

trudes above the anthers, and no pollen can get to it from the anthers. By pressure from above on the carina it is bent a little downwards, while anthers and pistil follow in this direction, but then fly upwards with elasticity, when the pollen flies forth in a small cloud, and a portion of it settles unfailingly on the stigma. According to my observations, in this case no sinking of the carina occurs in the last stage of the development of the flower as in *Indigofera* and *Medicago*. Hence (he concludes) fecundation only happens through the aid of insects, since the lapping down of the carina is not the completion of the flower's development."

In connexion with these observations I would wish to quote a description of the somewhat similar construction in *Cytisus scoparius*, kindly communicated to me by Mr. Darwin. He says, "In the Broom, if the flowers be protected from insects, the parts (stamen and pistil) do not spring out, and scarcely any pods are produced. In a flower lately expanded, when a bee alights on the keel, the shorter stamens alone are ejected, and they dust the abdomen of the insect. When the flower is a day or two older, if a bee alights on the keel, the pistil and longer stamens spring violently out, and the hairs on the pistil deposit plenty of pollen on the bee's back, against which the stigma is rubbed. When the bee flies away, the pistil curls still more, and the stigmatic surface becomes up-turned, and stands close to the protruded anthers of the shorter stamens. We have seen that the bee gets dusted in its abdomen from the shorter stamens of the younger flowers; and this pollen will be left on the up-turned stigma of the curled pistil of the older flowers. Thus both the upper and lower surface of the bee gets dusted with pollen, which will be transferred to the stigma at two different periods."