

That it is undoubted that the ravages of this maggot have been the greatest on the earliest sowed wheat, owing to the eggs after having been deposited being covered and protected by the more luxuriant growth of the leaf of the plant before the frost comes—and a strong proof of this is that the late sowed wheat in all our townships is invariably less affected by the insect, than the early sowed.

That the great cause of such extensive devastation by the insect this year in the fall wheat has undoubtedly been the exceedingly mild and open state of the weather last autumn, and the partial injury to the Spring wheat by the same insect probably have arisen from the unusual circumstance that there was no return of frost in the Spring after the snow had once gone, the mildness of the weather permitting the fly to reach maturity, while the plant was yet in a tender state. There may be some difficulty in accounting for the injury to the Spring wheat, but in the description given of this insect in some publications it is stated that it deposits its eggs twice in each year, and your committee know of no other way of accounting for it, nor can they exactly state for how long a period it continues its work of destruction, but they think for about three or four weeks, at the end of which time it reaches the chrysalis state, and thenceforth ceases to destroy the plant.

Your committee have further much pleasure in reporting that one species of wheat, viz. the White Flint, has altogether escaped the ravages of the insect in this country. Very many instances have occurred where this species of wheat, though sowed in the same field and at the same time with other wheat, has remained entirely uninjured, whilst the other varieties on both sides and close adjoining have been completely cut off.

One cause of this is no doubt the hardness of the straw, which in comparison with the other straw is like wire. Another cause is that this species of wheat has not so luxuriant a foliage as other wheats, and perhaps another, that it is a change of seed which is in itself not unimportant; at the same time your committee cannot certify that the White Flint species is entirely free from the ravages of the wheat insect at all times, but are decidedly of opinion that it is less liable to be injured by it than any other species within their knowledge. General Hartman, of New York State, from whom this species was procured by this Society, is of opinion that it is subject to be attacked, especially where there is no other species for the fly to blow upon—but also asserts, and no doubt with much truth, that the insect cannot effect so great an amount of destruction on this as on other kinds, owing to the reason above mentioned.

Your committee would further state, on the authority of a Mr. Brown of Sidney, that in one case where the White Flint species was mixed with the other seed wheat and sowed—the White Flint was perfectly free from the ravages of the insect whilst the other kinds were very much injured.

It has also come to their knowledge that in the townships of Madoc and Marmora, and parts of Rawdon where the sowing is generally later than in other places in the District, the farmers have not suffered so severely as in other townships.

Another circumstance which they consider worthy of remark is this, that those wheats which were sowed the earliest have been winter killed to a greater extent than that which was sowed later under similar circumstances—and that wheat which was on the tops of the ridges, on the driest ground, and of the most luxuriant growth, was as extensively injured by being winter killed as that in low situations.

Taking all these circumstances into consideration—your committee feel it to be their duty to recommend, that the farmers of this District be not discouraged from continuing the cultivation of wheat, or be on any account induced to substitute the growth of rye.

1st. Because (independent of higher and more enlightened reasons) this grain is not an article of export, and a few thousand bushels extra would glut the market so much as to make it almost unsaleable. And the introduction of rye tends to its being intermixed with wheat, a result which ought at all times to be carefully avoided.

2ndly. Because there appears at present to be a remedy and means of escape from the ravages of this great destroyer, either by later sowing, say from 10th to 20th September, or as soon as a sharp frost occurs which will destroy the fly, and prevent its depositing eggs in the young wheat plant; (a period later than this might lead to the almost equally unhappy result of extensive rust or mildew, should the season prove of its usual temperature,) or else by the cultivation of the White Flint species as recommended above, and

of which there is an abundant supply (for seed at least) in the county—or perhaps a more effectual remedy still—by the adoption of both these expedients. Your committee also strongly recommend thick sowing, viz. from 2 to 2½ bushels per acre; because by so doing the main stems are more numerous and the shoots less so.

Your committee are prepared to give the names of many farmers who sowed the White Flint last autumn, and who almost unanimously declare that it is entirely unimpaired by the insect, whilst every other species is more or less extensively destroyed, even though sowed on the same day, in the same field, and under exactly similar circumstances.

Not having heard of any other District having imported this description of wheat and having ascertained from well authenticated statements from them or from neighbouring Districts that they have unfortunately suffered very extensive injury.

Your committee cannot but congratulate the Society of this District that they took such active measures in 1845 to import so largely of this truly valuable description. As had we been without it, our loss and injury would have been much greater than it now is.

The great yield of beautiful flour which this wheat produces is also a very strong recommendation to it. In several cases the growth of the last season yielded 21 barrels of fine and one barrel of seconds per hundred bushels, and in another case twenty barrels of fine and two of good seconds; and many samples weighed sixty-two pounds per bushel.

With regard to other crops, your committee are happy to be able to report a fair prospect of an abundant supply, except perhaps of hay in the clover growing portion of the District, the severe winter and spring having heaved it almost all out—but taking the whole District, this crop will probably not be much short of an average. Peas and oats are very promising. Potatoes are also looking luxuriant, and though the breadth planted is probably not two thirds the extent of last year, the supply will be abundant, provided there be no rot among them; of which there is at present no appearance.

With regard to the wheat, they are decidedly of opinion that from the two causes already mentioned, viz. the ravages of the wheat insect and the very extensive winter killing, the crops will be deficient to the extent of fully one half what it produced last year, more especially as it is not improbable that owing to the wheat being both thinner on the ground and later—rust or mildew will be more prevalent than usual.

MORE ABOUT POTATOES.

"The only means of prevention (of the potato rot) that appears feasible to our mind are the use of sulphur, ashes, lime, soot, and salt, to be sown broad cast on the top of the plants when the dew is on in the morning, but not in sufficient quantities to destroy vegetation, and also to cut off the tops or pull them carefully up at a short period before the tubers give evidence of disease. The latter method if carefully practiced will doubtless be a means of saving a large portion of this valuable crop".—[British American Cultivator for July.

This is what a friend of ours would call a puzzler. As the directions read, the tops are to have the lime &c. sown upon them, "and also" to be cut off or pulled up; and all this "before the tubers give evidence of disease!" The preference given to the "latter method" would indicate that it was not meant to be one process but two distinct ones; still there is a difficulty which we think many will feel in determining when they should pull up the tops, since it must be done "before the tubers give evidence of disease." How is the farmer to know that they will be diseased at all till he sees it?

We must say that we have no faith either in the "latter" or in the former method. The disease we fear is too deep to be reached by such means, however, there is nothing like trying. Try it.

SALTING HORSES.—A person who kept sixteen farming horses, made the following experiment with seven of them which had been accustomed to eat salt with their food: lumps of rock salt were laid in their mangers, and these lumps, previously weighed, were examined weekly to ascertain what quantity had been consumed; it was repeatedly found that whenever these horses were fed on hay and corn, they consumed only about two and a half ounces per day, but that when they were fed with new hay, they took six ounces per day. This proves the expediency of permitting cattle the free use of salt at all times; and it cannot be given in a more convenient form than rock salt, it

being much more palatable than the other in a refined state, and by far cheaper. A good lump should always be kept in a box, by the side of the animal, without fear that it will ever be taken in excess.—[Southern Cultivator.

AGRICULTURAL STATE FAIR OF THE STATE OF NEW YORK.

This great annual fair which is to take place at Saratoga in September next promises to be the most important meeting of Agriculturists that has ever taken place in the United States. Invitations have been issued by the committee to Lord Elgin, Governor-General of Canada, & Mr. Van Buren ex-President of the United States. Contracts have been entered into for the erection of the necessary buildings, &c. The plot of ground where the fair is to be held is a fine level meadow of 25 acres; and the scenery in the neighbourhood is sublime.

One of the editors of this Journal will attend if possible for the purpose of gathering information from actual observation of the progress agriculture is making in the Empire State of the American Union. Those of our farmers whose occupation will admit of their doing so will do well to attend. We would however not have them forget the Exhibition of our own Provincial Agricultural Association which takes place at Hamilton on the 6th and 7th of October next.

TO MULTIPLY THE POTATO FROM THIRTY TO A HUNDRED FOLD.

It appears not to be generally known that the potato plant may be propagated more abundantly and with greater ease than most other plants. The shoots produce roots natural at every joint below the ground when planted in the usual way; to plant for propagation, a small space of ground will be sufficient, as the tubers may be placed close together; when shoots have grown an inch or two above the surface of the earth, the tops may be cut off below the first rooted joint and planted two or three inches apart in fine sandy earth; in the course of a week or ten days they will be well-rooted plants, and, planted at the distance that potatoes are generally planted, will produce a crop of tubers in eight, ten, or twelve weeks (according to the kinds), equal to that produced from tubers, and, when propagated in this manner, plants may be obtained in great quantities.

A more simple way will be to place the tubers in a similar manner as before stated, and when the shoots have grown to the length of two or three inches above the soil, to take up the tubers and strip off the shoots from them; there will be six or more beautifully rooted plants, just in order for final planting; replace the tubers as before, which may be repeated at least four times, and this will produce sufficient plants from four or five tubers, of a moderate size; to plant a rod of ground, at the distance that tubers are usually planted. Lateral shoots taken from a growing crop treated like cuttings of other plants, and afterwards transplanted, will also produce a crop of tubers equal in quantity to that produced by the parent plant.—[William Wallace, Cranbury Park, (Gardners' Chronicle.)

EARLY AND FINE WHEAT.—Mr. John Park has left with us a specimen of "Hutchinson wheat," raised by him on his farm in the town of Gates, which is remarkably bright and well-filled. Mr. Park commenced cutting wheat on Monday, the 12th inst. The field from which the above specimen was taken will average thirty bushels to the acre. The Hutchinson wheat stands the winter well, and is a valuable description of grain.—[Rochester American.

The wheat crop has been secured in Worcester county, Md., and is much better than it was at one time supposed it would be. The Worcester Shield says: "The corn and oat crops are still very unpromising. We have had no rain of any account in the neighbourhood of Snow Hill since the 30th of March, and vegetation is almost parched to death."

For the Canada Farmer.

Messrs. Editors.—The following ann, taken from a quaint antique Arithmetic of the Old School, is submitted, through your columns, to the examination of some rural tyro in the elementary principles of mathematical science and the first laws of nature, to exercise his calculating and computing powers upon, and to forward the answer to the "Canada Farmer."

A RUURAL OBSERVER.

Ques.—A water wheel turns a crank, working three pump-rods, fixed six feet from the joint or pin, by which their several levers, each nine feet in length, are fastened, for the sake of the intended motion; at one end the suckers of the pumps being wrought by the other, shows them to be levers of the third order. Now, I would know what the length of the stroke in each of the barrels will be, if the crank be made to play just nine inches round its centre?

MODES OF PRESERVING BUTTER.

In all that has been written on this subject in this country, we have seen no recommendation to melt and strain it. Yet there can be no doubt that this process proves effectual. We have often told our readers that thorough working is necessary to exclude the butter-milk, and leave the butter pure.—We have told them that it has been kept sweet for years without a particle of salt by separating entirely the impurities that are found on churning the cream. But this is not always an easy matter.—Washing with pure water is the best method that we have practiced, or known to be practiced in this country.

We have often asked the question why we should not boil the butter that we purpose to keep, as we boil the fat of the hog for lard and the fat of cattle and sheep for tallow.

It is well known that lard and tallow will keep sweet for a year without salt. And who can doubt that butter may be kept as long? On examining a recent publication, which we noticed in one of the late numbers of the Ploughman—"On the food of animals by Robert D. Thompson, of Glasgow"—we find the following remarks:

"Mode of preserving Butter fresh.—The cause of rancidity of fresh butter depends upon the presence of the small quantity of curd and water exhibited by the preceding analysis. To render butter capable of being kept for any length of time in a fresh condition, that is, as a pure solid oil, all that is necessary is to boil it in pan till the water is removed, which is marked by the cessation of violent ebullition. By allowing the liquid oil to stand for a little while, the curd subsides, and the oil may then be poured out, or it may be strained through calico or muslin, into a bottle, and corked up. When it is to be used it may be gently heated and poured out of the bottle, or cut out by means of a knife or cheese-gouge. This is the usual method of preserving butter in India, (ghee,) and also on the Continent; and it is rather remarkable that it is not in general use in this country. Bottled butter will thus keep for any length of time, and is the best form of this substance to use with success."

To our own taste, melted butter is more agreeable than any that has been long kept in firkins, unmelted. And *francy* butter is rendered more palatable by melting at the time of using it. Why not melt it before it changes!—*Mass. Ploughman.*

From the Maine Farmer.

RULES FOR MILKING.

Having milked, more or less, every season since I was a "wee-bit" boy, and having seen it done so poorly as to injure the cow, I propose to give a few rules for it, which I have learned from my own and others' experience. They are as follows:

1. Have a good stool to sit on.
2. Have your finger nails pared short and smooth.
3. Sit down and clean the bag, and wet the teats with the first stream of milk.
4. Then sit the pail under, and milk as fast as you can conveniently—the faster the better. A cow will give more milk when milked fast than when milked slow.
5. Milk as though the teats were full to the last, otherwise it makes them long to "strip" in a little while.
6. Never scold or strike a cow for running about the yard or kicking. It generally does more hurt than good.
7. If she runs about, have patience—talk kindly to her—and tie her up, as a last resort till she is not afraid.
8. If she kicks, sit forward far enough for your knee to come forward of her leg, and, she cannot easily hurt you or spill the milk.
9. If she switches you with her tail, in "fly time," fasten it by parting the hair and tying it around her leg. Use a string if the hair is not long enough.
10. If she holds up her milk, *hull with your hands*. What else does a calf *bull* for but to make the mother give her milk down?

PICKLED BERR
August, July 1847.