to attempt having deliveries made now if their copies are being impounded at the source. It may be that they are trying and on the other hand I think it possible that some of them consider it more important to insure complete files for the future than to run risks in delivery now. It is this particular point which has prompted this letter to you. One of the very new efforts of the American Documentation Institute has been to copy whole journals either on microfilm or by photoprinting. If some way could be found to reassure librarians that occasional missing numbers for the war period which they could not obtain from the publishers after the war could be replaced by photoprinting at reasonable costs, this might influence their present practice in the direction of taking care of present needs of scientists and others.

The situation with regard to German journals as to editions published is given in the following letter from G. E. Stechert and Company, New York City (March 6, 1940):

German publishers usually print a considerable number of copies in excess of their actual need for subscribers but this has changed during the last two years. We have only recently been advised that due to some paper shortage only copies for the exact number of subscribers will be printed.

At the annual meeting of ADI, the suggestion was made that activities of ADI in the field being discussed should be coordinated with those of the Librarian of Congress and the American Library Association. Contact has been made with Archibald MacLeish, Librarian of Congress, and any necessary communications with regard to the general policy of handling of journals from abroad will be channeled through him. It is understood that negotiations are underway whereby arrangements for clearance of scholarly and scientific journals from Germany may be made. However, the fact that such journals are coming through with regularity when shipped by the publishers seems to take care of the immediate situation, except in those cases where agents are holding copies for future delivery.

From the information gathered, the following recommendation can be made:

That libraries and individuals who have ordered through agents and who are not receiving journals from abroad should instruct those agents to dispatch currently the journals in order that they may be received promptly and be available for readers when they are current. In the event that losses are incurred through this procedure, it would be possible for libraries and individuals to obtain missing numbers through microfilm or photographic enlargement, which makes unnecessary the precaution of holding journals at source until the end of the war or some other future time.

WATSON DAVIS
AMERICAN DOCUMENTATION INSTITUTE,
WASHINGTON, D. C.

SCIENTIFIC BOOKS

SEDIMENTATION

Principles of Sedimentation. By W. H. TWENHOFEL. 511 pp. 44 figs. New York: McGraw-Hill Book Company. 1939. $5.00.

GRABAU, Barrell and Twenhofel will long be remembered as leaders in the twentieth century revival of interest in the origin and history of sedimentary rocks. Twenhofel's books have been immeasurably valuable in summarizing the constantly increasing volume of information; they are indispensable aids to every student of the subject. The latest, the "Principles of Sedimentation," traces the history of the sedimentary rocks from the places of origin of their components to their deposition and consolidation.

The first three chapters, on environments, present the physical and climatic background without which the history of sedimentation can not be properly understood. Chapters IV to VI give an excellent treatment of the origin and transportation of the inorganic sediments and the relationships of organisms to them. Chapter VII, on the classification of sediments, sedimentary rocks and minerals, is far too brief. Chapter VIII treats of the accumulated clastic sediments, both newly deposited and indurated. It seems unfortunate that limestone was not included here, for most marine limestones are just as much clastic sediments as are sandstones. Chapters IX to XIII, with the general heading "Sediments of Chemical Deposition," discuss the origin of limestone, dolomite, evaporites, sedimentary iron ores, a host of lesser chemically-formed mineral deposits and, curiously, the carbonaceous sediments. Much of the material in some of these chapters is of little importance to the stratigrapher. Chapter XIV, on structural features of sedimentary origin, is most useful. The final chapter, on textures and colors of sediments, is mostly repetition of what has been said earlier in the book.

The story is a highly complex one, and some parts of it are so obscure that about all that can be done is to set forth the lines of research that should be followed to furnish information. On the whole, Twenhofel has done a good job. The chief criticism of the book is merely that there is too much of it. Another edition of the "Principles" might well begin with Chapter IV. The first three chapters are covered by any good introductory course in geology, and much that they contain is repeated in later parts of the present volume. Chapters IV to VI could be followed

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*.

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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 long-continued 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.

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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.

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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 Pennsylvania." 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