

than the solution of any number of particular problems without correlation.

Among the list of references we miss the names of Burmester, Somoff, and in view of the subject matter treated, De Ross, who in the *Revue Universelle des Mines* published a series of articles on linkages, their different forms and uses. A translation of these articles appeared 1879 in Van Nostrand's Science Series. As in Crelier's kinematic systems, the tracing of curves is the main object of De Ross's investigations. While De Ross uses Peaucellier's inversor and its modifications as a generator, Crelier does not mention it at all.

The first three chapters deal with the curves which are produced by points and lines in connection with the motion of a right angle subject to certain conditions. In the next chapter conchoidal circular systems and curves are studied. The displacement of the extremities of a straight line of constant length along two rectangular lines, and on a straight line and a circle are the subjects of the concluding two chapters.

A number of new curves are obtained from the various motions. The treatment is throughout clear and simple and does not require more than the elements of plane analytic geometry and calculus. In some parts the typography is poor and a number of figures lack precision and neatness of execution.

ARNOLD EMCH.

NOTES.

At the meeting of the London mathematical society held on January 11 the following papers were read: By W. H. Young, "Successions of integrals and Fourier series"; by G. H. Hardy and J. E. Littlewood, "A new condition for the truth of the converse of Abel's theorem"; by A. Cunningham, "On Mersenne's numbers."

At the meeting of the Edinburgh mathematical society on February 8 the following papers were read: By Professor Goldziher, "On graphical integration"; by Dr. Muirhead, "A mechanism for solving equations of the n th degree"; by G. Philip, "The geometry of the general pedal curve"; by W. Gentle, "An extension of the remainder theorem."