#### OFFICIAL COMMUNICATIONS

#### MEETINGS OF THE SOCIETY

Summer Meeting: New Brunswick, New Jersey, September 15-17, 1945.

Abstracts must have been in the hands of Associate Secretary T. R. Hollcroft, American Mathematical Society, 531 West 116th St., New York 27, N. Y., not later than August 11. By invitation of the Program Committee there will be an address by Professor S. S. Chern entitled Some new viewpoints in differential geometry in the large, an address by Professor Samuel Eilenberg entitled Topological methods in abstract algebra, and an address by Professor Witold Hurewicz entitled Some aspects of ergodic theory. There will be a symposium on Recent developments in numerical methods, at which Professor I. J. Schoenberg will speak on Interpolation, smoothing and curve fitting, Professor Hans Rademacher will speak on Laurent expansions of algebraic functions, and Professor A. T. Lonseth will speak on Numerical solutions of integral equations.

### Annual Meeting: Chicago, Illinois, November 23-24, 1945.

Abstracts must be in the hands of Associate Secretary R. H. Bruck, 206 North Hall, University of Wisconsin, Madison 6, Wis., not later than October 19. Abstracts received by October 1 will appear in the November issue of this Bulletin.

## PASADENA, CALIFORNIA, November 24, 1945.

Abstracts must be in the hands of Associate Secretary A. C. Schaeffer, Department of Mathematics, Stanford University, Stanford University, Calif., not later than October 20. Abstracts received by October 1 will appear in the November issue of this Bulletin.

J. R. KLINE, Secretary of the Society

Articles for insertion in the Bulletin should be typewritten, double spaced, and the author should keep a complete copy. Papers in algebra and theory of numbers should be sent to Saunders MacLane, 474 Widener, Harvard University, Cambridge 38, Mass.; in analysis to R. E. Langer. North Hall, University of Wisconsin, Madison 6, Wis.; in other fields to P. A. Smith, Columbia University, New York 27, N. Y. Reviews should be sent to E. R. Lorch, Milbank Hall, Columbia University, New York 27, N. Y., and items for Notes to Bulletin of the American Mathematical Society, 531 West 116th St., New York 27, N. Y. All communications relating to the odd-numbered issues of the Bulletin should be sent to E. B. Stouffer, University of Kansas, Lawrence, Kan., and all other communications to the editors should be addressed to the Managing Editor, P. A. Smith, Columbia University, New York 27, N. Y.

The initial fees and annual dues of members of the Society (see this BULLETIN, May, 1930, p. 322; and November, 1944, Part 2, p. 93) are payable to the Treasurer of the Society, B. P. GILL, 531 West 116th St., New York 27, N. Y.

# CONTENTS

Vol. 51, No. 9	SEPTEMBER, 1945	Whole No.	<b>5</b> 52
The Control of an	Elastic Fluid. By H. BATEMAN	N	Page 601
Book Reviews			647
Notes			651
Abstracts of Paper	'S		
Algebra and The	eory of Numbers	• • • • • • • • • • • • • • • • • • • •	655
Analysis			657
Applied Mathem	natics		661
Geometry			662
Logic and Found	dations		665
Statistics and Pr	robability		665
Topology			666
New Publications			668