

Mr. CHARLES MOORE, F.G.S., exhibited a most interesting series of fossils, including fish-bones and mammalian remains, lately discovered by him in Triassic beds which had been formed in fissures in the Carboniferous strata near Frome. He stated that in about three cubic yards of coarse friable sand from this deposit, he had found not fewer than 45,000 teeth of fish—of the genus *Acrodus* alone. Teeth of several species of *Sauricthys* were also abundant, and next to them teeth of *Hybodus*, with occasional spines of the latter genus. Teeth and scales of *Lepidotus*, and scales of *Gyrolepis* were also numerous, as also were teeth showing the presence of several other

genera of fishes. With the above were found a number of curious bodies, each of which was surmounted by a depressed enamelled thorn-like spine, or tooth, in some cases with points as sharp as that of a coarse needle; these Mr. Moore supposed to be spinous scales belonging to several new species of fish allied to the *Squaloraia*, and that to the same genus were to be referred a number of minute hair-like spines, with flattened fluted sides, found in the same deposit. There were also present specimens hitherto supposed to be teeth, and for which Agassiz had created the genus *Ctenoptychius*, but which he was rather disposed to consider, like those previously referred to, to be the outer scales of a fish allied to the *Squaloraia*. It was remarked that as the drift must have been transported from some distance, delicate organisms could scarcely be expected, but, notwithstanding, it contained some most minute fish-jaws and palates, of which, perfect or otherwise, one hundred and thirty examples had been found. These were from the eighth to a quarter of an inch in length, and within this small compass some specimens possessed from thirty to forty teeth. In one palate he had reckoned as many as seventy-four in position, and there were spaces from which sixteen more had disappeared, so that in this tiny specimen there had been ninety teeth.

Of the order Reptilia there were probably eight or nine genera, consisting of detached teeth, scutes, vertebræ, ribs, and articulated bones. Amongst these he had found the flat crushing teeth of *Placodus*, a discovery of interest, for hitherto this reptile had only been found in the Muschelkalk of Germany, a zone of rocks hitherto considered wanting in this country, but which in its fauna was represented by the above reptile.

But by far the most important remains in this deposit

were indications of the existence of Triassic mammalia. Two little teeth of the *Microlestes* had some years before been discovered in Germany, and were the only traces of this high order in beds older than the Stonesfield Slate. Mr. Moore's minute researches had brought to light fifteen molar teeth, either identical with, or nearly allied to, the *Microlestes*, and also five incisor teeth, evidently belonging to more than one species. A very small double-fanged tooth, not unlike the oolitic *Spalacotherium*, proved the presence of another genus, and a fragment of a tooth, consisting of a single fang, with a small part of the crown attached, a third genus, larger in size than the *Microlestes*. Three vertebræ belonging to an animal smaller than any existing mammal had also been found. He inferred that if twenty-five teeth and vertebræ, belonging to three or four genera of mammalia, were to be found in the space occupied by three cubic yards of earth, that portion of the globe which was then dry land, and whence the material was in part derived, was probably inhabited at that early period by many genera of mammalia, and would serve to encourage a hope that the remains of that class might yet be found in beds of even more remote age.

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