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struments and the characteristics of the records they write. Diagrams of specific seismographs are well selected.

In the second chapter (20 pages) the author considers various types of earth waves. He discusses mainly waves recorded from artificial explosions, but also types found in seismograms of distant earthquakes and of nearby shocks. Of special interest is the record written by a field seismograph located near the atomic bomb which was exploded in New Mexico on July 16, 1945. This is the record in which the author discovered the so-called "hydrodynamic wave", a term not too well chosen, since there seems to be no physical relation to actual hydrodynamic waves. This type of motion has been found thus far only in records of nearby explosions but not in records of earthquakes.

The third chapter (52 pages) contains a summary of transmission characteristics of earth waves and the application of the theory to seismic prospecting. About 14 pages are devoted to the transmission of elastic waves through the earth, including calculation of the wave velocity through the earth's interior. It is illustrated by typical seismograms from two different epicentral distances in shallow earthquakes, by records obtained from artificial explosions for exploration geophysics, by sketches showing wave paths, and by graphs giving the relationship between observed transmission times of elastic waves from the source to the point of observation and the distance. The last 18 pages of this section are devoted to practical information about seismic prospecting.

In the last chapter the author discusses aspects of microseisms recorded continuously by sufficiently sensitive instruments. He deals mainly with the problem of locating the source of microseismic storms and the direction from which these waves approach the seismographs. He especially discusses the use of three stations located at the corners of a triangle ("tripartite stations"). He points to oversimplifications in the investigations of microseisms and discusses possible improvements for use of microseisms in locating the source of the disturbance.

The author has provided excellent illustrations. Most of the 58 figures are derived from his own work. The book can be well recommended for anyone who wants introductory information on selected topics concerning elastic waves in the earth.

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Books Received

INDUSTRIAL INSTRUMENTATION. By Donald P. Eckman. 396 pp. John Wiley and Sons, Inc., New York, 1950. $5.00.

ATOMIC PHYSICS. By Wolfgang Finkelnburg. 498 pp. McGraw-Hill Book Company, New York, 1950. $6.50.

THE PRINCIPLES OF SCIENTIFIC RESEARCH. By Paul Freedman. 222 pp. Public Affairs Press, Washington, D.C., 1950. $3.25.

THE HUMAN USE OF HUMAN BEINGS. By Norbert Wiener. 241 pp. Houghton Mifflin Company, Boston, Massachusetts, 1950. $3.00.