

*Die logischen Grundlagen der exakten Wissenschaften.* By PAUL NATORP. (Wissenschaft und Hypothese, XII.) Leipzig and Berlin, B. G. Teubner, 1910. xx+416 pp.

*Probleme der Wissenschaft.* Part I: *Wirklichkeit und Logik.* Part II: *Die Grundbegriffe der Wissenschaft.* By FEDERIGO ENRIQUES. Translation by KURT GRELLING. (Wissenschaft und Hypothese, XI.) Leipzig and Berlin, B. G. Teubner, 1910. x+vi+599 pp.

*Erkenntnistheoretische Grundzüge der Naturwissenschaften.* By PAUL VOLKMANN. (Wissenschaft und Hypothese, IX.) Second Edition. Leipzig and Berlin, B. G. Teubner, 1910. xxiii+454 pp.

A PHILOSOPHER devotes the greater part of his book to the foundations of mathematics; a mathematician boldly attacks the problems of philosophy; a physicist lectures on the theory of knowledge. These phenomena, as well as the fact that the books in question are sent to a mathematical journal for review, may well be regarded as significant of our times. Recent progress in the foundations of mathematics and the revolutionary conceptions and theories of present-day physics have necessarily struck deep into the current of philosophical thought. The authorship of these books need then occasion no surprise.

An extended notice of books of this character in a mathematical journal seems hardly called for as yet, however, as they will probably be of interest only to a limited number of mathematicians. A brief indication of the nature of their contents, however, may be given.

Professor Natorp devotes the first 97 pages of his book to an exposition of what he regards as the fundamental problems of logic. He follows Kant in insisting that the primitive act of thought is synthetic and repudiates vigorously the attempt of some logicians to base logic on a meaningless symbolism. In fact, logic as such is not and can not be a deductive science at all. This point of view leads necessarily to a genetic theory of knowledge in which the process or method of thought is the determining factor of knowledge.

The author regards as a primitive faculty of the mind the power of conceiving any mental act to be repeated indefinitely. He thus obtains essentially what mathematicians would call the abstract form of an unlimited sequence. On this he