

S.S. "LUCIANO MANARA" *Ex "Arciduca Stefano"*

No. 19259 in the Register Book.

Gerolamo Ulloa "Ex Dan"

This vessel has been fitted with portable tanks in the holds and 'tween decks for the carriage of petroleum.

An investigation has been made regarding the length of these tanks, and it is found as follows:-

- 1) Cylindrical Tanks in Holds: 11.81 feet diameter x 18.37 feet high.

The stresses on the sides and top are found to be comparatively low, but on the flat surface of the bottom very high. The bottom however is supported by wood beams.

- 2) Tanks in Holds with semi-circular ends and flat sides:
Length 23.3' x *Breadth* 13.12' x 15.75' high.

The stresses on the bottom are found to be high, but *the bottom is* supported by wood *beams*.

The Rules for oil bulkheads would require .38 plating with stiffeners spaced 24" apart; but the bottom of the tank is formed of .39 plating, with stiffeners spaced 40" apart.

The stresses on the sides and top appear to be moderate.

The test head for the tanks in the holds has been taken at 8 feet in computing the stresses.

- 3) Rectangular Tanks in Erections: *Length* 16.07' x *Breadth* 12.14' x 4.9' high.

The stresses are generally high with a test of a 4 feet head.

IG: The riveting in the butts of the plating is generally reeled, and in the circumferential seams is single riveted; where double-riveted riveting would be required.

The tanks are generally of light construction, ting varying from .19" in the smaller to .39" ^{at the bottom} in ger tanks, and the stiffeners are ~~at~~ $3\frac{3}{4}$ " and 4" spaced 40" to 48" apart.

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