

logging or derangement. A great difference was perceptible in the noise made by the various machines, some running almost noiselessly, and others making a great clatter. Other things being equal, we should certainly prefer a noiseless machine to one always going clack, clack, like a garrulous tongue; and we suspect there is defect of construction, and want of smooth working in the several parts where there is so much noise. Nearly all the machines had two wheels, the one-wheel principle of construction having been generally discarded by manufacturers. Among those we saw tested, two especially attracted our attention. One was an iron machine, named the "Clipper," invented by R. Dutton, of Brooklyn. Its mechanism was very beautiful, and it worked with much ease and precision. It is a very compact machine. The draft is not from the pole, but from an iron rod below, which would seem to have some decided advantages. The other was the "Eureka" Mower, manufactured by J. D. Wilber, of Poughkeepsie. It avoids the disadvantages of side-draft, by having the horses directly in front, one horse walking in the uncut grass, and the other, by means of a wide whistle-tree, walking outside. The grass trodden over seemed to be cut as easily as the rest. The "Eureka" did its work well and quickly. It cuts a swath rather more than six feet wide. The acre plots were 82½ feet in width. The "Eureka" cut its plot in 13 swaths, while the other machines required from 19 to 23. The dynamometer test had not been applied, and we are curious to know how a machine cutting a wide swath with the motive power directly in front compares as to the force required to work it, with machines making a narrower cut with a side-pull. In all, forty-nine mowers were tried, and from the nearly equal excellence of the work done by several of them, we imagine the judges will find it no easy matter to make their award. We learn from our exchanges that the dynamometer test came off after the mowing, and was a tedious, lengthy affair, consuming some days. On the 16th ult., the trial of reapers commenced, continuing two days. Thirty-two machines competed. They were not all absolutely different machines, nor indeed were the forty-nine mowers. In some instances the same machine was tried more than once under a diversified arrangement. The leading point of interest in regard to the reapers was that of self-raking. A number of devices to accomplish this have been put to the test, and we have little doubt that self-raking will yet come to be so satisfactorily done as to dispense with the additional weight and cost of an extra hand to clear the reaper platform of its accumulations. We shall await with much interest the report of the judges, and shall take care to advise our readers of the results arrived at. We earnestly hope that Canadian, as well as United States implement-makers and users, will derive substantial benefit from the thorough scrutiny which the New York State Society has been at the pains and expense to secure. After the trial of mowers and reapers, that of horse-rakes and forks, hay tedders, threshing machines, and feed cutters was to be proceeded with. The grounds of the Cayuga County Agricultural Society, half a mile out of Auburn, were used as headquarters during the trial. Here were officers' and committee rooms; buildings permanent and temporary; also tents for the exhibition of implements and machinery, of which a pretty good collection invited the inspection of visitors.

Rural Economy of the Netherlands.

(Continued from page 231)

We resume our notice of the copious and interesting report of M. Lavalege, with the following extract:

"On the other side of the Zuider Zee, that great gulf hollowed out by the tempests of the twelfth century, extends the 'green region' of Friesland. In Holland, cheese is the staple production; in Friesland, butter. The cheese made from the churned milk is considered only as accessory. It is in butter making that the Friesland farmer displays that perfect cleanliness which characterizes him. The Friesland butter is so firm in quality, that in the London market, to which it is largely exported, it sells at an exceptional price. The quantity of butter taken to the various provincial markets reached in 1860, 140,000 cwt., which, at the average price of £5, would realize £700,000. The domestic animals of Friesland are celebrated. The cows are as good as those of Holland; and the introduction of Durham bulls will produce a cross breed, which is expected to yield more cream from a smaller quantity of milk, and to fatten more readily. The black Friesland horses, with small lively heads and swan like necks, are capital trotters. In fact, the agricultural productions of Friesland are little inferior to those of Holland, but the farmers are

generally less wealthy. There are not so many properties among them, and the length of lease being only seven years on an average, the rise of rents is continual."

A source of manure is so peculiar to this country as to deserve special notice. Along the coasts are to be seen numerous little hillocks from 1½ feet to 20 feet in height, which were formed by the hand of man during the pre-historic period. These were places of refuge for man and beast during extraordinary high tides, and their commingled ingredients constitute a valuable fertilizer, which has been extensively used for that purpose.

North of Friesland, including the province of Over-Yssel, the land becomes inferior, the surface quite level, abounding in peat, with numerous small lakes and ponds.

"The earth, drowned in water all round, looks like a sea of mud. Towards autumn, numberless herds enliven these green solitudes; but up to the middle of July the only things that are to be seen are the various water fowl and sea gulls. These amphibious tracts exhibit many ingenious methods of cultivation. All sorts of marsh plants grow here with great luxuriance; and they are collected to make manure. The reeds furnish cheap and excellent covering for roofs: rushes are used to make mats, which serve as carpets for the humble dwellings, and are also exported to England. By such means a tolerable revenue is obtained from the swamps. This is also the land of floating islands, which originate in the accumulation of vegetable debris on the surface of the lakes, and in time become firm enough to carry cows. There are certain spots of drier and firmer land, and the delta formed at the mouths of the Yssel rivals in richness the best portions of Holland and Friesland."

The province of Zealand, adjoining the borders of Belgium, consists of several islands, formed by the windings of the Scheldt, and is about equally divided between arable and pasture. Cattle, flax, rape, wheat, and beans are its principal crops. Notwithstanding the humidity of the climate, the land has been successfully cultivated to this section from a very early period; an average of which may be estimated at 12 or 15 cwt. per acre, worth about £27 sterling. Farms are small, ranging from 10 to 60 or 70 acres, and the cultivation and management evince great industry, skill and perseverance.

In the Zealand coat-of-arms a lion is represented lifting himself by a bold attempt above the waves that were ready to engulf him. The motto is, *Super aquas*—"I strive and rise above water." The device is true in a double sense, both as applied to the battle which these islands may be said to wage against the ocean, and to the heroic struggle by which they established their independence. Zealand cut through its dykes and gloriously let in the flood rather than submit to the yoke of Philip II.; and it had afterwards to reconstruct, with great labour, what its patriotism had destroyed in one day.

The province of Groningen, lying at the other extremity of the Low Countries, is well cultivated and highly productive. Land in fee simple will average £80 an acre, and the farming class, on the whole, are exceedingly industrious and intelligent, many of them having accumulated much wealth. In this population, as is more or less the case in the Netherlands generally, we do not find that inequality of condition, constituting grades or classes, which so strongly marks most European populations. Groningen presents a purely agricultural population, governing itself with a liberal profusion of the comforts and even luxuries of life so where more widely and equally diffused.

The only houses are those of the farmers, and they are all alike. The buildings are unequalled. Between the road and the dwelling house is the garden, planted with ornamental and exotic trees, with a lawn laid out in flower beds. At the background is the kitchen garden, filled with fruit trees and a variety of vegetables. The extent of the facade, the numerous windows, the embroidered curtains, the furniture in American oak, the piano, the capital library, all proclaim easy circumstances, and the habits which result therefrom. Behind the dwelling-house is a great building, lofty and long like a church, containing stables, cattle, horses, barns, &c., all under one roof. On entering you find a room sufficient to store the crops of 250 acres, a collection of the most improved tillage implements, sixty cows perhaps in one row, and twenty splendid black horses,

the pride of their owner. The cultivation of arable land prevails, as in Zealand, and it is as well understood as in England. On the clays a crop of 42 to 55 bushels per acre of beans, 55 to 66 bushels of barley, and 77 to 88 bushels of oats is not uncommon. To give an idea of the number of cattle reared, we may cite the parish of Aduard, with not more than 2,000 inhabitants, which exported, in 1860, 359 milking cows, 420 fat oxen, 78 heifers, 86 horses, 1254 sheep, and 700 cwt. of butter, and it does as much every year."

M. de Lavalege ascribes much of the prosperity of the inhabitants of Groningen to the custom of tenancy which prevails in the country, called the *bekken regt*, or hereditary tenancy, and consists of the right of permanent occupation, on payment of a fixed annual sum which the landlord cannot increase. Under this kind of tenancy, holdings cannot be divided, and farms pass on from one generation to another in the order of family descent. Since the value of agricultural produce has much increased by a free market being opened in England, some wealthy cultivators have sub-let their farms on lease at a much increased rate, a practice which our author thinks will, if persevered in, finally subvert the ancient system of tenancy, which has worked so well for the great body of the people.

The means of diffusing useful information, and of advancing morals and civilization, have, in this sphere of action, proved anything but inefficient. "Nowhere, perhaps, is intelligence so generally diffused as in these countries. Most of the farmers are accustomed to engage in theological debates. Many of them belong to the *Meenonites*, who are the Quakers of Holland."

"One day," says M. de Lavalege, "I remarked four fine farms one after the other. I asked the landlord of an inn at which I was stopping to whom they belonged. 'To Quakers,' was his answer; 'they are wealthy, each is worth not less than £26,000 (three tomes).' I have heard the remark that there are no poor among the members of that fraternity; is that the case here? 'Yes,' says mine host, 'they have only a single poor person among them, and when he dies there won't be one!'"

Severe manners, work and mutual assistance, have banished want from these little communities, where every one is known, all are cared for, and each one helps the other. What a lesson do these cheering facts read to older and larger communities; and how clearly do they indicate the intimate relation that exists between man's spiritual welfare and his social and physical well-being.

To be Continued.

The Provincial Exhibition.

There is every indication that the approaching exhibition will show the same steady improvement over the last that each succeeding exhibition has done over the one immediately preceding. The reports from all quarters give encouragement to expect a plentiful harvest in every section of the western Province, and, as a general estimate, it is expected that the yield is fully up to the average. Where the Fall wheat was not entirely blasted by the unfavourable spring, there is every assurance of a fair crop; and where the injury has been fatal, the farmer has replaced his first unproductive sowing by spring grains which now promise well. The prize list for the exhibition has been issued, and the changes introduced demand some attention. The prizes amount to over \$12,000, which is slightly in excess of the amount last year. An important alteration has been made in the rules for competitors by the announcement that entries are open to all, and, consequently, competition is invited from the entire world. The advancement made in this respect is, in itself, demonstrative of the strides the country is making in the acquiring of material wealth. About six years ago the first change in this direction was introduced by opening the live stock classes for universal competition. Then the grain prizes were put in the free list, and now in the Arts and Manufacture Department the prizes are open to every competitor. The change substantiates the fact that Canadian manufacturers are, like Canadian farmers, gradually getting out of