little volume on geology. In so far as it is possible profitably to discuss the make-up of the earth and its long history of changing landscape, climate, and life in 54 pages, Dr. Greenly has succeeded where most of his competitors have failed. His reputation as a brilliant but cautious geologist is so high that no one need doubt his authority to act as a guide to the beginner in a subject which is notoriously difficult to condense effectively. The book is beautifully written—obviously it was a pleasure to write it—and is everywhere clear and concise. It is imbued throughout with a mellow spirit of philosophy which will give pleasure to the professional geologist as well as to the general reader for whom it is intended. No better school introduction to geology could be wished for. So many small books of this kind are written by earnest amateurs who are generally ill-equipped for the difficult task of writing simplified geology, that it is a pleasure to find one by a master of his subject that can be cordially recommended.

Geology and Natural Resources of Colorado. By Prof. Russell D. George. (University of Colorado Semicentennial Series, 1877–1927, Vol. 1.) Pp. xv + 228. (Boulder, Colo.: University of Colorado, 1927.) 2 dollars.

THE professor of geology in the University of Colorado has attempted to summarise a vast subject in a small volume with results that are likely to be of greater value to the geographer than the geologist. Beginning with an elementary but well-illustrated introduction to geology and mineralogy, the succeeding chapters deal with the geological history of Colorado; the metallic ores; fuels; structural materials; water supplies; soils and agriculture; climate and scenery. The treatment is generally too sketchy to have any detailed value. We learn, for example, that "the region is one of profound folding and faulting, and intrusion of igneous rocks. In many places it is evident that there were at least two periods of folding and two or more periods of faulting. The igneous intrusions are also of different ages." This information cannot be said to be helpful.

The addition of a bibliography would have made the book really useful to geologists, and it is no excuse to say, as the author does in his preface, that "a worth-while bibliography . . . would be too voluminous." As it is, the book is likely to be appreciated only by teachers of geography in North America as a source-book. For that purpose it is well arranged and illustrated.

Leçons sur quelques équations fonctionnelles avec des applications à divers problèmes d'analyse et de physique mathématique. Par Prof. Émile Picard. Rédigées par Eugène Blanc. (Cahiers scientifiques, publiés sous la direction de Gaston Julia, Fascicule 3.) Pp. v + 187. (Paris: Gauthier-Villars et Cie, 1928.) 40 francs.

THE book under notice constitutes a valuable addition to the scanty literature of the calculus of functions, so called by de Morgan. Chap. i. deals with the functional equations forming the basis of proofs of the parallelogram of forces, with extensions to non-Euclidean statics, trigonometry and geometry. Chap. ii. treats of the functional equations expressing rational addition and multiplication theorems of uniform functions, with applications to elliptic functions and to Poincaré's transcendents. Chap. iii. deals with the canonical difference equation of the first order, with applications to doubly periodic functions of the first and second kinds and to Picard's transcendents. The last chapter brings a discussion of the functional equations of Abel and of Schröder, and concludes with an application of Fredholm's equation to the problem of Dirichlet for the potential of C. Neumann. As might be expected from such a master of his craft, M. Picard has treated a variety of difficult problems in a most elegant and stimulating manner, thus demonstrating the great power of methods based on functional equations, and his book can be highly recommended to all interested in this subject.

Calculations in Physical Chemistry. By Prof. J. R. Partington and S. K. Tweedy. Pp. viii + 152. (London, Glasgow and Bombay: Blackie and Son, Ltd., 1928.) 7*s.* 6*d.* net.

THE problems selected by the authors are of the standard required for a degree in honours, and are based from the beginning on the use of the calculus. The six sections of the book deal with thermodynamics, characteristic equations, liquids and solutions, equilibrium, electrochemistry, and the heat theorem. Explanatory introductions are supplied to each section, and the answers to the problems are given at the end of the book. There is also a series of 100 miscellaneous exercises to which no answers are given. The book should prove of real value to those who wish to acquire a mastery of physical chemistry in its numerical aspects, and, in spite of its small size, the price is not excessive in view of the compact character of the contents.

Soil Management. By Prof. Firman E. Bear. (The Wiley Agricultural Series.) Second edition, thoroughly revised and enlarged. Pp. v + 412. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1927.) 17*s.* 6*d.* net.

THIS volume is primarily intended as a book for students, not only for those in college, but also for others who desire to gain an insight into modern methods of dealing with the various problems of soil management. Its general usefulness is testified to by the fact that a second edition is called for after three years. The requirements of crops and the characteristics of soils are outlined at the start, but the bulk of the work is devoted to a consideration of soil resources from the aspect of utilisation and conservation, together with the best methods of supplementing the natural supplies by fertilisers. Selected references bearing closely on the text are provided, together with a certain number of illustrations and diagrams.