

(*Tringa minuta*), which I saw running, in 1842, over the red mud thrown down by every tide on the borders of estuaries connected with the Bay of Fundy. When this mud, which extends over thousands of acres, has been baked by the hot summer sun of Nova Scotia, it shrinks and cracks to the depth of several inches or even feet, and acquires such consistency as to be divisible into the successive layers of which it is composed, presenting on many upper surfaces impressions of birds' feet and cracks, and on the under sides the casts of the same standing out in relief.*

I have also stated † that on the sea beach near Savannah, in Georgia, I saw clouds of fine sand drifted by the wind, filling up the foot-prints of racoons and opossums, which a few hours before had passed along the shore, after the retreat of the tide. This process will account, in a satisfactory manner, for the sharpness of many fossil casts of animals in ancient rocks, as the grains of uniformly fine sand were poured into the newly made cavities, not by a current of water, which could scarcely have failed to disturb the soft mud, but by the air, which could not cause the slightest derangement of the most delicate imprints.

No less than twenty-three foot-steps were observed by Dr. King on slabs in the stone quarry of Union township, before mentioned, before its abandonment, and the greater part of these were so arranged (see fig. 13) as to imply that they were the marks of the successive foot-steps of the same animal. Every where there was seen a double row of tracks, occurring in pairs, each pair consisting of a hind and fore foot, and each being at nearly equal distances from the next pair. The toes in each of these parallel rows turn the one set to the right, the other to the left. It is instructive to compare these impressions with those which had previously been met with in an ancient European rock (although one of less antiquity than the coal-formation), namely, the new red sandstone or Trias of Saxony and Cheshire. The accompanying figure (fig. 14) represents the Saxon Cheiro-

* I have presented specimens of this red mud, with the foot-prints of birds, to the British Museum, Geological Society, and Museum of Economic Geology.

† Travels, vol. i. p. 167.