# THE NEW ERA PRINTING COMPANY

## LANCASTER, PA.

is prepared to execute in first-class and satisfactory manner all kinds of printing and electrotyping. Particular attention given to the work of Schools, Colleges, Universities, and Public Institutions.

## Books, Periodicals

Technical and Scientific Publications

Monographs, Theses, Catalogues

Announcements, Reports, etc.

All Kinds of Commercial Work

(Printers of the Bulletin and Transactions of the American Mathematical Society, etc., etc.)

Publishers will find our product ranking with the best in workmanship and material, at satisfactory prices. Our imprint may be found on a number of high-class Technical and Scientific Books and Periodicals. Correspondence solicited. Estimates furnished.

THE NEW ERA PRINTING COMPANY

#### Whole No. 255

### CONTENTS

The Twenty-Eighth Regular Meeting of the San Francisco	
Section. By Professor W. A. Manning	203
The Tenth Regular Meeting of the Southwestern Section.	
By Professor O. D. Kellogg	208
The Relations of Mathematics to the Natural Sciences.	
Presidential Address. By Professor E. W. Brown	213
A Theorem on the Curves Described by a Spherical Pen-	
	230
A Theorem Concerning Continuous Curves. By Professor	
•	233
A Note on Discontinuous Solutions in the Calculus of Varia-	
	237
-	241
	244
	247
New rubilications	441

Changes of address of members, exchanges, and subscribers should be communicated at once to the Secretary of the American Mathematical Society, 501 Vest 116th Street, New York.

Subscriptions to the BULLETIN, orders for back numbers, and inquiries in regard to non-delivery of current numbers should be addressed to The American Mathematical Society, 41 North Queen St., Lancaster, Pa., or 501 West 116th Street, New York.

The initiation fees and annual dues of members of the American Mathematical Society are payable to the Treasurer of the American Mathematical Society, Professor J. H. TANNER, Cornell University, Ithaca, N. Y.

Articles for insertion in the BULLETIN should be addressed to the BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY, 501 West 116th Street, New York, N. Y.

The following dates have been fixed for the meetings of the Society:

A. M.

Sat., Feb. 24, 1917, 11:00 Sat., Apr. 28, ""

Sat., Oct. 27, 1917, 11:00 Th.-Fri., Dec. 27-28, 1917.

A. M.

The San Francisco Section will meet at Stanford University on April 7, 1917