

the importance of the Turonian-Senonian orogenic phase which is important economically in both North and South America is well brought out.

Although much space has been devoted here to minor criticisms, this work easily excels the best previous efforts of its kind. It will be invaluable, not only to readers with an academic interest in South America, but also to those engaged actively in the task of finding petroleum and other mineral resources.

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Enfermedades Infecciosas y Parasitarias. vols. 1 and 2. Jose Ink. Lopez y Etche-goyen, Buenos Aires, 1953. xv + 1485 pp. Illus. + plates.

This work on infectious and parasitic diseases is intended as a textbook in Spanish for both medical students and practicing physicians. Its two volumes describe the diseases produced in human beings by bacterial, viral, fungal, and parasitic agents.

The author describes the etiology, pathologic anatomy, symptomatology, laboratory diagnosis, treatment, and epidemiology of each disease and gives a brief summary of the main facts that help in identification of morbid conditions. This book not only includes the classical descriptions of diseases but also presents the more modern developments in laboratory diagnosis and the new therapeutic measures that have changed the prognosis of infectious and parasitic ailments.

There are 32 pictures, many in color. The bibliography contains 114 references from both foreign and Argentine sources, and there is an analytic index at the end. The scope of the book is wide; there are references not only to diseases common in Argentina but to many others of world-wide prevalence.

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Causalités et Accidents de la Découverte Scientifique. Illustration de quelques étapes caractéristiques de l'évolution des sciences. R. Taton. Masson, Paris, 1955. 168 pp. Illus. F. 980.

The author of this interesting and unusual book has collected a large number of documents concerning scientific discoveries. The book has the positive merit of having a wide scope, ranging through mathematics, astronomy, physics, chemistry, instrumental techniques, biology, and

medicine, and the negative merit of supporting no specific theory, historical, psychological, or other, but presenting each individual item in its variegated collection for the appreciation and judgment of the reader.

The author remarks in his preface that his objective presentation avoids forcing the complexities of actual scientific research into a systematic schematism. Unfortunately, this avoidance of rigidity has led him into the pitfall of disorder. We are made to jump from antiquity to modern times and to the Renaissance, from spectroscopy to hydrostatics and to typhus, from great names to obscure ones, from basic discoveries to chance observations and to dead ends, from original quotations to amusing anecdotes, so that the very richness of the collection leaves the mind in a whirl. In spite of this, the book will find its place on the shelves of the teacher, the historian, or the philosopher of science; each one will find recorded in it several cases that he has not met before as well as illustrations for his own pet theories. In this he will be aided by two excellent indexes, one of names and one, analytic, of subjects. The plates are also very good.

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Principles of Nuclear Reactor Engineering. Samuel Glasstone. Van Nostrand, New York, 1955. vii + 861 pp. \$7.95.

Samuel Glasstone has attempted to cover the entire field of nuclear energy in one volume. He has been highly successful in presenting a large amount of detailed information, which includes the basic physics and engineering calculations for nuclear reactors. The large gap between the basic design theory and the applications to practical reactor design has been presented in sufficient detail for design of research reactors but not for the design of power reactors. The treatment of most subjects is extremely brief, and incomplete. A great many of the design problems that must be solved by the reactor designer and operator are not mentioned. Nevertheless, the book does contain a wealth of information of value to the beginner in the field of nuclear reactor design. The simple basic principles are presented in a readable manner. Lists of nomenclature are attached to each chapter as well as lists of problems. Some examples of typical calculations are included, but more specific examples would be desirable.

The contents of the book include a review of the calculations of critical mass,

neutron flux distribution, and nuclear reactions; control of reactors; materials; shielding; thermal aspects of reactors; and descriptions of various reactors. The chapter on thermal aspects of reactors is perhaps the best presented.

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Scientific Method in Psychology. Clarence W. Brown and Edwin E. Ghiselli. McGraw-Hill, New York-London, 1955. ix + 368 pp. Illus. \$6.

Scientific Method in Psychology is meant to be a textbook at the undergraduate level. Its purpose is to state the general principles of science and the interpretation that these principles have in psychology. The book is divided into three parts of about equal length. The first part is a simplified idealization of both the scientific method and the scientist. The scientist is characterized as a straight thinker who is individually flexible, tolerant, and free of intellectual biases. He also has a good memory.

In the second part of the book, the authors detail the steps of the scientific method. These are: (i) the definition and delimitation of a scientific problem; (ii) the use of hypotheses in formulating a problem; (iii) collection of the facts; (iv) organization, analysis, and interpretation of the facts; and (v) generalization from scientific data. In part three, some specifically psychological procedures — psychological methods, structured and unstructured tests, interviews, and so forth—are described and compared.

The authors treat the experimental procedures quite competently and give a wide variety of examples. Their handling of more abstract problems of scientific method and particularly of theory, however, is not so sure. In a discussion of three types of facts, they distinguish one that is "remote from sensory experience." This type of fact is a fact that has been thought about by the scientist and thus has acquired meaning. This type of "fact" and "hypotheses," "theories," "interpretations," and "generalizations" become inextricably confused in later chapters. Because these terms are used frequently—and presumably systematically—throughout the text, the confusion is not helpful. Other topics are also perhaps more vague than they need be. For example, the following distinction is made: "Experience, knowledge, and understanding are closely related. They should be placed on a common continuum with experience at the beginning and understanding at the end. From experience we pass through knowledge on