

feathers, as, for instance, the sharp tailed grouse,* (*Tetrao phasianellus*), and I do not see why such an appendage would not produce precisely the impression on soft mud which the fossil specimens exhibit.

In comparing the descriptions that have been given of the species, it is interesting to observe how the length of the step increases in proportion to the size of the foot; from the huge *O. ingens*, with a foot sixteen inches long, and a step of at least four feet, down to the *O. minimus*, with a foot one inch long, and a step between three and five inches. In order, however, to present this correspondence before the mind at glance, as well as to give an idea of the peculiarities of the different species, I have prepared the appended "Proportional view of the Ornithichnites." On this the proportional size of the different tracks is shown as well as the comparative length of the steps. The whole is laid down from a scale of five inches to an inch. The plate does not present the appearance of any one specimen; but a connected view of the results obtained by an examination of all the specimens that have come under my notice. Very few single specimens are as perfect as those here represented; but a careful examination of various specimens has brought to light new characters, so as to justify me in exhibiting the tracks of as perfect a form as those on the plate. Where rows of several tracks are given on this plate, the toes are represented as turned outwards, and slightly curved, as they are seen in the most perfect specimens.

The two first species on this comparative view are exhibited in relief; and the others as depressions. This was done in order to give a more distinct sketch of the protuberances on the under side of the toes of the two first species. It should be recollected that such a representation will invert the position of the feet; so that what appears to be the left one is in fact the right one, and *vice versa*.

In the series of figures extending from 1 to 9, and including 16, 17, 23 and 24, an attempt is made to exhibit the tracks just as they appear on the rock. Yet the scale (twenty four inches to one inch,) from which they are laid down, is so small, that the representation probably falls short of the truth; since no attempt has been made to show the claws, which do sometimes appear. Yet in general, where the rock has been for some time exposed, these and other more delicate parts of the impression are obliterated; and it is only by cleaving down insulated specimens that I have discovered them.

* Also the Bantam domestic fowl.—*Ed.*