

always commanded the highest price of any of our spring wheats; it is, as named, a bald variety; and in favourable seasons, a very fine sample with large bright berries. The bearded variety grew a very short ear, resembling a *club* with six or eight rows in the ear; it was best adapted for low, strong land, as it was not subject to rust, it yielded middling well, but was very hard to thrash—no fear of its shaking—it was rather fine and weak in the stem, very apt to lodge, which made it troublesome to harvest—there has been none of it grown here for many years. The Black Sea wheat, and the Tea wheat, were tried to some extent, but with no marked success. These two varieties were very similar, if not identical; rather soft in the straw, very apt to lodge and crinkle down; there has been none of them grown lately. But by far the most valuable variety that has ever been tried here is the "Life Wheat;" it began to be introduced into this township in 1849, having been grown in the neighbouring township of Otonabee for six years previously, and on all low wet strong land has entirely superseded all other kinds. Its most marked quality is its being always free from rust, and its bearing to be sown so late in the season as to escape the fly in a great measure; it is a bald variety, moderately productive, is reckoned rather hard to grind, but makes good flour. Its introduction was providential, as without a variety with its properties it is hard to say what the farmers on the low wet lands in the township would have done.

It does not reflect much credit on our farmers that they have not ere this bestowed some public testimonial on the gentleman who was the means of introducing it into the Province—he certainly has been a public benefactor, and we hope he will not be allowed to pass away without some mark of esteem for his public spirit; would all our farmers who have directly benefited by it (not to speak of other classes who have been indirectly benefited) contribute only one dollar each, we feel assured it would make a handsomer testimonial than was ever presented to any man in Canada.

There is a variety called the China wheat that has been tried of late; it is a heavily bearded kind, said to be best on light land; it has not been sufficiently tried to see whether it will prove valuable or not. The first prize for spring wheat has been twice awarded to this township at our Provincial Shows.

Before passing from the cultivation of wheat we would notice briefly the insect enemies by which it has been attacked in this township; in doing so we will confine ourselves chiefly to our own observation and experience. During the years 1840 to 1844 a fly that somewhat resembles the Hessian fly in the manner it damaged the wheat crop; it did considerable damage, but it soon passed away, and we have not observed it in any considerable numbers until

the past two seasons, when it has again made its appearance. We are inclined to think it is not the Hessian fly, but some one or other of the species of Joint flies. The larva of this fly we have found in the first or second (very rarely in the third) joint from the ground; when the larva makes its escape it eats through one side of the stem of the wheat, thus causing it to crinkle and fall down. The larva is of a dark brown colour, tapers to both ends, and is rather more than the eighth of an inch long; its ravages have never been very extensive, therefore the fly has been little noticed.

The next insect enemy to the wheat that made its appearance was a caterpillar, which we first observed in 1843, and in that and the two following years it was rather prevalent, it caused considerable alarm among farmers at the time; after 1845 it passed away, and was not observed till 1853, when it again made its appearance, and was to be found in most of our wheat fields till 1856; since then we have not seen a single specimen, nor heard anything of its ravages. This caterpillar is called, in the New York reports, "Gaylord's Wheat Caterpillar," and we believe the fly that deposits has never been ascertained. Asa Fitch, of New York State Entomologist, to whom we sent specimens in 1856, states so, and was very anxious to have the parent fly ascertained. We have, on one or two occasions, attempted to preserve them through winter, but have always failed. There was mostly only one or two caterpillars in a head of wheat, (occasionally have seen three,) they completely destroyed grain of wheat they were bred in; and, numerous, might be found crawling about barn in great numbers, after the wheat had been taken in. When cleaning up the wheat thrashing, the screenings would appear with them; and, when disturbed, would roll coil themselves up. When the caterpillar first seen, they were not more than one ten an inch long, those we kept grew till they reached $\frac{3}{4}$ of an inch in length. On their first appearance they had a soft cylindrical body of a pale colour; the head much darker than the body with the appearance of five dull stripes along body and at least six pairs of legs; they damaged the wheat soon after it was put in the bin; those we kept knawed hard grains of wheat, ginning at the seed end; they seemed to be alike in early or late wheat, as we have seen them in the fall wheat harvested in July, and spring wheat that was not sown till after the middle of May.

The damage done by this enemy of the wheat was trifling, compared to what was done by the wheat fly or Midge, (*the cecidomyia*) which first made its appearance here in 1840, and has ever since injured our wheat crop more. This insect is too well known to our farmers to need any description. It is well known the fly comes first out from