his doctor's degree with Professor Gorham at Brown University this spring.

Dr. O. D. von Engeln has been promoted to an assistant professorship of geography at Cornell University.

DR. GRAHAM EDGAR has been promoted to be associate professor of chemistry at the University of Virginia.

Professor J. L. Gillin, of the State University of Iowa, who has been teaching sociology there for the past five years, has accepted a call to the University of Wisconsin, service to begin with the opening of the next school year. The work of Professor Gillin at the University of Wisconsin will be to teach courses in sociology during one semester of the year and the remainder of his time will be spent as secretary of the department of general information and welfare, one of the four departments in the extension division of the university.

Mr. M. Power, lecturer in mathematics at Dublin, has been appointed professor of mathematics at Galway.

PROFESSOR F. G. DONNAN, Muspratt professor of physical chemistry at Liverpool, has declined the chair of chemistry at University College, London, vacant by the retirement of Sir William Ramsay, K.C.B.

## 

To our communication in SCIENCE of March 8 Professor Castle has offered 1 a vigorous critique. A wordy continuation of the discussion of a matter most of whose points can be easily settled by experiments now under way would be to imitate the methods of an old continent and a past epoch in biology. We may add only that the simple Batesonian formula which Dr. Castle seems to find sufficient appears from the context no more fully satisfactory to the formulator than to ourselves. As to the effect of castration in eliminating horns in males, this is, apparently, a special result in Merinos and other races 1 SCIENCE, April 12.

possessing horns typically or prevailingly in the males only. Darwin has discussed this matter in the "Descent of Man," Chap. XVII.; and correspondence recently had with breeders of Merinos confirms Darwin's (and Castle's) statements. In Dorset Horns, on the other hand, as in reindeer and cattle, castration has only a modifying effect.

Finally, we wish to acknowledge kind suggestions (in letters) from Professor T. H. Morgan and Mr. A. H. Sturtevant, and we trust they will publish their formula, which differs in several respects from ours. The principal difficulty they find with our formula is that it does not account for a race in which, in successive generations, all males are horned and all females are hornless. Such a race of Merinos there may be; but there is much evidence that in many long and carefully bred strains of Merinos the standard of hornlessness in the ewes is maintained only by hurrying the horned ewe lambs to the butcher.

T. R. ARKELL C. B. DAVENPORT

May 8, 1912

## AGRICULTURE IN SCHOOLS

To the Editor of Science: I note in the issue of Science dated April 27, 1912, an announcement concerning the signing of the Harte bill providing for the establishment of a New York State School of Agriculture on Long Island. The memorandum by the governor appended to this bill, as quoted in Science, might mislead the reader in regard to the status of the teaching of agriculture in New York.

The Cortland State Normal School has had in operation for nearly a year a course for training teachers of agriculture. This course is open only to graduates of approved high schools who have had practical farm experience. The course is for two years' work. It may be that the fact that the governor has not been called upon to sign a bill of special appropriation for the establishment of this course has been the cause of his overlooking it.

In regard to the high school situation I wish to call attention to the fact that seven-