

SHORTER NOTICES.

Émile Picard. Biographie, Bibliographie analytique des Écrits.
By ERNEST LEBON. Paris, Gauthier-Villars, 1910. viii+80 pp.

Paul Appell. Biographie, Bibliographie analytique des Écrits.
By ERNEST LEBON. Paris, Gauthier-Villars, 1910. viii+71 pp.

THESE two new volumes of the *Savants du Jour* are entirely similar in plan and arrangement to their two predecessors, which were devoted to Henri Poincaré and Gaston Darboux respectively. They contain, besides the brief biographical sketches of Picard and Appell by M. Lebon, a complete classified list of their publications. The titles and references to the place of publication are in many cases followed by a brief synopsis of the content of the corresponding paper. The following notes taken from these volumes may be of some interest to readers of the *BULLETIN*.

Charles Émile Picard was born in Paris on July 24, 1856. He entered the *École Normale* in 1874 and received his doctorate in 1877. During his three years at the *École Normale* he was inspired by Darboux; under the guidance of the latter he produced his first memoir (presented to the Academy of Sciences, January, 1877) and his doctor's dissertation. Nearly all of his subsequent publications, however, relate closely to pure analysis; even his famous researches on algebraic surfaces are properly classified as pure analysis. In 1879, at the early age of 23 years, he published the two important theorems on integral functions that bear his name. These investigations attracted the attention of Hermite and led to a long and intimate friendship which resulted in 1881 in the marriage of Picard and the daughter of Hermite. After a short experience in teaching at Toulouse he was recalled to Paris in 1881, where he has remained ever since. He was elected to the Academy of Sciences in 1889, and was its president in 1910. He was awarded the *Prix Poncelet* in 1886 and the *Grand Prix des Sciences mathématiques* in 1888 for his work on the theory of algebraic functions of two variables. His published work numbers 341 titles.

Paul Émile Appell was born in Strasbourg, September 27,

1855. He entered the École Normale in 1873 and obtained his doctorate in 1876. His first published work relates to projective geometry and shows the influence of his teacher, Chasles. His dissertation falls into this period. But beginning with 1877 he, like Picard, devoted himself almost exclusively to the field of analysis. After a brief experience in the provinces, he was recalled to Paris in 1881, where he has remained. He was elected to the Academy of Sciences in 1892. The list of his publications contains 306 titles.

J. W. YOUNG.

Vermeintliche Beweise des Fermatschen Satzes. Besprochen von A. FLECK, PH. MAENNSCHEN, O. PERRON. *Archiv der Mathematik und Physik*, Bände 14-18.

Über das letzte Fermatsche Theorem. Von BENNO LIND. *Abhandlungen zur Geschichte der mathematischen Wissenschaften*, Heft XXVI₂, pp. 21-65, 1910.

THE age of circle squarers had hardly come to an end (one still meets sporadic cases here and there) when a new period, the age of the "Fermatists," arose. This genus suddenly received a tremendous boom through the "Wolfskehlsche Preisstiftung" by which a prize of 100,000 Marks is offered to him who first proves the great theorem of Fermat. And in its wake there have come a host who do not have the least ambition to add anything to mathematical knowledge but merely lust after the prize money. Their number will doubtlessly reach many thousands within the 99 years for which the prize is established.

The editors of the *Archiv* have opened their pages to a discussion of the proofs that might be submitted; and it is the pleasant (?) duty of Messrs. Fleck, Maennschen, and Perron to peruse these and point out to each writer the errors which lurk in his work. Of the 111 attempts at a proof that are discussed to date in the *Archiv*, none is successful and not one adds anything which may be of value in bringing the solution of the problem nearer completion. Fermat stated in a marginal note that *the equation*

$$(1) \quad x^n + y^n = z^n$$

has no solution in integers, for all values of n which are greater than 2, and that he possessed a most wonderful proof of this