yellow vesicles like ripe yellow plums ranged along their backs, each surmounted by its expanded crown of oval tentacles; in the figure the young are represented about half grown. All the young I examined were miniatures of their parents; the only marked difference was that in the young the ambulacra of the bivium were quite rudimentary—they were externally represented only by bands of a somewhat darker orange than the rest of the surface, and by lines of low papillæ in the young of larger growth; the radial vessels could be well seen through the transparent body-wall; the young attached themselves by the tentacular feet of the trivial ambulacra, which are early and fully developed.

"We were too late at the Falklands (January 23) to see the process of the attachment of the young in their nursery; even if we could have arranged to keep specimens alive under observation, there can be little doubt that, according to the analogy of the class, the eggs are impregnated either in the ovarial tube or immediately after their extrusion, that the first developmental stages are run through rapidly, and that the young are passed back from the ovarial opening, which is at the side of the mouth, along the dorsal ambulacra, and arranged in their places by the automatic action of the ambulacral tentacles themselves."

In order to complete the above description by Sir Wyville Thomson, the following remarks may be added:—As a rule, the tentacles in *Cucumaria* are unequal, two of the ventral ones being considerably smaller, but strangely enough, *Cucumaria crocea* appears to resemble the state in *Cucumaria frondosa*, &c., in having them equally large. The anus is devoid of teeth. Pedicels are only present in the ambulacra, where they are arranged in a double row along each. Sometimes this arrangement of the pedicels of the ventral ambulacra is slightly deranged, so that three instead of two rows are to be distinguished along each ambulacrum. The difference between the dorsal and ventral pedicels is very conspicuous, the former being more numerous and several times smaller. In the young, the size of the dorsal pedicels decreases gradually, so that in small individuals, from 20 mm. to 40 mm. long, no dorsal pedicels at all are to be seen. Besides, the smaller forms have only a simple row of pedicels on the ventral ambulacra, and it seems to be a rule that when the double rows of ventral pedicels are developed the dorsal ones begin to grow out.

The perisome is soft and very pliable, and does not contain any calcareous deposits, excepting in the tentacles and pedicels, the former being supported by scattered, small, perforated, irregular spicules or plates, the latter by a larger, well developed, round, perforated, terminal plate, with very numerous small holes, which is sometimes surrounded by small spicules. The calcareous terminal plates of the ventral pedicels are much larger than those of the dorsal pedicels, the former having a diameter of about 0·72 mm., the latter of only 0·38 mm. The Polian vesicle is single and rather large. The single, dorsal, madreporic canal winds upwards attached to the dorsal mesentery. In the largest specimens the retractor muscles are attached at a distance of about 25 mm. behind the