powerful bombers, air-borne radar for strategic bombing, proximity fuses, and the innumerable other new weapons of the most technological of wars. In that war, in which we were the victims of aggression, it was the obvious duty of every scientist to give our armed forces all the help he could. Now that the war is ended, but firm peace not yet achieved, it remains the duty of every good citizen, including the scientist, to do what is needful to maintain our national strength in order that we may lead in the firm establishment of a strong international organization. Should our Government misuse that strength to start an aggressive war, the scientist, like all other citizens, no more and no less, would share in the guilt if he acquiesced.

As for the second point, while we all earnestly hope that never again will an atomic bomb be dropped on human beings, the only insurance against it is the creation of an international organization strong enough to outlaw the use by any nation of the atomic bomb and other weapons for mass slaughter, to enforce its law by adequate policing, and to inflict individual punishment for infractions. No voluntary association of scientists can exercise such governmental powers. It seems to me unfortunate to deflect attention from the only true remedy by raising hopes in a measure which is certain to prove inadequate.

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Book Reviews

Chemical crystallography: an introduction to optical and X-ray methods. C. W. Bunn. Oxford, Engl.: Clarendon Press, 1945. Pp. xii + 422. (Illustrated.) $7.50.

The author's purpose, as stated in the Preface, is to present a practical guide to optical and X-ray methods for the identification of solid substances and for the determination of atomic configurations in crystals. His treatment of the subjects is designed primarily to introduce the chemist to these techniques and to provide him with a sufficient background to enable him to begin to apply the principles. In accomplishing his purpose, the author has been highly successful. The success is due, in great measure, to the simplicity of the presentation. Mathematics, for instance, has been kept to a minimum consistent with a thorough understanding of the practical applications of crystallography.

The subject matter is divided into two sections. The first, dealing with identification, is concerned with the use of morphological characteristics, indices of refraction, and X-ray powder patterns in chemical analysis. Elementary crystal theory, including symmetry, nomenclature of planes, growth features, etc., is clearly presented. The meaning of the refractive indices and their measurement and use in identification are particularly well developed.