

SHORTER NOTICES

Mathematical Tables. Volume 5. *Factor Table*. Prepared independently by J. Peters, A. Lodge and E. J. Ternouth, E. Gifford. London, British Association for the Advancement of Science, 1935. xv+291 pp.

This volume, the fifth in a series prepared under the direction of the British Association for the Advancement of Science, contains a tabulation of the decompositions into prime factors of *all* integers between 0 and 100,000. In this respect, that it lists all such integers, the present table differs from most existing factor tables, since it has been the practice in the formation of the more extensive tables to omit multiples of 2 and 5, and often of 3 and 7, also.

Conforming to custom, this volume contains an introduction comprising a description of the various methods employed in the construction of the three independent manuscripts upon which the table is based. In addition, there are given several lists of errata found in other tables upon comparison with the present one, as well as an enumeration of the more important tables.

As to the table proper, the printing is excellent and the arrangement commendable on account of its simplicity with a consequent accessibility of data. There is appended to the body of the work a table of reciprocals, to eight significant figures, of primes between 10 and 10,000. These data are well adapted to the factorization of integers that does not exceed 10^8 , by means of calculating machines.

In conclusion, the reviewer believes that for accuracy and utility the table under discussion supercedes all others covering a similar range.

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Bauschinger's *Tafeln zur Theoretischen Astronomie*. Second edition, revised by Gustav Stracke. Leipzig, Engelmann, 1934. v+192 pp.

The first edition of this collection of tables has been one of the stand-bys of astronomers all over the world ever since its appearance in 1901. Although primarily intended to be useful to computers of planetary and cometary orbits, all but a few special tables have found application in a much wider field.

During the years that separated the publication of the two editions the computational tools of astronomers have passed through a period of rapid evolution. Modern calculating machines are now in general use, and have replaced logarithmic methods wherever this simplifies or reduces the work. Convenient tables giving the natural values of trigonometric functions are now available, and the sexagesimal division of the degree is gradually giving way to the decimal division.

Dr. Stracke, who is the head of the division of minor planets of the Recheninstitut at Berlin, is well qualified to appreciate the value of these modern methods. He has succeeded in presenting a new edition that is thoroughly up to date, without neglecting the needs of those that are still using the older methods.

Few of the tables have been retained without some change. Without ex-