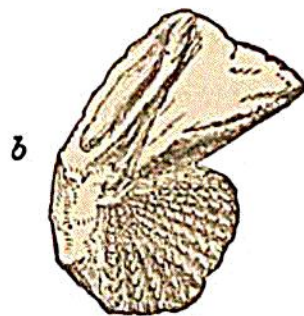


the homologues of the occipital, frontal, parietal, mastoid, and nasal bones, than to recognize the representatives of the carpals of the middle and ring finger in man, in the cannon bone of the fore leg of the ox. I may mention in passing, that the little central plate of the frontal division, (1, fig. 16,) which so nearly corresponds with that of the *Osteolepis*, occurred, though with considerable variations of form and homology, and some slight difference of position, in all the Ganoids of the Old Red Sandstone whose craniums were covered with an osseous buckler, and that its place was always either immediately between the eyes or a very little over them. Its never-failing recurrence shows that it must have had *some* meaning, though it may be difficult to say what. In the *Coccosteus* it takes the form of the male dovetail, which united the nasal plate or snout to the plate representative of the superior frontal. Of the cartilaginous box which formed the interior skull of either *Osteolepis*, or *Diplopterus*, or, with but one exception, of the interior skulls of any of their contemporaries, no trace, as I have said, has yet been detected. The solitary exception in the case is, however, one of singular interest.

In a collection of miscellaneous fragments sent me by Mr. Dick from the rocks of Thurso, I detected patches of palatal teeth ranged in nearly the quadratures of circles, and which radiated outwards from the rectangular angle or centre, (fig. 18, *b*.) And with the patches there occurred plates exactly resembling the barbed head of a dart, (*a*.) with which

Fig. 18.



*a*, Palatal dart-head.  
*b*, Group of palatal teeth.