THE JOURNAL
OF
PHARMACOLOGY
AND
EXPERIMENTAL TERAPEUTICS

EDITED BY
JOHN J. ABE
Johns Hopkins University

AND
WALTER E. DIXON
University of Cambridge

IN ASSOCIATION WITH

H. G. BARBOUR,
University of Louisville

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

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 SOLL-MANN,
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 XLIII
1931

BALTIMORE, MARYLAND