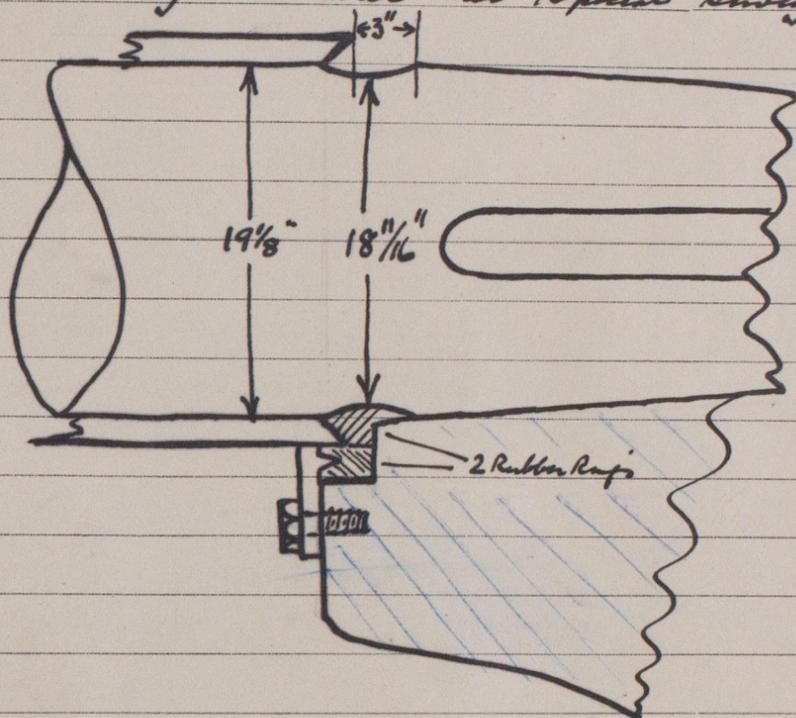


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The machinery was examined under steam after these repairs and found satisfactory (in dock).

Docking:- Vessel placed in dry dock propellers and all outside fastenings examined & in order. All sea valves opened up, examined, minor repairs & renewals effected, condition now satisfactory. The starboard tailshaft was withdrawn and owing to corrosion at the aft end of the liner, was removed ashore for machining - the liner was cut back $\frac{1}{2}$ " and circumferential grooving machined out of the shaft at the end of the liner, the final diameter being $18\frac{11}{16}$ " (original $19\frac{1}{8}$ "). A spare tailshaft was not available and this shaft has now been machined as per sketch below, to enable vessel to carry on until her Special Survey in April 1952.



It is understood from the Owners Rep^t that the original S.H.P. was 10,000 and the R.P.M. 125. with a propeller diameter of 210" - this gives a Rule Size of tailshaft = 18.7". The machinery is now run at 7,000 S.H.P. and 110 RPM - in view of these facts this shaft was considered efficient meanwhile. The cone end has been skinned and the propeller, which had been a poor fit, has now been satisfactorily rebedded.

S.R.L. Fractures in port and starboard L.P. turbine lower casings examined and considered by previous port marks to be unaltered from previous examination - for further examination in 12 months time.

DAMAGE NO 2 :-

Examined damage to port propeller stated to have occurred on the 23rd inst whilst vessel passing through docks and bow stern came into contact with quay. The tips of all four propeller blades found to be bent over for about 9" - it was recommended that the propeller be removed for repairs, that the tailshaft be checked for truth and that the port gearing be examined.

Close gauging of the cone end of this tailshaft showed that the small end of the cone was running out $35/1000$ " from the centre line, and on this account it was recommended that a further

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Reading be taken at midlength of the shaft, through an inspection door in the stern tube. A reading taken at this point showed the shaft to be true but an examination of the liner in way of this inspection door showed the liner to be fractured circumferentially. The shaft was withdrawn, taken ashore and the fracture found to be at the junction of the two piece stepped joint liners. The liner was turned away to the bare shaft in way of the previous stepped joint and the shaft found satisfactory - after a through inspection and hammer test of the liners the ends were undercut (see sketch) and the junction filled in with white metal - this shaft then being considered sufficient until the Special Survey in April.



While the shaft was in the machine shop, the repaired and rebalanced propeller was trued on same, & rebalanced until a satisfactory marking with the key in position was obtained.

The port framing was examined through inspection doors and found satisfactory. In addition the port stem tube was examined internally (with the aft peak filled) and found sound and tight.

On completion of repairs the machinery was examined under working conditions in dock and found satisfactory.

J. Milton