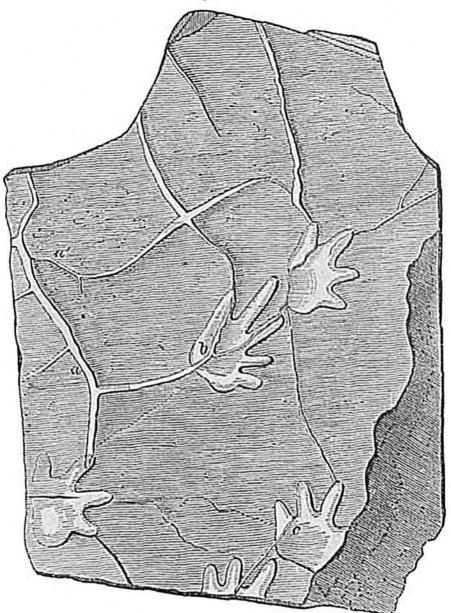


Fig. 512.



Scale one-sixth the original. Slub of sandstone from the coal-measures of Pennsylvania, with footprints of air-breathing reptile and casts of cracks.

in North America. These occur in the coal strata of Greensburg, in Westmoreland county, Pennsylvania; and I had an opportunity of examining them in 1846. I was at once convinced of their genuineness, and declared my conviction on that point, on which doubts had been entertained both in Europe and the United States. The footmarks were first observed standing out in relief from the lower surface of slabs of sandstone, resting on thin layers of fine unctuous clay. I brought away one of these masses, which is represented in the accompanying drawing (fig. 512). It displays, together with footprints, the casts of cracks (a, a')of various sizes. The origin of such cracks in clay, and casts of the same, has before been explained, and referred to the drying and shrinking of mud, and the subsequent pouring of sand into open crevices. It will be seen that some of the cracks, as at b, c, traverse the footprints, and produce distortion in them, as might have been expected, for the mud must have been soft when the animal walked over it and left the impres-