ably. Its main feature is a fresh commanding approach to the basic ideas of statistical mechanics without an aura of involved mathematics.

After a concise discussion of fundamental principles, this monograph then elucidates two major areas treated by statistical mechanics—the vibrations of crystalline solids and gaslike assemblies. With special emphasis on questions of particular interest to physicists, problems of normal coordinates, Debye and Einstein models for solids, details on anharmonicity and some nonequilibrium phenomena are dealt with. Considerable attention is paid to Fermi-Dirac and Bose-Einstein statistics and to a Bose-Einstein application to the liquid-helium problem. Mathematical simplicity, which characterizes this monograph, has been achieved by including more detailed physical essentials in five appendices.

The book is well written. It is interesting and even enjoyable to read. In particular, a noteworthy feature is the many footnotes which give both an informal and historical insight to the growth of statistical mechanics that is rarely seen in text books.

Theory of Elasticity of an Anisotropic Elastic Body. By S. G. Lekhnitskii. Transl. from 1950 Russian edition by P. Fern. Edited by Julius J. Brandstatter. 404 pp. Holden-Day, San Francisco, 1963. $10.95.
Reviewed by **E. H. Dill**, *University of Washington.*

Lekhnitskii is responsible for the pioneer work, beginning in 1936, in the use of complex variable techniques in the two-dimensional theories of anisotropic bodies, and he eventually published two monographs on anisotropic problems, *Anisotropic Plates* (1947) and the present book in 1950. A translation of the first book has been available for some time, and all scholars of elasticity, as well as those persons who are merely interested in the applications to anisotropic bodies, will welcome this translation of his second classic monograph.

The book appears to be photo-offset from a typed copy, but the quality of reproduction, paper, and binding is excellent. The contents include an extension of the elementary solutions for isotropic materials to the anisotropic case, and an extensive treatment

of the two-dimensional problem. No attempt is made to include the bending of plates and shells.

This is, of course, an old book and represents the state of knowledge at the time of writing, but little more has been done with regard to the linear theory since that time. The treatment uses elementary mathematics, and may appeal therefore to a wider class of readers than more modern treatments which tend to use tensor analysis. It is unfortunate that the editor has not chosen to provide introductory remarks which orient this book in the history of the subject and which relate it to more recent publications on anisotropic materials.

Ausgewählte Abhandlungen. Mit einem Verzeichnis der wissenschaftlichen Schriften. By Max Born. Vol. 1, 718 pp; Vol. 2, 706 pp. Vandenhoeck and Ruprecht, Göttingen, 1963. DM 100 per set.
Reviewed by **Emilio Segrè**, *University of California, Berkeley.*

The author was born in 1882 in Breslau, Germany. Thus he was 18 years old at the time of the introduction of *h* into physics, and 23 at the time of Einstein's first paper on relativity. From these dates it is apparent that Born is a contemporary of Bohr and Einstein. He could not have chosen a better time to participate in the development of quantum theory and relativity. In his maturity from the early 1920's until 1933, he was professor of theoretical physics at Göttingen, and one of the most popular teachers and leaders in the field. Between 1920 and 1925, Heisenberg, Jordan, Pauli, Fermi, and many, many other young physicists from Germany and other countries learned from and worked with Born at Göttingen, which was then one of the major centers of theoretical physics in the world. The advent of Hitler destroyed that center of learning; however, the works performed there remained, and these volumes are a suitable testimonial to that golden period of theoretical physics.

The selection of Born's papers collected in this volume reflects several of the most important developments in theoretical physics during the last 50 years. It is divided into six classes according to subject: (1) Mechanics, relativity, thermodynamics; (2) Crystal