

## FORESTRY EXHIBIT AT THE PAN-AMERICAN EXPOSITION.

In the prepared plan of the building on the lay of the Pan-American Exposition, which will be held at the nearby city of Buffalo in the summer months of 1901, the Architectural Board has placed the Forestry building in a prominent position on the grand court; this structure being connected with the Horticultural building by an ornamental colonnade, and balancing the Graphic Arts building, which also connects with the Horticultural building by a similar colonnade on the opposite side. The accompanying illustration of the Forestry building shows the importance the management attach to a proper classification and exhibition of the rare and interesting woods of Pan-America, for the building is beautiful in conception and amply large to make a display on a splendid scale.

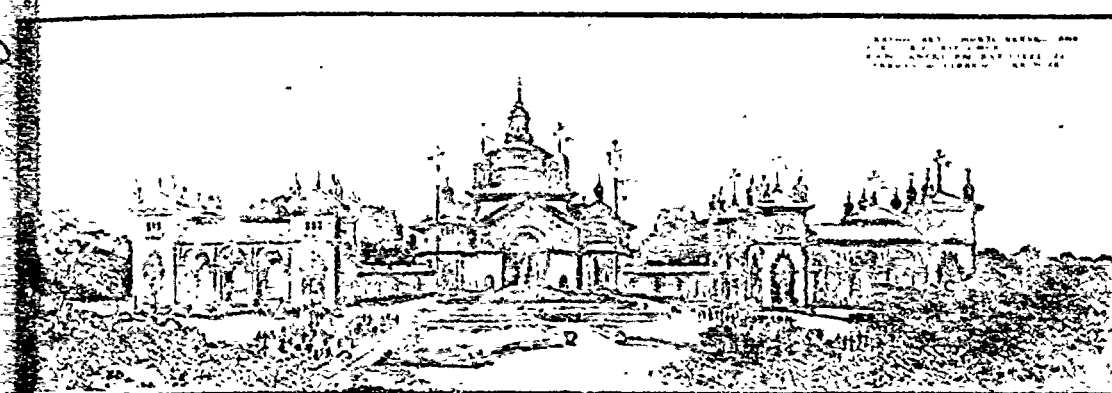
When one considers the scope of the coming great Exposition during the summer months of next year, it is not hard to imagine a forestry display of surpassing interest, as the western continent is at present the one section of the world where a magnificent forestry display could be secured. With the banyan trees of India and the giant swamp eucalyptus of New Zealand and Australia alone excepted, the rarest trees in the world are to be found in one or more of the countries of North or South America, or on the islands now dependent on the United States.

From far away Oregon and the upper portion of the Dominion of Canada the great pines and firs will be brought; their sections to repose within the Forestry building in competition with the polished sections of mahogany and ironwood from the forests of the Amazon

more, which, though sporadic, attains perfection in Arizona. From Virginia the red cedar comes, and the samples from there will be of interest when shown in connection with the machinery which annually reduces entire forests of the species into tiny lead pencils; for a majority of the countless millions of lead pencils used each year are cut from Virginia red cedar. Another species of the red cedar, harder, more ornamental and much more scarce than that used for lead pencil making, is found some hundreds of miles below the Virginia forests. These are called swamp cedars, and they grow in pools and swamps, many of them standing in from four to six feet of water, the pools and lakes being simply floored with countless thousands of these trees which have flourished, fallen and sunk below the surface.

The basswood of the far northwest lends itself readily to interesting displays, and a splendid showing will be made of hickory, that tough and wiry wood which, according to the late Leland Stanford, made the American trotting horse a possibility. Before the days of the bicycle sulky no wood except second growth hickory was light and strong enough to form the wheels and spokes of the old high cart, and without that material there would have been no Sunol and Maud S. records to amaze the country and show to breeders the wonderful possibilities of the American trotter.

In the showing of these and countless other varieties of woods which abound in the Americas, it will be the aim of the management to have the exhibit so prepared that interest will be felt by the casual spectator as well as by the forester or the lumber merchant. Of the rare woods these will be shown in the rough bark intact, as well as as cross and tangent sections showing the grades, grain



FORESTRY BUILDING—PAN AMERICAN EXPOSITION, BUFFALO, 1901.

in South America, while from the Yosemite valley of California great slabs of the giant red woods, the greatest trees in the world, will be brought to amaze the visitors. It is generally conceded that these red woods are the greatest trees, though some authorities raise the contention that the swamp eucalyptus has attained greater heights. It is said that one of these giant trees of New Zealand, when it fell, was found to measure nearly 400 feet in height. Enormous as that seems, it has been exceeded in the Yosemite, for a forest giant of the red wood species, called "The Wallace," was found to be approximately 500 feet in height, or nearly as high as the Washington monument, the tallest structure on the American continent, and with the single exception of the Eiffel Tower, the tallest structure in the world.

In their diameters these giant trees of California are as colossal as in their height, and some of the cross sections of the trees were very interesting when seen in their entirety. It is known that one of these trees attained an enormous bulk that through a hole in the trunk a coach and four was able to pass with ease, and on the wooded stump of another forty people were able to dance. The bark frequently attains a thickness of eighteen inches, and the body of the tree is capable of a rich deep polish similar to the red cedar of North Carolina. It will be a task of vast proportions to secure for the Forestry exhibit at the Pan-American a full cross section of one of these giant trees, but an effort will be made to have one shown in such manner that the onlooker may obtain a fair conception of the size of the tree and of the grain and texture of the wood.

Besides this and other rare woods, the director of the Forestry exhibit will show the so-called common woods, such as samples of the giant sugar maples of Indiana, some of which attain a height of 120 feet, and the great oaks of Connecticut and Maine, and the syc-

and textures. There will also be samples of abnormal or unusual growths, and an effort will be made to procure a sample from the giant fir trees of Oregon in order to show the immensity of the trees. At the World's Columbian Exposition was shown a counter, the entire top of which consisted of one single plank 150 feet in length and over 3 feet in width. It is hoped that one equally large may be secured as Oregon's contribution to the forestry display at the Exposition at Buffalo.

### CANADA'S COMMERCIAL AGENTS.

FOLLOWING is the official list of Canada's Commercial Agents in Great Britain, British possessions and foreign countries:

J. S. Larke, Sydney, N.S.W., agent for Australasia.  
G. Eustace Burke, Kingston, Jamaica, agent for Jamaica.

Robert Bryson, St. John, Antigua, agent for Antigua, Montserrat and Dominica.

S. L. Horsford, St. Kitts, agent for St. Kitts, Nevis and Virgin Islands.

Edgar Tripp, Port of Spain, Trinidad, agent for Trinidad and Tobago.

C. E. Seatum, Christiania, Norway, agent for Sweden and Denmark.

D. M. Rennie, Buenos Ayres, Argentine Republic agent for Argentine Republic and Uruguay.

In addition to their other duties, the undermentioned will answer inquiries relative to trade matters, and their services are available in furthering the interests of Canadian traders.

J. G. Colmer, 17 Victoria Street, London, S.W., England.  
Thomas Moffat, 16 Church Street, Cape Town, South Africa.

G. H. Mitchell, 15 Water Street, Liverpool, England.

H. M. Murray, 40 St. Enoch Square, Glasgow, Scotland.

Harrison Watson, Curator, Imperial Institute, London, England.

## LUMBERING OPERATIONS IN QUEBEC.

The annual report of the Commissioner of Lands, Forests, and Fisheries for the province of Quebec, states that during the year ending June 30th, 1899, the receipts from woods and forests were \$894,289.48. This includes the proceeds of a sale of 1,933 square miles of limits, which brought \$135,281.40. The area of timber limits under license is 45,889.34 square miles.

The report contains the usual statement of timber cut within the province during the year under review. This is as follows:

Pine, at dues of \$1.30 per M	195,722,426	feet.
Pine " " 80c " "	48,992,290	"
Spruce " " 65c " "	303,393,832	"
Room timber.....	80,809	"
White pine timber.....	840,191	cub. ft.
Red " " " " " "	51,627	"
Birch timber.....	368,138	"
Cedar " " " " " "	293,700	m. ft.
Firewood.....	3,555	cords
Pulp wood.....	3,806	"
Railway ties.....	466,368	pieces
Spool wood.....	1,197	cords
Shingles.....	11,804,000	"
Pickets.....	4,234	pieces
Telegraph poles.....	5,883	"

A comparative statement is also given of the quantity of different varieties of timber manufactured since 1866, from which we extract the following:

Season of Production.	Pine Saw-logs at \$1.30 per M	Spruce and Hardwood Sawlogs	Pine logs at 80c per M	White and Red Pine St. Timber	Birch Elm Maple, Etc.	Small Timbers, Pine, Spruce, Room and Flat Timber
Pieces	Pieces	Pieces	Pieces	Pieces	Pieces	Pieces
1866-67	1,101,200	799,285		81,943	3,81	
1867-68	1,311,100	4,702,400		44,456	2,694	
1868-69	1,514,000	35,994,7		77,498	4,858	
1869-70	1,471,000	44,110		77,811	3,222	
1870-71	1,600,000	35,676		94,657	2,185	
1871-72	2,010,500	335,676		127,657	4,053	
1872-73	2,241,700	80,000		80,971	2,638	
1873-74	2,357,000	1,102,100		79,338	11,741	
1874-75	1,474,747	6,700,714		77,771	6,595	
1875-76	1,181,076	701,519		111,879	17,768	
1876-77	1,177,644	642,794		80,805	14,794	
1877-78	1,131,880	792,419		65,358	7,735	
1878-79	1,479,445	445,879		59,500	9,456	
1879-80	1,791,800	1,450,842		34,601	5,722	19,978
1880-81	2,418,000	1,300,000		15,527	2,662	23,247
1881-82	2,610,000	1,410,000		17,707	1,101	47,640
1882-83	2,640,000	1,311,000		67,871	1,509	25,000
1883-84	2,700,000	2,110,000		26,000	9,841	18,121
1884-85	2,187,000	1,300,000		6,400	5,874	14,600
1885-86	2,600,000	1,352,000		21,445	2,112	37,311
1886-87	2,391,000	2,300,000		12,804	3,255	11,360
1887-88	3,101,000	1,600,000		12,717	2,737	21,071
1888-89	2,500,000	1,121,000		45,044	2,007	3,013
1889-90	2,147,447	2,610,000		61,600	18,321	8,401
1890-91	2,200,000	2,320,000		15,768	8,101	6,362
1891-92	3,014,000	2,740,000		47,972	59,906	14,178
1892-93	2,448,434	2,741,357	648,000	41,201	12,300	17,794
1893-94	2,000,000	3,297,150	1,100,000	35,083	631	7,644
1894-95	2,104,000	4,317,215	1,446,000	2,795	1,275	15,051
1895-96	2,151,000	4,594,000	1,500,000	9,115	1,113	9,341
1896-97	2,000,000	6,000,000	1,000,000	37,451	1,028	4,064
1897-98	1,471,000	5,431,700	823,576	19,921	9,183	12,184

### FROM THE TIMBER TRADE.

The great interest shown in Colonial affairs by Great Britain has been demonstrated by the numerous contributions from that quarter in behalf of the sufferers from the recent fire at Ottawa and Hull. THE CANADA LUMBERMAN acknowledges the receipt of contributions of \$50 for this purpose from Messrs. Irvin & Sellers, timber importers and merchants, Liverpool, Eng., and \$10.00 from Messrs. Sieveking, Podmore & Co., timber importers, London, Eng. Several other timber merchants and brokers in the Mother land have also contributed to the fund through the Ottawa banks.

The height of a chimney to create a draft for any kind of fuel will depend to a large extent upon the area of the flue. A chimney that is too high in proportion to its diameter will create no better draft than one that is not high enough, while the cost of the higher structure will, of course, be greater. The cause of chimney draft, that is the intensity of the draft, is due to the difference between the weight of the column of hot gases inside the chimney and the weight of a column of the external air of the same height.