

s.s. "NEW COLUMBIA", No. 29406 in the Register Book.

Dimensions : 411.5 x 55.46 x 38.04 ft. to shelter deck.

Owners : African S.S.Co., (Elder, Dempster & Co.Mgrs)

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This vessel is one of the "N" type standard, and was built in 1920 by Messrs. Harland & Wolff.

A letter has been received from Messrs. Elder, Dempster & Co. enclosing plans and specification in connexion with a proposal to subdivide No.2 lower hold into two tanks for carrying palm oil in bulk.

The case has been discussed with Mr. Clegg, the Owners' Representative, who stated that it was also desired to carry other vegetable oils in these tanks.

The tanks are approximately 35 ft. in length. A centre line bulkhead is not proposed to be fitted, but a deep quarter girder is arranged on each side of the ship. A new intermediate bulkhead is to be fitted and the existing bulkheads at the extremities of the tank will be reinforced as necessary. <sup>A</sup> ~~The~~ deep tank is already in the ship abaft the engine space and oil fuel tanks and a reserve hold between the proposed new tank and the boiler room bulkhead, and in view of this concentration of loading amidships it is considered that the shelter deck should be additionally stiffened by means of girders under the deck.

With regard to the omission of the centre line bulkhead in the new tank, it is submitted this could be approved, provided the hatchways and ventilators be of sufficient capacity to take up the expansion of the oil, and a letter be received from the Owners stating that when oil cargo is carried the free surface of the oil will not fall below the bottom of the hatchways and pipes when the vessel is at sea.

A similar proposal was approved in the case of the s.s. "TASMANIC" on 13.3.29.

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The Rules, Section 20A, require that where it is desired that a special notation be made in the Register Book, indicating that a deep tank is considered to be structurally suitable for the carriage of oil as cargo, the scantlings and riveting are to be as required for deep tanks carrying oil fuel. (This would involve double riveting the edges of the plating and the boundary connections of the deep tank.)

In the case of the s.s. "ESTHER DOLLAR", however, it was decided on the 7th August 1928 that ordinary deep and water ballast tanks constructed in accordance with the Rules (with single riveting) could be approved for the carriage of fish or vegetable oil, provided the Surveyors were satisfied that the tanks after testing under water pressure were satisfactory, and sparring or lining fitted to the bulkhead in the cargo hold.

It is therefore submitted that in this case also the single riveting of the boundary bulkheads and the crown of the tank might be approved for the carriage of vegetable oil, provided the same conditions are observed as in the case of the s.s. "ESTHER DOLLAR".

It is further submitted the Owners be informed that provided the arrangements be carried out as shown and amended on the plans, and to the satisfaction of the Surveyors, and provided the latter be satisfied that the tanks after testing under water pressure are satisfactory, and sparring or lining be fitted to the boundary bulkheads, the proposals will merit approval.

The capacity of the hatchways and ventilators should be sufficient to take up the expansion of the oil, and the Owners should furnish a letter stating that when an oil cargo is carried, the free surface of the oil will not fall below the bottom of the hatchways and pipes when the vessel is at sea.

If oil fuel may be carried in the double bottom under



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the proposed new tanks, the seams of the inner bottom plating and the margin angle should be double riveted, or alternatively the single riveting may be reinforced by electric welding, provided the Owners be satisfied as a result of their own experience, or that of the shipbuilders or repairers, that electric welding may safely be employed, and provided it be done by an approved system by competent workmen to the satisfaction of the Society's Surveyors.

The flash point of the oil must be above 150° F. and the requirements of Section 20 of the Rules should be complied with where applicable.

On completion of the alterations and on receipt of a satisfactory report from the Surveyors <sup>the</sup> notation ~~will be entered~~ <sup>will be amended</sup> in the Register Book, as follows :-

"Carrying Vegetable Oil in Deep Tanks."

J.M.M. J.A.

13.6.30

*[Handwritten signature]*

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3 plans & specn  
2 plans & specn Retd.  
P.C. H.W.  
                    

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