Plants as Assassins.

A great deal of attention has been given of late to that remarkable class of plants which are furnished with apparatus for catching and devouring flies and small insects. Charles Darwin has been experimenting largely with them, and has given the world the results of his researches in a work entitled "Carnivorous Plants," just published in London. Rather more than half of the book is devoted to the most abundant and readily obtainable plant, the common sundew, *Drosera rotundifolia*. The leaves of this plant are covered with small glands from which a thick and sweetish fluid exudes. Around the edge is a number of tentacles, each consisting of a round knob and pedicle. Insects are attracted by the fluid and get stuck to the surface of the leaf. Then the tentacles bend over and press the insect down upon the glands, and all the soft parts are slowly digested and absorbed, the relics falling off when the tentacles expand again. As might naturally be expected, salts of ammonia are among the substances which have the most poweful effect on the leaves of *Drosera;* but the excessively minute quantities which are efficacious will probably be as astonishing to every one else as they were to Mr. Darwin himself. From a most carefully conducted series of experiments, from which every possible source of error seems to have been eliminated, it appears that the absorption by a gland of 1-268800 of a grain of carbonate of ammonia (this salt producing no effect when absorbed through the root) is sufficient to excite inflection and aggregation of the protoplasm. With nitrate of ammonia a similar effect is produced by the 1-691200 of a grain, while the incredibly small quantity of 1-19760000 of a grain of phosphate of ammonia produces a like effect. The effect of inorganic salts and poisons can by no means be inferred from the effect of the same substances on living animals, nor from their chemical affinity. Nine salts of sodium all produced inflection, and were not poisonous except when given in large doses, while seven of the corresponding salts of potassium did not cause inflation, and some of these were poisonous. This corresponds to the statement of Dr. Burdon Sanderson, that sodium salts may be introduced in large quantities into the circulation of mammals without any injurious effects, by suddenly arresting the movements of the heart. Benzoic acid, even when so weak as to be scarcely acid to the taste, acts with great rapidity and is highly poisonous to *Drosera*, although it is without marked effect on the animal economy. The poison of the cobra on the other hand, so deadly to all animals, is not at all poisonous to *Drosera*, although it causes strong, and rapid inflation of the tentacles and soon discharges all color from the glands.