but more extensive, tables were published by G. A. Campbell in the Bell System Technical Journal for January, 1923. The present tables are much more extensive than any of these earlier tables.

These tables have great value in probability and statistical problems. They have been used very extensively, for example, by mass production quality engineers in the development of sampling inspection plans. The sampling inspection tables published by Dodge and Romig in the January, 1941, issue of Bell System Technical Journal were calculated primarily from Molina's tables. Because of the frequent occurrence of the term $a^x e^{-a}/x!$ in various functions, the tables will probably also be found very useful in the tabulation of such functions.

S. S. WILKS

*Non-euclidean geometry*. By H. S. M. Coxeter. (Mathematical Expositions, no. 2.) University of Toronto Press, 1942. 15+281 pp. $3.25.

There seems to be a well established pattern for books on the non-euclidean geometries, according to which a more or less elaborate historical sketch is followed by a development of the foundations of the geometries. There is usually little space left available for developing the geometries much beyond the foundations. Thus it not infrequently happens that many interesting results not intimately connected with the beginnings of the subject are declared "beyond the scope of this book."

Though the plan of the book under review presents no radical departure from such a pattern it does offer somewhat more of the subject proper than is usual, while the manner in which it accomplishes its aims sets a new high standard for such texts.

The historical survey is confined to a short first chapter (which the author observes "can be omitted without impairing the main development"). The emphasis being on the projective approach, there follow three chapters concerning the foundations of real projective geometry. Chapters V, VI, and VII are devoted to elliptic geometry of one, two, and three dimensions. Introducing congruence axiomatically (IX) in a "descriptive" geometry (VIII), the author obtains an absolute geometry from which the euclidean and hyperbolic geometries follow upon adjoining the appropriate parallel axiom. Two-dimensional hyperbolic geometry is treated in Chapter X. The next three chapters, entitled Circles and Triangles, The Use of a General Triangle of Reference, and Area, deal, for the most part, with matters apart from the foundations, while the concluding chapter of the book presents the usual euclidean models of the non-euclidean geometries.

The book is heartily recommended as furnishing a very well written account of the fundamental principles of hyperbolic and elliptic geometry from the classical point of view. This was doubtless the author's aim. The reviewer feels constrained to observe, however, that as a modern treatment of an old subject, the book might have recognized some of the contributions to its field made available during the last few years. Thus to the three traditional avenues of approach to the non-euclidean geometries there has been added a fourth—the abstract metric approach—which injects into the rigor of the classical axiomatic methods the stimulus of a rapid development. Still more within the spirit of the book, it seems, would have been a notice of the foundations of hyperbolic geometry due to Menger, Jenks, and Abbott based upon the sole operations of joining and intersecting.

The typography is excellent, and the figures (for the most part simple) are carefully drawn. Those contemplating using the book as a classroom text are advised that it contains no exercises and that many proofs, especially concerning material in the latter part of the book, would have to be supplied.

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