

purchase lean beef. It is better to purchase the poorest parts of a fat animal than the best of a lean one. The best piece of a fat ox (the loin) contains from twenty-one to twenty-eight per cent. more fixed material than the corresponding point in a lean one, and curiously enough, the worst piece in the lean animal (the neck) is the richest in nourishing material. The flesh of the neck improves very little in fattening, hence, economy considered, it is the best portion to purchase, as its value is in a measure a fixed one.

Gang Ploughs.

We know of no agricultural implement for which there is such a great demand at the present time. Every farmer we have seen that has once tried them would not be without one for many times its cost. They are fast supplanting the cultivator. Stubble land and fallows are quite as well worked by it as by the common plough, and at only half the expense. The agent of Mr. Levi Cossitt, of Guelph, the manufacturer of the Richardson Gang Plough called at our office on Friday when he showed us a large handful of orders and applications. A great many had tried the plough and were satisfied. Many orders were from farmers that had seen them work. Some letters contained orders for two and three, some were ordered by the dozen. Mr. Cossitt's plough has already attained a great name in the Dominion, and must spread its usefulness to all localities, as he offers to send them to any good farmer on trial. If they are not entirely satisfied with them they may return them. His Gang plough may be seen at the Centennial and at any of our leading agricultural exhibitions.

The plough took the 1st prize at the Provincial ploughing match last fall in Wellington. Over two thousand of them have been sold since it was first patented—only eighteen months ago.

From 1st January to 1st July, 1876, 163 ships of 109,870 tons have cleared from the port of St. John for Great Britain, carrying ninety million feet of deals, besides large quantities of other wood goods. Last year the number of ships was 97, with a measurement of 60,967 tons, and carrying 49,000,000 feet of deals. The shipments for June were by 59 vessels carrying 33,742,144 feet. The increase is about 80 per cent. in favor of this year.

Miscellaneous.

Farmer's Clubs—Farmers of New Brunswick in Council.

The readers of the FARMER'S ADVOCATE need not be reminded how persistently we urged farmers before the institution of the Order of Patrons of Husbandry to unite in a farmers' club, and hold meetings for the discussion of subjects of interest to them in their profession. Under whatever name or organization they may meet, whether Granges, Leagues, or Clubs, such meetings must be highly beneficial. The following items of interest, selected from the report in the *Colonial Farmer* of a meeting of the King's County Leagues, are worthy of our consideration:—

James G. Farrowweather—Sometimes he was asked, What means this League? to which he replied, simply a farmer's organization for the discussion of the many questions affecting our social economy—by no means political or necessarily so. A society wherein we seek to elevate our condition, break down prejudices, express our opinions, and meet for friendly discussion.

R. McCully thought one way to improve our condition would be to use more manure. When his father first moved to Sussex, and farmed on the gravelly intervals of his neighborhood he could raise a crop of potatoes and three crops of wheat without any manure, but this was not improving his cultivation, for it ran the farm out. He found marsh mud mixed with manure would

produce as good potatoes as barn manure. He once built a small lime kiln, mixed the lime with mud, and found it as good as the compost of mud and manure. Many years ago he had been told it would pay to keep cattle off the meadows. He had adopted the plan and found the meadows improve.

I. B. S. Raymond said he wanted good implements and plenty of them on the farm, and all the labor-saving appliances that could be used in the house. This would improve our condition, and by producing more he could buy more if needed, and save more. But he wanted to see our implements made at home. He believed in encouraging home manufactures, and creating more markets. Facilities for selling were always followed by a demand for production. It was a wonderful stimulant to industry. We should raise more or till less land. By tilling less and better we could have more money and pay higher wages. By stabling our cattle more we would make more manure.

Robert McLeod, M.P.P., said if the implements we have now are not as good as we desire, let companies be formed to give employment. He thought the manure of three cows thrown out of doors no better than that of one sheltered from the weather; one load of mud mixed with manure equal to two loads of barn yard manure. Top-dressing meadow land is very good, but if hide-bound, wants to be harrowed or ploughed. Good implements were no doubt needed, but he was happy to know there were more made at home than formerly. He thought drainage would be very beneficial, and the manufacture of tiles should be encouraged.

Mr. Samuel Frost, of Norton, thought we should impress on our Legislators the necessity of encouraging manufactures, and thus keep the money in the Province.

Mr. Hoyt Foster, of Kingston, said drainage was a great benefit. By lengthening the season it would enable us to produce more. He yarded his cattle nights through the summer, and by hauling earth and sods into his yard was able to make a large quantity of manure, nearly as much as in winter. A neighbor of his, by feeding one cow on shorts and roots had made \$100 dollars worth of butter in two months, and fed a calf besides. He thought it was better to feed his cows in the stable than to turn them on to the meadows.

W. B. Scovil, Esq., of Springfield, was happy to see so many farmers present. His greatest difficulty was that he had to work too hard; but on the manure question he felt he was pretty sound. He kept his in a cellar, and applied it in the fall, and ploughed it in. His horse manure he prevented from fire-fanging by keeping calves on it. His father had used a good deal of lime, and on the fields so limed he found the crops were even better than on other fields. John McLaughlin had applied lime at the rate of 15 to 20 hogsheads per acre, and the grass on a 26 acre field was a magnificent crop. On six acres of it that in addition to the lime had received 10 loads of manure, he had raised 316 bushels of oats. The farm is a heavy and wet soil, and poor at that. Drainage and the use of lime have made a great change. Mr. McLaughlin said he would have been starved out had it not been for lime. Mr. L. considered that the use of lime would enable us to grow wheat again.

J. D. M. Keator was disposed to accept the principle as correct, but considered that in the application of an artificial fertilizer, such as lime, experience was the surest guide. He thought the use of fresh slacked lime freed the organic products in the soil too profusely, and thus exhausted them. We hear of lime being used on heavy clay soils and improving the yield. We also hear of its advantages when applied to light sandy soils, so that we have to experiment for ourselves. Professor Johnston considered one application of lime in ten years often enough. If more manure will give the farmer more producing power, so will the use of good implements and judiciously arranged buildings. We must discriminate as to the application of the means at our disposal. A cheap tool to work with or inferior animal to use is not the cheapest in the long run.

Mr. Frost thought the application of lime too stimulating, and some parties who had used it had exhausted their farms.

Mr. John M. Kinnear, Sussex, considered that lime in developing unknown qualities in the soil, increased temporarily its powers of production, and then fell back to a condition worse than before.

Mr. A. B. Hayes did not believe in growing too many potatoes and oats, but thought the hay crop and stock raising to be the first consideration.

Hiram White used lime on his farm, and had tried it on all descriptions of soils. One fall he ridged a piece of swampy clayey ground and applied lime on it, seeded it down with buckwheat, and produced heavy crops of grass for a number of years. Tried it again on clay land with the best of results, and again on gravelly soil. Its effects were observed for two years and then disappeared.

Samuel B. Belding said twenty years ago he had experimented on a lot of ten acres of land, using lime and muck with the best results. He had top-dressed grass with gypsum, lime, ashes, refuse from his tannery, and had never failed of a good crop of hay.

Mr. Greenlade had used lime on potato land with good success, also on meadow land. It caused the timothy to grow luxuriantly.

An Outside Opinion.

In commenting upon the recent meeting of the National Board of Trade, at New York, the *Scottish American*, of that city, gives the following paragraph:—

Even the proposal to consider the reciprocal trade relations of Canada and the United States evoked a very small measure of enthusiasm, and produced what must prove a very abortive resolution. It is no use denying the fact that commercial reciprocity between the two countries would be an advantage. Since the abrogation of the old treaty the trade of the United States has suffered in greater proportion than that of Canada. The Dominion can afford to do without reciprocity for a longer period than the Union. During the past ten years there has been a steady increase in both the import and export trade of Canada, and at the present time it can show more elasticity and vigor in its finances and commerce than the United States. It is becoming, therefore, a matter of comparative indifference to Canadian statesmen and merchants whether or not a reciprocity treaty be renewed. Yet even in Canada there is a disposition to consider the question dispassionately; and had a conference been held between a committee of the Board and the Canadian delegates who were present it is not unlikely that some advance would have been made in the removal of difficulties, and in preparation for future amicable arrangements. The gentlemen who represented Canada had the confidence of their constituents, and were in every way competent to discuss the question in both its commercial relations and political bearings. The opportunity, however, was lost.

The Evil of Late Hours.

The rising sun draws forth qualities from earth and vegetation most conducive to the moral and physical health of the waking man; the invisible air is laden with properties which stimulate, his powers and refine his faculties. This, then, must be the proper time for quitting the bed-chamber into which the breath has been exhaled for many hours and the pores have been emitting their secretions the conjoined effect being such as to render the air mephitic and unfit for inhalation into the lungs. Miss the morning air, and you daily miss the most valuable draught of medicine that can be prescribed. The most subtle logician cannot gainsay this fact; but even were it not syllogistically demonstrable, the instincts of the animal and vegetable world would bear testimony to it in the example they set to man. No man should sleep less than six hours out of four-and-twenty—none if in the enjoyment of health more than eight.—*The Science of Life.*

To Beat the Curculio.

Now, friends, go to work and raise plums, apricots and fruits of that kind.

It is reported by the Iowa Horticultural Society that burning coal tar under the trees, when in fruit, is a sure preventive of the ravages of the curculio.

Take a long-handled vessel like a frying pan, put in the tar, set it afire, carry it around the trees, letting the smoke go freely among the branches and fruit. Coal tar makes a thick, heavy smoke, which rests on the fruit and leaves, and is proof against attacks of enemies. Mr. Kauffman and others have tried and proved it. Do it often, as rain washes it off.