

the intelligent and well known agricultural experimentalist, calculates this saving at 20 per cent. He observes that to move a bulk from one spot to another, in the way that field operations are carried on by a continuous chain of loading at one end and discharging at the other, seldom less than three carts are employed, and that in the usual practice of the Southern Counties, one horse occupies the stand-cart or wagon, and three horses, each of the other two that are in motion; the work thus going forward with seven horses. If two horses in a cart are used, five will be the number engaged; and, if four, the number will be nine. Mr. Hannam then shows, from many years experience on his own farm, that the same amount of work, when at a moderate distance, may be performed by *three horses in separate carts*. The following are the reasons assigned:—1st. A horse thus harnessed draws more in proportion with equal ease. 2nd. The mis-application of his strength in the constant draught of a heavy carriage is prevented. 3rd. He moves more briskly and freely, and turns, &c., with less loss of time; and when any check occurs, the loss is saved that takes place by the hindrance of a large number; and lastly, there is a certain convenience and ready manageableness which can be better felt than calculated or described.

Whether, and to what extent, the improved one horse cart would be generally advantageous in Canada, we possess, at present, no facts to warrant an absolute decision. On large farms, and in districts not hilly, having tolerably good roads, such carts might, we think, be advantageously introduced. We could like to hear from farmers who have thought on, or have had any experience in, this matter. A saving in labor, by the employment of improved implements must be the principal means of enabling us to meet the present low range of prices for agricultural produce.

The following calculation of Mr. Dryden, bearing upon the present subject, as published in the Transactions of the Highland Society, will, perhaps, be interesting to the reader:—

"That the state of the road has a very material influence upon the animal power required to draw a given weight over it, every person is well aware, but few persons regard the difference between the labour

of drawing a carriage over a road in good condition, and the same road when out of order. This has been, however, experimentally determined, and we commend to every farmer and every overseer the careful and steady consideration of the results thus obtained. In these trials it was found that a light carriage, with four wheels, weighing with its load 1000 lbs., required a force of traction as follows:—

On a turnpike road, when hard and dry,	30½ lbs.
On the same road when dirty,	39 "
On a hard compact loam,	53 "
On an ordinary bye-road,	106 "
On a turnpike road newly gravelled, . . .	143 "
On a loose sandy road,	204 "

"The care with which all drivers avoid the newly gravelled portions of a road is well known, yet few of even the best whips, I think, are aware of the enormous difference of pressure upon the collar shown by the above table to exist, when the load is passing over a hard and dry turnpike road, and the same road when newly gravelled, composed of loose sandy materials."

PLOUGHING.

From a letter received from a gentleman connected with the Hampshire County Society, we gather the following facts in relation to the trial of stubble ploughs, at the late exhibition of that society at Northampton. There were ploughs in use from four different manufacturers, but after a long trial, Ruggles, Nourse, Mason & Co.'s No. 37 was decided to be the best, on account of its great ease of holding, and its superior work.

A feat never before performed in ploughing, was accomplished by one of the contestants, who used Stubble Plough No. 38 of the same manufacturers. Starting his horses at one side of the field, he set the plough, and then let it run by itself to the end of the lot, a distance of 35 rods. Then it was just touched sufficiently to guide it round to the next furrow, when it *set itself*, and went through without a hand being touched to it. This is a quality which has long been desired, and it is manifest that the plough which can do its work well, without being held, has little need of any other recommendation.—*N. E. Farmer.*

VALUE OF THE ARTICHOKE AS AN AGRICULTURAL PRODUCT.—Recent investigations of this common root show that 100 parts by weight of the tubers contain 23.96 of alimentary substance, being richer in nitrogenous, fatty, and saccharine matters, and in phosphates than potatoes. It therefore follows that the Artichoke would prove most valuable for the fattening of pigs, cows, and animals generally, and its cultivation for this purpose is well worth the attention of farmers. As the tubers do not contain amylaceous substances, and are very easily soluble and digestible, it would be best to mix them with other aliments more resistant and less humid; such, for example, as dry fodder, bran, and grains, which would be ameliorated by the mixture. As to the difficulty of limiting their spontaneous reproduction, that may be prevented by the cultivation within boundaries, especially of plants which are cut down in the green, making weeded or hoed plants succeed them. The stems of the young artichokes also constitute a good green fodder.—*Proceedings of the French Agricultural Society.*