

another reason for such an examination of the subject as we have hinted at. The insect generally spoken of at present as preying upon the wheat in the ear, is the *Midge*, or Wheat Gnat (*Cecidomyia Tritici*). It is found in the kernels of wheat in its chrysalis or pupa state, the egg having been deposited by the parent fly upon the ears while the grain was yet soft or milky. There is a very wide distinction between this insect and the Weevil, (*Curculio granaria*). The former is of the *dip-terous*, the latter of the *coleopterous* order. The true weevil preys upon the grain after it is harvested and when stored in mills, &c. The larvæ of the Midge is most destructive while the grain is yet soft in the ear. Indeed it is said that it cannot eat through the skin of the ripened grain, and therefore is not to be dreaded in the granary.

REMEDIES.—To the wheat-grower the most interesting part of the subject is how to prevent the depredations of this insect. We believe no perfect remedy has yet been discovered, but so far as we can gather from the experiments and observation of others, as well as our own, we recommend *early sowing* and *early varieties*. We made a tolerably close inspection of our own fields this season, in which both the Hessian Fly and Midge were found, and the result confirmed the wisdom of the above advice. In a field of blue stem, sowed 12th Sept. on a warm clay loam, summer fallowed and manured, we found the Midge in about every fifth ear, and from one to three kernels affected. In a field of Red-chaff, sown a fortnight later and after a crop of pease, on good soil, not manured, four out of every five heads were affected, and from two to six grains in each. A strip of this field was blue-stem, sown at the same time as the red-chaff, and was less affected than the latter, though there was no perceptible difference in the time of ripening.

*Full ploughing* wheat stubble has been recommended, and if it were generally practiced, would no doubt, *with early sowing*, prove nearly, if not entirely successful. An experiment, which ought to be repeated in several localities this fall, was made last year by an intelligent gentleman in one of the Western States. We cut out his statement for insertion in this number, but it has been unfortunately mislaid. The experiment, however, was as follows:—He made two square boxes of wood, of equal size, and placed them in his wheat stubble. Under one the ground was spaded and inverted to the ordinary depth; the other was placed on the stubble undisturbed. Both were covered with milinet (a kind of gauze,) which allowed heat and moisture to penetrate but prevented the fly from escaping. He kept a close watch during June and July, and found that the Fly or Midge appeared in the unspaded box from two to three weeks earlier than in the other. This proved that turning the larvæ under ground in the fall retarded the appearance of the fly, and, combined with early sowing, shows the wheat-grower a method by which he can “get ahead” of his dreaded enemy. We may revert to this subject in our next number. Its importance no one will deny. To the farmers of Canada it is almost a question of life or death. A Committee of the N. Y. State Legislature reported that they had “full proof that a single insect (the Midge) last summer (1854) destroyed property to an amount exceeding *fifteen millions of dollars*” “in the State of New York alone.”

We have no data from which to estimate our loss in Canada, but even at a guess we may set it down this year at two or three millions.