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## Tensors and the Calculation of Vibrational Frequencies of Crystal Plates

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fracted and central x-ray beams. Jauncey and Deming<sup>2</sup> have performed a similar experiment on extinction using an ionization chamber and electrometer and have obtained results which are in disagreement with those of Fox and Fraser in regard to the central beam. We are repeating these observations using an ionization chamber and an electrometer tube to check the results of either of the above investigations. The evidence so far seems to give support to the work of Jauncey and Deming regarding the central beam.

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#### SOME OBSERVATIONS CONCERNING THE EVAPORATION OF METALS FROM HOT FILAMENTS

M. ALDEN COUNTRYMAN

For effective evaporation of metals from hot filaments, the metal to be evaporated, if different from the filament substance, must wet and cling to the hot filament used.

A number of filament materials have been tried and the metals which wet each are reported.

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#### TENSORS AND THE CALCULATION OF VIBRATIONAL FREQUENCIES OF CRYSTAL PLATES

R. G. WILSON AND J. V. ATANASOFF

A tensor method has been developed for the calculation of the frequencies of vibration of an infinite plate of any crystalline substance cut at any orientation. By the use of this theory a set of curves have been calculated showing the three characteristic frequencies for plates of quartz cut at various orientations. These results are in good agreement with the experimental work of the authors and other observers.

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