

Conservation

A monthly bulletin published by the
Commission of Conservation, Ottawa, Canada.

VOL. VII

JULY, 1918

NO. 7

Scientific Research Pays Big Dividends

Large United States Concern Makes Millions From one Discovery Made in Its Laboratories

The great laboratory of the General Electric Company at Schenectady is maintained at an annual cost of over \$500,000 and employs seventy-five investigators, including among them several who are eminent in the world of pure science. One of its products is the tungsten lamp which is now manufactured by twenty-two factories scattered over the country. This lamp, according to a very careful estimate made in 1911, was at that time, effecting a power saving valued at \$240,000,000 per annum. Since then, the consumption of this type of lamp has increased three-fold and further research has increased its efficiency of light production nearly 25 per cent. The research workers are discouraged from thinking of financial results, as discoveries are more likely to be made by those who are working in the scientific spirit.—Prof. J. C. Fields.

Point Pelee Reserved As New National Park

Game Sanctuary Established on Recommendation of Commission of Conservation

Point Pelee, the most southerly portion of Canadian territory, jutting out from the lake shore of Essex county, Ontario, into lake Erie for a distance of about nine miles, has just been designated a National Park by the Dominion Government, to whom the land belonged. The creation of this park for the protection of its distinct and attractive tree and plant life and its wild life it harbours permanently and during certain seasons, was recommended by the Commission of Conservation and the Advisory Board on Wild Life Protection; the Canadian Society for the Protection of Birds and the Essex County Wild Life Conservation Association also advocated its creation. In the Ninth Annual Report of the Commission the main features of the Point are described as follows:

Not only is it the most southerly point of Canada, geographically, and is the character of its birds, trees and plants, but it constitutes one of the concentration points in the northern
(Concluded on page 26.)

Only One Way to Cut Down Insurance Tax

Everyone Helps Pay for a Loss When a Building Burns

Failure to understand the real place and function of insurance is the most powerful obstacle in the way of fire prevention work. The average man figures that, when a building burns, the only loss is the difference between the actual value destroyed and the amount of insurance carried. Insurance does not restore property that is burned, nor obviate the loss entailed. It merely distributes the loss over many individuals instead of allowing it to fall upon the owner alone. The insurance company is merely a collecting and disbursing agency for the policy holders. It collects from those policy holders enough money to pay the loss plus a sufficient amount to cover operating expenses, including the ordinary dividends on capital stock.

Excessive fire losses necessitate excessive insurance rates. Low fire losses will, in time, bring about reduction of rates. In the long run, this rule works out inexorably. Every man who prevents or helps to prevent fire is indirectly reducing the cost of insurance. Every man who causes fire by carelessness or neglect is helping indirectly, but none the less surely, to increase the cost of insurance for both himself and his neighbours.

Even the man who has nothing to insure pays his share of the cost of fire. The manufacturer carries insurance on his goods in process of manufacture and in storage. The wholesaler and retailer likewise carry insurance upon their stocks. Be it a loaf of bread or a pair of socks, by the time the article has reached the consumer a dozen insurance premiums have been paid upon it, and the amount added to the price. The fire loss is, therefore, nothing more or less than a tax upon the public which, in some form or other, they are sooner or later compelled to pay. There is no escape except by a reduction of the fire loss itself. Better construction, the elimination of carelessness and the prosecution and prompt conviction of incendiaries are matters of direct and vital importance to every man, woman and child in Canada.—J. G. S.

In Japan, the Government and the manufacturers are jointly spending \$2,000,000 on an Institute for Physical and Chemical Research.

Eastern Spruce Now Used for Airplanes

Increased Demand Causes Allies To Turn to this Species

So great is the demand for airplane spruce by the Allies that eastern as well as Sitka spruce is now being used. Canada has large resources of eastern spruce, which has hitherto been used mostly for the manufacture of pulp, paper and lumber, and the British War Mission is at present trying to secure in eastern Canada as large an amount as possible of the grades suitable for airplane manufacture.

Eastern spruce has for some time been used for airplane construction in the United States, although only a very small percentage of this timber is sufficiently clear for this purpose. Tests made by the United States and Canadian governments show that where material of suitable quality can be found, this species serves admirably for airplane construction and may be expected to supplement the supplies of Sitka spruce from the Pacific Coast, which are only now beginning to approach adequate proportions.

The timber for use in airplanes has to be sawed parallel to the bark, instead of parallel to the axis of the log, as is done for lumber. In this way, straight-grained boards are obtained, having the highest possible percentage of material free from knots and possessing a maximum of strength.—C. L.

UNPRECEDENTED FIRE WASTE

Up to the present, the fire loss of the Dominion of Canada is 25 per cent. greater than for the corresponding period of last year. If this rate of destruction continues, the loss will exceed thirty-two million dollars in 1918, and together with expenditures upon insurance and fire protection, will constitute a burden of over \$65,000,000. This means about \$10 of out of the pocket of every man, woman and child in Canada, or almost \$40 for the average family.

BOOK-KEEPING FOR FARMERS

The Commission of Conservation has just published a Farmer's Account Book containing blanks and instructions for a simple but complete system of farm book-keeping. It will be sent on request to bona fide farmers only.

Proposed Solution of War Housing Problem

Town-planning Expert of Commission Suggests Government Housing Scheme for War Workers

Shortage of houses is reported from all parts of Canada. Subject to variety of local conditions the causes of the shortage are everywhere the same, namely, scarcity and dearth of money and high cost of labour and materials. These causes have come suddenly into being as a result of the war and have practically killed private enterprise in building. If the present economic conditions were likely to be permanent, the position would gradually right itself, as the level of rents and purchase price would soon rise to meet the increased cost; but perhaps the most prevalent expectation among authorities is that the existing conditions are not permanent and that costs will recede to some considerable extent—although not probably to the old level—when the war is over. That expectation is so likely to be realized that it is almost certain private enterprise will cease to be much of a factor in producing a supply of houses for several years to come.

There is a special war housing and a general industrial housing problem. The war problem is associated with the drift of population to districts where war industries have been established. The general industrial problem existed before the war and has been intensified in all parts of the country as a result of the causes above referred to. The same problems exist in Britain and the United States.

At the present moment, the most urgent question is that of war housing. Britain and the United States are dealing with that as an important war measure and that phase of the housing shortage in these countries is being met by means of housing schemes promoted and financed by the national governments.

It is claimed that in Canada we are also in urgent need of houses to help in winning the war, that we need them to enable us to increase the output of our war industries. What should our policy be in regard to this pressing special problem of war housing, due regard being paid to the lessons of Britain and the United States? Other aspects of the housing question may surely be left in abeyance till that one aspect is settled. If we fail to solve any problem of housing that needs
(Concluded on page 26.)