

the German Ocean, the temperature of which it lowers sensibly, and a very narrow belt passing down along the west coasts of the British Islands. It is in this belt that we usually work the dredge and tow-net; and, with the exception of some very curious compound forms which sometimes swarm in the West Highland Lochs, Radiolarians are scarce. Whenever the belt of water of northern derivation is passed, which is only from sixty to eighty miles from the shore, these forms, which frequently occur in the Atlantic, the Mediterranean, the Pacific, and all moderately warm seas in sufficient numbers to discolor the water, become abundant. The RADIOLARIA form a class of the somewhat negative subkingdom PROTOZOA—a subkingdom retained for the reception of all those animals of comparatively simple structure, such as the INFUSORIA, etc., whose relations we can not yet fully make out. The Radiolaria consist essentially of a little mass of sarcode, with no very definite bias as to form, but tending, when irritated, to assume more or less that of a sphere. The sarcode consists usually of rounded or oval granular masses of a brownish or yellowish color, interspersed with very characteristic round oil-cells, bright yellow, and very refractive; the whole cemented together by soft transparent sarcode, including fine granules. Near the centre of the body there is usually a very evident rounded mass of bioplasm which colors deeply with carmine; and the same dye brings out smaller bioplasts scattered through the general substance. When the animal is at rest, and happy in a cell with abundance of fresh sea-water, soft sarcodic matter from the peripheral layer stretches itself out all round in a maze of straight radiating pseudopodia, only visible under a high magnifying power; and in these the peculiar flowing motion, which is so characteristic of sarcode-feeding filaments, is well marked. In many Radiolarians, and especially in some very peculiar compound forms, a spherical internal chamber, called the "central capsule," whose function we do not fully understand, is very