

weight and quality may be very much improved, without detriment to the milking properties. We do not wish to be understood in these remarks as implying that there has been no advance made in this respect. The advance has been very great—thanks to the enterprise of spirited individuals—but much yet remains to be done.

ON PRACTICAL FARMING, ROTATION OF CROPS, MANAGEMENT OF STOCK, &c.

(Communicated to the Johnstown Agricultural Society, by John Bland, Esq., Brockville.)

As a preliminary to successful cultivation, all experience has proved the necessity of clearing and draining lands well and carefully, as circumstances admit and demand. This being done, the following rotation of crops may be judiciously adopted in each and every soil; always taking it for granted that the farmer, in addition to his own knowledge and experience, avails himself of the example and advice of his elder and more experienced neighbours.

My experience favours the following rotations of crops, on the soils to which allusion shall be made, modified by all and sundry circumstances which may arise from seasons, localities, &c.

SANDY SOILS.

1st year.—*Potatoes*:* well manured and scattered abroad, immediately ploughed in and as carefully harrowed. *Red* and *white* potatoes are two kinds well known. The former prefers a clay soil, the latter a sandy or loamy soil. Should be planted whole and a reasonable distance apart each way. Should be kept clean, but not too much covered up by ploughing, as air is wanted. A change of seed is found a good practice; but above all things *plant early*.

2nd year.—*Rye*: after which a crop of Buck-wheat may be raised, part of which may be consumed on the field, according to circumstances.

3rd year.—Oats and Clover, or Barley and Clover.

4th year.—Clover.

5th year.—Wheat, after which Buck-wheat, which use the same as recommended in second year.

6th year.—Peas, and associated with oats, &c. Here are eight crops in six years, five of which are ameliorating to the soil.

LOAMY SOILS.

1st year.—*Potatoes*:* culture, seed, &c., the same as before mentioned.

2nd year.—Wheat and afterwards Buck-wheat as before recommended.

3rd year.—Indian Corn and Pumpkins.

4th year.—Barley and Clover.

5th year.—Clover.

6th year.—Wheat and Buck-wheat as before.

CLAY SOILS.

1st year.—Oats and Clover.

2nd year.—Clover.

3rd year.—Wheat followed by Buck-wheat.

4th year.—Beans, previously well manured.

5th year.—Wheat.

6th year.—Peas and Oats.

Having given a brief summary of rotations, which must be modified according to soils and circumstances, I shall now proceed to refer more particularly to each kind of produce, and the most approved mode of culture and general management.

The potato has now become an universal favourite in every country, as approved food for man and also for beast. Some little more care than is at present bestowed on its culture is well deserving our zealous industry. Two ways are open to our practice, namely, 1st, by sowing the seed, and 2nd by planting the root. The former method gains us many varieties, but three years are necessary ere such come to maturity. Hence the 2nd method, planting the root, returns the exact variety or kind; and it is almost the universal practice, its success merely depending on the selection of the soil, and the skill of the cultivator. The produce of this crop varies from 300 to 600 bushels an acre, hence the premium offered by our bounteous mother Earth is far above all other offers. The potato is generally understood to be a native of this Continent, and is now considered the next staff of life to bread, being, as analyzed by a French chemist, said to contain in relation to bread the following nutrition.

Bread, every 100 lbs., 80 lbs.

Potatoes, every 100 lbs., 25 lbs. to 35 lbs.

Spring set Potatoes (for observe fall planting is now practised with much success in Europe) should be planted if possible, from 12th to 20th May, and may remain in the ground till the end of October. Various modes of planting have been practised, and approved of. I should generally recommend whole potatoes for planting, and from experience would prefer a full medium size. Plant two feet apart, and one asunder. Put potato seed in ground covered slightly with soil, and if you have not ploughed and harrowed in your manure, put the same on the top of the seed, and afterwards a little more soil. Every shower of rain will send some food to the seed below, and if you plant in the fall be liberal with your cover-dressing, and be assured when you are sleeping and sleighing, the seed is safer and better for an early start in spring, and it has been found from experience that even seed with a slight taint of the rot has disencumbered itself of the disease. If any prefer the practice of cutting their seed, invariably bury in a bed of Plaster of Paris for some little time, and not expose to frost. This is found of very great importance in protecting the seed, and improving the produce. When Potatoes begin to appear above ground, weeds appear also, harrow well then—it saves labour afterwards. A second harrowing with a suitable implement, also much approved, which cleans all and loosens the soil, to admit both air and moisture. Well, all that remains to be done is careful and prudent harvesting and storing. Small surface hills are now practised with success, containing about 20 bushels each; cover with plenty of straw and earth, and a trench cut round to carry away all water.

* If the writer means to recommend Potatoes as a rotation crop for field culture (say ten acres), we fear it must be struck out of the list. Potatoes are seldom cultivated on ordinary farms to the extent of more than one acre. Nor do we think a more extensive cultivation would be desirable.—Ed. Ag.