

pitcher does not unfrequently take place, for Dr. Mellichamp writes under date of June 27, as follows: "Most old leaves now examined—I might almost say all—instead of being bored, seem ripped or torn, as if by violence, apparently from without. You see occasionally shreds of the leaf hanging. Surely the legless larva of *Sarcophaga* cannot do this! What then—toads, or frogs, or crawfish abounding in these moist, pine lands? or rather is not the fat maggot the occasion of the visits of the quail, which lately I have observed here?"

These two insects are the only species of any size that can invade the death-dealing trap with impunity while the leaf is in full vigor, and the only other species which seem at home in the leaf are a minute pale mite belonging apparently to *Holothyrus* in the Gamasidæ, and which may quite commonly be found crawling within the pitcher; and a small Lepidopterous leaf-miner, which I have not succeeded in rearing. There must, however, be a fifth species, which effectually braves the dangers of the bottom of the pit, for the pupa of *Sarcophaga* is sometimes crowded with a little Chalcid parasite, the parent of which must have sought her victim while it was rioting there as larva.

No other insect, so far as we now know, can crawl up the slippery belt, but tumble into the tube and there meet their death.

Certain questions very naturally present themselves here: First, What gives the flesh-fly more secure foothold on the slippery pubescence than the common house-fly exhibits? Second, What enables the larva of the flesh-fly to withstand the solvent property of the fluid which destroys so many other insects? Third, What gives the *Sarracenia* moth and its larva similar security? I can only offer, in answer, the following suggestions: The last joint of the tarsus of the common house-fly has two movable, sharp-pointed claws, and a pair of pads or "pulvilli." These pads were formerly supposed to operate as suckers, and all sorts of sensational accounts of this wonderful sucker have been given by popular writers, who forgot that there are any number of minute insects having no such tarsal apparatus, which are equally indifferent to the laws of gravitation so far as walking on smooth, upright surfaces, or on the ceiling, is concerned. In reality, these pads are thickly beset on the lower surface with short hairs, most of which terminate in a minute expansion kept continually moist by an exuding fluid—a sort of perspiration. Take the soft human hand, moistened by perspiration or other means, and draw it, with slight pressure, first over a piece of glass or other highly-polished surface, and then over something that has a rougher surface, such as a