refrain from cautioning them against imagining that they are becoming acquainted with symbolic logic, or the deductive system in general, as mathematicians know it and use it. It may be hoped that logicians, too, will see fit to consult the article in the encyclopedia just mentioned or some other source of similar character, such as Pieri's inaugural address, before they permit themselves to form an opinion on the accomplishments, value, and recent advances of symbolic logic.

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SHORTER NOTICES.

H. Durège, Elemente der Theorie der Funktionen einer komplexen veränderlichen Grösse, in fünfter Auflage, neu bearbeitet, von LUDWIG MAURER, mit 41 Figuren im Text. Leipzig, B. G. Teubner, 1906. 397 + x pp.

THE present work, although styled the fifth edition of Durège's well-known "Elements," is in reality a new treatise. The title and the short historical introduction have been retained ; aside from these, we have not remarked a trace of the original work. Nor could it be otherwise. The theory of functions has grown enormously since the days of Riemann. On the one hand, new fields have been opened up and explored, on the other the old tools of research have been given a greater refinement and many new ones have been added. The present author, in preparing a new edition, quite rightly decided not to patch up the old edifice, but to tear it down completely and erect a new one in harmony with the needs and tendencies of the present day. The result is an up-to-date treatise of moderate proportions, clearly and attractively written, which will surely have a widespread and well-deserved popularity.

The book starts out with an introductory chapter on real variables. Dedekind's theory of irrational numbers is sketched; such notions as simple and multiple limits, upper and lower limits, uniform convergence, also a few notions from the theory of point aggregates are briefly treated. The subject of integration is developed more fully and terminates with Gauss's relation between line and double integrals, which is later used to prove Cauchy's fundamental theorem.