

meeting, their speeches will in like manner be translated into French. Besides this a whole session will be given to the English members, if needed.

Thus, both the English and the French-Canadian dairymen will profit, by the interchange of experience, to the ultimate gain of both sections of our population, and the future improvement of one of our most important industries.

ARTHUR R. JENNER FUST

ENSILAGE.

We have just received the "5th Ensilage Congress report" (address J. B. Brown, 55 Beekman St., New York, price 50c.) a most interesting 8^o pamphlet of 48 pages. From its pages we gather that ensilage is becoming more and more popular in the United States from year to year.

Hon. H. O. Potter, New York, reports that twice the stock can be kept by ensilage than by any other system.—respecting the building of the silo he says: The conditions of success are always the same—the most perfect isolation and exclusion of the air, with as uniform and unvarying a temperature as is attainable.

He advises the growing of corn in the usual manner for the securing of the heaviest corn crop. Then, as soon as the grain is glazed he husks it and dries the grain. The stalks are then cut at once and made into ensilage, after passing through the straw cutter ($\frac{1}{2}$ inch cut), and covered with a foot of earth.

Mr. Potter adds that without ensilage he should not know how to feed his stock of 250 head of cattle successfully on a poor farm.

Mr. George G. Smith, of St. Albans, Vermont, has two farms in St. Albans, Vermont. One is very light gravelly loam, very leachy. Before the adoption of ensilage the utmost capacity of the farm was 14 milking cows, with a proportionate number of young stock, six horses and about 40 sheep and even then had to supply for a deficiency of food from the other very frequently.

He now keeps on the same farm 50 milch cows, 45 younger animals, 60 sheep, 6 to 8 horses, with ensilage enough to carry the stock through continuously to the first of July, or with pasture, through August. He adds that in the near future this same farm will be enabled to keep 100 milch cows and the attendant young stock, with an increasing productive capacity of the farm, from year to year. On this farm, 25 acres of ensilage corn were planted which produced 680 tons, actual weight.

On the other farm, Mr. Smith keeps over 200 cows and raises about 1200 tons of ensilage! He says: "Although our cows have now been fed for six years with ensilage for their only winter food, with the addition of the usual quantity of grain (6 to 8 lbs. daily) the universal testimony of all who visit our farms is that they never saw stock looking so healthy and in such superb condition. Our butter takes equal rank with the finest Philadelphia butter and is of the best texture, color, and fragrance, and is free from the slightest possible taint or odour of ensilage."

This pamphlet is replete with interesting facts, and it should be read by every intelligent farmer in the land. The five reports can be had for \$1.50 by applying as above.

ED. A. BARNARD.

PERMANENT PASTURE.

Box 23, Sorel—February 28th 1886.

Some five years ago, the *Orillia Packet*—I think that was the name of the paper—was good enough to devote a leading

article to my address. I had been for a month or two recommending the readers of this periodical to try, at all events, to establish *permanent pastures* on their farms. I gave certain reasons why they should succeed, and I showed the advantages they offered.

The newspaper above mentioned ridiculed the idea, declared, without advancing any proof to sustain the assertion, that permanent pastures never could be established; and, in fact, ridiculed the entire plan.

What would the *Orillia Packet* say now? I should like to see the face of the editor when he peruses the exhaustive essay by Professor Brown of Guelph at the Huntingdon meeting of the Dairymen's Association! In the present article I shall quote largely from the essay, and I must be pardoned if I point out one or two errors into which I think the professor has, more from haste than from any want of experience, unfortunately fallen.

"As a stimulus to healthy appreciation of the importance of permanent pastures, and as one of the best possible ways of impressing our people, I may ask why it is that Britain, with all her age, experience, and wealth of other things, has already placed half her arable land under this crop. It is not altogether because of foreign competition in other crops, nor of climatic trouble, but because she knows of no better way to conserve, to wait, and to make money by doing little at the least risk and outlay. Britain has never hesitated to "hedge" in her agriculture when troubles arose, and to-day her farmers make more money per acre per annum on the best pasture than from any other source. One cow per acre being the average, there is a gross return of *four times more money than Ontario now shows*, and thousands of prime bullocks are annually produced from the same source."

Now, I am not by any means sure that half or even one-fourth of the arable land of England has been laid down in permanent grass. It is an expensive business, and tenant-farmers, unless aided by their landlords, have not of late years had the means to do it. A good deal has been done, but I doubt very much whether a million acres would not cover it. In Scotland there is, practically speaking, no permanent pasture, except what are called "grass-parks," i. e., small enclosures round villages, and a few acres round the farm-buildings for the use of the calves and sick horses. Indeed, I constantly meet with such advertisements as the following: Farm to let; property of containing 204 acres, of which 197 are arable. All the farming in Scotland, bar carse-land and upland grazing is on the five- or six-course rotation. (1)

As for one acre keeping a cow *for a year*, I think Mr. Brown must mean *for the season*. On our own Gloucestershire property, the land has been down in grass for certainly 500 years, and first-rate grass, too, it is, as will be understood when I say that if any one of the tenants breaks up an acre of it, he is bound to pay to the landlord £50! In spite of its goodness, it takes *three acres* to keep a cow winter and summer, and the average yield of a cow is 448 lbs. of Gloucester cheese, that is, 150 lbs. per acre. No doubt, English farmers make more money off "the best pasture" than from any

(1) In 1880, there were in Forfarshire, a model county, 253,373 acres of arable land, and only 27,251 acres of permanent grass, exclusive of heath or mountain land, but inclusive of deer parks, &c. Forfarshire has to my knowledge always been noted for having a larger proportion of grass than almost any county in Scotland, and Forfarshire has only *one-ninth*! Kincardine had, in 1880, 1203,22 acres of arable, and 5797, one-twentieth, of grass! v. Journ. Highland and Agricultural Society 1881. Aberdeen, with 604,734 acres under the plough, has only 27,406 under grass. Lanark and Ayr, lying close to the West coast, have a larger proportion of grass, and are dairy counties. Much of the permanent grass on the Borders is in sheep-walk.

A. R. J. F.