

animals,—the jumping-mouse (*Zapus hudsonius*) and the white-footed mouse (*Hesperomys leucopus*). These two mice, popularly so called, hibernate with great regularity in one sense, but differ *inter se* in another. The former, once torpid, remain so until spring, a few warm days in winter failing to rouse them; but the white-footed mouse seems simply to sleep soundly rather than grow torpid, and responds with considerable promptness to any disturbance. The jumping-mouse builds a nest of leaves and grass at a considerable depth from the surface of the ground (not a 'ball of mud,' as stated in the *Encyclopaedia Britannica*, art. 'Jerboa'), and, once fairly settled therein, is beyond the various sudden changes of our winters: the white-footed mouse, on the contrary, utilizes an old bird's-nest, or has a resting-place beneath a log or in a half-decayed stump. In such positions, of course, the occupant is more likely to be disturbed, and is also directly exposed to the varying temperature.

jumping-mouse, does not do. However this may be, the fact remains that both these rodents are quite sensitive to cold, and hibernate



FIG. 1.

as soon as winter sets in; yet how very differently is this faculty exercised! C. C. ABBOTT.



FIG. 2.

Is it to meet the requirements of this condition that this mouse lays up a goodly stock of food during autumn?—something the jerboa, or

ANOTHER ANCIENT HUMAN SKELETON FROM MENTONE, FRANCE.

WE owe to the favor of Prof. Spencer F. Baird, secretary of the Smithsonian institution, photographs of a human skull exhumed last month from one of the grottos at Mentone, France (next to that in which Rivière discovered a skeleton twelve years ago), together with a letter from Hon. Thomas Wilson, U. S. consul at Nice, under date of March 31, from which we extract the following statements:—

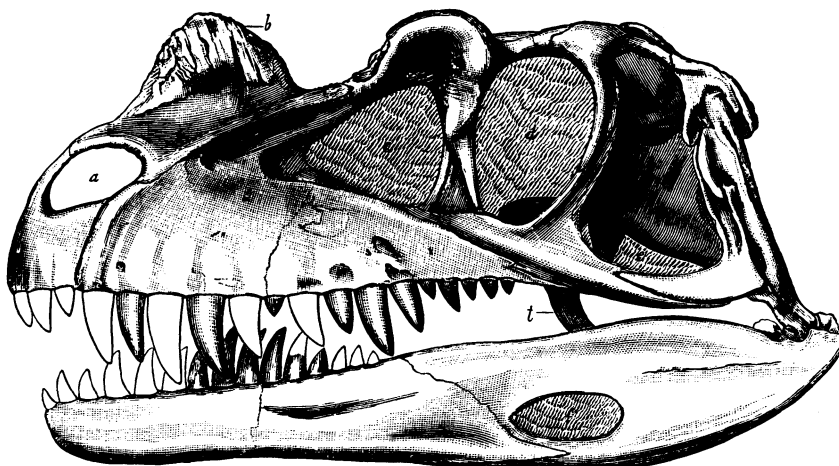
The skeleton to which the skull belongs was found in the 'fourth cavern,' at a depth of eight metres and a half, under well-defined strata; one, a metre and a half thick, composed of cinders, ashes, burnt earth, and charcoal. More or less worked flint chips were found with it, comparing well with those found with Rivière's skeleton.

The skeleton was complete; but, as the result of a quarrel over the ownership, the body was stolen, and its whereabouts are still unknown.

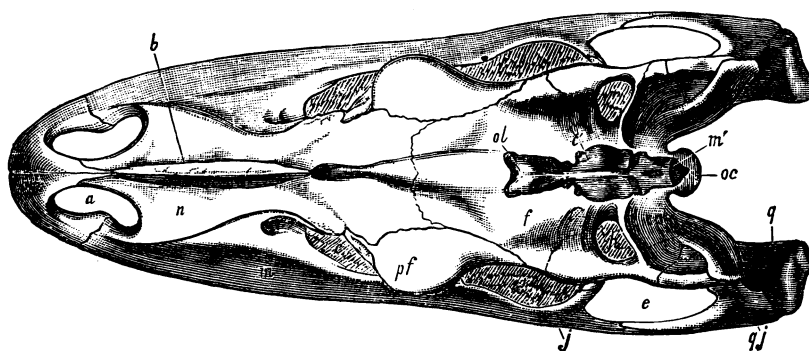
The skull was broken in the exhumation, but is nearly perfect; and, when found, a large flint chip was found resting against the top of the head, as shown in fig. 1, and two others resting like epaulets against the shoulders. The length of the skull, from the back of the

Although much has been written about these reptiles since Buckland described *Megalosaurus*, in 1824, but little has been made out in regard to the structure of the skull, and many portions of the skeleton still remained to be determined.

Of the carnivorous dinosaurs from the American



Skull of *Ceratosaurus nasicornis* Marsh; side view.



Skull of *Ceratosaurus nasicornis* Marsh; top view. *a*, nasal opening; *b*, horn-core; *c*, antorbital opening; *c'*, cerebral hemispheres; *d*, orbit; *e*, lower temporal fossa; *f*, frontal bone; *h*, supra-temporal fossa; *j*, jugal bone; *m*, maxillary bone; *m'*, medulla; *n*, nasal bone; *oc*, occipital condyle; *ol*, olfactory lobes; *pf*, pre-frontal bone; *pm*, pre-maxillary bone; *q*, quadrate bone; *qj*, quadrato-jugal bone.

head to the forehead, was eighteen centimetres, and from the back of the head to the projecting eyebrows, nineteen centimetres and a half: the breadth was fourteen centimetres. One femur was saved from loss, and measured forty-nine centimetres in length.

NEW JURASSIC DINOSAURS.

In the *American journal of science* for April, Professor Marsh has given the principal characters of the Theropoda, a carnivorous order of dinosaurs, illustrated by numerous figures, several of which are here repeated.

Jurassic, there are apparently four distinct families, one of which is represented by *Ceratosaurus*, a new form here described. The nearly perfect skeleton of *Ceratosaurus* presents several characters not hitherto seen in the Dinosauria. One of them is a large horn on the skull; another is a new type of vertebra; and a third is seen in the pelvis, which has the bones all co-ossified, as in all known birds except *Archaeopteryx*. Another feature, not before known in carnivorous dinosaurs, is the presence of osseous dermal plates, extending from the skull over the vertebrae. This skeleton is over seventeen feet in length.

The skull of *Ceratosaurus* is very large in proportion to the rest of the skeleton. The posterior region is elevated, and moderately expanded transversely.