Arctic Harpooner :

a Voyage on the Schooner *Abbie Bradford*, 1878-1879. By Robert Ferguson. Pp. xii+216. (Philadelphia : University of Pennsylvania Press ; London : Oxford University Press, 1938.) 9s. net.

MR. L. D. STAIR, evidently with great care, has converted the diary of Robert Ferguson into a narrative. It is certainly a readable book, but there is at times the slightest uneasiness in the reader's mind lest the editor may have been carried away by his theme : the feeling is probably unjustified. Matters of precise interest are (a) the accounts of the Eskimo and of Ferguson's success on his land journeys, short though they were, due to adopting completely the native mode of life, long before Stefansson, and (b) the information regarding the Greenland whale, at that time *the* whale.

Ferguson mentions a whale about 95 ft. long ; this can scarcely be correct, since the Rev. William Scoresby, D.D., F.R.S., considered 65 ft. unusual and 70 ft. the absolute limit of size for this species. On the other hand, Ferguson's figure of 130 barrels for this individual seems surprising, but the careful Scoresby measured a whale of 52 ft. which gave 24 tons of oil and says that "whales yielding 20 tons of oil are by no means uncommon" and "whales have been caught that afforded nearly 30 tons of pure oil". He states further that "the ton or tun of oil is 252 gallons wine measure" ; this is still the basis of the barrel of whale oil, which is reckoned in round figures at 40 gallons or 6 barrels to the ton. These whales therefore gave 120-180 barrels, which would be most remarkable for the gigantic Blue whale of the South. It should be mentioned on Scoresby's authority that the blubber of the Greenland whale is from 8 or 10 to 20 inches thick.

J. E. HAMILTON.

Industrial Chemistry

an Elementary Treatise for the Student and General Reader. By Prof. Emil Ramond Riegel. Third edition. Pp. 851. (New York : Reinhold Publishing Corporation ; London : Chapman and Hall, Ltd., 1937.) 28s. 6d. net.

PROF. RIEGEL'S book provides an admirable survey of modern industrial chemistry which is suited to the needs of the student and the general reader. The various sections have been written with the collaboration of experts and give in a concise form a wealth of authoritative information. The topics include mineral acids and alkalis, nitrogen products, phosphates, fertilizers, cements, ceramics, glass, fuels, water, coal products, electrothermal and electrolytic processes, petroleum, and the important organic chemical industries such as the manufacture of dyes, pigments, oils, explosives, rubber, etc. There are also good chapters on chemical plant and instruments of control, and on the metallurgy of iron and steel, copper and other common metals, and on the platinum metals and radium. The treatment is sufficiently detailed to be really useful, and the book is well illustrated and indexed. There are references to standard treatises and to recent articles in journals—the latter mostly American.

Physikalische Methoden in Chemischen Laboratorium Pp. v+267. (Berlin : Verlag Chemie, G.m.b.H., 1937.) 3.60 gold marks.

DURING 1936-37, a series of thirteen articles on the application of new physical methods to the solution of chemical problems appeared in the German technical journal *Angewandte Chemie* : these have now been reprinted and collected in the book under review. The subjects treated are X-ray methods, ultra-sonic waves, chromatography (three articles), Raman effect, dielectric loss, spectrum analysis (two articles), polarographic methods (two articles), photo-electric spectrophotometry, and colorimetry with colloidal solutions. Some of the articles, for example, those on the application of X-ray methods and of ultra-sonic waves, are mainly concerned with a description of the results obtained, but in others, as those on chromatography and the polarograph, adequate experimental details are given. The authors of the various sections have had practical experience of the subjects about which they have written, and so the matter may be regarded as authoritative, although, as is to be expected, the style is not uniform. Altogether the compilation should prove of considerable interest to chemists who wish to become acquainted with some of the recent developments in experimental technique. The book is well produced, in spite of its paper covers, and is excellent value for its relatively small price.

S. G.

The Modern Mind

By Michael Roberts. Pp. 284. (London : Faber and Faber, Ltd., 1937.) 8s. 6d. net.

THE special interest of this brilliant and well-written essay is the development given to the view that the history of thought shows that there are attitudes of mind corresponding to various historical periods ; and that so far as the English mind is concerned, such attitudes are evolutionary products involving the intuitions and inhibitions of our medieval ancestors. This is coupled with the author's effort to re-establish truth as poetry and religion apprehend it, though he seems to think that poetry and religion have no concern with facts at all. In the exposition of these views, the author displays great learning and a gift for discovering striking analogies. However controversial some of his conclusions may be, the reading of his book will be found to be both beneficial and pleasant.

T. G.

A Scheme of Inorganic Qualitative Analysis

By Dr. E. M. Stoddart. Pp. vii+39. (London : William Heinemann, Ltd., 1937.) 1s. 6d.

THIS small manual contains some useful tables for group separations and confirmatory tests. By omitting equations, which the student can find in the text-books of inorganic chemistry, it has been possible to get the material into a small space, convenient for bench use, and to produce an inexpensive guide to qualitative analysis. The book is very clearly written and should prove useful in school and college laboratories. The standard is that of the London Intermediate and General B.Sc.