++++

ELECTRICAL RESISTANCE OF THIN METALLIC FILMS*

John M. Boler, Edith Townes and Duane Roller, Norman, Oklahoma

(Abstract)

The work reported in Vol. 15 (1935), p. 91 has been continued. Mercury has been found to be different from cadmium in that satisfactory films cannot be formed on a glass plate cooled by liquid air. The granularcrystalline theory of film structure predicts this failure for, according to it, the plate temperature should be close to that of liquid hydrogen if films of a low-bolling-point metal like mercury are to be formed. Experiments with alkali metals are in progress.

++++