

65. In the Radiata, (Fig. 12,) the nervous system is reduced to a single ring, encircling the mouth, and giving off threads towards the circumference. It differs essentially from that of the Mollusks, by being disposed in a horizontal position, and by its star-like form.

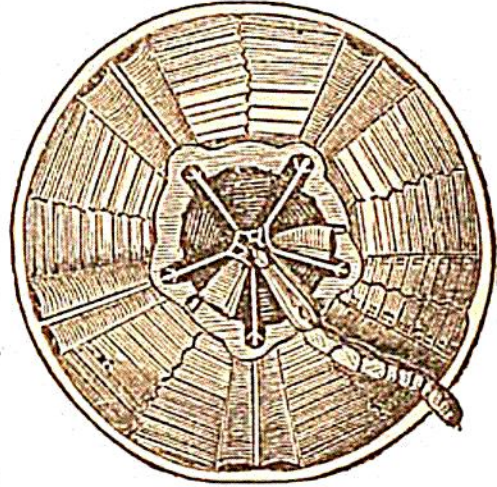


Fig. 12.

66. The nerves branch off and diffuse sensibility to every portion of the body, and thereby men and the higher animals are enabled to gain a knowledge of the general properties of the objects which surround them; every point of the body being made capable of determining whether an object is hot or cold, dry or moist, hard or soft, &c. There are some parts, however, the ends of the fingers, for example, in which this sensibility is especially acute, and these also receive a larger supply of nerves.

67. On the contrary, those parts which are destitute of sensibility, such as the feathers of birds, the wool of animals, or the hair of man, are likewise destitute of nerves. But the conclusive proof that sensibility resides in the nerves is, that when the nerve which supplies any member of the body is severed, that member at once becomes insensible.

68. There are animals in which the faculty of perception is limited to this general sense; but their number is small, and, in general, they occupy the lowest place in the series. Most animals, in addition to the general sensibility, are endowed with peculiar organs for certain kinds of perceptions, which are acted upon by certain kinds of stimuli, as light, sound and odor, and which are called the SENSES. These are five in number, namely: *sight, hearing, smell, taste, and touch.*