

The chapters on the document examiner and the ballistics expert are not included in the group of chapters devoted to the laboratory specialists, perhaps because these two categories of specialists operate in fields that are not so clearly areas of "pure" or basic science. Instead, the two chapters devoted to the document examiner and the ballistics expert are inserted in the series devoted to criminal specialties, between the chapter on breaking offenses and that on abortion. The author has also illogically included a chapter on criminal responsibility between the chapter on drug trafficking and that on alcohol and motor accidents. It appears that the organization of the book could be improved by rearranging the chapter sequence.

The next-to-last chapter deals with instructive and unusual cases and adds materially to the "whodunit" value of the book. The introductory chapter contains an interesting account of the development of scientific crime investigation and the establishment of crime laboratories in England.

The concluding chapter—on some foreign laboratories—is not sufficiently detailed to give the criminalist an understanding of the facilities of these laboratories in terms of the quality and quantity of staff and equipment.

The author has illustrated his discussions of scientific techniques with examples drawn from actual criminal cases. It is these accounts which make the book appealing to the lay reader.

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Introduction to Historical Geology. Raymond C. Moore. McGraw-Hill, New York, ed. 2, 1958. ix + 656 pp. Illus. \$7.95.

Extensive expansion and revision mark this new edition of a widely used text by one of the world's grand masters of the historical geology chessboard. Except for some illustrations, little remains unchanged in the new work. The page size is larger, the text is longer, and the 600 illustrations nearly double the number in the earlier edition.

After first treating the scope of historical geology and evolution, the book examines briefly several theories of our earth's origin, without, however, supporting any specific hypothesis. Next comes a considerably expanded coverage of the Precambrian, here called the Cryptozoic eon. After this, individual chapters treat each succeeding geologic period, describing rocks and fossils, paleogeographic history, life, climate, and economic resources, all primarily

from the viewpoint of a geologist working in North America. The final chapter outlines our scanty knowledge, as of several years ago, of man's geologic history. Recent finds—such as *Oreopithecus*, the Tuscan ape man, or the Swanscombe man—are not discussed, and the reading list needs some updating. For example, Wormington's classic work, *Ancient Man in North America*, is now in its fourth edition, not its second, and although one of Sellard's earlier papers is mentioned, his later book is not.

Three appendices complete the text. The first describes fossil organisms and is a superb exposition, reflecting the author's international eminence in paleontology. The second pictures many common lithologic symbols, and the last provides a glossary of technical terms.

Completely new features in this edition, deserving of special commendation, are the list of suggested readings and the dozen or so review questions at the end of each chapter. Each of the questions is carefully designed to induce the student to think and to reason from a background of factual information acquired through previous study.

Some terms not commonly used in the United States, but eminently satisfactory, are applied throughout the book. The European division of the Cenozoic into Paleogene and Neogene is adopted, and dolomitic rocks are called dolostones. Is the influence of a standard glossary at last infiltrating geologic science? The numerous illustrations, many of them new, are uniformly clear and appropriate. Some, such as the geologic maps showing outcrop and subsurface occurrences of the rocks of each system, provide useful reference information on every period since the Cambrian.

For teachers of historical geology this book is an excellent text. It provides a wealth of factual information, useful for stretching the minds of even the most competent students.

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Scientific Manpower in Europe. Edward McCrensky. Pergamon Press, New York and London, 1958. ix + 188 pp. \$4.50.

"The role of management of scientists in government is the principal theme of this study." The first three chapters consider some of the things a scientist looks for in a government career, some of the methods used by several Western European governments to attract and hold scientists in public service, and the levels and systems of payment. The material is drawn from Great Britain, France, West-

ern Germany, the Netherlands, and the Scandinavian countries.

Three other chapters describe (i) the representation of scientists in the establishment of employment conditions and rates of pay—for example, through the highly organized unions of the Scandinavian countries and the formal channels for joint consultation in Great Britain; (ii) the higher education of engineers in several countries; and (iii) several national patterns for the organization of research. A concluding chapter makes comparisons with the United States. These topics are treated very briefly.

There is growing recognition in the United States of the need for thorough and systematic review, and probably revision, of administrative practices controlling the recruitment, promotion, payment, and transfer of civil service scientists and engineers. This is all part of the larger issue of how best to organize and manage a government scientific program of expanding immensity. McCrensky's little book touches on many aspects of these problems, describes systems in use elsewhere, once in a while expresses a judgment as to how effectively different systems work, and thus provides ideas that might well be considered in the United States. But nothing is treated in depth; decisions to change present practices would require substantially more information than the author presents.

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Principles of Research in Biology and Medicine. Dwight J. Ingle. Lippincott, Philadelphia, Pa., 1958. xv + 123 pp. \$4.75.

In this unusual little book, which is addressed to "students who are preparing for or are beginning research in macrobiology and medicine," the author has attempted to survey the rationalities and methods of science all the way from basic aims and the fundamentals of logic to the selection and care of laboratory technicians. He makes this attempt in some 120 pages of short, concise assertions, aided by quotations from Lewis Carroll but without the aid of any illustrations, tables, quantitative data, or symbolic methods and with the introduction of very few examples.

The book is fundamentally sound but so condensed into generalities that controversial points are not explicitly asserted. It is hard to argue with the politician who asserts that evil is bad, and it is probably just as hard to deny, for example, that "causality is a useful assumption for scientists in the fields of