

In the *Canadian Entomologist*, vol. 2, p. 9, a third parasite is described by Mr. B. D. Walsh, under the name of *Hemiteles nematocorus*, which was reared from the cocoon of the saw-fly, by our esteemed friend the Rev. C. J. S. Bethune, of Port Hope, Ont. In his notes on its history he says, "On June 29th (1869) I observed, to my surprise, a saw-fly cocoon of *Nematus ventricosus* attached to a leaf high up on a gooseberry bush, instead of on or under the surface of the ground, as usual. Thinking that the unwonted situation might be the effect of a parasitic attack upon the larva, I brought the specimen in, and in a few days afterwards found that this parasite had emerged from it." Mr. Walsh remarks that this same species of *Hemiteles* has been found near Rock Island, Illinois, where at that time the gooseberry saw-fly had not reached; hence, in all probability, this is an indigenous insect, which has taken kindly to this pest, thus showing that a native parasite does sometimes acquire the habit of preying upon an imported insect, a fact of great practical importance as well as scientific interest. In July, 1870, we observed a small ichneumon fly at work on the gooseberry worm, and communicated the facts to the *Canadian Entomologist*, vol. 2, p. 146, as follows: On the 21st of July, at a quarter past seven in the evening, we were among the currant and gooseberry bushes, watching the manipulations of a few of those well-known foes, the larvæ of *Nematus ventricosus*. They were feeding away voraciously, when a disturber of their peace appeared among them, in the shape of a small black ichneumon fly, which fastened itself on the body of one of their number, and began to deposit its eggs, by means of a sharp ovipositor, dexterously thrust through the skin of its victim, whose jerks and writhings, while indicating a very uneasy state, failed to shake off the tormentor. The fly remained some time attached, and so intent was it upon fulfilling the instincts of its nature that a capture was made of both fly and larva, by the sudden movement of a pill-box; but while endeavouring to transfer them to a glass, so that their further operations might be better observed, the fly suddenly escaped and was seen no more. The larva also died before reaching maturity, so that the further history of the parasite could not at that time be elucidated. Possibly this may be the same insect as that last referred to.

FIG. 29.



The accompanying figure, 29, represents another insect friend, belonging to the *Heteroptera*, or true bug family, and known under the name of *Podisus placidus*, Uhler. It is represented much enlarged at *a* so as to show its markings more distinctly; the smaller outline figure below shows its natural size. We were the first to note the fact of this insect in its immature state preying on the saw-fly larvæ, and communicated our observations to the *Canadian Entomologist*, vol. 2, p. 15. About the middle of August, 1869, we first observed these friends at work on the worms. They were nearly round, about the size of a common lady-bird, having the head, thorax and legs black, and the abdomen red, with an elongated black spot in the centre, divided across by a whitish line. Approaching a caterpillar, they thrust their proboscis into it, and quietly suck its juices until it shrivels up and dies. With the view of testing the probable amount of good these friends were capable of accomplishing, we shut up two of them in a small box along with a dozen nearly full grown caterpillars, and at the end of three days found that they had consumed them all. Also six in another box with one bug, and in this instance the rate of consumption was about the same, two larvæ a day for each of these little creatures. The second time we fed them they did not get through their work quite so quickly; possibly they may have over-fed themselves at first. We have since repeatedly met with this useful insect, on its friendly mission, but as yet its numbers are quite insufficient to act as a material check on the natural increase of the saw-fly.

While we are not disposed to undervalue the labours of these friendly insects, we must admit that thus far, their combined efforts have been sadly insufficient to stem the advancing tide of the invading hosts. As confirmative of this, we would cite the fact that, in 1870 we collected several hundreds of the full grown worms, from which we reared the flies, but we failed to find a single parasite among the lot. We hope, however, that in time they will increase sufficiently to afford material aid to the agriculturist; but in the meanwhile recourse must be had to artificial measures, so as to bring sudden destruction upon the foe. Fortunately a very simple and effective, as well as economical remedy, is at hand, in powdered hellebore mixed in proper proportion with water. This is the root of *Veratrum album*, a plant which is a native of the mountainous districts of Europe, growing abundantly in the Alps and