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## Lloyd's Register of Shipping.

71, Fenchurch Street, E.C.3.

Enclosures.

7th January, 1937.

Dear Sirs,

M.S. "BENJAMIN FRANKLIN".

E. I duly received your letter of the 30th ultimo, with enclosures advised therein, respecting replace crank shafts proposed for the main engines of the above vessel, and with regard thereto I have to inform you that, with 4 SCSA oil engines for main propelling purposes, having 6 cylinders, diameter of cylinders 740 mm., stroke 1300 mm., span of bearings 984 mm., R.P.M. 128, maximum pressure in cylinders 49 Kgs. per sq. cm., M.I.P. 6.75 Kgs. per sq. cm., B.H.P. 5100,  $GD^2$  of Balance Weights 26000 Kg.M<sup>2</sup> and  $GD^2$  of Turning Wheel 15500 Kg.M<sup>2</sup>, the following sizes of crankshaft will be approved, viz:- Pins and Journals 460 mm. with 115 mm. central hole.

The plan showing details of crankshaft will also be approved, and two copies are returned herewith.

It is noted that the yield point of the material for the crank webs, crankpins and journals will be above 50% of the tensile breaking strength and that the shrinkage allowance will be 1/600, and this is in order.

I may add that the plan approved in my letter of the 21st October last has been cancelled.

I am, Dear Sirs,  
Yours faithfully,

The Surveyors,  
COPENHAGEN.

Lloyd's Register  
Foundation  
Secretary.