were found in it, and argues that the latter (*i. e.* the skeleton of the “Red Lady”) are of more recent date than the former.

In the cave at Spritsail Tor (cursorily examined by Sir H. De la Beche, and thoroughly explored by Colonel Wood), under a stalagmitic bone-breccia, the irregular fissure of the rocky floor was impacted with ochreous cave-earth full of bones and teeth of *Elephas antiquus*, *E. primigenius*, *Rhinoceros tichorhinus*, *Equus*, *Sus*, *Bos*, *Cervus*, *Lepus*, *Arvicola*, *Mus*, *Ursus spelæus*, *U. priscus* (?), *Felis spelæa*, *Hyæna spelæa*, *Canis Lupus*, *C. Vulpes*, *Meles taxus*, and *Mustela*. Coprolites of *Hyæna*, gnawed bones of *Bos*, *Equus*, and *Cervus*, and a great abundance of the detached molars of Horse, gave the cave the undoubted character of having been a Hyæna’s den. In the superficial sand on the stalagmite, the antlers of a Reindeer and some human bones were found.

General remarks on the distribution of the Mammalian remains in the different caverns were offered, and the special anomalies pointed out; and, after a comparative review of the fauna of the Gower bone-caves in relation with that of other cave-districts of England in particular, and of Europe in general, the author arrived at the following conclusions as being consistent with the existing state of our knowledge:—

1. That the Gower Caves have probably been filled up with their mammalian remains since the deposition of the Boulder-clay.

2. That there are no mammalian remains found elsewhere in the ossiferous caves in England and Wales referable to a fauna of a more ancient geological date.

3. That *Elephas* (*Loxodon*) *meridionalis* and *Rhinoceros Etruscus*, which occur in, and are characteristic of, the “Submarine forest Bed” that immediately underlies the Boulder-clay on the Norfolk coast, have nowhere been met with in the British caverns.

4. That *Elephas antiquus* with *Rhinoceros hemitæchus*, and *E. primigenius* with *Rh. tichorhinus*, though respectively characterizing the earlier and later portions of one period, were probably contemporary animals; and that they certainly were companions of the Cave-bears, Cave-lions, Cave-hyenas, &c., and of some at least of the existing mammalia.

2. On some ARROW-HEADS and other INSTRUMENTS found with HORNS of CERVUS MEGACEROS in a CAVERN in LANGUEDOC.

By MONS. E. LARTET, For.M.G.S.

[In a Letter to the President.]

[The publication of this paper is deferred].

[Abstract.]

IN a cavern of the limestone at Massat, near Tarascon in Languedoc (Department of the Ariège), examined by M. A. Fontan, the floor was found to consist of a blackish earth, with large rounded

pebbles, among which were mixed, in great disorder, bones and horns of a Chamois, *Cervus pseudovirginianus*, *C. megaceros*, and *Bos*, together with implements of stone and bone, to which MM. Isidore Geoffroy Saint-Hilaire and E. Lartet have referred in the 'Comptes Rendus' of May 10, 1858.

M. E. Lartet, in his letter, has furnished drawings and descriptions of some barbed arrow-heads of bone, some having indented grooves, probably for the appliance of poison; also needles, and a flute-bevelled tool of bone, a splinter or knife of hard flint, and the horn of an Antelope hacked at the base, probably when the animal was flayed.

3. *On the Occurrence of CRAG STRATA beneath the BOULDER-CLAY in ABERDEENSHIRE.* By T. F. JAMIESON, Esq.

[Communicated by Sir R. I. Murchison, V.P.G.S.]

[See above, page 371.]

4. *On some small FOSSIL VERTEBRÆ from near FROME, SOMERSETSHIRE.* By PROFESSOR OWEN, F.R.S., F.G.S., &c.

I WAS favoured a short time since by receiving from Mr. Charles Moore, F.G.S., the discoverer of teeth like those of *Microlestes* in a probably Triassic deposit near Frome, an additional series of specimens, including, together with teeth unequivocally mammalian and having the characters of those of *Microlestes*, some vertebræ, more or less mutilated, of corresponding size, and similar mineral condition. These were discovered in a fissure containing derivations from the "Bone-bed" and from earlier (Mountain-limestone) and later (Oolitic) deposits.

A small glass tube, numbered "5," was stated in Mr. Moore's list to contain "two little vertebræ." These I first examined. One (and the most perfect specimen, figs. 1-5) is a dorsal, the other a caudal vertebra; both are biconcave (*i. e.* the articular ends of the centrum are cupped); and in both the neural arch is confluent with the centrum.

The body of the dorsal vertebra is laterally concave both vertically and lengthwise (fig. 3, *c*), the lower surface (fig. 5) being narrow, prominent, like a smooth obtuse ridge, slightly concave lengthwise, expanding somewhat, like the rest of the centrum, at the articular extremities, *c*: these are deeply cupped, of a circular figure, with a smooth, almost polished surface. A narrow parapophysis begins very near the fore part of the side of the centrum, and is continued upward and a little backward, contracted and ridge-like, to the diapophysis on the side of the neural arch, figs. 1, 2, 4, *d*; or, the par- and di-apophyses are connected by an intervening ridge. On one side there is a continuous abraded surface, which might have afforded, when entire, a single articular surface to a rib; on the other side of