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THE HALIFAX CONVENTION.

Matters are progressing satisfactorily in regard to the Canadian Forestry Convention at Halifax, September 1-4. A number have already signified to the Secretary their intention of attending, and there is no doubt there will be a good attendance. This and the arrangements with the railways enables the Association to promise single fare rates for the round trip to members actually attending and their ladies.

Railway Arrangements.

Railway arrangements are on the *Standard Certificate Plan*. By this delegates purchase one-way first class tickets to Halifax and secure a certificate from the railway agent selling the ticket. These certificates will be signed by the Secretary at the Halifax Convention, and when thus signed will be honored for return tickets to the starting point.

Eastern Canadian Points.

From and including Fort William, Ontario, eastward tickets will be on sale at all railway stations in Canada Aug. 28 to Sept. 3, inclusive, and properly validated certificates will be honored at Halifax for tickets

for the return journey up to and including September 8.

Western Canadian Points.

In Western Canadian territory (namely, west of Fort William to the western boundary of Alberta) the dates of sale will be August 24 to 27, inclusive. Properly validated certificates will be honored for return tickets at Halifax up to and including September 19 for tickets back to starting point.

From British Columbia Points.

From British Columbia points the dates of sale will be August 22 to 26, inclusive. Properly validated certificates for return tickets will be honored at Halifax up to and including September 19.

Lake and Rail Routes.

These dates for British Columbia and Western Canada points will accommodate those desiring to travel by steamer across the Great Lakes. The usual arbitraries will apply for passengers desiring to use the lake route.

Delegates are requested to acquaint themselves thoroughly with these dates and rules, as failure to observe them will render it impossible for them to get the reduced rate. The Secretary is anxious to get the names of those who expect to attend, and will gladly give information on any point not clear. Address: The Secretary, Canadian Forestry Association, Journal Building, Ottawa.

SPRING FOREST FIRES.

As this issue of the *Canadian Forestry Journal* goes to press forest fires are reported in all parts of Canada. The open winter, with comparatively little snow, was followed by a dry spring, with the result that fires have been unusually widespread. The only gratifying feature is the greater activity which is being displayed on the part of governments, co-operative organizations and private companies in fighting the fires.

CONVENTION NOTES.

From those who have already signified their intention of attending the Convention at Halifax Sept. 1-4 it is evident it is going to be one of the best yet held. A number are going to make it a holiday trip, on which they will take their ladies, as well as an occasion to help along the cause of forest conservation. The Secretary is shortly making a brief trip to Nova Scotia to make preliminary arrangements, but correspondence addressed to him at Ottawa will receive prompt attention. Write to him for information, and let him know you are going to attend.

THE PRESS IS WITH US.

The votes of thanks passed at our Annual Meeting are not formal, but mean what they say. It is pleasing to know that they are received in this spirit. The following note from Mr. John Imrie, Secretary of the Canadian Press Association, shows that the Canadian Forestry Association has the support and good will of this most powerful agency, without whose aid it would be impossible to carry on our propagandist work with anything like its present effectiveness:

'I am pleased, indeed, to learn from your letter of the 9th inst. that the Canadian Forestry Association appreciates so heartily the co-operation of the press of Canada in its work for the cause of forest conservation. It will give me pleasure to present the resolution of the Canadian Forestry Association on this matter to our Executive Committee at their meeting.'

CONCERTED ACTION NEEDED.

A member writing from Muskoka says: 'Forestry vitally affects us here in Muskoka, where hard and soft timber abounds, and its care and growth affects our welfare. Ignorance and greed militate very generally against a proper use of our magnificent forests, and there is much to be done amongst our people in the way of conservative administration of our bush, and reclamation of stripped and waste, and burnt areas. It seems to me no great improvement will be effected without concerted action on the part of individual owners, Municipal Councils, and the Provincial Government.'

Saskatchewan Forest Reserves Increased.

Recent Additions Quadruple the Reserve Area in the Province.

Attention has been called frequently in the past in these pages to the fact that Saskatchewan with very heavy needs in regard to timber and fuel was the worst off of all the western Provinces in regard to forest reserves. The figures at the end of 1913 were:—

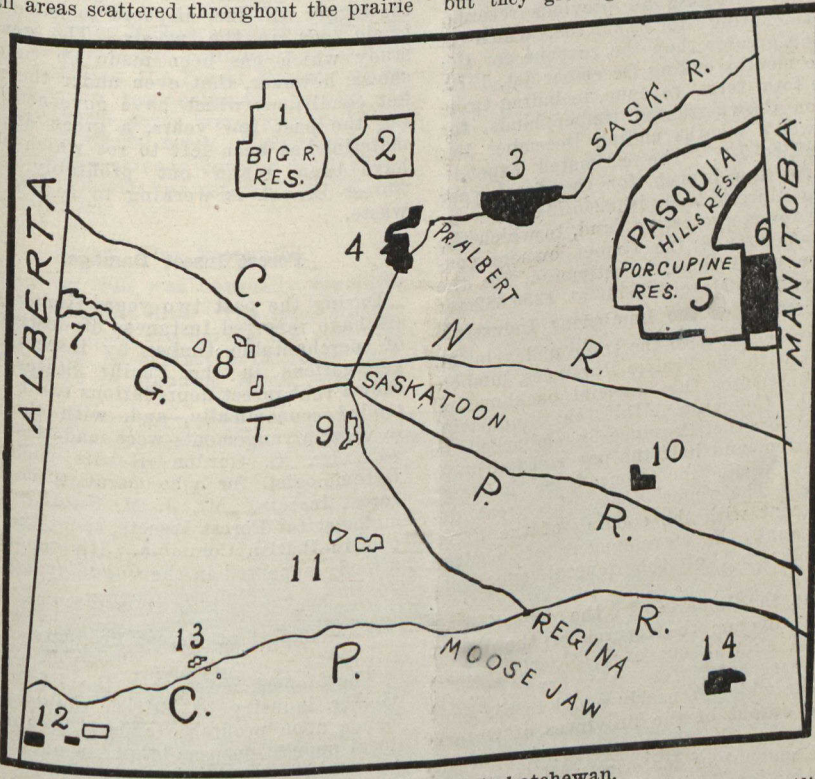
Alberta	26,271 square miles.
Manitoba	4,108 " "
British Columbia	3,782 " "
Saskatchewan	1,801 " "

By an Act just passed during the 1914 session of Parliament the area of the Saskatchewan reserves has been increased by 7,910 square miles, bringing the total up to 9,711 square miles. The additions consist of two classes:

First, non-agricultural tracts comprising small areas scattered throughout the prairie

country. These tracts are nearly all sandy and broken and have little or no timber upon them. It will be necessary in nearly all cases to provide for reforestation by artificial means, but if these tracts are forested they will be a great assistance to the settlers in the prairie districts surrounding them.

The second class of reserves are the larger areas forming the watersheds between the Saskatchewan and Assiniboine Rivers and between the Saskatchewan and Churchill Rivers. These are very important watersheds, and are the source of supply of timber for a great settled area of prairie lying to the south. They are elevated and broken and not of agricultural character, but they grow good timber.



Map of the Province of Saskatchewan.

This shows the old forest reserves in black, and the new reserves in outline. The names of the reserves are as follows: 1, Big River Reserve; 2, Sturgeon; 3, Fort a la Corne; 4, Pines and Nisbet; 5, Pasquia Hills and Porcupine; 6, Present Porcupine; 7, Manitou; 8, Keppel; 9, Dundurn; 10, Beaver Hills; 11, Elbow; 12, Cypress; 13, Seward; 14, Moose Mountain.

Annual Report British Columbia Forest Branch

The report for the year ended Dec. 31, 1913, of the Chief Forester of British Columbia, Mr. H. R. MacMillan, to the Hon. W. R. Ross, Minister of Lands, is a most important document.

Forest Revenue.

In addition to the usual letter press of such reports, there are a number of diagrams which help to enforce the points of the report. One of these diagrams shows that the forest revenue of British Columbia amounts to \$6.63 per head, whereas that of Ontario is only 79c per head, and Quebec 77c per head. Another diagram shows that royalties from timber cut in British Columbia during the twelve months amounted to \$489,377, whereas those of Ontario amounted to \$1,339,957, and those of Quebec to \$1,173,393. In spite of financial stringency during the past year, the branch collected, during the twelve months ending December 1st, a revenue breaking all previous records, and amounting to \$2,832,788, which is \$229,669 greater than the revenue for the twelve months ending December 1st, 1912.

The total forest revenue, including taxation on Crown-granted timber lands, for the twelve months ending December 1st, was \$2,999,579. The estimated expenditure for the branch for the fiscal year ending March, 1914, is \$245,754.

The forest protection fund, to which the government and the timber owners contribute equal sums, is estimated, for the year ending March, 1914, at \$350,682.

Importance of the Lumbering Industry.

Even today, with the trade undeveloped, except with the Prairie Provinces, lumbering constitutes the financial backbone of British Columbia. Half the industrial capital of the Province is embarked in lumbering, and half the pay roll and 37% of the production come from the same source. The report looks for great development with the opening of the Panama Canal, the development of eastern markets, and of the general over seas trade.

Says the Report: 'In the collection of forest revenue the returns of the Forest Branch show a cut of 1,457,000,000 feet, board measure, for the year 1913, an amount which is nearly equal to the combined output of the Provinces of Ontario and Quebec for the previous year. If the large amount of material used in railway construction during the year be included, British Columbia's total cut would approach 2,000,000,000 feet. The number of saw and shingle mills exceeds 425.'

Logging Inspection.

There were 794 logging operations in progress during 1913 on timber lands, on which a royalty, or tax, had been reserved to the Crown. The product of these operations for the calendar year 1913 was, approximately, 1,348,000,000 feet of logs, 82,805 cords of shingle-bolts, 3,030,010 lineal feet of piling, 35,000 mining-props, 15,500 cedar posts, and 5,093,718 lineal feet of cedar poles. The report states that there are few cases of intentional trespass. Absence of clearly marked survey lines and duplicate unofficial surveys account for most of them.

Clean Logging.

It is admitted that clean logging will depend upon the lumber market, for when there is no market for low-grade lumber the logger will feel disposed to leave low-grade logs in the woods. The general study which has been made up to date shows, however, that even under the market conditions, which have governed during the past few years, a great deal of material has been left to rot which could have been taken out profitably. The Forest Branch is working to reduce this waste.

Forest Insect Damage.

During the past two years timber owners have reported instances of destruction of merchantable timber by insects. Investigations in the Pacific States have shown that insect depredations can be controlled economically, and, with this end in view, arrangements were made last year with Dr. C. Gordon Hewitt, Dominion Entomologist, for a co-operative study of forest insects. Mr. J. M. Swaine, Entomologist for Forest Insects, spent the summer in British Columbia. His report has already appeared in the *Canadian Forestry Journal*.

Export of Forest Products.

The Report notes that the life of the timber industry of British Columbia depends upon profitable export, because the local population uses less than one-fifth of the timber production of the Province. The chief markets are the Prairie Provinces, the United States and Eastern Canada, and the sea-borne cargo trade. These are discussed at length, and measures for their development indicated.

Land Examination.

Noting the fact that Eastern Canada has found, along with older countries, that settlement on non-agriculture timber lands is not in the public interest, the Report points out that lands east of the Cascades bearing timber in excess of 5,000 feet per acre, and lands bearing in excess of 8,000 feet west of the Cascades are not open for sale or pre-emption. All expiring timber leases remain in forest reserve until examined and found valuable for agricultural purposes. In pursuance of this policy, 662,280 acres were examined in the year and maps and detailed information furnished to the different government departments.

Forest Reconnaissance.

Until recently the forest exploration of British Columbia depended upon private individuals. Little was known except that eleven million acres of merchantable timber had been taken up under grant or lease, and that a considerable portion of the rest of the Province was forested. To find out what these remaining 239,000,000 acres contained, the Forest Branch has entered upon a reconnaissance survey. In 1912 5,616,000 acres were surveyed, and in 1913 12,308,000 acres. This was in addition to the acreage covered by land-examination parties, or reported on by district foresters.

Forest Fire Protection.

The year 1913 was unusually favorable as regards forest fires. The total damage caused by forest fire during the year was only \$18,354, as against \$313,273 in 1912. The damage to standing forest was only

\$4,387, as against \$200,000 last year. Fires covered and damaged to a greater or less extent less than 6,000 acres of merchantable timber and 2,000 acres of valuable second growth; 2,535 acres of slash was also burned, making a total of 10,270 acres, as against over 150,000 last year.

The fire protection force for 1913 totalled, in midsummer, 320 men, as compared with 212 in 1912. The total area under administration was 150,000,000 acres. The total cost of patrol alone was \$190,000. There was a total of 578 fires. The four chief causes of fire are thus set out: Campers, 148; railway locomotives, 110; unknown, 104; railway construction, 62.

Burning Permits.

The plan of issuing permits to those desiring of clear land or burn brush has been very efficient in the way of keeping down fires from this cause. During the year a total of 11,925 permits were issued to burn brush covering 31,102 acres. Of these 11,255 were for farmers desiring to clear land, 157 for loggers burning slash; 458 for burning railway right-of-way, and 55 for public road building.

Permanent Improvements.

Owing to good weather conditions in regard to forest fires, a much larger fund than had been expected was available for permanent improvements. In all 1,200 miles of trail, 360 miles of telephone line, and ten ranger, or shelter, cabins were constructed. The Branch owns and uses twenty launches, ranging from twenty to fifty feet in length, and twenty row boats and canoes are used in the patrol service.



The Convention Province—One of Nova Scotia's Beauty Spots, Second Lake, Dartmouth.

Dominion Forestry Branch.

Recent Changes in and Additions to the Personnel.

There are in all sixteen survey parties in the field this year:

Mr. E. B. Prowd, assisted by Mr. H. A. Porteous, will be in charge of the Eastern Manitoba survey. Mr. D. German, assisted by Mr. R. M. Watt and Mr. J. L. Ketchum, will conduct a survey in connection with the Duck Mountain Forest Reserve. In Saskatchewan, Mr. A. V. Gilbert, assisted by Mr. D. Greig, has been placed in charge of the Saskatchewan Survey No. 1. Mr. G. S. Smith has been transferred from head office to take charge of the Saskatchewan Survey No. 2. He will be assisted by Mr. G. M. Dallyn. Mr. K. Vavasour, assisted by Mr. H. M. Hughson, has been placed in charge of Saskatchewan Survey No. 3. The Cold Lake Survey party has been placed in charge of Mr. T. F. Rance, assisted by Mr. F. J. McGibbon, and the Pelican Mountain Survey is being conducted by Mr. A. B. Connell, assisted by Mr. H. A. Parker.

Five survey parties have been organized in connection with the Alberta Inspection District. Mr. T. H. G. Clunn, assisted by Mr. R. D. McDonald, is to take charge of the traverse party operating in connection with the Clearwater Forest Reserve. A timber berth survey party is to be operated by Mr. A. Gorman, assisted by Mr. J. B. Hipwell.

In connection with the British Columbia Inspection District, two survey parties will likely operate,—one, the British Columbia Reserves Survey party, under Mr. A. M. Thurston, assisted by Mr. J. F. L. Hughes,—the other, the British Columbia Reconnaissance, under Mr. C. R. Mills, assisted by Mr. R. A. R. Campbell. Besides these, a special survey will be conducted in connection with the Saskatchewan Forest Reserves, under Mr. L. Stevenson, assisted by Mr. J. Kay.

Mr. G. E. Bothwell, forest assistant, was transferred from head office to assist in the administration of the Athabaska Forest Reserve. Mr. F. D. Brown, forest assistant, has been transferred from the Brazeau Forest Reserve to assist in the administration of the Clearwater Forest Reserve. Mr. S. H. Clark, who has been acting forest supervisor of the Athabaska Forest Reserve, has been transferred to the supervision of the Brazeau Forest Reserve.

The fire ranging in Manitoba and Saskatchewan has been reorganized, placing the administration in the hands of the district inspectors, Mr. F. K. Herchmer and Mr.

G. A. Gutches, respectively, leaving the inspection of the fire ranging in Alberta in the hands of Inspector E. H. Finlayson, whose headquarters will be at Calgary.

Mr. A. G. McIntyre resigned from his position as superintendent of the forest products laboratories in connection with McGill University on the 1st April. His place was taken by Mr. J. S. Bates.

Mr. F. McVickar resigned from his position as forest assistant in connection with the Bow River Forest Reserve, Alberta, on the 30th April. Mr. O. M. Savre, forest assistant, was transferred from the Athabaska Forest Reserve to the Brazeau Forest Reserve on the 1st April. Mr. D. W. Lusk, forest assistant, left Ottawa on the 4th May to take up his duties in connection with the British Columbia Forest Reserves. Mr. James McLean has been appointed superintendent of the forest nursery station at Sutherland, Sask., to take the place of Mr. W. B. Guiton, who has been transferred to the position of inspector of tree planting in connection with the forest nursery station at Indian Head. Mr. R. C. Miller of White Horse, Yukon Territory, has been appointed district fire inspector to take the place of Mr. Percy Reid, who has been transferred to Ottawa in connection with the Immigration Branch.

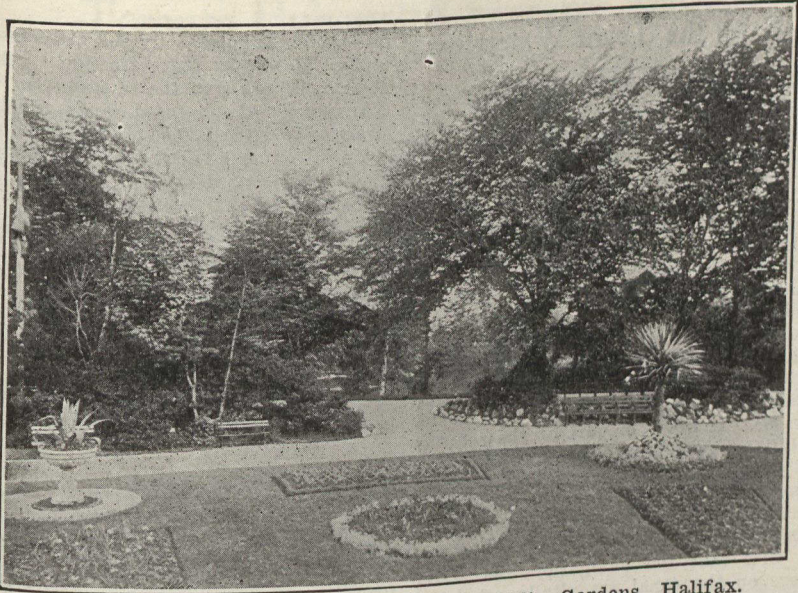
Mr. W. J. Boyd, who had charge of the fire ranging in Southern Manitoba last season, has undertaken a survey and inspection trip by canoe from Athabaska Landing through the northern part of Alberta into the Mackenzie and Yukon Districts. Mr. Boyd is accompanied by Mr. E. S. Davison of Toronto School of Forestry, and in the course of his trip will report on the reindeer and wood buffalo propositions together with the forest conditions of that country.

Mr. G. T. Robb has been appointed chief fire ranger of the Prince Albert Fire Ranging District, to take the place of Mr. A. Williseraft, who has been appointed to the position of forest ranger in charge of the Nisbet Forest Reserve.

Mr. J. A. Doucet, who was in charge of the Peace River survey last year, will obtain statistics in wood industries, etc., in Quebec.

HALIFAX, SEPT. 1-4.

**Don't forget the Convention date.
Write the Secretary that you will be there.**



See this at the Convention—View in the Public Gardens, Halifax.

ARBOR DAY IN QUEBEC.

Arbor Day was celebrated in Quebec with unusual ceremony on May 14. The scene was the Quebec Exhibition Grounds, on the outskirts of the City of Quebec. The guests of the Exhibition Commission for the ceremony assembled at the City Hall at 2.30 p.m., and were taken to the park in automobiles. At the grounds they were met by His Honor Sir Francis Langelier, Lieutenant Governor, and Lady Langelier, attended by Captain Victor Pelletier, A. D. C. About two hundred were present for the ceremony, including Hon. J. E. Caron, Minister of Agriculture for Quebec; His Worship Mayor Drouin, of Quebec; Hon. Cyr F. Delage, President of the Quebec Exhibition Commission, and Mr. G. Morisset, Secretary; Mr. William Power, M.P., President of the Canadian Forestry Association; Mgr. Rouleau, rector of the Normal School; Mr. Avila Bedard, Professor of the Quebec Forestry School, Laval University. There were also present a number of members of the Legislature, members of the City Council, Directors of the Exhibition Commission, students of the Forestry School, and prominent citizens. His Honor the Lieutenant-Governor planted the first tree, taking the spade from the gardener and filling in the sod, amid general applause. Trees were also planted by Lady Langelier, Mde. Delage, Hon. J. E. Caron, Mr. Wm. Power, M.P., His Worship the Mayor, Mgr. Rouleau, Mr. Eug. Leclerc, Hon. Mr. Roberge, Ald. J. Collier, and Ald. G. Gibson. Mr.

Power, as President of the Canadian Forestry Association, was called upon for a speech upon the occasion. He briefly explained the aims of the Association, and said it was in agreement with all efforts to make people realize the importance and necessity of the forests. He spoke of the beginning of the work in Canada, and, in planting the tree assigned to him, dedicated it to the memory of Sir Henri Joly de Lotbiniere, one of the fathers of forestry in Canada and the first President of the Canadian Forestry Association. After the planting ceremony had been concluded the directors of the Exhibition Commission conducted their guests to the Grecian Temple, where a group photograph was taken, after which all repaired to the Administration Building, where refreshments were served.

The Chief Game Warden of New Brunswick has made his Annual Report of the number of deer killed in that province in 1913. The figures are as follows: moose, 1,499; deer, 2,075; caribou, 454; a total of 4,028. These figures are interesting in view of the statement in a history of New Brunswick published in 1825 to the effect that the last moose had vanished from the forests of that province. These figures also show what can be done by proper methods of game protection, and the same holds true in regard to forest protection. New Brunswick's revenue from game licenses is more than sufficient to pay its present fire and game protection organization.

Report on the Trent Watershed.

There has been issued by the Commission of Conservation of Canada the report on *The Trent Watershed Survey*, compiled by Dr. C. D. Howe and Mr. J. H. White of the Faculty of Forestry, University of Toronto, with an introduction by Dr. B. E. Fernow. The report comprises 156 pages and is illustrated with 32 half-tone engravings and three maps.

The district covered by the report is in the central part of Southern Ontario, and lies along the line of the Trent Valley Canal, which is ultimately to connect Lake Ontario with Georgian Bay. The region surveyed is about midway between these two bodies of water. It takes in part of the counties of Haliburton, Peterborough and Hastings. This district was once a great pine forest. Owing to the fact that the Dominion Government has invested \$10,000,000 in the Trent Valley Canal, and owing to the further fact that the navigation and water-powers on the canal are vitally related to the forest cover in the district, the Dominion Government is more directly interested than in other parts of the country. The Ontario Government is interested in the matter of timber dues and land sales, while all the municipalities are interested because of the municipal needs of the district and the question of the taxes to be derived therefrom.

The report states that the area is typical of much of the cutover lands of Eastern Canada for which it is desirable to formulate a policy of recuperation. The surface of the country is broken and hilly, interspersed with innumerable small lakes. The soil is underlaid with rock which is laid bare by repeated burning of the timber and young growth.

The report covers farming, forest, industrial, mining and tourist traffic conditions in the area considered. It states that only 15,000 people inhabit the 2,100 square miles of the watershed (a decrease since 1901 of 15 per cent.), and that hardly 10 per cent. of the region has been cleared for farm purposes. The soil is altogether unsuitable for agriculture, and run-down and abandoned farms are to be found in large numbers. Nearly 200 farms were for sale for unpaid taxes in 1911 at 6 cents per acre.

Practically all the pine has been removed. The whole area has been burned over at least once. Almost one-half the area is covered with young and second-growth trees of the poplar-birch type, the result of fires.

It was found, however, that enough hardwood and wood of the poplar-birch type remain to warrant the adoption of a policy of conservation, and Dominion, Provincial or municipal ownership of the territory in

question is suggested by the Commission as an initial step in that direction. Other recommendations are: the re-possessing by the Province of the licensed lands which have practically ceased to produce the quantity of logs contemplated under original licenses; the imposing of restrictions on existing limit holders, tending to protect the forest growth; the appointment of a forester charged with the surveillance of the region; the perfecting of a fire-protection organization, building of look-out stations and watch-towers, and appointment of the game-wardens as fire-wardens.

Copies of this report may be had by those interested by applying to the Commission of Conservation, Ottawa.

COMPLIMENT BRITISH COLUMBIA.

Many compliments have been received by the Honorable W. R. Ross, Minister of Lands of British Columbia, upon the new Timber Royalty Act, in which the principle of profit-sharing in the timber resource is a feature. Among those who have written warmly commending the new act are: Hon. Clifford Sifton, Chairman of the Canadian Commission of Conservation; Mr. Henry S. Graves, Chief Forester of the United States; Hon. David Houston, United States Secretary of Agriculture, and Dr. B. E. Fernow, Dean Faculty of Forestry of the University, Toronto. At a meeting of Timber License Holders, held in the office of the B. C. Lumber and Shingle Manufacturers' Association, the subject was discussed, and the report states that all present appeared well satisfied with the new act.

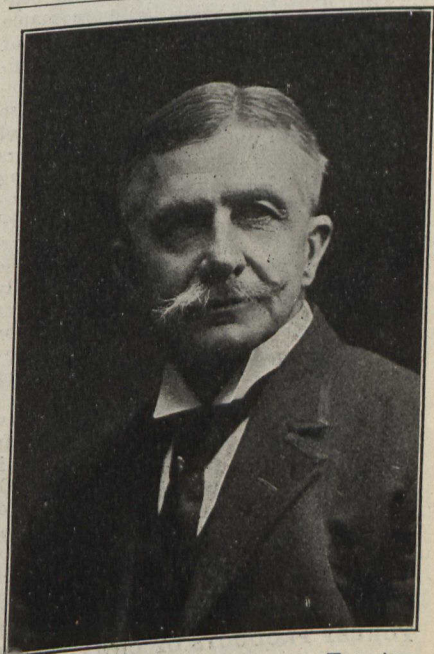
The letter of the United States Secretary of Agriculture was as follows: 'The plan of readjusting stumpage values of timber at stated intervals in sales from public lands, whereby the public will derive a fair share of the increase in lumber values, is one with which I am in hearty accord. You will doubtless be interested in learning that a provision of this character is included by this department in all contracts for sales of timber from national forest lands where the period of contract is in excess of five years, and that it has been accepted as equitable by timber operators. I feel that you are to be heartily congratulated on this progressive legislation.'

Dr. Weiss, Director of the United States Forest Laboratory at Madison, Wisconsin, U.S.A., is to go to British Columbia this summer at the request of Hon. W. R. Ross, Minister of Lands, to study the utilization of waste products in lumber manufacturing.

Toronto University Forestry School.

GRADUATING CLASS, 1914.

The graduating class of the Forest School of the University of Toronto for 1914 consists of seven men, which is slightly smaller than for the two years previous. All the men have secured employment and are beginning work forthwith. Of the seven the Dominion Forestry Branch has employed five, namely Messrs. A. B. Connell, W. J. Boyd, W. A. Delahey, Wm. Kynoch and F. B. Robertson. The location of these gentlemen for the present will be seen in the list of changes in the Dominion Forestry Branch on another page. Mr. Roy L. Campbell is to become assistant editor of the *Pulp and Paper Magazine* of Montreal. Mr. J. R. Chamberlain goes to the British Columbia Forest Service, acting as a Forest Assistant in the Kamloops District under Mr. P. Z. Caverhill.



Dr. B. E. Fernow, Dean, Toronto Forestry School.

Hon. W. R. Ross, Minister of Lands for British Columbia, is arranging for the exhibition of finished forest products of British Columbia at all the Trades Commissioner's offices throughout the British Empire. The object is to make British Columbia woods and their good qualities better known in the timber markets of the world.

MAPLE SUGAR MAKERS WIN.

At the annual meeting of the Canadian Forestry Association a resolution was passed supporting the effort of the maple sugar makers to have a law enacted prohibiting the selling of adulterated maple sugar and syrup. The ground taken by the Association was that owing to the lack of remuneration in the business, if adulteration was allowed, farmers would clear of maple trees land that was not fit for anything else and that land would become permanently unproductive. That this was actually taking place is seen from an extract from a letter written by one of the leading bankers of the Eastern Townships of Quebec. He writes: 'In driving around the country I have noticed that not a few maple groves, which used to produce a considerable amount of sugar, have been cut down for fire wood. It seems to me a most foolish thing to do.'

Not only was there adulteration, but sugars and syrups innocent of any maple sap were put up in such a way as to convey the impression that the pure maple product was being sold. The argument of those who sold these adulterated and imitation articles was that they were composed of ingredients not harmful to those who used them as food. After a hard fight, however, the maple sugar makers won their point, and a new law governing this matter, passed at this session of Parliament, prohibits the use of the word 'maple' on any food products bearing a resemblance to maple sugar, or maple syrup, unless the same are produced wholly from sap of the maple tree. Maple sugar and maple syrup in Canada now stand on the same basis as butter and honey. They must be pure, or the seller is liable to a heavy fine.

The production of maple sugar is now valued at a little over \$2,000,000 per year, and friends of the industry predict that it will now rise, in a few years, to \$7,000,000 or \$8,000,000. Maple groves, instead of being cut down, will be protected, and new groves will be developed in wood lots, or even set out again on abandoned, or partly abandoned, farms.

FOREST PRODUCTS OF CANADA, 1912.

The Dominion Forestry Branch has issued Bulletin 42, *Forest Products of Canada, 1912*, by R. G. Lewis, B.Sc.F. This is a collection of bulletins 38, 39 and 40 for convenience and covers the production in Canada in 1912 of lumber, square timber, lath, shingles, pulpwood, poles and railway ties.

Persons interested may receive copies free upon applying to the Director of Forestry, Department of the Interior, Ottawa.

YUKON TIMBER PROTECTION.

A member writing from the Yukon says: 'I know of no other place in Canada where our limited area of timber should be so zealously guarded as in the Yukon. We have many uses for wood here, whereas it is not so necessary in other parts of Canada. We must depend entirely upon it for fuel, and we cannot import timber for mining purposes, as it would be too expensive, and we would have to let low grade mines remain undeveloped. Notwithstanding these facts, our timber land is burnt over and thousands of cords destroyed every year. Most of this destruction could be avoided. The fires mostly occur along the Yukon Valley, on account of people making their way into the interior in small boats. They land on the bank of the river to cook their food. After this is done they return to their boats, leaving the fires to go out or to ignite the nearby woods, just as may happen. This could be stopped by increasing the Mounted Police patrol, and this should be done as early as possible, as we expect large travel to the new gold strikes during 1914.'

LOWER OTTAWA FOREST PROTECTIVE ASSOCIATION.

The organization for protecting in a co-operative way the forests on the Nation, Lievre, Rouge and Gatineau rivers, the formation of which was noted last month, has now been completed. A charter has been obtained from Quebec. The officers are: President, Hon. W. C. Edwards; Vice-President, Mr. Ward C. Hughson; Directors, Messrs. R. M. Kenny, George Millen, and J. B. White; Secretary, Mr. Frank Hawkins; Chief Fire Inspector, Mr. Arthur H. Graham. The Secretary's office is at 19 Castle Building, Ottawa.

Although it was late in the year before the charter was received, the officers immediately set to work and placed a force of about forty men under the Chief Fire Inspector. He immediately proceeded to the woods, where some spring fires were already reported, and though with very little equipment and with no opportunity to cut trails or erect telephone lines, is at present doing what can be done to combat the fires.

OIL FUEL FOR LOCOMOTIVES.

The use of oil fuel for locomotives was begun in the United States in 1900, now oil burning locomotives are operated exclusively upon 20,910 miles of railway in the United States and 587 miles in Canada; and in conjunction with coal burners on an additional 4,720 miles in the United States.

INDIANS AS FIRE RANGERS.

A forest ranger in the west writes, commenting on the suggestion of Archdeacon Renison and others as to making use of Indians as fire rangers. After an experience of nearly thirty years among the Indians, he comes to the conclusion that they will not make good fire rangers. They lack, in his opinion, the steady application of white men, and they are so inter-related to all the Indians of the same district that it is practically impossible to get them to act in the prosecution of another Indian. They are excellent canoe men and woodsmen, and make good assistants to white rangers, who can direct them and press prosecutions for setting fire to the forest.

MAPLE SUGAR MAKING.

The article by Dr. Fisk in the January issue of the *Canadian Forestry Journal*, on the possibilities of a maple sugar grove, attracted a great deal of attention. The comparison which Dr. Fisk made between an apple orchard and a sugar bush was most suggestive.

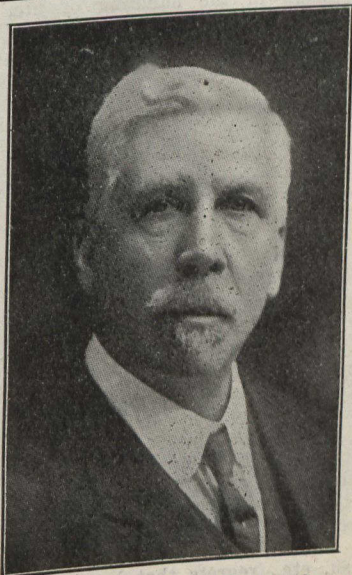
In this connection Hon. J. E. Caron, Minister of Agriculture in the Province of Québec, deemed the matter of sugar making of so great importance that in the early spring he caused three schools to be opened to teach the best methods of making maple sugar and syrup. These schools were conducted at Beauceville, Beauce Co., St. Roch des Aulnaies, l'Islet Co., and at Labelle, Labelle Co. The results were such that it is believed the schools will be re-opened next year.

CANADA'S GRAVE RESPONSIBILITY.

A member of the Canadian Forestry Association, who is also at the head of a great wood-using industry, writes: 'Canada has a grave responsibility in the matter of its woods and forests, and I am glad to know that this is being realized more and more, but I am satisfied that consistent and intelligent effort has yet to be directed in the matter of re-foresting. The fringe of the problem is being skirted, nothing more. To an intelligent onlooker the future supply of pulp wood and pine is a very grave matter, and it is certainly up to the present generation to take care of future generations, and not leave them a heritage denuded of the very raw materials which are so necessary to existence. Our woods are receding, pine is scarcer, there is less of it; our pulp woods are further in the

background, and yet we say, "Wait and see what nature will do."

'Coupled with intelligent work in the direction of reforesting, it goes without saying, of course, that there should be adequate fire protection all the time, and I was particularly interested in that portion of your letter which told what work has been done in Quebec.'



The Late Sir William Whyte, formerly Vice-President Canadian Pacific Railway and a warm friend of forestry. He presided at the opening of the Winnipeg Convention, 1913.

HE STRUCK A MATCH.

He struck a match as he passed through
The glorious growth of centuries;
He lit his pipe—and then he threw
The tiny blaze among the trees.
It flickered, seemed to die away—
And he, all careless, passed along,
Filled with the pleasure of the day,
The glory of the Forest's song.

Furious, wold-driv'n by the gale
That roared as Hell is thought to roar,
The forest fire swept hill and vale,
Claiming its victims by the score.
Huge flame-tongues covered every place
That even seemed to offer hope,
And devastation smote Earth's face:
No power, save God's, with this could cope.

Black are the hills where stood the trees
That graced them so short time ago;
No more their green boughs to the breeze
Sing gently, waving to and fro;
Black are the stumps and dry the hills
That yesterday so joyous went;
But blackest is it that these hills
Are suffered by the innocent!

—Carroll Wright.

POWERS OF FOREST RANGERS.

A western forest ranger writes to the *Canadian Forestry Journal* commending Mr. E. H. Finlayson's suggestion at the Winnipeg Convention that rangers be given certain judicial powers. This ranger states that often in the far north much more might be done in checking carelessness in the handling of fire, or violation of forest protection laws. The offender may be caught red-handed miles away from any justice of the peace, and the rangers have no power to take the violator before a justice without a summons, which might take weeks to obtain. He suggests that chief rangers, or assistant chief rangers, should have the powers of justices of the peace.

IS SECOND GROWTH AS GOOD AS THE VIRGIN GROWTH?

Mr. J. D. Howe, of St. John, New Brunswick, writes: 'In the December number of the *Canadian Forestry Journal* the views of the Deputy Minister of Lands and Forests for New Brunswick are given on two papers contributed by Mr. Allen in the issues of October 1st and 15th last of the *Canada Lumberman*. Lieut. Col. Loggie, the Deputy Minister, after agreeing with Mr. Allen on the disposal of brush, etc., regrets that he cannot agree with his statement, "that after virgin growth is cut away quite as good never follows," and adds, "my theory is in lumbering; remove the merchantable log at maturity; let in the air and light, and the same process will rotate, resulting in a bountiful nature supplying as good a log as the virgin one that was cut away."

'The questions may be asked—How much of the forest does the Deputy Minister regard as virgin? Is it only the matured trees? Does he consider the smaller trees younger and as second growth, and that a bountiful nature will continue to supply as good logs as the first? If so, he is laboring under a delusion that many other high authorities in forest treatment are laboring under; a delusion that is laying waste immense areas once covered with fine forests.

'In differing from such high authorities on this question, I feel the gravity in making these assertions, but as Nature's proofs are so convincing, I take the liberty in doing so.

'If the trees in a close stand of virgin spruce forest be carefully examined (large and small) it will be found that they are nearly all the same age, and should all be considered the virgin forest. It is thought by many that the smaller are

younger trees, but examine and be convinced.

'When the largest trees are taken out, letting in the sunlight and air, undoubtedly the smaller will rapidly put on new growth and produce as good logs as the first. This can be repeated or rotated, as it is usually termed, until the first or virgin stand is exhausted. While this process is going on the new or second growth will appear wherever sunlight is allowed to reach the earth by the openings made in removing the virgin growth. This second growth consists chiefly of brush spruce and fir branched to the roots, poplar and other varieties of so-called forest weeds, which give the lumbermen so much trouble, swamping roads (greatly increasing the accumulation of brush) in order to secure the last of the virgin timber.

'No, Mr. Allen's views will be borne out as correct by those who have much to do with lumber getting and using.

'I have dealt more fully with this subject in a paper sent to the *Canadian Forestry Convention* in February, 1912, of which a review was published in the June, 1913, number of the *Canadian Forestry Journal*.

'This phase of Canadian Forestry is one of most vital importance at the present time, and should be carefully and impartially looked into.'

BUSINESS VISITORS.

Among those who called at the office of the Canadian Forestry Association, in the Journal Building, Ottawa, during the past month, were Mr. R. D. Prettie, Supt. of Forestry for the Canadian Pacific Railway; Mr. H. R. MacMillan, Chief Forester of British Columbia; Mr. E. J. Zavitz, Provincial Forester for Ontario. All of the above are directors of the Association, and Association matters were discussed with the Secretary. Other visitors were: Mr. G. A. B. Krook, Wolseley, Sask., Horticulturist for the Canadian Pacific Railway; Arthur H. Graham, Chief Fire Inspector of the Lower Ottawa Forest Protective Association, and J. H. Grimm, of the Maple Syrup Producers' Association, Montreal.

A FINE HOLIDAY GROUND.

Nova Scotia is just being discovered by Canadians from other Provinces. It is attracting an increasing number of visitors yearly. Halifax is the centre of attraction, and September is the ideal month. Attend the Convention Sept. 1-4. Help to make it a big success, and see one of the finest parts of Canada.

With the Forest Engineers.

Canadian Society of Forest Engineers.

The President, Dr. B. E. Fernow, has, in pursuance of a provision of the constitution adopted at the last (1914) annual meeting, appointed the following nominating committee to nominate officers for the ensuing year:—Dr. J. F. Clark, and Messrs. J. H. White and T. W. Dwight.

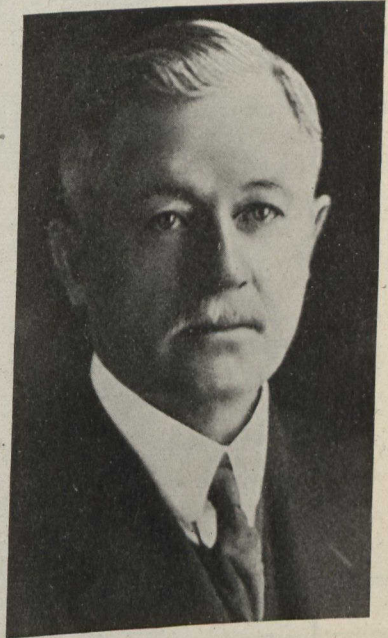
Ottawa Foresters' Club.

The Ottawa Foresters' Club held its concluding meeting for the season at the University Club, Ottawa, on April 8. The President, Mr. R. H. Campbell, Director of Forestry, was in the chair. There was a good attendance of members. The occasion of the gathering was an address by Mr. H. R. MacMillan, Chief Forester of British Columbia, on work in that Province. Mr. MacMillan spoke in an easy, conversational way for over an hour, and then for half an hour more answered the numerous questions submitted by members of the Club, and discussed points brought up. It is intended to have a number of similar meetings during the coming autumn and winter.

British Columbia Society of Foresters.

Sixteen members were present at the organization meeting of the British Columbia Society of Foresters, held in Vancouver. Dr. Judson F. Clark was in the chair, and Chief Forester MacMillan explained the object of the meeting. After discussion, Dr. Judson Clark was elected President, and, according to the constitution, he chose the following Executive: Messrs. H. R. MacMillan, D. R. Cameron, G. D. McKay and W. J. VanDusen, the latter to be Secretary-Treasurer. At a subsequent meeting of the Executive a constitution was drawn up, the objects of the Association to be the development of interest in Forestry in British Columbia. Meetings will be held regularly, quarterly, with extra meetings upon call of the President upon special occasions. As the name of the society is not deemed entirely satisfactory in some quarters, this will be further discussed at the next regular meeting.

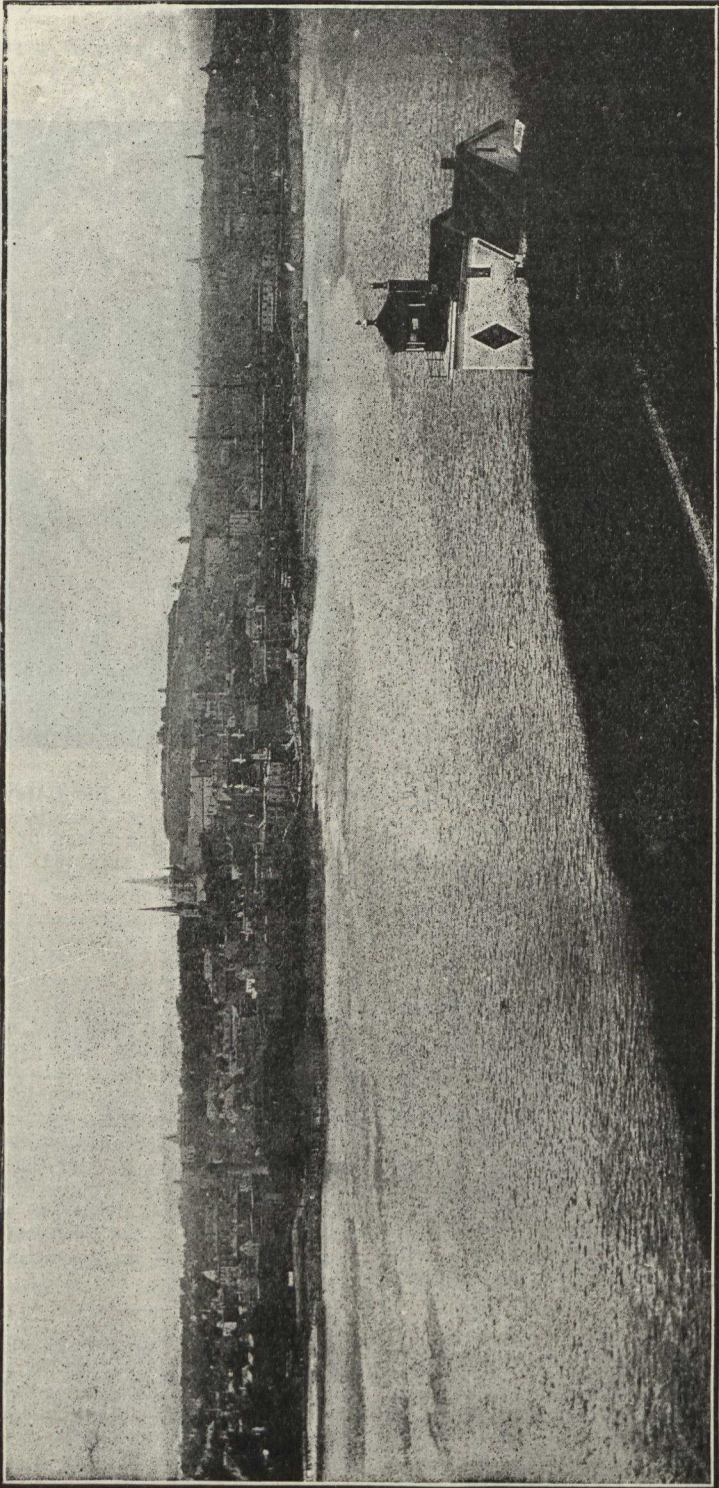
A new member writes: 'Being so thoroughly in sympathy with the work which you have undertaken, we consider it a privilege to be included in the roster of your Association.'



Sir Douglas Cameron, Lieut.-Governor of Manitoba, one of Canada's leading lumbermen, and a friend of conservation, recently knighted by King George.

The Editor of the *Courier* of Crystal City, Manitoba, writes in an appreciative way of the grove on the farm of Mr. J. J. Ring near that place. He notes that during the winter time driving into this grove out of the storm was like going into a house. He also tells of the other advantages of this grove. These trees were planted by Mr. Ring, the grove being among the first to be set out under the plan of the Dominion Forestry Branch and from seedlings grown at Indian Head. Mr. Ring was one of the earliest members of the Canadian Forestry Association, and is an enthusiast on this subject.

The number of agricultural and forestry colleges and schools in Austria in 1912-13 was 226. These included three colleges, four academies, nine agricultural and five forestry middle schools and eleven lower grade forestry schools.



Halifax, the City of the Convention, Sept. 1-4, 1914—View of Halifax from George's Island, showing part of the waterfront in foreground and citadel on the skyline. An ideal city for a summer visit.

CANADIAN FORESTRY ASSOCIATION.

The Canadian Forestry Association is the organization in Canada for the propagation of the principles of forest conservation. This it does by means of conventions, meetings, lectures and literature.

It is a popular organization supported by the fees of members, assisted by some government grants.

There is a vast field of work before the Association which is only limited by the funds at the disposal of the Association.

Those who are not already members are invited to join and assist in the work. The membership fee is one dollar per year, and this entitles the member to attend and vote at all meetings and to receive the *Annual Report* and the *Canadian Forestry Journal*. Women as well as men are eligible for membership.

Applications for membership and requests for literature and information may be addressed to

The Secretary,
Canadian Forestry Association,
Journal Building, Ottawa, Can.

OBJECTS OF THE ASSOCIATION.

- (1) The exploration of the public domain, so that lands unsuitable for agriculture may be reserved for timber production.
- (2) The preservation of the forests for

their influence on climate, soil and water supply.

(3) The promotion of judicious methods in dealing with forests and woodlands.

(4) Tree planting on the plains and on streets and highways.

(5) Reforestation where advisable.

(6) The collection and dissemination of information bearing on the forestry problem in general.

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Candidates for advanced standing may take examinations in any subject but are required in addition to present evidence of a specified amount of work done in the field or laboratory.

The school year in 1914 begins July 1 and is conducted at the school camp at MILFORD, Pennsylvania.

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