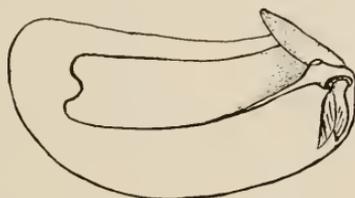


## A TRICOTYLEDONOUS BEAN.

---

J. M. VAN HOOK.

While examining a number of Lima bean seed in the summer of 1920, the writer was surprised to find between the ordinary cotyledons a third body, apparently a third cotyledon. Its shape and location is well shown in the accompanying figure. While a greater portion of the extra cotyledon lies parallel with the others and pressed between them, the part at the end where it is attached is twisted so that it is vertical to its flat surface and lies between the plumule and radicle. The two regular cotyledons are also attached at this end.



Enlarged tricotyledonous bean with one of the outer cotyledons removed.

Polycotyledonous beans may not be of rare occurrence, though the writer knows of none reported on Lima beans. Harris (Mem. N. Y. Bot. Gard. 1916.) reports a race of the common bean which has the cotyledons varying from two to seven in number, but which tends to be tetracotyledonous.

Indiana University,  
October, 1920.

