BOOK REVIEWS

rather to a series of papers starting in 1948. The footnotes catch up in the long run, if the reader uses his powers of deduction. But more difficult is the deduction that the aforementioned result led to the development of extremal methods and polyhedron packings.

The Minkowskian synthesis (i.e., the packing of space with general convex bodies), certainly receives due attention, although a sense of continuity with earlier work, particularly with that of Hermite, is not made apparent. Likewise the contact between the geometry of numbers and algebraic number theory seems lost in the mass of details again. The reviewer refers to the contact occurring when the algebraist had to work with inequalities not only to find bounds on norms but even to prove the discriminant theorem, which implies the following: "Every irreducible monic polynomial of degree at least two and with integral coefficients contains a repeated (polynomial) factor modulo some prime." Conversely in the last twenty years (owing largely to the influence of Mordell, Davenport, and Mahler), the intense desire for unimprovable bounds in algebraic number theory caused the replacement of the convex body by the more general star body. One contrast in presentation that the reader will immediately note is that while the older methods (Minkowskian and earlier) are often presented with enough detail (diagrams, tables, etc.) to excite the non-specialist, the methods developed in the last twenty years are given in little detail, with emphasis instead on lists of definitions, theorems, and conjectures, and with a valuable bibliography drawn up for 1951. Incidentally, a more modern bibliographical format (alphabetically arranged, and containing the titles of the papers) probably would be more useful.

The chapter titles are as follows: A. Convex bodies. B. Star bodies. C. Linear forms. D. Minima of homogeneous forms. E. Inhomogeneous forms. F. Quadratic definite forms. G. Continued fractions. H. Algebraic numbers. I. Partitions and lattice point figures. The reviewer feels that the inclusion of the last chapter is hardly justified by the historical continuity presented, but that otherwise the titles suggest that the geometry of numbers still would not be beyond Minkowski's recognition.

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Economic activity analysis. Ed. by O. Morgenstern. New York, Wiley: London, Chapman and Hall, 1954. 18+554 pp. \$6.75.

This is a collection of essays by members of the Princeton University Economics Research Project who were studying the mathematical structure of American type economies with support from the

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