ON THE OCCURRENCE, SITES AND MODES OF ORIGIN AND DESTRUCTION, OF PRINCIPLES AFFECTING THE COMPENSATORY VASCULAR MECHANISMS IN EXPERIMENTAL SHOCK1, 2

By Dr. EPHRAIM SHORR, Dr. BENJAMIN W. ZWEIFACH and Dr. ROBERT F. FURCHGOTT3

Department of Medicine, Cornell University Medical College, The New York Hospital and The Department of Biology, Washington Square College of Arts and Sciences, New York University, New York

The possibility was recognized by Cannon, Bayliss et al.4 during World War I that positive deleterious principles might arise during hemorrhagic and traumatic shock, in consequence of the reduction in blood volume or tissue damage, and contribute to the fatal outcome. However, since little direct evidence has been forthcoming in support of this concept, there has been a growing tendency during recent years to emphasize the primary importance of the reduction in the effective blood volume and its direct circulatory consequences, to the exclusion of other factors.5

1 The major portion of this material was presented at a conference on shock held under the auspices of The Josiah Macy, Jr. Foundation at Boston, May 14, 1945. Submitted for publication October 1, 1945.
2 The work described in this paper was done under a contract recommended by the Committee on Medical Research, between the Office of Scientific Research and Development and Cornell University Medical College. It was also aided by a grant from The Josiah Macy, Jr. Foundation to New York University. During the past summer, additional support and the facilities of the Lilly Research Laboratories, Wood's Hole, Mass., were made available through Dr. G. H. A. Clowes, of the Eli Lilly Company.
3 With the technical assistance of Mathilda Fischl and Leon Delorney.