

"it seems certain that the formation (Jamesburg) was produced during the submergence of the area which it covers;" secondly (p. 128); that "the period of submergence must have been short;" and thirdly (p. 129), that "the amount of erosion accomplished since the deposition of the Jamesburg is slight. This is shown * * * by the undissected flats of this material, even where in close association with considerable streams. * * * Either the formation is very recent, or conditions since its development have been most unfavorable for erosion * * *. The small amount of erosion which it has suffered seems hardly consistent with its correlation with the earliest glacial epoch."

In order to understand the distinct advance here made, one has but to refer to Prof. Chamberlin's article in the *American Journal of Science*, for March, 1893, pp. 191, 192, where he enumerates among the features which he thinks 'may be accepted as demonstrative,' first, that "an older fluviatile deposit (the Philadelphia-Brick Clay) is to be associated in age with the old glacial drift," and "that after the formation of this older river deposit, which took place at a low altitude and a low gradient, there was an epoch of elevation and erosion, during which the Delaware cut its channel down to the depth of 200 or 300 feet below the upper old terrace." It would seem now that this interpretation must be abandoned for the Delaware, as a similar interpretation had to be abandoned for the gravel terraces near the junction of the Cone-wango and the Allegheny Rivers two years ago. Mr. Salisbury is undoubtedly correct in believing that these high level gravel and clay deposits in the Delaware Valley, in the vicinity of Trenton, are of comparatively recent deposition. They are not older, but younger, than the erosion of the rock channel of the Delaware.

I may say in conclusion, also, that the investigations of Prof. E. H. Williams, in the Lehigh Valley, which have been too little noticed, seem positively to show that the river channels of that whole region had been worn to nearly their present depth of rock bottom before the earliest period of glaciation. I trust that renewed attention will be attracted to this diffi-

cult problem concerning which so many facts have now been accumulated.

G. FREDERICK WRIGHT.

OBERLIN, O., January 29, 1896.

ANCIENT MEXICAN FEATHER WORK AT THE
COLUMBIAN HISTORICAL EXPOSITION AT
MADRID, 1892.

TO THE EDITOR OF SCIENCE: Under the above title a contribution of mine has appeared in the recently issued Report of the U. S. Commission on the Madrid Exposition, Government Printing Office, Washington, 1895. Owing to the fact that the proofs were not sent to me for revision, my paper contains several typographical errors, three of which particularly demand correction. It being too late to rectify these errors by any other means, I have adopted the present method of doing so, with the hope and earnest request that possessors of copies of the report will duly note them therein, in order to prevent future misunderstandings. On page 332 read that I identified the shield 'of Phillip II.' at the Royal Armory, Madrid, as being of Hispano-Mexican workmanship, in 'October, 1892,' instead of '1893,' as printed.

On page 335 read the 'tiny,' instead of the *wing* feathers * * * that grow on the heads and breasts of tropical humming birds.

On page 337 read Mr. Phillip Becker instead of 'Bectier(?)' I need scarcely state that, in my original text, the name of my late, highly esteemed friend, is correctly given and is not followed by an interrogation point.

Thanking you, in advance, for kindly affording me the opportunity to do myself justice.

Yours truly,

ZELIA NUTTALL.

JANUARY 14, 1896.

SCIENTIFIC LITERATURE.

NEW DATA ON SPIRULA.

Zoölogy of the Voyage of H. M. S. Challenger: Part I., XXXIII. Report on Spirula. By T. H. HUXLEY and P. PELSENER. VIII., 32 and 12 pp. 4°, and six plates. 1895.

The eighty-third and last part of the zoölogical series of reports on the scientific results of the Challenger expedition could not be issued in one of the zoölogical volumes on account of delays in its preparation. These delays were