

SPROUTING FLOWER BUDS OF OPUNTIA.

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In June of last year I took some *Opuntia* plants home, and also some top joints heavily set with large buds. The former were planted in the garden, the latter set in an Oleander tub. When, after a month, none of the flower buds had opened, it was thought that they were too many, as the joints bearing them were without roots, and most of them were cut off and left lying on the ground, where a part of them later on became partly or entirely covered with soil. In September, I was surprised to find them all green and fresh; most of them had rooted, and a few even sprouted, sending up shoots from half an inch to over an inch high, being perfect little joints. At the present writing (Jan. a. c.) all are alive, and, no doubt, will grow out to plants next summer. They will be watched closely and further report be given.

It might be added that the *Opuntia* calyx-tube, which is later the fruit, has "eyes," that is buds, of the same character as the ordinary buds of the plant, with clusters of bristles; and out of these the young shoots grew, when the bud took root.

Evidently these buds retain more of the nature of the mother plant than is common in flowers. It is unknown to me, whether similar observations have been made before. But it would be of interest to make experiments with different plants. Would the receptacles root and sprout if detached after flowering and fertilization have taken place? Would the buds sprout when left in situ on the mother plant, after the flowering parts had been removed, the receptacle only left in place? Will the buds of other genera of Cacteeae, and other similar succulent plants behave in the same way, under favorable conditions?

So-called viviparous plants are, as is well known, rather common, e. g. among Gramineae, Cyperaceae, Polygoneae. But there the actual flower parts develop into leaves, from which they had originally been derived, and while yet remaining on the parent plant.

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