striated ends appear to be bounded by *b*, *m* and *k*, as well as other faces.

I am now wondering how commonly such coatings are aragonite rather than calcite.

Alfred C. Lane

Tufts College, Mass.,
June 18, 1912

SCIENTIFIC BOOKS

Theoretical and Physical Chemistry. By S. Lawrence Bigelow, Ph.D., Professor of General and Physical Chemistry in the University of Michigan. New York, The Century Co. 1912. 14 × 22 cm. Pp. xiii + 544. Price $3.00.

In his preface, the author points out that, after gaining some knowledge of the facts in the first year or two's study of chemistry, students are ready to find both profit and pleasure in a more philosophical study of generalizations and principles than was possible at an earlier stage. Truly, the modern beginners' course in general chemistry, although it is in part descriptive and detailed, yet fully deserves the appelation "general" in Ostwald's sense, and might well have served for a course in physical chemistry some fifteen years ago (p. 4). Selecting the generalizations from the masses of details accumulated in all the special branches of chemistry, however, "our subject makes a specialty of these generalizations," and therefore stands to chemistry in the same relation as philosophy does to all sciences. Instead of "Theoretical and Physical Chemistry," the book might, indeed, have well been entitled "The Philosophy of Chemistry," if for no other reason because of the catholic and philosophic viewpoint of its author. After reading his prefatory acknowledgments to his former teachers Ostwald and Nernst, one looks rather for Germanic philosophy; but what one finds is Anglo-Saxon. For those who require to have this distinction characterized for purposes of physical science it may be stated, with Duhem, that the Anglo-Saxon temperament wishes to construct a tangible model of sticks and strings, while the Germanic carries the logic to its necessary conclusion, however unfathomable.

In regard to the subjects treated, any criticisms as to omissions is disarmed by the statement that "the most difficult part of the task has been the selection of topics to omit." In spite of well-chosen omissions, however, a very wide field is nevertheless covered, lightly, often with elegance and always with clearness. The titles of some of the thirty chapters which the book contains are as follows: The Scientific Method; Fundamental Definitions; Unit Quantities of Chemistry and Chemical Notation; Chemical Energy, Affinity and Valence; Spectroscopic Evidences and the Theory of Inorganic Evolution; Luminiferous Ether and Vortex Rings; Radioactivity and the Electron Theory; Solid Solutions; Colloidal Solutions; Liquefaction of Gases; Some Elementary Thermodynamic Deductions; Actinochemistry. In an elementary text, beaten tracks have, in the main, to be followed, for "classifications and methods of presentation which have proved satisfactory by their results should not be tampered with unless for clearly good cause. My colleagues will therefore recognize many familiar statements and arrangements in the following pages"—which remark again disarms criticism of the author, at least, for an occasional misstatement. Examples of the side-heads to paragraphs may serve to show that the topics selected for treatment are not by any means identical with those common to other similar text-books; such side-heads are: Relativity Principle, Table of Energies and their Factors, Landolt's Experiments, Significance of Valence, Archimedes Spiral [of the elements], Protyle, Emission of Light and Temperature, Stefan's Law, Bolometer, Proto-elements, Zeeman Effect, Canal Rays, The Value of e/m, Stokes' Law, Siendentopf and Zsigmondy's Results, Brownian Movement, Kundt's Method, "Etch Figures," Agglutination, Three Ways to Damage a Storage Cell, etc. The paragraph on page 141 on the deduction of Avogadro's theory might, by the way, be omitted or modified in the light of Rayleigh's note on page 326 of Maxwell's "Heat."

After all, the manner, in an elementary text, is perhaps even more important than the mat-

ter. Preeminently throughout, the manner is one of friendliness to the student; and, as one reads, one senses constantly the author's mental attitude of regret that our accepted terminology has been confusing or that the subject can not be made even plainer than a pikestaff. In the preface we read, ". . . most earnest efforts have been directed to show the inherent simplicity of some ideas . . ."; and it may truly be said that these efforts have been, in the main, remarkably successful.

The publishers have done their work well, and the book is excellently produced and unusually free from *errata*. There can be no doubt that this is the best text-book in its range and field that has yet appeared.

ALAN W. C. MENZIES

In Northern Labrador. By WILLIAM BROOKS CABOT. R. G. Badger. Illustrated. $2.50.
Among the Eskimos of Labrador. By S. K. HUTTON. J. B. Lippincott Co. Illustrated $3.50.

These are two notable books about a little-known country, which give valuable and interesting information as to the life conditions and the racial characteristics of its aboriginal peoples. The interesting volume by the American regarding the Indians of the central inland district is well balanced and supplemented by the English doctor's detailed accounts of the Eskimos of the northern coasts.

Most readers will find specially attractive the well-written, beautifully illustrated volume by Mr. Cabot, who prefaces his experiences by a brief, admirable summary of previous explorations. While he has many times visited Labrador the book confines itself to accounts of five visits, wherein he acquired some facility in Indian speech, and became familiar with the social, domestic, travel and hunting methods of both the Eskimo and Indians.

He outlines Grenfell's great work in a sentence: "He represents the modern humanities on a coast where before they were peculiarly lacking." With artistic appreciation he writes: "The bergs are gigantic crystalline masses, pure elemental separations, the like of which neither land nor sea has to show in any other form. In some lingers the greater design, foundation, plinth and shaft. The gods of the North had their temples and these are their fragments." Vegetation and landscape, birds and beasts, fish and mankind all appeal to his observing mind.

The illustrations from photographs are excellent, and well chosen, adequately representing the land and the people.

The data obtained on Lake Mistinipi, an affluent of George River, as to the Naskapi Indians are valuable. Tersely they are described as untamed aborigines, of the stone age, of unmodified raciality, thin-legged, wiry, with horse-tail hair. The typical photographs and ethnographic details are of special interest.

The appendix on mice will be read by scientists with pleasure. His remarks, on the intimate interrelations between the humbler forms of life and seasons of want and plenty for the higher forms, will be noted with interest. The volume is a welcome addition to our knowledge of this inhospitable land.

Dr. Hutton's hospital service of five years among the eskimos of extreme northern Labrador has enabled him to produce quite a remarkable book. With these aborigines he has "come in closest contact in their homes, in their work, in their hunting and their journeys, in health and in sickness." More than thirty reproductions of photographs, with notes, afford clear ideas of the features, dress, and life conditions of these Children of the Ice. There are interesting descriptions of weddings, seal-hunting, walrus-killing, fur-trapping, reindeer-hunting, tent and igloo life, child training, etc. An adventurous touch is given in a sledge journey wherein the author was lost on a mountain-crossing, in a violent snow storm. In short the volume is filled with information as to the present condition of the eskimos of Labrador that will be most acceptable not only to the general reader, but to ethnologists. Specially noteworthy is the account of the semi-heathen natives of Killinek, the most northerly point of Labrador, with its decrepit old chief, Tuglavi.

The Killineks "are more weather-beaten than those farther south, as they live mainly