THE JOURNAL
OF
PHARMACOLOGY
AND
EXPERIMENTAL THERAPEUTICS

EDITED BY
JOHN J. ABEL
Johns Hopkins University
AND
WALTER E. DIXON
University of Cambridge

IN ASSOCIATION WITH

H. G. BARBOUR,
Yale University
J. H. BURN,
Pharmacological Laboratory, Pharmaceutical
Society of Great Britain, London
J. T. CASH,
University of Aberdeen
A. J. CLARK,
University of Edinburgh
H. H. DALE,
London
W. J. DILLING,
University of Liverpool
C. W. EDMUNDS,
University of Michigan
S. FLEXNER,
Rockefeller Institute for Medical Research
P. J. HANZLIK,
Leland Stanford Junior University
R. A. HATCHER,
Cornell University Medical College
V. E. HENDERSON,
University of Toronto
A. D. HIRSCHFELDER,
University of Minnesota
SIR FREDERICK G. HOPKINS,
University of Cambridge
REID HUNT,
Harvard University

P. D. LAMSON,
Vanderbilt University
W. DEB. MACNIDER,
University of North Carolina
C. R. MARSHALL,
University of Aberdeen
E. K. MARSHALL, JR.,
Johns Hopkins University
E. MELLANBY,
Sheffield University
F. RANSOM,
London
A. N. RICHARDS,
University of Pennsylvania
TORALD SOLLMANN,
Western Reserve University
R. STOCKMAN,
University of Glasgow
CARL VOEGTLIN,
U. S. Public Health and Marine Hospital
Service
G. B. WALLACE,
University and Bellevue Hospital Medical
College

VOLUME XLIV
1932

BALTIMORE, MARYLAND