BRIEFER NOTICES.

Heinrich Hertz: Gesammelte Werke. Band III: Die Prinzipien der Mechanik in neuem Zusammenhange durgestellt. Mit einem Vorworte von H. von Helmholtz. Leipzig, Barth, 1894. 8vo. xxx + 312 pp.

Only the third volume of this edition of the collected works of the late Heinrich Hertz has so far appeared; but the two other volumes were promised for the fall of 1894 and

will probably soon be ready.

The first volume will contain the papers written during the years 1879–1884, including the doctor dissertation and the address on light and electricity delivered at the congress of German naturalists at Heidelberg, and also some papers of very recent date. Ph. Lenard, of Bonn, is the editor. Volume II will be a reprint of the papers previously published under the title "Untersuchungen über die Ausbreitung der elektrischen Kraft" (Leipzig, Barth, 1892), of which an English translation was recently issued ("Electric Waves: being researches on the propagation of electric action with finite velocity through space;" authorized English translation by D. E. Jones, with a preface by Lord Kelvin. London, Macmillan, 1894).

The third volume is also edited by Professor Lenard. It contains an exceedingly interesting and original treatise, or rather memoir, on the principles of theoretical mechanics and mathematical physics which was composed during the last three years of the author's life.

A. Z.

HERMANN GRASSMANN: Gesammelte mathematische und physikalische Werke. Auf Veranlassung der mathematisch-physischen Klasse der kgl. sächsischen Akademie der Wissenschaften und unter Mitwirkung der Herren: Jakob Lüroth, Eduard Study, Justus Grassmann, Hermann Grassmann der Jüngere, Georg Scheffers, herausgegeben von Friedrich Engel.—Ersten Bandes erster Theil: Die Ausdehnungslehre von 1844 und die Geometrische Analyse. Unter Mitwirkung von Eduard Study herausgegeben von Friedrich Engel. Mit einem Bilde Grassmanns. Leipzig, Teubner, 1894. 8vo. xvi + 436 pp.

The idea of a new and complete edition of Hermann Grassmann's mathematical works was first suggested by Professor Felix Klein, of Göttingen. After obtaining the consent of Grassmann's surviving relatives he personally laid the matter before the Saxon Academy of Sciences (in October, 1892), insisting in particular on the desirability of including in the proposed edition all hitherto unpublished papers of any importance. Upon his recommendation the Academy elected a