

thousand feet long and thirty-two feet deep. The regularity of its structure throughout implies that it has been formed very gradually, and by the uniform action of the same causes. Three layers of vegetable soil, each of which must at one time have formed the surface of the cone, have been cut through at different depths. The first of these was traced over a surface of 15,000 square feet, having an average thickness of five inches, and being about four feet below the present surface of the cone. This upper layer belonged to the Roman period, and contained Roman tiles and a coin. The second layer, followed over a surface of 25,000 square feet, was six inches thick, and lay at a depth of ten feet. In it were found fragments of unvarnished pottery and a pair of tweezers in bronze, indicating the bronze epoch. The third layer, followed for 35,000 square feet, was six or seven inches thick, and nineteen feet deep. In it were fragments of rude pottery, pieces of charcoal, broken bones, and a human skeleton having a small, round, and very thick skull. M. Morlot, assuming the Roman period to represent an antiquity of from sixteen to eighteen centuries, assigns to the bronze age a date of between 3000 and 4000 years, and to the oldest layer, that of the stone period, an age of from 5000 to 7000 years.

Another calculation has been made by M. Troyon to obtain the approximate date of the remains of an ancient settlement built on piles and preserved in a peat-bog at Chamblon, near Yverdon, on the Lake of Neufchatel. The site of the ancient Roman town of Eburodunum (Yverdon), once on the borders of the lake, and between which and the shore there now intervenes a zone of newly-gained dry land, 2500 feet in breadth, shows the rate at which the bed of the lake has been filled up with river sediment in fifteen centuries. Assuming the lake to have retreated at the same rate before the Roman period, the pile-works of Chamblon, which are of the bronze period, must be at the least 3300 years old.