

sects ; 3, impressions of feet only, such as might be left by most vertebral animals and all the invertebrate tribes that have feet.

2. Width of the trackway.
3. Angle made by the axis of the foot with the line of direction called the median line.
4. Distance of the tracks from the median line.
5. Number of feet.
6. Relative size and character of the feet before and behind.
7. Mode of progression ; by one row of tracks or two ; direct or oblique ; by steps or leaps, etc.
8. Length of step.
9. Size of foot.
10. Number of toes.
11. Whether thick-toed or narrow-toed.
12. Number and size of the phalangeal impressions.
13. Divarication or spread of the toes.
14. Character of the heel.
15. Claws and pellets.
16. Anomalous characters, such as indicate that the animal may have partaken of characters now found only in different classes or orders : like the ichthyosaurus, pterodactyle and sauroid fishes.

A careful application of these and other less important characters will enable us, in most cases, but not in all, to decide from tracks whether the animal was vertebral or invertebral ; to which of the classes in these two great groups it belonged ; often to what family, genus and species. In this way have the examples of Lithichnozoa been determined, which will be given under the different formations in our next Section.



SECTION II.

PALÆONTOLOGICAL CHARACTERS OF THE ROCKS.

ORGANIC remains are not thrown together confusedly in the rocks, but each of the great rock formations has its peculiar fossils, which are not found in the formations above or below. Usually the species are limited to a particular formation, although the