sq. ft.		16	0	0
G.S. 64	,,				
DONKEY BOILERS.					
H.S. ✓	Sq. ft.				
G.S. ✓	,,				
		£			
ENGINES.					
L.P.C. 23.65	Cub. ft.		22	0	0
		£			
Testing, &c. ... ~~FL~~			10	0	0
		£			
Expenses					
Total ...		£	48	0	0

It is submitted that this Report be approved,

Chief Surveyor.

Approved by the Committee for the Class of **M.B.S.*** on the 24th August 1927

Fees advised

Fees paid

Secretary.