into the ground. Here it contracts to the pupa state, and in a few days issues as a large two-winged fly, which I have described (*loc. cit.*) as *Sarcophaga sarraceniæ*—the Sarracenia Flesh-fly.

The immense prolificacy of the flesh-flies, and the fact that the young are hatched in the ovaries of the parent before they are deposited by her on tainted meat and other decomposing or strong-smelling substances, have long been known to entomologists, as has also the rapid development of the species. The viviparous habit among the Muscidæ is far more common than is generally supposed, and I have even known it to occur with the common house-fly, which normally lays eggs. It is also possessed by some Œstridæ, as I have shown in treating of *Œstrus ovis*, the Sheep Bot-fly,*

But the propensity of the larvæ for killing one another, and their ability to adapt themselves to different conditions of food supply are not sufficiently appreciated. I have long since known, from extensive rearing of parasitic Tachinidæ, that when, as is often the case, a half dozen or more eggs are fastened to some caterpillar victim only large enough to nourish one to maturity, that they all hatch and commence upon their common prey, but that the weaker eventually succumb to the strongest and oldest one, which finds the juices of his less fortunate brethren as much to his taste as those of the victimized caterpillar. Or, again, that where the food supply is limited in quantity, as it often is and must be with insects whose larvæ are parasitic or sarcophagus, such larvae have a far greater power of adapting themselves to the conditions in which they find themselves placed, than have herbivorous species under like circumstances.

Both these characteristics are strongly illustrated in *Sarcophaga sarraceniæ*. Several larvae, and often upward of a dozen, are generally dropped by the parent fly within the pitcher; yet a fratricidal warfare is waged until usually but one matures, even where there appears macerated food enough for several. And if the Xanthoptera larva closes up the mouth of the pitcher ere a sufficient supply of insects have been captured to properly nourish it, this Sarcophaga larva will nevertheless undergo its transformations, though it sometimes has not strength enough to bore its way out, and the diminutive fly escapes from the puparium, only to find itself a prisoner unless deliverance comes in the rupture or perforation of the pitcher by the moth larva or by other means. This rupturing of the

* 1st Mo., Ent. Rep., p. 165.