

seem unfortunate that the skull in the Proceedings of the zoölogical society should have been figured as a *typical* cranium, and that no mention should have been made of the fact that it was aberrant in so important a particular. FREDERIC A. LUCAS.

Washington, D.C., May 3.

Some trees.

In September of 1885, I was present at and assisted in the following measurements of an iron or lever-wood tree (*Ostry virginica*) on the grounds of Lyman Child, Esq., near Bethel village in Vermont: circumference at ground, 128 inches; one foot above ground, 83 inches; four feet above ground, 69 inches; with corresponding diameters of 3 feet 7 inches, 2 feet 7 inches, and 1 foot 11 inches; height of tree, 38 feet; lateral extent of branches, 47 feet. It stands on a barren, precipitous hillside, and can find nutriment in little else than the disintegrated granite rock. In much travel and a long life in east and west, I have never seen one but this, of even one-half this size.

At Excelsior Springs in Clay county, Mo., some thirty miles from Kansas City, stands a maple (*Acer Sach*) and white-oak (*Quercus alba*) joined in one symmetrical body, from the ground up about six feet; thence dividing into two separate trees of some fifteen to eighteen inches diameter each. The line of union of the bodies is only indicated by a slight crowding of the bark.

Near the same Excelsior Springs an oak and maple of some twelve inches diameter each, stand at the ground two feet apart. At about fifteen feet above the ground, in their earlier growth, a limb from the maple was projected horizontally across the body of the oak. Time and growth have embedded the limb from the maple in the body of the oak; and now the appearance is, on the one side of the oak, an anastomosis with the maple by a three-inch arm, and, on the other side, a two-inch maple-limb produced from an oak-tree.

A slippery-elm tree (*Ulmus fulva*) stands in our yard here in Kansas City, of some thirty inches diameter, at one foot from the ground, and averaging twenty inches for twenty feet upwards, and thence twelve inches for forty feet; entire height, about eighty feet. I find no such *Ulmus fulva* in Gray; but its sweetish, mucilaginous inner bark pronounces it a real *fulva*. Its terminal branches, often in whorls of from three to seven, are blunt and club-like, unlike the light pendant terminals of many of the American or white elms. Other specimens of this elm are in the vicinity, but not often so symmetrical in form. A. L. CHILD, M.D.

Kansas City, Mo., May 3.

The Daniel Scholl observatory.

It occurred to me that it might be of interest to you and your readers to hear that in the old historic town of Lancaster City, Penn., an observatory named the Daniel Scholl observatory has been erected on the grounds of Franklin and Marshall college. The equipments consist of meteorological apparatus, chronometer, Seth Thomas thirty-day regulator, chronograph, transit instrument of three inches aperture, and a Clark-Repsold equatorial telescope of eleven inches aperture. The telescope has a set of negative and positive eye-pieces, with reversion prisms for three of the micrometer eye-

pieces, a Mertz solar eye-piece, and a comet eye-piece, together with a micrometer with complete illuminating apparatus for bright and dark field as worked out by the Repsolds. Since this is comparatively new, and, as far as we know, the only micrometer and purely equatorial mounting by Repsold in this country, we thought it might be of some interest to those who have not had the opportunity to see this form of mounting and micrometer.

JEFFERSON E. KERSHNER.

Lancaster City, Penn., May 7.

Death of Prof. William Ashburner.

William Ashburner, the well-known mining engineer of San Francisco, died in that city, April 20, after a brief illness. The deceased held a high place in his profession, and was greatly esteemed by all who knew him. He was born in Stockbridge, Mass., in 1831. He attended the public schools of his native town. In 1849 he entered the Lawrence scientific school at Cambridge, and after two years went to Paris, where he pursued such studies as are requisite to the profession of mining engineer, at the Ecole des mines. In 1854 he returned to this country, and, accompanied by the late Professor Rivot, he devoted several months to the examination of the mineral region of Lake Superior. In 1859 he was engaged in the exploration of a part of the island of Newfoundland, and in 1860 he went to California as one of the chief assistants in the state geological survey of which Prof. J. D. Whitney was the director. In 1864 he was appointed one of the commissioners of the Yosemite Valley and the Mariposa Big-Tree Grove, a position he held until 1880. From 1862 until 1883 Professor Ashburner was actively engaged in his professional work, and travelled almost incessantly in the mining districts of the United States, British Columbia, and Mexico, also in the more distant regions of South America and Asia.

In 1874 he was made professor of mining in the University of California, and subsequently honorary professor of mining in the same college. In 1880 he was appointed by the governor, regent of said university, and was a member of the board of regents at the time of his death. He was selected by the late James Lick as one of the trustees of the California school of mechanical arts, this latter being one of Mr. Lick's public benefactions, and was also chosen by Mr. Stanford one of the trustees of the Leland Stanford, jun., university. Professor Ashburner was otherwise prominent in various scientific and educational societies, particularly in the California academy of sciences, in which for many years he was one of the trustees. He was also a member of the microscopical, historical, and geographical societies of San Francisco.

In the community in which he lived for so many years, he was universally recognized as a public-spirited and honorable gentleman. His quiet and unostentatious manners, as well as other agreeable personal qualities, endeared him to a large circle of friends.

The enthusiastic and active interest he took in every thing conducive to the growth and intellectual advancement of the Pacific coast made him a valuable citizen, and his death may well be regarded as a public loss.

R. E. C. S.

Smithsonian institution, Washington, May 9.