Conservation

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

VOL. III | MAY, 1914 | NO. 5

(Cut No. 63)

Mechanical stokers used—no smoke visible.

TO NEWSPAPERMEN

To further public interest in conservation subjects, the Commission will lend to Canadian journals the cuts used in this bulletin. These may be obtained in either fine or coarse screen.

As there are only a limited number of these cuts, delays are sometimes unavoidable, but orders will always be filled as soon as possible after receipt of application. It is requested that cuts be made use of at the earliest possible date, and returned promptly, enclosing note showing by whom sent. We shall be pleased to receive copy of publication in which the illustration appears.

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Importance of Proper Exits

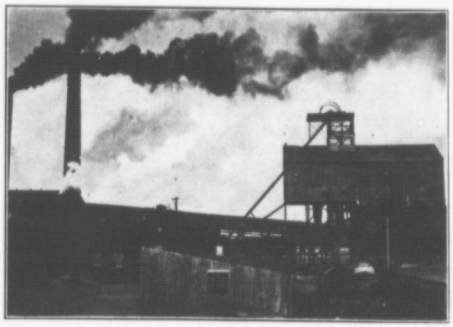
Fire Dangers Minimized by Right Precautions

The question of exits is of vital importance in minimizing fire dangers.

In most moving picture theatres the booth containing the cinematograph machine is placed directly above the main entrance. Consequently, if a roll of film becomes ignited, the crowd must pass dangerously near the fire in order to escape, and panic is liable to arise. There is no good reason why the machine booth should not be placed at the other end, that, in case of accident, the rush would be away from, and not toward, the centre of peril.

As an aid in illustrating lectures, the increasing tendency to supplant the old-fashioned lantern slides by the more life-like moving pictures will increase the fire-hazard in churches, schools, Y. M. C. A.'s and other institutions, not specially equipped for the use of cinematograph machines. In many churches, the exits even from the main body of the building are insufficient, while, in the portion used as a Sunday school, where week-day entertainments are most frequently carried on, conditions are still worse.

Building regulations with regard to fire-escapes should be made more stringent and existing by-laws strictly enforced. In some buildings there is a tendency to lock or block the way to these special exits. Sometimes the escapes lead into courtyards. Regular inspection should be provided to see that such means of egress are kept clear, and are readily opened at an instant's notice.—*P. M. B.*



(Cut No. 64)

Hand firing employed—smoke very dense.

Mechanical Stokers Prevent Smoke

Smoke is unconsumed carbon and hence represents a loss of fuel. The greatest loss of fuel as smoke occurs from the use of hand-fired boilers. To obviate this, it is necessary to fire often and distribute the fresh coal evenly over the surface of the fire, the success of the operation depending largely on the intelligence of the fireman.

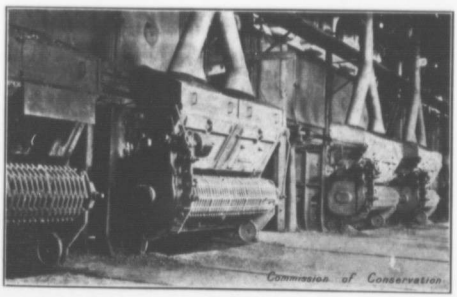
Properly regulated mechanical stokers are the most efficient means of firing stationary boiler plants. They also have the advantage of being automatic and the boilers can be fired with lower-grade coal.

There are many different types of mechanical stokers on the market; the one shown in our illustration is a chain-grate stoker firing water-tube boilers and using slack coal.—*W. J. D.*

The Dominion Forestry Branch and the British Columbia Forest Branch each employ about thirty technically trained foresters. The Province of Quebec employs sixteen, and Ontario two. Nova Scotia has provided by law for the appointment of a provincial forester, but the appointment is still pending. New Brunswick needs a provincial forester, and has the matter under consideration.—*C. L.*

In general it may be stated that the most dangerous forest fire periods in the west are in middle and late summer; in the east they are in the spring and fall.

Canada cuts about two million cords of pulp wood annually, about half of which is exported for manufacture in the United States.



(Cut No. 65)

Chain-grate stokers, Allan Shafts, Acadia Coal Co., Stellarton, N. S. By using these stokers, almost perfect combustion is obtained, as may be seen from the illustration at the top of this page.

To secure a merit badge in forestry, boy scouts are required, among other things, to identify 25 kinds of trees.

There is a flourishing forest school in the Philippines, and 28 men were graduated with the class of 1913.

Co-operative Forest Fire Protection

St. Maurice Association Keeps Damage down to .001 per Cent of Timber Value

The second annual report of the St. Maurice Forest Protective Association, covering the season of 1913, demonstrates the admirable results in forest fire protection that may be secured by co-operative action. This Association is composed of seventeen limit-holders having lands in the basin of the St. Maurice river, Quebec. The Forest Protection Branch of the provincial Department of Lands, Forests and Mines co-operated with the Association and bore a part of the expense, though the greater portion of the cost was borne by an assessment of 25c. per 100 acres levied upon the limit-holders.

The co-operation was further extended to the Board of Railway Commissioners, the manager of the Association having received an appointment as Fire Inspector, in order to assist in enforcing the requirements of the Board in connection with railway fire patrols, right-of-way clearing, and the reporting and extinguishing of fires occurring along the lines of railway subject to the Board's jurisdiction within the St. Maurice watershed. The manager also acted in a similar capacity for the Quebec Public Utilities Commission, as to provincially chartered railways within the protected territory. Through this harmonious co-operation of all the agencies concerned with fire protection in this area, results were secured far exceeding in efficiency those secured in previous years.

The members of the Association control 7,279,000 acres in the St. Maurice drainage area. This figure does not include government lands not under license, or lots taken up by settlers, which latter were the greatest source of danger and the scene of 50 per cent of the fires. It is interesting to note that the area patrolled comprises approximately one-sixth of the whole area under license in the province. This area was divided into four divisions and twenty-five districts, sixteen of which were each patrolled by two men in a canoe, five each by one man on horseback or on foot, and four each by two men on railway power speeder.

The total number of fires extinguished was 306, of which 263 were extinguished by the patrolmen without extra labour. Had these fires been left unattended, many of them would undoubtedly have caused serious damage. Only 43 fires required extra labour to extinguish them. Although the summer of 1913 was the driest since 1908, the actual fire damage was less than one one-thousandth of one per cent of the value of the timber on the territory patrolled.

The Association has had a steady growth, 102,000 acres having been added to its territory in 1913, and over 266,000 acres, thus far, in 1914. Still further extensions are anticipated. *C. L.*

Laying up Domestic Furnaces

Precautions that will Lengthen Life of Heating Plants

As this is the time of year owners of domestic furnaces prepare to lay them up for the summer season the following notes will prove of interest*:—

(1) Care should be taken, when discontinuing the use of a heating system, to see that all radiators and pipes are thoroughly drained. To do this it is desirable to open the air vents on all the radiators.

(2) In order to prevent pitting, the boiler should also be emptied.

(3) If the boiler stands in a badly ventilated or damp place it is advantageous to give the exterior a coat of preservative paint.

(4) When the boiler has been drained, it should be cleaned out as well as possible, internally. Any scale or sediment that may have collected within it should be removed. The boiler should be refilled and drained at least twice, after the water has been run off from it, and it should be washed out with a powerful stream of water from a hose, when this is possible. When it has been emptied for the last time it should be allowed to drain very thoroughly and any water that remains standing in it should be removed.

(5) When the boiler has been drained, the valve on the feed pipe should be examined to see if it is tight, and if there is any leakage at this point the valve should be repaired. The blow-off cock on the boiler should be left open; so that, if there be any leakage from the supply pipe, the water can flow out freely instead of accumulating inside.

(6) The boiler should be opened up as completely as possible, that there may be a free circulation of air through it. If it has a manhole or hand-holes, these should be left open, and if the safety valve is of the lever type, it should be raised from its seat and fastened in the open position.

(7) After the boiler has been thoroughly freed from water and opened to the air, it is well to warm it a little for the purpose of drying off the moisture. This operation should be performed with extreme care and should *not* be done by building a fire upon the grate because there is danger of seriously damaging the boiler in this way. The safe way is to heat it by placing a small single-burner kerosene stove in the furnace, and leaving it there until it burns out. If the boiler becomes damp during the summer the heating should be repeated whenever it seems desirable.

(8) The ash pit and smoke flue should be cleaned internally.

(9) All accessories of the boiler should be examined and any repairs that are needed should be made at once because this work is likely to be forgotten or it may be delayed until the late fall when many other boilers are being returned to service and the repair men are so busy that it is hard to get them when they are wanted.

(10) Don't throw waste papers or other combustible matter in the furnace during the summer months Someone may set fire to it and damage the boiler.—*W. J. D.*

*Condensed from *The Travellers Standard.*

America's Work for Wild Birds

Humane Legislation of United States Congress Strikes Deadly Blow at Trade in Feathers

Dr. W. T. Hornaday, Director of the New York Zoological Park, gives, in the *Nineteenth Century*, some striking statistics illustrating the decline of the murderous feather trade since the passing of the American Act prohibiting the importation of feathers into the United States. The effectiveness of the Act, as also the wide extent of the slaughter of rare and beautiful feathered creatures that has been carried on, may be gauged from the following quotation:

"At the London feather sale of the 14th of October, 1913, the market suffered a tremendous decline. On account of bad prices and lack of buyers, one third of the lots offered had to be withdrawn. The exact number of lots offered was 1174, and the number withdrawn was 368. It is with much interest that we have made a complete summary of the offerings that could find no sale because the American market was tightly closed. The chief products that literally went begging on that occasion were as follows:—

1,203 skins of greater bird of paradise.
127 skins of rifle bird of paradise.
761 skins of emu.
1,212 skins of eared pheasant (Numidie)
1,237 skins of Lady Amherst pheasant.
790 skins of golden pheasant.
142 skins of Impeyan pheasant.
105 skins of pelican.
318 skins of marabou stork.
22,810 skins of kingfishers.
173 skins of scarlet ibis.
3,321 skins of terns (white sea swallows)
400 skins of gulls.
30 skins of owls.
308 skins of cockatoo.
1,759 skins of parrots.
2,494 ounces egret plumes = 14,964 birds.
17,402 wing and tail feathers of condor.
1,993 wing and tail feathers of eagle.
34,681 wing and tail feathers of hawk.
544 wings of macaw.

The above list contains the principal items of the sales that could not be made. Multiply these totals by three, and the result should show a fair approximation of the whole product of world-wide bird-slaughter as offered in London on the 14th of October."

WORLD'S LARGEST FORESTRY ASSOCIATION

The St. Maurice Forest Protective Association is the second largest of its kind in the world, the largest being the Western Forestry and Conservation Association, the subsidiary associations of which last year provided for a patrol of 22,000,000 acres of timberland in the states of the Pacific Northwest. This area contains over 500 billion feet of timber, or a fifth of the entire supply of the United States. The fire loss last summer was one one-thousandth of the value of the timber on the area patrolled. The cost of patrolling varied between 50 cents and $3.00 per 100 acres, according to conditions and the amount of improvement work done, such as trails, telephone lines, lookout stations, etc.—*C. L.*

Grand Rapids Reservation

Practical Conservation by the Water Powers Branch

The Minister of the Interior has authorized the reservation of all the available Dominion lands contiguous to the Grand rapids of the Saskatchewan river, in the province of Manitoba, until such time as the Superintendent of the Dominion Water Power Branch is able to make a definite statement respecting the lands actually required for power purposes at this point. During the summer of 1913 an extensive topographical survey of this important power site was made by the Dominion Water Power Branch, to enable the engineers of the government interested in power and navigation to design a scheme of power development which would realize the best use of the power resources of the river without any impairment of future navigation. The hydrographic investigations that have been under way for the last couple of years show that the river varies from 4,200 second feet at low water to about 160,000 second feet at flood time. While this variation is very considerable it is thought that sufficient regulation can be provided to make a power development at Grand rapids a profitable undertaking. In any event, the action of the engineers of the Dominion Water Power Branch in having a thorough survey made and in arranging for reservation of the Dominion land required for power shows that conservation is being carried out in practice as well as in theory.

Fire Insurance on Timber Lands

The results obtained by the St. Maurice Forest Protective Association demonstrate that, by the adoption of intelligent co-operation between timber owners and governments, absolute protection against forest fires may be secured in the normal season. In other words, timber can be practically insured for the normal year at the cost of supporting the organization that has been developed.

However, as an extension of the co-operative patrol idea, the suggestion has now been made that timber land owners throughout Canada and the United States form a co-operative association or company to insure against the loss of timber by fire. The understanding is that insurance would be limited to timber lands covered by regular patrol. On account of the high cost, timber land insurance has made but little progress on this continent. Many owners have felt that they could better afford to carry limited insurance in the form of providing special patrols, themselves carrying the balance of the risk, which in normal years would be slight. However, the certainty of very dry seasons at intervals of several years, makes the distribution of the risk highly desirable, and justifies the organization of mutual forest fire insurance associations.—*C. L.*

After Clean-up Week, What?

Let the Good Work Continue—Make things Clean, then Keep them so

Of course you have had your clean-up week! There are few towns and cities in Canada that have not, and every citizen who takes a pride in his home and in his town will lend a hand.

During the long winter months there accumulates somewhere about the house waste material which should have been disposed of day by day, for we could destroy much more than we do in our furnaces or in the kitchen stoves.

It is the accumulation of this heterogeneous litter in our homes and in the yards and lanes, this careless handling of domestic waste, which is the cause of the new fad of "clean-up week," a general action on the part of all citizens which is all right in its way and produces good results. But, reader! have you learned the lesson whilst gathering together these belated boxes and barrels of refuse? The lesson is: When clean, stay clean. To tidy up your back-yard once a year is as bad as giving your body a yearly bath. As you require to wash yourself daily, so it is essential that each citizen should care for the domestic refuse and prevent its accumulation upon his premises.

What cannot be burned in the kitchen stove should be removed by the health authorities, and if your town or city has not a properly operated, municipal refuse-collection system, then it is your duty as a rate-payer to insist upon one being installed forthwith.

If the good work begun by you does not proceed henceforth with regularity and system, then your "clean-up week" will have been a failure.

The question for each one of us is: Will you assist in making it impossible for anyone in your municipality to suggest that "clean-up week" is a necessity?—*C. A. H.*

Dublin's Pitiable Slum Conditions

Similar Evolution taking Place in Canada—Evil of Dividing Houses into Apartments

"The tenement houses of the present day are, for the most part, houses that were originally built to accommodate and provide for one family."

"The tenement house system is due to many causes . . . but the result is that houses which were built to accommodate one family have been taken over by landlords who farm them out, without in any way making them suitable for the purpose, in one, two or three-roomed dwellings."

"Having visited a large number of these houses in all parts of the city, we have no hesitation in saying that it is no uncommon thing to find halls and landings, yards and closets of the houses in a filthy condition."

"We fully endorse the evidence given by many witnesses that the surroundings of a tenement house in which there can be no privacy, and in which children scarcely realize the meaning of the word 'home', form the worst possible atmosphere for the up-bringing of the younger generation."

The above extracts from a report, dated February 17th, 1914, could be so fittingly applied to such cities as Montreal, Toronto, Quebec, and Winnipeg, as well as to many of the smaller towns and cities of Canada, that one might well imagine they had direct reference thereto. This, however, is not the case. They are contained in the Report of the Departmental Committee of the Local Government Board of Ireland and have direct reference to the Housing Conditions of the Working Classes of the City of Dublin.

The findings are exactly the same as would be the case if our Canadian slum homes were investigated and reported upon in a similar manner by a properly empowered departmental committee of the Government of Canada. In Canada tenements are known as apartment houses, but the references may well be taken as applying to these "amended" Canadian homes. That the same evolution is taking place here is evidenced by advertisements of real estate men offering large houses for sale "suitable for dividing into apartments."—*C. A. H.*

Fresh Milk Saves Babies' Lives

Good Work done by Montreal Local Council of Women

From January, 1913, to December, 1913, inclusive, 357 new cases were treated. The attendance at clinics was 3,222. The nurse made 3,045 visits; 456 children recovered. The deaths for the year were 10—the average rate of mortality being 2%. At the present time the number of registered babies is 200.

The milk dispensed by this depot is of the highest standard, nor sterilized, pasteurized, or "railroad" milk, but from a model dairy near the city. The evening's milk is put into the bottles and cans, these are sealed and placed in cold storage till the next morning when the milk is delivered by direct transit to its destination.

Eleven gallons of loose milk daily are used for the formulæ, averaging 50 to 55 pails with the bottles packed in them, while from 76 to 80 quart bottles of pure milk are taken also.

Free milk distributed	2,124 qts.
Milk sold	36,900 "
Total distribution	39,024 "

The amount spent on milk was $2,725.89, the receipts for milk sold, $2,344.90; 24 210 lbs. of ice were distributed free; several people leaving town for a month or more in the summer kindly gave their ice supply during their absence. On hot days there was only just sufficient.

During the summer a supply of simple medicines was bought for the use of the needy when prescribed by the doctors. One or two babies could not take even the modified milk and for these a special food was ordered; this was sold at a little over cost price and only under medical direction. A serum was used for some babies with wonderful results, but this also barely covered the original cost, except in a few cases.

The pleasing results of this cannot be recorded on paper but anyone who saw some of the thin, sick babies brought to the depôt in July and August would hardly recognize these same children in the fat, rosy-cheeked healthy ones now displayed with pride and grateful thanks by their mothers.

The next Canadian Forestry Convention will be held at Halifax, N. S., September 1 to 4, 1914. This will be the first Canadian Forestry Convention ever held in Nova Scotia.

Spraying for Tent Caterpillars

DO IT NOW!

The tent caterpillar is, unfortunately, too well known to need description. It forces itself on our notice in a hundred objectionable ways. To effectively control this pest, in orchards, parks and boulevards, artificial methods must supplement the natural forces of destruction.

Spraying, to be effective, must be done immediately after the leaves first come out and as the caterpillars are hatching. Later, when the caterpillars are larger, it takes a much bigger dose of poison to kill them and the difficulties of complete extermination are greatly increased.

The sprays found most effective are the following:

Paris-Green Spray

Paris Green	1 lb.
Quick lime (best)	2 lbs.
Water	160 gals.

The lime prevents "burning" the foliage.

Lead Arsenate

Lead arsenate	4 lbs.
Water	40 gals.

Banding the trunks of trees with "tree tanglefoot," a mixture of crude castor oil and resin in equal parts, is a useful precaution to prevent migration from infested to non-infested trees.

Jarring trees will cause the caterpillars to descend and they can then be killed on the ground or while dangling in the air.

Burning with torches may be practised when the caterpillars are gathered in clusters.

Handpicking the eggs in the winter time is laborious but effective.

Birds may be encouraged by keeping down cats, and providing good, safe nesting places. Birds known to eat hairy caterpillars are: The yellow-billed and black-billed cuckoos, the blue jay, scarlet tanager, white-bellied nuthatch, American redstart, chipping sparrow, Baltimore oriole, yellow-bellied sapsucker, cat-bird and wood thrush.

Parasites of various kinds feed upon the tent caterpillars, though few people, except entomologists, are acquainted with them. There are also several species of flies that are deadly enemies of our orchard pests.

The latest Canadian railway to organize its forces for the more efficient handling of fire protection work is the Algoma Central and Hudson Bay Railway. This line taps a heavily timbered section in Central Ontario, extending north from Sault Ste. Marie. D. C. A. Galarneau has been appointed forester to the Company, with duties which will include supervision of railway fire protection.—*C. L.*

Live Stock Must be Kept

Or Soil will be Impoverished—Crop Rotation and Growing Legumes not Sufficient

In any scheme to maintain or build up soil fertility, crop rotation, including the growing of legumes, is vital but not sufficient. Clovers put the soil in better physical condition, so that the plant food in it becomes quickly available to the next crop. There is a danger then that we may mistake a more productive soil for a more fertile soil and be inclined to give too much credit to the growing of the clover and not enough to the feeding of it to farm animals. No matter what crops are grown, if they are all sold away from the farm, the soil will become exhausted. Live stock must be kept. Nature has provided a balance between animal and plant life, and man cannot long disobey nature's decrees.

When every particle of manure is saved and applied to the land, there is money in live stock; in dairy products, in beef, in the annual increase, and most of all in the next year's crop. According to figures of the United States Department of Agriculture the yield per acre of corn in Kansas dropped from 34.3 bushels in the decade 1870-79 to 21.3 in the decade 1890-99. Kansas has also grown large quantities of alfalfa, but the corn and alfalfa have both been sold away from the farms and decreased yields have resulted. In Illinois, which is a stock-raising and stock-keeping state, the yields have actually increased. It is a significant fact that the stock states show the smallest losses in crop yields. This is true of a state and the same principle applies to the individual farmer. —*F. C. N.*

TOWN PLANNING

Is the *selection of the site and environment*, and the adaptation of the same for settlement by an intelligent method, having in view health, amenity, and convenience;
is not a fad, but simply an *orderly method* of doing what must be done in any case;
means *life* for the babies, and *better health* for each person in the town;
assures to mothers and children as *healthful homes and home environment* as the factory act provides healthy workshops for mechanics;
supplies *suitable streets* for all sections, whether residential or industrial;
provides for cheap and rapid *transportation;*
gives the children *playgrounds* in lieu of dusty streets and dirty lanes;
prevents the undue encroachment of business upon *residential areas;*
allocates to *factories* their proper place;
is an important factor in giving a *higher morality* to the people;
bestows on the many advantages at present only possible to the few, giving to the poor blessings denied them under existing methods;
pays, because it is of economic value to the municipality permitting it to acquire property, which is sure to enhance in value, at a minimum of cost;
is what all should work and strive for, *ennobles citizenship* and elevates the nation.

Honey Bees Increase Fruit Crop

Pollenization of Blossoms must be Properly Effected to Ensure Good Yield

Many remarkable facts have been noticed by fruit inspectors, while on their regular tours of inspection, regarding the importance of bees in orchards in spring during the apple-blossoming period. In the county of Middlesex there were comparatively few apples one season. Practically the only exception was an orchard of 12 or 14 acres, the proprietor of which was also an extensive bee-keeper. The explanation given was that, as the bees were kept in the orchard, they were able during even the short periods of sunshine, to fertilize the blossoms fairly well.

Bee-keeping is a paying and profitable occupation; one that should receive much more attention than is given to this very important industry. Fruit blossoms of nearly all kinds depend almost exclusively upon insects for their pollenization. The wild bees include about 50% of the insects useful to the fruit grower for this purpose, but in large plantations, such as orchards, plantations of strawberries or bush fruits, etc., the large number of blossoms coming in at the same time overtax the usual number of wild bees in the neighbourhood so that is is advisable to have a special stock of honey bees to supplement them. More than this, tame bees being kept in the immediate neighbourhood, or directly in the fruit plantations, are more useful than the wild bees which may in many cases have to fly long distances, and cannot reach the orchards during the mild spells between showers.—*J. F.*

GOOD ROADS MEAN:

An increase in the value of farm land ranging from $5.00 to $25.00 per acre;
A more intensive agriculture, owing to the fact that a much greater variety of crops can be profitably marketed;
Hence, an improvement in soil fertility due to better farming methods;
The advantage to the farmer of being able to sell at the most convenient time, instead of waiting for good weather conditions;
The marketing of perishable goods in fresher condition;
Bigger loads and fewer trips to town;
Less wear and tear on harness and waggons;
Greater feasibility for gasolene traction;
Lower prices for the city consumer, because produce can be delivered at less cost for haulage,
More traffic for the railways, since roads act as feeders of the main lines of travel;
Free delivery of parcels and mail to farmers' homes;
Better school attendance;
The promotion of social intercourse among the dwellers in rural districts;
Country homes in summer for city people and increased automobile tourist traffic, thus creating more local demand for eggs, dairy and garden produce.

White Pine Growing is Profitable

Six per cent Compound Interest may be Earned in about Fifty Years

The growing of white pine, according to a U.S. government bulletin recently issued on the subject, is a profitable undertaking, returning 6 per cent compound interest if the trees are cut when not more than from 35 to 70 years old.

The original white pine forests are approaching exhaustion, and, with the growing scarcity of large-sized, high-grade white pine lumber, lower grades now find a ready market. In addition, the tree grows rapidly, has a heavy yield, and is easy to manage.

Second-growth white pine, 50 years old, on good soil, may yield as much as 49,000 board feet of lumber per acre; on medium soil 36,000 feet; and even on poor soil, 24,000 feet. White pine boxboard lumber, one of the chief products of such stands, sells from $12 to $18 a thousand board feet. Material for making matches, another product, sells for from $17 to $18 a thousand. Even larger material, suitable for sashes and blinds, some of which may be cut from a 50-year old stand, brings from $30 to $35 a thousand feet. Second-growth white pine, the kind that is found on thousands of abandoned fields and pastures in the eastern part of Canada and the United States, and which has sprung up in many places after the original white pine forests have been cut out, has a value to-day that makes it well worth the attention of the owner.

The best second-growth white pine, 45 years old, will yield about 42,000 board feet per acre, but the same stand, when 55 years old, will yield 55,000 feet, an increase of 13,000 feet per acre in 10 years. In addition, with the increase in quantity comes an increase in quality. Not only more, but better timber is to be had. Including this factor of quality, the lumber from an acre of best white pine, 55 years old, is worth about $1,900 against a value of $750 when the stand is 45 years old.—*Ex.*

New Organization to Reduce Fire Hazard

Formation of Lower Ottawa Forest Protective Association, Ltd.

The spread of the co-operative idea in forest fire protection is evidenced by the recent organization of the Lower Ottawa Forest Protective Association, Ltd. This Association represents nearly 10,000 square miles—or over 6,250,000 acres—of timber lands on the watersheds of the Gatineau, Lievre, Rouge, Coulonge and Nation rivers, in the province of Quebec. The staff will comprise a manager, three inspectors and about 50 rangers. The headquarters of the Association will be at Ottawa. In order to co-ordinate the efforts of all the agencies interested in protecting this region from fire, the manager of the Association has been appointed an officer of the Forest Protection Branch of Quebec, as well as of the Fire Inspection Department of the Dominion Railway Commission. To reduce the fire hazard as much as possible, a close degree of co-operation with the settlers and with the railways operating in this territory is also proposed. —*C. L.*

Increase in C.P.R. Fire-Fighting Staff

The Forestry Branch of the Canadian Pacific Railway has assigned three men to handle fire inspection work for the Company on its lines in British Columbia, and three additional men on its Eastern lines, in Ontario, Quebec, Maine and New Brunswick. These men not only make investigations for the purpose of collecting information to be used in fire claim cases; what is more important, they also help to prevent the occurrence and the spread of fire by personally meeting sectionmen and other employees of the Company and thus ensuring that the men are fully informed regarding the very strict instructions issued by the General Manager relative to the reporting and extinguishing, by railway employees, of fires occurring along rights of way. These inspectors also assist the Operating Department in securing efficient action in connection with the requirements of the Railway Commission relative to the maintenance of special patrols in forest sections, and the removal of inflammable débris from the Company's right of way. Under this method of organization, it is expected that much better results will be obtained than formerly. —*C. L.*