

deavored to clear up the genera with what appears to be considerable success. Palæontologists everywhere are placed under a great debt both to the author for his most timely review of these forms and to the Argentine Government for the liberal style in which these Memoirs have been published.

VARIATION IN CRABS.

THE English monthly, *Natural Science*, under its recent change of publishers, has not lost any of the vigor which has characterized it since its establishment three years ago, and continues to be one of the most interesting of the reviews of progress in biology and geology which come before us. The general editorial attitude is that of entire independence of all traditional theories and authorities. There is shown no bias in the present evolution controversy, either towards the Darwinian or the Lamarckian side, but an impartial consideration of each. In the April number are some comments upon the recent discussion in the Royal Society of the facts brought out by Professor W. T. Weldon's extensive statistical investigation of variations in the shore crabs, from which we take the following: "Although Professor Weldon did not say so, it must have occurred to many listeners that this first result of statistical inquiry upon variation was in direct contradiction to those who asserted that variation is not a matter of 'chance,' but has its course in determined directions. . . . His results have already established the importance of these methods, and we cannot doubt that wherever the methods are applied with discrimination equally important results will be obtained. . . . Pending such inquiry, he may be taken to have shown that there is a relation between selection and minute variation, not that selection operates upon minute variations."

It seems to us too early even to make such guarded inductions as these from these re-

searches, for their significance is very largely diminished, if not completely destroyed by our absence of a knowledge of the conditions under which these seven thousand crabs developed. If the variations were due to congenital tendencies then their selection has a bearing upon the evolution problem, but if the variations were due to varying conditions of development, as is more than probable in a large percentage of cases, their selection has no bearing whatever upon the evolution problem. This is the uncertainty which vitiates this method, and is strangely overlooked by the editors of *Natural Science* as well as by others. None the less, this investigation is a step in the right direction towards a sound inductive basis for the solution of this most pressing biological problem of the day.

REGRESSION AND ORGANIC STABILITY.

MR. FRANCIS GALTON (42 Rutland Gate, London W.) would be glad to receive information regarding:

(1) Instances of such strongly marked peculiarities, whether in form, in color or in habit, as have occasionally appeared in a single or in a few individuals among a brood; but no record is wanted of monstrosities, or of such other characteristics as are clearly inconsistent with health and vigor.

(2) Instances in which any one of the above peculiarities has appeared in the broods of different parents. In replying to this question, it will be hardly worth while to record the sudden appearance of either albinism or melanism, as both are well known to be of frequent occurrence.

(3) Instances in which any of these peculiarly characterised individuals have transmitted their peculiarities, hereditarily, to one or more generations. Especial mention should be made whether the peculiarity was in any case transmitted in all its original intensity, and numerical data would be particularly acceptable, that showed the fre-

quency of its transmission (*a*) in an undiluted form, (*b*) in one that was more or less diluted, and (*c*) of its non-transmission in any perceptible degree.

GENERAL.

At a meeting of the secretaries of the Scientific Societies of Washington on April 18th, Hon. Gardiner G. Hubbard, President of the Joint Committee, presiding, it was decided to print in SCIENCE regular reports of the meetings of all the societies.

PHILADELPHIA has been selected as the place for the next meeting of the Society of American Naturalists. In conjunction with it will meet the affiliated societies—the American Morphological Society and the American Physiological Society, and probably the Geological Society of America, the Association of American Anatomists and the American Psychological Association.

PROFESSOR WOLCOTT GIBBS, President of the National Academy of Sciences, Professor Herman Knapp of Columbia College and Professor Hugo Münsterberg of Harvard University have been appointed an American committee to collect money for the memorial to Helmholtz to be erected in Berlin.

DR. LOUIS-FLORENTIN-CAMEIL died at Fontenay-sous-Bois on March 11th, at the great age of ninety-seven. He was for many years head physician of the Asylum for the Insane of Charenton, being the successor of Royer Collard and Esquirol.

MR. J. C. SUMNER, of the Royal College of Science, has been appointed Curator of the Port Erin Biological Station.

DR. JOHN FISKE gave, during April, at the Berkeley Lyceum, New York, a course of lectures on 'Lessons of Evolution in Relation to Man.'

THE 'Mazamas,' a society of mountain climbers organized in Oregon last year, propose sending by heliograph a message and

reply from British Columbia to Mexico on July 10th. The coöperation of societies and individuals is requested in order that all the intervening mountain peaks may be occupied. Communications should be addressed to Mr. T. Brook White, Secretary, Portland, Oregon.

A NATIONAL ETHNOLOGICAL EXPOSITION will be held at Prague from May 16th to October 12th.

AMONG the papers read at the annual spring meeting of the Institution of Naval Architects on April 3d, 4th and 5th, at London, were 'Notes on Further Experience with First-class Battleships,' by Sir William White; 'On Solid Stream Forms,' by D. W. Taylor, U. S. Navy, and 'On the Method of Initial Condensation and Heat Waste in Steam Engine Cylinders,' by Professor R. H. Thurston.

MR. CHRISTOPHER HEATH, of University College, has been elected President of the Royal College of Surgeons, to fill the vacancy caused by the death of Mr. J. W. Hulke.

MR. HERBERT SPENCER has begun a new series of articles in *The Popular Science Monthly* for May. His general subject is 'Professional Institutions,' one of the divisions of his Synthetic Philosophy, and he will aim to show how each of the professions has been developed out of the functions of the priest or medicine-man.

THE New York Legislature has appropriated \$16,000 for scientific work in horticulture. The work will be under the immediate charge of Professor L. H. Bailey of Cornell University.

THE Legislature of California has appropriated \$250,000 to erect a building in San Francisco for the professional departments of the University of California.

THE international importance of the work done at the Columbia College Observatory in investigating the subject of variation of