pure dominants, and the other half dominants in whom the recessive character is latent; but both sorts will be alike (normal) in appearance, as actually observed.

The third son appears to have married each time a woman in whom the albinic character was recessive. The probability of such unions is indicated by Mr. Farabee's observations of *other albinos 'in the vicinity.'* For to every albino produced, where crossing with normal individuals takes place, there are certain to be produced *at least twice as many* 'normal' individuals containing the recessive character. If, as supposed, the third son and each of his wives contained the recessive character, we should expect one in four of their offspring to be an albino; the recorded observation is four in fifteen, a close approximation to the calculated result.

W. E. Castle.
Zoological Laboratory, Harvard University,
December 16, 1902.

MAGAZINE SCIENCE.

To the Editor of Science: The following letter from Mr. C. E. Borchgrevink, in regard to the criticisms published by me in Science of September 13 on the captions of the illustrations of his article on the eruptions of Mt. Pelée which appeared in *Leslie's Monthly* for July, has just been received. In justice to the author, I trust that you will publish this extract from his letter in your columns.

"From a correspondent I hear that you have made an attack on me based upon the article published in *Leslie's Monthly*. I am not responsible for those statements or for those errors in regard to photographs, which never met my eye before they appeared in *Leslie's Monthly*. Very few of those photographs came from my hand and I never of course claimed them."

E. O. Hovey.

SHORTER ARTICLES.

AGGREGATE ATAVIC MUTATION OF THE TOMATO.

On former occasions I have described two remarkable cases of aggregate phylogenetic mutation of the tomato which occurred suddenly under my personal observation, in which publications * I used the term mutation in the special sense that has been adopted by Professor De Vries. The following remarks refer to reports that have reached me from correspondents concerning equally sudden and complete atavic reversion of similar plants and their fruit, for which process I here use the term mutation in its ordinary sense. While the main fact of atavic mutation is clearly stated in these personal reports, they are wanting in certain details necessary to a fuller study of the subject. They are, however, important as aids in an interesting line of inquiry.

In May, 1902, I received from Mr. H. J. Browne, of Washington, D. C., who was then in Havana, Cuba, on business, a package containing a cluster of small spherical tomatoes of the variety known as the Cherry tomato. An accompanying note informed me that they were obtained from the proprietor of a plantation a few miles from Havana who had grown them there, and who assured Mr. Browne that they were the immediate product of seed of the large and fine variety well known throughout our country as the Trophy. These Trophy seed were obtained from the United States and planted in Cuba. The resulting crop of fruit was excellent and perfectly true to that variety as regards size, color, consistence and edible quality; but the seed of those Cuban-grown Trophy tomatoes invariably produced there the small cherry variety. The planter further stated that essentially the same result occurred in the case of all the several other improved varieties of tomatoes, the seed of which he had also procured from the United States, and that the degeneration was in all cases complete, heritably permanent and of uniform character; and that the change equally affected the whole crop. Because of this constantly occurring and hereditary atavism the planter was obliged to procure fresh seed from the United States for every acceptable crop of tomatoes grown on his Cuban plantation.

Quite independently of the foregoing statement I lately received a similar one from Miss Mary E. Starr, of Morristown, N. J. Her observations were made upon her father's plantation on the Bayou Tèche, St. Martin's

* Science, November 29, 1901. *Bull. Torrey Bot. Club.*, August, 1902.