

### Silver in mounds.

In the number of *Science* for May 22 you have an article on 'Silver from a Pennsylvania mound,' which leads me to speak of a recent find here. Within the city limits, on the west side of the river, and in the region of a group of mounds now mainly removed, there were recently found two nodules of nearly pure silver, weighing together upward of twelve pounds, together with a small piece of silver-foil. The nodules were irregular in shape, with some admixture of earthy material; but a competent chemist pronounces them essentially pure silver. With them was found a large copper axe, a large sea-shell (*Pyrula?*), bone spears, human bones, etc., — the usual contents of the mounds (in this region) of the so-called mound-builders. A more complete examination of these articles will be made.

E. A. STRONG.

Grand Rapids, Mich., June 11.

### Mound-building tribes.

'Name the mound-building tribes,' is the demand now made of those holding the Indian theory. The mound testimony so far obtained (much of it by the bureau of ethnology, and yet unpublished), taken in connection with the historical, traditional, and linguistic evidence, leads to the following conclusions: —

1. That the ancient works in eastern Arkansas, north of the Arkansas River, were chiefly built by the 'Arkansia' (Quapaws or Kappas), and other allied tribes of the Dakotan stock encountered by DeSoto, and found still occupying this region when first visited by the French explorers. The evidence in support of this opinion seems to be well-nigh conclusive.

2. That some ancient works recently discovered in Pontotoc and Union counties, Miss., are probably due to the Chickasaws, who are known to have inhabited this region from the time of DeSoto's expedition until a recent date. These works have been visited and carefully explored by a bureau assistant, who discovered in one of the mounds, in addition to a number of the usual mound-builder's relics found in such works, one blade of a pair of scissors, the blade of an iron 'case-knife,' and a small silver plate stamped with the Spanish coat-of-arms. The vestiges of aboriginal art present marked differences from those found in Arkansas, western Tennessee, and the more southern portions of Mississippi. Of course the data so far obtained, relating to this locality, are too meagre to justify a decided conclusion.

3. That most of the antiquities of Alabama and Georgia are attributable to the Muskoki tribes. But the mound explorations indicate that the south-west corner of Georgia, and immediately adjoining portions of Florida, were occupied in mound-building times by a different people. It is somewhat significant that Mr. Gatschet ('Migration legend of the Creeks') locates the Uchees in precisely this area. Some specimens of pottery indicate contact with the whites, but others are more ancient. The indications are that the same people occupied this region at two different periods.

4. That the Cherokees were mound-builders, and that they were the authors of most of the works of western North Carolina and eastern Tennessee. I have given elsewhere (*Magazine of American history*, May, 1884) some reasons for this belief. Subsequent explorations have served to strengthen this opinion. A number of mounds around the site of old Fort Loudon, Monroe county, Tenn. (one of them of large size), recently opened, furnish what seem to be absolutely connecting-links between the mound-builders and Indians. From the large one, containing ninety-

one skeletons, were taken dozens of polished celts; several shell masks; some engraved shells; a gallon or more of shell beads, some of them pearls; vessels of clay of ancient type; bone implements; hundreds of perforated shells; a few pipes of a comparatively modern Cherokee type; four copper hawk-bells with shell-bead and pebble rattles; discoidal stones, etc. No indication of intrusive burials.

But the mound testimony in regard to this tribe does not stop here. It indicates that to them we must attribute the works of Kanawha valley, near Charleston, those at Grave Creek, and the typical works of southern Ohio: in other words, it is in accord with the tradition mentioned by Haywood, and the theory which identifies them with the Talegwi. The proof is circumstantial, but the chain is unbroken: the pipes alone are sufficient to show this. We can trace them back along their line of migration to Iowa. The works of Ohio indicate several different waves of population, and occupancy for a greater or less length of time by different tribes; but the works of the Talegwi (Cherokees) are generally easily distinguished. The mound testimony absolutely forbids the idea that the Ohio mound-builders went south to the Gulf states, and merged into the Muskoki family, or were represented by the Natches.

5. That the track of the Shawnees can be traced by their works from southern Illinois to north-eastern Georgia. They were undoubtedly the authors of the box-shaped 'stone graves,' or cysts, found south of the Ohio River, and the other works of that region directly connected with these graves. While it is probable they entered it from the west, possibly along the line of the lower Missouri River, the works at the eastern end of the elongate area bear the marks of greatest age, unless we attribute to them the Cahokia pyramid and its companions. The region of the Cumberland valley and middle Tennessee was evidently their chief and most permanent seat of power. The later occupancy by them and by the Delawares, of various points in Ohio, is generally indicated by their stone coffins and mode of burial.

6. That a large portion of the works of Kentucky differ from all others east of the Mississippi, north-eastern Missouri alone presenting any thing similar. The only probable solution of the puzzle is, that a tribe which once inhabited this section has become extinct, or fled west, and was absorbed in some other tribe, or became nomadic. And, last, that Morgan's theory that the mound-builders were from the pueblo Indians is without foundation.

The evidence on which these conclusions are based cannot be presented here, but will be given in the report on the mound explorations of the bureau of ethnology for the years 1882-85, now being prepared for publication.

CYRUS THOMAS.

### Abert's squirrel.

That the credit of first publishing a drawing of Abert's squirrel may be given to the proper person, I beg, through you, to call Dr. Shufeldt's attention to the illustration of it that is contained in Senate exdoc. No. 59, 32d congress, 2d session, 1853: "Report on the natural history of the country passed over by the exploring expedition under the command of Brevet Capt. L. Sitgreaves, U. S. topographical engineers, during the year 1851, by S. W. Woodhouse, M.D., surgeon and naturalist to the expedition."

Plate 6 is a full-length view of the animal, and on pp. 53, 54, is a description in detail of this *Sciurus*.

New York, June 15.

L. S. FOSTER.