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PLATE A. THE OBSERVATORY OF THE UNIVERSITY OF MICHIGAN, 1916

**DETROIT OBSERVATORY**

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**ASTRONOMICAL OBSERVATORY**

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**UNIVERSITY OF MICHIGAN**

**Volume II.**

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1916

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## PREFACE

In planning the reorganization of this Observatory in 1905, one of the objects sought was to provide means for modern astrophysical investigations. To this end a large reflecting telescope of the Cassegrain form, having an aperture of  $37\frac{1}{2}$  inches and an equivalent focal length of sixty feet, was designed and constructed at the Observatory under my supervision, the optical parts having been obtained from the John A. Brashear Company of Pittsburgh. This instrument was completed in May, 1911, and since then it has been used almost exclusively for photographing stellar spectra with a single-prism spectrograph. The telescope, spectrograph, and engines for measuring spectra have been briefly described in the first volume of these *Publications*, which also contains some of the first results secured by the aid of this telescope. More than thirty-seven hundred spectrograms have now been made, and with few exceptions they are suitable for exact measurement. Nearly all of the papers of the present volume are based upon data obtained from a small proportion of these spectrograms, that is, from those which have already been measured and discussed. Other investigations are in progress.

The spectrographic work has been under the immediate supervision of Professor Ralph H. Curtiss, who designed the spectrograph and measuring engines, and, with Dr. Merrill, planned the programs for work. Dr. Curtiss has also prepared the enlarged spectra, which are used as illustrations in this volume.

WILLIAM J. HUSSEY.

Ann Arbor, November, 1916.



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