

tual drainage and good management has rid the best wheat lands of Scotland of the insect, and increased the average production per acre from eleven to over thirty-five bushels. The same process, if vigorously set about, will accomplish in a similar manner in Canada the desired success, and avoid the necessity of our agriculturists substituting coarse red wheats for our beautiful white samples, which command the highest price wherever they are offered for sale.

The following is a case in point, the result of under draining. A friend of the writer living in the State of New York, on land similar to the best grain farms in this county, had given up sowing wheat owing to its annual destruction by the midge, but having experienced benefits in England from draining, began in 1856 a similar process, which he thought from the position and nature of his land to be useless. That season he drained half of a ten acre field to the depth of four and a half feet and thirty feet apart, prepared the whole field and sowed it with Soule's wheat on the 5th of September. The following spring, when the roller was applied, the utility of draining was very perceptible, and at harvest time a hundred fold more so. The five acres that were drained, the grain was ripe ten days earlier than the other, and yielded over forty bushels to the acre of a fine quality, whilst the undrained portion of the field scarcely returned fifteen bushels to the acre, the insect having made such havoc in it.

The sequel to a thorough system of drainage, arrived at on scientific principles by men of note in England, can be learned by a reference to the last edition of the "*Encyclopaedia Britannica*," under the respective heads of "*Agriculture*" and "*Drainage*." It appears that the temperature of the soil at a depth of 7 or 8 inches on well drained land, was found to be, from thirty-five observations made by Mr. Parker in Lancashire, ten degrees higher than on land in its natural state at the same depth. Now if the same effects can be produced here from draining, of which one would suppose there need be no fear, vegetation in early spring would be sufficiently promoted as to place our tenderest wheats ahead of the midge's time and be a safeguard against rust. The expense of draining on a system like the above may deter many farmers from undertaking it, but let them once experience its benefits and rest assured it will be vigorously prosecuted. Those who care only for the present generation may substitute three cedar rails and brush for tiles, which will answer every purpose and save the cost of the latter, but no one should think of draining to the depth of less than four and a half feet and thirty feet apart, and if they should decide on placing the openings at a less distance apart corresponding advantages will accrue.

Toronto, August 17, 1859.

T. B.

*Colonist.*

**FEED FOR HORSES.**—The London Omnibus Company, says an exchange, have recently made a report on the feeding of horses, which discloses some interesting facts. It seems that the company uses no less than 6000 horses; 3000 of this number have for their feed bruised oats and cut hay and straw, and the other 3000 get whole oats and hay. The allowance accorded to the first was—bruised oats 16 lbs.; cut hay, 7½ lbs.; cut straw, 2½ lbs. The allowance accorded to the second—unbruised oats, 19 lbs.; uncut hay, 13 lbs. The bruised oats, cut hay and cut straw amounted to 26 lbs., and the unbruised oats, &c., to 32 lbs. The horse which had bruised oats, with cut hay and straw, consumed 26 lbs. per day, and it appears that it could do the same work as well, and was kept in as good condition, as the horse which received 32 lbs. per day. Here was a saving of 6 lbs. a day on the feeding of each horse receiving bruised oats, cut hay, and cut straw. The advantage of bruised oats and cut hay over unbruised oats and uncut hay is estimated at five cents per day on each horse, amounting to \$300 per day for the company's 6000 horses. It is by no means an unimportant result with which this experiment has supplied us. To the farmer who expends a large sum in the support of horse power, there are two points this experiment clearly establishes, which in practice must be profitable; first, the saving of food to the amount of 6 lbs. a day; and, secondly, no loss of horse power arising from that saving.—*Maine Farmer.*

**PRINCIPLES NOT PRODUCTS ENTITLED TO AWARDS.**—The *American Agriculturist* calls for a reform in the management of agricultural societies, and says their exhibitions should be made a means of contributing to the science of the art of husbandry, by having the reports and addresses carefully prepared by eminent practical farmers; and advocates offering premiums in each class to those who can combine the most science and utility with the greatest economy in production.