Conservation

Published monthly for eight months in the year by the Commission of Conservation, Ottawa, Canada.

VOL. I | MAY, 1912 | No. 3

Burning Up Two Millions a Month

Fire Waste in Canada Mounting Higher and Higher—Measures Adopted by Other Countries to Reduce it

In the first four months of this year Canada burnt up $68,258 worth of property a day. Eight and a quarter million dollars is a pretty big sum of money to send up as a smoke offering to the god of fire in four months' time. Nevertheless, that is the extent of the offering we made.

Here are the fire losses in Canada month by month as given by the *Monetary Times*:

January	$4,002,650
February	1,640,153
March	2,261,414
April	1,355,055
Total, four months	$8,259,272

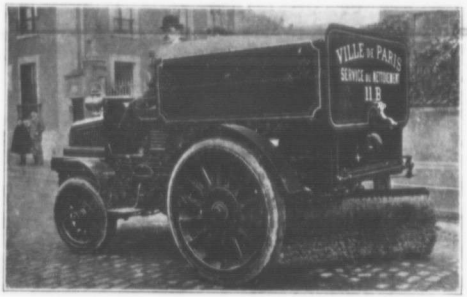
The worst feature about these losses is that they are increasing by leaps and bounds. The figures given above are nearly three million dollars greater than for the same four months of 1911—$2,897,397 to be exact.

How are we going to reduce these losses?—that is the important question. The greatest reduction in them would be accomplished by having every city and town revise its building by-laws from the standpoint of fire protection. The next step would be the appointment of officials—not mere functionaries—to rigidly enforce those by-laws.

Manitoba Leads

We Canadians, in the fullness of our prosperity, pay too little attention to this dead economic loss from fire. It is time that we gave it a thought. In the United States, many of the States have fire marshals that look into the cause of every fire, prosecute incendiaries, and order the pulling down of buildings that are a fire menace. They also keep a list of people who have had fires and few insurance companies there are who will insure the property of a man who has had fires of a suspicious origin. In Canada, the only Province having a fire marshal is Manitoba. It is worth while to remember that a really good fire marshal is a splendid investment for any province.

One cent per acre per year is insufficient fire insurance for an asset like the Rocky Mountains Forest Reserve.



Motor-driven Street Sweepers in Paris

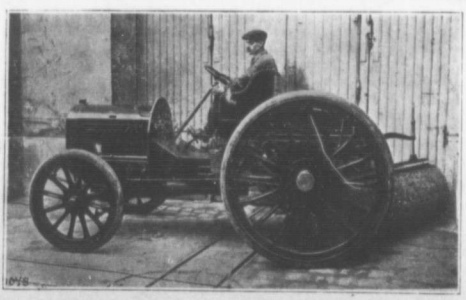
Dusty, dirty streets are a reproach to any city. At the same time it is undoubtedly a fact that there are few things that contribute more to the good reputation and general well-being of a city than clean streets. Street dust is an excellent medium for the transmittal of disease germs, especially of tuberculosis and other pulmonary complaints. These adhere readily to street dust and are quickly scattered by winds, or by coming in contact with the clothing of pedestrians. Consequently, in every well regulated city, efforts are made to lessen the dust nuisance.

The character of the pavement is a very important factor in cleanliness. Smooth pavements such as asphalt or brick are easiest to clean, but they also lend themselves most readily to the scattering of dust by wind. Wood blocks are commonly used for pavements in Europe, but rarely here.

One of the big troubles in Canadian cities is keeping the unpaved side streets clean. Such streets are frequently not even kept in good repair, and in dry weather clouds of dust from them drift into the main streets.

But even with good pavements a certain amount of street dust is inevitable and means must be adopted for its removal. This is usually accomplished by sweeping and by sprinkling or flushing. In most cities the sweeping is done by hand. Numerous experiments have, however, been made to ascertain the value of machine sweepers. The latter have proven to be of excellent service on smooth pavements, when used at night or at other times when traffic does not interfere. Generally the best of these machines are provided with a sprinkling apparatus so as to moisten the dust before sweeping. The flushing machines are apt to be destructive to pavements, and have the additional disadvantage of forcing silt into sewers, thus making necessary a frequent flushing of the latter.

The accompanying cuts illustrate types of street cleaning machinery that are being experimented with in Paris. These are driven by gasolene motors. They will be put through exhaustive tests during the coming summer, to determine their fitness for street cleaning. The photos have been kindly loaned by the *Commercial Motor* of London, England.



To Prevent Forest Fires Set by Railways

Recommendations of Conservation Commission Discussed at Meeting of Railway Commission

Coal burning locomotives in forest regions and the attendant costly forest fires; or oil burning locomotives and fewer fires;—which?

As announced in *Conservation* for March, the Commission of Conservation has been co-operating with the Board of Railway Commissioners in formulating regulations for the prevention of the starting of forest fires by locomotives.

A meeting of the Railway Commission to discuss suggested regulations was held in Ottawa on the 13th of May. Representatives of the railways, the Dominion Forestry Branch, the Commission of Conservation and the Government of British Columbia were present. At this meeting the regulations drafted by the Commission of Conservation were discussed. These may be summarized briefly as follows:

All previous orders of the Railway Board with respect to fires along lines of railway to be rescinded.

All coal burning locomotives to be fitted with specified netting spark arresters.

Locomotive ashpans to be specially constructed with a view to preventing the escape of live coals.

Railway companies to be required to provide locomotive inspectors at terminal and divisional points. These inspectors to examine weekly, the nettings and fire boxes of each of the locomotives running into such divisional points. The records kept by these inspectors to be available for the chief fire inspectors of the Railways and of the Commission.

The Railway Board to employ a Chief Fire Inspector for the Dominion who will be given wide powers in the matter of keeping railway rights-of-way free from inflammable materials and of requiring the construction of proper fire guards. He shall also prepare each year, a detailed statement for the railway companies setting forth the measures that they will be required to take to prevent fires. Such information must include details of—

(*a*) the number of men to be employed as fire patrols, their location and duties;

(*Continued on page 2*)

Municipal Sanatoria

Crusade Against Tuberculosis in Canada—The Situation Outlined—Local Treatment an Advantage

Tuberculosis is a disease that is frequently co-incident with poverty. The treatment necessary is generally expensive, and the patient is often for long periods of time incapable of doing any work. It is not surprising, therefore, that the charitably inclined should take a deep interest in the crusade against the disease.

Nature of Work in Canada

In Canada a number of institutions and organizations have been established for the care of the tuberculous. Most of these have been brought into existence by social workers. Sometimes, however, provincial governments have provided sanatoria, either wholly, or in part at their own expense. In other instances, the provinces—notably Ontario—have assisted in erecting buildings as well as in their maintainence when completed. Still another class are what might be called municipal sanatoria—that is, they are erected and supported largely by local municipalities. Some of these only accept patients from the contributing municipalities; while others accept *pay* patients whether residents of the municipality or not.

With such a variety of institutions to support, it is not surprising that various means have been devised for raising funds. Nor is it surprising that there has grown up confusion amongst would-be contributors as to how their subscriptions should be directed.

Aspects of the Tuberculosis Problem

In order to avoid such confusion, and at the same time to co-ordinate the efforts that are being made for the suppression of the disease, it is essential that the situation be clearly understood. In the first place, tuberculosis is a communicable disease, and as such comes directly under the purview of the *municipal* health authorities. In any attempt at co-ordination therefore, the work must centre around the municipal health officials. If this is not done there will be overlapping and consequent waste of effort.

In the second place, it should be remembered that locally managed tuberculosis work commands the confidence and support of municipal organizations. This is true, because the good results can be daily demonstrated, thus proving a valuable educational advantage to the ratepayers. Not only that, but the local sanatorium makes it possible for the patient to see his friends frequently, which is a very important factor. It has been very truthfully stated that fresh air, sunlight, and good food are the chief needs of the tuberculous. The two former can be found anywhere in Canada, and the latter can be provided by any well managed local sanitorium.

In the third place, it should be clearly understood that this important work cannot be directed solely by any one charitable organization. The province, the municipality and the individual contributor have each to be considered. But in any case, if confusion is to be avoided, the chief authority must be vested in the Medical Officer of Health.

Municipal Work in Ontario

There are many examples of effective municipal anti-tuberculosis work to be found in Canada. This is perhaps particularly true of Ontario. Ottawa possesses a sanitorium and dispensary, the work of which is encouraged in every way by an appreciative local interest. It is managed by an association of men and women who have strong local interests. Patients are received only from municipalities that contribute to the maintainence of the sanatorium. There are now four such institutions in Ontario, all of which are doing excellent work. At least four others will be established in the near future, and in time the whole province will be covered with similar local sanatoria.

New Town Sites

In connection with the location of new town sites along the lines of the transcontinental and other railways, it would seem expedient that power should be vested in some central authority, whereby all new sites should be approved of by that body after the plans had been filed and duly considered. Any subsequent changes or alterations should only be made upon the approval of that authority.

Boards of Trade are Interested

Several Boards of Trade in the vicinity of illustration farms have written to the Commission of Conservation offering their co-operation in the work. The interests of town and country are one, and far-seeing business men recognize that when the farmer increases his yield per acre it means more money in their pocket.

(*Continued from page* 1)

(*b*) the equipment and transportation that the force will require.

Section men and other employees of the companies to constitute emergency fire fighting forces.

The companies to be held liable for losses caused by their locomotives, where the regulations of the Railway Board have been disregarded.

On portions of railway lines where oil locomotives are used the regulations may be suspended.

The Commission of Conservation urged the necessity for compelling the railways to use oil burning locomotives in prescribed forest areas. This was objected to by British Columbia on the ground that it would injure the coal industry of that Province. It is rather anomalous that a Province having such valuable timber resources should be willing to risk their destruction for the sake of hastening the consumption of its extensive coal deposits.

Forestry Survey of Nova Scotia

Something about the Work Done by Dr. Fernow and Dr. Howe

The extent and value of Canada's forests are largely matters of conjecture. No comprehensive plan of taking stock of the country's forest wealth has yet been devised. The people have heretofore been content to let the lumbermen cut timber without much regard to the danger of exhausting the supply, or to the loss due to the stripping of otherwise barren forest soil.

But the old order is changing. During the summers of 1909 and 1910 Nova Scotia had a reconnaissance survey made of the forest areas of the Province. The work was placed under the direction of Dr. Fernow and Dr. Howe, both of whom are connected with the Department of Forestry of the University of Toronto.

Purpose of the Survey.

The purpose of the survey as outlined by Dr. Fernow is as follows: To "furnish approximately correct information regarding the extent, character and condition of the forest resources of the Province, with a view to . . . furnishing a basis upon which the Government might formulate a policy, not only for the crown lands still in its possession, but for the Province at large."

It is so obviously absurd for a government to undertake to legislate concerning matters of which its knowledge is hazy and incomplete, that it is a wonder that the principle of taking stock of the forests was not recognized sooner.

Report to be Issued

The Commission of Conservation will issue a complete report of this survey of Nova Scotia early in the coming summer. In this report Dr. Fernow will describe the method of working and the results obtained from the standpoint of the forester. Dr. Howe will describe the geological structure of the Province in relation to forest growth, an exceedingly important factor in any of the provinces of the Dominion. It was found, for example, that fully two-thirds of the area of Nova Scotia consists of non-agricultural land, either covered with forest growth or not fit for any other use than timber growing.

Storage Basins and Water Powers

The Situation in New Ontario—Value of Forests in Maintaining Uniform Flow

Storage basins are an exceedingly important consideration in water-power development. Any large natural reservoirs where the run-off from precipitation may be impounded and subsequently discharged gradually throughout the year, add greatly to the potential value of a water-power. In the matter of easily developed water storage systems, Canada is exceptionally well favoured. In New Ontario, however, the large river systems are, in so far as available information goes, rather deficient in this regard. The lake expansions of the rivers are comparatively few in number, and some of the largest of the lakes are shallow and of small value as storage basins.

Forests as Reservoirs

But Nature has, here, in a measure, provided storage reservoirs of another sort. The forest floors and extensive areas covered with plant growth, as well as great swamps, each and all constitute valuable water reservoirs. In these there is a widespread and satisfactory distribution of waters which tends to create a much more uniform run off. A discreet conservation and utilization of such reservoirs will, in general, be found to be much more desirable than are some of the large artificially constructed storage basins.

New Ontario Waters

It will thus be seen that the forest cover of New Ontario is of great importance in preserving a uniform flow of the rivers, and in making the water-powers of that region valuable. In spite of the protection of the forests many of the larger rivers are little more than wild torrents in the spring time.

During the next few years some $5,000,000 will be spent in opening up and developing the resources of New Ontario. It would seem the part of wisdom to go cautiously in the matter of removing the forests, lest in the years to come the rivers of Northern Ontario should strive to emulate the efforts of the Mississippi in the year of grace, 1912.

Motor Garbage Collectors, Paris

Weeds on Canadian Farms

A Serious Menace—Their Habits and Characteristics

The weed is often defined as a plant out of place. The term is, perhaps, most commonly applied to those plants which are useless and objectionable. Some cultivated plants may become pests when they grow where they are not wanted. There are a great many objections to weeds, the chief of which are the following:—

(1) They take up space which should be devoted to useful plants among which they grow, and tend to deprive the latter of light and air. A few weeds such as bindweed, wind round or climb up the stems of cereals, or other crops, often pulling them to the ground.

(2) They absorb large amounts of water and fertilizing constituents which are needed for the nourishment of the cultivated crop.

(3) They are a source of loss in that they necessitate more labour being spent in cleaning operations.

(4) The presence of weed seeds in samples of grains and in clover and grass seeds reduces the market value of these.

(5) Some weeds are parasitic upon useful plants. An example of this is the dodder which lives upon the juice of the clover plants to which they attach themselves.

(6) Some weeds are poisonous to stock; others give an objectionable odor to milk when they are consumed by dairy cows.

(7) Many weeds are objectionable in that they harbour parasitic fungi and insect pests which often find their way to cultivated crops.

Habits and Characteristics of Weeds

A study of the life history of weeds in respect to their habits of growth, time of seeding and duration, is necessary if we are to apply effective remedies for their destruction or their control.

Weed Classification

Annual weeds, such as, wild mustard, chick weed or groundsel, germinate readily and grow very rapidly, often smothering crops by sheer numbers. They are very productive, single plants producing many hundreds of seeds in one season. Usually they germinate in spring and die in autumn.

Biennials take two seasons to complete their life cycle. Their seeds germinate and grow into leafy plants during the first season; in the second season the buds of the plant develop into long stems which bear the flowers and seeds. After the seeds are produced and ripened the plant dies.

The perennial weeds are capable of growing for many seasons during which time they can produce many crops of seeds. Most of this group have underground root stocks which extend to great depths in the soil and are hard to kill, examples are: bindweed, couch grass and perennial sow thistle. The perennials are extensively spread by these underground stocks on which buds are present. Small pieces of the root stock may be carried to some distance and grow into individuals as strong as the parents from which they have been derived.

The Pioneer Society

The Pontiac Crop and Rural Improvement Association was organized at Shawville, Quebec, on the 9th of May. This is the first farmer's association to be organized in connection with the Illustration Farm work being done by the Land's Committee of the Commission of Conservation.

Soil Mining Being Practised

Canadians Impairing Soil Fertility —How England Solved the Problem—Crop Rotation, Seed Selection and Use of Fertilizers Needed

Soil mining is not a new industry. It is, however, peculiar to new countries. The countries of Europe learned centuries ago, that soil mining is one of the most blighting and disastrous practices of which farmers could be guilty. In Europe, necessity compelled farmers to at length adopt effective crop rotations; to take steps to check the growth of weeds, and to use fertilizers for maintaining the productivity of the soil. As a result, in England for example, the average wheat yield per acre is more than four times as great as it was 200 years ago. That is, instead of the average annual yield of eight bushels to the acre, for the land under wheat, the present average yield is from thirty-two to thirty-four bushels to the acre. This, on soil that has been cropped practically continuously for 400 years.

Canadian Conditions

How does this compare with conditions in Canada? The average yield per acre in Canada, for 1911 was 22·2 bushels for fall wheat, and 20·7 bushels for spring wheat. These figures take into consideration the almost virgin wheat areas of Western Canada. The figures for Eastern Canada for the same year are: fall wheat 20·9 bushels, and spring wheat 17·9 bushels to the acre. What does this indicate? It shows that thousands of farmers in Canada are mining the soil, and that unless improved methods of farming are adopted many farms will, in time, become incapable of producing crops at all. As a matter of fact, that is what has already happened in some sections of the country, and even in the Prairie Provinces some 500 square miles have been so ruined.

Dr. J. W. Robertson, the chairman of the Committee on Lands for the Commission of Conservation, has said repeatedly that by better farming the farmers of Canada could double the production of the area now under cultivation within ten years. If this is true—and Dr. Robertson usually knows whereof he speaks—then the question of bettering agricultural methods is one of national importance. In other industries, competition generally forces men to adopt the most scientific methods in production. As far as agriculture is concerned the pressure of competition is felt much less, and hap-hazard, discredited systems—or lack of systems—may be followed for years.

Some Defects

What, then, are some of the weaknesses of Canadian methods? In the first place, there is, especially in the newer portions of the country, a general lack of intelligent rotation of crops. Crop rotation does not simply mean any order of sequence for one crop to follow another. It implies that each year while the crop is growing, the best preparation is being made for the succeeding crop; for the preservation of the fertility of the soil and for its freedom from weeds. In this connection, it should be noted that the growing of clovers and other nitrogen gathering crops should become far more general than it is.

In the second place, there is room for vast improvement in seed selection, and in soil cultivation for the checking of weeds. It is safe to say that but a small percentage of Canadian farmers ever use hand selected seed, and thousands of farmers do not even use the fanning mill for cleaning their seed grain. Weeds are rapidly becoming general throughout the country. In every province there are sections where weeds are reported to be getting worse, and in some places, the farmers themselves admit that they are beyond control.

In the third place, fertilizers, such as barnyard manures and nitrogen-gathering crops, do not receive the attention that they deserve. This is perhaps the chief cause for soil mining. It is absolutely impossible to prevent the destruction of soil fertility without the application of manures or other fertilizers. It should be considered little short of a criminal offence for a farmer to burn the straw or the manure produced on his farm; and yet in the West this is done by many farmers.

This question of fertilizers leads up to that of mixed farming. Why should the farmer be content to sell his poorer grades of grain for the lowest return, when by feeding it, he can procure the highest return? Why should he be content to "keep all of his eggs in one basket," when he can protect himself from the loss of a partial crop failure by engaging in general farming? Is it not almost a national disgrace that Canada is compelled to import butter, eggs, vegetables and even milk? It is precisely the production of these and kindred products in ever increasing quantities that will check the waste of soil fertility that is now going on, and preserve for the future an unimpaired soil.

Alfalfa in Quebec

One feature of the work of the Lands Committee last year was the beginning of an investigation into the conditions under which alfalfa can be successfully grown in the province of Quebec.

Three farms in each of the counties of L'Assomption, Brome and Huntingdon, and two farms in Chicoutimi were used for this illustration work. Professor Klinck of Macdonald College had charge of the work. The following is taken from his report of the work conducted last year:

"The farmers in these districts appreciate very much the opportunity that is being afforded them for co-operating with the Commission of Conservation. Without exception, every man with whom the Commission is co-operating in these counties, has done his utmost to ensure the success of the undertaking. The communities, as a whole, have shown unusual interest in the work and seem to appreciate the fact that, if this high yielding, nutritious plant can be grown successfully, it will not only be a boon to the farmers themselves, but a blessing to the entire community."

Quebec Forest Revenues

The total income of the Province of Quebec during the fiscal year 1911 from woods and forests was $1,126,907.70, or nearly $85,000 more than during the preceding year. The Minister of Lands and Forests, in his annual report, recently issued, estimates that the revenue from this source during the current fiscal year will approximate $1,500,000. The system of patrol for the prevention of forest fires has proved very efficient, and the cost has been much more than justified as a form of insurance of existing property interests as well as a guarantee of the perpetuation of the forest upon non-agricultural lands, thus insuring the permanence of the wood-using industries upon which the province so largely depends. The prevention of forest fires is the first essential to the permanence of lumbering and other woods industries, and money spent for this purpose is one of the best investments that any owner of timber lands can make.

Agricultural Itinerary

During the latter half of May and the first half of June, the Agriculturists of the Commission will visit the Maritime Provinces for the purpose of selecting Illustration Farms and of assisting in forming in connection with them *Neighbourhood Improvement Associations*. Later on, Ontario, Quebec and the Western Provinces will be visited in turn for the same purpose. The Agricultural Survey work is being continued again this year and the alfalfa investigation work conducted last year in Quebec is being extended this year to a number of the other Provinces.

Lignite Briquettes or Imported Coal?

Cost of American Coal used in Western Canada—Methods of utilizing Lignites—Producer Gas for Power

Why should Western Canada import American coal and disregard the fact that the time is not far distant when the United States will require all her supplies of coal at home?

The greater portion of domestic fuel used in the Provinces of Manitoba and Saskatchewan is Pennsylvania anthracite, costing from $11.00 to $15.00 per ton. Soft coal, also mined in the United States, is used as far west as the western boundary of Manitoba. This coal finds a market in these provinces notwithstanding the fact that 5,500 square miles in Saskatchewan is estimated to contain 18 billion tons of lignite coal, and 48 square miles in Manitoba to contain 160 million tons of lignite coal.

Character of Coal of Western Canada

The reason is this: The coals of Manitoba and Saskatchewan are of low fuel value and contain about 28 per cent. of moisture when mined; on exposure to the air for 24 hours, the coal loses its moisture and disintegrates. These facts, together with the high freight rate on the coal, prevents its shipment over any great distance.

In order to overcome these difficulties it is necessary to make the value of the fuel greater by putting it into such shape that it might be easily transported without great loss. This could be brought about by briquetting the lignite and selling it as a domestic fuel and by generating electricity either by gas producers or by means of steam engines at the mines, and transmitting the electricity for power and lighting purposes.

Work of U.S. Bureau of Mines

It is of interest to know that the United States Bureau of Mines has demonstrated that suitable briquettes can be made from low-grade lignites and that three samples of lignite, one from Texas, one from North Dakota, and one from California were made into satisfactory briquettes without the aid of a binder.

With regard to the production of cheap power, the following is taken from Bulletin No. 13, United States Bureau of Mines:

"These tests in the gas producer have shown that many fuels of such low grade as to be practically valueless for steaming purposes, including slack coal, bone coal, and lignite, may be economically converted into producer gas and may thus generate sufficient power to render them of high commercial value.

"Practically every shipment tested in the producers, including coals with ash as high as 44 per cent. and lignites and peats high in moisture, has been successfully converted into gas that has been used in operating gas engines. It is estimated that on an average each coal tested in the producer-gas plant developed two and one-half times the power that it would develop if used in the ordinary steam-boiler plant. Such relative efficiency probably holds good for the average installation of moderate power capacity, but the ratio is smaller when large steam plants of the most modern type are compared. *It was found that the low-grade lignite of North Dakota developed as much power when converted into producer gas as did the best West Virginia bituminous coal when utilized under the steam boiler.* Thus, through these investigations, lignite beds underlying 20,000,000 to 30,000,000 acres of public lands, supposed to be worth little, have been shown to possess a large value for power development. As a result the money value of this Government land has been increased to the extent of probably $300,000,000 or more."

Fires on Private Lands

The broad interest of a general government in the forest fire question upon privately owned lands is well illustrated in the United States by the provision of the Week's Law for co-operation of the Federal Government with States for the patrol of forest lands upon the headwaters of navigable streams. The Week's Act became law March 1, 1911, and in addition to providign for the acquisition of lands by the Government, carried an appropriation of $200,000, available until expended for co-operation with the States in fire-protection work. During the summer of 1911 co-operative agreements were entered into with a number of States, principally in the East, the western watersheds being already for the most part protected by the establishment of National Forests. One of the first States to enter into co-operation with the Federal Government under the new law was New Hampshire. An efficient system of fire patrols, supplemented by the use of lookout stations and telephones, was established in the northern district of New Hampshire, comprising an area of about one million acres, at a cost of less than one and one-half cents per acre.

Placing Responsibility for Forest Fires

Something about What is Being Done in British Columbia

In the past, forest fires have generally been regarded as acts of Providence, which could not be prevented, but must be accepted in a spirit of more or less patient resignation. More recently, however, it has been shown conclusively that forest fire damage can be practically prevented if proper measures are taken. The rapid rise in timber values has made owners less willing than formerly to submit to unnecessary loss, and this in turn is bringing about the adoption of protective measures not only by railroads but by owners of timberlands. The latter are in part inspired by the desire to save their own property and in part to eliminate carelessness which might result in damage suits by neighbouring owners. The rigid enforcement of the law of responsibility for carelessness in setting forest fires will perhaps go further in preventing damage from this source than any other measure. As long as it is cheaper to continue careless methods than to take proper precautions, fires will continue to devastate our forests.

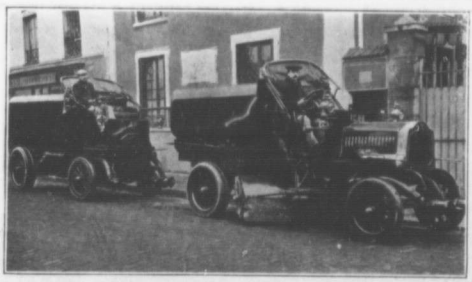
Cases in British Columbia

An example along this line is the suit recently heard before the Supreme Court at Vancouver against the Paterson Timber Company, for $10,239 damages caused by fire spreading from the defendant's lands. The Court held the Company liable and the amount of damages to be recovered will be determined at a future hearing. The responsibility of railroads for fires spreading from their rights-of-way is clearly established in two cases also recently heard in British Columbia.

In Clarkson vs. Nelson and Fort Shephard railway, is involved the largest claim for damages ever entered in a British Columbia timber case. The original claim for $375,000 involved 8,320 acres of timber limits, and now another area of 4,210 acres has been brought into the case, in respect of which, additional damages of $408,000 are claimed. The defendant company has been held responsible for the fire, but the award for damages has not yet been made.

The suit of the King Lumber Mills, Limited, located near York, B.C., against the Canadian Pacific railway is similar in principle. The amount claimed in this case is $140,000. The jury was unable to determine positively the source of the fire, which spread from the company's right-of-way. It found, however, that the company was negligent in failing to maintain a clear right-of-way, and in failing to properly attend the fire when reported by its employees. It also finds that the railroad did not take reasonable precautions to prevent the fire spreading. The amount of damages to be paid to the plaintiffs has yet to be decided by the Supreme Court.

A few such cases as those will go further toward preventing the occurrence of fires, than any amount of legislation.



Types of Motor Sprinklers and Sweepers in Paris

"Chicken Feed"

The highest conception of a nation is that of a trustee for posterity.—*Jas. J. Hill.*

Conservation is progress without the loss of essential values.—*Dr. Hibben, Princeton.*

The health of the individual is a national, as well as a personal asset.

Let us cast our minds twenty or twenty-five years ahead, and see what will then be the condition of affairs.—*Jas. J. Hill.*

Conservation does not consist in hoarding, but in wise investment.

Why should the back yard be dirty, even if man is made of dust?

National efficiency is the result of natural resources well handled, of freedom of opportunity for every man, and of the inherent capacity, trained ability, knowledge and will, collectively and individually, to use that opportunity.—*Roosevelt.*

The average length of human life in different countries varies from less than twenty-five to more than fifty years. This span of life is increasing wherever sanitary science and preventive medicine are applied. It may be greatly extended.—*Rept. of National Conservation Commission.*

The permanent welfare of the nation demands that its natural resources be conserved by proper use.—*Rept. of National Conservation Commission.*

Regina is Looking Ahead

Regina has set out a large number of shade trees on its streets this spring. Cottonwoods alternate with elms, the intention being to remove the former when the elms grow large. It's a wise city that sees into the future.