

remarks. He had last summer in one field 13 acres of wheat, which had yielded 40 bushels to the acre, with the exception of 2 acres upon which the wheat was a complete failure from the ground being too wet. To prove the results of draining more clearly he had constructed a short drain through the wettest part of the field and there *the wheat was good*. Now it must be admitted that according to the present price of wheat, he had sustained a clear loss of £20, and as regarding the cost of draining with the horse-shoe tile (Mr. Peers here exhibited a specimen of the tile he had introduced upon his own farm) putting them 15 feet apart and 3½ feet deep, he had made the calculation that had he drained last year the two unproductive acres, the crop would have more than paid the expense. This may appear to be an extreme case, but is the simple result of recent experience.

Mr. Lemon stated that it was proverbial in the north of Scotland, that the crops were 14 days earlier upon the properly drained fields. He had been principally accustomed to stone drains, and had lately made 175 rods upon his own farm which had proved very satisfactory, but great care was required in their construction. Some built a triangular duct at the bottom, laying one stone flat on the ground, setting up two others as a triangle upon it and then wedging in stone to keep them in their position. But he preferred the sides of the duct perpendicular although it might not be so easy to find suitable stone to cap them. He had heard of some farmers using slabs for that purpose, but this he did not consider a wise economy. All draining should be done with permanent material, and there was no work the farmer had to do, which required more judgment and care, for any obstruction from the displacement of any of the material, used would consume so much labor over again; he would warmly recommend that all draining should be done at first in the most solid and permanent manner.

Mr. Alexander remarked that it would be desirable to take the sense of the meeting regarding the depth at which drains should be constructed, the respective advantages of stone and tile drains, and which kind of tile is to be preferred.

Mr. Paulin thought that no uniform depth could be fixed upon. But the question of economy, is one of great importance in this enquiry. In some subsoils it is hard digging when one gets below 30 or 36 inches, while he was doubtful whether in certain soils and subsoils the top-water would go off, if the drain were placed beyond that depth. It is certainly necessary that the soil should be opened up for the proper descent of the roots. But he thought the above depth sufficient from the common surface, which would admit the free use of the subsoil plough. With respect to the materials used, where there was plenty of surface stone, it might come in advantageously for the main drains, but it is probable that the pipe tile either with the collar or without, [if it could be procured in the Province,] would be the cheapest and most practical material for the smaller drains.

Mr. Peers desired to make one observation in reference to what had fallen in the course of

discussion. All that he had heard could not convince him that two and a half was so advantageous a depth as three and a half feet. He felt no doubt that the surface water would find its way to the latter depth, and would quote a fact arrived at by Mr. Mechi, by experiment on his farm in Essex, upon which the drains were five feet deep. He states that after the application of liquid manure on the surface, he found the smell of it quite perceptible filtering out of the drains below.

The Chairman desiring to have the sense of the meeting respecting the best kind of tile, a lengthened discussion took place, principally sustained by Messrs. Allan, Shell, McCallum and Maybee, when it was agreed that the pipe tile carefully laid was the most satisfactory and the cheapest tile, and the Chairman was requested to communicate with Mr. Buckland, whether a machine for making such tiles could be procured so that they might be introduced into the country.

The next meeting was appointed to be held in the Town Hall, on Friday the 13th January, at 5 o'clock, P. M., when officers will be chosen for the current year.

SUBJECT FOR DISCUSSION.

The whole management of sheep. What shelter they require in winter. Their most common diseases. How guarded against? Feeding and treatment of the Ewes before and after lambing. How often the flocks should be changed, &c., &c.

Communications.

ON TESTING IMPLEMENTS, DIFFERENT BREEDS OF CATTLE, &c.

To the Editor of the Canadian Agriculturist:

SIR,—I hope I shall not be intruding on your time if I ask why there is no trial of the implements offered for exhibition at the Provincial Shows, at least I heard of no trial, and none of the implements seemed to have been used. In England, short and unsatisfactory as the day allowed for it is, there is a trial, and no implement is allowed an award without having gone through it, and why could not the thing be done here? How can there be a really fair competition between two implement makers when the award is made simply by guesswork, or calculation? The plough, for instance, that gets the first prize may draw 8 or 9 stone heavier than one that is not mentioned, and turn a worse furrow, though it may look much the best implement of the two, and a fair trial, with a dynamometer to record the working draught of every implement, would be of immense value to the really skillful mechanic, not to mention that it would knock off some of those acres of gold leaf, and pounds of flaring paint, that distressed the eye of taste so painfully at Hamilton, and make implements