## Patmore's Reliable Seeds, Trees, Shrubs and Plants

THE DAY OF THE PRODUCER IS HERE—and now is the farmer's and gardener's opportunity to increase his crop and improve his farm and home grounds. By so doing he will increase his present prosperity and insure the increased value of his holdings.



The Patmore Nursery Co. BRANDON, Man. Limited SASKATOON, Sask.

GROW TREES in all parts of your farm, they will insure your crops in all seasons against drought and hot winds.

GROW HARDY FRUITS, your family needs them in summer and winter.

GROW VEGETABLES for home use and for sale, they pay. GROW SEEDS, ROOTS AND FODDERS, they yield abundantly.

## WE SUPPLY EVERYTHING TO MAKE A GOOD GARDEN

COLLECTION NO. 1

Contains 22 varieties of our Reliable Vegetable seeds in packets and ozs. 2 lbs. of seeds for \$1.25 prepaid.

COLLECTION NO. 2

12 packets of Reliable Flower seeds for 25 cents

FARMERS' COLLECTION NO. 3

Contains I lb. Mangel, I lb. Sugar Beet, I lb. Swede, ) lb. Carrot, ) lb. Kale and 4 lbs. Rape—8 lbs. seed for \$2.50 prepaid.

Write today for our 1915 Catalogue in which we list all the hardiest and best varieties of Vesetable and Flower Seeds. Fruits, Trees and Shrubs, Grasses, Fodders and Seed Potatoes.

We have growing in our nursery and offer for sale: 255,000 Native Maple, I to 3 ft. high. 6,000 Ontario Maple, 2 to 6 ft. high. 12,000 Native Ash, 1 to 8 ft. high. 150,000 Russian and other Poplar in all sizes. 70,000 Russian Laurel in all sizes.

5,000 Crabapple and Plum Trees and a large stock of all hardy fruits, ornamental shrubs, plants, etc., at prices from \$6.00 per 1,000.

FOR \$10.00 CASH with order we will send prepaid to any address—50 Currant and Gooseberry Bushes of best varieties, 100 Raspberry Plants, 12 Plum and Fruit Trees, young and thrifty, 2 to 3 ft. high, and 12 Rhubarb Roots. All of the above for \$10.00.

We are Special Agents for Messrs. Sutton & Sons, Reading, England. We list in our Catalogue the hardiest varieties of their World Famed Seeds in sealed packets at 10 cents per packet. We have 6,000 bushels of Seed Potatoes of the best varieties.

WRITE FOR OUR ILLUSTRATED CATALOGUE G.

## Live Stock

FEEDING STEERS CHOPPED GRAIN

Some interesting feeding experiments have been made during the past year under the direction of the Alberta Department of Agriculture. These are, of course, in a large measure not conclusive, as definite results in this line can only be secured by work covering a number of years. However, they are informative and interesting judged from the average stock feeders' view.

A bunch of steers were selected of the thick

thick, broad, low set, contented looking type, carrying flesh on top with plenty of heart—girth and broad, short head, indicating vigor and intelligence. Great care was taken that in feeding, the animals should be as quiet as possible. should be as quiet as possible. One regular attendant, with whom the animals became familiar, was used. The steers were watered from a galvanized iron tank; the ice being kept off the water by means of a heater set in the tank. The heater was a specially constructed one for the purpose, the water coming in direct contact with it. A comparatively small amount of coal being sufficient to keep the water from freezing.

The steers were divided into three lots:

TA!

All of No. 1 were fed cut feed entirely, principally green oats and some wheat with chop in addition. All of No. 2 were fed sheaf oats and cut feed twice a day with chopped feed mixed with it. All of No. 3 were fed sheaf oats and wheat and the showed grain was fed sengrately. and the chopped grain was fed separately.

The experiment having extended only over one year cannot be absolutely conclusive; it showed in favor of the cut feed and chop mixed. There was not much difference, however, between these against long feed with cut feed and chop

One strong point in mixing the chop with cut feed was found in that each steer was more likely to get his full share of the feed. When the chop was fed alone some animal was sure to get more than his just share. Not only did this deprive the more timid animal of sufficient, but it gave too much to the other and mixed. but it gave too much to the other and thus put him off his feed. So far as the experiment went, indications were that it did not pay to have the grain ground exceedingly fine. The experimenters were enabled to feed much more heavily with the coarse ground feed and there was much less liability for the animals to go off their feed on it. When feeding coarsely ground chan they were able to go off their feed on it. When feeding coarsely ground chop they were able to bring the steer up to an allowance of fourteen pounds per day; and where it was finely ground it was with difficulty that the steer could stand twelve pounds per day. In the beginning, to feed the chop, a start was made at about three pounds, and the ration gradually increased until a maximum of twelve or

fourteen pounds was reached. The chop was started about the first of the year and in two and one half months the cattle were on full rations. The chop consisted of oats and barley or oats and frozen wheat. This latter did not give very good results. A couple of weight making tests are given below:—

Weight of 22 steers weighed out
on May 27
Weight of 22 steers weighed in
on Nov. 22

Total gain in weight	6,275	"
Average weight of 22 steers weighed out	1,506	"
weighed in	1,220	"

## SILAGE FOR FATTENING CATTLE

Average gain per head ...... 286 "

The past summer has been a severe teacher to many farmers. Feed is scarce and many cattle have to be sent to market which might more profitably Feed is have been wintered over had the feed

The value of silage when used for fattening cattle is set forth in the following extract from an Iowa bulletin, the conclusions from which, althe written concerning conditions in that State, are equally applicable to Western Canada:—

Corn silage should be put into the feeding program of every Iowa beef producer if he wants to fatten cattle economically and efficiently. That corn silage is our most profitable cattle roughage has been clearly demon-strated at the Experiment Station as well as upon hundreds of Iowa farms.

The addition of corn silage to the ration not only decreases very materially the cost of gains, but usually makes them more rapidly. The steers are finished more quickly and ordinarily sell for a higher price than where clover is used as the roughage.

Fattening cattle of all ages utilize silage as their roughage ration. It is as good for the calf and yearling as for the two and three year old. All profit from its use.

Silage is practically one-third to two-fifths as valuable as clover hay for beef production. Silage at \$3.20 a ton and clover hay at \$7.66 a ton were equally efficient in fattening two-yearold steers in 1911-12 in our station tests. Ordinarily when clover is sell-

alfalfa is fed, but are made more cheaply. Furthermore, the selling price is markedly enhanced. Actual experiment has shown that as compared to clover in a ninety-day feed, silage cattle, rightly fed, will sell from ten to seventy-five cents higher per hundred weight.

For a long feed silage is quite efficient, producing, as compared to clover, both cheaper gains and a higher quality of finish.

Protein supplements must be fed with silage in order to make it an efficient fattening food. Cattle cannot be fattened economically on corn and corn silage. It is imperative and absolutely essential that protein concentrates such as cotton seed meal, cold pressed cottonseed cake, linseed oil meal or similar feeds be fed.

Some very good rations which have been tested out and found highly effi-

cient, follow:
For calves—Corn, full feed; linseed or cottonseed meal, 3 pounds per thousand pounds of live weight daily; clover or alfalfa at free will; oat straw at free will; corn silage twice daily, all that they will clean up in from thirty min-

utes to an hour.

The addition of dry roughages to the silage ration is profitable as all cattle seem to crave a certain amount of dry rough feed. Although clover and al-falfa are desirable oat straw may be profitably used in their absence.

Yearlings and two year olds or older will require about the same ration as calves with the exception that the protein supplement may be decreased somewhat. Two year olds should receive about two and one-half pounds of linseed or cottonseed meal per thousand pounds of live weight daily; yearlings about two and three-quarter lings about two and three-quarter pounds.

The average daily silage, hay and grain consumption of a two-year-old steer weighing 1,000 pounds at the start, during a five-month full feeding period will approximate: Shelled corn, 13 to 16 pounds.

Cottonseed meal or linseed meal, 2.7 to 3.6 pounds.

Clover or alfalfa hay, 3 to 5 pounds.

orn silage, 22 to 35 pounds. With silage as lone roughage the consumption will be about 28 to 35 pounds. It requires practically one and three-quarters to two and three-

and three-quarters to two and three-quarters tons of corn silage for a five months' feed for a two-year-old. In the absence of any dry roughage such as clover, alfalfa or oat straw, corn silage may be used as the lone roughage. Some dry corn stover should be utilized if possible. In case of lone silage feeding, however, one had best increase the protein concen-trates slightly.

In what quantities throughout the feeding period shall we feed silage? Our experience clearly shows that sil-



Bunch of steers being fattened on the Olds Demonstration Farm, Alberta

been available. A substitute is needed to fill up the feed gap. What better one could be advocated than corn? Some farmers still believe that corn cannot be grown successfully in the West, but some farmers in practically all localities thruout the country have this year produced corn on their farms. The value of corn in the States to the south is only too well known, and as silage, nothing perhaps is so universally used and highly prized as a food for all kinds of stock, particularly ing from \$10 to \$15 per ton, silage is worth from \$3.50 to \$6.00.

That the corn grain which is put into the silo is not wasted our feeding records clearly show. Cattle receiving silage do not eat as much grain as hay fed cattle, the decrease being approximately equal to the amount of corn found in the silage. For a short feed, silage is pre-

eminently our most abundant and effi-cient roughage. The gains are not only more rapid than where clover or