

connected by an algebraic function. In default of a complete solution of the problem, the academy at least desires the treatment of particular examples, leading to classes of new transcendentals."—Fourneyron prize (fr. 1000) for 1910: "Theoretic and experimental study of the blow of a battering ram in an elastic tube."—Poncelet prize (fr. 2000) for 1909 for general progress in applied mathematics; for 1910, for an important memoir in pure mathematics.—Vallant prize (fr. 4000) for 1909: "Perfect, in some important point, the application of the dynamical principles of fluids to the theory of the propeller."—Boileau prize (fr. 1300) for 1909, for an important contribution to the theory of fluids. The remaining prizes will be awarded under the same conditions as those previously announced.

Dr. H. LEBESGUE has been promoted to a professorship of mathematical analysis at the University of Poitiers.

THE late Mr. RICHARD BROWN, of Youngstown, Ohio, left the sum of \$30,000 to Mount Union College to endow the chair of mathematics. The present professor, Mr. B. F. Yanney, has been appointed to the chair.

PROFESSOR C. O. GUNTHER, of the Stevens Institute of Technology, has been promoted to be acting professor of mathematics.

PROFESSOR W. W. BEMAN, of the University of Michigan, has been granted a leave of absence during the next academic year.

NEW PUBLICATIONS.

I. HIGHER MATHEMATICS.

- BAKER (H. F.). Introduction to the theory of multiply periodic functions. Cambridge, 1907. 8vo. 16 + 336 pp. Cloth. 12s. 6d.
- BÔCHER (M.). Introduction to higher algebra; prepared for publication with the cooperation of E. P. R. Duval. New York, Macmillan, 1908. 8vo. 11 + 321 pp. Cloth. \$1.90
- BROMWICH (T. J. P. A.). Quadratic forms and their classification by means of invariant factors. (Cambridge tracts in mathematics and mathematical physics.) New York, Putnam, 1907. 8vo. 8 + 100 pp. \$1.10
- BROZAT (W.). Ueber Scharen von ∞^4 Flächen im R_3 , die durch Berührungstransformationen in Scharen von ∞^4 Kurven überführbar sind. Greifswald, 1907. 8vo. 53 pp. M. 1.80