

was already clear in the 18th century that the dizzying welter of weights and measures then in existence must be replaced by a standard system. The honour of introducing the present metric system goes to France where its use was made compulsory in 1840. Practically all countries, except Great Britain and the U.S.A., followed France's excellent lead. Why these two countries have not yet fallen into line remains a mystery. Which weighs heavier a pound of gold or a pound of feathers? Coarse materials, such as feathers, are weighed in the Avoirdupois system of measure but noble metals, such as gold and silver, are weighed in the Troy system. Now the avoirdupois pound is heavier than the troy pound so that the pound of feathers is heavier than the pound of gold (by about 80 grams).

For the student of metrology this book is essential and even the amateur will find many interesting things in it, especially the plates.

Charles Fox, McGill University

Introduction to Algebra, by Sam Perlis. Blaisdell Publishing Co., Waltham, Mass., Toronto, London, 1966. xx + 440 pages. \$9.50.

There are presently available dozens of introductory texts in modern algebra, mostly covering the same material varied only by the author's particular emphasis. The book under review is no exception, but it does do a good job in presenting the fundamentals in a clear, direct manner.

The list of chapter headings reads as follows: Fundamental Concepts, Linear Equations and Matrices, Groups, Rings, Integral Domains, Fields, Divisibility, Classical Algebra, Vector Spaces, Extension Fields, Determinants, Linear Transformations, Forms and Matrices, Length and Orthogonality. The introduction of matrix computation, elementary matrix operations and the vector spaces of n -tuples in the second chapter makes the transition to the abstract more gentle. In addition, it provides a plentiful supply of nontrivial examples of groups and rings, thus making these concepts less one-dimensional than they often appear to beginning students. In general, the author gives well-chosen examples, motivates the theorems well and gives straightforward proofs. There are plenty of good exercises at the end of each section.

The material covered is a proper subset of that covered in Birkhoff and MacLane, but it should be quite sufficient for a one-year course. Alternatively, the book could be used as a text for separate half-year courses in abstract algebra and linear algebra.

John D. Dixon, University of N. S. W., Australia