Essays like this one by Professor Truesdell can help to overcome this lack of information. It is not just a question of historical piety and correct assignment of priority. Euler actually is good reading, and we must consider Professor Truesdell's introduction as an invitation to read him, like Christopher Morley's introduction to Shakespeare. After all, as Jacobi already said: "Today it is quite impossible to swallow a single line by D'Alembert, while we still can read most of Euler's works with delight."

D. J. STRUIK

Algèbre locale. By P. Samuel. (Mémorial des Sciences Mathématiques, no. 123.) Paris, Gauthier-Villars, 1953. 76 pp. 950 fr.

The object of this monograph is a presentation of the theory of local rings and their generalizations, the semilocal rings and the M-adic rings. Those aspects of the theory are dealt with which are valid in rings of arbitrary dimension. Thus the special properties of one-dimensional rings such as rings of p-adic integers or of power series in one variable are not included.

All rings considered are commutative and have an identity element. *Local rings* were introduced some fifteen years ago by Krull; they are Noetherian rings with a single maximal ideal. More generally, a *semilocal ring*, in the sense of Chevalley, is a Noetherian ring A with only a finite number of maximal ideals. If M is their intersection, then $\bigcap_{n=1}^{\infty} M^n=(0)$, and the sequence of ideals $\{M^n\}$ defines a Hausdorff topology on A. More generally, a Noetherian topological ring in which the topology is Hausdorff and is defined by the powers M^n of some ideal M is called *M-adic*. A *Zariski ring* is an M-adic ring in which every ideal is a closed set. M-adic rings and Zariski rings were introduced by Zariski (who, however, called the latter type *generalized semilocal*). The semilocal rings of Chevalley are Zariski rings, as are all complete M-adic rings. The more elementary properties of these rings are considered in Chapter I. Here are discussed their completions, homomorphisms, quotient rings, direct decompositions, and finite extensions.

In Chapter II we are concerned with a semilocal ring A and a defining ideal V of A—that is, an ideal V in A such that $M^t\subset V\subset M$, t being some integer and M the product of the maximal ideals of A. It is then proved that the length of A/V^n as an A-module is a polynomial of $P_V(n)$ for n sufficiently large. The degree d of this polynomial is independent of V and is, in fact, the minimum number of generators in any defining ideal. It is called the dimension of A and thus coincides with the notion of dimension of a local ring in the