cupied, an opening bracket or parenthesis should be placed in front of the continuation. Here it is indicated every which way: On page 98, left column, line 16, a bracket is used; on the same page and column, line 20 (from the bottom), a vertical line is used; on the same page and column, line 9 (from the bottom), nothing is used; while on page 283, right column, line 8, a rather ingenious device resembling a bent arrow is used.

In thoroughness, accuracy, and typography the Carpovich dictionary does not compare with Callaham's.

M. Hoseh

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Multilingual Aid

Geographical Conversion Tables. D. H. K. Amiran and A. P. Schick, Eds. Published for the International Geographical Union by Aschmann and Scheller, Zurich, 1961 (order from Stechert-Hafner, New York; \$6). xxix + 539 pp.

This work was initiated, essentially, in the summer of 1952 when the Seventeenth International Geographical Congress, meeting in Washington, D.C., appointed a special committee to evaluate the need for a volume of geographical conversion tables. The special committee reported its findings to the Eighteenth International Geographical Congress held in Rio de Janeiro in 1956. The upshot was approval for the preparation and publication of such a volume.

Many persons, too numerous to mention here, provided aid, encouragement, and critical direction to the arduous undertaking, but the major travail fell upon the shoulders of the editors, D. H. K. Amiran and A. P. Schick of the Department of Geography of the Hebrew University of Jerusalem, and the actual compilation of the material was done in that department. Preparation costs were met by Ford Foundation subsidy, and publication-cost grants were made by the National Science Foundation (U.S.), by UNESCO, and by the International Geographical Union.

In a strict sense, one reports on, rather than reviews, a work of this nature. There are over 300 pages of tables in the volume. These deal with a host of items, such as conversion from fathoms to meters, from acres to square feet, from metric tons to short tons, from

bushels per acre to kilograms per hectare, and from percent of slope to degrees of slope, as well as conversion from inches of mercury to millibars, from time in hours, minutes, and seconds to radians, from horsepower to kilowatts, from degrees Fahrenheit to degrees Celsius, and so on. Included, also, are tables on sunrise, sunset, and sunlight duration and, along other lines, the comparison of weights of bags, sacks, bales, and barrels of various types of commodities from one country to another. There are even graphs of walking travel time and motoring travel time (per distance)—and a world timezone map.

The materials in the volume are presented in English, French, German, Russian, and Spanish—the increased international, perhaps one should say virtually world-wide, utility of the work is obvious. Several professional geographers have checked the materials in terms of the five "language-expressions" just noted.

To all of those, especially the editors, responsible for this volume, this "reporter" tips his hat. They have sacrificed precious research and other time for the production of a needed and extremely useful book. Their own personal rewards may have to "come in Heaven," but in the meantime, many on earth will profit from their labors.

In somewhat parenthetical conclusion, it should be pointed out that the title of the volume is partially misleading—for the materials, the "conversion tables," certainly are of interest and utility beyond the "geographical" field.

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Brief Treatment

Introduction to College Geology. Chauncey D. Holmes. Macmillan, New York, ed. 2, 1962. xx + 483 pp. Illus. \$7.

In the preface to this edition, the author says that the text is "designed for use in college courses carrying five or six semester hours credit," that it combines and coordinates physical and historical geology, and that it has been revised "in keeping with the many new developments of the past decade." In my opinion, no one of these admirable aims has been realized.

Whether a text is suitable for college

use depends, to be sure, on a lot of factors, not the least of which is the instructor. I think that this book belongs at the high school level, or perhaps it could be used for the geology part of an earth-science requirement in college. For one thing, the content (483 pages) is less than half that commonly used for a full college course. But more important than bulk, the spirit of the book is repeatedly revealed in simple statements of fact, completely without trace of quantification in the physical part, and without a hint that any problem exists in the problem-riddled field of historical geology. With negligible exceptions, not a geologist, no matter how famous, is mentioned; there are no references, no footnotes, and no bibliography. That the student is expected only to memorize may be seen from typical chapter-end questions: "Name the eight most abundant elements present in Earth's crust." "Name in their proper sequence the periods of the Mesozoic era." "What is an earthquake? Seismology?"

I see no sign of integration of physical and historical geology; chapters in the two fields have simply been intermixed. The first hundred pages have to do with the earth as a planet and with rocks and minerals. Then there are several historical chapters, 230 pages long. The last 130 pages are physical geology again: shorelines, earthquakes, erosion, groundwater, winds, petroleum, and (again) minerals. There is no more than the usual cross reference between the physical and historical sections; they stand or fall by themselves.

The book has not kept up with the "many new developments" that interest me. In an admittedly hasty reading, and in the index, I have found nothing on the following: evolution, ecology, graywackes, tectonism, lithofacies, or eugeosynclines. Turbidity currents are there-two paragraphs of them-and geosynclines occupy five. And glaring though these omissions may be, I cannot understand how Pleistocene glacial history can be treated without some reference to deep-sea cores and to oxygen-18. Migration, extinction, Gondwanaland, and palynology are missing, though there is a brief mention of pollen (not in the index). Paleomagnetism (not named) takes one sentence; isotopes are not listed, although radiocarbon occupies a page. The word "time" is not in the index, and one would not expect to find time-stratigraphic, nor even facies.

With all its limitations, is the book