

species should be carefully sought under stones, bark, dung, or flowers, or swept with a small net from grass or leaves. They may be put in quills, small cones of paper, or in glass vials. They can be readily killed by immersing the bottles, &c., in which they are collected in hot water, or exposing them to the vapor of ether.

When possible, a number of oz. or 2 oz. vials, with very wide mouths, well stopped by corks, should be procured, in which to place the more delicate invertebrata, as small crustacea, worms, mollusca, &c.

It will frequently be found convenient to preserve or transport insects pinned down in boxes. The bottoms of these are best lined with cork or soft wood. Beetles are pinned through the right wing-cover or elytra; all other insects through the middle of the thorax.

The traveller will find it very convenient to carry about him a vial having a broad mouth closed by a tight cork. In this should be contained a piece of camphor or still better, of sponge soaked in ether, to kill the insects collected. From this the specimens should be transferred to other bottles. They may, if not hairy, be killed by immersing directly in alcohol.

The camphor should always be fixed in the box containing insects, as it would break the feet and antennæ of the latter if in a loose and crystalline state. It may be kept in a piece of muslin or canvas, and then pinned at the bottom of the box.

2. RADIATES, MOLLUSKS &c.

Sea-urchins and star-fishes may also be dried, after having been quite immersed for a minute or two in boiling water, and packed up in cotton, or any soft material which may be at hand.

The hard parts of coral, and shells of mollusca may also be preserved in a dried state. The soft parts are removed by immersing the animals for a minute or two in hot water, and washing clean afterwards. The valves of bivalve shells should be brought together by a string. The soft parts of shell-fish, &c., should when possible be preserved in alcohol.

Wingless insects, such as spiders, scorpions, centipedes or thousand-legs, earth-worms, hair worms, and generally all worm-like animals found in the water, should be preserved in alcoholic liquor, and in small bottles or vials.

3. MINUTE MICROSCOPIC ORGANISMS.

It is very desirable to procure specimens from many localities, of the various forms of microscopic animals and plants, not only on account of their intrinsic interest, but for their relation to important general questions in physical and natural science. These will almost always be found to occur in the following localities:—

1. In all light-colored clays or earths, as found in peat bogs, meadows, soils, &c., particularly when these are remarkably light.