

allowance of a little hay and grain, while still in the pastures, may gradually accustom the digestive functions to the new work demanded of them, and when put in the stable or shed on a purely dry aliment those functions will go on uninterruptedly and efficiently. Another point is, that, as far as possible, young and idle horses should have the means of taking exercise daily. If they cannot have a yard or paddock to run in they should be ridden or led out for half an hour daily. When the transition must be made suddenly or has already been made and is evidently disagreeing with the stock, the addition of some laxative agent to the food will usually correct the morbid tendency. Thus, wheat bran to the extent of a quart, or a pint of linseed meal or oil cake, may be added to the daily ration of grain, or roots or apples may be substituted, and of these none is more to be recommended than carrots when these can be obtained. Bran is comparatively indigestible, and should not be fed to excess, as it may, of itself, induce that clogging of the bowels we are so anxious to counteract. It is best given as a warm mash, and when there is no danger to be apprehended from frost, even a little scalded may be given with advantage. As a partial substitute for these natural aliments much good may be derived from a daily dose of one or two ounces glauber salts in the food, to be increased or diminished as may seem demanded in the particular case.

Wool Growing and Wool Manufacturing.

We have before us a letter of the Executive Committee of the National Association of Wool Manufacturers to the Executive Committee of the National Wool Growers' Association, United States. In it the value of sheep husbandry is forcibly presented, and the mutual dependence of wool growing and wool manufacture on each other for the prosperity, and almost the existence, of each branch of industry is shown. To us Canadians the lessons enforced are no less applicable. There is no other husbandry more profitable to the farmer than sheep farming, paying a good direct profit and fertilizing the soil in a higher degree and at less cost than can be done by any other method while the most effectual means of encouraging the extension of sheep farming is the fostering of home woollen manufactures. Of this the wool growers and wool manufacturers are well aware, and to this the associations referred to direct their united energies. We take from the letter some brief extracts well worth our consideration:—

"The immediate object of our Association is the extension and prosperity of the domestic sheep and wool husbandry, and the extension and prosperity of domestic wool manufacture. But your prosperity depends upon an active home market for your wool, and ours depends upon an ample home supply of wool for our mills, and we become thus identified, in spite of our separate organizations, and have for a common cause the securing of a national legislation which shall promote the united wool industry of the country.

"Our united industry is national because it subserves the two great primal necessities of a people—those of clothing and food. It has caused our people to be more abundantly and substantially clothed than any other in the world. Without our own mills we should not have sheep. To our nine thousand sets of machinery employed in the manufacture of wool we owe our invaluable possession of 35,000,000 sheep, whose manure doubles the products of the wheat lands on which they are raised; whose flesh is the most nourishing of all animal food; and which, by their influence in diminishing the cost of all animal food to our whole population, may be safely said to reimburse many-fold the alleged increased cost of clothing to our

people caused by the protective duties on wool. The wool industry is a necessity for the highest national development, because it promotes the highest arts of stock breeding; it is the indispensable adjunct to the most advanced form of agriculture—a mixed husbandry; and in its pastoral form it is the pioneer to new settlements. In our department, more than any other industry, it nourishes the highest mechanical, chemical and decorative arts, and is the invariable precursor of a diversified manufacture with its attendant results of wealth and culture."

Our readers see how our advocacy of sheep-farming from time to time is corroborated by the experience of the most practical men of the United States. We have known by the experience of years the truth of the Old Country proverb, that *the hoof of the sheep maketh the land fat*. We have also the additional testimony that a good home market tends more than anything else to promote the development of the resources of our farms. Not without good grounds does the Association conclude that the encouragement of a national wool industry rises above all questions of economical theory.

The Spring Crop of 1878.

The results of last year's farming, and the anxiety about the fall wheat, must make the enquiry, "What shall be our spring crops?" an important one. The advantages to be derived from a greater diversity of crops and a rotation in our system of agriculture must now be considered. The exhaustion of our soil by successive grain, the policy of sowing less wheat for some time, and the profits of growing a greater diversity of crops are to be considered.

DIVERSITY AND ROTATION OF CROPS.—We have repeatedly urged upon our readers the policy of a more diversified system of agriculture, and every year brings additional proof of the judiciousness of such a course. The farmer who depends wholly, or nearly so, on the bushels of wheat he can raise from his farm, depends on a very precarious support. A large average of wheat may for one year be profitable if the yield be heavy and prices remunerative. It was so in 1877, but there was not for wheat growers so good a paying season for many years in Canada, and, to base our calculations on the recurrence of such seasons, would be great folly. The yield of wheat and its market value may be very different in '78 from what it was in '77, when it put into the pocket of the farmer, acre for acre, more money than any other article of farm produce. Shall we then be induced by the profits of wheat growing in '77 to add largely to the area of our wheat culture this spring. Such is the course that has been generally pursued in this country. If any one crop—wheat, barley or potatoes, or whatever it may be—brings in a good profit, the market is pretty sure to be glutted with that variety the next season, and then an over-supply causes low prices. So we now see in the very large area of fall wheat throughout the country that our wheat crop for '78 promises to be unusually large in acres, whatever it may be in bushels.

EXHAUSTION OF THE SOIL.—The farmer that follows a system of diversified farming will, in a given number of years, make more money than he would by trusting entirely to the growing of wheat or any other grain. He is less liable to losses from a failure of a crop or from dull demand with low prices, and his business is, on the whole, safe. The great advantage, however, to be derived from a greater diversity of farming is the greater fertility of the soil. Wheat crops succeeding wheat impoverishes the farm, exhausting its stores of fertility. The lands of New England that were so fertile a few years ago, have, from scourging

system of sowing grains uninterruptedly, become so barren that in many parts of the country the farms have been deserted, the owners seeking new homes in the virgin soils of the West. More clover, more root crops, more live stock fed on the farm—these are what the country needs for the enriching of our farms and our farmers.

WHAT SHALL BE OUR GRAIN CROP?—The wheat crop of '77 has been more profitable than other produce of the year—the yield has been heavy, the market brisk, with remunerative prices; but it would be folly so to order our farming as if these sort of things were certain for the future, even for the next season. Of such seasons we cannot expect a continuance. How our fall wheat may turn out is now a matter of great doubt, and what the prices may be is a question of as great uncertainty. If the summer and harvest weather in 1878 be favorable to the farmers of England, the prices of breadstuffs may be low. It is not good policy to depend wholly on wheat—to make it our only grain crop. Barley was not a very profitable crop last year. The season did not answer very well for it, and the prices were not high. The Toronto price for spring wheat now averages \$1.08 per bushel; for barley 61c.; twenty-five bushels of wheat (a good crop) would realize \$27; forty bushels of barley (an equally good crop) would realize \$24.40. We have then to take into account that this year wheat is exceptionally high, and barley low priced. And barley, No. 1 Canadian, is quoted in New York at \$1 per bushel. Canadian barley, when No. 1, will be always in demand. In the United States they must buy it, it is so much superior to their own.

It has always held a high rank in the markets of the West. Large quantities are constantly imported from Canada. Duties were paid one day lately in the Chicago custom house on 20,408 bushels of barley. Our advice is that Canadian barley is now greatly sought after in England for malting purposes. Large shipments have been lately made to the old country, stimulating the demand here. Barley for the export trade must weigh 50 pounds to the bushel.

We would certainly not trust our grain crops too much to wheat. We sow wheat and barley and oats. A diversity in our grain crops, as much as a rotation in our agricultural system, we believe to be, on the whole, most profitable.

The Hyacinth in Pots.

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There is no flower to supercede the Hyacinth for an early bed in the border; and when grown in the house, or conservatory, is pronounced by all to be unsurpassed for its rich and beautiful colors, and lovely fragrance. The demand for this winter gem is yearly increasing in Canada, and it speaks well for our farming community to say that many of its members order their supply direct from Holland. In the cities and towns where manufactures are carried on, the factory operative, the mechanic, and needlewoman all delight to have a few pots of flowers in their windows, and as the hyacinth bulb is generally cheap, a few of them are by no means a rare sight in winter. They give a room, otherwise dismal, a cheery look, and no similar amount of money can be spent to give a family an equal degree of sincere and thorough happiness. In the November number of the *ADVOCATE*, a short notice was extracted from the *North British Agriculturist*; but this notice can be greatly improved, and some errors corrected, as the styles of growth in the milder climate of England scarcely answer for Canada. Hyacinths are obtained of all colors except deep yellow and orange. All the best and finest bulbs, and the commonest, will do equally well for pot culture; and as this paper is not written on theory, but by one who has had much