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## Apparatus for Determination of Resistivity at Low Temperatures

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20,000 atmospheres and this offered such a convenient method for observing radioactivity, a spintharoscope arrangement was set up by using a florescent zinc sulphide screen containing a small amount of radium. This was mounted on the inner surface of the pressure window and a microscope focused on this screen, so that the scintillations could be observed.

Observations were made as the pressure was changed from one to twenty thousand atmospheres. For observations of this kind no attempts have been made as yet to make an actual count of scintillations at various pressures but so far as we could tell, the number of scintillations was unaffected as the pressure was changed.

#### CONCLUSIONS

1. The intensity of the phosphorescence of zinc sulphide screen is decidedly less (perhaps one-half) under extremely high pressures.
2. Aside from the intensity, the florescent and phosphorescent properties of zinc sulphide are very little affected by extremely high pressures.
3. Radioactivity is affected very slightly if at all by pressures as high as 20,000 atmospheres.

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#### APPARATUS FOR DETERMINATION OF RESISTIVITY AT LOW TEMPERATURES

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An apparatus has been designed following the method of Cioffi and Taylor (J. O. S. A. and R. S. T. 6, 906 (1922)), by which the resistance of 2 single crystal specimens can be determined simultaneously at temperatures ranging from liquid air to room temperature. The method is being used to investigate crystals of "spectroscopically pure" zinc.

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#### MAGNETIZATION OF ELECTROLYTIC NICKEL FILMS

E. P. T. TYNDALL AND H. E. MALMSTROM

The magnetic properties of nickle films electrolytically deposited on brass tubes are determined by the method previously described