trunks, of which *O. articulata*[1] is a representative. On the other hand, there is no doubt that the latter approach the bulbiferous type, through the *enneaphylla* form already described.

Commonly the leaflets are digitately clustered at the end of an elongated petiole; but the pinnate type, represented among our species by *O. Berlandieri*, is not uncommon in the tropical American species, and in the section *Biophytum* the elongated leaves consist of a large number of crowded leaflets. On the other hand the suppression of all but the terminal leaflet results in the unifoliolate leaf of *O. dichondraefolia* and a few species that do not occur in our territory; and in *O. rusciformis* (sometimes quoted and figured as *O. frutescens*), the reduction and final abortion of the leaflets, accompanied by an unusual dilatation of the petioles, results in as perfect phyllodia as those of *Acacia*,—but these stand with their edges tangential to the stem, not radial as in the latter genus. A transition to this type is afforded by a considerable series of species in which the petioles are more or less dilated and efficient in assimilation. On the other hand, Hildebrand[2] has pointed out that the leaves of seedlings of *O. Lasiandra* are at first trifoliolate, though the later leaves consist of 7–9 leaflets.

The leaves of *Oxalideae* have long been known to possess the power of movement in a marked degree. The change of position of the leaflets at night, so that they are then exposed to a minimum cooling by radiation — the so-called sleep of the leaves — is a familiar example. Under the influence of light and warmth, this position is exchanged in the daytime for one in which they have the best exposure for assimilation; but a sudden and intense illumination causes the leaflets to close again more or less, and continued exposure to either light or darkness for a period of days breaks the readiness of their response to either, while it has been shown that if so fastened that they cannot close at night, they soon become feeble or die.

In *Averrhoa*, the leaflets are usually in evident motion, from an intensification of their circumnutation, — a movement which has been carefully studied by Mr. Darwin in many plants. In this respect they resemble the small lateral leaflets of *Desmodium gyrans*, the common "telegraph plant" of greenhouses. It is also known that the leaves of *Biophytum*, to a certain extent those of *Oxalis acetosella*, and in a still less degree of other species, are influenced by shocks, which cause the leaflets to assume the nocturnal position with more or less rapidity, as in *Mimosa*, *Robinia*, etc. The seat of these different movements is in the pulvini near the base of the general petiole and of the short stalks of the leaflets, and in the midribs of the latter.

The flowers of most species are solitary or umbellately clustered; but in the former case the peduncle is 2-bracted some distance below the flower, and the umbels are likewise subtended by two or more bracts. In specimens of *O. violacea*[3] some of the branches of the umbel have been observed to branch, and this, with the constant presence of the bracts referred to, indicates that the inflorescence in these cases is in reality a reduced cyme. A typical dichotomous cyme is, in fact, regularly developed in luxuriant specimens of *O. corniculata*, var. *stricta*[4]. In *O. Brasiliensis*, bulblets have been observed,

[1] Bot. Magazine, cx, Pl. 6748.
[2] Bot. Zeitung, 1887, 3.
[3] Zuccarini: Monogr. Oxalid., 19; Jacquin: Hort. Vindob. 84, Pl. 180.
[4] On this subject see Zuccarini: Nachtrag Monogr. Amer. Oxalisarten, 190; Wydler: Pringsheim's Jahrb. wiss. Bot. ix; Eichler: Blüthendiagramme, ii, 304, etc.