

*Gesammelte mathematische Werke.* By Richard Dedekind. Zweiter Band. Herausgegeben von Robert Fricke, Emmy Noether, Oystein Ore. Braunschweig, Vieweg, 1931. 2+442 pp.

The first volume of Dedekind's collected works was noticed in this Bulletin (vol. 36 (1930), pp. 611-612). The second volume maintains the high standard of editorial excellence achieved in the first. As detailed summaries of the contents of this volume are readily available in the recent German notices, it will suffice here to call attention to one feature not found in the previous volume: eleven papers, notes, or letters from the "Nachlass" are here printed. These are of great interest, for historical reasons, if no other, and alone demand that the present volume be in every mathematical library. The letters to Frobenius are of special interest, as they give a glimpse into Dedekind's methods of work.

E. T. BELL

*Versicherungswesen, System der Versicherungswirtschaft.* By Alfred Manes. Leipzig and Berlin, Teubner, 1931. x+315 pp.

The book brings together in one volume a treatment of various types of property and business insurance. The discussion is concerned with much that has appeared in American practice under the name of casualty insurance together with a treatment of fire and marine insurance. The book contains no formal mathematical treatment of any branch of insurance, but gives a general discussion of the development of underwriting ideas in the various branches.

H. L. RIETZ

*Die Anwendung der Nomographie in der Mathematik.* By H. Schwerdt. Berlin, Springer, 1931. 8+116 pp.+104 tables.

The applications of nomography seem, in general, to have been put forth with the intention of relieving the non-mathematician of the labor of computing, and of the necessity of thinking. However, the volume under review is addressed to mathematicians. Although not trivial, the text makes no great demands on the knowledge or ability of the mathematically inclined reader, and his interest is certain to be aroused by the clever application of the principles of nomography to the formulas so familiar to him. The range of illustration is large. In five chapters on elementary geometry, coordinate systems, coordinate geometry, equations, and functions, the author gives over two hundred varied applications, illustrated by excellent drawings in the collected Tables. The importance and usefulness of these applications vary. Thus a nomogram for  $a = 2r \sin \alpha$  cannot give the degree of accuracy usually desired, and as a rough check is inferior to a slide rule or a mental calculation. Nomograms for the roots of cubic equations are useful. We found of most interest the sections on space coordinate systems, on curvatures of surfaces, and on the solutions of equations. The book may be assigned to a good undergraduate for independent study.

There is a bibliography and a good index. The proof reading seems to have been done with unusual care, and the paper, printing, and binding are of unusual excellence.

B. H. BROWN