

face dotted with hillocks, like rifle-pits, caused by the up-turned roots of large trees, of which no other vestige remains. In the eastern part of Bradford county were extensive ancient windfalls, still recollected by the older inhabitants, where now is a fine, well-cultivated farming-country; and in the southwestern part of the same county a tornado of a later date left a long, straight path through the pine timber, which was known as the 'Devil's Lane.' I have seen the track of an extensive tornado in the forest of one of the Alleghany Mountain counties of this state. I have reports of others in West Virginia and in Indiana, and of very numerous ones in the vast forests of Lower Canada, in New Brunswick, and Nova Scotia. Every hunter and lumberman who has travelled through the forests is familiar with these evidences of more or less ancient tornadoes, and of a few in later times. From their occurring in uninhabited regions, and from their not being attended with loss of life or improvements, no accounts of them are to be found, and the traditions of them are soon forgotten. In the further study of this interesting subject, these fossilized tornadoes, so to speak, should not be overlooked. The tornadoes of Kansas, Missouri, Illinois, Minnesota, and Georgia, are probably only repetitions of what has at long intervals occurred fortuitously in all parts of our country.

JAMES MACFARLANE.

Towanda, Penn., March 11.

[Windfalls are the subject of Tornado circular No. 12, which may be obtained on application to the chief signal-officer, U. S. Army, Washington. Information concerning the location, direction, length and width, and, if possible, also the date, of these old tornado-tracks, is much desired.]

Remains of a prehistoric tree.

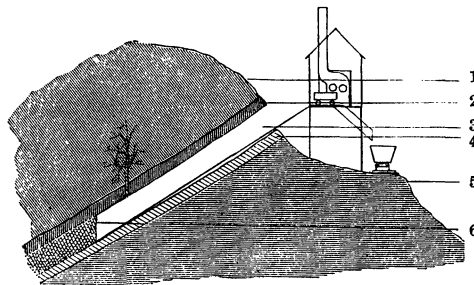
While making some assays for the Oregon iron and steel company, during the past summer, I was often in the mines of the company at Oswego, eight miles south from Portland, Ore.

Being on one occasion about five hundred feet down the main gangway, my attention was called to a curious 'hole in the roof.' On examination, I found it to be a perpendicular cylindrical cavity in the roof-rock, in diameter about ten inches. Upon feeling the walls of the cavity, I found the surface somewhat rough, like the bark of a tree. Introducing a lamp, I could discern small indentations corresponding to the knots and twigs upon the trunks of trees. I was convinced that the hole had once been occupied by a tree, and, procuring a jointed pole, probed the cavity to a height of twenty-two feet. Toward the top the indentations became more numerous; and, by replacing the stiff pole by a flexible bamboo, the side orifices could be probed to a depth of two or three feet, and seemed to have a slight inclination (see figure).

Examining the ore on roof and sides, I was rewarded by finding a network of roots, which retained their original forms perfectly, although petrified. I procured one specimen an inch and a half in diameter. An analysis of it showed the material occupying the position of the original bark to be kaoline; it being perfectly white, and about a quarter of an inch in thickness. Inside this ring of kaoline the wood had been replaced by iron ore, not differing from that of the surrounding vein.

Above and below the ore I found no roots; the tree having grown in the space now occupied by the ore-vein, and at an inclination to it. The strata dip to the north at an angle of 35° to the horizon.

Immediately under the ore is a stratum of scoriae one to three feet in thickness. Below this is hard, compact basalt. The roof of the mine is 'greenstone,' decomposed by heat to coarse sand-rock immediately over the ore. The ore-vein averages five feet and a half in thickness.



SECTION IN MINE AT OSWEGO, ORE.

1, 'greenstone'; 2, sand-rock; 3, gangway; 4, scoriae; 5, basalt; 6, ore-vein.

At six hundred feet I found pieces of wood not petrified, and in a good state of preservation, some parts showing a charred surface. I found afterwards, in other parts of the mine, several smaller orifices in the roof-rock, and similar to that described above.

HAROLD B. NYE.

Congenital deafness in animals.

Mr. Lawson Tait, quoted by Professor Bell in *Science*, No. 54, says that 'congenital deafness is not known to occur in any animal but the cat.' In contradiction to this statement, Dr. Burnett has reported to you (No. 57) the cases of two deaf dogs; and I now refer you to the mention of a deaf-mute cow in Dr. Haubner's 'Bericht über veterinärwesen,' quoted in the 'Organ der taubstummen-und blinden-anstalten in Deutschland,' vol. xxv. p. 176. This cow was twelve years old, and had been in the possession of the same owner since she was three weeks old. She was perfectly deaf to all sounds. At feeding-time, or when a calf was taken away from her, she made the same demonstrations that other cows do, stretching out her head and neck, and opening her mouth wide as if to bellow, but only making a short, deep, gurgling sound, very different from the ordinary lowing of cattle. Her sight was good, and she was an intelligent animal. Nothing abnormal could be discovered in her ears or throat. Her color is not mentioned. She had had eight calves: but whether these inherited their parent's deafness is not known; for in this case the danger, if such a danger existed, of 'the formation of a deaf variety' of the bovine race was effectually prevented by the early butchering of the calves.

EDWARD ALLEN FAY.

National deaf-mute college, Washington, D.C.,
March 14.

Muraenopsis.

Is it not by mistake that you state, in the review of 'Yarrow's check-list' (*Science*, No. 56, p. 264), that the generic name 'Muraenopsis' must be suppressed because 'pre-occupied among the eels'? The name was first applied to eels by Kaup (1856, 'Catalogue of apodal fish,' p. 11), though credited by him to Le Sueur. The latter, however, did not use it. His name was 'Muraenophis' (1825, *Journ. Philad. acad.*, v. p. 107), or 'Muraenaphis' (l.c., pl. iv.), or 'Muroenophis' (l.c., index). Kaup's error was copied by