

SHORTER NOTICES

Bibliographie des Triangles Spéciaux. By J. Neuberg. Brussels, 1924. 52 pp.

In this bibliography some 50 different special triangles are listed and their curious properties, in so far as they concern the modern geometry of the triangle, are enumerated with explicit references to the literature. This is often accompanied by systematic developments and proofs, and with additions by the compiler. Of its usefulness there is certainly no question.

As to completeness, probably no bibliography of any field in elementary geometry will ever be complete, but this particular field has long enjoyed a certain advantage. It must be remembered that for over forty years Neuberg has been a worker in and bibliographer of modern geometry. Over this tiny corner of the great domain he seems to have watched and labored with unflagging interest and fully one-half of the 170 references listed are to *MATHESES* of which he is an editor. This last statement which might at first sight argue against completeness, in this case means definitely that investigations in this field have been drawn to this journal. We note the absence of reference to American journals, and a cursory examination leads us to believe that this reflects in no way on Neuberg. We trust this absence will continue, a statement we hasten to explain. The student who has at his disposal *MATHESES* and this bibliography has nearly all the information on this subject that he needs. This concentration should be maintained, and teachers conducting courses in modern geometry should urge their pupils to survey this charming little field, and to communicate new results to *MATHESES*.

B. H. BROWN

The Law of Diminishing Returns. By W. J. Spillman. Yonkers, World Book Co., 1924. xi+178 pp.

This little book is very interesting, but more particularly to workers in biology and agriculture. It consists of two parts: The Law of the Diminishing Increment and The Law of the Soil. The first part deals with a special phase of the law of diminishing returns so familiar to students of economics and refers to the more precisely defined law which states that the increments in yield corresponding to successive equal increments in fertilizer applied to a crop tend to constitute the terms of a decreasing geometric series. Mathematicians would be interested primarily in the numerous numerical confirmations of the law by field experiments with fertilizer and with irrigation water; also its application to the growth of fattening animals, including children. The second part is a translation of a discussion of the results of experiments along the same line conducted in Germany by Mitscherlich.

Errors occur among the differences in the table on page 4; at the top of page 10, certain numbers should be written as subscripts.

C. H. FORSYTH