always a portion of the profit arising from the transaction. This besides being bad in principle, is entirely unnecessary. By having his own discount check, the merchant keeps his business entirely in his own hands, fixes his own rate of discount, and can give premiums or trade instead of cash, if he so desires. In order to encourage what we believe to be a better and strictly legitimate way of doing business, The Commercial will undertake to furnish discount checks to the trade, at a nominal price. By using these checks, each merchant will have a distinctive stamp of his own, which will prove a good advertisement for his own business alone, and will not advertise a competitor. The system will also have the effect of encouraging customers to continue their trading at the place where the checks are used, instead of wandering about from store to store, as is the case under the trading stamp system. The Commercial will send free sample cash discount checks and instructions on application, to any one who will enclose 2 cents for postage.

## HOME FRUIT TRADE.

The Dominion department of agriculture has issued a pamphlet giving information in regard to to the exportation of Canadian fruits to British markets. Canadian fruit growers should try to supply the home trade before seeking an extensive export business. There is a large and constantly growing demand for fruit in Manitoba and the Territories, which Canadian growers have never yet been able to supply to any considerable extent, except for a few varieties of the firmer fleshed fruits such as apples. The home trade should be more profitable than export business. At present the bulk of the supply of such fruits as peaches, pears and plums, for our western markets comes from the United States. Shipments of the more tender fruits received in the Winnipeg market from Eastern Canada, have usually arrived here in an unsalable condition, owing to the lack of knowledge shown by the growers and packers in handling fruits for distant points.

## TRANSFORMING THE PRAIRIE.

The Commercial has for years been a steadfast advocate of tree-planting on our prairie farms. It has been proved by experiments that a great variety of trees and shrubs can be grown to advantage on the open prairie. This week we give a number of illustrations of scenes on the Experimental farm at Indian Head, showing what has been accomplished there within a few years. A commencement was made at Indian Head in 1888. Little could be done the first year or two beyond erecting buildings and preparing the soil for cultivation. A great transformation however, has already been brought about, and now avenues, groves and shelter belts of vigorous trees, shrubs and ornamentals have transformed this spot of bare, bleak prairie into a place of beauty. The illustrations given herewith were first produced in a handsome special number published by the Indian Head Vidette, to which publication The Commercial owes its compliments for the appearance of the cuts in these columns. The following article from a recent issue of the Farmer's Advocate, gives some interesting information about the farm:

### INDIAN HEAD EXPERIMENTAL FARM.

At an altitude of 1,924 feet above the sea level, on a bare, open plain, many miles from timber, is located the 682 acres which compose the Dominion Experimental Farm for the Northwest Territories. Indian Head is on the main line of our great transcontinental highway, something over 300 miles westward from Winnipeg. Previous to its acquirement by the government it had all been under cultivation as a portion of the celebrated Bell Farm. Mr. Angus MacKay, who has been superintendent of the farm since its establishment, had previous to his appointment farmed for several years in the neighborhood. As an experimental farm for the wheat-growing sections of the Territories the site was well chosen. Two coulees drain the farm, and from reservoirs formed by dams across one of these the water supply of the farm is obtained. The soil, with the exception of 100 acres of heavy clay, is a very uniform, rich, black sandy loam with clay subsoil. Upon the government taking possession, attention was immediately given to tree-planting, but at first without very marked success. Within the last five or six years, however, the development along this line has been most marked, and where ten years ago not a vestige of a tree could be seen, to-day there are in all some fifty acres of strong, vigorous growing shelter and ornamental trees, distributed in plots of from one to twelve acres on different parts of the farm, and in addition some ten miles of roads lined on both sides with avenue trees or hedges. The success of tree-growing depends, as pointed out by Mr MacKay, upon summer-fallowing the land previous to planting, and subsequent thorough and frequent surface cultivation in order to keep down weeds and grass and to retain moisture in the soil. For general planting Mr. MacKay recommends: Native maple (box elder), as being most readily obtained and easily started, even where there is no shelter; the native white ash, for purposes of utility; the elm (native), for avenue and permanent planting; cottonwood, for quick growing in avenues or elsewhere; and the native poplar. Of the shrubs and ornamentals, the Caragana and honeysuckle stand at the head of the list, with the Asiatic maple (Acer ginnala) the choice for low-growing, ornamental hedges. The list of trees and shrubs that have been found perfectly hardy now numbers upwards of 200 varieties; of course, it should always be borne in mind that most of these are only hardy grown in the shelter of other more hardy trees.

In addition to demonstrating the possibilities of tree culture on the high, bare prairies of what has been termed the semi-arid districts of the Central West, it has also been shown that by a proper system of cultivation wheat can be grown successfully, almost regardless of the rainfall for any one season. That system consists of bare summer-fallowing, so performed as to conserve the moisture of two seasons for the growing of the one crop. At first, one deep plowing in the early part of the season, followed by frequent surface cultivation to destroy germinated weed seeds and keep a perfect soil mulch on the surface, gave best results, but as the root fibre became worn out of the soil this system tended very much to cause soil-drifting. As seeding-down is not yet practical on the large scale on which farming is carried on in the wheat areas of the West, this plan of fallowing is being modified to suit these conditions, and now the first plowing is a shallow one, followed as before by frequent surface cultivation, continued till the season of growth is past; then the land is plowed again deeply, and the subsoil thus brought to the surface does not mellow enough to drift. Of course, weed seeds may thus be brought to the surface to grow with the crop, but these may be held in check by the harrow and weeder after the crop has been sown. Mr. Mackay recommends summer fallowing one-third of the land each year and taking off two wheat crops, the second without plowing, simply burning off the stubble and drilling in the seed.

Red Fife still holds supremacy over the forty varieties of wheat under test from year to year. Wellman's Fife (practically the same thing) ranks well up, as does Redfern and White Fife; while the Dominion Experimental Farm hybrids, Preston and Stanley, keep well up in yield and quality. Out of sixty varieties of oats, none rank higher for general utility than the Banner, which has averaged close up to one hundred bushels per year. The Abundance stands next, perhaps, both being first-class milling oats. Of early varieties suitable for Northern Alberta, the Welcome, Winter Gray, Early Gothland and White Russian will likely be found most suitable. Of six-rowed barley, the Odessa has been the best and most regular in yield; and the Canadian Thorpe, the best all-round two-rowed being stiff in straw and fairly early; but for general cultivation none excel the Odessa. Peas have been fairly tested, and, while they yield largely, are not likely to be generally grown under existing conditions. Some of the Experimental farm hybrids head the list, but of the varieties to be had on the market, Prince Albert and Crown are the best small, with Pride and Mummy about the best large peas. Spring rye has been found a most useful fodder crop, yields two cuttings if sown early, and is absolutely proof against summer frosts. Success has not yet been achieved in growing corn or any of the millets. Grasses however, have been grown with marked success. The introduction of Brome grass is due in a large measure to the work done on this farm. It is now considered one of the best and most serviceable grasses for the west. Native rye grass—Agropyrum tenerum—is also a most useful variety, yielding heavy crops of hay. While several of the clovers have lived through the past two winters, nothing much can