

FORESTRY CONGRESS.

The annual meeting of the American Forestry Association, which was held in Montreal on August 21st, 22nd, and 23rd, passed off very successfully. There was a large attendance of those interested in forestry both from the States and the Dominion, among the representative men of high standing being many of our leading lumbermen.

The following is a partial list of the delegates from a distance:—

B—Bureau, Senator, St. Remi; Butler, A. W., Brockville, Ind.; Beall, T. Lindsay; Broster, C., Three Rivers; Beadle, D. W., Barnes, Wis. S., Baskerville, P., St. Catharines; Bergeron, J. G. H., Beauharnois; Brigham, Dr., Phillipsburg; Bell, C. E., Representing Crown Lands Department, Quebec; Beaufort, E. L., Cape Vincent, N. Y.; Briselois, E. C., Minnedosa, Man.

C—Chandler, —, Chicago; Chaffers, Hon. W. H., St. Catharines; Chapais, J. C., Varannes; Crobasca, J. G., Sorel; Chapman, C., Toronto; Cowper, G. B., Toronto; Charlton, E. J., Quebec; Charleson, J. B., Quebec; Cuthbert, E. O., Berthier; Chester, F. W., Quebec; Chandler, G. H., St. John, N. B.

D—Dean, Harmon, Shelby Co., O.; Denton, J. M., London, Ont.; Dumpey, P. E., Trenton, Ont.; Dunn, L. H., Quebec; Dall, Caroline H., Washington, D. C.; Dwyer, G. E., Suttonville; Dwyer, E. A., Sutton; Dougall, J., Windsor; Dawe, T. H., Lachine; Desrivieres, F. G., Desrivieres; Dougall, John, N. Y.; Du Vernet, F. H., Toronto.

E—Emerson, N. P., Sutton Junction; Emery, Dr. J. G., Port Burwell; Emery, Vernon H., Hamilton.

F—Fernow, B. E., Statington, Pa.; Fyles, Rev. T. W., Cowansville; Field, J. G., Stanstead; Fulton, Rev. James, Lachine.

G—Guilbault, F. M. P., Joliette; Gillies, Jas., Carleton Place; Gillies, John, Braeside; Gibbs, Hon. T. N., Ottawa; Glead, C. S., Topeka, Kansas.

H—Hough, Professor F. B., Washington; Hicke, J. S., Roslyn; Hope, James, Toronto; Howard, J. W., Chambly; Hyatt, Jas., Stantonville, N. Y.

J—Joly, Hon. H. G., Quebec; Jones, W. J., Bowmanville; Joutte, S. N., New York.

K—Kinsey, Chas. E., Cincinnati, O.; Kay, Andrew, Granby, P. Q.; Keefer, T. C., Ottawa; Kerr, Thomas, Toronto; Kerr, Walter, Kemptville, Ont.; King, Rev. E. A. W., Lewis, P. Q.

L—Little, L. G., New York; Little, J., Cote St. Antoine; Logue, C., Maniwauke; Lynch, Hon. W. W., Quebec.

M—Mohr, Prof. Chas., Mobile, Ala.; Martin, J. R., Cayuga; Malhot, Hon. H. G., Three Rivers; Manning, J. W., Manning, H. G., Reading, Mass.; Mills, W. H., Hamilton; Miles, H. R., L. L. D., Quebec; Moffatt, J. R. G., London, Eng.; Mills, W. B., Beaufort, N. B.; Martin, R., Martin, E., Martin, W. R., Hamilton; Mitchell, C. W., Ottawa; Massue, L. H., Varannes; Mills, Jas., M. A., President Agricultural College, Guelph; Morris D., St. Theres; McConville, P. W., Joliette.

N—Norman, J. B., Three Rivers; Nagle, R., Ottawa; Norris, John.

P—Panchaud, Dr. C. F., Varannes; Pardo, Avon, Toronto; Peffer, G. F., Powanoc, Wis.; Poraull, J. H., Varannes; Pell, L., Pembroke.

Q—Quinn, Stephen J., St. Hyacinthe.

R—Russell, A. J., Russell, J. Haig, Ottawa; Renaud, Eugene, Montagny; Ritchie, Wm., Three Rivers; Russell, A. G., Ottawa; Rodriguez, J., Jacksonville; Ross, W. G., St. Nicholas; Robitaille, L. A., Quebec; Rully, J., Sherbrooke.

S—Saunders, W., London; Studer, J. H., Columbus, O.; Stetson, John, Toronto; Stephen, John, Chicago.

T—Tache, E. E., Quebec; Thistle, W. N., Ottawa; Tracy, W. W., Detroit, Mich.

U—Ulrich, Alfred, Dresden, Saxony.

W—Warder, Dr. J. A., North Bend, O.; Wilson, H. W., Boston; Whiteside, E., Cambridge; Winnett, W. H., London, Ont.; Westover, D., Frehshsburg.

Y—Young, W. C., Ottawa.

The Congress assembled on Monday, August 21, at 2 o'clock, the number present exceeding a hundred.

Prof. Hough nominated, in the absence of the

President, the Hon. H. G. Joly, one of the Vice-Presidents, as President of the Congress. The nomination was enthusiastically ratified. Mr. Joly took the chair.

Prof. Hough was elected Secretary, and Charles Moore, Ala., as temporary Treasurer.

The President briefly explained the objects of the meeting, and announced the order of proceedings by sections.

Prof. Hough announced that the officers of the sections, as appointed at the Cincinnati meeting, would continue in office until the election of new officers. He moved the appointment of a committee consisting of Charles Moore, Bernard Fourncaux and Wm. Saunders to take into consideration the relations between this Congress and the American Forestry Association, which had previously appointed a similar committee consisting of Messrs. E. Moody, New York; D. W. Beadle, Ont., and N. J. Colman, Missouri.

Dr. J. A. WARDER, first vice-president of the Association, said the American Association had come here prepared to co-operate with the Congress, and to submit to whatever the committee should recommend to-morrow. The Association had done a great deal of good during the last seven years, but they were even prepared to abandon their organization, if necessary, in the interests of American forestry.

Mr. C. E. BELL, Crown Timber Agent for the Province of Quebec, offered for the inspection of the Congress, a box containing forty specimens of Canadian woods. They were excellent specimens, some of them polished and and were greatly admired.

The Congress then adjourned and met immediately afterward in sections.

SECTION A.

This section assembled under the presidency of Prof. Franklin B. Hough of Washington, W. Little, of Montreal, being secretary.

FOREST FIRES.

The first paper by Mr. JOSEPH S. FAR, Wood's Hall, Mass., made a single brief suggestion—that new plantations should be made in blocks of 10, 20, 40 or even 100 acres, divided from each other by the least 100 (even 300) feet.

HARDWOOD DISTRIBUTION.

Prof. Mohr, of Mobile, Alabama, then read a very elaborate paper on "The Distribution of Hardwood Trees in the Gulf Region of the Southern States," giving very full details as to the various species.

PLANTING BY RAILWAYS.

The third paper read was by Dr. Franklin B. Hough, Chief of the Forestry Department of Agriculture, Washington, on "Tree Planting by Railroad Companies." He dwelt upon the immense consumption of timber by the railways, especially for ties, giving statistics as to the numbers required, their duration, the necessary ages of the trees, their preservation, etc. He urged the railway companies themselves to plant, showing that it took 25 acres of land on an average to supply a mile of road. He also dwelt upon the need of shelter belts, to check snow drifts, and related what the Northern Pacific and other companies were doing in this respect.

TREE PRUNING.

Mr. N. H. EGGLESTON, Williamstown, Mass., read a paper on the "Rational Method of Tree Pruning." After condemning the thoughtless lopping of trees, he said that by a rational method a forest will yield much more than when left to itself. This was known in Germany 250 years ago, and pruning was renewed in this century, and is now practised on the continent. De Cans' treatise has been translated into English at Harvard. The essential thing is to cut off a branch as close as possible to the trunk, no matter how large the wound. The descending sap that makes the new wood cannot do it if a stump projects from its line of descent. Rational methods were practised in Europe with great benefit.

THE RUSSIAN MULBERRY.

Mr. D. C. BURSON, of Topeka, Kansas, sent a short paper on the Russian Mulberry, which he said was coming into great use on the western prairies as a tree to bring returns to the present generation. It was a quick grower, with handsome and durable timber.

THE LARCH.

Mr. DAVID NICOL, of Cataragui, Ontario,

contributed a paper on the advantages of the *Larix Europæa*, or European larch, its quick growth, adaptability, propagation and culture. He discussed these very fully. The larch, he said, was adapted for lands otherwise valueless.

VILLAGE COPPICES.

The next paper read was "The Coppice for the Village and Town," by Mr. M. C. Road, of Hudson, Ohio. The article advocated the planting of coppices in odd spots in villages, towns or farms.

STREET TREES.

J. BEAUFORT HURLBERT, L.L.D., of Ottawa, in a paper on the subject of forest trees most suitable for streets, lawns and groves, which he gave as suggestive only, presented a list of some thirty trees that he considered most suitable for ornamental purposes. Of the seventy to seventy-five forest trees, and the thirty to forty shrubs, of Canadian growth, he would give the preference, for streets and lawns, to the maple, elm, basswood, beech, birch, oak, butternut, walnut and ash.

FOREST PRESERVATION.

Mr. JOHN DOUGALL, editor of the *New York Witness*, read a paper on "The Preservation of Forests from Wanton Destruction; and on Tree Planting." This was one of the most important contributions of the meeting. He described the evil effects that had followed from the too extensive denudation of the forests of this continent, and described how this evil was at length recognized. He advocated a system of forestry laws similar to those of France, Germany, Norway, and other countries in Europe. These should include a law to prevent the kindling of fires in the woods, a forest police, regulations for the gradual thinning out of the largest trees, giving the younger ones time to grow; a general system of tree planting by large corporations, etc. Every farm, he held, should have a belt of timber planted along its windward side 50 feet wide at least; swamps not covered with trees should be planted, he thought, with white and red cedar and tamarac; rocky ground also might be profitably utilized. Forest commissioners, he held, should be appointed just as fish commissioners are now. As to Canada, he urged the need of tree planting in the valley of the St. Lawrence about Montreal, and on the Northwestern prairies. The other Provinces were better supplied, and the system of selling timber limits to lumbermen was conservative of the forests, but there was need for greater precaution against fire and waste. A capable commissioner of woods and forests for the Dominion would therefore prove a very valuable functionary if he were not only an expert, but an enthusiast in forestry, otherwise his salary would only be an additional and useless burden.

Mr. THISTLE, Pembroke, suggested that the forest rangers, whose work ceases in the spring, should hereafter be employed during the summer in an attempt to preserve the woods from fires.

Mr. E. B. COWPER, Crown Lands Department, Toronto, did not think the time had come when the planting of forests was a practicable question for Ontario and Quebec. Clearing must go on.

Mr. LITTLE said too much, perhaps, had been made of planting as compared with the preservation of forests, which was of infinitely more importance. He has seen splendid pine destroyed for the sake of clearing land, which would only grow fifteen bushels of corn to the acre. He scarcely thought that was right. It was like flying in the face of Providence.

Some further discussion took place on the necessity of preserving forests from fire, and a difference of opinion was shown as to whether there was more necessity of protecting our timber supply or of planting new forests.

The meeting adjourned about six o'clock.

FOREST FIRES.

Before adjourning, however, it was resolved that the report of the committee on forest fires be submitted to the general sessions.

OTHER PAPERS.

The following papers were also submitted to this section:—

The Destruction of Trees and Shrubs at the Ontario Experimental Farm. Prof. W. Brown, Guelph, Ont.

A few Thoughts on the Necessity for a Certain Portion of each Farm being left in Forest. J. Beaufort Hurlbert, L.L.D., Ottawa, Ont.

Forest Economy of Canada. Stewart Shayne, Ottawa, Ont.

Experimental Plantation of the Eucalyptus near Rome. Franklin B. Hough, Ph. D., Louisville, N. Y.

Conditions of Forest Growth. Bernhard E. Fernon, Shaweegan, Pa.

Lessons to be Learned from the Forests of Western Asia. Prof. M. S. Osborn, Oxford, O.

Borders in Forest Trees. Rev. T. W. Fyles, Cowansville, Que.

SECTION B.

This section was organized under the presidency of that enthusiastic forester, Dr. John A. Warder, North Bend, O., Chairman of the section. The Hon. Spring Rice was elected Secretary of the section.

TREES PLANTING FOR RAILWAYS.

As a well deserved compliment to the chairman, the first paper read was his contribution on "Tree Planting for Railroads." He pointed out that forest plantations being a long deferred investment, had not much attraction for a poor man, but might well be undertaken by companies, and especially by railways. He gave a detailed account of the success of some recent operations in prairie tree planting. He dwelt specially on the merits of the *atalpa speciosa* for ties and similar purposes.

THE CATALPA IN CANADA.

Mr. ROBERT BURNER, of Pictou, N.S., contributed some "remarks on the Canadian cultivation of the *atalpa speciosa*." As a test whether this very useful tree would grow north of parallel 42, in the spring of 1880, 100 plants from Illinois were set near Pictou (45° north latitude), on a sharp, gravelly soil with a south exposure. They were protected from sun and frost, and this spring were distributed. All the reports of their progress are very good. There is every reason to hope that the complete naturalization of the *atalpa*, as suggested by Dr. Warder, of the Bend, Ohio, will be accomplished.

RAPID PLANTING.

Mr. ROBERT DOUGLAS'S (Waukegan, Ill.) paper on the three motion system of planting trees was read by the chairman. First the ground should be carefully prepared, say as for corn, it is then rolled and marked into spaces four feet apart, and the young plants, which are generally done up in parcel of fifty, are dibbled in. Three men at a rule are engaged, two plant and one carries the soil, or young trees. A hole is made, the plant inserted, the spade withdrawn, and the digger, planting one foot close to the young tree, forces it into position, and passes on to the next space. This method is considered better than running furrows with a plough. The plants used were usually yearlings. By this method as many as 1,500 trees could be planted in one day.

PRAIRIE PLANTATIONS.

Mr. H. W. PENNEL, of Russell, Kansas, sent a communication dwelling on the want of protection of those open regions from the winds which have a free sweep of hundreds of miles. The only way for breaking up those winds was by planting trees. In his own experience, at least half of his 6,000 black walnuts are in fruit this season; 3,500 ash-leaved maples transplanted this spring, are making fine growth in spite of the severe drought. The author seemed to find the ravages of insects the greatest drawback.

OTHER CONTRIBUTIONS.

The following papers were also contributed to this section:—

Oaks of Hardin County, Ohio. W. F. English, Mount Victory.

Timber Trees of the Black Hills. Robert Douglas, Waukegan, Ill.

The Coniferous Trees of the United States and Canada. Dr. George Vosey, Botanist of the Department of Agriculture, Washington, D. C.

Black Locust Growth. Dr. John A. Warder, North Bend, O.

Experiments in Tree Planting in Cape Cod. Joseph S. Fay, Wood's Hall, Mass.

The Ash. Arthur Bryant, Princetown, Ill.

Larchwre. A plantation on drifting sand. Dr. John A. Warder, North Bend, O.

Extensive planting by shelter belts. H. M. Thompson, Preston Lake, Dakota.

The classification of Oaks. Dr. John A. Warder, North Bend, O.