

REPORT ON BOILERS.

No. 4418
MON JUL 31 1922Received at London Office
of writing Report JULY 11th 1922 When handed in at Local Office JULY 11th 1922 Port of PHILADELPHIA.

Survey held at PHILADELPHIA Date, First Survey SEP. 22nd 1920 Last Survey JULY 6th 1922.
 on the TWIN SCREW MOTOR VESSEL "MISSOURIAN" (Number of Visits 22) Tons Gross 7899 Net 4915.
 Built at CHESTER, PA. By whom built MERCHANT S. B. CORP. When built 1922.
 Made at PHILADELPHIA. By whom made THE WM. CRAMP & SONS S & E B CO. When made 1922.
 American-Hawaiian S. S. Co. Port belonging to NEW YORK.

VERTICAL DONKEY BOILER— No. ONE Description VERTICAL Manufacturers of steel WORTH STEEL CO.
 at PHILADELPHIA By whom made THE WM. CRAMP & SONS S & E B CO. When made 1922 Where fixed ENG. ROOM. Working pressure 150 lbs.
 by hydraulic pressure to 275 Date of test 6-12-21 No. of Certificate 532 Fire grate area 9.62 Description of safety valves SPRING LOADED.
 of safety valves ONE Area of each 4.90 Pressure to which they are adjusted 100 lbs. If fitted with easing gear YES If steam from main boilers can
 the donkey boiler — Dia. of donkey boiler 4'-6" Length 11'-8" Material of shell plates O.H. STEEL Thickness 17/32 Range of tensile
 gth 28-32 Descrip. of riveting long. seams D.R. LAP. Dia. of rivet holes 15/16 Whether punched or drilled DRILLED Pitch of rivets 2.86
 of plating 4 3/8 Per centage of strength of joint Rivets 77.01 Plates 67.31 Working pressure of shell by rules 158.8 lbs. Thickness of shell crown plates 11/16
 us of do. — No. of Stays to do. — Dia. of stays — Diameter of furnace Top 3'-10" Bottom 4'-6" Length of furnace 4'-5"
 kness of furnace plates 1/2 Description of joint WELDED. Working pressure of furnace by rules 156 lbs. Thickness of furnace crown
 is 9/16 Radius of do. — Stayed by TUBES. Diameter of uptake — Thickness of uptake plates —
 kness of FIRE #138 W.G. tubes.

The foregoing is a correct description,

J. J. Mullen Manufacturer.
CHIEF ENGINEER

Dates During progress of work in shops — 1920. SEP. 22. 1921. AUG. 10, 15. SEP. 12. OCT. 19, 20, 31. NOV. 1, 15, 30. DEC. 6.
 Survey while building During erection on board vessel — MAR. 20, 27, APR. 6, 19, MAY 4, 12, 24. JUNE 6, 16, 28. JULY 6.
 Total No. of visits 22.

Is the approved plan of boiler forwarded herewith YES.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

THE BOILER HAS BEEN BUILT UNDER SPECIAL SURVEY, THE STEEL TESTED IN ACCORDANCE
 WITH THE RULES, & THE BOILER BUILT IN ACCORDANCE WITH THE APPROVED PLAN, THE
 MATERIALS & WORKMANSHIP ARE OF GOOD DESCRIPTION; THE BOILER WAS TESTED
 BY HYDRAULIC PRESSURE TO ONE & ONE HALF TIMES THE WORKING PRESSURE PLUS
 50 lbs. AND WAS FOUND TIGHT AND SOUND IN EVERY RESPECT; THE SAFETY
 VALVES WERE ADJUSTED TO 100 lbs. PER " (BY REQUEST.) IT HAS BEEN
 SATISFACTORILY SECURED ON BOARD.

Survey Fee ... \$25.00 : When applied for, 19
 Travelling Expenses (if any) £ — : When received, 19

J. J. Mullen

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute New York Jul. 18. 1922

Assigned See Mullen's report.