

## V. THE COLLECTION AND PRESERVATION OF ECHINODERMATA.

Like other animals, and, indeed, like all natural objects, Echinoderms can only be studied from specimens. As far as possible, they should be observed in their own homes and under their natural conditions of life. But this is not enough; they must be taken away to where their anatomy can be studied at leisure and under more favorable conditions, and to serve to illustrate to others, and to arouse in them an interest in, these forms. How to collect, and, particularly, how to preserve Echinoderms, must therefore be an important part of our consideration of the group.

There are two methods of taking them, shore-collecting and dredging. The best localities for both are found where strong but not violent currents of the clearest water flow over bottoms of various kinds, but with rock and gravel predominating. For shore-collecting those places are particularly good where the tide leaves among the ledges pools with bottoms of gravel and scattered boulders. To such places the student should go at the time of the spring tides if possible, for the greater retreat of the water will lay bare many a treasure inaccessible at other times. He should go clad in his oldest clothes and long rubber boots, carrying with him one or two ordinary pails, some small bottles or vials of alcohol in his pockets, and a spade for digging in the gravel, the handle of which can be used as a lever for overturning stones. A companion to act as general assistant will be found of great value. Then, looking upon the less exposed open places, peering under ledges and among boulders, searching among the seaweeds, digging in the gravel, overturning stones and scanning their under sides, the student, if his heart be in his work, cannot fail of a rich harvest.