

curring in sending them to market, and by being able to keep the land in a fertile condition with manure purchased at a low price, when, if the same system were followed at a considerable distance from a market, it would be ruinous. It may be laid down as a general rule, that crops consisting of plants whose mode of growth and cultivation tend to the production of weeds, should not follow in succession; that crops whose culture admits of the destruction of weeds should be cultivated where we cultivate plants, which favour the production of weeds; and further, crops whose consumption returns to the soil a sufficient quantity of manure, should be cultivated at intervals, sufficient to maintain or increase the fertility of the farm; that crops consisting of the same or similar species should not follow in succession, but should return at distant intervals, as the case will allow; that when land is to be laid to grass, this should be done when the soil is fertile and clean.

The cultivation of the soil, like every other occupation of life, is subject to its reverses, and it would seem, judging by the past few years, that the patience of the farmer has been put to a test equally as severe as that of any other class. His main dependence, that which most readily afforded him the ready means, the wheat crop, has almost failed, and the question has been seriously asked whether it would not be advantageous to abandon its cultivation for a limited period, with a view to extirpate that much dreaded enemy, the weevil? Before deciding in the affirmative upon a question which so vitally affects our very existence, would it not be well to inquire whether the farmer himself does not in a great measure contribute to the result by not pursuing the best system calculated to check the ravages of those insects, which threaten that crop with universal destruction. It is well known that early sown wheat is less liable to the ravages of the midge than that which matures later, and it is equally well known that the weevil and other insects commit the greatest depredations on low, wet land. Hence the necessity for a proper system of draining, which will enable the farmer to select the most advantageous season for sowing his seed, and to make every effort to increase its early maturity. The soil of this country is well adapted to the growth of wheat, although there are some fields in every far a more suitable than others, and it is to them we must confine our attention. Let that portion of the farm least favourable to wheat be cultivated with other crops, which, when consumed on the farm, furnishes the most valuable manure. This must be used to enrich the soil for wheat. If this course were adopted, I have no hesitation in saying that Canada, as a wheat-producing country cannot be excelled. Many adopt the plan of ploughing in their clover, preparatory to the wheat crop, but it is a well-ascertained fact, that manure furnished by decayed clover is not as appropriate a food for wheat as the excrements of animals living on clover. It contains too much carbonaceous matter, and while the nitrogen of the clover furnishes by decay the required ammonia, which not only increases the crop but accelerates its maturity, the carbonaceous matter, which greatly preponderates in clover, is of little value, and has a great tendency to retard the growth.

Another great source of evil to the farmer, and one which could readily be removed were proper efforts to be made, is the increasing growth of that scourge, the Canada thistle, which seems particularly indigenous to our soil. Year after year we are compelled to witness its gradual increase, and in many parts of the country we find it has become master of the soil. It is needless to attempt to point out a remedy for the extirpation of so great an evil, which so long as it can find one farmer in a community who will not wage war against it, is sure to increase and multiply. Nothing but Legislative enactments with unlimited power will check its onward progress. It is to be hoped that the Act lately passed will be rigidly enforced by every friend of the farmer.

Our attention has lately been called to a disease of a highly infectious character, which has exhibited itself among the cattle of the mother country. It has already assumed immense proportions, and is spreading itself in every direction. Like that dreadful scourge, the cholera, it has aroused the energies of the people and forced them to adopt every possible remedy to arrest its onward progress. As to its origin, whether imported from other countries or otherwise, it is impossible to speak of any degree of certainty. The attention of the Government has been directed to it, and measures are being adopted to ascertain how far the disease at present prevails, and every effort is being made to arrest its progress. Happily we have so far escaped so dreadful a plague, but it behoves us to guard against it in every possible way, and I am pleased to be able to state that already our Legislature by the wise forethought of the President of the Board of Agriculture, have opened its eyes to the importance of the matter, and passed an Act which it will be our duty to see strictly enforced. The symptoms of the disease are now clearly

understood, and as they manifest themselves in a decided manner in its early stages, no farmer, however ill-informed in other respects, can plead ignorance in this case. The symptoms are thus described, and of the orders issued by the Privy Council.

Great depression of the vital powers, frequent shivering, staggering gait, cold extremities, quick and short breathing, drooping head, reddened eyes, with a discharge from them, and also from the nostrils, of a mucous nature, raw slinking places in the inner side of the lips and out of the mouth; diarrhoea or dysenteric purging."

While this country has suffered much in the past by the failure of the wheat crop, and a succession of unfavourable seasons, it cannot but be observed that the people have not relaxed their energies, but, on the contrary, have experimented greatly in other branches of industry, from which they are reaping the most satisfactory results. But a few years ago the cultivation of flax was looked upon as an experiment which must result in loss, but the industry and perseverance of its early pioneers have overcome all the difficulties by which they were surrounded during its first introduction, and we at the present time see it ranking among the first of our staple productions, not only in extent but also in profit. The cultivation of flax bids fair to mark an important era in the history of this country, as a new field of profitable industry to our farmers, and as a means of increasing the prosperity of the country, we have the most satisfactory proofs from the reports which are annually made by the gentlemen who have made it their particular study. We are greatly indebted to Mr. Donaldson for the great interest manifested by him in pointing out to our people generally throughout the country the great advantage to be derived from its cultivation; and from the elaborate and very satisfactory reports made by him to the Board of Agriculture, we have abundant evidence that the farmers are becoming alive to its great importance. The best proof that I can offer is the fact that in 1863, there were 3,000 acres under cultivation in Canada, while in 1865, from authentic returns, we find there are upwards of 10,000 acres. An impression has heretofore prevailed, that it would be impossible to produce that finer kind of flax which could be brought into competition with that of other countries. The impression has been entirely removed by a comparison of that grown in Canada, with that of other countries, and at the present time we can produce articles manufactured from it which cannot be excelled. It is clearly ascertained that the flax plant will grow to perfection where cereal crops can be cultivated, and with even less exhausting effects to the soil than wheat. With a soil generally adapted to its cultivation, with all the facilities of modern machinery, and with a market for the sale of the manufactured article, we have every reason to hope that our farmers will look forward to the cultivation of flax as one of the most profitable occupations. The leading points to be observed in the successful culture of flax, having been so fully and ably discussed in THE CANADA FARMER and other periodicals, I would be but taxing your indulgence by attempting to offer any suggestions.

There is another branch of industry which has within a few years been found productive of great benefit to the farmer, the magnitude and rapid extension of which few are aware of. I refer to the manufacture of cheese. It has been the custom to manufacture only that which was required for the consumption of the farm, but the great demand for exportation, and the facilities which are afforded for its manufacture, have encouraged the establishment of factories in many of the townships in Western Canada. That these factories have been found profitable in the United States, we have positive proof in their rapid increase and with a large extent of country peculiarly adapted to the dairy business, we have every reason to hope that they will be found equally so in this country.

We have reason to feel grateful that the harvest just secured is the best we have had for a number of years, and that the prospects of the farmer, which have so long been anything but hopeful, are brightening. For this, no doubt we are indebted to the propitious season, which has brought the crops to early maturity. There is danger, however, that this sudden prosperity may be productive of evil results. It is to be feared that the husbandman, elated by the success of the present season, may be induced to try the experiment of sowing a greater extent of land than he has done in previous years, relying upon having similar success in years to come. So much being dependent on the success or failure of crops, and every branch of business being affected by the prosperity of the agriculturist, it is a matter of regret that we have not some valuable means of ascertaining the true position of the country? The Grand Trunk Railway Company has already, as in former years, made a very satisfactory report on that portion of the country contiguous to its line, and it would be well if some similar plan could be devised by which

a report could be made to embrace the whole Province.

No person, not even the casual observer, can have examined the Exhibition thoroughly without having been struck with the abundant evidence of the wonderful growth of the manufactures of this Province. Much has already been said of agriculture and of the beneficial results flowing from the improvements therein, but it is almost impossible to conceive that manufactures could have made such extraordinary and rapid strides as they have during the last few years. Everywhere we see the mechanical skill and genius of the country being constantly developed. Whether we examine minutely the large and ponderous machinery of the steam engine, or admire the ingenuity and skill exhibited in the construction of the sewing machine, we cannot but come to the conclusion that the mechanics of this country are destined to play conspicuous parts in the future of this country. The immense water privileges, the abundant supply of fuel, the extraordinary and rapidly increasing demand for every kind of agricultural implement, the great growth of home manufactures and the cheapness of the labour, all offer such inducements to the mechanic, that we cannot but become a great manufacturing country.

While congratulating ourselves upon the advance made in agriculture and manufactures in the past, we cannot lose sight of the fact that our continued prosperity is threatened by the interruption of that treaty with our neighbours, which must be admitted by all, has conferred inestimable benefits upon the agriculturist of Canada. It is impossible to estimate the evil consequences which may be entailed upon us by its abrogation; and while it may be advisable to use every legitimate means to effect a renewal thereof, even by mutual concession, it still behoves us to be prepared to meet the emergency by opening up new channels of commerce, and seeking a market where we can advantageously place the productions of our soil in competition with our neighbours.

The visit of our neighbours from the Maritime Provinces at this opportune time has added much to the interest of the Exhibition. They have had a favourable opportunity for taking a bird's-eye view of Upper Canada from an agricultural and mechanical point of view; and it is to be hoped that the accumulation of the products of the enterprise and industry of our people will not only have removed any unfavourable opinion they may have heretofore formed of us but have fully convinced them that their brethren of the Inland Provinces have within themselves all the elements necessary to the fulfilment of their noble destiny.

I cannot close this address without expressing my heartfelt thanks to the members of this association for the kindness they have shown me during the time I have held the distinguished position of President, and in retiring from that office it is pleasant to know that the mantle will fall upon a most worthy successor.

Mr. Rykert as retiring President introduced the President for next year, Mr. McGillivray, Glengarry. Hon. D. CHRISTIE, Brantford, then called for three cheers for the retiring President, the new President for the Queen, &c., which were heartily responded to, and the meeting then dispersed.

Manufactures and Machinery at the recent Exhibition.

The Great Western Railway people showed a fine lot of railway machinery. They had a very nice skeleton or working diagram of an engine, several axles, a large driving wheel, a pair of cylinders, car and engine springs, a couple of domes—one of them of very pretty polished brass—a variety of gunges, bolts, nuts, &c. Perhaps the most interesting article in their assortment was a duplex safety valve—a contrivance which makes it impossible to "lock" the safety valve—the fastening down of one valve leaving the other free to act.

In stores, there were not many competitors. J. G. Beard & Sons, of Toronto, had a large assortment—probably a score. Some of their cooking stores were furnished with very fine copper furniture. They also showed a portable forge, a verandah chair, and some ornamental castings.

Copp Brothers, of Hamilton, had also a fine assortment of stores here. They showed a large hotel stove, weighing over half a ton, and a fine cooking stove from a Canadian pattern.

Joseph Martel, of Carlisle, exhibited a handsome spinning wheel. Adam Stratthroy showed an improved spinning wheel, which seemed a neat piece of machinery. William Glendillon, of Ingersoll, also exhibited a spinning wheel.

Joseph Sharman, of Stratford, showed an iron crimping machine. Selway & Iredale, of Toronto, exhibited a quantity of hoof lasts.