

S. We do not hear very much about the Hessian fly now, do we?

T. Four or five very minute species of flies are parasitic upon it. They pierce the egg, or the larva, or the pupa, and deposit one of their own eggs in the body. These, in due time, are hatched, and the young larvæ of the parasites feed upon the body of their host, and destroy it. Under certain combination of circumstances these parasites increase with the abundance of their hosts so as even to exterminate the Hessian fly in some localities. There is no remedy so cheap and effective as nature's own.

PRACTICAL BOTANY.

No. V. THE ORCHIDS.

"What is an orchid?" said a teacher the other day: "do they grow here?" "How may they be recognized?"

The orchidaceæ is a large and interesting family of plants. They are found in these Provinces. Many of the species are abundant, while others are of rare occurrence. In New Brunswick and Nova Scotia up to the present time about thirty species have been discovered and tabulated. No family of our plants is more attractive or more worthy the attention of students. The different species have so many features in common that when one is made the subject of careful analysis and study, the others may be easily recognized. It may require prolonged and continuous effort to thoroughly master the details of structure of one, but the labor will be rewarded in a life-long enjoyment of the study and occurrence of these wonderfully beautiful members of our flora. Some are so rare that perhaps but few individuals of certain species will be met with in the course of a lifetime, and will have to be sought for in the seclusion of the deep forest. The writer well remembers the delight with which he gazed upon *Calypso borealis* for the first time—one of the most beautiful plants in these provinces, and one which it is safe to say not more than a dozen people here have seen and recognized. In general outline not unlike the plant pictured in this article, its flower is more inflated, like the lady's slipper, and showy, variegated with purple, pink and yellow. It has a single ovate thin leaf, slightly heart-shaped at the base, springing from the bulbous root. It is named after the goddess Calypso, and the name is singularly appropriate, as it means *to conceal*. A prolonged search for the plant last month (it flowers in June), for the purpose of illustrating this article, failed to reveal its whereabouts in haunts where it had been found in previous years (for, tempted by its beauty, it had been taken up

bodily and transported to the window-seat, delighting the eyes of friends, and causing the delicately nurtured house plants to grow green with envy while its delicious bloom lasted). Lest one may think we go in ecstasies over this child of the forest, hear what that genial lover of flowers and talented botanist, Prof. W. W. Bailey, says about it:

Calypso, goddess of an ancient time,
(I learn it not from any Grecian rhyme
And yet the story I can vouch is true)
Beneath a pine tree lost her dainty shoe.

The tints of purple and the texture fine,
The curves of beauty shown in every line,
With fringes exquisite of golden hue,
Perfect the wonders of the fairy shoe.

A writer on botany many years ago said: "This rare and beautiful plant is found in Vermont, Nova Scotia, Michigan, and west to Oregon." Has it been found in Nova Scotia recently? A well-known botanist there says he has never seen the plant.

Although the first of July is rather late to look for it, it may be found in deep, mossy woods.

But let us look at a few of the difficulties promised above. The plant selected to illustrate this article is one scarcely less beautiful than *Calypso*, but fortunately more common, and may be found in the cold bogs of New Brunswick and Nova Scotia in July and August. Its handsome rose-purple flowers makes it a conspicuous and beautiful object amid the brown earth and duller heath flowers of the barrens. It is from five to nine inches high, springing from a solid bulb. (Most plants of this family have either tuberous or fleshy roots.) The scape, or stem which bears the flower, has two or three little bracts which tightly envelop the stem. The single linear leaf protrudes from its sheath in the scape *after* the plant flowers. The scape of *Arethusa* terminates in one (rarely a pair is found) bright, rose-purple flower. (The flowers of this family are very irregular, borne either single, as in this case, or in racemes or spikes, as in the case of *Spiranthes*; always at the top of the stalk, and each flower subtended by a bract.) The perianth of *Arethusa* consists of six parts, five of these much alike, but the sixth quite different.

