no reference being made to the Far East or to various lands including or connected with the European centers. Relatively few of the names and achievements of the world's most prominent mathematicians are mentioned, although many more would naturally be expected in any consideration of the *Progrès de la Pensée Mathématique*. It is to be hoped that M. Pelseneer will carry out on a large scale a further and more complete study of the hidden spirit which has inspired the greatest scholars. For example, what was the spirit that inspired Menaechmus, Deinostratus, Diocles, Heron of Alexandria, and other Greeks whose names are not mentioned? As a single problem, who will undertake to consider the influences which surrounded Leonardo Fibonacci? If a man like Dr. Solomon Gandz, well known for his valuable contributions to *Isis* and other publications, and with the necessary equipment in the Semitic, Latin and Greek, and modern European languages could find the time to make this study for Fibonacci alone—and I know of no other similar field which promises such interesting results—the work would be of great value and interest.

In the later period there are also such leaders as Napier, Desargues, Barrow, Cotes, Jacobi, Plücker, and Bolyai—to name but a few—each offering a problem of historical interest almost equal to that of Fibonacci, but generally with less of what we may call mathematical romance. Will M. Pelseneer have the time to extend his studies so as to include these and others of equal standing?

The book has a good index of names, some of them of less importance than those mentioned above; but for an index of topics the reader must resort to the less satisfactory *Table des Matières*.

DAVID EUGENE SMITH

## MONTEL ON UNIVALENT FUNCTIONS

*Leçons sur les Fonctions Univalentes ou Multivalentes.* By Paul Montel. Collection de Monographies sur la Théorie des Fonctions, publiée sous la direction de M. Émile Borel. Paris, Gauthiers-Villars, 1933. iv+159 pp.

This book reproduces, with some modifications, the author's course of lectures delivered at the Sorbonne during the winter of 1929. It contains an exposition of a multitude of interesting results of the theory of univalent functions and of their various extensions. This theory, the origin of which is in the general problem of conformal mapping of simply-connected domains, was given a powerful impetus by the "Verzerrungssatz" of Koebe and Bieberbach. Since then it has attracted the attention and efforts of many mathematicians and at present is perhaps one of the most developed branches of the modern theory of functions of a complex variable. The author starts with classical results, but gives a short account also of the most recent ones, of which, however, he often reproduces only statements, omitting proofs altogether. A consistent use of the theory of normal families which was introduced and developed with great success by the author contributes considerably to the general elegance and unity of exposition.

A brief description of contents follows. Chapter 1 (*Univalence et multivalence des fonctions analytiques*) contains the fundamental notion of the theory of univalent and multivalent functions together with simple facts concerning convex and star-shaped domains. Chapter 2 (*Ordre de multivalence des poly-*