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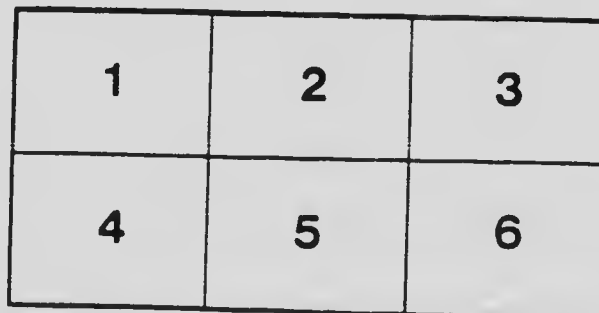
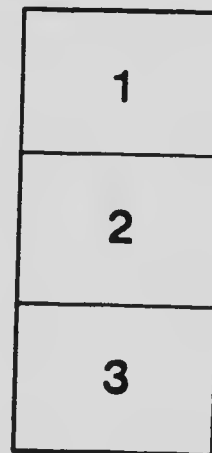
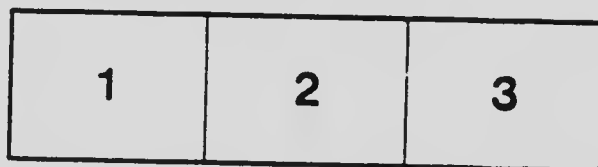
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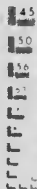
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DEPARTMENT OF THE INTERIOR, CANADA

Hon. FRANK OLIVER, Minister: W. W. CORY, Deputy Minister

FORESTRY BRANCH—BULLETIN No. 11

R. H. CAMPBELL, Superintendent of Forestry

FOREST PRODUCTS OF CANADA

1909

LUMBER, SQUARE TIMBER, LATH AND SHINGLES

COMPILED BY

H. R. MACMILLAN, B.S.A., M.F.

OTTAWA

GOVERNMENT PRINTING BUREAU

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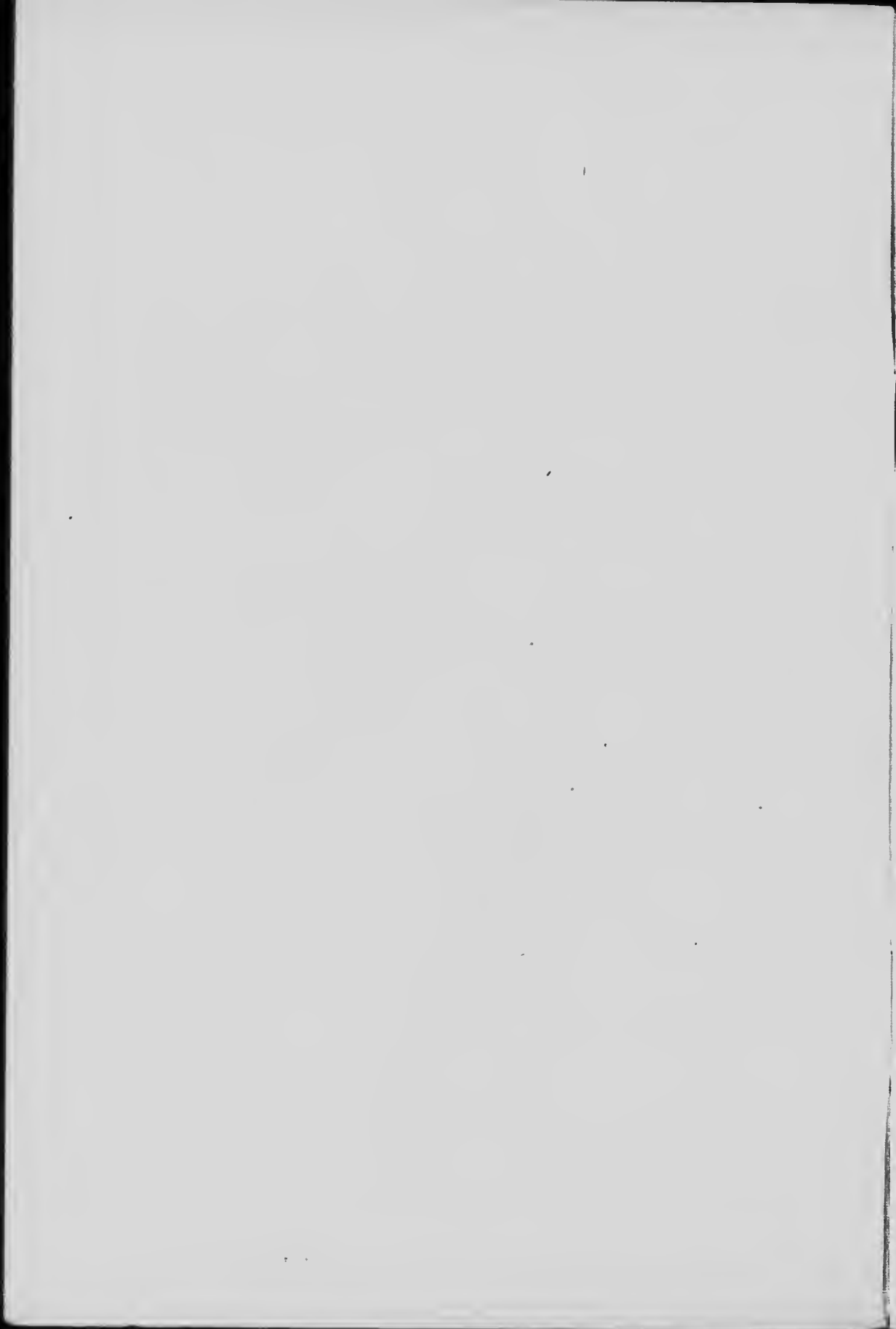
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LUMBER, SQUARE TIMBER, LATH AND SHINGLES.

The statistics of the lumber cut in Canada in 1909 are based upon reports made directly to the Forestry Branch of the Department of the Interior by 2,085 operating sawmills. The reports are made on schedules furnished by the Forestry Branch and cover the calendar year 1909.

The co-operation of the secretaries of the different lumber manufacturers' associations has made possible the securing of complete lists of sawmill operators. The assistance rendered by trade papers, prominent lumbermen, provincial, county and township officials has kept this list up to date. It is probable that the increased number of mills reporting in 1909 (2,085 as compared with 1,409 in 1908) is due more to the success of the Forestry Branch in getting in touch with small mill operators, than to a greatly increased activity in lumber manufacturing. The figures for 1909, then, may be taken as more nearly indicative of Canada's annual lumber output than those for 1908. The 1909 reports are, without doubt, close to the truth and the most accurate yet received in Canada. There are still a number of small mills not reporting, particularly in the province of Quebec, but their combined annual cut is only a very small percentage of the total.

Lumber.

In table 1, is given a statement of the lumber cut in the different provinces in 1909 as compared with the cut reported for 1908. It will be borne in mind that where 1909 shows an increase over 1908 in the number of mills and amount of lumber cut, this increase is in part due to the more complete reports secured for 1909.

TABLE 1.

LUMBER.—Number of mills reporting. Quantity of Lumber cut, with per cent of increase and distribution by Provinces, 1908 and 1909.

Province.	Rank.		Number of Mills Reporting.		Quantity M. Feet B. M.		Value of Lumber.	Per cent of Increase in Cut.		Per cent Distribution of Cut.	
	1908.	1909.	1908.	1909.	1908.	1909.		1909 over 1908.		1908.	1909.
Canada.....	...	...	1,409	2,085	3,348,176	3,814,942	\$62,819,477	13·9	100	100
Ontario.....	1	1	591	976	1,294,794	1,519,080	\$30,050,344	17·3	38·7	39·8	
British Columbia...	3	2	143	172	647,977	790,601	11,374,989	21·0	19·3	20·7	
Quebec ..	2	3	277	451	690,137	638,582	9,489,386 (1)	7·5	20·6	16·7	
New Brun. ick...	4	4	180	106	308,400	391,203	5,336,974	26·8	9·2	10·3	
Nova Scotia.....	5	5	112	240	216,825	273,551	3,273,177	26·2	6·4	7·2	
Saskatchewan...	6	6	26	23	91,166	87,340	1,448,075 (1)	4·2	2·8	2·3	
Manitoba.....	7	7	40	52	56,447	59,861	1,025,269	6·0	0·7	1·6	
Alberta.....	8	8	40	40	41,382	52,850	798,320	27·7	1·3	1·4	
Prince Edward Isld.	(2)	9	(2)	26	(2)	1,874	22,940	(2)	(2) ..	(2) ...	

(1) Decrease.

(2) No reports from Prince Edward Island for 1908.

(3) Less than one-tenth of one per cent.

For the whole of Canada there is an increase of 676, or 47·9 per cent in the number of active mills reporting; there is a corresponding increase of 13·9 per cent in the lumber output or 466,776,000 board feet more than the cut reported for 1908. The average cut per mill reporting in 1908 was 2,376,000 feet; the average cut per mill reporting in 1909 was 1,830,000 feet. The decrease in average mill output for 1909 may be accounted for by the larger number of small mills reporting.

It is interesting to note that the total cut in Canada for 1909 is a little less than one-ninth of the lumber cut of the United States for 1908, and a little less than the lumber cut in Washington State in 1907. The *per capita* lumber production in Canada for 1909 was 468 board feet, or 27 per cent greater than the *per capita* lumber production of the United States for 1908.

Ontario still maintains a good lead in its position as the first province in point of lumber production. It holds this position by virtue of its great annual cut of white pine, and by reason of its diversified forests, which give it a small annual cut of almost every wood produced in Canada. Ontario has been Canada's greatest lumber producer for a great many years; it produced over one-third of the lumber cut in Canada in 1909, and the increase over the 1908 cut was 17·3 per cent or a greater increase per cent than that for the whole of Canada.

An increase of 22 per cent in the cut in British Columbia, accompanied by a decrease of 7·7 per cent in the cut of Quebec caused Quebec to drop from second place, which it had held for many years. British Columbia now holds second place, a position which, because of the rapid exploitation of the fir and cedar forests, it will probably maintain. The decrease in the cut in Quebec for 1909 was due mainly to a much lighter cut of white pine, red pine and cedar. If the cut in Quebec had increased in keeping with that for the whole of Canada, by 13·9 per cent, Quebec would still have dropped to third place. Had it not been for a great increase in the cut of balsam Quebec's showing would have been smaller.

The other six provinces still hold the same relative positions as in 1908. Owing mainly to an increase in the cut of spruce and white pine, New Brunswick and Nova Scotia alike showed an increase in cut of about 26 per cent over 1908. A similar increase for Alberta due to an increase in the cut of spruce brought it close to Manitoba. Manitoba stood about the same and owing to a decrease in the cut of spruce Saskatchewan showed a general decrease of 4·2 per cent. There are still a large number of small mills unreporting in Quebec. When the returns from them are secured, Quebec's position will be improved. Reports secured for the first time from Prince Edward Island give it the distinction of having the smallest average cut per mill, about 72,000 feet per year. British Columbia has the largest average cut per mill, 4,597,000 feet per year.

The value given for lumber is the value at the mill. The average price of lumber was lower in Nova Scotia for 1909 than elsewhere in Canada, \$11.96 per thousand feet. The average in the several provinces was as follows:

Nova Scotia.....	\$11 96
Prince Edward Island.....	12 24
New Brunswick.....	13 64
Quebec.....	14 86
Alberta.....	15 11
British Columbia.....	16 31
Saskatchewan.....	16 58
Manitoba.....	17 12
Ontario.....	19 80

The comparatively high average value in Ontario is due to the large cut of white pine and to the fact that a higher price is charged in Ontario for nearly every species of lumber than is secured in the other provinces.

The following diagram shows graphically the relative lumber production of the different provinces.

DIAGRAM N°1

LUMBER PRODUCTION

BY PROVINCES . 1909

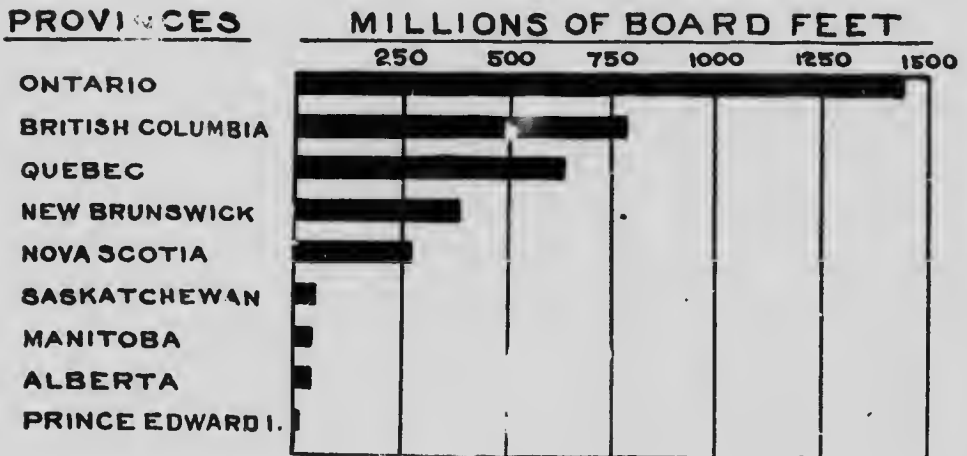


Table 2 gives the relative production of lumber by species in 1908 and 1909 together with the per cent of increase or decrease in 1909, the total value of each species in 1909, the percentage each comprised of the total cut, and the average value per thousand for the two years.

TABLE 2.

LUMBER.—Quantity and Value cut, by species, with per cent of increase and per cent distribution 1909.⁽¹⁾

Kind of Wood.	Rank.		Quantity M. Feet B. M.		Per cent of Increase 1909 over 1908.	Total Value of Lumber.	Per cent Distribution of Total Cut.		Average Value Per M.	
	1908.	1909.	1908.	1909.			1908.	1909.	1908.	1909.
Total, Canada.....			3,348,176	3,814,942	13.9	\$ 62,819,477	100	100	16.27	16.41
Spruce	1	1	1,027,987	1,124,949	9.4	16,365,720	32.5	29.5	14.09	14.55
White Pine.....	2	2	953,044	1,046,783	9.8	22,563,447	30.2	27.4	20.08	21.55
Douglas Fir.....	3	3	371,845	469,658	26.3	6,850,579	11.8	12.3	13.78	14.58
Hemlock.....	4	4	259,096	302,721	16.8	3,577,372	8.2	7.9	12.44	11.81
Cedar.....	6	5	122,834	189,391	54.2	2,645,379	3.9	5.0	15.69	13.96
Red Pine.....	5	6	134,828	165,886	23.0	2,777,734	4.2	4.4	16.88	16.76
Balsam.....	7	7	48,488	91,065	87.8	1,170,840	1.5	2.4	12.53	12.85
Larch or Tamarack.	9	8	35,752	68,720	92.2	1,027,344	1.1	1.8	13.94	14.95
Birch.....	8	9	45,833	53,016	15.7	990,393	1.4	1.4	16.86	18.68
Maple.....	10	10	30,684	43,072	40.4	729,162	0.9	1.1	16.99	16.93
Basswood.....	14	11	14,778	42,506	187.6	836,602	0.5	1.1	19.26	19.68
Elm.....	13	12	26,308	34,697	31.8	582,999	0.8	0.9	17.92	17.09
Jack Pine.....	12	13	28,452	27,819	(1) 2.2	404,585	0.9	0.7	13.96	14.58
Yellow Pine.....	11	14	30,592	26,975	(1) 11.8	345,710	0.9	0.7	17.46	12.82
Ash.....	15	15	11,191	17,144	62.1	315,367	0.4	0.5	19.00	18.40
Beech.....	18	16	5,083	15,036	195.8	216,052	0.2	0.4	14.53	14.36
Poplar.....	16	17	6,401	7,457	16.5	101,200	0.2	0.2	12.45	13.57
Oak.....	17	18	5,755	6,646	15.5	190,205	0.2	0.2	31.72	29.97
Hickory.....	19	19	1,164	835	(1) 28.3	22,100	(2)	(2)	20.02	26.47
Walnut.....	20	20	28	51	82.1	2,440	(2)	(2)	36.74	47.84

(1) Decrease.

(2) Less than one-tenth of one per cent.

(3) Except in the total, no figures are given in this table of lumber not identified by species in the reports received.

Nearly one-third of the lumber cut in Canada is spruce; spruce and white pine together make up nearly three-fifths. Spruce in 1909 with an increase of 96,962,000 feet exceeded white pine which showed an increase of 93,739,000 feet. The indications are that the cut of white pine lumber has nearly reached its maximum. Within the past two or three years it has dropped from first place, a position it had always held in Canada's lumber cut.

Douglas fir, still in third place, showed an increase of 26.2 per cent or 97,813,000 feet over 1908, the largest actual increase shown by any species. Cedar, another wood cut largely in British Columbia, increased by 66,557,000 feet, or 34.2 per cent; this was sufficient to give it fifth place over red pine which only showed an increase of 23 per cent or 31,053,000 feet.

Woods showing increases much larger than the average were balsam, tamarack, maple, basswood, elm, ash and beech. The cut of balsam and tamarack was almost

twice as large in 1909 as in 1908; the cut of basswood and beech was almost four times as large in 1909 as in 1908.

Birch still maintains its place as first among Canadian hard woods, though its comparatively small per cent of increase over 1908, 15·7 per cent, caused it to lose eighth place in the general list to tamarack.

The only wood of which Canada cut a larger amount in 1909 than the United States did in 1908 is balsam. The cut of balsam in Canada in 1909 was 91,065,000 feet; the cut in the United States in 1908 was 69,956,000 feet. Comparing the Canadian figures for 1909 with the United States figures for 1908, the latest available, it is found that spruce is the only other timber in the output of which Canada nearly equals the United States. The cut of spruce for the United States in 1908 was 1,411,992,000 feet, or 287,043,000 feet more than were cut in Canada in 1909. In other important timbers the cut in the United States was many times that in Canada, there being eight times more Douglas fir, three times more white pine, eight times more hemlock, twenty times more maple, and nearly four hundred times more oak produced in the United States per year than in Canada. There are relatively more hardwoods produced in the United States than in Canada. There was nearly as much black walnut cut in the United States in 1908 as maple in Canada in 1909.

The relative quantities of hard woods and soft woods produced in Canada in 1909 are shown in Table 3, with the quantities of the leading species.

TABLE 3.

RELATIVE QUANTITIES of Soft Woods and Hard Woods produced in Canada, 1909.

SOFT WOODS.		HARD WOODS.	
Kind of Wood.	Quantity.	Kind of Wood.	Quantity.
	M. Feet B. M.		M. Feet B. M.
Total	3,513,967	Total	220,460
Spruce	1,124,949	Birch	53,016
White pine	1,046,783	Maple	43,072
Douglas fir	469,658	Basswood	42,506
Hemlock	302,721	Elm	34,697
Cedar	189,391	Ash	17,144
Red pine	165,886	Beech	15,036
Balsam	91,065	All other	14,989
All other	123,514		

Here it is shown that soft woods comprise 94·3 p.c. of the total lumber cut in Canada; hardwoods, and most of them of the less valuable species, make up the remaining 5·7 p.c. In 1908 the proportions were, soft woods, 95·3 p.c., and hardwoods, 4·7 p.c. In the United States the relative quantities for 1908 were: soft woods, 76·9 p.c., and hardwoods, 23·1 p.c.

Table 4 shows how the deficiency in Canadian hardwoods is made up by importations. The figures for the imports are for the calendar year, 1909, and were furnished by the Department of Trade and Commerce.

TABLE 4.

RELATIVE QUANTITIES of Hardwood Lumber¹ Imported into and Produced in Canada, 1909.

HARD WOODS IMPORTED.		HARD WOODS CUT IN CANADA.	
Kind of Wood.	Quantity.	Kind of Wood.	Quantity.
	M. Feet B.M.		M. Feet B.M.
Total.....	103,705	Total.....	220,460
Oak.....	46,482	Birch.....	53,016
Cherry, chestnut, gumwood, hickory, whitewood.....	11,557	Maple.....	43,072
Mahogany.....	1,616	Basswood.....	42,506
White ash.....	1,148	Elm.....	34,697
Walnut.....	488	Ash.....	17,144
Hard pine.....	42,414	Beech.....	15,036
		Poplar.....	7,457
		Oak.....	6,646
		Hickory.....	835
		Walnut.....	51

(¹) In addition to the sawn lumber included in this table, there were imported during 1909 4,855,000 oak staves, round logs (nearly all hardwood), hardwood railway ties, handles, heading and staves to a total value of \$1,376,547. The total value of hardwoods imported into Canada during 1909, including hard pine, which is usually a substitute for Canadian hardwood, was \$5,198,536. The total value of the hardwood lumber produced in Canada in 1909 was \$4,005,520.

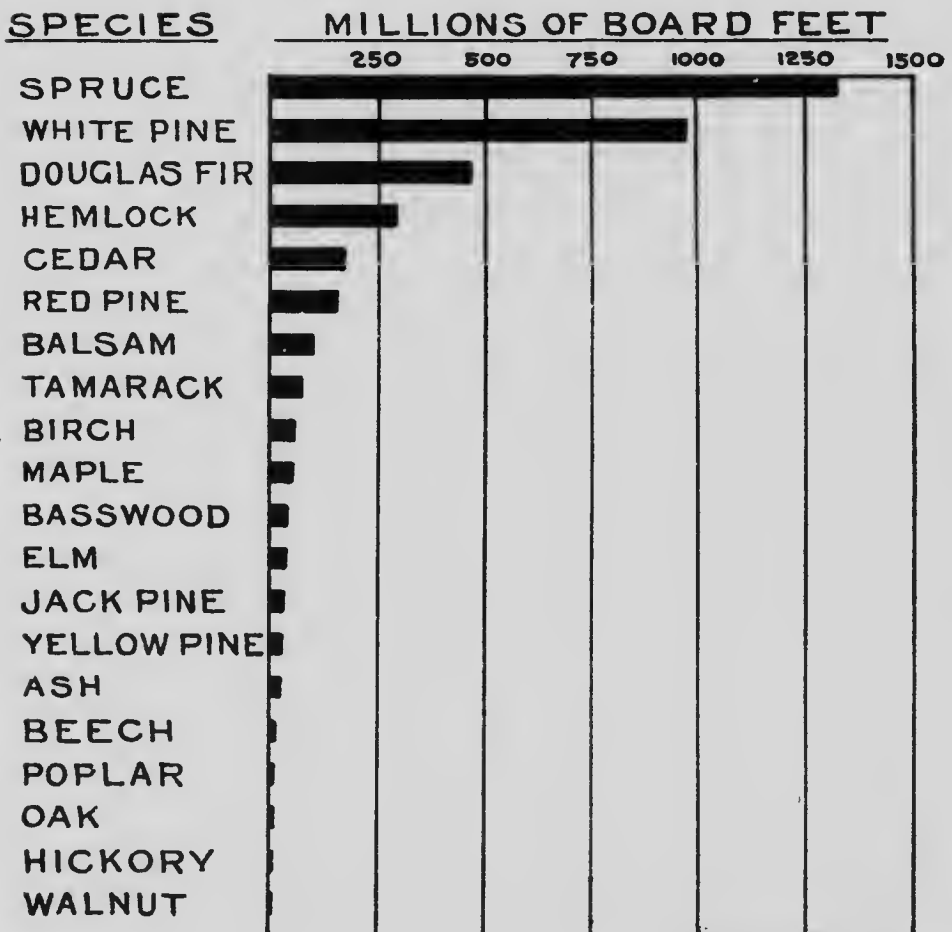
Nearly all these imports are from the United States. Canada is dependent upon the United States for the greater part of her supplies of such valuable hardwoods as oak, hickory, white wood (tulip or yellow poplar), chestnut, gum, walnut, cherry and for all the hard pine which is so frequently used as a substitute for hardwoods. The value of the hardwoods imported into Canada during 1909 exceeded by 29.8 per cent the value of the hardwoods manufactured into lumber in Canada during 1909.

In view of the fact that the supply of hardwoods in the United States available for import into Canada is surely and rapidly disappearing, it is evident that whatever can be done to encourage the production of hardwoods in suitable localities in Canada should be done at once.

Diagram 2 represents graphically the relative quantities of lumber of different species produced in 1909.

DIAGRAM N^o2

LUMBER PRODUCTION
BY SPECIES. 1909



LUMBER PRODUCTION BY SPECIES.

Tables 5 to 24 show by provinces the production of each of the different species of lumber. The order in which the species are discussed is that of their relative importance according to production in 1909, as shown in Table 2.

SPRUCE.

Under this heading are included all the different species of spruce found in Canada. From Saskatchewan to the Atlantic white spruce predominates with a small percentage of black spruce. In Alberta the cut is about evenly divided between white and Engelmann spruce; in British Columbia Engelmann spruce predominates with a good percentage of tideland or Sitka spruce.

TABLE 5.

SPRUCE LUMBER.—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M. ft. B. M.	Per cent Distribution		1908.	1909.
			\$	\$ cts.	\$ cts.
Canada.....	1,124,949	100	16,365,720	14 09	14 55
Quebec.....	356,650	31.7	5,092,752	14 22	14 28
New Brunswick.....	266,443	23.7	4,115,055	13 22	15 44
Nova Scotia.....	169,316	15.0	2,028,884	13 76	11 98
Ontario.....	98,586	8.8	1,589,157	14 49	16 21
Saskatchewan.....	87,045	7.8	1,439,511	17 29	16 54
Manitoba.....	54,515	4.8	755,033	11 49	13 85
British Columbia.....	49,006	4.4	658,633	14 18	13 44
Alberta.....	42,108	3.7	671,939	15 38	15 96
Prince Edward Island.....	1,280	.1	14,756	(1)	11 53

(1) No reports from Prince Edward Island for 1908.

Quebec has been, is, and promises for many years to remain the chief spruce producing province; during 1909 nearly one-third the total spruce cut in Canada was cut in Quebec. The cut of spruce in 1909 showed an increase over that of 1908 in every province except Saskatchewan and British Columbia. The decrease in Saskatchewan was only 3,277,000 feet, and the decrease in British Columbia was 16,531,000 feet, or 25.2 per cent. The greatest increase was in Nova Scotia where the 1909 cut exceeded that of 1908 by 34,418,000 feet or 26.2 per cent. There was also an increase in Ontario of 35,704,000 feet, or 56.8 per cent.

The price of spruce lumber increased by 46 cents during 1909. It was most expensive in Saskatchewan, at \$16.54, and cheapest in Prince Edward Island at \$11.53. Spruce is the only lumber in Canada cut in the whole nine provinces.

The 1908 cut of spruce in Maine exceeded the 1909 cut in Quebec by 3,154,000 feet, less than 1 per cent. The average price in Maine was \$16.56 per thousand, as compared with \$14.23 per thousand in Quebec; the average price in the United States was \$16.25 per thousand, as compared with \$14.55 in Canada.

WHITE PINE.

White pine includes the eastern white pine (*Pinus strobus*) and the western white pine of British Columbia (*Pinus monticola*).

TABLE 6.
WHITE PINE LUMBER—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M	
	M. ft. B. M.	Per cent Distribution.		1908.	1909.
			\$	\$ cts.	\$ cts.
Canada.....	1,046,783	100	22,563,447	20 08	21 55
Ontario.....	887,930	84·8	19,823,696	21 08	22 33
Quebec.....	62,576	6·0	1,362,615	20 69	21 73
Nova Scotia.....	35,982	3·4	500,730	17 16	13 92
New Brunswick.....	30,197	2·9	435,300	17 62	14 42
British Columbia.....	30,058	2·9	439,200	13 35	14 63
Prince Edward Island.....	40	(1)	1,100	(2)	28 13

(1) Less than one-tenth of one per cent.

(2) No returns from Prince Edward Island for 1908.

Ontario dominated the white pine cut even more completely in 1909 than in 1908, cutting 84·8 per cent of the total in 1909 as compared with 80·1 per cent in 1908. This increase of 124,445,000 feet or 16·3 per cent in Ontario is accompanied by an increase of 15,613,000 feet or 76·6 per cent in Nova Scotia, an increase of 13,859,000 feet or 84·4 per cent in New Brunswick, and an increase of 22,428,000 feet or 293·9 per cent in British Columbia. Quebec alone showed a decrease, the white pine cut being smaller in 1909 than in 1908 by 82,116,000 feet or 56·7 per cent.

The average price of white pine for Canada increased \$1.47 during 1909. It was dearest where only a very small quantity was cut, in Prince Edward Island, at \$28.13; it was cheapest in Nova Scotia at \$13.92.

Minnesota alone of the American states exceeds Ontario in white pine production. The cut in Minnesota for 1908 was 1,072,613,000 feet, 184,683,000 feet or 20·8 per cent greater than the cut for Ontario in 1909. The average price in Minnesota in 1908 was \$18.19 as compared with \$21.08 in 1908 in Ontario, and the average price in the United States was \$18.17 as compared with \$20.08 for the same year in Canada.

DOUGLAS FIR.

Douglas Fir in Canada is confined almost exclusively to British Columbia, where it is the chief timber. A small quantity is cut on the eastern slope of the Rocky Mountains in Alberta.

TABLE 7.
DOUGLAS FIR LUMBER.—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	Ave. Value per M.	
	M. Feet B. M.	Per cent Distribution.		1908.	1909.
Canada.....	469,658	100	\$6,850,579	\$13·78	\$14·58
British Columbia.....	469,408	99·99	6,847,279	13·72	14·59
Alberta.....	250	·01	3,300	14·69	13·20

The total output of fir in 1909 was greater than in 1908 by 97,813,000 feet or 26.2 per cent. The increase in cut was entirely in British Columbia; the cut of fir in Alberta is almost negligible.

The price of fir increased 80 cents during 1909. The average price for 1909 was \$14.58.

The cut of fir in British Columbia is yet small compared with that in Washington and Oregon. Idaho and California also greatly exceed British Columbia in the annual production of fir lumber. The average price of fir in the United States for 1908 was \$11.97 per thousand, as compared with \$13.78 for the same year in Canada.

HEMLOCK.

Under hemlock are included both the Eastern and the Western species (*Tsuga canadensis* and *Tsuga heterophylla*).

TABLE 8.

HEMLOCK LUMBER.—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	Average Value per M.	
	M. Feet B. M.	Per cent Distribu- tion.		1908.	1909.
Canada	302,721	100	\$3,577,372	\$12.44	\$11.81
Ontario.....	162,405	53.6	1,977,114	13.07	12.11
Quebec.....	55,053	18.2	639,062	12.75	11.61
Nova Scotia.....	47,465	15.7	496,569	9.98	10.46
British Columbia.....	22,736	7.5	311,579	12.39	13.69
New Brunswick.....	14,878	4.9	151,003	10.83	10.75
Prince Edward Island.....	169	.1	1,995	(2)	11.80
Manitoba.....	15	(1)	250	(3)	16.67

(1) Less than one-tenth of one per cent.

(2) No reports for 1908 from Prince Edward Island.

(3) No hemlock reported for 1908 from Manitoba.

The production of hemlock for 1909 exceeded that for 1908 by 43,625,000 feet, or 16.8 per cent. Over one-half the Canadian hemlock is cut in Ontario. The greater part of the 1909 increase in cut was in Ontario where the 1909 cut exceeded that of 1908 by 27,144,000 feet, or 20 per cent. In point of quantity hemlock is exceeded only by white pine in Ontario's lumber production. In Quebec and Nova Scotia there was practically no increase in hemlock production in 1909. British Columbia showed an increase of 10,880,000 feet, or 91.7 per cent, and New Brunswick an increase of 5,732,000 feet, or 62.6 per cent. The price of hemlock decreased 63 cents during 1909. It was dearest in British Columbia at \$13.69, and cheapest in New Brunswick at \$10.15.

Five American states, Wisconsin, Pennsylvania, Michigan, West Virginia and New York exceed Ontario in hemlock production. In each of the first three named, the annual production is greater than the total for Canada. The average price of hemlock in the United States for 1908 was \$13.65; in Canada it was \$12.44 for the same year.

CEDAR.

Under this heading are included the white cedar of the East (*Thuja occidentalis*), the red cedar of the Pacific coast (*Thuja plicata*) and the cypress of the Pacific coast (*Chamaecyparis Nootkatensis*.) Very little of the latter is manufactured.

TABLE 9.

CEDAR LUMBER.—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	Average Value per M.	
	M. Feet B. M.	Per cent Distribu- tion.		1908	1909
Canada	189,391	100	\$2,645,379	\$15.69	\$13.96
British Columbia.....	140,904	74.4	1,992,884	17.22	13.43
Quebec.....	17,535	9.3	227,703	12.43	12.99
New Brunswick.....	16,622	8.7	204,369	11.29	12.29
Ontario.....	14,275	7.6	220,008	13.95	15.41
Prince Edward Island.....	50	(1)	400	(2)	8.00
Manitoba.....	5	(1)	75		15.00

(1) Less than one-tenth of one per cent.

(2) No reports for 1908 from Prince Edward Island.

There was an increase of 66,557,000, or 54.2 per cent, in the production of cedar for 1909. This increase was mostly due to a larger cut in British Columbia, the province producing three-quarters of the Canadian cedar. The increase in British Columbia over 1908 was 60,091,000, or 75.5 per cent. Quebec, the second province in cedar production, showed a decrease of 10,093,000 feet, or 36.5 per cent and was nearly approached by New Brunswick which showed an increase of 14,240,000, or 599.8 per cent. This great increase places New Brunswick third in cedar production in Canada, a place previously held by Ontario, which for 1909 showed an increase of 1,777,000 feet, or 14.2 per cent.

The average price of cedar throughout Canada dropped \$1.73 during 1909. The decrease was due to a drop of \$3.79 in the price in British Columbia; all other provinces showed an increase in the average price. During 1909 cedar was dearest in Ontario at \$15.41, and cheapest in Prince Edward Island where the cut was very small, at \$8.00.

No state in the United States equals British Columbia in cedar production. The nearest approach is Washington, which in 1909 cut 115,135,000 feet. The average price during 1908 was \$22.14 in Washington, \$17.22 in British Columbia, \$18.03 for the United States and \$15.69 for Canada.

RED PINE.

Red pine (*Pinus resinosa*) is confined to Eastern Canada.

TABLE 10.

RED PINE LUMBER.—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M. Feet B.M.	Per cent Dis- tribution.		1908.	1909.
			\$	\$ cts.	\$ cts.
Canada	165,886	100	2,777,734	16 88	16 76
Ontario	153,455	92.5	2,607,476	17 23	17 03
Quebec	8,493	5.1	121,178	16 09	14 27
Nova Scotia	3,195	1.9	41,780	15 46	13 08
New Brunswick	743	0.5	7,400	12 08	9 96

There was an increase of 31,059,000 feet, or 23 per cent, in the red pine cut for 1909. This was not sufficient to enable it to maintain fourth place, and in 1909 for probably the first time the red pine output was exceeded by the cedar output. Ontario produces over nine-tenths of the red pine cut in Canada; the cut in Ontario for 1909 exceeded that for 1908 by 53,336,000 feet, or 53.3 per cent. Quebec is still second in red pine production, but the cut for 1909 showed a great falling-off of 23,366,000 feet, or 72.7 per cent. There was an increase in Nova Scotia of 2,227,000 feet which gave it third place over New Brunswick where there was a decrease of 913,000 feet. The average price of red pine in Canada was almost the same in 1909 as 1908, decreasing only 12 cents. It was most expensive in Ontario where it was \$17.03, and cheapest in New Brunswick where it was only \$9.96.

In the United States Government reports red pine is not differentiated from white pine, therefore comparison cannot be given.

BALSAM.

The balsam reported by Canadian lumbermen is all of the Eastern species (*Abies balsamea*). Small quantities of the Western species (*Abies lasiocarpa* and *Abies nobilis*) are cut in Alberta and British Columbia, but are not reported separately; they are probably mixed with and sold as spruce.

TABLE 11.

BALSAM LUMBER.—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M. Feet B.M.	Per cent Dis- tribution.		1908.	1909.
			\$	\$ cts.	\$ cts.
• Canada	91,065	100	1,170,840	12 53	12 85
Quebec	69,780	76.6	885,841	12 57	12 69
Ontario	14,157	15.5	217,914	13 97	15 39
New Brunswick	5,478	6.0	51,310	11 06	9 37
Nova Scotia	1,585	1.7	15,975	11 82	9 51
Prince Edward Island	65	0.2	700	(1)	10 77

(1) No reports for 1908 from Prince Edward Island.

The growing scarcity of other woods in the East is bringing balsam to the fore. The cut in Canada for 1909 was 42,577,000 feet, or 87·8 per cent greater than in 1908. Three-quarters of the balsam cut in Canada is produced in Quebec; the increased cut in Quebec in 1909 was nearly equal to that in the Dominion, being 46,588,000 feet, an increase of 200·3 per cent over 1908. Balsam is now fourth in the list of important woods in Quebec, being exceeded only by spruce, white pine and hemlock. Up to 1909 red pine and cedar were ahead of balsam in lumber production in Quebec. There was an increase of about 2,000,000 feet in the Ontario cut for 1909, a decrease of about 7,000,000 feet in the New Brunswick cut, and an increase of about 800,000 feet in the cut in Nova Scotia.

The price of balsam lumber was about the same in 1909 as in 1908, increasing only 32 cents—to \$12·85. It was highest in Ontario at \$15·39 and lowest in New Brunswick at \$9·37.

The cut in Quebec for 1909 was as great as in the whole of the United States for 1908. Maine, the leading American State, produced 45,022,000 feet of balsam lumber in 1908. The average price of balsam in the United States for 1908 was \$14·36; it was \$12·53 in Canada for the same year.

TAMARACK.

This term includes both the Eastern (*Larix laricina*) and the Western (*Larix occidentalis*) species. The Western species is manufactured in British Columbia only.

TABLE 12.

TAMARACK LUMBER.—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M. Feet B.M.	Per cent Dis- tribution.		1908.	1909.
			\$	\$ cts.	¢ cts.
Canada	68,720	100	1,027,344	13 94	14 95
British Columbia	44,699	65·5	687,466	13 50	15 38
Ontario	12,337	17·9	183,444	14 67	14 87
Quebec	7,713	11·2	104,419	15 23	13 64
Manitoba	3,895	5·3	51,047	15 27	13 11
Saskatchewan	55	0·1	668	17 49	12 15
Nova Scotia	16	(1)	248	(2)	15 50
New Brunswick	5	(1)	52	12 00	11 50

(1) Less than one-tenth of one per cent.

(2) No tamarack reported for 1908 from Nova Scotia.

The cut of tamarack was 35,752,000 feet in 1908, and was 68,720,000 feet in 1909, an increase of 32,968,000 feet, or 92·2 per cent. There was a large increase in each of the provinces producing tamarack; the increase was greatest in British Columbia, the province producing two-thirds of the tamarack cut in Canada, where it was 21,289,000 feet, or 90·9 per cent. Tamarack is now fourth in the list of the British Columbia woods; it had previously been fifth, but in 1909 it passed yellow pine.

The average price of tamarack advanced \$1·01 from 1908 to 1909. Excepting in Nova Scotia, New Brunswick and Saskatchewan, where the cut is negligible, it was dearest in British Columbia at \$15·38, and cheapest in Manitoba at \$13·11.

The average price of western tamarack in the United States in 1908 was \$11.81, the price of the eastern tamarack was \$12.86. In Canada the prices in 1908 were \$13.50 and \$14.15 respectively. In spite of the lower average price of the Western species, it is the superior timber.

BIRCH.

All species of birch are included; the most important is yellow birch (*Betula lutea*). Birch is the most important hardwood cut in Canada.

TABLE 13.

BIRCH LUMBER.—Quantity and Value of Cut by Provinces, 19

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M. Feet B.M.	Per cent Dis- tribution.		1908.	1909.
			\$	\$ cts.	\$ cts.
Canada.....	53,016	100	990,393	16 86	18 68
Ontario	19,293	36.4	419,784	17 15	21 76
New Brunswick.....	15,998	30.2	308,335	12 83	19 27
Quebec.....	12,444	23.5	200,511	20 09	16 11
Nova Scotia.....	5,128	9.7	59,428	13 58	11 59
Prince Edward Island.....	127	.2	1,990	(²)	15 67
Saskatchewan.....	20	(¹)	250	(²)	12 50
Manitoba.....	6	(¹)	95	25 00	15 83

(¹) Less than one-tenth of one per cent.

(²) No reports from Prince Edward Island for 1908.

(³) No birch reported from Saskatchewan for '08.

Birch showed only an average increase in 1909, an increase of 7,183,000 feet, or 15.7 per cent. Over one-third the birch cut in Canada is produced in Ontario; the two provinces making up the greater part of the remainder are New Brunswick and Quebec. There was a slight decrease in the cut in Ontario, Quebec and Nova Scotia. This was made up by a large increase of 9,500,000 feet in New Brunswick. This increase gave New Brunswick second place in birch production, previously held by Quebec. The price of birch increased \$1.82 over the average of 1908. It was cheapest in Nova Scotia at \$11.59, and highest in Ontario at \$21.76.

A much larger quantity of birch, as of all hardwoods, is produced in the United States than in Canada. Two states, Wisconsin and Maine, each produce annually more birch than all Canada; Wisconsin almost three times as much, and four other states, Michigan, New York, Vermont and Pennsylvania, produce more birch annually than Ontario. The average price in the United States in 1908 was \$16.42; in Canada it was \$16.86.

MAPLE.

All species of maple are included; nearly all the lumber manufactured is hard maple (*Acer saccharum*).

TABLE 14.

MAPLE LUMBER.—Quantity, and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE	
	M. Feet B.M.	Per cent Dis- tribution.		1908.	1909.
			\$	\$ cts.	\$ cts.
Canada	43,072	100	729,162	16 99	16 93
Ontario.....	36,006	83.5	626,801	18 07	17 48
Quebec.....	3,101	7.2	57,016	14 20	18 38
Nova Scotia.....	2,833	6.6	33,608	15 70	11 83
New Brunswick.....	1,067	2.4	11,167	10 64	10 27
Prince Edward Island.....	45	.1	670	(1)	14 89

(1) No reports from Prince Edward Island for 1908.

The maple cut for 1909 exceeded that for 1908 by 12,388,000 feet, or 40.4 per cent. In spite of this large increase maple is still tenth in the list of Canadian woods, and second in the list of hardwoods. The great increase in the maple cut was in Ontario, where five-sixths of the maple is produced. There was a comparatively large increase in Nova Scotia with decreases in Quebec and New Brunswick. The cut in Ontario for 1909 was 12,304,000 feet, or 51.9 per cent greater than in 1908. The average price of maple remained about the same in 1909 as in 1908, decreasing six cents per thousand. It was lowest in New Brunswick at \$10.27 and highest in Quebec at \$18.38.

Although Canada is the land of the maple, the annual cut in the United States is about twenty times greater than in Canada; in 1908 it was 874,983,000 feet. Michigan, New York, Wisconsin and Pennsylvania each cut more maple lumber per year than does Canada. The average price of maple in the United States in 1908 was \$16.30; in Canada it was \$16.99.

BASSWOOD.

There is only one species of basswood in Canada (*Tilia americana*).

TABLE 15.

BASSWOOD LUMBER.—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M. Feet B.M.	Per cent Dis- tribution.		1908.	1909.
			\$	\$ cts.	\$ cts.
Canada.....	42,506	100	836,602	19 26	19 68
Ontario.....	29,671	69.8	564,073	19 45	19 01
Quebec.....	12,835	30.2	272,529	18 88	21 24

The cut of basswood in Canada for 1909 was much greater than in 1908, showing an increase of 27,728,000 feet, or 187.6 per cent. This increase enabled it to pass elm, jack pine and yellow pine in lumber production, and brought it to eleventh place from fourteenth. Ontario produces about two-thirds of the Canadian basswood; the remainder comes from Quebec. The proportionate rate of increase was about the same in each province. The price of basswood was 42 cents higher in 1909 than in 1908. For 1909 it was \$2.23 higher in Quebec than in Ontario.

The United States produces annually about seven times as much basswood as does Canada; the cut in 1908 was 319,505,000 feet. Wisconsin and Michigan each cut more basswood in 1908 than did Canada in 1909. The average price of basswood for 1908 was \$1.24 higher in the United States than in Canada.

ELM.

There are several species of elm lumber cut in Canada; the most important is soft elm (*Ulmus americana*).

TABLE 16.

ELM LUMBER.—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M feet B.M.	Per cent Dis- tribution.		1908.	1909.
Canada.....	34,697	100	\$ 592,999	\$ cts. 17 92	\$ cts. 17 09
Ontario.....	32,729	95.5	559,483	18 07	17 09
Quebec.....	1,968	4.5	33,516	15 25	17 03

There were 34,697,000 feet of elm cut in Canada in 1909; this was an increase of 8,389,000 feet, or 31.8 per cent over 1908. Nearly all the elm cut in Canada, 95.5 per cent, is produced in Ontario. The remainder is cut in Quebec. The average price of elm for 1909 decreased 83 cents from 1908. For 1909 the price was practically the same in Ontario and Quebec.

The annual production of elm in the United States is about eight times greater than in Canada; for 1908 it was 273,845,000 feet. Wisconsin and Michigan each produce more elm per year than is cut in Canada. The average price of elm for 1908 was \$18.40 in the United States, and \$17.92 in Canada.

JACK PINE.

The Eastern species of jack pine, sometimes called grey and scrub pine, or, in Quebec, cypress, is known to botanists as *Pinus Banksiana*. The Western species cut in British Columbia under the names of lodgepole or black pine is known botanically as *Pinus contorta*.

TABLE 17.

JACK PINE LUMBER.—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M feet B.M.	Per cent Dis-tribution.		1908.	1909.
Canada.....	27,819	100	\$ 404,596	\$ cts. 13 96	\$ cts. 14 58
Ontario.....	13,002	47.1	227,688	13 94	17 51
British Columbia.....	6,281	22.6	80,744	12 00	12 84
Alberta.....	4,906	17.6	41,547	13 35	8 47
Nova Scotia.....	1,575	5.6	15,775	11 81	10 02
Quebec.....	1,425	5.0	26,544	14 99	18 63
New Brunswick.....	400	1.4	4,500	(2)	11 25
Saskatchewan.....	220	0.7	7,650	17 00	19 43
Manitoba.....	11	(1)	148	14 66	14 10

(1) Less than one-tenth of one per cent. (2) No Jack Pine reported for New Brunswick in 1908.

Jack pine was one of the few species to show a decrease in cut for 1909. There were 27,819,000 feet of jack pine cut in 1909, a decrease of 633,000 feet, or 2.2 per cent as compared with 1908. Nearly one half the jack pine of Canada is cut in Ontario; five-sixths are cut in Ontario, British Columbia and Alberta. These three provinces each showed a small decrease in cut for 1909. The maritime provinces alone showed a small increase. Jack pine is used more largely for railway ties than for lumber.

The average price of jack pine was 62 cents higher in 1909 than in 1908.

In the United States Government Reports, jack pine is not separated from white pine.

YELLOW PINE.

The only yellow pine cut in Canada is the western yellow or bull pine (*Pinus ponderosa*) of southern interior British Columbia. This should not be confused with the hard yellow pine imported in large quantities into Eastern Canada from the Southern States.

TABLE 18.

YELLOW PINE LUMBER.—Quantity and Value of Cut, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M feet B.M.	Per cent Dis-tribution.		1908.	1909.
Canada.....	26,975	100	\$ 345,710	\$ cts. 17 46	\$ cts. 12 82
British Columbia.....	26,975	100	345,710	17 46	12 82

Although the cut of all other important British Columbian woods increased in 1909, the quantity of yellow pine cut was 3,617,000 feet, or 11·8 p. c. less in 1909 than in 1908. On this account yellow pine dropped from eleventh place which it held in 1908 to fourteenth in 1909. The area of yellow pine forest in Canada is very small; the annual production can never be great. The average price for 1909 was \$4.64, less than it was in 1908.

ASH.

There are two species of ash cut in Canada, white ash (*Fraxinus americana*) and ash (*Fraxinus nigra*).

TABLE 19.

ASH LUMBER—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total value.	AVERAGE VALUE PER M.	
	M. feet B.M.	Per cent Dis- tribution.		1908.	1909.
			\$	\$ cts.	\$ cts.
Canada.....	17,144	100	315,367	19 00	18 40
Ontario.....	8,782	51	175,165	19 86	19 95
Quebec.....	8,312	48·8	139,457	17 12	16 78
Nova Scotia.....	39	0·2	527	19 84	13 51
New Brunswick.....	9	(1)	168	(2)	18 46
Prince Edward Island.....	2	(1)	50	(3)	25 00

(1) Less than one-tenth of one per cent. (2) No ash reported from New Brunswick for 1908. (3) No reports from Prince Edward Island for 1908.

Practically all the ash produced in Canada is cut in Ontario and Quebec; a little over one half is cut in Ontario. The cut for 1909 was substantially greater than for 1908. There were 17,144,000 feet cut in 1909, an increase of 5,953,000 feet, or 62·1 per cent over 1908. There was a much greater increase in Quebec than in Ontario; the increase in Quebec was 4,531,000 feet, or 119·3 per cent, the increase in Ontario was 1,608,000 feet, or 22·4 per cent. Nova Scotia, the most important of the maritime provinces in the production of hardwood lumber, cut only 39,000 feet of ash in 1909, and 236,000 feet in 1908. The average price of ash was 60 cents lower in 1909 than in 1908. During 1909 it was \$3.17 higher in Ontario than in Quebec. In the United States the annual cut of ash is thirteen times as great as it is in Canada. Each of five states, Michigan, Arkansas, Ohio, Indiana and Wisconsin, exceeds Canada in the annual production of ash. The average price of ash in the United States for 1908 was \$25.51; in Canada it was \$19.00.

BEECH.

There is only one species of beech cut in Canada (*Fagus grandifolia*). The scarcity of other more valuable hardwoods is leading to an increased use of beech.

TABLE 20.

BEECH LUMBER—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total value.	AVERAGE VALUE PER M.	
	M. feet B.M.	Per cent Dis- tribution.		1908.	1909.
Canada	15,036	100	\$ cts. 216,052	\$ cts. 14 53	\$ cts. 14 36
Ontario	8,224	54.7	131,651	15 12	16 01
Nova Scotia	3,972	26.4	46,323	10 98	11 66
New Brunswick	1,495	10	14,766	(1)	9 87
Quebec	1,275	8.4	22,379	14 28	17 55
Prince Edward Island	70	0.5	933	(2)	13 33

(1) No beech reported from New Brunswick for 1908.

(2) No reports from Prince Edward Island for 1908.

The increase in the cut of beech for 1909 was proportionately greater than that shown by any other wood. The cut for 1909 was 15,036,000 feet, which was an increase of 9,953,000 feet, or 195.8 per cent over the quantity cut in 1908. Ontario produces over half the beech manufactured in Canada; about one-quarter is cut in Nova Scotia; the remainder comes from the other three Atlantic provinces. The increase in the cut of beech was general in all the eastern provinces. The price of beech was about the same in 1909 as in the preceding year, being 17 cents higher in 1908.

The annual cut of beech in the United States is about twenty-seven times as great as it is in Canada. The average price of beech in 1908 was \$16.27 in the United States, \$14.53 in Canada.

POPLAR.

There are several species of poplar in Canada, some of them widely distributed in large quantities throughout the northern timber belt. None of them are yet cut in large quantities for lumber. Those which are most commonly manufactured into lumber are, large toothed aspen (*Populus grandidentata*) aspen poplar (*Populus tremuloides*) and balsam or black poplar (*Populus balsamifera*). It is possible that the figures for Ontario include a small quantity of yellow poplar or tulip (*Liriodendron tulipifera*).

TABLE 21.

POPLAR LUMBER—Quantity and Value of Cut by Provinces, 1909.

Province.	QUANTITY.		Total value.	AVERAGE VALUE PER M.	
	M. feet B.M.	Per cent Dis- tribution.		1908.	1909.
Canada	7,457	100	\$ 101,200	\$ cts. 12 45	\$ cts. 13 57
Ontario	3,114	41.8	41,568	13 71	13 35
Quebec	1,962	26.3	28,938	15 03	14 75
Manitoba	1,412	18.9	18,980	11 80	13 44
Nova Scotia	480	6.5	6,146	10 83	12 80
Alberta	409	5.5	4,765	11 66	11 64
New Brunswick	54	0.7	482	(1)	8 89
Prince Edward Island	26	0.3	321	(2)	12 35

(1) No poplar reported from New Brunswick for 1908.

(2) No reports from Prince Edward Island for 1908.

There was only an average increase of 16.5 per cent in the cut of poplar for 1909. Ontario has a strong lead in the production of poplar. Ontario and Quebec taken together produce about two-thirds of the poplar cut in Canada. The average price of this lumber was \$1.12 higher in 1909 than in 1908.

OAK.

Of the several species of oak found in Canada only two, white oak (*Quercus alba*) and red oak (*Quercus rubra*) are sufficiently common to be of importance in lumber production. Only relatively small quantities of oak can now be secured in Canada; the timber is chiefly confined, as is the case with other important hardwoods, to farmers' woodlots. The oak cut in Manitoba is burr oak (*Quercus macrocarpa*). A portion of the oak manufactured in Canada is United States timber, imported in the log.

TABLE 22.

OAK LUMBER.—Quantity and Value of Cut, by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M. Feet B.M.	Per cent Distribution.		1908.	1909.
Canada	6,646	100	\$ 199,205	\$ cts. 21 72	\$ cts. 29 97
Ontario	5,288	79.5	162,706	31 24	30 77
Nova Scotia	864	13.1	17,136	24 32	19 84
Quebec	492	7.4	19,313	37 24	39 28
Manitoba	2	(1)	60	(2)	25 00

(1) Less than one-tenth of one per cent.

(2) No oak reported from Manitoba in 1908.

The increase in the oak cut for 1909 was 891,000 feet or 15.5 per cent. There were small increases in the production in Ontario and Nova Scotia, a decrease in Quebec. The production in each province is so small that the cutting of one oak grove would have quite an effect upon the returns. Over three-quarters of the Canadian oak is produced in Ontario, the remainder in Nova Scotia and Quebec.

Excepting walnut, oak is the most expensive Canadian timber. The average price was \$31.72 in 1908 and \$29.97 in 1909.

The United States is the great source of oak lumber. Oak stands fourth in importance in the list of United States woods. There were 2,771,511,000 feet manufactured in 1908. The average price per thousand was \$21.23. The cut of oak has long passed the maximum in Canada.

HICKORY.

Hickory is another wood which is, for commercial purposes, nearly extinct in Canada. It never existed in large quantities, but now it is confined to stray trees in farmers' woodlots.

TABLE 23.

HICKORY LUMBER.—Quantity and Value of Cut, by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M. Feet B.M.	Per cent Distribution.		1908.	1909.
Canada.....	835	100	\$ 22,100	\$ cts. 20 02	\$ cts. 26 47
Ontario.	815	97.6	21,780	20 02	26 72
Quebec.....	20	2.4	320	(1)	16 00

(1) No hickory reported from Quebec for 1908.

The cut of hickory for 1909 was 835,000 feet; a part of this consisted of logs imported from the United States. This cut was 329,000 feet, or 28.3 per cent smaller than that for 1908. The decrease was altogether in Ontario; no hickory was reported from Quebec for 1908. The scarcity of hickory seems reflected in its average price for 1909, which was \$6.45 greater than for 1908.

The production of hickory in the United States was 197,372,000 feet, valued at \$29.66 per M.

The production of this valuable lumber has long passed its maximum in Canada.

WALNUT.

The small quantity of walnut (*Juglans nigra*) originally existing in Canada has been practically all used up. Of the kindred species, butternut (*Juglans cinerea*) none was reported for 1909.

TABLE 24.

WALNUT LUMBER. - Quantity and Value of Cut, by Provinces, 1909.

Province.	QUANTITY.		Total Value.	AVERAGE VALUE PER M.	
	M. Feet B.M.	Per cent Distribution.		1908.	1909.
Canada.....	51	100	\$ 2,440	\$ cts. 36 74	\$ cts. 47 84
Ontario.....	48	94.1	2,395	30 13	50 32
Quebec.....	3	5.9	65	67 20	26 00

The cut of walnut in Canada for 1909 was 51,000 feet; for 1908 it was reported as 28,000 feet. In both years Ontario produced nearly all the walnut lumber. Walnut is the most expensive Canadian lumber; the average price for 1909 was \$47.84 per thousand. The increase in price, \$11.10 per thousand, was the greatest made by any timber.

Walnut is still an important wood in the United States. There were 43,681,000 feet cut in 1908, at an average value of \$42.53.

LEADING PROVINCES.

The provinces leading in the cut of each of the twenty different species manufactured in Canada are shown in the following table, together with the percentage of each species manufactured in the leading province.

TABLE 25.

PROVINCES leading in the cut of each species, 1909, together with percentage cut of each species in the leading Province.

Province.	Species of wood in which the Province stood first, with percentage of species cut in that Province.
Ontario.....	White Pine, 84.8 per cent.; Hemlock, 53.6 per cent.; Red Pine, 32.5 per cent.; Birch, 36.4 per cent.; Maple, 83.5 per cent.; Basswood, 69.8 per cent.; Elm, 95.5 per cent.; Jack Pine, 47.1 per cent.; Ash, 51 per cent.; Beech, 54.7 per cent.; Poplar, 41.8 per cent.; Oak, 79.5 per cent.; Hickory, 97.6 per cent.; Walnut, 94.1 per cent.
British Columbia.....	Douglas Fir, 100 per cent.; Cedar, 74.4 per cent.; Tamarack, 65.5 per cent.; Yellow Pine, 100 per cent.
Quebec.....	Spruce, 31.8 per cent.; Balsam, 76.6 per cent.

Both in quantity and variety the centre of Canada's lumber production is Ontario, the province which in 1909 led in the cut of fourteen kinds of wood. Ontario's lead is greatest in the woods of high technical value, the pines and hardwoods. The cut of hardwoods in Ontario for 1909 was 143,970,000 feet or 65.3 per cent of the total quantity of hardwoods cut in Canada. The majority of this hardwood is cut from farmers' woodlots and lands privately owned. Canada is in a bad way for hardwoods.

SQUARE TIMBER.

The only figures available as to the amount of square timber cut annually are the statistics of exports furnished by the Department of Trade and Commerce. There is very little hewn square timber used in Canada, and as all the sawn square timber is entered under the head of lumber, the quantity of hewn square timber exported is approximately the quantity cut. On the following table are given the quantities of square timber of different species exported during the calendar year 1909.

TABLE 26.

(1) QUANTITY AND VALUE of Canadian Square Timber exported, 1909.

Kind of Wood.	Quantity Exported, 1909.	Total Value.	Average Value per Ton.
	(2) Tons.	\$	\$ cts.
Total	41,442	991,491	...
White Pine.....	20,539	655,784	31 92
Birch.....	13,935	148,105	10 63
Red Pine.....	4,445	134,633	30 29
Elm.....	1,675	35,808	21 38
Ash.....	429	6,183	14 41
Oak.....	416	10,936	26 29
Maple.....	3	42	14 00

(1) During 1909 the following foreign timber was exported through Canadian ports: Oak, 4,146 tons; Elm, 2,634 tons; Red Pine, 60 tons.

(2) The expression 'ton,' applied to square timber, means 40 cubic feet.

White pine is yet and always has been by measurement the chief square timber exported; in 1909 it was 60.7 per cent of the total. Birch is and has been for many years second.

The highest price per cubic foot was that paid for oak, 54 cents, the lowest was birch at 22 cents. Although the price per ton was slightly higher for white pine, the price of red pine for 1909 was 8 cents higher per cubic foot than that of white pine.

The square timber trade is declining. It passed the maximum in 1877. It is now difficult to secure in Canada first-class clear timber of a quality suitable for squaring. The extent of the decline is shown in the following tabular statement which gives, as taken from the Trade and Commerce reports, the average annual export of square timber, with values, for the years 1871-1880, inclusive.

TABLE 27.

THE AVERAGE ANNUAL EXPORT of Square Timber when the Trade was at its height, 1871-1880, with Average Total Annual Value and Average Value per ton and cubic foot.

Kind of Wood.	Quantity Exported Annually.	Total Value for the Average Year.	Average Value per Ton.
	Tons.	\$	\$ cts.
Total.....	491,117	5,139,111	.....
White Pine.....	305,062	3,004,092	9 84
Oak.....	80,683	1,188,832	14 74
Birch.....	34,466	258,436	7 49
Elm.....	21,897	258,658	11 81
Others (2).....	49,009	429,093	8 75

(1) 1 ton = 40 cubic feet.

(2) These are unenumerated in the government reports, but probably include Red Pine, Ash and Maple.

The average white pine export for the decade 1871-1880 was about 15 times as great as it was in 1909; the export of oak was then 194 times what it was in 1909; the export of birch has kept up better, it was in 1909 nearly one half as great as it was in the seventies. The export of elm has decreased largely; it is now only one-thirteenth as great as it was thirty years ago. The other timbers, red pine, ash and maple, are only exported to about one-tenth the quantity previously shipped.

The decrease in the shipment has been partially made up by an increase in prices. The greatest increase has been in the price of white pine, which has gone up 208 per cent, from 12 cents to 38 cents per cubic foot; the price of elm has nearly doubled, from 24 cents to 43 cents per cubic foot; oak has increased from 30 to 54 cents, and birch from 15 to 22 cents per cubic foot.

It is interesting to note that, unless it was exceeded previously, the greatest export trade of square white pine timber was in 1868 when 37,954,788 cubic feet were exported, valued at \$2,467,629. The greatest export of oak was 4,502,521 cubic feet in 1877; the value of this year's shipment was \$1,501,020. Birch saw its best year in 1875 when 2,653,966 cubic feet, valued at \$454,581, were exported. The greatest shipment of elm was in 1869 when 1,773,859 cubic feet were exported for \$318,107. Since the year of the maximum every species has experienced a steady decline.

LATH.

The lath production of Canada is shown by provinces in Table 28.

TABLE 28.

LATH.—Quantity and Value of Cut by provinces, 1908 and 1909, with per cent distribution and average values.

PROVINCE.	QUANTITY, 1908.		QUANTITY, 1909.		Total Value, 1909.	AVERAGE VALUE PER M.	
	Thousands.	Per cent Distri- bution.	Thousands.	Per cent Distri- bution.		1908.	1909.
Canada.....	671,562	100	822,124	100	\$ 1,979,034	\$ 2 21 cts.	\$ 2 46 cts.
Ontario.....	263,241	39.2	287,315	34.9	708,979	2 33	2 46
New Brunswick.....	138,991	20.7	164,635	20.0	391,428	2 05	2 32
Quebec.....	92,914	13.8	97,518	11.9	218,531	2 03	2 24
Prince Edward Island.....	(1)	(1)	90,786	11.0	271,689	(1)	2 99
British Columbia.....	86,862	12.9	77,487	9.4	160,830	2 39	2 08
Nova Scotia.....	62,638	9.3	66,929	8.2	150,956	2 18	2 26
Saskatchewan.....	18,477	2.7	26,339	3.2	52,729	2 17	2 00
Manitoba.....	7,370	1.1	8,231	1.0	14,520	1 38	1 76
Alberta.....	1,069	0.3	2,882	0.4	9,572	3 35	3 32

(1) No reports received from Prince Edward Island for 1908.

There was an increase of 150,562,000 pieces, or 22.4 per cent in the manufacture of lath for 1909. The relative position of the provinces is unchanged from 1908 except that reports received from Prince Edward Island for 1909 give it fourth place, previously held by British Columbia. The manufacture of lath is, in Prince Edward Island, much greater in proportion to the lumber cut than in any other province. One-third of the lath manufactured in Canada comes from Ontario; Ontario and New Brunswick together produce over one half, or 54.9 per cent of the total lath cut.

The average price of lath for 1909 was \$2.46 per thousand, an increase of 25 cents over 1908. The price fluctuated widely in different provinces; it was \$1.76 in Manitoba and \$3.32 in Alberta. The price of lath in the United States for 1908 was \$2.27.

In Ontario the majority of the lath cut are white pine, Douglas fir is the principal species used in British Columbia. Spruce leads in the other provinces.

Table 29 gives the quantities cut of different species, with per cent distribution and average value, comparing the 1908 output with that for 1909.

TABLE 29.

LATH.—Quantity and Value of Cut by species, with per cent distribution and average value, 1908 and 1909.

KIND OF WOOD.	QUANTITY, 1908.		QUANTITY, 1909.		Total Value, 1909.	AVERAGE VALUE PER M.	
	Thousands.	Per cent Distri- bution.	Thousands.	Per cent Distri- bution.		1908.	1909.
Canada (1).....	671,562	100	822,124	100	\$ 1,979,034	\$ 2 21	\$ 2 46
Spruce.....	271,187	45.1	379,031	46.1	726,953	2 12	1 99
White pine.....	206,250	34.5	257,977	31.3	548,542	2 37	2 51
Cedar.....	52,232	8.7	68,321	8.3	165,823	2 07	2 43
Douglas fir.....	40,907	6.8	40,081	4.9	73,114	2 13	1 83
Hemlock.....	20,662	3.4	33,470	4.0	73,671	1 99	2 20
Jack pine.....	(2)	.....	8,803	1.7	18,356	(2)	2 09
Balsam.....	6,315	1.2	4,887	0.6	10,387	2 39	2 13
Poplar.....	(2)	.....	200	(2)	130	(2)	2 10

(1) This total for Canada includes a quantity of lath of unspecified species.

(2) Less than one-tenth of one per cent.

(3) No jack pine or poplar lath were reported for 1908.

Spruce leads in the lath output by an even greater margin than in 1908; for 1909 nearly one half (46.1 per cent) of the lath manufactured were of spruce. Spruce and white pine together furnish four-fifths of the lath. The relative rank of the species remains unchanged for 1909 except that towards the end of the list small quantities of jack pine and poplar are introduced.

SHINGLES.

Comparative statistics of the 1909 shingle cut for Canada are presented in table 30.

TABLE 30.

SHINGLES—The Quantity and Value of the cut by Provinces, 1908 and 1909, with per cent distribution and average values.

PROVINCE.	QUANTITY, 1908.		QUANTITY, 1909.		Total Value, 1909. \$	AVERAGE VALUE PER M.	
	Thousands.	Per cent Dis- tribution.	Thousands.	Per cent Dis- tribution.		1908. \$ cts.	1909. \$ cts.
Canada.....	1,499,396	100	1,988,753	100	3,701,182	2 07	1 86
British Columbia.....	724,652	48.2	866,275	43.1	1,627,624	1 92	1 88
Quebec.....	406,440	27.2	337,668	17.0	628,610	2 09	1 87
Prince Edward Island.....	(1)	(1)	279,845	14.0	323,080	(1)	1 15
New Brunswick.....	109,913	7.3	243,202	12.2	460,860	2 96	1 93
Ontario.....	223,533	14.9	238,943	12.0	611,228	2 59	2 57
Nova Scotia.....	33,141	2.2	21,035	1.1	34,938	2 09	1 66
Alberta.....	(2)	(2)	1,285	(2)	2,067	(2)	1 61
Manitoba.....	1,125	0.1	460	(3)	625	2 80	1 49
Saskatchewan.....	592	(3)	50	(3)	150	2 30	3 00

(1) No reports were received from Prince Edward Island for 1908.

(2) No shingles were reported from Alberta for 1908.

(3) Less than one-tenth of one per cent.

There was an increase in the shingle production reported for 1909 of 489,357,000 or 32.6 per cent. A part of this increase is undoubtedly due to the more complete reports received for 1909. The value of the shingles produced in Canada, 1909, \$3,701,182 is greater than that of the lumber production of any species except spruce, white pine or Douglas fir, and exceeds the value of the 1909 lumber production of the province of Nova Scotia.

British Columbia holds by a great lead its position as first, with a cut of 866,275,000, valued at \$1,627,624. British Columbia produces two-fifths of the shingles manufactured in Canada; British Columbia and Quebec together produce three-fifths. A large cut reported from Prince Edward Island and a large increase in New Brunswick give these provinces third and fourth places. Quebec stands second in spite of a decrease, and because of a decrease Ontario falls to fifth place.

The average price of shingles at \$1.86 per thousand is 21 cents lower than in 1908. The price fluctuated widely in 1909; it was \$1.15 in Prince Edward Island, \$2.57 in Ontario and \$3.00 in Saskatchewan. The average price of shingles in the United States for 1908 was \$2.55.

Cedar was the chief species used in British Columbia, Ontario, Quebec and New Brunswick. Shingles were most commonly manufactured of spruce in Prince Edward Island and Nova Scotia; spruce, poplar and jack pine are used in the prairies.

The quantities manufactured of the different kinds of wood are shown in table 31.

TABLE 31.

SHINGLES—The Quantity and Value of the cut by species, 1908 and 1909, with per cent distribution and average value.

KIND OF WOOD.	QUANTITY, 1908.		QUANTITY, 1909.		Total Value, 1909. \$	AVERAGE VALUE PER M.	
	Thousands.	Per cent Dis- tribution.	Thousands.	Per cent Dis- tribution.		1908.	1909.
						\$ cts.	\$ cts.
Total (1).....	1,499,396	100	1,988,753	100	3,701,182	2 07	1 86
Cedar.....	1,397,411	96.4	1,507,285	75.7	2,983,687	2 07	1 98
Spruce.....	15,255	1.2	310,884	15.6	373,185	1 55	1 20
White Pine.....	25,462	1.8	135,363	6.8	278,153	2 05	2 06
Hemlock.....	8,671	0.5	11,996	0.6	20,097	1 76	1 67
Balsam.....	1,693	0.1	5,157	0.3	9,199	1 83	1 78
Douglas Fir.....	(2)	.....	3,140	0.2	5,280	.....	1 68
Jack Pine.....	380	(3)	1,665	0.1	2,763	2 00	1 66
Poplar.....	175	(3)	1,352	(3)	2,146	1 68	1 60

(1) There are included in this total a small quantity of shingles of unspecified species.

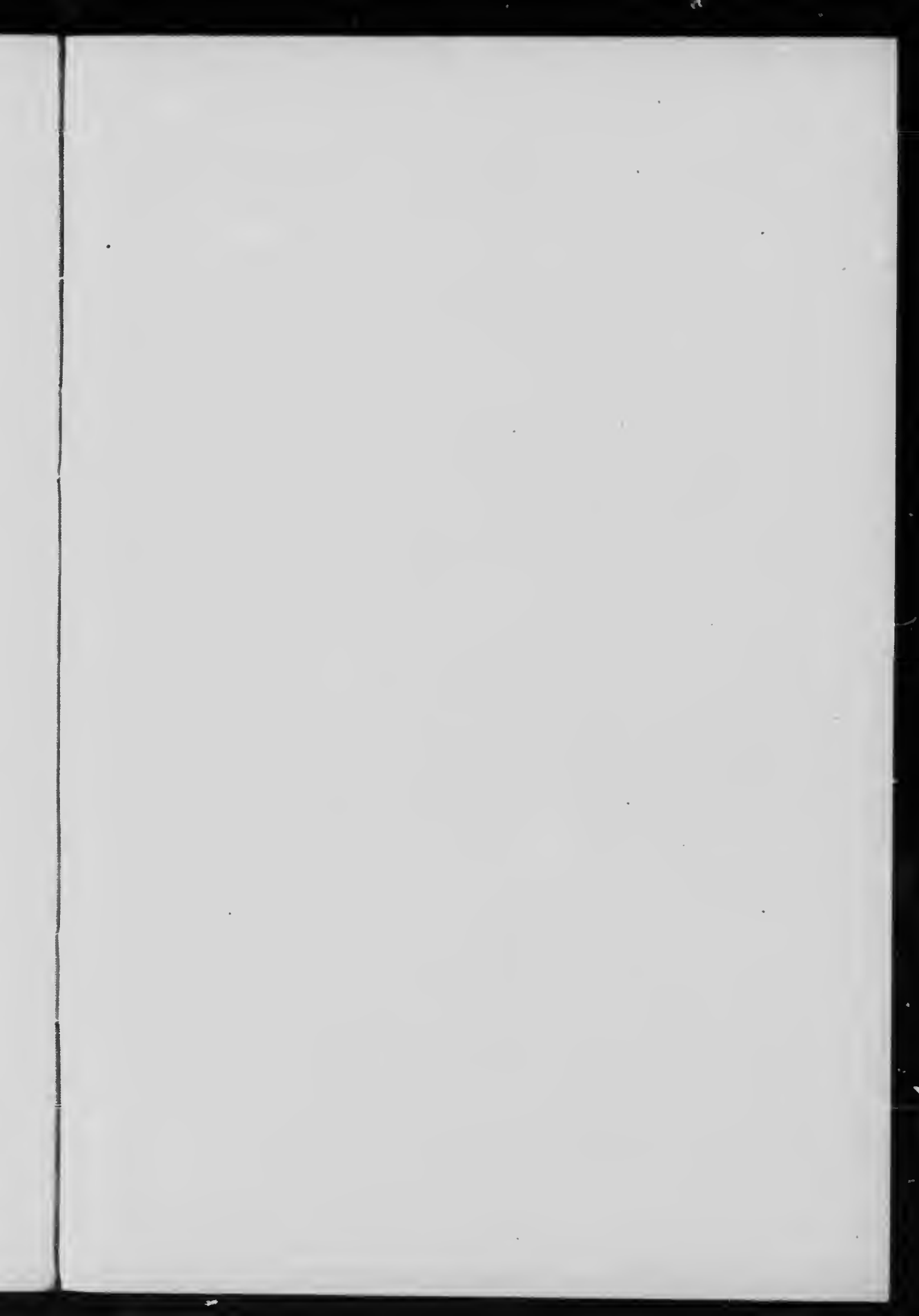
(2) No Douglas fir shingles were reported for 1908.

(3) Less than one-tenth of one per cent.

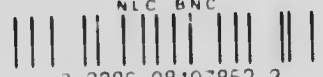
Cedar is the great shingle wood. Over three-quarters of the shingles cut in Canada in 1909, 1,507,285,000, were of cedar; about one-half of these, 769,830,000, were of western cedar cut in British Columbia. The increase in the cut of spruce and white pine and other species in the eastern provinces reduced the proportion of cedar shingles; it was 96.4 per cent of the total in 1908. Ninety per cent of the spruce shingles were cut in Prince Edward Island, the remainder in Nova Scotia and Quebec. Three-quarters of the white pine shingles were of western white pine (*Pinus monticola*) cut in British Columbia. Of the hemlock shingles reported, 11,996,000, over nine-tenths were cut in Ontario and Nova Scotia.

The prices of all species were a little lower in 1909 than in 1908. The lowest in 1909 was spruce at \$1.20, and the highest white pine at \$2.06.

Cedar shingles were \$1.91 in British Columbia in 1908; in the same year the average price of all grades was about \$2.50 in the State of Washington.



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