

# Canadian Forestry Journal

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## CANADIAN FORESTRY JOURNAL,

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## THE WINNIPEG CONVENTION.

The Winnipeg Convention has passed. It was both encouraging and steady; encouraging in point of attendance, in interest (in a prairie centre not previously known to be interested in forestry) and in the tone of the papers and discussion; and steady, humbling if you will, in drawing attention to the smallness of the work yet done in the vast field that ought to be covered.

The Winnipeg Convention was the first attempt to carry the war of forestry propaganda into central Canada. This is not overlooking the successful meeting at Regina in 1909 but that was rather a gathering of workers than an attempt to awaken the general public to the need of conservation. This, then was the first organized campaign, and on the whole the results were encouraging. The numbers were not as large as those at Quebec or Ottawa or Victoria but then, up to the present, Winnipeg has been looked upon as anything rather than a timber or forestry center. It was not easy to fix a date for the meeting and the one selected had as its chief disadvantage the fact that it came in the same week as the Winnipeg Exhibition. Some people were kept away by the fear that the hotels would be overcrowded but the chief difficulty to be apprehended was that of the newspapers being so crowded with Exhibition reports that forestry matters would get scant space. As it turned out, however, the Winnipeg daily newspapers, weeklies and trade journals took up forest conservation with energy, and during and preceding the convention scores of columns of well-informed and appreciative

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Montreal.

articles were published. It is, perhaps, not too much to say that through the publicity secured by and through the convention the people of the Central West have begun to be aroused to the fact that the forests of the prairie provinces are of great importance to every person in the community.

The aspect of the importance of western forests to the western community was brought out in the addresses of His Honor the Lieut. Governor and the other speakers at the opening session; while the importance to the individual was brought home by the address among others of the President and the papers of the Mr. R. H. Campbell, and Mr. W. T. Cox. The title of Mr. Campbell's paper 'Manitoba: a Forest Province,' was one which at once arrested attention. The exhibit of native woods of Manitoba had apprised people of the fact that timber trees do grow in Manitoba, and Mr. Campbell's paper supplied the information as to districts, species and quantities. Mr. Cox boldly challenged old figures and stated that the rate of growth was more rapid than formerly estimated.

The President pointed out as a most encouraging sign that, whereas some years ago the railways had looked askance at the work of the Association, views had so changed that men like Sir William Whyte, Mr. George Bury and Mr. J. S. Dennis attended, took part in the meetings and told what the railways were doing in forest protection.

The success of tree-planting on the prairies was a most encouraging feature. Nearly twenty-five million trees have been planted by prairie farmers. This number of trees would not, it is true, make much of a showing in the forests of the timber provinces but on the prairie these trees mean added comfort and happiness. At present

they add chiefly to the content, rather than to the extent of prairie life. This makes for permanence of occupation and of aim, a thing much needed on the prairies. In the future it doubtless will mean a very considerable addition to the local supply of fuel, fencing and building material. Only a beginning has yet been made and tree planting is bound to go on at a greatly accelerated pace.

Fire protection continues to be the burden of most of the addresses at conventions. This is both satisfactory and unsatisfactory. It is satisfactory to know that so many people are thinking about this subject and that in some cases new methods are being experimented with, but it is unsatisfactory in that we are always talking about it and making such slow progress.

It was in this connection that the address of Mr. Vere C. Brown was applicable. He virtually held that the Association had reached that dangerous time of which the Scriptures give warning when all men speak well of us. He pointed out that at convention after convention there was unanimous agreement that such and such things were necessary; the public and the press have concurred in this, and yet nothing was done.

These conventions in the aggregate cost a lot of time and money. Their object is to arouse the public mind in order to get something done. Not a little has been done in the past but the time seems to have arrived for a review of methods in order that results accomplished shall be more nearly commensurate with the effort put forth. This is the steadying result of the convention and it is to the solution of this problem that all officers and members of the Canadian Forestry Association should devote themselves during the coming winter.

# Conditions in the Peace River District.

## Interesting Letter from a Vice-President of the Association.

For a good many years Mr. Francis D. Wilson has been the territorial Vice-President of the Canadian Forestry Association for the territory of Mackenzie. Mr. Wilson was the representative of the Hudson's Bay Co., at Fort Vermilion. In replying to the letter of the Secretary notifying him of his re-election and inquiring about forestry work in the district, Mr. Wilson writes tendering his resignation owing to the fact that he is being moved by the company to Moose Factory, James Bay District. This does not mean that Mr. Wilson has lost interest in forestry, and he promises to write for the Association an account of forest conditions near his new post. Accompanying his letter Mr. Wilson sent some notes of conditions in the Lower Peace River Valley, which are published below. It should be noted that postal facilities in that part of the Dominion are very poor. Mr. Wilson's letter is dated May 20, so that it was dispatched before the Dominion Forestry Branch began any work in that district this season. It should also be noted that Mr. Wilson's reason for thinking it will not be necessary to lay out forest reserves in that district, is that the land now covered by forests is wholly unfit for agriculture. However, with the advent of the inexperienced settler, and still more of the 'fake' settler, it will probably be just as well to have these marked out as forest reserves as early as possible.—Ed.

There is very little settlement going on in the lower part of the Peace River, the settlers at Fort Vermilion

are, with two or three exceptions, retired servants of the Hudson's Bay Co., or their descendants. Peace River Crossing, Grande Prairie and the upper Peace River are attracting all the incoming settlers at present, and any settlement going on here at present is not adversely affecting the forests. We have had a period of four or five very dry years, and last summer and the summer before there were a number of forest fires that destroyed a quantity of spruce timber. It is difficult to suggest an adequate system of fire protection, the distances are so great and the country wholly unsettled between Peace River Crossing and Chipewyan (a distance of 557 miles) with the exception of the Fort Vermilion settlement which is situated about halfway between these two points.

There is a Sergeant of the R. N. W. M. Police stationed here. If he had one or two Constables with him they could render effective service for at least six months of the year, which are the danger months, by a system of patrol on the Peace River. They could meet a patrol from Peace River Crossing the first part of the month and return to Vermilion and go down



Skidway of Logs on Peace River.



Hudson's Bay Company's Logging Camp on the Peace River.

the river and meet a patrol from Chipewyan, by this system the whole of the Peace River could be covered by a patrol twice a month, and if an arrangement could be made with the Forestry Branch for extra pay, this patrol could be made to serve the double purpose of police and fire patrol. I am sure that if an arrangement as outlined could be made with the Commissioner of the R. N. W. M. Police we would have a much more effective service at less expense than the appointment of three or four forest rangers.

In granting permits to saw-mill owners for cutting timber on the Peace River, I do not think it wise to prohibit cutting on the Islands, as the majority of the Islands on the Peace River have a quantity of over-ripe timber about 10% of which is already affected by stump rot which in some cases extends up the tree five or six feet. Permits could be granted to responsible parties with the stipulation that no timber should be cut under a certain size, making the limit an inch or two larger than timber cut on the main land. None of those parties sent out by the Dominion Forestry Branch to examine the country in the vicinity of Lesser Slave Lake

have, as far as I can learn, been on the Peace River.

The land covered by any of the timber areas in this part of the country is wholly unfit for cultivation and I do not think it will be necessary to have any of it reserved for timber production.

#### New Museum.

The New York State College of Forestry at Syracuse is developing what promises to be the most complete Forest Museum in this country. Besides a solid Redwood plank, with dimensions of 7 x 11 feet and the section of a giant Ironwood over two feet in diameter, it is securing trunks of trees from the Adirondacks and Catskills, which will represent all of the native forest species of New York. It has just received unusually large trunks of the Mountain Ash and Shadbush or Juneberry from the Catskill Forest Experiment Station near Tannersville. These two trees are really forest weeds and seldom reach a large size, but they are of interest because they are weeds of the forest and because they have an ornamental value not ordinarily appreciated. The College is anxious to make its Forest Museum the most complete of its kind in the country and is anxious to learn of large or peculiar trees throughout the State. \* \* \*

One quail killed in Kansas last fall had in its stomach the remains of twelve hundred chinch bugs. This shows one of the useful points of the quail. And keeping forests on lands that are not fit for agriculture will protect the quail, which in turn will protect the farmer.

# Dry Weather Causes Fires.

Severe Outbreaks in all Parts of the Country.

The extended drought which was felt throughout the length and breadth of the country this year was particularly severe in the eastern part of Canada, and worst of all in Ontario. The Metereological Bureau at Toronto has kindly supplied figures for the precipitation in the last few months.

Thirteen of the fourteen meteorological stations throughout Canada report a great decrease in precipitation in May, June, July and August, 1913, as compared with the amount recorded in the same months in 1912. By stations the figures are as follows:—

Station	De-		
	1912 Inches	1913 Inches	crease 1913
Vancouver, B.C. ....	12.03	10.90	1.13
Calgary, Alta. ....	13.68	11.49	2.19
Prince Albert, Sask. ...	12.62	8.42	4.20
Winnipeg, Man. ....	12.25	10.60	1.65
Port Arthur, Ont. ...	9.29	14.97	5.68*
Parry Sound, Ont. ...	11.78	9.34	2.44
Cochrane, Ont. ....	11.16	7.35	3.81
Stonecliffe, Nipissing Dist., Ont. ....	12.10	8.67	3.43
Toronto, Ont. ....	13.59	7.33	6.26
Ottawa, Ont. ....	15.90	9.24	6.66
Montreal, Que. ....	13.85	10.33	3.52
Quebec, Que. ....	21.53	14.14	7.39
St. John, N.B. ....	19.89	10.51	9.38
Halifax, N. S. ....	17.30	12.52	4.78

\*Increase.

This is the worst drought in many years, not since 1885 has there been felt such tremendous need for moisture. Wells in all parts of the country were wholly dried up, springs ceased to flow, and practically everywhere the crops were retarded and the pasture of stock gravely injured. During the latter part of the month of June, all July and the great part of August, there was practically no rain to support the herds which supplied milk to the great urban centres.

Needless to say, this condition of dryness made the woods like tinder, and everywhere upon very slight cause fires sprang out which spread rapidly through the undergrowth and consumed vast quantities of young trees, mature timber and houses, lumber yards and mills. The worst fires of the month in Nova Scotia took place about the 21st of August. Fires fairly honeycombed the district round about Bedford and Sambro, Purcell's Cove and Bear Cove. Cinders rained down everywhere

and vast areas of timberland were destroyed, houses were abandoned by the score, and a company of militia was called out near Halifax to aid the settlers in their efforts against the fire demon. Between Hammond's Plains and Upper Sackville the forests of excellent timber were completely destroyed, at a loss to the limit holders of at least \$50,000. In Halifax County where there had been not the slightest drop of moisture, the fire was under way for two weeks, and communication was cut off between Lunenburg and Halifax through the burning down of the telephone and telegraph lines. Many small settlements were completely surrounded by fire, and there was no chance to secure any intercourse between them and the more thickly populated centres. Beachville, Clearland and East Dover were all gravely threatened at one time, but luckily escaped any serious loss. Chief Fire Ranger Penny, of the Government service estimated that 3,000 acres of land were burnt over at a loss of from \$70,000 to \$100,000.

In central Ontario hardly a district was without some loss through bush fires. Worst of all were those which swept through the central part of the country between Sudbury and Kingston. In Haliburton County the flames held sway well over a week. In Apsley Township the settlers were in a desperate way and were removing their effects and fleeing before the flames. Peterborough, Lindsay, Fencelon Falls and Bobcaygeon were all centres of great havoc. In Minden the Digby fire had not only reached the settlement at Moore's Falls, but was burning along the west side of the road near the summer cottages at Moore's Lake, creeping on its way to Norland. Another branch of this same fire, which was one of the most destructive in all the series of conflagrations, came out toward the neighborhood north of Deep Bay and Gull Lake. To head this off a settler set a back fire, but the result was more disastrous than the original flames would have been, as it got away and burned over a great area. Another fire running through the district near Longford not only destroyed great areas of forest land, but got into the farmers' hay and destroyed vast quantities. In Snowdon Township the fire swept the entire lumbering district from Lochlin and Gelert to Irondale and Gooderham. It burned its way to Furnace Falls, destroy-

ing in addition to the young forest growth and the young standing timber, 200 cords of fire wood. In many cases the settlers protected their farm houses by ploughing fire guards around them. At Hastings Village the danger was so great that three hundred men were called out to fight the flames, and finally succeeded in controlling them. Just outside of Peterboro a blaze which required the efforts of fifty men to put it out, ran unchecked for two or three days. At Gravenhurst the flames made terrible inroads upon the forest and the property of citizens, and it was not until the fire brigade and the citizens of the town had worked for forty-eight hours that the danger was really overcome. The town of Orillia was enveloped with smoke for many days on account of numerous blazes round about. At Parry Sound the settlers, lumbermen and railway men were fighting the flames day and night. The villages of Ardbeg and Boakview were saved only after prodigious efforts on the part of the fire fighters. Superintendent Bartlett of Algonquin Park reported a fire of very serious proportions raging in Livingstone township. Details of the destruction are not to hand however.

The Ottawa Valley was visited by a great number of fires of sizes of greater or less magnitude, some of which did great destruction. The Mer Bleue at Carlsbad Springs was the centre of raging forest fires. At Constance Creek, Aylwin, Kazubazua, Wilson's Corners, and many other points, there were blazes which seriously damaged property and wholly destroyed the young growth in the wooded area.

Relief from the terrible drought did not come until the 20th of August when rain fell to the extent of from 1 to 3 inches over practically the whole East. In Northern Ontario particularly its blessings were felt. Many localities were blessed with heavy thunderstorms, and the period of cold weather immediately following added to the effectiveness of the rain through preventing rapid evaporation of the moisture which had entered the soil. It is impossible to estimate the benefits from this single period of precipitation, but undoubtedly had the rain not come, or had the wind risen, the losses would have been appalling.

The prairie district suffered more or less, although Chief Forester Leavitt, of the Commission of Conservation, who made an extended trip West in the month of July, reported that the losses were not as great as in many other years. A greater degree of moisture was felt in the mountainous provinces of Alberta and British Columbia, and no great amount of destruction was wrought. However in Vancouver Island great anxiety was felt on the part of the lumbermen holding timber limits because the dry weather had been respon-

sible for several bad outbreaks, and the forest wardens were forced to work night and day with all the help they could procure.

Until some regular system of compiling the losses from forest fires throughout the Dominion can be instituted, it will be impossible to state the actual loss which has taken place during the danger season. It is fair to estimate that this season's havoc amounts to fully half a million dollars. Further reports from the Province of Quebec and British Columbia will serve to indicate to what extent the forest wealth was depleted.

#### COMMISSION OF CONSERVATION ACTIVE.

The Commission of Conservation and the Department of Lands of British Columbia have entered into a co-operative arrangement for a study of the forest conditions and forest resources of British Columbia. Dr. H. N. Whitford has been employed by the Commission of Conservation to begin the work of collecting information along the above lines from all available sources. Dr. Whitford was for years a member of the Forest Service of the Philippine Islands and has published a bulletin on their forest resources.

The large amount of material which has been collected by the British Columbia Forestry Branch will be supplemented by information to be secured from all other possible sources including the Forestry Branch of the C.P.R. and statements by timber cruisers, limit holders, surveyors and others. The C.P.R. Forestry Branch has collected a great deal of valuable information with regard to forest conditions and forest resources of the southern part of British Columbia, and much of this information is to be made available through a co-operative arrangement between the Commission of Conservation and the authorities of the C.P.R.

This work is part of a general study which has been undertaken by the Commission of Conservation, having for its object the approximate determination of the amount of timber in each of the various provinces of Canada.

In the Prince Albert District of Northern Saskatchewan, a similar study of forest conditions and forest resources is being carried on for the Commission of Conservation by Mr. J. C. Blumer. This part of the work is being conducted in co-operation with the Dominion Forestry Branch.

Mr. Blumer first took up forestry work as a student in 1901, and studied forestry at the University of Michigan in 1905-6. For the past three years he has been a resident of Saskatoon, Sask.

**DEATH OF HON. JOHN SHARPLES.**

The death of Hon. John Sharples, member of the firm of W. & J. Sharples, timber merchants of Quebec, occurred at the family residence in that city on July 30. Mr. Sharples was a native of Quebec, having been born there in 1847. He was educated at Quebec and Montreal and became within a few years of going into business with his brother one of the leading lumbermen of the province. Mr. Sharples was prominent in public affairs. He was a member of the Legislative Council of Quebec, honorary president of the Union Bank of Canada, and, during recent years, had occupied the post of member of the Quebec Harbor Commission, director of the Quebec Bridge Company, director of the Quebec Railway, Light, and Power Company, director of the Prudential Trust Company, director of the Quebec Steamship Company and vice-president of the Quebec Northern Railway Company.

In religious and social matters he was also very active. He was vice-president of the Anti-Alcoholic League, past president of the Canadian Club and a few years ago he established a special children's ward in the Hotel Dieu hospital of Quebec. In 1907 in view of his distinguished services and in recognition of his Christian character he was created a Knight of St. Gregory by his Holiness the Pope.

The funeral services were held at St. Patrick's Church, Quebec, on Aug. 1 and were attended by leading citizens of the province. One of the chief mourners was Mr. Wm. Power, M.P., vice-president of the Canadian Forestry Association, whose partner the late Mr. Sharples was. The Secretary attended on behalf of the Association.

**TIMBER PRICES SOAR.**

Some idea of the recent advance in the price of lumber may be gathered from the fact that E. A. Dunlop, M.L.A., of Pembroke, has just paid the record smashing price of \$14.40 per thousand feet for the timber on a limit measuring 15 1-2 square miles in the township of Gooderham, District of Nipissing.

The limit, which was bought from the Ontario government by Mr. Dunlop for the Pembroke Lumber Company, contains all white pine. Tenders for the purchase were called for, and Mr. Dunlop's was the highest.

For the past few years the average price paid per thousand feet for timber cut off similar limits has been between \$10 and \$11. About a year ago, however, J. J. McFadden, of Renfrew, paid \$13.50 for a limit near the Jock river.—Citizen.

**C.P.R. PUBLICITY.**

One of the best publicity features in the interests of forest conservation which has appeared yet is the following notice which appears in the Western Lines Time Table of the Canadian Pacific Railway. The folder is issued by the hundreds of thousands and the notice is displayed in such a fashion as to attract widest attention.

**SAVE THE FORESTS**

Canada's timber preservations are assets the value of which can only be conjectured. To wilfully neglect to take ordinary precaution to insure them against destruction from forest fires is to commit a crime against the safety and prosperity of our citizens.

**CAREFULLY EXTINGUISH  
SMALL FIRES**

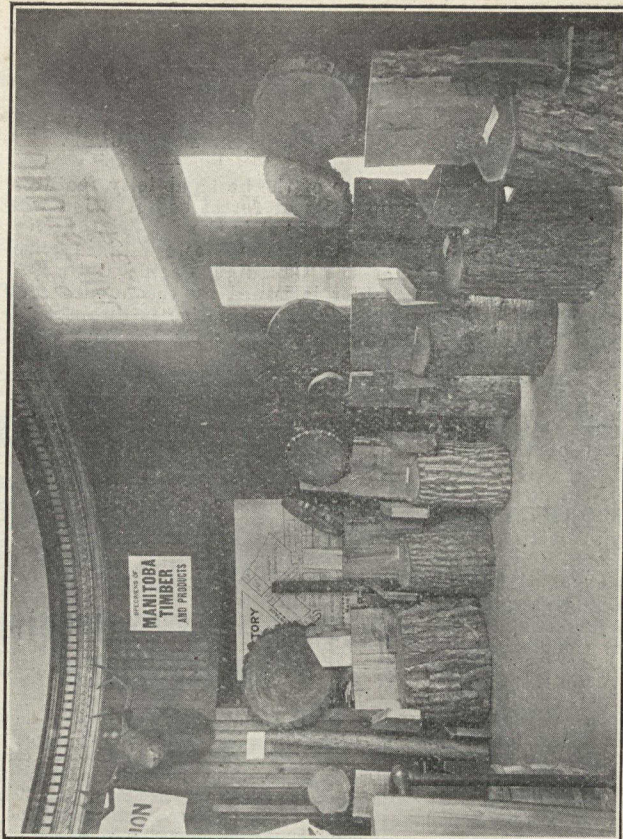
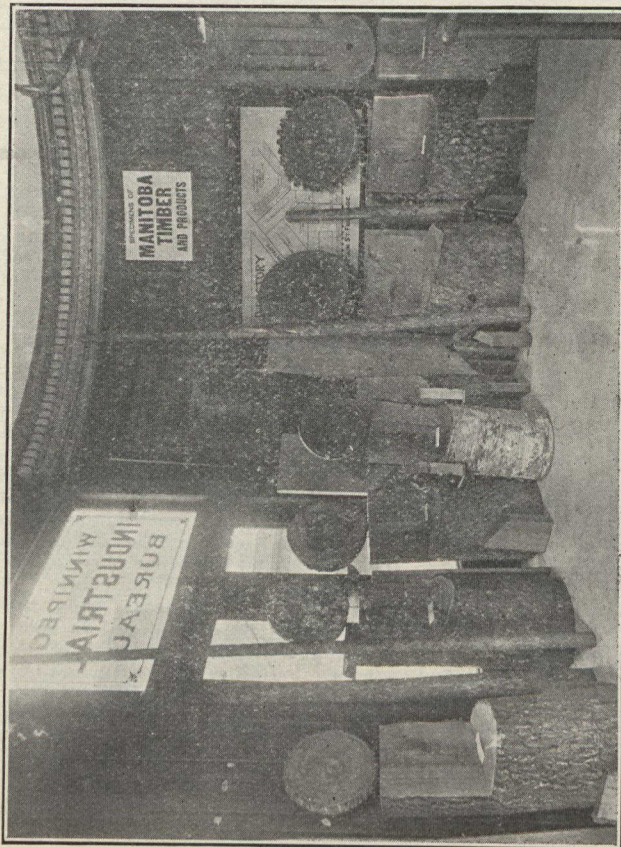
Those who go into the woods—hunters, fishermen, campers and canoeists—should consider it their duty to exercise every care to prevent loss from fire. Passengers on trains should not throw lighted cigar or cigarette ends out of the car windows. Besides the danger to lives, homes and property to settlers, every acre of forest burned means labor turned away, reduced market for our crops, heavier taxation on other property, streamflow disturbed and higher lumber prices.

**FIRE AT BOOTH'S MILL.**

During the first week of September the mills of Mr. John R. Booth at the Chaudiere Falls, Ottawa, suffered damage by fire to the extent of over \$110,000. The first fire occurred on Sept. 1 in the carrier which conveys the sawdust and refuse to the burner, resulting in a loss of over \$10,000. This caused the closing down of the mills for a week, and on Sunday, Sept. 7, when the equipment was repaired sufficiently to permit of resuming operations, a second fire destroyed the part of the plant known as the timber mill, with a loss of approximately \$100,000. This was a wooden structure situated between the sawmill and the Chaudiere Falls. By dint of hard work on the part of the city firemen and the mill fire brigade the fire was kept from reaching the sawmill, a stone structure, and the other parts of the plant, as the pulp and paper mills, etc. The timber mill was a total loss. About three hundred hands were employed in this part of the plant. Decision has not yet been made as to rebuilding, but any structure erected to replace this one, will, it is stated, be like the more recent parts of the plant, of steel and concrete.

THE EXHIBIT OF MANITOBA WOODS AT THE WINNIPEG CONVENTION.

The Exhibit was arranged in the large rotunda of the Industrial Bureau. The illustrations below show the two halves of the circle. Six or seven hundred people saw the exhibit daily.



Black Willow (*Salix nigra* Marsh).  
Diam. 20 in.

White or American Elm (*Ulmus americana, L.*). Diam. 20 in.

Canada Balsam (*Abies balsamea Mill.*). Diam. 24 in.

Black Spruce (*Picea mariana, B. S. & P.*). Diam. 12 in.

Aspen (*Populus tremuloides Michx.*). Diam. 27 in.

Balm (*Populus balsamifera, L.*).  
Diam. 30 in.

Cottonwood (*Populus deltoides Marsh.*). Diam. 42 in.

White Cedar or Arbor Vitae (*Thuja occidentalis, L.*). Diam. 15 in.

Basswood (*Tilia americana, L.*).  
Diam. 22 in.

Black Ash (*Fraxinus nigra, Marsh.*).  
Diam. 18 in.

Burr Oak (*Quercus macrocarpa Michx.*). Diam. 33 in.

White Spruce (*Picea canadensis, B, S. & P.*). Diam. 40 in.

Tamarack (*Larix laricina, Michx.*).  
Diam. 19 in.

White Birch (*Betula papyrifera Marsh.*). Diam. 19 in.

Jackpine (*Pinus divaricata, pp. Mont de Cours.*). Diam. 22 in.

Red or Norway Pine (*Pinus resinosa, Ait.*). Diam. 23 in.

Manitoba Maple (*Acer negundo, L.*). Diam. 18 in.



## DOMINION FORESTRY BRANCH DOINGS FOR JULY.

Mr. R. H. Campbell, the Director of Forestry, is continuing his tour of inspection in the West, being at present in British Columbia, but expects to be home in the early part of September. During his absence Mr. T. W. Dwight occupies the position of Acting Director.

Mr. Lewis has returned from his trip to the Maritime Provinces, where he was gathering statistics for his bulletin on the Wood Producing Industries of these provinces.

### Forest Nursery Stations:

Mr. Norman M. Ross reports satisfactory progress, with increasing interest manifested by settlers, 1595 letters being received in July. Eight inspectors of tree-planting are now at work under the general supervision of S. S. Sadler.

The Branch nursery at Sutherland is being brought rapidly into shape by Mr. Walter B. Guiton.

### Forest Administration.

Mr. F. K. Herchmer, the District Inspector in Manitoba, reports having made a general survey of the Reserves along with Mr. R. H. Campbell, everything being found satisfactory. A steel lookout tower was recently erected by Supervisor Stevenson on the Riding Mountain Reserve. Mr. Tunstell is making a survey of the region around Clear Lake, which will be opened up as a summer resort.

On the Duck Mountain Reserve, Mr. Wellman reports seven miles of fire line and eleven miles of wagon road constructed. Mr. Newman is engaged in laying out lots for a summer resort at Madge Lake.

In Saskatchewan, Mr. G. A. Gutches, the District Inspector, after attending the Forestry Convention at Winnipeg and the Rangers' convention at Roblin, made a tour of the Reserves, where very satisfactory work is being done, many miles of trails and fire-lines being cut. Permitees are reported to be piling brush satisfactorily.

There has been a considerable change in Alberta, due to Mr. Millar's desire to have his men acquainted with the varied conditions existing in the different divisions of the Rocky Mountain Forest Reserve. Mr. Alexander has been transferred from the Brazeau Forest to the Crowsnest Reserve, exchanging localities with Mr. Clark, who is now Acting Supervisor of the Athabaska Forest Reserve. Mr. Edgar has resigned the supervisorship of the Bow River Forest and Mr. Greenwood been appointed Deputy Forest Super-

visor, Mr. Millar taking control temporarily.

On the British Columbia Reserves, Supervisor Scandrett reports the construction of trails, bridges and ranger-stations.

### Fire Ranging:

Mr. Finlayson, the Chief Inspector of Fire Ranging reports arrival at Fort McMurray, after an adventurous canoe trip down the Athabaska River. Few of the July reports of the Chief Fire Rangers are in, but owing to the abundant rain, there has been little danger or damage from fire in Western timber areas.

Mr. D. Roy Cameron, District Inspector of British Columbia, has arranged for a system of check inspections of fire-protective apparatus on locomotives, which should eliminate the possibility of further negligence. The Trans-continental Railways have so far, kept their rights-of-way in fairly satisfactory condition.

### Forest Surveys:

Mr. Donald Greig, in charge of the Lake Manitoba Survey, reports good merchantable stands of aspen and jack pine in the eastern part of the surveyed region.

Mr. A. B. Connell has completed the reconnaissance of the northern slope of the Pasquia Hills, and will continue work on the Carrot River.

Mr. C. H. Morse reports that in the upper valleys of the Maligne and Athabasca Rivers 'practically no merchantable timber exists.'

Mr. E. H. Roberts has completed the survey of the Birch Lake region near Prince Albert and will continue the work around Green Lake.

Mr. Lionel Stevenson, the soil expert, has made an examination of the soils of some of the areas reserved from settlement in Saskatchewan and has found them in general suited only for forest crops.

Other survey reports have not yet been received.—G.E.B.

## NEW PEST IN QUEBEC.

'Le Naturaliste Canadien' for the month of July contains the regrettable announcement that the San Jose Scale has been found in the province of Quebec. This insect, as is well known, has done a tremendous amount of damage in the United States and in some parts of Ontario. In Quebec it was found first of all on the bark of a young mountain ash tree near Ste. Anne de Bellevue. Quebec scientists believe that the insect was brought in with a young tree from an Ontario nursery. A careful watch is being maintained to prevent the further infesting of trees in Quebec.

### QUEBEC FORESTRY NOTES.

There are now fifteen township forest reserves in the Province of Quebec. These are chiefly scattered over the Lake St. John district and on the south shore of the St. Lawrence. Altogether there are now 220,000 acres in these reserves and the work has been so successful that there is a steady demand for the setting apart of more reserves. These reserves are in ungranted and unlicensed lands and before the formation of the reserve every man took what suited him regardless of the consequences. Now each reserve is, as far as possible, divided into twenty parts, one of which is to be cut over each year. Each reserve is in charge of a resident ranger who grants permits, directs the cutting operations and sees that the regulations are obeyed. One of the most gratifying features of the establishment of the reserves is the spirit of community ownership which has been developed. Township residents feel that the reserve is theirs and assist the ranger in enforcing cutting regulations and in preventing waste.

The provincial forest nursery at Berthierville continues to grow. This year 78,000 seedlings were supplied by this nursery to provide for the planting of sand lands in Lachute and elsewhere as described in the May issue of the *Canadian Forestry Journal*. So far white pine and spruce have been the chief species grown. The department is studying Scotch pine and European larch with a view to their use if found suitable. Farmers are supplied with seedlings for planting wood lots at a nominal price and the demand for these keeps pace with the growth of the nursery. Much more interest is now taken in replanting work than a few years ago. Colleges, convents and institutions are following the work and adopting methods found successful. The city of Three Rivers was not greatly interested in trees when the nursery at Berthierville was established; now the work there has shown what can be done the citizens are working out a comprehensive plan for the beautifying of their streets.

Mr. G. C. Piche, Chief of the Quebec Forest Service, has purchased 4,500 acres of waste land near Shawinigan Falls. It is a cut over and burned over tract, coming up to hardwoods. Mr. Piche is going to see what is the best method of handling such a tract in this locality. It is likely he will permit the use of it as an experimental ground by the students of Laval University Forest School.

The railways are now co-operating with the Forest Service of the Government of Quebec in regard to the use of permits to ship wood on railways. In rural Quebec lands are either patented to farmers, licensed to lumbermen, or unpatented; that

is to say, still in the hands of the Crown. Holders of patented and licensed lands, of course, have the right to ship timber and wood, but in the past there has been a great deal of trespassing upon Crown lands by men of no substance. Consequently when wood stolen from Crown lands was shipped out there was no way of recovering dues or fines. Now every one must have a permit to cut wood on Crown lands and if this permit is not produced the railway agent will refuse to receive wood for shipment. Thus the professional trespasser is being checked and the Provincial treasury enriched.

### PUT OUT YOUR FIRE!

When you are camping, put out your fire! Near Peterboro, in the region of the Pigeon and Bald lakes, a disastrous fire was started last week by a party of campers leaving behind them an unextinguished fire. Their fun over, they left the place apparently without thought of the danger. The result was that a large territory was burned over and much property destroyed. Most forest fires originate in this way. Carelessness with camp fires is a major cause. A very little precaution would save a fortune in Canada. It only takes a minute or so to drench one's fire until only steam is visible and all danger is passed. Nearly every camp fire is close to the water, making the operation of little trouble or exertion. When next you camp, and your fire has served its purpose, put it out.—Ottawa Citizen.

Douglas fir has an average of five years life when untreated; treated, it lasts twelve years. Hemlock, lasting as a natural wood five years, doubles its term of life when treated, as does tamarack. Spruce is one of the species which when untreated decays most quickly, lasting only three years. If treated it will last twelve years, its life being thus increased 300 per cent. To sum up, wood preservation not only prolongs the life of durable timbers, thus decreasing their annual consumption, but also permits the substitution of inferior species, whose use considerably reduces the drain upon the more desirable kinds.

### WINNIPEG CONVENTION REPORT.

The report of the Winnipeg Convention has been completed by the printer and it is expected that within a week or ten days after receiving this copy of the Journal members of the Canadian Forestry Association will have the report in their hands.

# With the Forest Engineers.

(Contributed by the Canadian Society of Forest Engineers.)

The plan inaugurated during the past month by the Secretary for obtaining from members news of their doings has met with gratifying success. In response to the letters addressed to members several interesting replies have been received, some of which are quoted in full below.

Almost the first reply received was from the President of the Society, which it is only fitting should be given precedence. Dr. Fernow's note is as follows:—

Dr. Fernow has spent his vacation in his summer home at Point Breeze, N. Y., U.S.A., revising or re-writing, at least in part, his *Economics of Forestry*, the book having become thoroughly antiquated, especially in its statistical data and in the chapter on 'The Forestry Movement in the United States.' In July he attended the forestry conference in Sunapee, N. H., U.S.A., and delivered an address on 'A Plan Adequate to Meet Our Needs for Wood and Timber,' in which he argued that forest planting on a large scale, systematically, is alone capable of meeting the future demands for timber in the United States, and proposed a plan by which twelve hundred million dollars were to be spent in that direction during a campaign of sixty years, or, as he expressed it, 'two Dreadnoughts a year.' Dr. Fernow is now (Aug. 13) on an excursion to the West with the International Geological Congress.

## Quebec Forest Service.

Avila Bedard, M.F., is back from Europe. He has visited Great Britain, France and Belgium.

The Province of Quebec has now sixteen forest engineers in the Forest Service. Two (Piche and Bedard) from Yale and the other fourteen are graduates of the School of Forestry of Quebec.

The Forest Service is devoting much attention to the forest inventory. All the parties in the field are covering different strips, etc., so that a very good knowledge of the forest conditions will soon be obtained.

The appropriation of the Forest Service is now \$100,000 per annum, whereas it was only \$55,000 in 1909. It means that the Gouin government is desirous to give all the necessary funds to obtain a good and progressive service.

The revenues of the Department of Lands and Forests for the fiscal year end-

ing June 30th last will exceed \$1,750,000, a substantial increase over the preceeding years. Since 1908, every year has seen the revenues increasing steadily.

## Advances in B. C.

H. R. MacMillan, Chief Forester of British Columbia, writes in part as follows:—

'Mr. Price is now with us and we are working on general re-organization of our work. One of the most important features from a forestry standpoint is that regulations for brush disposal, fire protection, and reproduction of valuable species are now being included in all Forest Branch timber sales. One hundred and fourteen timber sales are now under consideration, aggregating a value of \$460,000. Timber is sold only for immediate cut. One hundred and eighty-eight miles of telephone line and 134 miles of trail for fire-protective purposes are now under construction for the Forest Branch.'

## Fire Protection in Quebec.

W. C. J. Hall, Superintendent of Fire Protection for the Province of Quebec, writes as follows:—

'The fact of all railways in this province, except the Intercolonial Railway and the National Transcontinental Railway, being controlled by the Dominion Board of Railway Commissioners and the Quebec Public Utilities Commission, and by having been appointed by both bodies as Provincial Fire Inspector renders my duties particularly interesting.

'I was surprised to see the readiness with which the railways met the provisions of Orders 16570 (now replaced by Order 107) and 72, respectively, and co-operated with the Inspector in Chief for Canada, Mr. Leavitt and myself. I had all the lines inspected for hazardous sections and established special patrols thereon, which I may say have been regularly maintained. These special patrols consist of motor-cars, velocipedes, and track-walkers, according to the tastes of the various railway superintendents. Fires on or off the rights of way are reported to me promptly, as a rule. I have a staff of seven Inspectors travelling over the railways, not devoting the whole of their time to this object, but a considerable part of it.

'Up to the time of writing we have had no serious fire on any of the railways, ex-

cept one, and this one came from a fire which started about three miles distant, from a settler's slash. A very interesting bit of work is being handled now, namely, burning the right of way through timbered lands, and so far my Inspector has handled this work with great success. We have several miles of this to attend to; if we get through with it successfully it will be an object lesson. We burn at night with a good force of men handling it, first seeing that the slash is separated from the forest by lanes each side. The Inspector superintends the whole work and no burning can be undertaken without his consent.

'The relations between the Quebec Government and the Federal authorities, i.e., the Board of Railway Commissioners, are most cordial; we have joined forces for the public good, and work hand in hand, with the result that railway conditions in Quebec province are probably more advanced in the line of protection than in any other province; at all events the protection is more complete owing to action of the Quebec Public Utilities Commission. We hope to obtain control over the Intercolonial Railway and National Transcontinental Railway before long.'

#### **A Mountain Climb in B. C.**

D. Roy Cameron writes under date of Aug. 12:—

'Mr. Clyde Leavitt and myself made an interesting trip, towards the end of July, from Ashcroft to the summit of Cairn Mountain (elevation 7650 feet) situated in the Hat Creek Forest Reserve. The idea I had in making the trip was to show Mr. Leavitt some very fine sheep range available on the summits of the Clear Mountains above timber line.

'Starting from Ashcroft early in the morning by team, we reached the Amphitheatre Ranger Station on Oregon Jack Creek, seventeen miles distant, for an early lunch. Here we changed to saddle horses, and, accompanied by Forest Assistant Alan E. Parlow with a pack-horse in tow, set out for timber line, which we made about six o'clock. Parlow was left here to cook supper, while Leavitt and I proceeded to the summit. From this point a magnificent view is obtainable of the Cascade Range, which rises 8,000 feet straight out of the Fraser Canyon. Unfortunately the setting sun threw the mountains into shadow so that details were lacking, but even at that the scene was well worth the climb.

'On returning to timber line a demonstration of gastronomic ability was given by all, after which we retired to a shelter improvised out of a pack-cover.'

The change from the stifling heat of Ashcroft to the chilly winds of timber-line was very acceptable.

In the morning we found that one of the horses, supposedly gentle, had decided antipathies to making the descent, probably thinking 10,000 acres of fine range enough for his simple needs. Then ensued a Wild West Show during which it was discovered that the combined roping ability of the outfit was 0.00%. A thorough test of this made a change of tactics seem desirable. Snaring was decided on, and, when this was finally managed after much patient (or impatient) manoeuvring, the very much disgusted horse was finally snubbed around a small white-bark pine, and the incident closed. Fuller details and additional color can probably be obtained from the Chief Fire Inspector for the Railway Board, on request.

A record trip to town completed an enjoyable two days' trip.

Some fine pictures were obtained by Mr. Leavitt but the finest of all was unfortunately never taken.

#### **In Southeastern British Columbia.**

J. D. Gilmour, District Forester at Cranbrook in the B. C. Forest Service, writes:—'Since December, 1912, I have been stationed at Cranbrook as District Forester in the Provincial Forest Service. The work includes all business in connection with the Forest Branch in this district. This season we are laying emphasis chiefly on fire protection, and are building trails and telephone lines for that purpose. The summer so far has been favourable. The dangerous periods have been short, and there have been few fires entailing extra expense, and all these have been discovered and extinguished before they had much start. The total area burned over is negligible. We are also working to obtain co-operation with lumbermen in the burning of slash, and have met with some success; we look for more in future. Already over one thousand acres of slash has been successfully burned in places where it constituted a grave danger.

#### **Top-logging and Dynamite.**

Ellwood Wilson, chief of the Forestry Department of the Laurentide Co., Ltd., has sent some interesting notes as to his doings and experiences of the month, together with interesting additional notes.

On July 14th, Mr. Wilson took Mr. Kieffer, of the Forestry Department of the Quebec Government, to inspect an area of about three square miles which had been lumbered by the Laurentide Co., Ltd., and on which all tops had been lopped to the tips of the trees. The results were very satisfactory; the brush lying flat on the ground and many of the branches already beginning to decay. The woods, it was found, were left in good condition and were much easier to travel through; there was much less risk of fire,

and, if fire should start, it would be much easier to extinguish.

On July 15th Mr. Wilson left to attend the meeting of the Society of Eastern Foresters as the guest of Dr. Hugh P. Baker, Dean of the Forestry Faculty at the University of Syracuse. Foresters from all the Eastern States were present, as well as professors from Yale, Cornell and Syracuse Universities. The meetings were held at the fine new Ranger School at Wana-kena, on Cranberry Lake, and were of the greatest interest, the discussion on top-logging being especially so. It was agreed that top-logging was absolutely essential from the standpoint of fire protection and reproduction, both in soft woods and hardwoods and it was the general opinion that it was not feasible or necessary to pile or burn the brush. The cost derived from a number of experimental plots and from the experience of the Adirondack lumbermen, who are compelled by law to lop their tops, was from 20 to 30 cents per thousand feet, board measure.

A very interesting experiment was tried by representatives of the Dupont Nemours Powder Company for the benefit of the assembled foresters. In an old lumber slash piled with debris, which had once been run over by fire, dynamite cartridges were placed in the ground for a distance of over 250 feet, spaced about two feet apart and set by making a hole, by hand, with a crow-bar and putting in the cartridge, then tamping with earth rammed down with a piece of broomstick. The depth of the holes was about 15 to 18 inches. It took about an hour to set the cartridges. The slash and ground were then sprinkled with kerosene oil from watering cans and set on fire. As the flames reached the line of dynamite, the latter was exploded by electricity, and when the smoke had cleared away the fire was found to be stopped by a trench about three feet wide and nearly three feet deep, blown right down into the mineral soil, and leaving the soil so loose that, had it been necessary, earth and sand in any quantity was available for throwing on the fire. Dead and-down logs and stumps were blown out of the way. For all but a very bad top fire this method would have proved eminently satisfactory for stopping it and by going sufficiently far ahead of a forest fire and laying dynamite the fire could either be completely stopped or could be narrowed down very quickly, cheaply and surely. Experiments were tried by laying the dynamite on top of the ground, but the results were without value.

Mr. Wilson then went to the meeting of the Society for the Protection of New Hampshire Forests in connection with the Directors of the American Forestry Association at Soo-nipi Lodge, Lake Sunapee, N.H. This was a most interesting and in-

structive meeting and many notable people were present and spoke, including the Governors of Vermont and Maine, the Bishop of New Hampshire, Drs. Fernow and Roth, Profs. Toumey and Chapman, Dr. Rothrock and S. B. Elliot, of the Pennsylvania Forestry Commission, Dr. Henry S. Drinker, President of the American Forestry Association, and members of the U. S. Government Service and foresters from several States.

Dr. Fernow's address in which he advocated planting rather than natural reproduction was very important and interesting. He discussed this question at length, quoting German experience on the subject and concluded that it was the duty of the National and State Governments to take up planting on a large scale, and that vigorously.

Dr. Roth's address on conditions in Michigan and Wisconsin was very interesting, as was that of Professor Toumey on European conditions.

Mr. Wilson spoke on Commercial Forestry, and advocated planting for large corporations and especially for pulp and paper companies, and discussed the future supply of pulpwood and the increasing use of balsam fir in pulp-making. He also described the planting experiments of the Laurentide Co., Ltd.

Mr. G. C. Piché, Chief of the Quebec Forestry Service, Mr. Wilson reports, has fourteen parties at work making estimates and growth studies. A report has been made on forty square miles showing the amount of timber, the different species and their rates of growth, etc., and is a very important piece of work. The report shows that we must modify our ideas as to the amount of standing timber and lower them considerably.

#### LUMBERMEN AND FORESTRY.

Lumbermen are sometimes accused of hostility or at least indifference towards scientific forestry, but this, as everyone knows who is acquainted with the facts, is not the case. At a recent meeting of the North Idaho Forestry Association, composed of lumbermen and timber owners, the sum of \$58,000 was placed to the University of Idaho for a new forestry building and equipment. Officials of the University declare that sixty per cent of the timber now wasted in manufacture may be saved, and it is to devise methods to show this that the new building is required. The equipment includes a saw-mill plant for the use of students in learning the practical side of the industry. This is in harmony with the action of the Massachusetts Lumber Manufacturers' Association in supporting a chair of applied forestry and practical lumbering in the Yale University Forest School, for which the Association has voted \$100,000.

### WORK IN THE ROCKY MOUNTAIN RESERVE.

In the July issue of 'The Rocky Mountain Review' whose appearance was mentioned in these columns a couple of months ago, there are evidences of efficiency and careful management on the part of the officers of the Rocky Mountain Forest Reserve. A series of tables indicate briefly the exact extent of the work carried on, the difficulties encountered and the business transacted. Fires are divided into three classes, of which class A are small fires, such as spreading camp fires, not covering more than a few square rods; class B, fires requiring assistance and extra expense, generally not covering more than five acres; class C, large fires requiring extra help and expense. The figures in these classes for the quarter ending on June 1st are as follows:—21, 3, and 9, a total of 33 fires. Of these 2 were started by railroad construction, 22 by locomotives, 1 through clearing land, 4 through camp fires, 1 through lightning, 1 through dropping burning match, and of two the causes were unknown. Of permanent improvements there were constructed the following: roads  $7\frac{1}{4}$  miles, costing \$1,032.13, standard trails 112 miles, costing \$4,086.87; secondary trails, 215 miles, costing \$3,161.97, telephone lines, 51 miles, costing \$5,367.47, fire guards 330.5 miles, costing \$304.11. There were also erected 2 district ranger stations, at a cost of \$2,313.09, 13 ranger cabins, costing \$3,891.42, 8 barns, at a cost of \$1,633.48, 6 bridges, costing \$4,074.34, and one lookout tower, costing \$28.31. There were also uncompleted projected with a total value of \$4,860.72. In timber and hay receipts the reserve officers took in \$31,221. This sum was divided as follows:—Crow's Nest, \$8,979.39; Bow River, \$20,428.28; Brazeau, \$1,436.50; Cooking Lake \$28.45; Cypress Hills, \$348.38.

### DOUGLAS MALLOCH'S NEW BOOK.

Douglas Malloch has written another book and the *American Lumberman* has published it. In case some do not recall the work of this writer we reprint the real foreword which appears on the protection cover. 'Douglas Malloch' is a western poet who has spent much time in the forests, writing songs for lumbermen. His poems have travelled by word of mouth from pioneer to pioneer. In this volume appears 'Today', which has been reprinted a hundred times, and has been attributed to many and diverse sources.'

Those who think poetry cannot deal

with such commonplace subjects as lumbering should read this book. They will get new views on poetry and on lumbering. The first volume 'In Forest Land' was good: 'The Woods' is better and it proves both that Mr. Malloch is a real poet, a poet with good red blood in his veins and in his verse; and that he has the strength to resist the current misconception that strength consists in coarseness. Some of the subjects he handles are not parlor themes but somebody ought to handle them, to make them live, to make the careless world see at what cost of labor and lives the world's comforts are secured. While there is no imitating of any other poet some of the lines remind one of the strongest phrases in 'The Sons of Martha.' And through it all the poet never loses his moral bearings or his optimism. There are nearly fifty poems in the volume many of which we would like to quote such as 'Children of the Spring,' 'The Pine Tree Flag,' 'Down Grade,' 'The Soul,' 'The Sky Pilot,' 'Brothers and Sons,' but lack of space forbids the presentation of more than two 'Possession' and 'Today,' which are here given.

### POSSESSION.

There's some of us has this world's goods,  
An' some of us has none—  
But all of us has got the woods,  
An' all has got the sun.  
So settin' here upon the stoop  
This patch o' pine beside,  
I never care a single whoop—  
Fer I am satisfied.

Now, take the pine on yonder hill:  
It don't belong to me;  
The boss he owns the timber—still  
It's there fer me to see.  
An', 'twixt the ownin' of the same  
An' smellin' of its smell,  
I've got the best of that there game,  
An' so I'm feelin' well.

The boss in town unrolls a map  
An' proudly says 'It's mine'  
But he don't drink no maple sap  
An' he don't smell no pine.  
The boss in town he figgers lands  
In quarter-sections red;  
But I just set with folded hands  
An' breathe 'em in instead.

The boss his forest wealth kin read  
In cent and dollar sign;  
His name is written in the deed—  
But all his land is mine.  
There's some of us has this world's goods  
An' some of us has none—  
But all of us has got the woods,  
An' all has got the sun.

## TODAY.

Sure this world is full of trouble—  
 I ain't said it ain't  
 Lord! I've had enough, and double,  
 Reason fer complaint.  
 Rain an' storm have come to fret me,  
 Skies were often gray;  
 Thorns an' brambles have beset me  
 On the road—but, say,  
 Ain't it fine today!

What's the use of always weepin';  
 Makin' trouble last?  
 What's the use of always keepin'  
 Thinkin' of the past?  
 Each must have his tribulation,  
 Water with his wine,  
 Life it ain't no celebration.  
 Trouble? I've had mine—  
 But today is fine.

It's today thet I am livin'  
 Not a month ago,  
 Havin', losin', takin', givin',  
 As time wills it so.  
 Yesterday a cloud of sorrow  
 Fell across the way:  
 It may rain again tomorrow,  
 It may rain—but, say,  
 Ain't it fine today!

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## SAWDUST BRIQUETTES.

A new industry may be successfully combined with the planing mills—that of making of the sawdust briquettes to be used for firing under the boilers, thus considerably decreasing the cost of the fuel to the mill owner. According to a note in a recent issue of the *Scientific American*, this is being very advantageously done in Germany. The sawdust is automatically gathered and conveyed to a place near the presses. From here it is carried over a heated belt-conveyor to a drying-room. This is a cylindrical revolving drum about two feet in diameter and twenty feet long. In this drum the sawdust is partially dried, the pitch contained in the wood is softened, acting hereafter as a binder. From here the sawdust is conveyed over an incline to the after-dryer of the same shape as the first dryer, which forms a part of the press. Here it is submitted to a higher temperature to drive off all the moisture, and kept running forward toward the end of the after-dryer by rotating paddles. At the end of this after-dryer, the sawdust falls through an opening into the trough of the press.

At the end of each pressing operation, which takes place about twenty-four times a minute, a briquette is made about 5½ inches by 2¾ inches by 1½ inch, weighing between one half and three quarters of a pound. From the press the briquettes are carried by another belt-conveyor to a cooling room, and are then ready for use.—  
*Paper Inc.*

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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 begins in early July and is conducted at the school camp at MILFORD, Pennsylvania.

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