

the advancement of agriculture, must take the lead in this business, and the many will soon be interested in the result, and cheerfully follow the movement that we think will eventuate in so much good. Let every thing like sectional or political feeling be religiously eschewed in the management of these societies. They are intended for the people, to benefit the many, and so the funds appropriated must be sacredly regarded.

We think it may reasonably be anticipated that the Reports which are to be made to the Secretary of State from the State Society, and the County Societies, will form an annual volume of the most instructive and useful kind, and which will form a record or history of Agriculture in this State, invaluable to the farmer. The Agricultural law of 1817 has done much for the fame of De Witt Clinton, and the good effects resulting from it have not yet ceased to be felt. The farmers of the State have demanded, and the Legislature have again granted aid to the agriculture of the State. Let such a use be made of this money, and such a spirit awakened in the community, that the agricultural prosperity of the State shall be commensurate with its unequalled position, and its immense resources.

BERKSHIRE HOGS.—The superiority of this breed of pigs over all others is, we believe, fully tested and generally acknowledged in Great Britain and the United States. Their chief characteristics are that they are very quiet and gentle, and fatten easily, upon almost any kind of food, at an early age, and to a great weight.

The common long legged, big boned, varnished race of pigs, sometimes called "land-pikes," eat twice as much food, do ten times as much mischief, and do not yield half as much pork as the Berkshires. It is, therefore, high time that they make room for their betters.

We see that the Hereford breed of cattle is attracting great attention in the United States, on account of its superior properties for fattening; the Durham or short horned and the Ayrshire breeds, however, appear to be in most general repute, both in the United States and Canada, on account of their combining, in a great measure, the qualifications necessary for the dairy and the butcher. But as beef, whether fresh or barrelled, is very scarce this season, and about as dear as pork, we think that exertions should be made to introduce such a breed as the Hereford.

The conductors of the *Advocate*, earnestly desire to give all the information in their power to their agricultural readers, and at the same time wish to call forth the abilities of Canadian Agriculturists. They have therefore pleasure in announcing that they will award a prize of a Gold Medal, value £12 10s. (or that amount in cash should it be preferred) to the author of the best Essay on Horned Cattle, and a similar prize to the author of the best Essay on Hogs; the necessary funds having been put at their disposal for that purpose by a gentleman deeply interested in the welfare of Canada.

These essays being for publication in the *Advocate*, must necessarily condense much information into small compass. They will require to describe the different breeds of the animals referred to, which are most esteemed, such as the Durham, Ayrshire, Hereford, and Devon breeds of cattle, and the Berkshire and China breeds of hogs with the best crosses, and compare them with the breeds, commonly raised in the country. They will also require to describe the best modes of keeping these animals, and turning them to the greatest possible advantage.

All competitors will be pleased to forward their essays, free of postage, to Mr. James Court, Montreal, on or before the 1st January next; and the names of the judges who are to determine the merits of the essays (a majority of whom will be good practical agriculturists) will be published next month. Should no essay of sufficient merit appear, it will be at the option of the judges to withhold the prizes altogether.

The species of corn ranked as culmeiferous, are Wheat, Oats, Barley, and Rye. These are all robbers of the ground, and tend to exhaust it of its productive powers. It is no wonder then, to find the lands that have been under the management of French Canadians, in a state of sterility: they having been in the ruinous habit of taking three, sometimes four, of these robbing crops in succession. Land cannot be kept in a productive state, nor preserved from deterioration, when under a course of crops, unless alternate crops of the leguminous species (beans, peas, clover, vetches or tares), are regularly taken throughout the course.

No hungry or emaciated grain should be taken for seed. The young plants of grain live in a great measure upon the nourishment which they derive from the parent seed, till the coronal roots are formed, and able to search for food; and that nourishment cannot be so great when the parent is hungry and light, as when plump and heavy. That light and imperfect seed will vegetate and send forth a stalk or plant will be admitted, but the produce of that stalk or plant will not be so healthy or great, as what may be obtained from plump well filled seed.

Clay soils and heavy loams are better adapted for wheat, than sands and gravels; and the latter are better calculated for barley, than the heavy soils. Upon clay soils of middling quality, a six course shift might be profitably carried through, provided that every branch of the work be well executed. 1st, summer fallow with manure, 2nd wheat, 3rd clover, 4th oats, 5th beans and peas, 6th wheat. If manure can be given in the middle of the shift, (and that could be accomplished, provided the farmer would pay the necessary attention to the collecting of materials which are ultimately convertible into manure), every one of the crops may be expected good.

The turnip culture is a correct system of husbandry. By no other system can light and gravelly soils be brought to that degree of fertility of which they are susceptible. Setting turnips aside, it is impossible to cultivate light soils successfully, or to devise suitable rotations for cropping them with advantage. Turnips are cultivated in two ways, viz., in broad cast, and drilled method. In the first way, although the crop may be very good, the land cannot be cleaned so thoroughly as when the drilled system is adopted, which for the benefit of succeeding crops should never be lost sight of. The most approved varieties of the turnip tribe, are the Swedish or Rutabaga or Swedish turnip, the Aberdeen orange or yellow, and the white globe turnip. The globe turnip grows to a great size upon good land; some of them measuring upwards of three feet in circumference. They should, invariably, be first made use of—cattle improve rapidly upon them so long as they retain their juices, which may be longer or shorter, according to the season and other circumstances. The yellow turnip should next be resorted to. It is superior to Rutabaga upon ordinary soils, as it will grow to a considerable weight where the other would be stunted. Considerable advantages might be obtained, by uniting the live stock and corn husbandry, and making the management of the one subservient to the growth of the other. There are comparatively few arable farms where double the quantity of live stock might not be kept, without lessening the annual produce of grain. By a proper combination of green crops, such as tare and clover for summer, turnips for winter, rutabaga and mangel wurtzel for spring, the tillage farmer may fatten a quantity of stock equal to the grazier.

A farm managed according to the rules of alternate husbandry, will yield a greater quantity of produce, than if any other system be adopted. If one-half of the farm be kept under artificial grasses and other green crops, as much live stock may be supported and fattened upon the produce, as if the whole farm was kept in old pasture, and the other half, from the large quantity of manure produced from the consumption of green crops, will furnish as much disposable produce for supplying the market, as if the whole farm had been kept in regular sequence of corn crops. All these advantages may be gained by a conjunction of stock and corn husbandry. Griffintown, June 18, 1841. S. N.

BAD PRACTICES OF FARMERS.—1. That of exhausting land by over-cropping. President Madison attributed this to the effect of "habit," continued after the reason for it had ceased to exist. Whilst there was an abundance of fresh and fertile soil, it was the interest of the cultivator to spread his labour over as great a surface