

thin prairie grass. There is still another very important consideration regarding these level prairie lands; that is, that many of them cannot be settled on till drained of the sour and unwholesome surface water, and, from the nature of the country, draining is a very expensive operation, and not unfrequently entirely impracticable. Deep permanent springs are often very difficult to find, and there is much suffering both by man and beast for want of really good pure water.

To corroborate what I have said, with regard to the deficiency of the yield of wheat, and other crops in the United States, I give below a quotation from a very late and very clever publication by John Jay, being "A statistical view of American Agriculture, its home resources and foreign markets, &c., in an address delivered at New York before the American Geographical and Statistical Society, on the organization of the Agricultural Section," New York, 1859. "The average number of bushels of wheat to the acre in Alabama and Georgia is five; in North Carolina, Virginia and Tennessee, seven, ranging upwards in the other States until it reaches twelve in New York, Ohio, and Indiana; thirteen in Maryland and Vermont; fourteen in Iowa and Wisconsin; fifteen in Florida, Pennsylvania and Texas; and sixteen (the highest average) in Massachusetts. Oats range from ten bushels to the acre through various intermediate gradations, to thirty-five and thirty-six bushels, which is the highest." The journal of the Highland Society of Scotland thus observes. "If the above statement, as given by Mr. Jay, be correct, the state of farming in many parts of America must be indeed in a wretched condition—the American maximum corresponds to our minimum," adding however the following, which appears to be only too true with regard to late years, but reports of this year's crop indicate that the evil is not progressing. "We believe," says the *Journal*, "that the wheat crop has recently suffered much from the increased ravages of insects, and from various diseases to which it seems to be becoming more and more subject."

Since the above was written, the prospects of the wheat crop in the United States this year appear to be more promising than usual, and in Canada there is every prospect of a very handsome return. From all quarters of Canada West, reports have been sent to this office of expected large crops of wheat, say from 30 to 40 bushels per acre, and of spring grain most abundant supplies, including that of Indian Corn, and corroborative of what I have stated, with regard to the yield of this grain in Illinois not exceeding 40 bushels per acre, I again quote Mr. Jay's statements, as given by the same journal:—"Commencing, he says, at eleven bushels per acre, the returns of produce of Indian Corn range, through various gradations in the different States, up to 32 in Vermont and Iowa; 33 in Indiana; 34 in Missouri; 36 in Ohio, and 40 in Connecticut." This last is the highest return given.

I am Sir,

Yours with respect,

WILLIAM HUTTON,
Secretary Bureau of Agriculture.

Toronto, July 22, 1859.

THE WHEAT-FLY, AND THE REMEDY.

To the Editors of the *Agriculturist*.

The attention of the country seems now to be fully roused to the importance which must attach to this subject, and it is certainly time that the evil threatening western Canada, through the destruction of the wheat crops, should cause farmers to devise some means by which to save their grain; or in case that can not be done, to adopt in time a system of culture that will enable them to turn their attention successfully to the raising of products heretofore much neglected.

The midge advances gradually through the country, at the rate, it is supposed, of about 10 or 12 miles each year, but its progress varies according to the nature of the ground, and through peculiarities of the season. A few lead the way, their numbers gradually increase, and the unwary and hitherto inexperienced farmer is seldom aware of the presence of his unwelcome visitor till the second or third year of his occupancy. Once established, there he remains, and sends forth fresh broods to cover new territory. The writer first encountered the wheat fly in a remote parish of Lower Canada in the