Spiral Disposition of Small Intestines.

As the more solid parts of animals alone, are usually susceptible of petrifaction, we cannot demonstrate by direct evidence the form and size of the small intestines of the Ichthyosauri, but the contents of these viscera are preserved in such perfection in a fossil state, as to afford circumstantial evidence that the bowels in which they were moulded, were formed in a manner resembling the spiral intestines of some of the swiftest and most voracious of our modern fishes.

We shall best understand the structure of these intestines by examining the corresponding organs of Sharks and Dog-fish, animals not less peculiarly rapacious among the inhabitants of our modern seas, than the Ichthyosauri were in those early periods to which our considerations are carried back. We find in the intestines of these fishes, (see Pl. 15, Figs. 1, and 2,) and also in those of Rays, an arrangement resembling that of the interior of an Archimedes screw, admirably adapted to increase the extent of internal surface for the absorption of nutriment from the food, during its passage through a tube containing within it a continuous spiral fold, coiled in such a manner, as to afford the greatest