In a recent issue of Nature, Professor R. A. Peters of Oxford has announced the discovery and development during the war years of an effective anti-arsenical, 2,3-dimercaptopropanol. This substance has been called BAL (British anti-lewisite). As its name suggests, BAL is of interest in war medicine as an effective therapeutic agent against both the local and systemic action of certain arsenical war gases. Clinical trials of BAL, conducted as a part of the program of war research, have shown further that the compound is of value in the treatment of types of arsenical poisoning encountered in civilian medicine. Beyond this direct clinical application, the study of the action of BAL has resulted, as stressed by Professor Peters, in an important advance in the understanding of fundamental biochemical mechanisms.

* Many of the investigations included in the footnotes have not been published in open literature and the date given is the year in which the work was carried out.


Full details concerning BAL, its chemistry, method of preparation and basic biochemical actions were promptly and graciously transmitted to the United States by Professor Peters and his associates through official channels. BAL itself was received in this country late in 1941. Thereafter an intense program of study, including preparation and manufacture, biochemistry, toxicology, pharmacology, experimental therapeutics and clinical application, was undertaken jointly by the Government agencies concerned. Cooperating in this program were the U. S. Army, the U. S. Navy, the Office of Scientific Research and Development, the National Research Council, the Federal Security Agency.

It is the purpose of this review to give a brief summary of the information on BAL particularly as it was developed in the United States. As in England, more detailed papers based on the original confidential reports are being prepared for early publication.