

driven aslant by the wind. The prominent side of the markings, therefore, indicates the side toward which the wind blew.

Numerous proofs of shallow shore-water, and likewise of exposure to the air, are supplied by markings left by animals. Castings, tubular burrows and trails of worms, tracks of mollusks and crustaceans, fin-marks of fishes, footprints of reptiles (Fig. 207), birds, and mammals, may all be preserved and give their evidence regarding the physical conditions under which sedimentary formations were accumulated. It may frequently be noticed that such impressions are as-

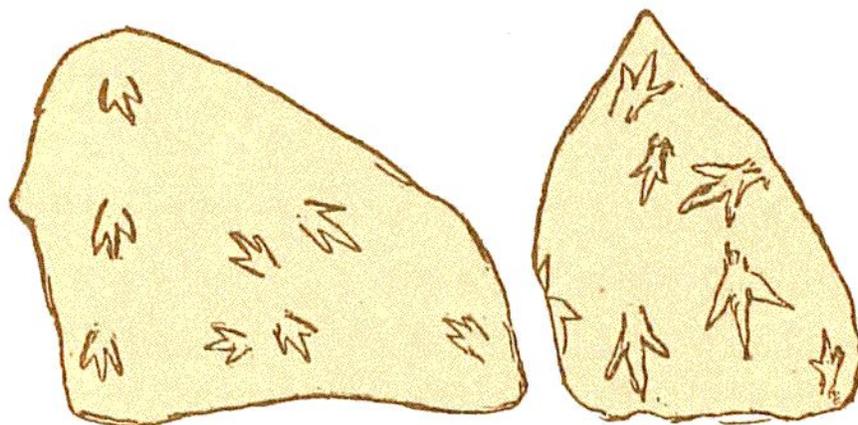


Fig. 207.—Footprints from the Triassic Sandstone of Connecticut (Hitchcock).

sociated with ripple-marks, rain-prints, or sun-cracks (Fig. 208); so that more than one kind of evidence may be gleaned from a locality to show that it was sometimes laid bare of water.

The more striking indications of littoral conditions being comparatively infrequent, the geologist must usually content himself with tracing the gravelly detritus, which suggests, if it does not always prove, proximity to some former line of shore. Such a section, for instance, as that depicted in Fig. 209 may often be found, where lower strata (*a*) having been tilted, raised into land, and worn away, have yielded materials for a coarse littoral boulder bed (*b*), over