

Evolution

By Chapman Pincher. (Reason Why Series.) Pp. 199. (London: Herbert Jenkins, Ltd., 1950.) 7s. 6d. net.

ANOTHER book from the nimble pen of the indefatigable Chapman Pincher bears witness to his industry and the catholicity of his tastes. Here, in one of the popular "Reason Why" series, Pincher presents both the evidences for and the mechanics of evolution. The book is planned as a series of well-thought-out and commonly asked questions followed by answers generally accepted in contemporary biological thinking. The material is usually free even from minor errors, although the assertion that human ova are liberated bi-monthly and alternately from the two ovaries is one which further investigation may not substantiate.

Each section has been carefully chosen and skilfully written to give a connected story which should be intelligible to the lay reader; he may be a little over-powered by the cumulative effect of biological terms. To the clearly presented text of what is, at current prices, a remarkably cheap book, Pincher has added many black-and-white drawings and diagrams which increase its value. He has also included an interesting appendix describing the methods used in calculating the age of the earth, a glossary which differs from so many in making 'difficult' terminology clear, and a short and relevant bibliography.

Herdsmen and Hermits

Celtic Seafarers in the Northern Seas. By T. C. Lethbridge. Pp. xix+146. (Cambridge: Bowes and Bowes, 1950.) 10s. 6d. net.

THERE is always a freshness about anything T. C. Lethbridge writes. His works give one the feeling of scudding before the breeze in an open boat on a crisp spring morning. However outrageous his statements at first sight appear to be, one goes on reading and later, not infrequently, comes to the conclusion that, after all, though unorthodox, there is not a little truth in them. He is a leading expert both on the Saxon period in Great Britain and on handling boats of all kinds; he has sailed about the rugged coastline of Scotland, is intimate with that of Iceland, and has also explored and mapped that of Baffin Land.

Mr. Lethbridge brings to this little work on the early story of Scotland, Iceland and Greenland all his varied knowledge and experience. It is quite easy for the study-archæologist to move people about like pawns, and to postulate migration routes in early times by sea on the evidence of distribution maps. What is important to know is what was possible under the climatic and geographical conditions of the period and with the boats available at the time, and these are just the kinds of points the author is so well qualified to pronounce upon. On land he stresses the effects of the Belgic invasions of southern Britain, prior to the appearance of the Romans on the scene, and believes that many of the natives among whom the Belgæ penetrated migrated northwards and developed the well-known Broch culture. He distinguishes sharply between this culture and that of the Stone Forts.

The chapters dealing with the discovery of Greenland and its eventual colonization by Eric the Red are particularly interesting, as, too, are the remarks on the problem of the Norsemen having reached the mainland of America—either Labrador or possibly farther westward up the Hudson Bay. Clearly, Mr.

Lethbridge believes in the genuineness of the famous runic stone, now known as the Kensington Stone, which was said to have been found in America. The author's knowledge of the area and of boats has enabled him to check up on the records and to trace out the route taken, assuming that a day's sailing covered about a hundred miles. Specialists may deery some of the statements made; but the book contains valuable matter and makes good reading.

M. C. BURKITT

The Science Teacher's Handbook

A Companion to "Everyday Science Topics". By T. A. Tweddle. Pp. 249. (London: George G. Harrap and Co., Ltd., 1950.) 12s. 6d. net.

THIS book, based on a scheme of work which has been in use for ten years, is for teachers and is a companion to the author's three books on "Everyday Science Topics". As the title of the volumes implies, the topical method accompanied by experimental work is used, and the topics, which are based on the pupils' interests, needs and possible occupations, are intimately connected with their everyday experiences. This, the reviewer feels, is the right course to follow for youngsters who do not need or wish to pursue any strictly academic work, and it is excellently done here. There may, however, be some pupils in the higher age-groups destined to enter the technical field later on, and a more formal course, say in the last year or two at school, might be helpful to them.

Scientific principles are dealt with incidentally, and this is understandable. But one hopes, at any rate, that in pursuing the course time may be found to direct attention to the pioneers who discovered the principles; such attention would be both instructive and educational to the pupils. In general, the scheme has been well thought out and presented, and should be especially helpful to those Modern Schools searching for a suitable course.

General Chemistry

A Systematic Approach. By Harry H. Sisler, Calvin A. Vander Werf and Arthur W. Davidson. Pp. x+870. (New York: The Macmillan Company; London: Macmillan and Co., Ltd., 1949.) 37s. 6d. net.

THIS book, intended as a one-year course, is the result of much teaching experience on the part of the authors, and is intended to provide a logical, interesting and psychologically sound approach. The contents cover the topics usually found in modern American books of its standard, including some organic chemistry. Particular emphasis is laid on general theoretical principles, physical chemistry and the modern theories of atomic structure and valency.

Since the Periodic Table is taken as a basis, many less-common elements come in for short discussion. The inert gases are dealt with first, then non-metals of Groups 7-4, and then the metals of Groups 1-4, the transitional elements being dealt with in an unusual place, after Group 3. The historical approach is used throughout, it being recognized that the way knowledge has been attained is at least as important as the knowledge itself. While the whole text is clear and attractive, special mention should be made of the theoretical sections; the physical chemistry is modern and quite adequately treated. At the same time, the descriptive chemistry is not unduly curtailed, as sometimes happens, and the book as a whole is well balanced.