

Messrs. Ward, M. P., Col. Rhodes, Bissell, Thorburn, Everets, and Blair, discussed some of the most important points of Mr. Robertson's lecture and the session adjourned.

#### AFTERNOON-SESSION.

The president took the chair, and declared the session opened, at 2.30. At his invitation, the members continued the discussion of Professor Robertson's lecture for about an hour.

The delegates were then requested to place their railroad tickets in the hands of the secretary to be initialed by him so as to enable them to get the reduction of their fares they were entitled to.

Mr. Ed. A. Barnard, secretary to the Council of Agriculture, and director of the official Journals of agriculture of the Province of Quebec, was then requested to address the meeting.

Mr. Barnard's lecture was entitled, "The rational feeding of milch-cows." He laid down the principle that the intelligent milk-producer regulated his system of cow-feeding so as to obtain the greater possible net profit at the lowest possible cost. The greatest yield to be got from a cow in a year is thirteen times her weight. A middling yield would be seven times the weight of the cow, as there are some who only give twice their weight in a year. A table was displayed showing that cows do not always give milk in proportion to their weight. Generally small cows give more milk in proportion to their weight than large ones. Thus a good cow of 440 lbs. will give eight times her weight, while a cow of 1760 lbs. will only give five times her weight of milk in a year. On the other hand,

it was shown that the small 440 lbs. cow will eat more in proportion to her weight than the 1760 lbs. cow. The smaller one requires 4.12 lbs. of hay per 100 lbs. of her weight; the larger cow only about 3.35 lbs., per 100 lbs. This was shown in another table.

In these calculations, not only must the milking value of the animal be considered, but the quality of its food, the care given it, and the temperature of its abode. Thus, a third table proved that if an animal requires 13.2 lbs. of food as a maintenance-ration at a temperature of 32° F., the same animal will only require 6.6 lb. at 68° F.

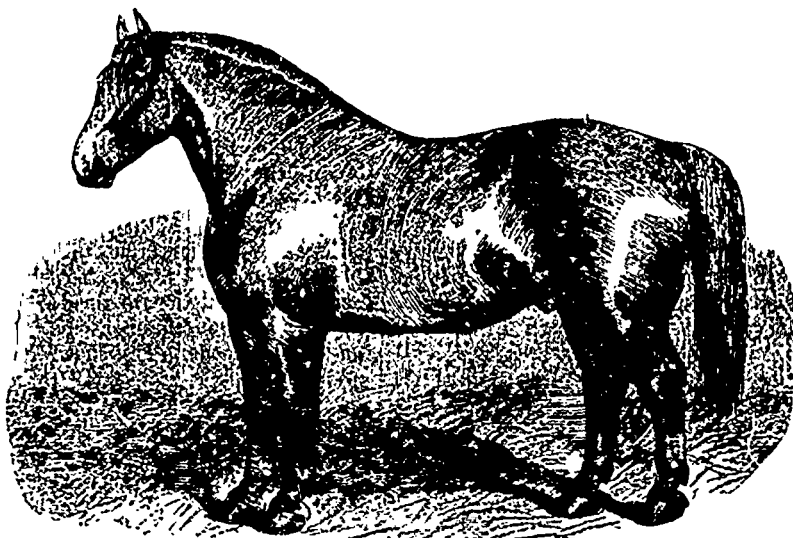
As to the quality of food, it is settled that the young grass in June, growing on the side hills, is the best for the production of milk. (1) We must therefore try to provide throughout the year a food composed of elements approaching as nearly as possible the composition of this grass. A very elaborate table showed how this food is to be composed.

(1) All the best pastures for milch cows in England are, as far as I know, and I have visited most of them, on the dead level, and many of them below the level of the sea or tidal rivers. A. R. J. F.

The lecturer, applying the principle he had just laid down, demonstrated by a fifth table the yield he had obtained, by means of it, from a herd of ten Jersey-Canadians belonging to him. The cows averaged, in weight, 700 lbs., and gave in a twelvemonth an average of 7,500 lbs of milk each. The cost of their keep was \$31.64 a head, for the year, and calculating the milk at a cent a pound, the net profit per cow was \$43.36 a year.

At the request of Mr. K. Everets, immediately after Mr. Barnard's lecture, the president invited M. A. G. Thorburn, N. W. Territory, to say a few words. Mr. Thorburn expatiated on all the advantages offered by the North-West to those occupied in the dairy-industry. The land is of superb quality, the climate, though very cold in winter, is dry, and the summer magnificent. The grasses are rich, and must be capital food for milch-cows, as they were for the immense herds of bisons which formerly used to frequent the prairies of that region. At present, milk and cream are scarce, and any one who devotes himself to the dairy-business must reap great profits from it. Just now, the cost of transport is so great, that no profitable export business can be carried on. The speaker would be glad to join the Dominion dairymen's

association, but he was sorry to see that, before he became a member he must be a member of some provincial dairymen's association. He hoped that this rule would be modified in favour of those who lived where none of these associations existed. (To be continued.)



A YOUNG ENGLISH SUFFOLK STALLION.

#### OUR ENGRAVINGS.

*A young English Suffolk Stallion.*—A horse that weighs about 1500 lbs., and is active, steady at a

pull, and can walk  $4\frac{1}{2}$  and trot 8 miles an hour, is a valuable farm-horse. Such an animal is the Suffolk, and I never could understand why they are not popular here.

*Turnip-hoers at work.*—The hoers, you will observe, stand squarely to the drills, and don't fiddle along the rows as too many of our men and women *à Sorel* persisted in doing until I worried them out of the practice. Edge-hoe potatoes and corn along if you like, keeping the row of plants between your feet; but mangels, swedes, &c., that require singling, and the pulling down of the drills, should be struck at right-angles. One careless man in the picture is standing on the plants, and the griever or steward blew him up I hope.

A. R. J. F.

#### CORRESPONDENCE.

June 17th, 1889.

TO MR. JENNER FUST.

Sir,—I send a list of the seeds that I sowed at Lachine on April 26th. They are all doing perfectly well; the pease