

derived from the reports of the modes of culture by which large crops are produced on a given surface than from those showing how one pound of seed is multiplied a thousand fold. From data at hand the Committee say they find that there were many larger yields from quarter acres by non-competitors than by some of those who received prizes. The unfavorable season and devastations of the Colorado beetle diminished to such a degree the crops of many who intended to compete that they did not feel warranted in entering upon what they considered a hopeless venture. Of the merits of the potatoes, as developed upon this later and more extended test, it is said that there is general acknowledgment of the superiority of the Vermont as an early variety, both for market and table, in fact, "the earliest and best in cultivation;" that Compton's has given not less satisfaction as a potato of the highest quality; and that Brownell's Beauty, the newest of the three, has made "a most splendid record," not only giving "the largest returns," both from the single pound and the quarter acre, but eliciting "unanimous praise of all cultivators."

The methods of culture adopted by the various competitors will be explained in next No. of the *Journal of Agriculture*.

#### BONE DUST AS A MANURE.

(From the *Morning Herald*.)

It is evident from the large quantities of fresh beef, mutton and pork that are now coming from the Upper Provinces, that our Nova Scotia farmers must wake up. Notwithstanding the acknowledged stride which agriculture has made in this Province within the last twenty-five years, yet no science has been slower in its progress towards perfection, and even admitting numberless instances of intelligent and spirited management among farmers of the higher class, it is still an undeniable fact that the great mass of them are of a very opposite description.

The prejudices of farmers against all innovation upon their established habits are as old as agriculture itself. For the rising generation a more enlarged system of education is obviously the surest means, but the farmer who has not that advantage may easily acquire a practical knowledge of the various modes of culture and of rearing stock, pursued in other districts, by occasionally visiting them after seed time, and see what they are doing. He will thus be enabled to compare in the most effectual manner their different fashions with his own, and in this way will be stimulated, and stimulate his brethren in active enterprise and improved husbandry.

In Great Britain farming is carried on to great perfection, and it is almost incre-

dible the amount of money that is expended for artificial manures; thousands of tons of guano and bones are annually used. I noticed by a newspaper last fall that a vessel had left Chicago for England with 400 tons of ground bones, valued at \$20,000, or \$50 per ton. If bones are so valuable in England, what a waste of valuable manure there is yearly in Nova Scotia? There is scarcely a house in the Province but might save one barrel of bones during the year, some a great deal more. Now, if every one were to save all the bones he could, he could have them ground, as there is in course of erection, near Wellington Station, I. C. R., a bone mill, the proprietors of which will buy and grind all the bones that may be sent, and sell to farmers throughout the Province at reasonable prices.

Our farmers will now have to compete with the farmers of Ontario, and to be successful they must farm better—they must feed better during winter—they must raise more roots, and to do this, must have artificial manures, the best of which is bones. There is no other artificial manure so durable in the soil, as has been proven in a great many cases. On a field which was boned over forty years ago, the crops for fifteen or sixteen succeeding years were visibly better than on another part of the same field manured with farm-yard manure. In another case about three acres of light sandy land were dressed in 1814 with 150 bushels of bones per acre, since which time (1835) it is said never to have forgotten it, but is nearly as good again, as the other part, farmed in precisely the same way, with the exception of the application of bones. About sixty years ago, a farmer is also said to have obtained a forty years lease of a tract of poor land in a high situation near Rochdale, Lancashire, on which after fencing and draining it, he erected a bone mill, and began manuring the ground at the rate of 100 to 180 bushels of bone dust per acre, the consequence of which was, that in a few years he let off more land than paid the rent of the whole, and retained a large farm in his own hand. The correspondent of the *Quarterly Journal of Agriculture*, from whom these details were taken, says that one acre would summer a cow of large size, and that some fields were cropped with oats ten or fifteen years in succession, yet that it is surprising to see the herbage which the land still produces, both as to quantity and quality. One great advantage of bones is their cheap application. The expense of manuring an acre of land with barn-yard manure is very great, especially if it has to be carted a long distance, and as it has to be done at a busy time of the year, when every hour is worth a great deal to farmers, it would be well for them to think the matter over during these cold days, and I think they

will come to the conclusion that there is money in it. A farmer like any one else who wishes to make money must spend money, and Dr. Dawson, years ago, when farm produce was not worth over half what it is now, said that bones were cheap to a farmer at from \$1.50 to \$2.00 per barrel; and Professor Gregory says that in process of time no nation will consent to sell bone dust, save at a price which will render its use impossible, and we must come to that which the Chinese, with their practical sagacity have come to long ago, namely, the principle of restoring to the soil every thing that is taken from it in the crops, the only principle on which agriculture can be permanently or profitably conducted on average soils.

SMALL FARMER.

*Shubenacadie, Feb'y. 12th, 1875.*

#### THE HARRIS ORCHARD.

We find the following interesting account of Mr. Harris's orchard at Wolfville, in the *Morning Herald*:—

The County of Annapolis has long been celebrated for its Apple Orchards, and for the variety of apples grown therein, but of late years the enterprising farmers of Kings have gone extensively into the cultivation of fruit, with the determination to place Kings in the first rank as a fruit producing country.

One of the finest Orchards in the County of Kings is that of Mr. D. J. Harris, of Wolfville. It consists of about fourteen hundred trees, viz.:—850 apple trees, 600 pear trees, nearly 400 plum trees, and a number of peach, cherry, and quince trees.

The apple trees have been set out six years, the plum five years, the pear four years, in the spring, and the peach, cherry, and quince trees were set out at the same time.

These trees are growing on land than which none more favorable, for the cultivation of fruit, can be found in the Province. It is a mixed loamy and gravelly soil, and the land, gently sloping, requires no drainage. The Orchard embraces an area of seven acres.

As might naturally be expected, Mr. Harris bore off a good many prizes from the Provincial Exhibition. He exhibited no less than twenty-six different kinds of plums, and took the first prize for the largest and best collection, and four other prizes for plums. Four prizes were granted to him for pears, his *Clopp's Favorites* being pronounced by Judge Wilkins, and other well qualified judges, the best pears ever exhibited in this Province. Mr. Harris also took prizes for six different kinds of apples. The quince trees, before mentioned, are just beginning to bear. The peach trees are in a promising state, and have produced excellent fruit. He has trained up against the