## THE

# JOURNAL

### OF

## SYMBOLIC LOGIC

### EDITED BY

MAX BLACK ALONZO CHURCH Managing Editor: ROBERT E. LUCE

### Consulting Editors:

C. A. BAYLIS PAUL BERNAYS G. D. W. BERRY EVERT BETH F. B. FITCH Carl G, Hempel László Kalmár S. C. Kleene J. C. C. McKinsey Andrzej Mostowski Everett J. Nelson Rózsa Péter W. V. Quine Barkley Rosser H. E. Vaughan

VOLUME 13 NUMBER 2

**JUNE 1948** 

PUBLISHED QUARTERLY BY THE ASSOCIATION FOR SYMBOLIC LOGIC, INC. WITH THE AID OF SUBVENTIONS FROM

HARVARD UNIVERSITY INSTITUTE FOR ADVANCED STUDY PRINCETON UNIVERSITY UNIVERSITY OF PENNSYLVANIA

Copyright 1948 by the Association for Symbolic Logic, Inc. Reproduction by photostat, photo-print, microfilm, or like process by permission only

#### TABLE OF CONTENTS

A system of axiomatic set theory-Part VI. By PAUL BERNAYS	65
Practical forms of type theory. By A. M. TURING	80
An extension of basic logic. By FREDERIC B. FITCH	95
A problem concerning the notion of definability. By ALFRED TARSKI	107
Reviews	112
Notice of a meeting of the Association	128

The JOURNAL OF SYMBOLIC LOGIC is the official organ of the Association for Symbolic Logic, Inc. It is published at Mount Royal and Guilford Avenues, Baltimore, Maryland, quarterly, in the months of March, June, September, and December. The subscription price is four dollars annually, for current subscriptions. New subscriptions must begin with the first number of the current volume, as determined by the date of receipt of the subscription. Completed volumes are sold at five dollars. Members of the Association of three years standing may purchase back volumes of the JOURNAL at reduced rates for their personal use (except volume 1).

Applications for membership in the Association, subscriptions to the JOURNAL, and business correspondence should be addressed to Mount Royal and Guilford Avenues, Baltimore-2, Maryland, or to Robert E. Luce, Rutgers University, New Brunswick, New Jersey.

Articles for publication in the JOURNAL should be sent to Max Black, Goldwin Smith Hall, Cornell University, Ithaca, New York or to Alonzo Church, Fine Hall, Princeton University, Princeton, New Jersey. All manuscripts should be typewritten with wide margin and wide spacing between the lines, and the author should keep a complete copy; footnotes should be numbered consecutively and should also be typed with wide margin and wide spacing (preferably on a separate sheet). If an article is of more than thirty-two (printed) pages in length, the editors reserve the right to divide it between two or more, not necessarily consecutive, numbers. Authors receive fifty reprints of each article, without covers, and additional reprints may be purchased if desired.

Attention is called to the fact that the JOURNAL invites submission of (1) original technical papers in the field of symbolic logic, (2) expository papers in this field, (3) philosophical papers which bear upon this field or make use of its methods, and (4) studies in the history of logic in which modern technical developments are taken into account.

Authors and publishers are requested to send, for review, copies of books and reprints of articles in journals to Alonzo Church, Fine Hall, Princeton, New Jersey.

Entered as second class matter at the post office at Baltimore, Maryland, under the Act of Aug. 24, 1912.