by chapters VIII and IX, the clastic and carbonate sediments, and the book concluded with chapter XIV, the structural features of sedimentary rocks. These portions of the book describe the rocks most commonly encountered and illustrate all the general principles. An edition containing the material mentioned above (278 pages), and selling for two thirds of the present price, would be a boon to college students.

The book is to be commended for the impartiality with which the various facts and theories are presented. The bibliographies are excellent, up to date and well placed. There are, of course, some statements with which not all will agree and a few minor errors. There are remarkably few typographical mistakes. One of them might well be repeated in future editions, for when the compositor makes the author say that in many dolomites the fossils are "silified," many who have studied these rocks will think he has achieved the *mot juste*.

HARVARD UNIVERSITY

PERCY E. RAYMOND

SUBMARINE CANYONS

The Origin of Submarine Canyons. By DOUGLAS JOHNSON. 126 pp. 4 figs. 4 plates. New York: Columbia University Press. 1939. \$2.50.

ONE of the most puzzling features on the face of the earth is the series of spectacular submarine canyons which notch the margins of the continental platforms and extend downward and outward to depths of eight or ten thousand feet below the surface of the sea. Their origin is perhaps the most baffling problem faced by geologists at the present moment, and their presence has caught the interest of the general public to an unusual extent. This slender volume from the pen of Columbia University's well-known geomorphologist should therefore be called to the attention of a larger audience than the small group of specialists working on the problem.

Professor Johnson reviews critically the numerous hypotheses that have been under consideration and rejects the idea that the canyons are a result of subaerial erosion at a time when the continents stood higher with respect to sea level than they do to-day. He also concludes that erosion by turbidity currents has "such doubtful validity that one is impelled to seek elsewhere a more satisfactory explanation of the great trenches found beneath the sea." He therefore attempts to explain the canyons "as the result of longcontinued sapping by submarine springs fed . . . by waters, chiefly artesian, migrating through the sediments of the continental shelf to appear on its steeper seaward face." Although that explanation may appear incredible at first glance, Professor Johnson's marshaling of data and cogency of logic are such as to give much plausibility to his ideas.

KIRTLEY F. MATHER

HARVARD UNIVERSITY

A NEW GERMAN SCIENCE DICTIONARY

German-English Science Dictionary for Students in the Agricultural, Biological and Physical Sciences.
By LOUIS DE VRIES, professor of modern languages, Iowa State College, and collaborators. Pp. x + 473.
New York and London: The McGraw-Hill Book Company, Inc. 1939. \$3.00.

ATTENTION should be called to this much-needed valuable little dictionary for aid in reading scientific German, especially when one must traverse other fields outside one's own. It measures only ca. $7\frac{1}{4}'' \times 5\frac{1}{4}'' \times \frac{3}{4}''$. but contains 48,000 entries; the book has been kept "pocket-size" by omitting many compound words, whose meaning can readily be derived from the components. There has been a crying need for just such a volume to serve general science in the manner that Patterson's serves chemistry. Included among the collaborators are men and women in the fields of botany, bacteriology, genetics, entomology, zoology, psychology, biochemistry, nutrition, etc., etc.; by this means, the vocabulary selection and word-meanings have been broadly selected and will serve a large group of people.

HAROLD KENNETH FINK CALIFORNIA INSTITUTE OF TECHNOLOGY

SOCIETIES AND MEETINGS

PENNSYLVANIA ACADEMY OF SCIENCE

THE -regular spring meeting of the Pennsylvania Academy of Science was held at Washington and Jefferson College, Washington, Pennsylvania, on Friday and Saturday, March 22–23, 1940. Ninety-six persons registered. A general session occupied the members on Friday morning. In the afternoon Geologic and Biologic sections met separately. Saturday was given over to another general session. A total of forty-four papers appeared on the program. The annual dinner was held on Friday evening at the George Washington Hotel. After the dinner, Dr. E. T. Wherry, of the University of Pennsylvania, gave a public address on "Notable Native Plants of Pennsyl-

vania." This was illustrated with colored slides. . Simultaneously with the Senior Academy, 258 members of the Junior Academy met under the guidance of Professor K. F. Oerlein. The next regular spring session of the Academy is scheduled for April 11-12, 1941, at Coatesville, Pennsylvania, under the auspices of the Chester County Natural History Society. The place and date of the 1940 summer meeting have not