

are attached, and from which the root is developed, is called the *radicle*, a term meaning "little root." As it is strictly, however, a rudimentary *stem*, and not a root, the term *caulicle* would be better. Between the cotyledons, at the summit of the radicle, you will find a minute upward projection. This is a bud, which is known as the *plumule*. It develops into the stem.

65. If you treat a Pea or a Bean (Figs. 71, 72) in the same manner as the Cucumber seed, you will find it to be

Fig. 71.



Fig. 72.

constructed on the same plan. The embryo of the Bean is dicotyledonous also. But you will observe that in these cases the embryo occupies the whole of the interior of the seed. In describing the seed of the Buttercup, it was pointed out that the embryo occupies but a very small space in the seed, the bulk of the latter consisting of *albumen*. Seeds like those of the Buttercup are therefore called *albuminous* seeds, while those of the Bean and Pea are *exalbuminous*. But, notwithstanding this difference in the structure of the seed, the *embryo* of the Buttercup, when examined under a strong magnifier, is found to be dicotyledonous like the others. In short, the dicotyledonous embryo is a character common to all the plants we have examined—common, as a rule, to all plants possessing the other characters enumerated above. From the general constancy of all these characters, plants possessing them are grouped together in a vast Class, called Dicotyledonous plants, or, shortly, **Dicotyledons**.