

REPORT ON MACHINERY.

No. 751

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of writing Report *Aug. 8th 1919* When handed in at Local Office *Aug. 8th 1919* Port of *Vancouver, B.C.*
in Survey held at *Vancouver, B.C.* Date, First Survey *Dec. 18/18*, Last Survey *August 4th 1919*
Book. on the *Single Screw Steel S.S. Canadian Trooper*, (Number of Visits *43*) Gross *3179.84*
ster *R.P.S. Fisher* Built at *Vancouver, B.C.* By whom built *Wallace Shipyard & L^d* When built *1919*
ines made at *Vancouver, B.C.* By whom made *Wallace Shipyard & L^d* when made *1919*
ilers made at *Vancouver, B.C.* By whom made *Vulcan Iron Works & L^d* when made *1919*
ealed *1800* Owners *Canadian Government* Department *Marine* Port belonging to *Montreal*
istered Horse Power *375* Is Refrigerating Machinery fitted for cargo purposes *Yes* Is Electric Light fitted *Yes*
n. Horse Power as per Section 28 *375*

GINES, &c.—Description of Engines *Triple Expansion Marine* No. of Cylinders *3* No. of Cranks *3*
t. of Cylinders *15" 41" 64"* Length of Stroke *45"* Revs. per minute *70* Dia. of Screw shaft as per rule *13.35* Material of *Steel*
the screw shaft fitted with a continuous liner the whole length of the stern tube *Yes* Is the after end of the liner made water tight
the propeller boss *Yes* If the liner is in more than one length are the joints burned *Yes* If the liner does not fit tightly at the part
ween the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *Yes* If two
rs are fitted, is the shaft lapped or protected between the liners *Yes* Length of stern bush *4'-9"*
t. of Tunnel shaft as per rule *11.85* Dia. of Crank shaft journals as per rule *12.42* Dia. of Crank pin *13.25* Size of Crank webs *8 1/2 x 24 1/2* Dia. of thrust shaft under
ars *13 1/2* Dia. of screw *16.3* Pitch of Screw *17'-6"* No. of Blades *4* State whether moveable *Yes* Total surface *83.28*
of Feed pumps *2* Diameter of ditto *4* Stroke *24* Can one be overhauled while the other is at work *Yes*
of Bilge pumps *2* Diameter of ditto *4* Stroke *24* Can one be overhauled while the other is at work *Yes*
of Donkey Engines *3* Sizes of Pumps *1-7 1/2 x 9 x 10" Duplex* No. and size of Suctions connected to both Bilge and Donkey pumps
Engine Room *2 of 3" 110p. 3 1/2"* In Holds, &c. *No 1 Hold 2 of 3" No 2 Hold 2 of 3"*
of Bilge Injections *1* sizes *6"* Connected to condenser, or to circulating pump *Yes* Is a separate Donkey Suction fitted in Engine room & size *Yes 3 1/2"*
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 *None*
all connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *Valves & Cocks*
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 *Below*
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 *Yes*
at pipes are carried through the bunkers *None* How are they protected *Yes*
all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *Yes*
the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges *Yes*
the Screw Shaft Tunnel watertight *Yes* Is it fitted with a watertight door *Yes* worked from *Main Deck Level*

ILERS, &c.—(Letter for record *S.*) Manufacturers of Steel *Illinois Steel Co L^d*
al Heating Surface of Boilers *5162* Is Forced Draft fitted *Yes* No. and Description of Boilers *2 of Scott Marine*
orking Pressure *180 lb* Tested by hydraulic pressure to *300 lb* Date of test *Jul 8. 1919* No. of Certificate *22*
each boiler be worked separately *Yes* Area of fire grate in each boiler *66.12* No. and Description of Safety Valves to *Yes*
boiler *2 of Mann Type* Area of each valve *9.62* Pressure to which they are adjusted *180 lb* Are they fitted with easing gear *Yes*
allest distance between boilers or uptakes and bunkers or woodwork *14'-0"* Mean dia. of boilers *15'-6"* Length *11'-6"* Material of shell plates *Steel*
ickness *1 3/8"* Range of tensile strength *60,000* Are the shell plates welded or flanged *Yes* Descrip. of riveting: cir. seams *Double Rivet*
seams *Double* Diameter of rivet holes in long. seams *1 3/8"* Pitch of rivets *9 3/16"* Lap of plates or width of butt straps *19 7/8"*
Butt Strap *87.2* Working pressure of shell by rules *192.5* Size of manhole in shell *12" x 16"*
centages of strength of longitudinal joint *85* No. and Description of Furnaces in each boiler *3 of Morrison* Material *Steel* Outside diameter *4'-2 1/2"*
e of compensating ring *2' 9" x 3' 1 1/2"* Thickness of plates *1 3/8"* Description of longitudinal joint *Yes* No. of strengthening rings *Yes*
ngth of plain part *19.32* Working pressure of furnace by the rules *187.5* Combustion chamber plates: Material *Steel* Thickness: Sides *7/8"* Back *5/8"* Top *5/8"* Bottom *1 1/8"*
orking pressure of furnace by the rules *187.5* If stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *187*
ch of stays to ditto: Sides *7 1/2 x 9"* Back *8 1/2 x 8"* Top *7 1/2 x 9"* Area supported by each stay *67.5* Working pressure by rules *210* End plates in steam space:
terial of stays *Steel* Area at smallest part *1.77* Working pressure by rules *184* Material of stays *Steel*
terial *Steel* Thickness *1 1/8"* Pitch of stays *15 x 18"* How are stays secured *Double* Working pressure by rules *184* Material of stays *Steel*
ea at smallest part *5.25* Area supported by each stay *270* Working pressure by rules *202* Material of Front plates at bottom *Steel*
ickness *1 3/16"* Material of Lower back plate *Steel* Thickness *1 3/16"* Greatest pitch of stays *10 1/2 x 8 1/2"* Working pressure of plate by rules *182.5*
meter of tubes *3"* Pitch of tubes *4 1/4"* Material of tube plates *Steel* Thickness: Front *1 3/16"* Back *3/4"* Mean pitch of stays *8 1/2 x 1 1/2"*
ch across wide water spaces *13 1/2"* Working pressures by rules *249* Girders to Chamber tops: Material *Steel* Depth and
ickness of girder at centre *10 x 1/4"* Length as per rule *2'-8"* Distance apart *9"* Number and pitch of stays in each *3 of 7 1/2"*
orking pressure by rules *226* Steam dome: description of joint to shell *Yes* % of strength of joint *Yes*
iameter *Yes* Thickness of shell plates *Yes* Material *Yes* Description of longitudinal joint *Yes* Diam. of rivet holes *Yes*
itch of rivets *Yes* Working pressure of shell by rules *Yes* Crown plates *Yes* Thickness *Yes* How stayed *Yes*
No. of Visits *43* PERHEATER. Type *Yes* Date of Approval of Plan *Yes* Tested by Hydraulic Pressure to *Yes*
Date of Test *Yes* Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler *Yes*
iameter of Safety Valve *Yes* Pressure to which each is adjusted *Yes* Is Easing Gear fitted *Yes*

