

Canadian Forestry Journal

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THE FORESTRY MOVEMENT.

There never was a time in Canada when there was so much interest in forest conservation by wise use as there is to-day. At the same time only a very small fraction of the public has any idea of what true conservation means. Constantly the argument is heard that we cannot afford to keep our forests unused for the sake of posterity. Those who know that conservation means the best use of the forest now and in the future must show, as Hon. Walter L. Fisher pointed out at Washington recently, that the movement does not aim to lock up the forest resources but that it is constructive and progressive, aiming at the immediate use of such forest products as can now be extracted profitably, and looking forward to the highest utilization of the lands, which though admirably suited to forest growth are not suited to anything else.

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CANADIAN FORESTRY JOURNAL.

At the annual meeting of the Canadian Forestry Association and subsequent meeting of the Editorial Committee it was decided to publish the Journal as a monthly, beginning with a sixteen page form. The proceedings of the annual meeting will be found in this issue.

THE NEXT CONVENTION.

It has been decided to hold the next Forestry Convention in the City of Winnipeg in the latter part of July. There will be a good program dealing particularly with prairie problems, though the list of subjects will not be confined to these. There will be special railway rates which will be announced later. Members of the Canadian Forestry Association and friends of forest conservation are requested to keep this time in mind and if possible to attend. Those who expect to attend or who may be able to do so will greatly assist in the work if they will write a note to the Secretary, Canadian Forestry Association, Canadian Building, Ottawa, to this effect.

This is in line with the remarks of Hon. George H. Perley at the banquet of the Canadian Lumbermen's Association, which will be found in this issue. The public does not know as yet that a large part of every country, and of Canada in particular, is fitted only to grow trees and that devoted to that purpose it will produce wealth for the whole nation; while to attempt to farm such areas or to leave them to take care of themselves has resulted and always will result in barrenness, waste, depopulation and poverty.

It is the privilege of every friend of forest conservation to preach it as an affirmative and progressive doctrine. To do this it is necessary to

have definite things to accomplish. The reading of the various articles in this issue will show some of these things, and it is the intention to present the leading issues in concrete form in the *Journal* from issue to issue. The views of those interested in forestry on subjects coming particularly within their ken will be welcomed.

Under the auspices of the Touring Club of France an international forest congress will be held in Paris, France, June 16-20 inclusive. The Government of France is assisting in this work and is inviting representatives from different countries of the world. Two of the leading topics will be, first, co-operation in forestry which will take in the question of relation to agriculture, relation to credit societies, banks, etc.; and, second, the creation of an international forestry bureau similar to the International Agricultural Institute which has its headquarters at Rome.

WANT NATURAL RESOURCES.

At the opening of the Alberta Legislature the speech from the throne concluded with the regret that 'the promises of the federal authorities in regard to the handing over of their natural resources to the prairie provinces has not yet been implemented in the slightest degree. Although requests for conferences on this question have been made, no time has yet been fixed by the federal authorities and I bring this matter to your attention for such action as you may desire to bring in the interests of the province of Alberta.'

TEN THOUSAND A DAY.

Our Dumb Animals.

In Louisiana alone it is reported that during the short season 10,000 robins a day are killed by brutal men and boys. They are shot, clubbed to

death in the trees where they roost at night in great numbers, slaughtered by the wholesale to be sold for a few cents apiece. And yet the robin and its nestlings are perfect gormandizers when it comes to making a meal of bugs and caterpillars, the fledglings eating one and two fifths times their own weight of worms and insects each day. No wonder men speak of many of these little birds as 'worth their weight in gold.' How magnificent the economic wisdom of the state that allows their destruction at the hands of men who sell them for less than an ounce of copper!

WIRELESS FOR FIRES.

Lumbermen of Spokane are seriously considering the adoption of the wireless telegraph as an effective aid in fighting fires in the great forests of the Pacific Northwest. On the success of a test to be made next spring by the Marconi company in one of the forests near Spokane hangs the future of wireless as a means of fighting fire.

Special apparatus will be placed on the trails used by the forest rangers, who will carry emergency aerials to string between two high trees at any point in the woods. By this means it is proposed to have reported to a central station any incipient blazes, so that fire-fighting squads may be rushed to the scene in time to prevent the fire from gaining headway.

The weekly report of the Department of Trade and Commerce of Canada recently contained a paragraph from the Birmingham, England, representative of the Department in regard to sugar manufactured from sawdust. The correspondent stated how Mr. A. Zimmerman described the process. In its natural state, he said, wood contained no sugar, but when sawdust was digested with a weak sulphurous acid solution under a pressure of six to seven atmospheres as much as twenty-five per cent. of the material was converted into sugar. This, he said, made a valuable feeding stuff for horses and cattle. He gave instances showing that the food had been tried with good success in different parts of England.

Canadian Forestry Association

Fourteenth Annual Business Meeting

The fourteenth annual business meeting of the Canadian Forestry Association was held in the Board of Trade Rooms, Ottawa, on Wednesday, Feb. 5, beginning at 11 a.m. There was a good attendance of members, probably the largest at any annual meeting when the same was not held during a convention. The names of those present will be found at the close of this article. In the absence of the President, Mr. John Hendry of Vancouver, the Vice-President, Hon. W. A. Charlton, of Toronto, upon motion took the chair.

DIRECTORS' REPORT.

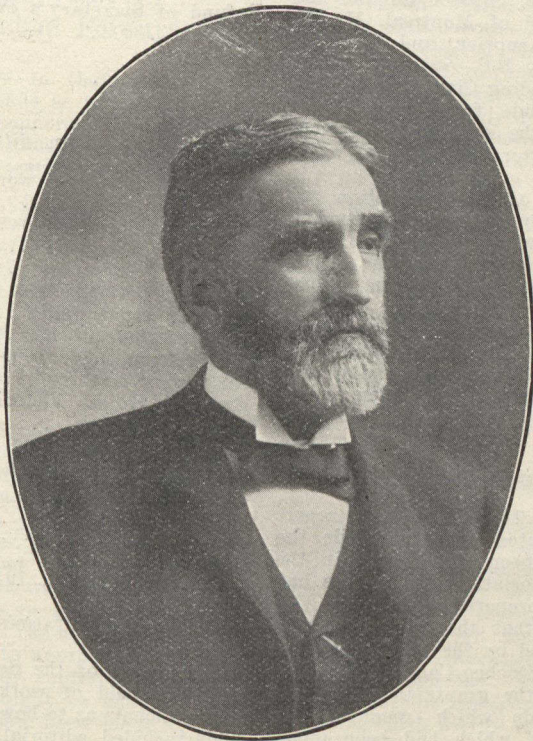
The report of the Directors showed that 1912 had been a very active year in the work of the Association. Two conventions

had been held, one in Ottawa in February and the second in Victoria in September.

In reviewing the forestry situation it was noted that the progress in forest conservation in Canada had been steady during the year. It was estimated that the total expenditure in 1912 on forest protection by federal and provincial governments and by private individuals amounted to about \$1,500,000.

The Dominion Forestry Branch in addition to its protective and tree planting work had made an examination of areas in British Columbia, Alberta, Saskatchewan and Manitoba of lands to ascertain if they should be put into forest reserves.

British Columbia had put into force a new forest act and organized a strong forest service.



Hon. W. A. CHARTON, M.P.,
President Canadian Forestry Assn.

In Ontario the government and the limit holders together had over one thousand fire rangers in the field during the danger season.

The Province of Quebec had made a beginning in the work of planting denuded sand lands, and had strengthened its protective and development work. The St. Maurice Valley Forest Protective Association had successfully completed its first year's work.

Private efforts in regard to forestry had been greater than ever before, special mention being made of the introduction of oil-burning locomotives by the Canadian Pacific Railway in the Rocky Mountain forest region, and the introduction of telephone systems by a number of limit holders, particularly in Quebec.

The Association again pressed for the establishment of a federal laboratory to test the different woods of Canada.

Progress was noted in forestry education and the establishment of schools to train experienced and working fire rangers to give them greater efficiency in their work was urged.

Fitting reference was made to the loss to the cause of forestry through the deaths of Sir Edward Clouston, Senator Rolland and Mr. R. W. Shepherd of Montreal, Mr. H. F. McLachlin of Arnprior, and Mr. Otis Staples of Wycliffe, B.C.

The need of extending Civil Service regulations to the outside forest service had been pressed upon the governments, and the outlook in this matter was declared to be hopeful.

The membership of the Association had continued to steadily increase and stood at 2,865. The Treasurer reported that after the expenses of the year there was a substantial balance on hand. Of the income \$2,249 was from members' fees. The Dominion Government and the Governments of Ontario, Quebec and British Columbia had continued their grants, and several of the leading banks of Canada had taken an active interest in the work of the Association.

TREASURER'S REPORT.

In bringing in the Treasurer's report the Secretary pointed out that while the expenditures had been the largest in the history of the Association, the income had been fortunately proportionately large. He also pointed out that the total had been considerably swelled by the handling of the payments for the Quebec Convention. This was also true of the grants in aid of the Victoria Convention which amounted to nearly \$2,000, and which had been immediately paid out at the conclusion of that gathering. The balance to some seemed unduly large, but this would be required for new work to be undertaken during the year.

TREASURER'S REPORT FOR 1912.

The report of the Treasurer, Miss M. Robinson, which was duly certified by Messrs. F. Hawkins and T. E. Clendinnen the auditors, was as follows:—

Receipts.

Balance from 1911	\$1,494 51
Membership fees	2,249 70
Copies of <i>Forestry Journal</i>	25 00
Advertising in <i>Journal</i>	122 57
Grant for Quebec Convention, 1911	2,386 50
Grant from Dominion Govt.	2,000 00
Grant from Ontario Govt.	300 00
Grant from B. C. Govt.	200 00
Grant from B.C. Govt.—Convention	1,500 00
Grant from Quebec Govt., 1912 ..	200 00
Grant from Quebec Govt., 1913 ..	200 00
Grant from Traders' Bank.	25 00
Subscriptions to B. C. Conv'n.—	
B. C. Lumber and Shingle Mfrs.' Assn.	250 00
B. C. Mills, T. & T. Co.	240 00
	<hr/>
	490 00
Refund of Secretary's expenses. .	6 00
Interest	60 33
	<hr/>
Total	\$11,259 61

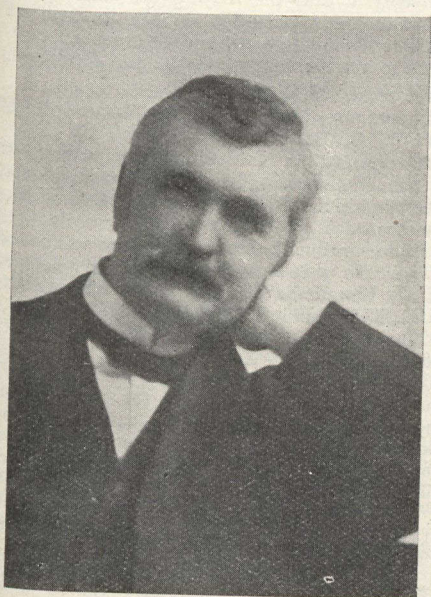
Expenditure.

Salaries and clerical work.	\$2,304 20
Quebec Convention	530 52
Ottawa Convention	919 65
Victoria Convention	1,454 24
Secretary's expenses	200 00
Annual report	329 65
Printing and supplies	102 76
<i>Forestry Journal</i>	1,076 09
Lantern and lectures	16 80
Addressing machine	20 00
Empress Hotel, Victoria, banquet	1,990 00
Postage	71 00
Commission on cheques	10 33
Balance	2,234 37
	<hr/>
Total	\$11,259 61

Ottawa, Dec. 31, 1912.

SECRETARY'S REPORT.

The report of the Secretary dealt wholly with the field of work, suggesting certain improvements as to how it might be covered. This included editorial, lecture work, clerical work, etc. Regret was expressed that owing to increasing pressure of other duties the Assistant Secretary and Editor, Mr. F. W. H. Jacombe, had decided that he could



MR. WM. POWER, M.P.,
Vice-Pres. Canadian Forestry Assn.

no longer continue in those offices, and suggestions were made as to how this work might be handled temporarily. The advisability of securing assistance to carry out the Winnipeg Convention was also suggested.

These reports were duly received and dealt with.

LOG RULE AND FIRE LEGISLATION.

Dr. B. E. Fernow (the chairman in each case presented the reports of the committees on uniform log rule and forest fire legislation.

In regard to the first, the desirability and difficulty of introducing a uniform log rule to take the place of the five different log rules in use in Canada were set out. The need of a uniform unit of measurement for forestry purposes, *i.e.*, for the purpose of studying rate and amount of production of wood material, was stated. For this purpose nothing was so good as the cubic foot or cubic meter. The only way to bring this about would be to approach the several provinces to see if by conference of those interested one rule might be adopted. No effort to this end had been made by the committee. When such a change was contemplated, however, it would be well to press at once for the adoption of the cubic foot or the cubic meter as the standard measure.

The report on fire protection showed that gratifying progress had been made during the year. Particular attention was drawn to the issue of a most comprehensive order (No. 16570) by the Board of Railway Commissioners of Canada regarding fire protection along railway lines. This action was taken after a number of public hearings in which the different bodies interested in forest protection, including the Canadian Forestry Association, were represented. The chairman of the committee (Dr. Fernow) had been asked to formulate the plans on which the order was based. As a result of this Mr. Clyde Leavitt, Forester for the Commission of Conservation, had been made Chief Fire Inspector for the Board of Railway Commissioners, and had organized the work so that all the railways in the western half of Canada were patrolled in 1912, and it was expected that the railways in eastern Canada would be patrolled in 1913. A specially good feature of the organization was that it linked up the work of the Railway Commission with that of the Dominion and Provincial Governments, the forest protective officers of these governments being made local inspectors of the parts of the railway lines coming within their jurisdiction. It was stated that this legislation was the most advanced of its kind on the continent, covering under one authority 24,000 miles of railway lines. The report also referred to experiments made in brush disposal, particularly by lopping the tops, and also to the extension of telephone lines both under the Dominion Forestry Branch and on private limits in eastern Canada. Gratification was also expressed at the formation of the St. Maurice Forest Protective Association as indicating the most hopeful line of work yet inaugurated, and one which the committee hoped would be widely imitated.

On motion of Dr. Fernow, seconded by Mr. Piche, the reports of the Committees on Uniform Log Rules, and on Forest Fire Legislation were received, the committees continued and allowed to amend their reports before printing.

RESOLUTIONS.

Moved by Hon. Hewitt Bostock, seconded by Hon. Sydney A. Fisher, and

Resolved, that in reference to the notice of motion given by Mr. Southworth this Association, while thoroughly appreciating that the aim of Mr. Southworth is wholly to secure the advancement of the cause of forestry through the widest publicity, still believes that the newspaper publicity which Mr. Southworth desires can be fully secured while carrying on the *Canadian Forestry Journal*, and hereby instructs the Directors and the Editorial Committee to endeavor to develop this bulletin work and at the same time to make the *Journal* as effective as the

means at the disposal of the Association allow.

Moved by Mr. Ellwood Wilson, seconded by Mr. G. Y. Chown, and

Resolved, that the Association regrets the necessity (caused by increased pressure of other duties) of the decision of the Assistant Secretary and Editor that he can no longer continue that work; and it desires to record its appreciation of his faithful and painstaking labors, in the past five years, by granting him an honorarium of fifty dollars.

Moved by Mr. Wm. Power, seconded by Mr. Hiram Robinson, and

Resolved, that the Association desires to express its regret at the illness which prevents the attendance of Mr. William Little, Director and Past President, and to voice the hope that he will be speedily restored to his wonted health and long spared to advance the cause which he has so deeply at heart and for which he has done so much.

Moved by Mr. Ellwood Wilson, seconded by Mr. A. H. D. Ross, and

Resolved, that the Association desires to express its appreciation of the care, energy and liberality with which the retiring President, Mr. John Hendry, fulfilled the duties of that post in the past year. Because of the desire to make the Victoria Convention in every way successful he returned from Europe much earlier than he had intended, and though in poor health threw himself into the arrangement of details with the greatest energy. The Association desires to express the hope that Mr. Hendry's full recovery to health will be speedily accomplished and that he will be long spared to throw his great weight as one of Canada's leading captains of industry into the cause of forest conservation.

Moved by Mr. A. H. D. Ross, seconded by Mr. Ellwood Wilson, and

Resolved, that the thanks of the Canadian Forestry Association be tendered to the Dominion Government and the Governments of Ontario, Quebec, British Columbia and New Brunswick for their grants in aid of the work of this Association.

Moved by Hon. Sydney Fisher, seconded by Hon. H. Bostock, and

Resolved, that the Canadian Forestry Association desires to convey its thanks to His Royal Highness the Governor General for his kindness in continuing as Patron of the Association; it desires to assure him of the anxious concern with which the members have followed the reports of the illness of Her Royal Highness the Duchess of Connaught and of their earnest hope that she may speedily be restored to her wonted health.

Moved by Mr. Piché, seconded by Dr. Fernow, and

Resolved, that the Association send a contribution of twenty-five dollars to each of the two committees formed to erect a monument to the memory of Gayer and Broillard, the two celebrated foresters.

Moved by Mr. E. Wilson, seconded by Mr. W. G. Power, and

Resolved, that a committee be appointed to consider means for the increase of the membership and the formation of local associations.

Upon motion the committee was composed of Mr. E. Wilson (convener), and Messrs. R. H. Campbell, Zavitz, Piché, MacMillan, R. B. Miller and F. C. Whitman.

Moved by Mr. E. Wilson, seconded by Dr. Fernow, and

Resolved, that a committee be appointed to examine the question of the progress in the several provinces of the exploration or classification of lands and to report on ways and means for the furthering of this movement.

Upon motion the committee was composed of Mr. E. Wilson (convener), Hon. Sydney Fisher and Mr. George Y. Chown.

Moved by Mr. R. H. Campbell, seconded by Mr. A. H. D. Ross, and

Resolved, that the thanks of the Canadian Forestry Association be conveyed to the general managers of the chartered banks of Canada which have assisted the Association by making their branch managers members of the Association, or by direct grants in aid of its work.

On motion of Mr. Chown, the Secretary was re-elected and the other elections referred to the Directors.

Moved by Mr. Piché, seconded by Mr. W. G. Power, and

Resolved, that this meeting recommend to the Directors that the salary of the Secretary be increased by the amount of three hundred dollars per year.

Moved by Dr. Fernow, seconded by Mr. E. Wilson, and

Resolved, that the Directors be instructed to arrange for the nomination of a slate of officers through a Nominating Committee which is to report the slate to the annual meeting.

Moved by Dr. Fernow, seconded by Mr. Wilson, and

Resolved, that a special vote of thanks be transmitted to the Treasurer, Miss M. Robinson, for her excellent services, in recognition of the same that a *douceur* of one hundred dollars be paid her in addition to the customary honorarium, and that she be requested to continue in office.

OFFICERS ELECTED.

Patron—H.R.H. the Governor General.
 Hon. President—Rt. Hon. R. L. Bordon.
 Hon. Past President—Rt. Hon. Sir Wilfrid Laurier.

President—Hon. W. A. Charton, M.P.

Vice-President—Wm. Power, M.P.

Treasurer—Miss M. Robinson.

Secretary—James Lawler.

Board of Directors—Wm. Little, Hiram Robinson, Aubrey White, E. Stewart, H. M. Price, W. B. Snowball, Thomas Southworth, Hon. W. C. Edwards, Geo. Y. Chown, John Hendry, Hon. Sydney Fisher, R. H. Campbell, J. B. Miller, Gordon C. Edwards, Dr. B. E. Fernow, Ellwood Wilson, Senator Bostock, F. C. Whitman, G. C. Piché, Alex. MacLaurin, Mgr. Mathieu, Bishop of Regina, A. P. Stevenson, Wm. Pearce, C. E. E. Ussher, Denis Murphy, C. Jackson Booth, Wm. Price, J. W. Harkom, A. S. Goodeve, W. C. J. Hall, J. S. Dennis, J. B. White, E. J. Zavitz, Geo. Chahoon, Jr., R. D. Prettie.

DIRECTORS' MEETING.

After the annual meeting a meeting of the Directors was held in the same place when officers were appointed or elected as required by the constitution.

Territorial Vice-Presidents—Ont., Hon. W. H. Hearst; Que., Hon. Jules Allard; N.B., Hon. J. K. Flemming; N.S., Hon. O. T. Daniels; Man., Hon. R. P. Roblin; P.E.I., Hon. J. A. Matheson; Sask., His Honor G. W. Brown; Alta., Hon. A. L. Sifton; B.C., Hon. W. R. Ross; Yukon, Geo. Black, Commissioner; Mackenzie, F. D. Wilson; Keewatin, His Honor D. C. Cameron; Ungava, His Grace, Mgr. Bruchesi, Archbishop of Montreal.

Editorial Committee—R. H. Campbell, Thos. Southworth, Avila Bedard, J. M. Macoun, Ellwood Wilson, E. J. Zavitz, F. W. H. Jacombe.

Editor, James Lawler; Associate Editor, G. C. Piché.

A number of other routine matters were dealt with by resolution, the Secretary was authorized to proceed with the arrangements for the Winnipeg Convention in the latter part of July, 1913, and questions affecting

office accommodation, assistance, etc., were referred to a committee composed of the Directors resident in Ottawa.

THOSE PRESENT AT ANNUAL MEETING.

Hon. H. Bostock, Monte Creek, B.C.
 Horace Boulton, Canada Lumberman, Toronto.
 Hon. W. A. Charton, Geo. Y. Chown, R. H. Campbell, Dominion Director of Forestry; A. C. Campbell, D. R. Cameron, Dominion Forestry Branch, Kamloops.
 T. W. Dwight, Dominion Forestry Branch, Ottawa.
 L. N. Ellis, C.P.R. Forestry Department, Calgary, Alta.
 Hon. Sydney Fisher, Dr. B. E. Fernow, Dean of the Faculty of Forestry, University of Toronto.
 Frank Hawkins, Secretary Canadian Lumbermen's Association.
 F. W. H. Jacombe, Forestry Branch, Ottawa.
 Clyde Leavitt, Forester, Commission of Conservation; R. G. Lewis, Forestry Branch, Ottawa.
 Douglas Malloch, American Lumberman; B. R. Morton, Forestry Branch, Ottawa.
 Wm. Power, M.P., Quebec; W. Gerard Power, Manager River Ouelle Lumber Co., St. Pacomé, Que.; G. C. Piché, Chief of Quebec Forest Service.
 Hiram Robinson, President Hawkesbury Lumber Co., Ottawa; A. H. D. Ross, Lecturer, Faculty of Forestry, University of Toronto.
 Ellwood Wilson, Forester, Laurentide Co., Grand Mere, Que., F. Page Wilson, Editor Pulp and Paper Magazine, Toronto; J. B. White, Woods Manager, Riordon Co., Calumet, Que.; H. C. Wallin, Forestry Branch, Ottawa.
 E. J. Zavitz, Ontario Provincial Forester, Guelph, Ont.

Canadian Lumbermen's Association.

The Fifth Annual Meeting of the Canadian Lumbermen's Association was held in the Chateau Laurier, Ottawa, on Feb. 4, 1913, and was the most successful annual meeting yet held. There was a large and representative attendance.

In the unavoidable absence of the President, Mr. Alexander MacLaurin of Montreal, who was kept away by reason of ill health, the chair was taken by Mr. J. C. Browne of Ottawa, Vice-President.

There was a large amount of important business relating to the different aspects of

lumbering at the two business sessions in the morning and afternoon.

The following officers were elected:—

President, Alexander MacLaurin, Montreal; Vice-Presidents, J. C. Browne, Ottawa, J. S. Gillies, Braeside, Ont., His Honor D. C. Cameron, Winnipeg, and John Hendry, Vancouver; Executive Committee, Alex. MacLaurin, Montreal, J. C. Browne, Ottawa, Gordon C. Edwards, Ottawa, J. S. Gillies, Braeside, and J. J. McFadden, Renfrew; Directors, W. Power, M.P., Quebec; E. H. Lemay, Montreal, Arthur H. Campbell,

Montreal, D. L. White, Midland, Walter C. Laidlaw, Toronto, J. G. Cane, Toronto, W. A. Firstbrook, Toronto, A. D. McRae, Fraser Mills, B.C., Wm. McNeill, Vancouver, B. C., and the following new members: A. L. Mattes, Prince Albert, Sask., Duncan McLaren, Toronto, C. A. Larkin, Toronto, and J. Hanbury Wycliffe, B.C.

A vote of thanks was passed to the Secretary, Mr. Frank Hawkins, for the valuable work he is doing for the Association.

The proceedings concluded with a banquet at the Chateau Laurier in the evening when over one hundred guests were present. The chair was occupied by Hon. W. C. Edwards. At his right hand was Hon. Geo. H. Perley, who ably represented the Dominion Government in the enforced absence of Rt. Hon. R. L. Borden, the Prime Minister, through press of parliamentary business. Mr. E. M. Macdonald, M.P. for Pictou, N.S., took the place of Sir Wilfrid Laurier, who was indisposed.

There were a number of excellent speeches, but the one which had the most particular reference to forestry was that by Hon. Geo. H. Perley. As it well known Mr. Perley is a member of a family that has been largely interested in lumbering in the Ottawa Valley for many years. He has always been a warm friend of the cause of forestry, and though his public duties have made it necessary for him to sever in a measure his active connection with the lumber business, this has not lessened his desire to assist in the perpetuation of the great industry and of the forests upon which it is dependent.

On this occasion Mr. Perley pointed out that it was clearly evident that a large part of Canada should be kept permanently under timber. The land was not suited for anything else, and it was a mistake to allow settlement in such a district. Lands should be classified and a sharp line drawn around those suited for forests and unsuited for agriculture, and no settlement should be permitted therein. This proper disposal of the land affected every citizen, but it particularly affected the lumberman. The lumberman should therefore, he held, be foremost in the work of teaching this to the people at large—that it was for the national wellbeing that forest lands be devoted to forests and not ruined in an attempt to farm them. Canada was a democratic country. The decision in any of these public matters depended upon the people, the voters needed to be taught and those interested in forest products should enlighten their neighbors.

Mr. Perley's speech was brightened by a number of very apt anecdotes drawn from his experience as a young man in the lumber woods. He referred to the hopeful and healthful character of the lumberman's life, and recalled to all present the waste of money and human life that all had seen in

the attempt to grow oats and potatoes where Providence had intended that nothing but pine and spruce should ever grow.

This part of Mr. Perley's speech was one of the best statements of the necessity for and advantages of forest conservation to a country like Canada that could be made. Coming from an experienced and successful lumberman speaking to leaders in Canada lumbering, the statement had very great weight, which was not lessened by the fact that Mr. Perley has now upon his shoulders additional responsibilities as a member of the Cabinet of the Government of Canada.

Senator Edwards, as usual, filled the chair with tact and ability, and in proposing the health of Hon. J. G. Foster, United States Consul, spoke of the place that gentleman had made for himself in the hearts of Canadians, and suggested that if there was any danger that the change in the government at Washington would result in Mr. Foster's retirement, that prominent Canadians should start a petition to be forwarded to Washington praying that Mr. Foster be allowed to remain in his present office at Ottawa.

Mr. Foster made a fitting and feeling reply.

The toast to the health of Mr. John R. Booth, 'the grand old man of the Ottawa lumber industry,' was received with cheers.

Mr. Douglas Malloch, 'The Lumberman Poet' of the American Lumberman, Chicago, in replying to the toast to the Press, made a very witty speech concluding with the recitation of one of his happiest poems, 'Isn't it Fine To-day.'

As most of the members of the Canadian Lumbermen's Association are also members of the Canadian Forestry Association a good many of those present on Feb. 4 remained to the next day to attend the Annual Meeting of the Canadian Forestry Association.

The City of Philadelphia has just had a thorough report made on the condition of shade trees in the city. This showed that fully fifty thousand trees are in danger of destruction, and a recommendation was made that fifty thousand dollars be appropriated for the purpose of protecting the trees by pruning and by combating destructive insects.

It is announced that the City of Ottawa and the Ottawa Improvement Commission will co-operate this year in a vigorous and systematic fight against the caterpillars which last year did so much damage to the shade trees of the city. The State of Massachusetts has spent hundreds of thousands of dollars in fighting the pests which are attacking its trees, and Canada must be on the alert or she will be placed in the same predicament.

The Problem of Forestry.

By Henry S. Graves, Chief Forester of the United States.

When this country was first settled there was a forest unequalled anywhere in the world. It stretched in an almost unbroken mass from the Atlantic Ocean half across the continent; there was an extensive forest on the higher ranges of the Rocky Mountains, and on the Pacific coast a broad band of forest of unparalleled development. The original forests were remarkable not only for their vast extent, but also for the great number of valuable species composing them, and their enormous yield in useful material. The forest contained trees of great size and age. Nature working through centuries had provided a vast storehouse of timber fully grown and ready for use when required. It is upon this supply that the American people have been drawing for four centuries. It has constituted a source of great wealth and has been an important element in the internal development of the country and in the extension of its commerce.

When the country was first settled the effort was to remove the forest for agriculture. With the increase of population there naturally arose a demand for products and the timber was cut for use and not merely destroyed. The first lumbering for use took only the choicest trees in the forest. As trees were selected here and there, but little damage was done to the forest. As the demand for timber increased the forests near settlements and accessible for transportation were cut through again. The process went on until the modern methods of lumbering were introduced, which make very heavy inroads into the forest, often removing every tree.

As the country developed, forest fires became an increasing menace to the forest. The majority of the lumbered lands were burned over and usually at the same time immense areas of uncut timber. As long as there were still vast areas of virgin forest, but little thought was given to the loss by fires. But as in one state after another the original forest was cut away or burned away, people began to realize that a halt must be called, and that very vigorously.

Investigations have shown that since 1870 an average of over 50,000,000 acres were being burned over every year, with an annual loss of from 50 to 100 millions of dollars.

Use of wood and future supplies.

The United States is essentially a wood-using nation. Lumber has been so plentiful and cheap that we use wood for many pur-

poses for which other nations use other material. Our per capita consumption of wood is seven times that of Germany. Forty eight thousand sawmills are at work supplying this material. There would be no need of anxiety about our extravagant use of timber if there were an adequate supply. We are drawing on our capital, and through failure to practice forestry our forests are not producing by new growth within one third of what we actually use, let alone



MR. H. S. GRAVES.

the amount lost by fire and by waste. In other words, we are actually using up our forest supplies, and that very rapidly.

There is often an impression that there is a great supply in Canada and in the West which may be drawn upon after we have used up our eastern supplies. No greater mistake could be made. The forests of Canada are far from inexhaustible. The Canadians are wasting their resources as fast as this country is, and they will need their forests to meet their own future requirements. There is also a belief that the Western mountains are covered with a solid

mass of unbroken virgin forests. This is far from truth. The western forests have suffered from fires from time immemorial. Not only are there everywhere great areas burned by recent fires, but there is scarcely a forest in which there are not evidences of ancient fires. The forests are frequently broken, the trees scarred and defective, and the yield deficient because of old fire-injuries. Immense stretches are bare or covered with an immature growth where formerly some fire swept off the forest.

We can not count on meeting our needs by imports from other countries, nor can the East count on meeting its full needs from the West. The country should be self-supporting in forest products, and each region should have a home supply which will meet its principal needs. We must stop our waste, reduce our extravagance in use, and increase our production by growth by fully 300 to 500 per cent.

Forests and Streams.

For many years foresters and others have given warning that the forest problem reaches further than the supply of timber and other products. There is an exceedingly intimate relation between the conservation of forests and the conservation of water. The forest is the best natural regulator of the run-off water. Any system of water conservation must, therefore, include a proper protection of the forest cover at the head-waters of rivers.

The general public does not appreciate the results which will follow the destruction of the cover of the mountains, because in most instances the process has not yet proceeded to a point to make its effects felt. Complaints are common from manufacturers and other users that the streams are becoming less regular as the forests are cut. Many measurements conclusively show that there is such an increasing irregularity, but the fact is that the mountains in most sections have as yet not been so denuded as to cause the worst results that might be feared. This is particularly so in the East. Thus in the South the forests may be cleared by cutting or fire and a new growth quickly springs up. Until the cover is re-established there is without doubt an effect on the run-off, but it is only a temporary effect. The conditions gradually re-establish themselves. But let the forests be continually denuded on the steep slopes; there will be a gradual change in the physiographic conditions. The beds of the streams will begin to be slightly deeper, there will be new channels formed where during storms the surface water runs off rapidly in a flood. After a time there is a swift change — the result perhaps of some exceptional storm — when the equilibrium of stream conditions is upset. There is a permanent change of conditions of run-off. The channels are all deepened, and torrent conditions exist. From

then on, every storm produces a flood of greater or less proportions. It is this point of permanent change of stream conditions which we most fear, and which will occur when forests are continually denuded. It has already occurred in many places in the West, where the recuperative power of vegetation is less vigorous than in the humid region. It has occurred widely in the Alps of Europe. When such torrent conditions are established, the mere restoration of the trees will not cure the evil. It is an engineering problem to control the water by artificial means, and as already proven in Europe this is a task of great magnitude and vast expense.

What the U. S. Government is doing.

What, then, is being done to protect the national forests so that they may perform their functions as water regulators and provide timber for the people's use? How far is forestry actually in practice?

The chief work so far is being done by the Government. A forest policy has been initiated. Nearly 200,000,000 acres of land have been set aside as forest reserves. Most of this lies in the high mountains. Much of it is as yet undeveloped and wild country, with few trails or roads. In the past fires burned so frequently in the mountains that there was a regular fire season when the forests were ablaze and the air full of smoke. When the National Forests were put under administration these fires were reduced at once, and for the last five years the loss on the National Forests has been exceedingly small. It seemed to the public as if the fire problem on the public lands was under way of solution. Those in charge of the forests realized, however, that a vast wilderness cannot be organized for perfect fire protection in a few years, because the fundamental first necessity to protect a forest is to open it up so that all parts are available for patrol and for moving men and equipment to fight fires. Nevertheless, the Forest Service, even with only a pitifully small protective force, has been able to hold down the fires to a minimum during the years of normal rainfall.

During 1910 there was exceptional drought, especially in the Northwest. The forests became exceptionally dry. Not only the surface layer of leaves, but even the humus in the usually damp woods, became excessively inflammable. In the northwestern forests the situation became critical as early as June. The early spring had been unusually dry, and then the summer rains failed. By July fires were springing up in great numbers, and in August the forests of the entire northern Rocky Mountains were threatened by fire. The climax was reached toward the end of August. Hundreds of fires had already been put out, but new ones continued to be started from various causes. Locomotive sparks, brush

burning, careless campers, lightning, incendiarianism, all contributed. The great fires of Idaho occurred August 20. There were then many fires burning in the mountains. Nearly all were under control, that is, they were trenched, and a force of men were guarding them and preventing their spread.

With reasonably calm weather, all would have been extinguished before long, but suddenly a terrific hurricane arose, which lasted practically a day. So strong was it that men were unseated from their saddles. Whole areas of forest were absolutely flattened. Men were killed by falling trees in front of the fires. Every smouldering fire was fanned into a conflagration. Sparks were blown miles ahead of the fires. The flames rushed through the crowns of the trees with a fury which was appalling. Within a day there was a fire a hundred miles long. Seventy six fire fighters had been killed, and, if it had not been for the skill and nerve of the rangers, many more would have been lost. For a few days all work was devoted to rescue, and then the fight on the fires was resumed. It was a noble fight and the nation should be proud of the forest officers who toiled day and night, again and again risking their lives to save the forests and the towns which were imperilled.

This is the first instance of an organized attempt to fight such great fires. It cost a million dollars, but there was saved property aggregating certainly over one hundred million, if not two or three times that.

The experience clearly demonstrated the fact that fires can be controlled when the forests are properly developed and manned by an adequate force of men, for where these conditions existed the fires were subdued promptly and with little loss. The great and disastrous fires occurred where the forests were without means of transportation and communication and without adequate patrol. The lesson is also taught that money must be spent by the government on construction of roads, trails, telephone lines, and other equipment of the forests; and there must be more men for patrol. It will take time to develop this vast wilderness for full protection, but the work should progress faster than in the past. European forests are safe because of this kind of development. It has taken many years to perfect the organization. We can make our forests equally safe, but it will require large expenditures for development in improvement. This I believe the people should be willing to expend.

Forestry on Other Lands.

But the government owns only a small portion of the total forest area of the country, and very little in the East. Most of the forests now furnishing the lumber used in the country are privately owned. The

government forests are as yet not being cut to a large extent. They are the most remote, and in many cases the least valuable forests. They have not yet been reached for the market. Four fifths of the merchantable timber is in private ownership. A few owners are practicing forestry, but only a few of the larger holdings are handled with a view to the continuous production of timber. It is probable that less than two per cent of the lumber on the market today has been put under the principles of forestry.

We have, then, the great task not only to perfect the management of the national forests, but to introduce forestry on the lands not publicly owned. To accomplish this requires the combined efforts of the government, the states and private owners. A number of states have purchased land for forest reserves. But in the aggregate the area is small. These reserves should be greatly extended. On private lands the first task is fire protection. Private owners now hesitate to invest money in forestry because of the fire risk and because also they fear that the possible profits will be eaten up in the taxes now imposed on growing timber. They should be helped in removing these obstacles to forestry. The states have a duty to introduce a system of taxation which will not prevent forestry. The states have the duty to directly aid private owners in fire protection. There should be a thoroughly organized fire-protective service supported by the states. This will involve a considerable annual outlay and the burden will be on the public. But the benefits from forestry are chiefly derived by the public. The single individual is unwilling and often unable to invest money primarily to secure a general public benefit. I regard this as the first duty of the states in forestry. It is certain that forest laws, no matter how perfect in themselves, will not be effective unless they carry ample appropriations to enable organized practical forestry.

The country has accepted the principles of forestry. It now demands practical results. We can produce the results if the country will meet the necessary cost. Prussia spends \$2 an acre on its public forests. We spend 2 cents an acre on ours. It is not unreasonable to expect an increased national expenditure. Many of our states spend nothing on forestry. If those forests outside the public domain are to be protected and the public is to receive the benefits derived from such protection, the states must assume their responsibilities and carry their share of the burden.—*The Bulletin of the Geographical Society of Philadelphia.*

[While Mr. Graves's remarks apply particularly to the United States, there is also much food for reflection for Canadians.—Ed.]

IN ALGONQUIN PARK.

C. W. Young, President of the Canadian Press Association.

There's days when the fish won't bite;
It's either too calm, or else too rough;
It's either too warm, or not warm enough;
It's either too cloudy, or the sun's too
bright;

The wind's the wrong way, or the moon's
not right;

It's either too wet, or else it's too dry;
Or for some other reason, you can't tell
why,

But there's days when the fish won't bite.

There's days when the fish won't bite;
You may try every lure, you may try every
bait,

You may do what you will, and wait and
wait

From morning till noon, and from noon till
night,

But you won't get a nibble tho' you try all
your might;

You may grumble or swear,

But the fish don't care,

For there's days when the fish won't bite.

But there's days when the fish will bite;

When it ain't too calm, and it ain't too
rough,

When it ain't too warm, but just warm
enough;

And the big old fellows, oh, joy, how they
fight!

Your rod's bent double as you keep your
line tight.

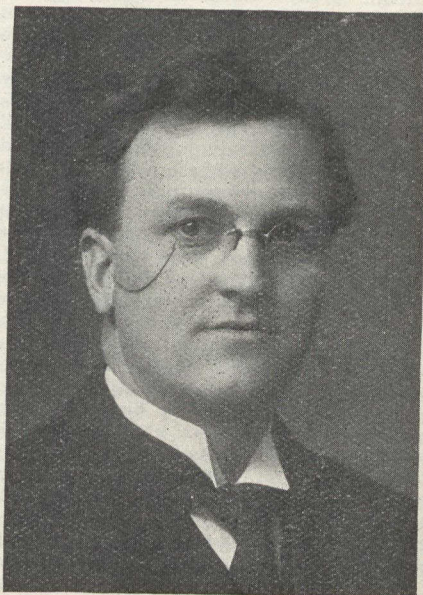
How they leap! How they run!

Gee whiz, but it's fun!

On the days when the fish will bite!

At the close of the big game season in New Brunswick, Lt.-Col. Loggie, Deputy Surveyor-General, announced that the receipts from game licenses for the past fiscal year had amounted to over \$51,000, thus making a new record for receipts from this source. The preceding year the receipts were \$43,000.

It is to be noted that in the annual reports of the general managers of the leading chartered banks of Canada specific mention is made of the condition of our forest industries. Careful reading of these will show that these financial leaders expect our forest industries to continue indefinitely. There is no reason why they should not, and in fact no reason why they should not be greatly increased in the time to come if we only handle our forest lands in a rational manner. To have this done is the reason for the existence of the Canadian Forestry Association.



MR. E. J. ZAVITZ.

RAILWAY FIRE PROTECTION.

Mr. E. J. Zavitz, Provincial Forester for Ontario, has been appointed Provincial Fire Inspector by the Board of Railway Commissioners, and subject to the general supervision of the Chief Fire Inspector will direct the enforcement in Ontario of the railway fire regulations of the Board. Similar action as to Quebec has been taken by the appointment as Provincial Fire Inspector of Mr. W. C. J. Hall, Chief of the Forest Protection Branch, Department of Lands and Forests, Quebec. It is anticipated that co-operation with the Railway Commission will be extended to the provinces of New Brunswick and Nova Scotia through action by the respective Provincial Governments.

—Conservation.

A committee of the British Board of Agriculture recently held an enquiry as to the relative value of forests and sheep grazing in regard to the support of population. The result of the inquiry was that whereas it took twenty-five hundred acres of rough broken land to support one shepherd and his family, the same amount of the same kind of land would support twenty-five woodsmen and their families. The object of the inquiry was to show which was the better industry to foster in a country where land values are high and the population dense. The result is worthy of note by all interested in forestry.

Constitution and By-laws, Canadian Forestry Assn.

Corrected to Feb. 5, 1913.

I. NAME.

The name of the Association shall be: The Canadian Forestry Association.

II. OBJECT.

Its objects shall be:—

(1) To advocate and encourage judicious methods in dealing with our forests and woodlands.

(2) To awaken public interest to the sad results attending the wholesale destruction of forests (as shown by the experience of older countries) in the deterioration of the climate, diminution of fertility, drying up of rivers and streams, etc., etc.

(3) To consider and recommend the exploration, as far as practicable, of our public domain and its division into agricultural, timber and mineral lands, with a view of directing immigration and the pursuits of our pioneers into channels best suited to advance their interests and the public welfare. With this accomplished, a portion of the unappropriated lands of the country could be permanently reserved for the growth of timber.

(4) To encourage afforestation wherever advisable, and to promote forest tree-planting, especially in the treeless areas of our north-western prairies, upon farm lands where the proportion of woodland is too low, and upon highways and in the parks of our villages, towns and cities.

(5) To collect and disseminate, for the benefit of the public, reports and information bearing on the forestry problem in general, and especially with respect both to the wooded and prairie districts of Canada, and to teach the rising generation the value of the forest with a view of enlisting their efforts in its preservation.

(6) To secure such forestry legislation from time to time from the federal and provincial governments as the general interests demand, and the particular needs of the people seem to require.

III. MEMBERSHIP.

Its membership shall include all who pay an annual fee of \$1.00 or a life membership fee of \$10.00.

IV. OFFICERS.

(1) The officers shall comprise an honorary President, a President, a Vice-President, a Secretary, an Assistant Secretary, a Treasurer, the editor of the official organ of the Association and thirty directors.

(2) In addition to the above all past presidents of the Association, from (and including) the Association year 1909-1910, shall be *ex-officio* members of the Board of Directors.

V. ELECTIONS.

These officers shall be elected by ballot at the annual meeting of the Association, and shall serve one year, or until their successors are elected. Vacancies occurring during the year may be filled by the Executive Committee.

VI. EXECUTIVE COMMITTEE.

The officers shall constitute an Executive Committee, and five of the same shall be a quorum, and they will appoint a Vice-President for each province and as far as possible for each provisional district of the Dominion.

VII. ANNUAL MEETING.

The annual meeting of the Association shall be held during the month of February in the City of Ottawa, unless otherwise determined by the Executive Committee of the Association and a notice of one month of the date selected shall be given to each member by the Secretary.

VIII. SPECIAL MEETINGS.

Special meetings shall be held at such times and places as the Executive may decide, a sufficient notice of which shall be sent to each member by the Secretary.

IX. AMENDMENTS.

Amendments of the Constitution can only be adopted by a two-thirds vote of the members present and entitled to vote, and at the annual meeting of the Association, and a notice of such intended amendment shall be given with the notice calling the meeting.

BY-LAWS.

President.

The President shall preside at all meetings of the Associations.

Vice-President.

In the absence of the President, a Vice-President shall preside at all meetings of the Association; and in the absence of all of them a President *pro tempore* shall be elected by the meeting.

Secretary and Assistant Secretary.

The Secretary shall keep a record of the proceedings of the Association and of the Executive Committee, and shall be custodian of all documents, books and collections ordered to be preserved.

He shall conduct the correspondence of the Association and shall keep a list of members with their residences, and shall notify members of the time and place of meeting of the Association, and in his absence his duties will be discharged by the Assistant Secretary.

Treasurer.

The Treasurer shall have the custody of all moneys received, and shall deposit or invest the same in such manner as the Executive Committee shall direct, and shall not expend money except under direction or approval of the Executive Committee. The financial year of the Association shall close on December 31st of each year.

Order of Business.

At the regular meeting of the Association the order of business shall be that proposed by the Executive Committee and announced by the Presiding Officer. In the absence

of such prepared order of business, the following shall be observed:—

- (1) Calling to order.
- (2) Reading and referring or disposing of letters, accounts, etc.
- (3) Reports of Committees.
- (4) Inquiries and notices of motion.
- (5) President's address.
- (6) Papers, addresses and discussions by members and others invited by the meeting.
- (7) Nomination and election of officers.
- (8) Unfinished and miscellaneous business.
- (9) Adjournment.

With the Forest Engineers.

(Contributed by the Canadian Society of Forest Engineers.)

Forest Engineers' Annual.

The fifth annual meeting of the Canadian Society of Forest Engineers convened at the Carnegie Library, Ottawa, at 3 p.m., on Wednesday, February 5, and also at an adjourned session at the Laurentian Club at 8 p.m. There were present Dr. B. E. Fernow, president, in the chair, Messrs. R. H. Campbell, Ellwood Wilson, D. R. Cameron, T. W. Dwight, L. M. Ellis, A. Knechtel, C. Leavitt, G. C. Piché, A. H. D. Ross, H. C. Wallin, E. J. Zavitz and F. W. H. Jacombe.

The secretary's report showed forty-two active members, with one honorary and three associate members.

Mr. Thos. Southworth, on signifying his wish to withdraw from active membership through having severed active connection with forestry, was elected an honorary member.

Mr. E. Wilson reported progress for the committee on the standardization of forest maps. On motion the committee was continued, Mr. Wilson being designated convener. Mr. A. H. D. Ross was added to the committee, and, on motion of Mr. Cameron, Mr. Wallin was substituted for the mover on the committee. This committee now consists of the following:—Mr. Wilson, convener, Dr. J. F. Clark, Dr. C. D. Howe and Messrs. Ross, Wallin and Dwight.

Mr. Wilson also reported verbally in regard to the proposed International Society of Foresters and asked that the committee be continued. The request was, on motion, granted.

A motion regarding the qualification for active membership in the society, of which Mr. Wilson had given notice, was passed after amendment. The effect of the motion is that future candidates for active membership must not only be graduates of an

approved forest school, but must also have had two years of practical experience in the practice or teaching of forestry.

The question of appointing advisory committees for the various divisions of the Dominion was introduced and it was resolved that such committees should be appointed, each committee to consist of three members, to be appointed by the Executive committee. Four committees are to be appointed, one for each of the following districts:—(1) Quebec and the Maritime Provinces, (2) Ontario, (3) Manitoba, Saskatchewan and Alberta, and (4) British Columbia.

Mr. Dwight was appointed auditor.

The Executive committee was instructed to look into the question of procuring a charter for the society to work out a more satisfactory method of electing officers and to arrange for a dinner in connection with the next annual meeting.

The thanks of the society are again due to Mr. Campbell for his hospitality in entertaining the members at dinner at the Laurentian Club, a courtesy which was greatly appreciated.

Additions to Membership.

The following have recently been added to the list of active members of the society:

Dominion Forest Service—Messrs. D. R. Cameron, T. W. Dwight, W. N. Millar and H. C. Wallin.

Quebec Forest Service—A. Bedard.

British Columbia Forest Service—F. W. Beard, R. E. Benedict, O. D. Ingall, H. S. Irwin, H. C. Kinghorn, John Lafon, J. B. Mitchell, E. G. McDougall, T. H. Plumer, G. H. Prince, H. K. Robinson and W. J. VanDusen.

Railway Commission—Clyde Leavitt.
University of Toronto—J. H. White.

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