which in the Asterolepis, as in the sturgeon, consisted each of a single plate. In both the exterior surface of the buckler and of the operculum the tubercles are a good deal enveloped in the stone, which is of a consistency too hard to be removed without injuring what it overlies; but you will find them in the smaller cast which accompanies the others, and which, as shown by the thickness of the plate in the original, indicates their size and form in a large individual, very characteristically shown. So coral-like is their aspect, that if it was from such a cast, not a fossil (which would, of course, exhibit the peculiarities of the bone), that Lamarck founded his genus Monticularia, I think his apology for the error might almost be maintained as good. I am sorry I cannot venture on taking casts from some of my other specimens; but they are exceedingly fragile, and as they are still without duplicates I am afraid to hazard them. Since publishing my little volume I have got several new plates of Asterolepis, — a broad palatal plate, covered with tubercles, considerably larger than those of the creature's external surface, — a key-stone shaped plate, placed, when in situ, in advance of the little plate between the eyes, which form the head