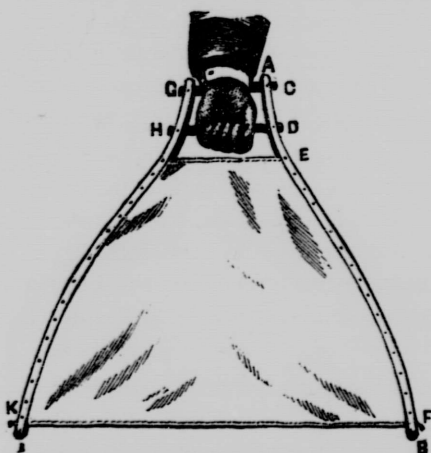


at the base allow of this net being easily held by taking the upper bar in the left hand, so that the lower bar rests against the back



of the wrist. We have used these nets in connection with our official field work and have found them very serviceable. Dr. Fletcher has recommended them in his departmental reports as of much value in collecting various insects which are troublesome to the market gardener, etc., so that they can be afterwards destroyed.

There are many kinds of caterpillars, however, which cannot be collected by beating, or gathered from beneath stones, bark, etc., on the ground. Some of these are borers, which pass the whole of their larval existence feeding inside the stems and roots of various plants. The caterpillars of the genus *Papaipema* (*Hydræcia*) have, within the last few years, been given special attention by some students. These larvæ are true borers and work within the stems of burdock, goldenrod, etc. *Papaipema cataphracta*, which bores in burdock, is a common species at Ottawa wherever the plants are numerous, and the presence of the caterpillar can usually be detected by the withering and discolouring of the tips. The caterpillars of *P. appassionata*, which have only recently been discovered, were found, by Mr. Henry Bird, of Rye, N.Y., feeding in the roots of the Pitcher-plant (*Sarracenia*). Last season, when at the Mer Bleue, the writer examined many pitcher-plants, but could not find any larvæ, although in the root of one plant the work of a noctuid caterpillar was detected, as well as some frass, but of course we do not know that it was of this species.

Other larvæ of smaller species of moths form various kinds of cases, inside of which they live and change to the pupal state,