

SHORTER NOTICES.

Mathematischer Bücherschatz. Systematisches Verzeichnis der wichtigsten deutschen und ausländischen Lehrbücher und Monographien des 19. Jahrhunderts auf dem Gebiete der mathematischen Wissenschaften. Von E. WÖLFFING. I Teil. *Reine Mathematik.* Leipzig, Teubner, 1903. Pp. xxxii + 416. Price 14 Marks.

ONE of the most valuable contributions that can be made in any science is a good bibliography, and the difficulty of making it is commensurate with its value. The preparation of such a work is an attractive field for a bibliophile, and many have been the attempts to enter it, but only a few who have made the venture have accomplished anything of permanent value. How difficult even the masters have found the task is easily seen by any scholar who has studied carefully some portion of the field, for his own bibliography soon becomes far more complete than any other that he consults on that particular domain.

For this reason it is easy to find fault with a work like the one under review. The task is so herculean, the patience needed is so inexhaustible, the scholarship demanded is so extensive, that errors are certain to creep in; errors of the pen, of judgment, of typography, and of knowledge. And recognizing all this, a reviewer should approach his examination of such a work with abundant charity, and with the determination to find the good that is in the book.

Approaching this work in such a spirit, Professor Wölffing is to be thanked for having compiled such an extensive list of books, for having attempted to classify them, and for having given two indexes, one by subjects and one by authors.

A rough estimate shows that there must be about twenty thousand works catalogued, and to have that number of titles arranged in fairly convenient form is helpful. Even more valuable, in many ways, is the preface, in which is given a rather extended list of sources for the construction of a bibliography. Scholars who fail to find what they wish in this work, thus have other sources suggested, which in turn may lead to the information desired.

Not much else can be said for the book. It abounds in errors of every kind, and the author's list of over two hundred