

Two general defects seem to be patent, one in presentation, one in range. It is the author's aim to emphasize the force and directness of the analysis by having the results appear after a minimum of intermediate work, but this work has frequently been so abbreviated that the reading is at times extremely difficult. Again, the author was naturally ambitious to have his method apply to as large a range of subjects as possible, but its applicability seems but questionably successful when applied to projective properties.

For the differential analysis of curves and surfaces the work of Cesàro is certainly a powerful instrument and can be used with profit by every student of the subject.

VIRGIL SNYDER.

CORNELL UNIVERSITY,
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GAUSS'S COLLECTED WORKS.

Carl Friedrich Gauss Werke. Achter Band. Herausgegeben von der königlichen Gesellschaft der Wissenschaften zu Göttingen. In Commission bei B. G. Teubner in Leipzig, 1900. 4to., 458 pp.

WITH the death of Ernst Schering, the venerable editor of the first six volumes of Gauss's collected works, it became incumbent on younger hands to continue the labor of studying, selecting and preparing for the press everything of interest that still remained in the great mass of manuscript that Gauss left behind. Professor Klein, with customary energy and dispatch, has made the necessary arrangements to bring Schering's labor to a prompt termination.

Four new volumes are planned. Professor Brendel, of Göttingen, is editor-in-chief, having the editorial supervision of the entire undertaking. He has also, in particular, the preparation of volume VII. This is to contain the final edition of the *Theoria motus* and Gauss's voluminous work on the theory of perturbation of the smaller planets, the theory of the moon, etc.

Volume VIII is the volume under review and will be spoken of later.

The contents of volume IX fall into two parts. One of these is to be devoted to mathematical physics, and is in charge of Professor Wiechert, director of the magnetic observatory in