

possible extent of surface in the smallest space. A similar contrivance is shown by the Coprolites to have existed in the Ichthyosaurus. See Pl. 15, Figs. 3, 4, 6.\*

*Impressions of the Mucous Membrane on  
Coprolites.*

Besides the spiral structure and consequent shortness of the small intestine, we have additional evidence to show even the form of the minute vessels and folds of the mucous mem-

\* These cone-shaped bodies are made up of a flat and continuous plate of digested bone, coiled round itself whilst it was yet in a plastic state. The form is nearly that which would be assumed by a piece of riband, forced continually forward into a cylindrical tube, through a long aperture in its side. In this case, the riband moving onwards, would form a succession of involuted cones, coiling one round the other, and after a certain number of turns within the cylinder, (the apex moving continually downwards,) these cones would emerge from the end of the tube in a form resembling that of the Coprolites, Pl. 15, Figs. 3, 5, 7, 10, 11, 12, 13, 14. In the same manner, a lamina of coprolitic matter would be coiled up spirally into a series of successive cones, in the act of passing from a small spiral vessel into the adjacent large intestine. Coprolites thus formed fell into soft mud, whilst it was accumulating at the bottom of the sea, and together with this mud, (which has subsequently been indurated into shale and stone,) they have undergone so complete a process of petrification, that in hardness, and beauty of the polish of which they are susceptible, they rival the qualities of ornamental marble.

Fig. 6, shows a longitudinal section through the axis of