NOTES FROM THE RESEARCH LABORATORY EASTMAN KODAK COMPANY.*

A METHOD AND INSTRUMENT FOR THE MEASUREMENT OF THE VISIBILITY OF OBJECTS.¹

By L. A. Jones.

THIS paper is a report of the research work done during the war in an effort to determine the best method of painting a vessel in order to obtain low visibility. The theoretical aspect of the subject is considered at some length, and a description of the instrument built for the measurement of visibility is given. The factor used to express the weather conditions from the visibility standpoint (that is, the optical factors of the weather condition) is defined and is termed the "weather co-efficient." Curves showing the theoretical relation between visibility and the weather co-efficient and between visibility and the reflection factor of the object considered are given. Finally, curves plotted from actual measurements are compared with the theoretical curves, and fairly good agreement is shown.

THE IMPORTANCE OF THE NODAL POINTS IN LENS TESTING.²

By G. W. Moffitt.

THIS paper deals with the interpretation of the lens bench measurements when no collimator is used and when the object distance is limited.

In such cases the lens does not pivot on the second nodal point when lateral shift of the image is eliminated for small rotations of the nodal slide, but on a point which divides the separation of the nodal points into parts proportional to the magnification.

The complete formula for calculating the true focal length is

* Communicated by the Director.

¹ Communication No. 79 from the Research Laboratory of the Eastman Kodak Company, and published in *Phil. Mag.*, Jan., 1920, p. 96.

² Communication No. 89 from the Research Laboratory of the Eastman Kodak Company, published in *J. Opt. Soc. Amer.*, 1920.