

## THE ONONDAGA LAKE SQUIDS.

SINCE sending my note concerning the alleged discoveries of squids in Onondaga Lake I have learned through Principal Wilson of the Putnam School at Syracuse that a third specimen is said to have been secured at a time, I should infer, before the other two were taken. This story, however, has not been traced to its starting point. Much more interesting, as apparently corroborative testimony of the existence of these creatures in Onondaga Lake, is the circumstantial relation given to me by Professor J. M. Scott, teacher of sloyd in the Syracuse Public Schools, a son of Principal W. H. Scott of the Porter School. On reading the accounts and seeing the cuts of the squids alleged to have been taken by Mr. Terry, as printed in the *Syracuse Herald*, he was reminded of a find of his own, in regard to which he writes me as follows:

"Some twelve or thirteen years ago a number of boys, of whom I was one, were fishing just to the left of the outlet and had a small scoop net for catching crabs and minnows. Another lad and myself went ashore, and in fooling around in the mud near the shore looking for crabs I saw something queer and got it in the net. We took it to an old man who claimed to be a sailor and he told us it was a squid. Not knowing it was of any value whatever, we amused ourselves with it awhile and left it in the water after having killed it. I have since thought it was a queer find."

JOHN M. CLARKE.

THE FOSSIL TREE BRIDGE IN THE ARIZONA PETRI-  
FIED FOREST.

TO THE EDITOR OF SCIENCE: I have recently learned from a friend who has visited the petrified forest in Arizona that the famous natural bridge is in danger of being washed away. It consists of a log spanning a gully about twenty feet in width and from ten to twelve feet in depth. Each end of the log is embedded in sandstone formed of the original deposit. Spring rains in recent years have widened the gully, and threaten to demolish the natural abutments. I write

to call the attention of the readers of SCIENCE to the matter, hoping that some one may be in a position to influence the authorities in that section of Arizona to take some steps to preserve this remarkable tree.

HENRY F. OSBORN.

AMERICAN MUSEUM OF NATURAL HISTORY.

## SHORTER ARTICLES.

MENDEL'S PRINCIPLES OF HEREDITY AND THE  
MATURATION OF THE GERM-CELLS.

IN view of the great interest that has been aroused of late by the revival and extension of Mendel's principles of inheritance it is remarkable that, as far as I am aware, no one has yet pointed out the clue to these principles, if it be not an explanation of them, that is given by the normal cytological phenomena of maturation; though Guyer and Juel have suggested a possible correlation between the variability or sterility of hybrids and abnormalities in the maturation-divisions, while Montgomery has recognized the essential fact in the normal cytological phenomena, though without bringing it into relation with the phenomena of heredity. Since two investigators, both students in this University, have been led in different ways to recognize this clue or explanation, I have, at their suggestion and with their approval, prepared this brief note in order to place their independent conclusions in proper relation to each other and call attention to the general interest of the subject.

Bateson, in his recent admirable little book on Mendel's principles, is led to express the surmise that the symmetrical result in the offspring of cross-bred forms 'must correspond with some symmetrical figure of distribution of gametes in the cell-divisions by which they are produced' (p. 30). It is needless to remind cytologists that the study of the maturation-mitoses, especially in the case of arthropods, has revealed a mechanism by which such a symmetrical distribution may be effected; for the germ-cells in the great majority of cases arise in groups of fours, formed by two divisions, of which one is in many cases described as differing in character from the ordi-