

# Conservation

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## Tree Planting on the Prairies

What One Teacher Accomplished—  
A Centre for Neighbourhood  
Improvement

A certain teacher in a rural district in Saskatchewan, having prepared the ground last summer, has planted nine hundred young trees at his school this spring. The varieties include Manitoba maple, green ash, golden willow, Russian poplar and caragana. In addition to this, he has a flourishing school garden. As a result of his work, the people of the district—mostly Germans—are applying to the Indian Head nurseries for over 50,000 trees for the spring of 1915.

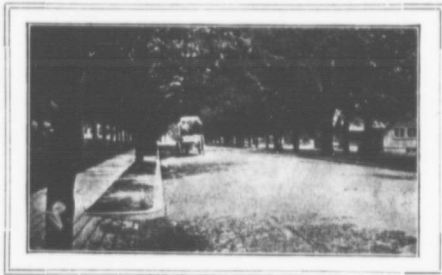
The importance of tree planting on the wind-swept prairies of the Canadian West is obvious to anyone who will give the matter a moment's reflexion. Yet why is not more of it done? We often hear it said that the farmers have not the time. But in any district where an enthusiast begins the good work, others follow; the essential thing is to stimulate interest by a concrete illustration of what can be accomplished.

If every teacher in the West would emulate this young man's example a change could be wrought in the appearance of the Canadian prairies and the general comfort of western life that, in a very few years, would amount to nothing short of a revolution. Some day the casual traveller between Winnipeg and Calgary will no longer turn wearily from the car window and sigh for a change of scenery, but will write to his friends of the charm of peaceful homes, each snugly sheltered by its grove of trees and surrounded by its garden of bright flowers. This is no mere idyllic picture; it is within the scope of art to make the prairies as attractive as any countryside that inspired the songs of Tennyson or of Burns.—P.M.B.

## FORESTRY CONVENTION

The fifteenth convention of the Canadian Forestry Association will be held at Winnipeg on July 7, 8 and 9.

The world owes you a living, but you must be your own debtor-collector. Get busy.



A Waste of Pavement

This street exemplifies a common fault in residential street-making. The pavement is too wide, for the traffic is light. A narrower pavement would permit a wider boulevard. See page 4, "Streets we Like to Live on."

## The Smoke Nuisance From Round Houses

A Method has been Discovered for  
Abating the Smoke Nuisance  
from this Cause

There is little excuse for dense smoke arising out of the operation of stationary plants, as this can be overcome by the use of mechanical stokers using a fuel adaptable to the class of work required. In the case of roundhouses, however, some allowance must be made, as the dense smoke is formed by the lighting of fires and by the banked fires of standing engines.

The nuisance resulting is considerable for two reasons. (1) Round houses are generally situated within the city limits and near residential districts. (2) The ordinary arrangement is to discharge the smoke from the roundhouse by short stacks. In this way the smoke is more liable to be a nuisance than when discharged from a tall chimney.

The following method of smoke elimination has been used successfully at a 30-stall engine house situated in a residential district of Chicago. The smoke from the stacks is drawn into a main flue by means of exhausters and discharged into a series of washeries, the number depending upon the amount of smoke to be treated. Live steam is also added between the flue and the washery. In washing, the smoke is passed through water, under a head of about one inch. This is done in two similar compartments in series. It is estimated that the process will remove

practically all the consumed carbon and 75 per cent. of the acids and gases.—W.J.D.

## Co-operation Reduces the Cost of Living

Civil Servants Reduced their Grocery  
Bills 2 Per Cent.

Ottawa Civil Servants are cutting down the cost of living. For the year ending March 31, last, they paid 2 per cent less for their groceries than other householders. They were enabled to enjoy this reduction because they have joined together to form the Civil Service Co-operative Supply Association which runs a first-class grocery store. Members of the Association received a dividend of two per cent. on all their grocery purchases for the past year. The Association is not yet two years old and every indication points to the fact that larger dividends will be forthcoming in the future.

Some noteworthy facts are presented in the annual report. One is that the store did a business of practically \$1,000 a week on a capital of \$2,570. Another is that the cost of delivering goods amounted to slightly over \$3.60 on each \$100 worth of goods sold. In the average grocery store about two thirds of the goods sold have to be delivered. According to this, about 5½¢ is paid for delivery charges on every \$1.00 worth of groceries delivered. This reminds one of the statement of James J. Hill, that the cost of high living and the high cost of living are often confused.—M.J.P.

## Processes Used in Butter-Making

Simple Rules for Making Good Butter—  
The Part Played by Bacteria  
—Directions for Churning

Some bacteria are good friends of the butter-maker, while others are very bad enemies. The ripening of cream is mainly due to the work of the good bacteria which it contains, and these small germs thrive best when the cream is kept warm. The bacteria which are of greatest aid to the dairyman are the lactic acid germs. A pure culture of these germs is known as "starter." Starter is used by the best butter-makers for ripening cream and gives to the butter that fine flavour and aroma so much desired.

There are other bacteria which cause trouble in butter-making. Among these are the bacteria which turn milk blue, red, and occasionally yellow. Others produce a curdling of the milk without souring. Some produce gas accompanied by bad flavours. Some make the milk very bitter, others give it a soapy taste, a fruity taste, or a strong barnyard odour, and some make the milk slimy or ropy, so that it can be drawn out into long threads.

Trouble from any of these is usually the result of carelessness or unsanitary conditions. These

(Concluded on page 2.)

## Alfalfa Fireguards

Much of the loss to crops, buildings and other improvements, caused by railway fires in cultivated sections of the Prairie Provinces, could be avoided if farmers would raise some non-combustible crop on a strip of land adjacent to railway rights of way. Alfalfa is suggested in this connection, since this crop will not burn and a narrow strip would form a thoroughly efficient fireguard. Where clover can be grown successfully, it will answer equally well. The growing of potatoes, beets, or other root crops will serve the same purpose, where local market conditions will permit. This would also be a step in the much-to-be-desired direction of diversified farming.—C.L.