

wards with considerable force (Pl. 10). The segments of the ovary having already bent themselves at a sharp angle with the beak, the result of this movement is to throw the seed, or even the entire carpel, to a considerable distance. So far as I have examined them in the field, or as the indications of herbarium specimens are to be trusted, our species behave uniformly in this manner (though in *L. pusillum* the carpels do not bend abruptly above the ovary) with the exception of *G. Robertianum* (Pl. 10, fig. 10) and some of the other small-flowered species, where the ripened segments of the ovary, though nominally dehiscent, remain closed about the seeds, imprisoning them. To compensate for this, these segments nearly separate from the styler appendages, with which, in *G. Robertianum*, they are finally connected only by a pair of slender silk-like bundles of fibres. When the style at length breaks away and suddenly becomes arched, these fibres give way and the ovarian segment with its enclosed seed is thrown off with much force, often to a distance of many feet. (Note 4.)

ERODIUM, L'Her., Geran. Pl. 1-6; Benth. and Hook. Gen., 1, 272.

At length mostly caulescent, with often pinnatisect leaves; peduncles mostly umbellately several-flowered; flowers nearly regular, the upper petals a trifle smallest; stamens with anthers 5, opposite the sepals, alternating with as many sterile filaments; carpels very sharp-pointed below, covered with obliquely ascending appressed hairs, at most tardily dehiscent; styles spirally twisted below when ripe, bearded on the inner side; seed obconical or oblong, not sculptured; otherwise as in *Geranium*.—About fifty species, mostly natives of the north temperate portion of the Old World, some of them widely distributed as weeds.

SYNOPSIS OF NORTH AMERICAN SPECIES.

- *Leaves round-ovate, with approximated lobes, or not lobed; seed large, 4-5 mm. long.
 Pedicels glandular, seeds stout. *E. macrophyllum*.
 Not at all glandular, seeds slender. *E. Texanum*.
- * * Leaves ovate-oblong, with approximate lobes; seed smaller, not over 3 mm. long.
 Fruit very small, beak 25 mm. long. *E. malachoides*.
 Fruit much larger, beak 70-120 mm. long.
 Leaves pinnatifid with irregularly toothed segments. *E. Botrys*.
 Cauline leaves bipinnatisect with linear-oblong segments; sepals and fruit very large. *E. Ciconium*.
- * * * Leaves oblong, with remote segments; seed as in the last.
 Leaves pinnatifid, or bipinnatifid, with irregularly serrate segments; stipules obtuse. *E. moschatum*.
 Leaves bipinnatisect, with narrow sharp-toothed segments; stipules acute. *E. cicutarium*.