

Tonnage
Do. between 1
3rd, 4th, 5
Total under
Do. of Poop
No. of R. Qr

COPY FOR
LONDON OFFICE
(LLOYD'S R)

No. 501 SHIP, "OREGON MARU."

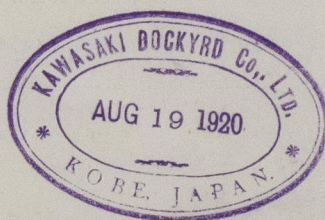
LIGHT DISPLACEMENT

AND

DEADWEIGHT CARRYING CAPACITY.

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KAWASAKI DOCKYARD CO., LTD.,
KOBE, JAPAN.



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066889-006902-0190174

No. 501 Ship, "Oregon Maru."

LIGHT DISPLACEMENT

AND

DEADWEIGHT CARRYING CAPACITY.

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1. - Draught and Displacement at 10.30 A.M., Aug. 17th, 1920:-

Temperature of sea water 80° F.
Specific gravity of sea water by Baume's hydrometer 1.014
Weight of sea water per cub.ft. $62.373 \times 1.014 =$ 63,246 lbs.

where 62.373 is the weight of 1 cub.ft. of fresh water
at 59° F. (Water with unit specific gravity) in lbs.

Draught : Forward 5'-11 $\frac{7}{8}$ "
Aft 10'-6 $\frac{1}{4}$ "
Mean 8'-3 $\frac{5}{16}$ "
Trim by the stern 4'-6 $\frac{7}{8}$ " = 4.57 ft.
Draught amidships : Port 8'-2 $\frac{1}{8}$ "
Starboard 8'-2 $\frac{3}{4}$ "
Mean 8'-2 $\frac{7}{16}$ "
Hogging $h = 8'-3\frac{5}{16}" - 8'-2\frac{7}{16}" =$ 7/8"
Tons per inch immersion $T =$ 36.75
Longitudinal I of W.P. about midship $I =$ 126,418,000 Sq.ft.
x Sq.ft.

Change of displacement by one ft. trim (35 cub.ft. per ton) 5.87 tons.

Displacement at 8'-3 $\frac{5}{16}$ " draught, even keel (Do.) 3,306.7 tons.

Correction for the trim - $4.57 \times 5.87 =$ - 26.8 "

" " the hogging = $-h \times (T - \frac{I}{105L^2})$

= $-7/8 \times (36.75 - \frac{126,418,000}{105 \times 385^2})$

= $-7/8 \times (36.75 - 8.12) =$ - 25.1 "

Displacement corrected for the trim and hogging
(35 cub.ft. per ton) 3,254.8 tons.

Displacement further corrected for the density of sea water

$3,254.8 \times \frac{63,246}{64,000} =$ 3,216.5 tons.



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2. - Weight to Come Out of Ship:-

<u>Item.</u>				<u>Respective Wt. in Tons.</u>	<u>Gross Wt. in Tons.</u>
No.1 Ballast tank			Empty	0	
No.2	"	"	"	0	
No.3	"	"	"	0	
No.4	"	"	"	0	
Feed water tank,	P	F.W.	2'-4"	58.5	
"	S	"	2'-6"	62.9	
Fore peak tank			Empty	0	
After "			"	0	
Fresh water tank		F.W.	5'-7"	20.6	
Sanitary tank			Empty	0	
Water in tanks, Total					142.0 tons.
Bilge water					6.0 "
Water in three boilers					62.5 "
Coal in side bunkers					3.0 "
Men on board (80)					4.7 "
Provision and crew's effects					0
Consumable stores					0
Temporary weight of Hull Department					4.3 "
" " " Engine "					0 "
<u>Weight to Come Out of Ship, Total</u>					232.5 tons.

3. - Weight to Go On Board after the Date:-

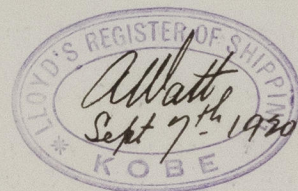
Two bower anchors and 3.6 shackles of cable.	12.2 tons.
Oil piping and valve spindles	1.5 "
<u>Weight to Go On Board after the Date, Total</u>	13.7 tons.

4. - Light Displacement and Draught:-

Displacement on Aug.17th, 1920, corrected for the trim, the hogging and the density of sea water	3,216.5 tons.
Weight to come out of ship	232.5 "
Weight to go on board after the date	13.7 "
Equipped Weight	3,007.7 tons.
Boiler water	59.7 "
Light displacement	3,067.4 tons.
Corresponding draught	7'-8 1/2"

5. - Deadweight Carrying Capacity:-

Displacement at 27'-1.33" draught (Summer Load Draught)	12,105.0 tons.
Light displacement	<u>3,067.4 "</u>
Deadweight Carrying Capacity	9,037.6 tons.



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