Carl Anton Bjerknes: Gedächtnisrede. Von V. BJERKNES. Leipzig, J. A. Barth, 1904. 31 pp. + photo.

To some it may appear strange that the son of C. A. Bjerknes should have been chosen to deliver the commemorative address summing up the life-work of his father. of fact, however, no other choice could have been made. his scientific research Bjerknes worked apart from others. His only confident and colleague was his son. So in the monograph before us the son, after sketching his father's early life, traces step by step the development of the Hydrodynamic Action at a Distance from the days when its author was a pupil under Cauchy, Lamé, and Dirichlet until the last manuscript, written two or three days before his sudden death by apoplexy. Bjerknes left about 40,000 pages of closely written manuscript, accumulated since the early seventies. So great was his love of perfection, his striving for quality rather than quantity that little of all this had been published until the appearance of the Hydrodynamische Fernkräfte* and that which remains is accompanied by a request that nothing be printed without the most careful revision. It is a rare and noble sight to see men like Gibbs and Bjerknes who are possessed of a spirit of research apart from the common desire to rush into print.

E. B. Wilson.

Tablas de Multiplicar. By J. DE MENDIZÁBAL Y TAMBOR-REL. Mexico, Imprenta y eucuadernacion de Mariano Nava, 1903.

Some years ago the author of this volume published a set of 8-figure logarithm tables of the numbers up to 120,000. Curiously enough, similar tables were published by the French government in the same year, these two being the first complete 8-figure tables to appear. M. Tamborrel now makes a decided advance in one direction on Crelle's multiplication tables which gave the products of all numbers up to 1000 by numbers up to 1000. He has arranged in a handy form the products of all numbers from 1 to 10,000 by numbers from 1 to 100. To save space in printing, these are arranged in a novel manner. Down the centre column of each page run the numbers from 1 to 99. On the right in nine columns are shown the products of these by nine 3-figure numbers; on the left, also in nine col-

^{*} Reviewed in the BULLETIN, December, 1903.