

The section on factorization of symmetric functions in Chapter IV ; the determination of the integral roots of equations of higher degree than the second in Chapter V, rather than in the later chapter on the theory of equations ; the treatment of determinants in the chapter on linear simultaneous equations and the application of determinants to the solution of systems of n linear homogeneous equations in n variables and of n linear non-homogeneous equations in n or in $n - 1$ variables.

The treatment of the theory of limits in Chapter XV should be noticed for its excellence ; the substance of the ϵ, δ definitions of limits is given verbally, and illustrated graphically without using the algebraic statement of the definitions ; the presentation of infinite sequences and series becomes clear as a result of this treatment of limits.

The exercises in verbally expressing the formulas used are a welcome aid in the efforts to combat the carelessness of expression to which our students are so largely accustomed. The method of graphing a function is explained in Chapter V, but is made very little use of in the later chapters. One misses the graphical illustrations particularly in the chapters on simultaneous equations and in the chapter on variation, while the graphical methods could have been used to greater advantage in the chapter on theory of equations and in the chapter on limits.

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Spezielle algebraische und transzendente ebene Kurven, Theorie und Geschichte. Von GINO LORIA. Autorisierte nach dem italienischen Manuskript bearbeitete Ausgabe von F. SCHÜTTE. Zweite Auflage. Leipzig, B. G. Teubner. Erster Band: *Die algebraischen Kurven*, 488 pp. and 14 plates, 1910. Zweiter Band: *Die transzendenten und abgeleiteten Kurven*, 384 pp. and 6 plates, 1911.

THE value and importance of this work, which was first published in 1902, are partially indicated by this early appearance of a complete revision. About one hundred and twenty-five pages and three plates have been added. Since 1902 much has been done in the theory of special plane curves, and this work has, as far as possible, been incorporated in the new edition, which is now published in two volumes instead of one.

Many of the excellent features of the work were pointed out and discussed at some length in Professor E. B. Wilson's