

out to be thoroughly satisfying on this point. The safest plan, in my opinion, and I have planted many an acre, is to make the sets moderately large: whether whole or cut is at present a toss up. (1)

Feeding experiments.—At the New York Station an experiment was made with 2 years old half bred Holstein-short-horns, "for the purpose of comparing the relative feeding values of a nitrogenous vs. a carbonaceous ration with growing and fattening animals." Two lots were made each containing two steers and two heifers. The hay, silage, and roots were the same for both lots, and all received wheat bran and corn-meal, but in the case of lot 1 part of the corn-meal was replaced by either linseed meal, gluten meal, or cottosseed-meal. The trial lasted 163 days, and the conclusion arrived at was, "that the substitution of nitrogenous foods for corn meal and a small quantity of bran, was not followed by any advantage as a fattening ration, so far as the increase in live weight indicates."

The meat of the animals fed on the more carbonaceous ration was thought to be "much the tenderer and sweeter."

Sir John Lawes came to the same conclusion many years ago: see his "Experiments on pig-feeding," R. A. Society's Journal, Eng.; No. XXXII, 1853.

Sowing-crops.—An interesting trial was made, at the Pennsylvania State College, on the yield and nutritive value of sowing crop. The land employed for the purpose was very heavily manured. The total yield per acre, and the yield of digestible food ingredients were as follows:

YIELD PER ACRE.

	Total green food	Total dry matter.	Digestible.			
			Albuminoids	Non-albuminoids	Carbo-hydrates	Fat.
	Pounds	Pounds.	Pounds.	Pounds.	Pounds.	Pounds
Rye	15,890	2,491	106	209	1,310	90
Clover	26,650	4,094	515	96	1,614	139
Corn-fodder	17,890	1,782	195	46	857	28

To shorten a long story:

THE YIELD OF MILK AND BUTTER PER ACRE WAS:

		Milk.	Butter-fat.
Green	Rye	2,120 lbs.	84 lbs.
	Clover	3,098 "	125 "
	Corn fodder..	1,508 "	65 "

Thus, taking the milk all round at a cent a pound the clover yielded, per acre, \$30.98; the rye 21 20; and the corn-fodder \$15.08. Or, in butter at 20 cts. a pound: clover \$25.00; rye \$16.80; and corn-fodder \$13.00, besides the skim-milk for the calves and pigs. A fair proof, as far as one experiment can show, that of all green-meats, clover is the best and corn the worst; and yet Mr. Tylee, of Ste-Thérèse, has no opinion of clover-silage, probably, because the corn he ensiles is ripe, or nearly ripe, in the grain. (2)

Ensilage.—The samples of ensilage sent to the Dairymen's Association last year for judgment were six in number: five of corn-silage and one of clover.

On these, the report of the judges was as follows:

"MR. FISHER—Gentlemen; M. l'abbé Chartier was to have presented the report on the samples of silage, but he was obliged to leave, and he begged me to take his place.

There are five samples of corn-silage, all of excellent quality. The best, we found in the box made of green-wood, but the name of the owner we could not discover. This maize is of the best quality, it was ensiled at a fit degree of ripeness, and had not suffered from frost. Even now, it has still the appearance of fresh cut corn. With the exception of a slight development of acidity, it has undergone hardly any change since its ensilement. (1).

The next sample came in a cheese box. Neither of this could we find the proprietor's name. This sample also was cut before frost, and is fairly ripe. It contains a good amount of nourishment; only its preservation is not so perfect as that of the former sample. (2)

(1) and (2). Since the meeting, the secretary has found out the names of those who sent in the samples. No. 1 was furnished by Mr. Joseph Dumas, of St-Isidore de Dorchester; the second by the Rev. M. L. Gagné, curé of St-Ferdinand d'Halifax. Both these exhibitors are only beginners in silage-making. This proves the truth of what has often been observed: there is no agricultural novelty so easily put into practice as the making of silage.

The third sample is from Mr. Cartier, of Kingsey. Its quality is about the same as that of No. 2, except that the maize was not cut fine enough; and Mr. Cartier was anxious that we should state that to ensure the good preservation of silage, it is almost absolutely necessary that it should be cut fine.

The fourth is from Mr. Brodeur, of St-Hugues. This is a well preserved sample, but we do not think the maize was ripe enough before it was cut; and it had also been slightly frozen before it was ensiled.

Sample 5, belonging to Mr. Monat was cut into too long pieces by the chaff-utter. It fermented a little too much in the silo.

Mr. J. Damien Leclair sent a sample of clover-silage. It is perfect; we find that it contains much more nutriment than either of the preceding samples. Its only defect is that it was not chaffed before ensilement."

I have always held that clover would make better silage than corn, if properly cut and packed; and the amount of weight per acre, if the clover were mown three times—in early June and August, and late September—would be very nearly, if not quite as great as a crop of silage-corn.

But, there is something much more astonishing to my mind in the fact that Mons. Choquette, of the experiment-station at St. Hyacinthe, finds that Mr. James Drummond's silage, made from sweet-corn, the cobs of which were gathered and sent to market, (1) was by far the most nutritious of 15 samples sent him for analysis!

Valued at the usual rate for carbo-hydrates, albuminoids, and fat, the average samples were worth \$2.26 a ton. The most inferior sample M. Choquette's values at \$1.40 a ton; the second best, at \$3.18, but Mr. Drummond's he reckons to be worth \$3.54, and this without the grain! In this, there was only 74.86 % of water, while some of the other lots contained as much as 87 %! Of albuminoids Mr. Drummond's contained 2.33 %, the average being 1.43. The average of fat, worth as much as the albuminoids, was .62%, but of Mr. Drummond's 1.70 %—nearly three times as much—some of the other samples holding only 0.35 %, and the very

(1) Except for the ash-leaf kidney, which must never be cut.

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(2) See "clover-silage" at the D. Ass.

(1) They sold for \$50 an acre!

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