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A Study of Waterborne Shipments of Timber Products from the Pacific Northwest

by

Willard E. Wilson Jr.

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INTRODUCTION

The purpose of this thesis is to report on a study of the waterborne shipments of timber products from the Pacific Northwestern States of Oregon and Washington. The attempt is to be made to coordinate statistics, theories, and facts of the past waterborne commerce in order to present a clear picture of what can be expected in the future.

The original purpose outlined for this thesis was to merely present a source for statistics on waterborne lumber-products shipments from the Pacific Northwest showing otherwise scattered information on shipments, distances, rates, and production of these timber products. This original purpose was modified by certain circumstances, however, and so the final purpose was adopted. For the moment it seems necessary to hark back to the original purpose to point out why it was not carried through and to indicate certain modifying factors which must be taken into account in the text of this thesis.

In breaking down the original objectives and beginning preliminary research it became evident that any attempt to provide such a single source of statistical information was not only impracticable but practically impossible. It was impracticable for the simple reason that there are absolutely no comparable figures presented by any two record-keeping organizations on the same item or for the same period.[1] Also

1. Mears, E. G., Maritime Trade of the Western United States Chapter VII.

it was apparent that any interested party could obtain the information which his individual needs required with but little research or inquiry; any thesis compounding it all into one volume would be beyond my interests and consume more than my limited time. With this in mind, the charts, tables, and graphs presented in this thesis attempt to show trends rather than attempt to list exact figures of the material discussed.

This study of the waterborne shipments of timber products will not resort to complicated economic formulae or foreign trade principles. But in an attempt to point out the tie-in of the subject of waterborne commerce with the lumbering industry as a whole it has been necessary to discuss the policies of reciprocity, foreign trade, and similar subjects. Also, at various points throughout this thesis it has been found convenient to discuss briefly some specific controversial subjects such as foreign competition for markets, freight rate standards, exporting organizations and systems, conservation of timber resources, and so forth. Discussion of these controversial subjects has been included, not with the idea of entering into the controversy, but with the idea of presenting logical arguments, of an authority or of my own, to bring out, if possible, the effect on the waterborne commerce in the future.

To clarify some of the references to "lumber" and "timber products" used at various points in the text of this thesis and to explain the use of statistics of lumber and logs in speaking of exports, coastwise and intercoastal

commerce, and tariff, it must be stated here and now that this is done because it is on these items that available statistics are probably most reliable. Nearly 80% of the movement of timber products of this region are included under one or the other of the two categories, lumber or logs. The remainder of the products are relatively insignificant and become even more so when it is considered that inasmuch as they consist of a myriad of small specialty products they do not have much effect on the problems and economy of the region as a whole. In the future the trends might change to make such products an important part of the trade, but in the past and at the present time they are not considered as such.

It is considered that the purpose of this thesis is important because there is a direct relationship between the waterborne shipments of the region and the importance of the lumber industry itself. In other words this study may be instrumental in reaching a conclusion as to what will be the place of lumbering in the Pacific Northwest, or even what will be the place of Pacific Northwest lumbering in the markets of the United States and the world at large. It is thought that by outlining the general history of the maritime development on the Pacific Coast up to the present a clear picture of some of the problems to be met in the future would be given. With the trends of the past for a fluctuating background, it may be possible to prophecy the probable results of circumstances in the future. Thus, advantage is taken of the theory that history repeats itself.

Chapter I

BEGINNINGS OF MARITIME TRADE.

Inconsequential as it may seem, a short discussion of the pioneering era in the development of the Pacific Northwest is valuable because it brings out the first step in the exploitations by the white man of the natural resources in what are now the States of Oregon and Washington.

The Russian conquest of Siberia in the seventeenth century brought about a revival of interest in the desire to determine the geographical relation between the northeast coast of Asia and the American continent. Connected with this, Bering's two expeditions proved to be large factors in the exploitation and eventual settlement of the Pacific Northwest and the Coast as a whole. It was from Bering's time to the first part of the nineteenth century that trading vessels began what is now the maritime trade from the West Coast. However, it can be considered as maritime trade at this period only because of the fact that the Pacific Coast ports were on the great circle route. That fact encouraged vessels to stop to make last repairs before starting the long voyage ahead across the Pacific or around Cape Horn. Further, many advanturing vessels were drawn by the numerous fur-bearing animals found to the north in Alaska and on the coast of what is now Canada. During this time we find the first employment of Pacific Coast woods in the commerce of the world. True it was only as replacement of spars and masts on the trading vessels, but the reputation of the

straight, strong Douglas fir throughout the world probably owes much of its existence to these early beginnings.

The first actual development that might be called the start of a lumber industry was the plant erected at Fort Vancouver by Dr. John McLoughlin, chief factor for the Hudson's Bay Company in 1827. This, the Northwest's first sawmill, was equipped to cut two thousand board feet per day. It was from this establishment in 1832 that the first cargo of sawed lumber was shipped to the Chinese market.

While the English, Americans, and Russians were busy exploiting the fur resources of the north Pacific Coast, the Spaniards were largely active in exploring and developing the southern part of the Pacific Coast. The Spanish influence in their colonies gradually decreased, however, until at the time of the discovery of gold in California in 1848 they had been completely ousted. The gold discovery at Sutter's mill brought about a migration to the West Coast, mostly to California, and some impetus was given to the lumber trade of the region to the north. It was when the excitement wore off that the opportunity was at hand for the real boom in the Oregon Territory. The tail of the migration swung northward into this region, and began development of its resources.

Thus, the main characteristic of this period of beginnings was that up to the end of the period in the late 1870's the industry of lumber making only developed in pace with the needs of the western settlement. Of course, there was a small trade between the Northwest and the seaboard of California, but that only partially satisfied the needs of the

settlers to the south. The conclusions that can be drawn from the events of this era are of little value for application to the present day problems. The events of the earliest period are interesting, though, in that they paved the way for the expansion characterizing the next period in the maritime trade of the Pacific Northwest's lumber industry.

Chapter II

PERIOD OF EXPANSION--1875-1914.

The outstanding characteristic of the period of expansion was that the timber trade to a lesser degree reflected directly the increases in population and came more to represent the steady development of new trade routes. The lumber industry expanded during the late seventies to support an off-shore trade with the Orient, and, in limited amounts, with the Atlantic seaboard and Europe.[1] It is interesting to

TABLE I source: 38

Lumber Shipments from Columbia River
Year--1884

Cargoes	Destination
41	San Francisco
5	San Pedro
1	San Diego
1	New York
2	China
3	Panama
3	Uruguay
Total 56	made up of 22,202,500 bd. ft.

note that just before the beginning of this period, in 1857, White pine was shipped "around the Horn" from Maine to build a large part of San Francisco[2]; compared with this, as the result of the activity during the period of expansion, by 1907 Sugar pine was being shipped in the opposite direction

1. "Westward-Ho of the Sawmill," W. B. Greeley, Sunset, June, 1923.

2. "Lumber Industry of America," M.O. Nelson, Review of Reviews, March, 1903.

to that which the White pine had been sent and then sold at approximately the same prices--$90 to $100 per thousand board feet.

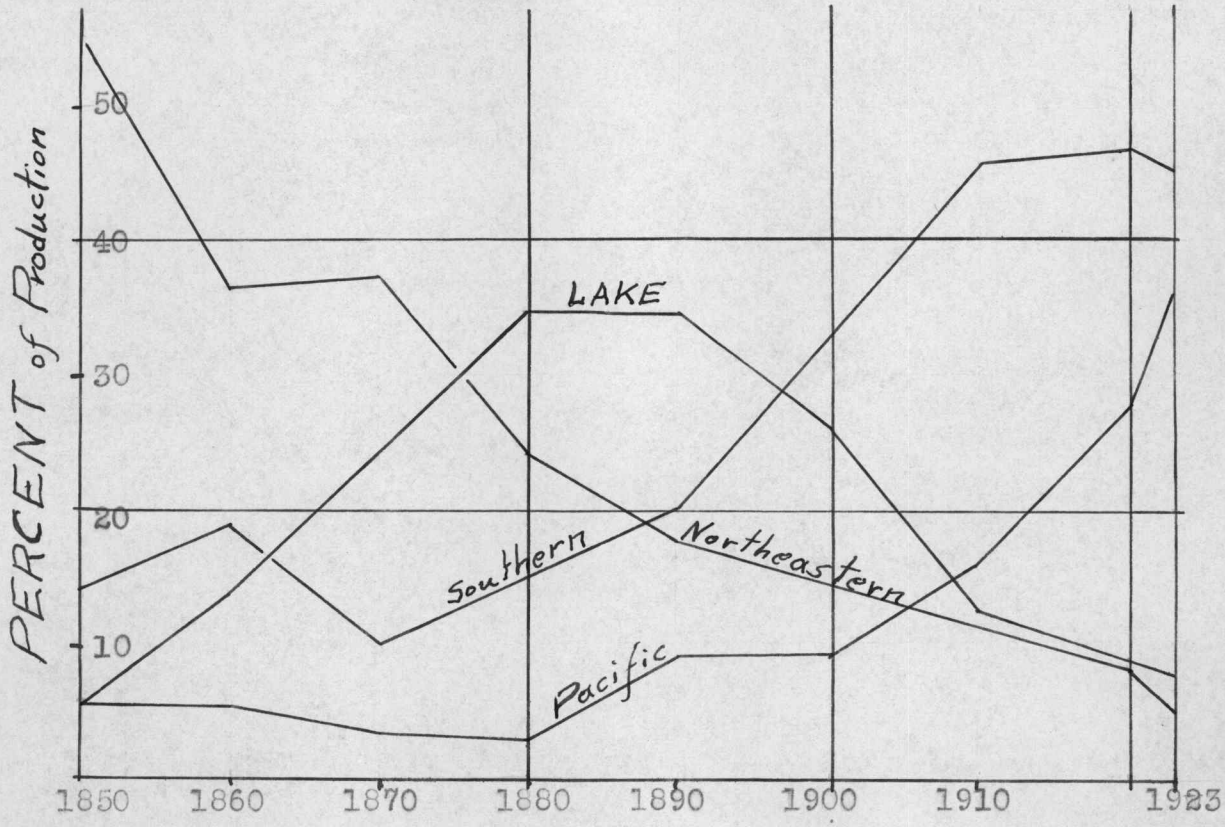
At the beginning of this period of expansion of the Northwestern United States the timber resources of the area east of the Mississippi River were becoming depleted. The manufacturing organizations that had become established in the east turned their assets into cash to be invested in the timber resources on the West Coast. The decided movement westward during this period is shown by Figure 1. According to the expectations of the migrating lumbermen the products of the Northwest would in a few years be able to take over the markets in the population centers. When this time came they would receive premium prices for the products of the raw material for which they had paid high prices. They failed to comprehend the significance of the fact that nearly 2000 miles cut off the Northwest from the principal consuming regions, however. The great distance from the Northwest to the markets and the correspondingly high freight rates made it difficult for the Northwest's industry to meet competition in anything except high valued products. In the eastern markets it was usually cheaper for all except special products to be imported from Canada to these markets or obtained from second growth, inferior, or substitute species in the cutover regions. As a consequence, the Pacific Coast lumber manufacturers were confronted in 1905, 1906, and 1907 with the problem of overproduction with a restricted market, especially for the low-value material obtained from the manufacturing

FIGURE 1

REGIONAL TREND OF LUMBER PRODUCTION

IN UNITED STATES 1850 - 1923

Each year - 100%



Source: National Lumber Manufacturers Association, 1925, page 61, Appendix A, Chart I.

process. During the ten year period from 1899 to 1909, when the lumber production was increasing from 1965 million feet to 7500 million feet, the waterborne trade decreased from 50% to 20% of the production; of this commerce, that portion which went to foreign ports increased only about 180 million feet in the ten years, our exports in 1909 amounting to only 400 million board feet annually.[1] The result was that the home market was depended on to absorb the increase in production; the fallacy of this will be pointed out later.

A solution for the problem of overproduction with only a restricted market was found about 1907. Since the high mountains and wide deserts more or less cut off the Pacific Coast region into an economic area all its own, it was but natural that serious attention should be turned toward seeking out, developing, and expanding new markets to be reached by the water route. Thus, steps were taken to sell to foreign markets in such countries as were available as far as non-prohibitive transportation rates were concerned. Up until about 1907 practically no concerted effort was made in the direction of selling to these markets. Instead, the foreign, and also the domestic markets, bought the lumber rather than it being sold to them.

The efforts to increase the markets for timber products of the Pacific Northwest were outstanding in they took the form of what authorities now agree are necessary steps to extending a market--for instance, the efforts at standardization

1. "The Panama Canal--Its Relation to the Lumber Industry of the Pacific Coast," J. H. Bloedel.

of the products. The permanent organization of the Cargo Inspection Bureau, under the West Coast Lumberman's Association, established in 1905 a certificate which within six years became a recognized feature in all contracts of sale. It determined finally and at the point of shipment the grades and tally. To all the markets of the world that the products reached and to the coastwise market of California it became essential to both buyer and seller. It functioned by charging the member concerns two and one half cents on each thousand board feet tallied.[1]

Another idea which was adopted in the effort to extend the markets for the timber products was the improvement of the distribution facilities. Up until about the same time, 1907, the lumber trade was carried on for the most part by vessels lacking a return cargo from the Coast after emptying cargoes of manufactured products from other regions. In other words, there were but few schooners actually engaged in transporting the lumber, and what there were were small and slow. The adoption of fast, commodious, modern carriers, the surplanting of wooden sailing vessels by the faster, relatively cheaper oil and coal burning ones, was a boon to the lumber exporting industry. It is thought that the effect of the dependable service upon the buyer of the timber products was inestimable. The adoption and carrying out of fixed

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1. National Lumber Manufacturers Association, Report of Pacific Coast Lumber Manufacturers Association, E. G. Griggs, "National Problems Affecting the Lumber Industry;" 1911.

schedules gave the buyer confidence in that he could depend upon receiving his orders in time to meet immediate market demands.

However, the results of the concerted action for new markets that probably would normally have followed did not come about. E. C. Robbins in his article entitled "Lumber Decline in the Northwest"[1] gives a clear picture of the situation at this time. The following is a quotation from Mr. Robbins' article.

> "----Business was just recuperating when the panic of 1907 swept over the country. Eastern investors abruptly stopped their remittances. Chicago bankers had no more money to lend the Northwest. The boom in timber lands collapsed and lumber dealers suddenly found that the only way they could realize on investments already made was by seeking wider markets.
>
> "But here again the economic nemesis followed them. The market already unsteady as a result of over-expansion and ill-advised ordering, began to fall in harmony with the trend of general prices. The increased production simply crushed it and the lumber dealer found himself trapped. It was necessary to sell his product in order to secure returns from his business, yet increased distribution served only to force the market lower and lower. Associations to steady production and prices were suggested but the cry of illegality effectually checked the movement.
>
> "Business continued in this chaotic state until the spring of 1913 when a short boom was given by large purchases of ties, posts, etc., by railroads, but soon sank back down to its former level. In 1914 the removal of the tariff barrier against Canadian timber subjected American dealers to vigorous competition from the North."

Mr. Robbins' discussion also points out that the lumber industry probably suffered more from the combined ravages of the reactionary effect of the panic and tariff agitation and uncertainty than any other of the leading industries. The

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1. "Lumber Decline in the Northwest," E. C. Robbins,

following table appears to bear his point out. At least it shows that the industry did experience considerably decreased trade at this time. Even though the table referred to shows the exports for the whole United States, the trend holds for the Northwest as well.

TABLE II Source: 45

United States Wood Exports
Dollars

Item	1907	1908	1909
Unmanufactured		$16,694,908	$12,580,389
Lumber		36,189,226	29,435,493
Shingles		75,535	61,784
Doors, Sash, Blinds		14,084,291	14,060,712
Shooks and Cooperage		479,266	534,534
Furniture		5,631,325	4,293,904
Miscellaneous		8,366,754	6,900,616
Total	$90,000,000	$81,521,305	$67,867,432

Thus, it was during this early period, from 1870 to 1914, that many of the present day problems of the cargo trade first became important. Certain solutions were attempted; some that did not prove too successful were fundamentally sound even though the results would not indicate that they were sound, and others were merely experiments from which we can learn valuable lessons to apply in the future. The value of a sound, uniform trade policy in the Pacific Northwest became evident as the result of the action taken during this period of expansion. Likewise, the advantages

of a good quality of carrier for the product became apparent. However, the effects of the tariff upon the prices and markets for lumber were being discussed controversially even at this comparatively early date. The matter of the effect of tariff on the lumber industry will be discussed more fully in Chapter VI.

At the end of this period in the development of the maritime trade of the Northwest's lumber industry, the outlook for the future was very dark. It seemed that all effort to put the distribution of the products on a firm basis had failed. It was from this low ebb that developed the era of increased activity and boom times of the recent period, from 1914 to 1929, and then, from 1929 to 1940, the appearance of the unusual economic conditions throughout the world.

Chapter III

RECENT TRADE--1914-1940.

There are several historical events recorded during the recent period that have had a decided effect on the progress of the forest products trade of the Douglas fir region. Namely, there are the completion of the Panama Canal, the World War, and the somewhat unusual world economic conditions characterizing the period after the late 1920's.

The opening of the Panama Canal to traffic on August 15, 1914, brought to a close another epoch in the maritime history of the world. Specifically, Atlantic markets were opened for all varieties of Pacific Coast products, and particularly those which were too bulky to stand high freight rates, such as timber products. Table III gives some comparative distances from Pacific Coast ports to other ports of the world by the Panama Canal and by the old routes.

TABLE III

Comparative Distances by Various Routes
Miles

Portland, Oregon, to	Distance by		
	Rail	Cape Horn	Panama
New York City	3197	14,364	5949
New Orleans	2635	14,764	5146
Antwerp		14,905	8917
Liverpool		14,784	8679

Source: Timberman, January, 1912.

The Panama Canal has been particularly of advantage to the lumber industry. While the Canal opened up Far Eastern markets to eastern producers of some products, there is

practically no such competition for Far Eastern lumber markets. Of probably equal importance to the lumber industry is the fact that the presence of more than one route to a market gives the advantages of a competitive rate for carrying the bulky freight. When the transcontinental railroads had practically a monopoly on the transportation facilities to markets on the eastern seaboard there was no possible way in which the rates could be held at the absolute minimum. Nearly always rates had been higher on the transcontinental railroads than the manufacturing cost of the lumber--$12 fir timbers required $12 freight to Minneapolis in 1907. But after the Canal was completed the railroads felt the competition and got permission to reduce rates between Atlantic and Pacific terminal ports without making reductions to intervening cities. Thus, as a result of the low rates through the Panama Canal, new markets were opened on the Atlantic Coast from which many Pacific Coast products had previously been barred by high transportation charges.

But the advantages of the Canal were not realized immediately as might be assumed from the discussion above. The Panama Canal did not become a noticeable factor in effecting the rates or the scope of the Northwest's lumber trade until after the close of the first World War. At the time of the opening of the Canal in 1914 the attention of the world was focused upon the spreading conflagration in Europe. Thus, for four years the facilities of the Big Ditch were devoted largely to military service. The shipments of lumber products through it were limited by the number of ships on hand

for such service. For instance the Blue Funnel Line started service to England in February, 1915, and all ships, up to May, were booked to capacity; the first five ships would carry ten million board feet.[1] At the end of the War the existence of a surplus of ocean tonnage, resulting in a marked decrease in ocean freight rates, brought the Atlantic seaboard within comparatively easy reach of the Pacific slope. In a few years the Atlantic Coast of the United States became one of the most important markets of Washington and Oregon, and British Columbia. Between 1922 and 1932 the most conspicuous gains in the proportion of lumber requirements supplied were made by Oregon and Washington in the North Atlantic and New England States. The gain is attributable to favorable water transportation facilities and rates.[2] Lumber and logs continued to be the most important products moved, composing about 70% of the total movement for this period. However, it is significant enough to make a special note of the fact that the percentage of the movement made up of pulp doubled from 1928 to 1937, being 14% of the total at the later date. It might be well also to note here that by 1923 British Columbia was shipping over one half of her waterborne shipments to the Atlantic Coast. This undoubtedly effected the growth of the eastern markets for the Northwestern States' products, but the seriousness of this effect is another matter of controversial nature, as will be pointed out.

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1. "Results of the Panama Canal on World Trade," Outlook, vol. 11, pages 490-7.
2. Oregon State Planning Board, A Study of Lumber Shipments from Oregon and Washington; 1936.

As nearly as could be determined from records, it is practically impossible to determine accurate lumber shipments by source and destination through the Panama Canal. Therefore, to show the trend in timber products shipments through the Canal it is only possible to obtain data on totals of such shipments from Pacific to Atlantic. The shipments of timber products through the Canal from the Pacific to the Atlantic Oceans for the fiscal year of 1926 were 3,312,000 long tons, an increase of 24% over 1925. The shipments for 1927 were 3,396,627 long tons, an increase of 84,627 long tons over 1926 and eight times as much as in 1921. The increase in the fiscal year of 1927 was attributed to the increase in sales in European countries. During the fiscal year ending June 30, 1930, the shipments from Pacific to Atlantic amounted to 3,530,879 long tons, an increase of 219,004 long tons over 1929.[1] This same source indicated that of the total for the fiscal year ending June 30, 1926, 90% of the shipments through the Canal were intercoastal and only 5% were bound for Europe. For the year ending June 30, 1927, 85% of the traffic was intercoastal, as compared with the fiscal year ending June 30, 1930, when 60% was from West Coast to East Coast. This latter 60% amounted to 1,520 million board feet of manufactured products.

The rapid development of markets, bringing about an increase in waterborne movements of timber products more or less corresponding to it, carried along until the crash of

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1. Department of Commerce Yearbook, 1931.

1929. At the time of the crash world markets, shipping, production, and producers alike the world over were hit badly, and conditions sank to a very low level. The position of the Northwest's lumbering industry was even more precarious than most other industries because of the recurring effects of the unwise investments made during the period of expansion. It was probably only due to the special characteristics of wide stock, long lengths, and clear lumber obtainable from the Douglas fir stands that the industry was not entirely severed from the markets which it supplied by waterborne commerce. The three years following 1929 were most serious with a tendency for conditions to be on the upswing after that. However, the upswing which the trade of the lumber industry was able to make was tempered several times for variable-lengthed periods by certain modifying factors. These factors which hindered normal return of markets included tariff changes, international conflicts, maritime labor difficulties, and so forth. Further report of each specific factor is made in the following two chapters.

In summarizing this chapter concerning the general development of the maritime commerce of the Northwest's lumber industry from 1914 to 1940, the outstanding feature is the presence of unsolved problems. Apparently there is no solution to the problems presented by conditions of warfare. There will always be certain losses experienced by the absence of lumber markets in warring nations; however, it seems that American ownership of vessels would be the answer to inadequate tonnage for supplying markets in nations not engaged

in the conflict. Another unsolved problem, identical with that of the early periods of development of the maritime trade, is the one of depressed economic conditions. A partial solution for the Northwest lies in the maintenance of certain special characteristics of the Douglas fir timber. That is, the characteristics of long lengths of wide, clear stock.

Aside from the problems of war and depression met with in this period probably the outstanding feature is the opening of the Panama Canal with its competitive effect on freight rates for the Northwest's timber products. The Canal will probably continue to influence the rates in the future, and make available wider markets for the lumber industry.

Chapter IV

WATERBORNE FOREIGN COMMERCE

In considering the waterborne shipments of timber products from the two northwestern States, it might be well to indicate the area which can take advantage of the few ports in distributing its products to the markets by waterborne commerce. Figure 2 indicates the approximate trading area. The borders of this area are determined largely by advantageous rail facilities and rates to the port of departure. However, since a large portion of the shipments are composed of Douglas fir products, by far the bulk of the trade originates in the western portion of Oregon and Washington.

The trend in foreign shipments from the Northwest has been towards the Far East rather than towards Europe (See Table IV). This trend was especially true before 1925, at which time the Panama Canal began to take effect. Even today exports are more uniform to the Far Eastern area than to Atlantic ports, though. The reasons for the ready markets in the Far East are sufficiently described by one example, the conditions present in China.

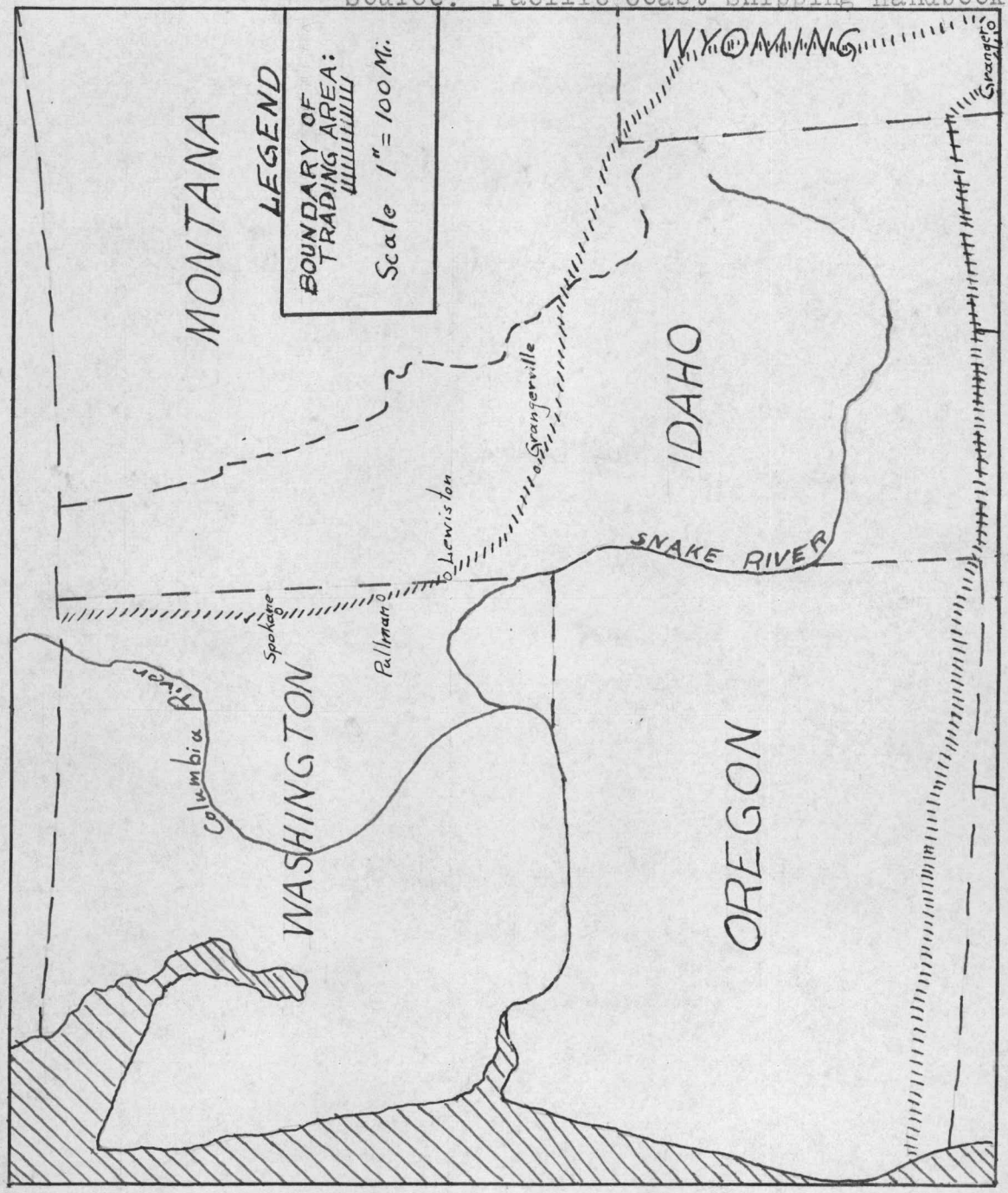
For many years China has had little available timber of her own. The area within reach of the coast has long since been denuded of forests, and high transportation costs make the interior forest resources of little value to the country's population centers. While bamboo is widely used in the building of native dwellings, the greater part of the requirements for ordinary construction purposes must be met with

FIGURE 2

Trading Area Served by

North Pacific Ports of the United States.

Source: Pacific Coast Shipping Handbook



imported wood. Ties, bridge timbers, box shooks, and piling came much into use with the economic development starting in the latter part of the nineteenth century in this country, and thus the products from the West Coast of the United States were imported to meet these demands.

Likewise, South Africa's entire lack of commercial softwood timber resources necessitates importation of foreign stock to fulfill its needs.

TABLE IV Source: 11c

Destination of Softwood Exports
Percent of Total

Destination	1929	1933	1938
Orient	31.78	40.64	15.32
South America	17.78	11.75	27.71
Central America	11.40	10.52	20.43
Canada	4.34	1.56	5.52
Australia	10.93	2.06	2.46
Africa	1.88	3.54	5.99
United Kingdom	8.37	9.68	9.83
Europe	13.52	20.25	12.74
Totals	100	100	100

In the tidewater section of the Douglas fir region exports are normally about 22% of the total lumber movement. Up until the time of the first World War exporting was carried on indirectly through foreign agents, usually British. But the events of the World War caused these agents to turn their attentions to other fields, and so the exporting business was left in the hands of the lumber industry of the Pacific region.

In 1916 it was called to the attention of the Federal Trade Commission that Washington and Oregon mills suffered in the export trade owing to market exploiting combinations of other lumber-producing nations and the fact that American mills were prohibited from forming such combinations even in the solicitation of export business. The Pacific Northwest's mills catering to the cargo trade even expressed a desire to have governmental regulation and supervision of export selling agencies to legitimately develop foreign demand for Pacific Coast lumber. The first attempt at unsupervised organization for direct exporting to foreign markets was the Douglas Fir Exploitation and Export Company at San Francisco, California, which was formed in November, 1916. About the same time another was formed on the Pacific Coast which was not concerned with the region discussed here; it was the Redwood Export Company.

This method, direct exporting, is made possible by the beginnings of the foreign trade when the uses of the Northwest's products became well known on the market. The associations are merely a means to an end, carrying on cargo trade without difficulties and misunderstandings between the exporter and the foreign buyer that might result from an indefinite basis of agreement on a particular transaction. Many such organizations incorporate into their policies the important parts of what is considered necessarily included in a sound export policy. The United States Department of Commerce has published recommendations for such a policy in several forms. The following outline briefly covers one of these.

According to the pamphlet on which the following is based,[1] every export quotation or sales agreement should cover:

A. How far the goods will be carried at the expense of the exporter. (There are ten accepted methods of designating how far the goods will be carried at the exporter's expense and where the responsibility of the exporter ends in each case. The National Foreign Trade Council, 26 Beaver Street, New York, N. Y., has consolidated these ten standard quotations, with a full description of their individual significance, in a booklet available upon request.)

B. The terms of sale, including:

1. Date of shipment or delivery at a certain point.
2. Description of goods, including quality, stipulations and guarantees, such as privilege of buyer to inspect before shipment.
3. The price, including currency in which drafts are to be drawn and payable at due date and the unit in which the price is quoted.

C. The form of payment, specifying whether:

1. Part or all cash in advance.
2. By straight draft.
3. Under letter of credit.
4. By remittance against open account.

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1. United States Department of Commerce, Promotion of American Commerce At Home and Abroad.

SCHOOL OF FORESTRY
OREGON STATE COLLEGE
CORVALLIS, OREGON

D. The method of payment.

1. Drafts drawn at sight or at so many days after sight or after date.
2. Terms of the letter of credit , if one is to be opened.
3. Whether documents are to be delivered against payment (D/P) or acceptance (D/A) of drafts.

Details of financing exports with advice as to the best method, exchange restrictions and rates, etc., may be obtained from the Finance Division, Bureau of Foreign and Domestic Commerce, United States Department of Commerce, Washington, D. C. Generally speaking, however, exports may be sent abroad:

A. On open Account.

B. Consigned to a foreign agent or merchant.

C. Shipped with the pertinent documents deliverable to a foreign buyer against his acceptance or payment of the covering draft, which may be drawn at sight or payable at a fixed number of days after sight or after date.

D. Shipped under a letter of credit which may be revocable or irrevocable and confirmed or unconfirmed, or, in the case of shipments to the Far East, under an "Authority to purchase."

E. Shipped on the basis of a "simple credit" or a "reimbursement credit" or against a bank guaranty.

The organization for export trade through export houses continued until the passage of the Webb-Pomerene Act. Several corporations organized under this act, including the Pacific

Lumber Exporters' Association organized in May, 1923. An example of the working of one of these companies can be no better illustrated than by the following quotation from the Timberman article entitled "Plywood Industry Announces New Export Sales Policy:"[1]

> "The Pacific Forest Industries, the recently formed plywood export sales company, is a cooperative undertaking, organized under the laws of the State of Washington. It is also duly registered with the United States Federal Trade Commission in Washington, D. C., and is licensed to operate as a corporation solely engaged in the export trade under the provisions of the Webb-Pomerene Act. Headquarters are at Tacoma, Washington.
>
> "The membership of the organization comprises all manufacturers of plywood in Oregon and Washington in a position to cater to the export trade. The selling contract excludes, however, exports to the Dominion of Canada, with particular reference to British Columbia, which is an important outlet for Douglas fir plywood.
>
> "The total normal capacity of Pacific Forest Industries, based on the maximum output of each mill, is 720 million square feet, figured on 3/8 inch rough basis. This corresponds roughly to about 400,000 tons of plywood. The principal product is Douglas fir plywood, but the mills are also equipped to produce plywood of other species, such as Sitka Spruce in addition to Pacific Coast and Philippine hardwoods.
>
> "In the past, lack of uniform export policy, keen competition and constantly fluctuating prices, have been serious drawbacks to the development of the plywood export trade. The purpose of the new organization is, briefly, to endeavor to remedy these conditions: first, by maintaining a consistent export policy at home, and, secondly, to secure the cooperation of foreign agents and importers in stabilizing marketing conditions in the foreign field and to work for the extension of the uses for products of the organization.
>
> "The members of the organization realize that a permanent export market can be held only when based on a definite obligation on their part to fill all orders which the Pacific Forest Industries accept on their behalf for export shipment. This policy has been definitely established and the export business has been separated from the domestic part of their trade. Furthermore,

1. Timberman, vol. 36, #8, page 34; June, 1935.

> a system of standard grades will be established by the organization's own staff of inspectors, one located in each member mill and paid by the Pacific Forest Industries. These inspectors report directly to the organization and not to the mill.
>
> "While the main efforts will be concentrated on the sale of standard sizes and grades, the organization will endeavor to cater to special requirements of its foreign customers, so far as practicable.--------"

The past few paragraphs discussed the attempts of the Pacific Northwest's lumbering industry to extend its markets by means of development of uniformity of products and policies. But there are other problems met with in satisfying foreign markets. Not the least important of these is the problem brought about by an increase in ocean freight rates, resulting in advance in prices and decrease in shipments. Specifically, it seems that the Northwest lumberman is at an especially great disadvantage because of the higher standards for conditions on American vessels. A feature of the North Pacific shipping is the general agreement that higher operating costs make increased freight rates necessary as a matter of self-preservation. The effect spreads to ships carrying foreign flags when it is taken into consideration that the shorter hours and reduced efficiency combined with the higher wages for long-shore labor have added considerably to the expense of handling cargo at North Pacific ports, affecting both foreign and domestic flag ships. At the present time the American operators are faced also with the likelihood of an increased wage scale for seamen.[1] Every increase in cost of transportation is of great importance in effecting

1. Timberman, December, 1934, page 79.

the consumption of such a low value, bulky item of commerce as timber products on the whole are.

In addition to discussing the effect of increased freight rates on the timber producing industries, it is probably appropriate to mention here the connection between low freight rates and conservation. An extremely well-founded argument for low transportation costs is that such a condition would enable the manufacturer to save an increased proportion of the tree he is now cutting. At the time of the opening of the Panama Canal it was hoped by many conservationists that finally the solution had been found for producing such lower rates, but it seems to be that any chance the new route had to accomplish this was nullified by the effects of the ensuing international conflagration and unusual economic conditions.

Another equally important aspect of Northwest lumber in foreign markets is the effect of each country's tariff policy on the value of its imports from this region. For instance, in the early 1920's Japan made large purchases for the reconstruction after the bad earthquake. Before long she changed her tariff regulations so that the high duty on manufactured material below a certain size encouraged the importation of round stock or large cants rather than material which the American labor and industry had produced. At the present time the United States is making an attempt to counteract this action somewhat by placing an embargo on the exportation of Douglas fir peeler logs to foreign markets, thus making an

attempt to conserve the limited supply of special timber on which the Pacific Northwest has a monopoly.

A more glaring example of a foreign power's tariff policy effecting the markets of the Pacific Northwest is the decline in certain countries of imports of this region's products following the inauguration of the preferential trade agreement by the United Kingdom. This resulted in the decrease of our export sales to the British Empire from 78% to slightly over 8% of our total export sales between the eight years 1929-37. In 1929 the mills of British Columbia shipped 41 million feet to Australia; that same year the mills in Oregon and Washington shipped 224 million board feet to the same country. Then, as a direct result of the preferential tariffs built up in favor of members of the British Empire, in 1935 the British Columbia mills sold 129 million board feet to Australia, and the mills in Oregon and Washington witnessed the decline of their sales to this Commonwealth to 23 million board feet. Considering the trade with England, the situation was even worse. As indicated before, the Panama Canal took effect soon after the close of the War and markets in Europe for Northwest timber products began to increase; those in England took on a particular importance. By 1929 the sawmills of Oregon and Washington were shipping about 250 million board feet annually, while the mills in British Columbia were sending a trifle less than 70 million board feet. Then, in 1935, the Ottawa preferential agreement giving the Canadian producers a ten percent advantage on

the delivered price resulted in the British Columbia mills replacing those of Oregon and Washington by sending 455 million board feet to England while the two Pacific States sold 31 million feet.[1]

These three, uniformity of policy, freight rates, and tariff, are probably the big influences on the value of individual foreign markets to producers of timber products in the Pacific Northwest. But there are still innumerable influences arising entirely unforeseen which probably have enough effect at least temporarily to warrant mention. For example, about 1916 favorable political and economic conditions in Mexico resulted in large orders to that country; this brought about a slight revival in the industry that still had not recovered from the panic of 1907 and was suffering from the effects of the war in Europe. Similarly, about 1926 a decrease in exports of Brazilian Pine to the River Plate countries in South America was accompanied by a sharp increase in shipments of Douglas fir and Western hemlock to that region. In 1927, China's imports dropped because of serious internal strife; in that same year Australia and New Zealand increased their purchases in view of the anticipated increases in tariff on lumber, while a slight rise in British purchases was accounted for by improved trade conditions and the encouragement afforded by generally lower prices on the softwoods. In 1928 reduced agricultural returns in Cuba and the lumber tariff

1. National Lumber Manufacturers' Association, Extending Reciprocal Foreign Trade Agreement Act; Washington, D. C., 1937. Page 553.

and internal disturbances in Mexico were the cause of decreased sales to these countries.[1]

Without claiming to have covered all of the factors effecting the Northwest's lumber in foreign markets the few paragraphs above will give some conception of the enormity of the problem, as well as its unpredictable nature. We have seen that the factors can be divided into two categories; first, the slow-changing ones such as exchange facilities, transportation facilities, and trade regulations, and second, the rapidly-changing, relatively less important ones such as political and economic difficulties effecting the markets. It is thought that if in the future we continue to bend our efforts to solving the bigger, more stable aspects of the problem, the effects of the other ever-changing factors will tend to offset each other in such a manner as to maintain a more or less stable foreign market as a whole. A stable foreign market is important because there is much truth in the axiom accepted in lumbering circles that the export trade automatically reflects domestic conditions.

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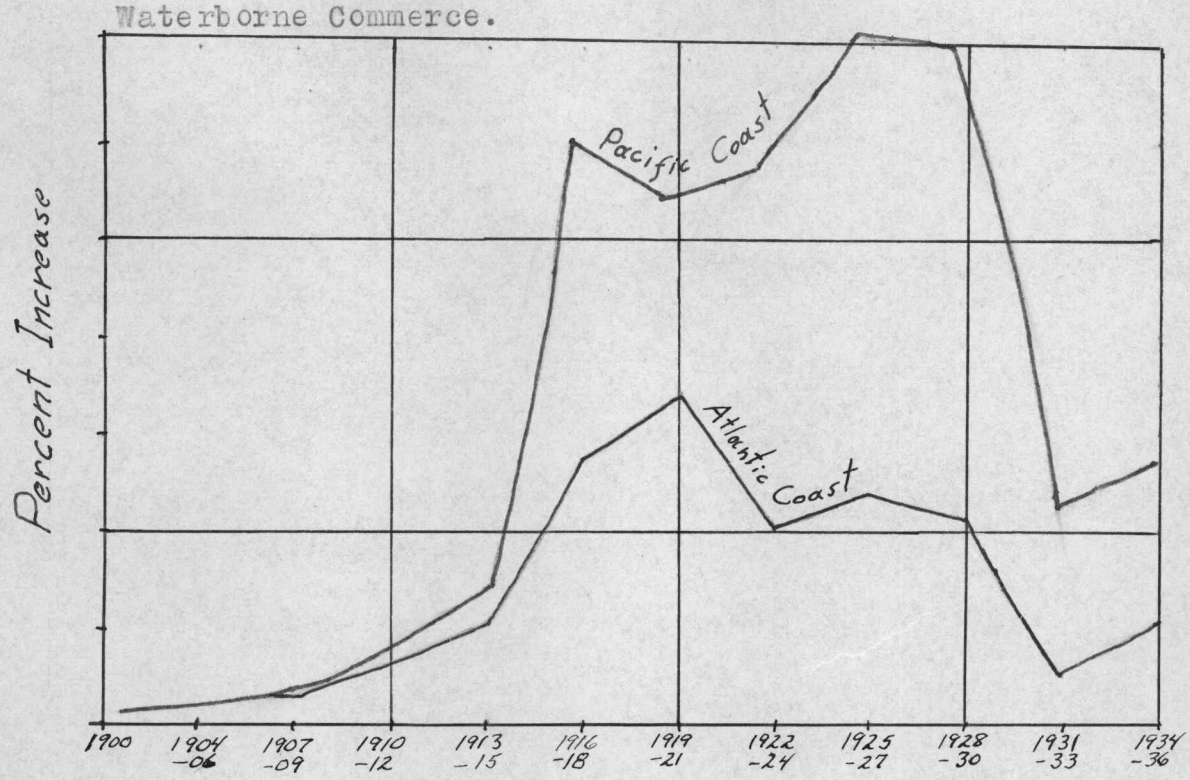
1. See United States Department of Commerce Yearbooks.

Chapter V

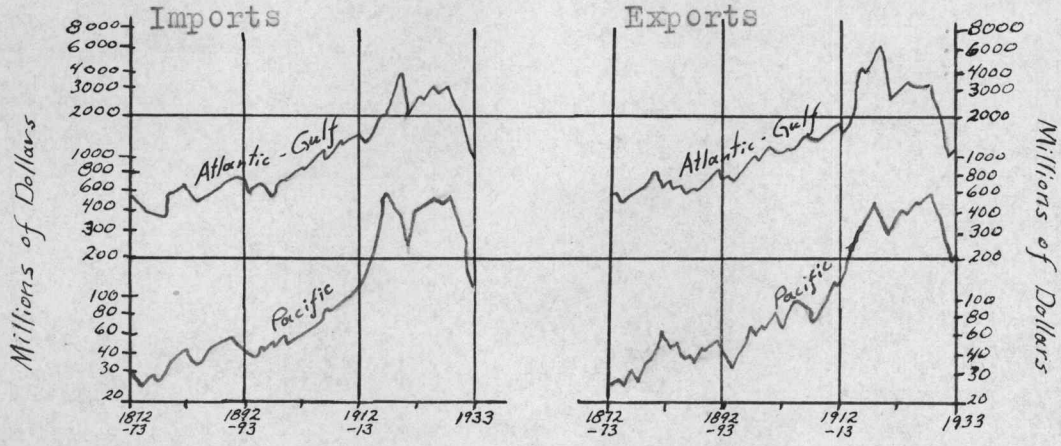
WATERBORNE DOMESTIC COMMERCE

Up until the time of the opening of the Panama Canal, waterborne shipments of any sort bound from the West Coast to the East Coast either went around the southern tip of South America or were unloaded at the Isthmus of Panama, transshipped across this body of land, reloaded, and then carried to the port for which they were destined. The handling costs practically limited the markets for lumber to Pacific Coast ports; therefore, the development of the West Coast ports dependent upon timber products was slowed down. Figure 3 indicates the slow development, both in percent of increase and in value, comparing the Pacific Coast with the Atlantic and Gulf Coasts of the United States. California continued to be of importance as a market for Northwest timber products, following the trends of the early days of settlement, but the shipments to the Atlantic Coast only became of consequence after the World War when the Canal took effect. Of course special demands had been satisfied by the transcontinental haul by railroad, but the rates limited the amount that was sent overland. As the lumbering industry migrated westward, see Figure 1, and the method of transportation remained by rail, the length of haul steadily increased, and the average freight charge showed similar trends. For instance, in 1840 the average transportation cost for timber products was only one to three dollars per thousand board feet, but by 1900 it had increased until the consumers in this country were paying an average of nine dollars. This continued until in 1920 the

FIGURE 3



Comparative Growth Pacific and Atlantic Coasts; Values Shown in Percent Increase Over 1900.
Source: Pacific Coast Shipping Handbook.



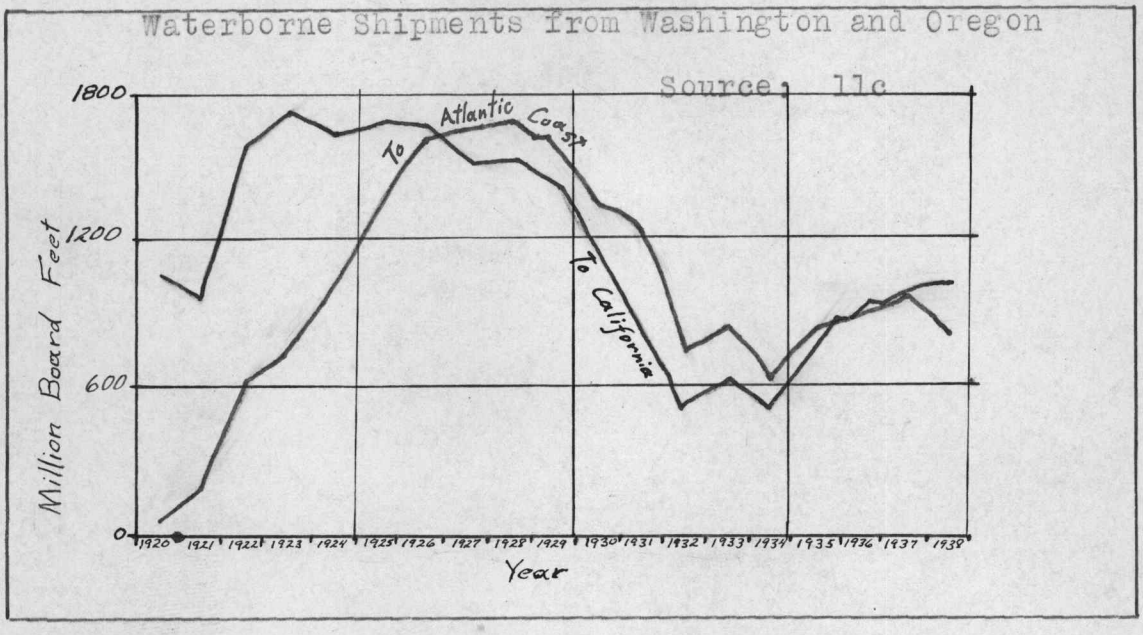
Value of United States Exports and Imports
by Groups of Customs Districts
1872 - 1933

Source: Maritime Trade of the Western United States, E. G. Mears, Figure 37, page 417.

people of the United States paid $25,000,000 to transport two million carloads an average distance of 485 miles, an average of $20 per thousand for the West Coast; in six years the average lumber haul had increased 37% from the 360 miles that was the average haul of 1914.

With the opening of the Panama Canal, the West Coast industries witnessed the linking of the West with the East Coast into one continuous coastline. Figure 4 shows the development of waterborne shipments to the Atlantic Coast.

FIGURE 4



The effect of the competition of the Canal is shown in the figures for 1925; then the average rail haul for the United States was 725 miles, while the average cost for the West Coast to the East had decreased to $12 per thousand.[1] The

1. Keir, Industries of America. Sunset, page 56-8; June, 1923.

increase in average haul of the United States, as was stated before, is accounted for by the movement of the lumber industry westward until the bulk of the rail shipments came from the North Pacific Coast where the average haul to eastern markets is 1,275 miles.

The past few paragraphs present but a brief resume' of the relationship of the railroads to the domestic commerce of the Pacific Coast's lumber industry. Several books have been written on this relationship, but such references would not be of any value in pointing out the value of the transition from rail to water transportation for timber products. The bringing about of cheaper freight rates as indicated is probably the one big advantage of the development of water routes.

The natural sequence now points to a discussion of the facilities, methods, policies, and problems of the newborn water transportation afforded by the recently opened routes. At the present, timber products move from Washington and Oregon, and British Columbia, to Atlantic and Gulf ports chiefly by water. Water shipments from Washington and Oregon are carried chiefly on vessels operated by regular lines, and are subject to rates set by agreement, usually through some form of conference, between steamship companies. These vessels engaged on the intercoastal trade route transporting commodities between the ports of the continental United States through the Panama Canal experienced a sharp decline in their business during the depression. As a result, the shipping companies were forced to adopt strict policies of economy in operating in order to maintain enough tonnage movement to

keep from being forced into bankruptcy. An outgrowth of this was the Act of 1933 regulating intercoastal rates. Prior to this legislation, no agreement could survive the character of the competition except for short periods, and each of these was marked with agitation, suspicion, and misunderstanding. However, under the Act the Maritime Commission is empowered "to prescribe just and reasonable rates and require all common and contract carriers engaged in the intercoastal trade route to publish, post, and file with the Maritime Commission lists of all their rates, fares, and charges for or in connection with transportation between intercoastal points."[1]

Aside from regular line vessels operating under conference rates, there are some shipments, particularly to Atlantic Coast ports, by vessels not operating under any such conference rates. Part of this non-conference movement is by regular service and a lesser part is by irregular service. The irregular service includes vessels chartered for a specific trip for full cargoes, vessels owned or chartered for long periods by lumber companies or associations, and vessels accepting mixed cargoes at rates varying for different commodities. Table V indicates the proportions of these various types of services that are employed. To add further to Table V, domestic timber products moving from Washington and Oregon by non-conference carriers to Atlantic and Gulf ports in the three years 1926-29 amounted to between 22% and 80% of the total waterborne shipments, varying yearly. For the first

1. Annals of the American Academy of Science; page 93; September, 1937.

eight months of the fiscal year 1931-32 the intercoastal conference was in dissolution and the non-conference shipments during that year amounted to 749,000,000 board feet, or 80% of the total.[1]

TABLE V

Domestic Waterborne Shipments from Washington-Oregon Area to Atlantic and Gulf Ports
Thousand Board Feet Year Ending June 30
Douglas Fir and Hemlock

Carrier	1929	1932	1935
To Atlantic Coast			
Conference Carrier	863,010	176,906	487,546
Non-confer. "			
Regular Service	524,587	632,965	100,789
Irreg. "	76,562	116,398	46,620
Total	1,464,159	926,269	634,955
To Gulf Coast			
Conference Carrier	20,943	11,117	22,575
Non-confer. "			
Regular Service	13,580		
Irreg. "			
Total	34,523	11,117	22,575
Total Intercoastal	1,498,682	937,386	657,530

Source: U.S. Shipping Board Bureau Special Compilation.

At the time of this writing the Pacific Coast forest products manufacturers and shippers are alarmed at the increasing scarcity of intercoastal space. Wartime shipping developments are blamed for the diversion of vessels from intercoastal trade into special charter service, which is doubly profitable for the shipping concerns. Much of the

1. United States Tariff Commission, Concessions Granted by the United States in the Trade Agreement with Canada; 1936.

charter shipping is reported to be for South America and other routes which have been heretofore served by British tramp freighters.

With eastern markets awaiting delivery, lumber has piled high up on shipping docks. At the present, the manufacturers and shippers are concentrating on a determined fight to not only keep existing services running but to obtain additional vessels in which to move lumber, shingles, pulp, plywood, etc., from the northwestern ports to the Atlantic seaboard. Strong pressure is being brought to bear on the United States Maritime Commission to have this body assign certain unassigned tonnage for intercoastal service. The Pacific Northwest Shippers Emergency Commission since its formation has been acting as a clearing house in keeping shippers and producers advised of the transportation situation and has been putting forth effort to coordinate the many units which are trying to obtain shipping relief.[1]

The situation has disturbed the forest products producers and shippers more than has any problem for a long time. The following examples help to show the reason for their unrest. At least one mill, the Warrenton, Oregon, Shingle Company, employing 42 men, closed because the manager said movement of accumulated stocks before May of this year was impossible. Big mills at Everett and Longview, Washington, reported the shipping problem was the cause of their reduced operations. At Bellingham, Bloedel-Donovan Lumber Company

1. West Coast Lumberman, page 66; April, 1940.

officials reported that the American-Hawaiian line had advised that after April 15, 1940, it could handle only one million feet of its lumber monthly, only one fourth of the scheduled shipments with the line. The company said no shipping space at all was available for Baltimore, Philadelphia, and Puerto Rico, and space to California ports is scarce. Tacoma's biggest shipping items to the Atlantic Coast, plywood and doors, have dropped from a normal of one thousand tons a month to 250 tons. Port authorities reported other cargoes have dropped proportionately.

Many meetings have been held up and down the Coast to attempt to arrive at a solution for the problem, and many pleas have been sent to Washington, D. C., urging relief. Governors of the two states have added their support in an effort to relieve the conditions of the lumber industry; Governor Martin of Washington sent a telegram to the United States Maritime Commission saying: "It is my opinion this situation is acute and some definite program of relief to shipping is imperative. Otherwise widespread curtailment of industrial life will soon follow and our entire recovery program will be retarded."[1] Speakers at some of the meetings mentioned above have pointed out that even though intercoastal shipping rates have experienced a sharp rise recently, lumber going to $16 per thousand or more, ships which formerly operated on intercoastal service still find it more profitable to operate on other routes under the special charter. The trouble, they

1. Grants Pass Daily Courier, Thursday, March 28, 1940.

point out, is that the owners of the ships are only looking at the short time view of the matter. The question is, will the intercoastal trade be waiting for them when the profits of wartime conditions have faded and they must return to a stabilized item of commerce.

Despite the difficulty of obtaining reliable statistics on the rates for carrying timber products on the intercoastal route, it is thought suitable to quote the United States Tariff Commission as follows:[1]

> "The rate paid on shipments of lumber from Washington and Oregon to the Atlantic Coast by regular conference service in 1928 and 1929 was $14 per thousand board feet. From July 1, 1931, to March 31, 1932, a period in which the total volume of shipments of all kinds was small, the conference was not in operation and domestic lumber was carried to Atlantic ports at approximately $8-8.50 per thousand, except that during the month of July, 1931, some lumber may have been carried at a rate higher than this under a rate agreement in force during that month between three lines. The conference resumed functioning in April, 1932, following a substantial increase in the total volume of shipments and the rate was placed at $10 per thousand and later increased to $12.50 per thousand, which is the current rate (1936).
>
> "No conference rates have been established on fir and hemlock lumber shipped from British Columbia to United States Atlantic and Gulf ports. In periods when substantial shipments have been made to these ports about 40% of the movement has been by regular line service and about 60% by irregular service. Information gathered by the Tariff Commission indicates that for shipment of lumber to United States Atlantic and Gulf ports during the period 1929-35 there was little, if any, difference between the rates charged by regular non-conference lines from British Columbia and from the United States Pacific Coast. Rates for the irregular service both from British Columbia and from Washington and Oregon to Atlantic and Gulf ports vary considerably from time to time according to availability of cargoes

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1. United States Tariff Commission, Concessions Granted by the United States in the Trade Agreement with Canada; 1936.

> and bottoms. This, together with the fact that charges for this service are not necessarily stated in terms of cargo units, makes it difficult to determine the average cost of transporting lumber, either from British Columbia or from Washington and Oregon by vessels in irregular service. Indications are, however, that the rates for irregular service average somewhat lower than the rates for regular conference service."

They go further in discussing the supposed advantage that British Columbian producers have in shipping lumber to the Atlantic and Gulf ports of the United States and say: "In view of the variation in the available services on both sides of the line, comparison should not be made between domestic conference rates and Canadian rates for irregular service, particularly in view of the fact that regularity of service has a certain advantage under some circumstances. Moreover, many of the carriers in the domestic intercoastal conference service are closely associated with lumber companies."

If this statement is of sound background, it would seem that the lumber industry's arguments of unequal competition for eastern markets were unfounded if based on the argument of Canada's industry having cheaper freight rates. But even though it were granted that Canada's industry has a competitive advantage because of lower freight rates, it may be seen that another factor will enter into the picture in the long run. It must be taken into consideration that the British Columbia timber industry, operating with some advantage on the competitive markets, is operating on a saw-timber basis with pulp-wood species logged merely as a by-product of this main industry. These pulp species predominate over the

Douglas fir, however, and it is estimated that there are from twenty to twenty-five years of commercially available Douglas fir saw-timber at present rates of production in this portion of Canada.[1] At the end of this 25 year period the pulpwood species must be logged for pulp production; when this takes place, the well-known fact that the terrain in British Columbia, especially on the mainland, presents much more difficult and costly logging conditions will come in to play a part in offsetting the lower stumpage rates, fixed charges, and freight rates of British Columbia's producers. In the event that the expected destruction of Canadian Douglas fir comes about, Canada will be placed on a nearly equal, or perhaps inferior, competitive basis with our own Northwest in pulp production, and competing Douglas fir from Canada will be completely out of the picture. The absence of competition will allow the full realization of the advantages of the low water freight rates by Washington and Oregon producers in maintaining eastern markets.

In the domestic waterborne commerce the Pacific Northwest has a distinct advantage over export commerce in timber products because there are no trade barriers to pass and make more difficult the problem of keeping prices low enough so that the demand for the products will not be curtailed. This advantage, along with the fact that the market is made up of

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1. "What the Pacific Slope Forests Now Have and Are Now Growing in Relation to National Supplies and Demands," H. J. Andrews; Journal of Forestry, vol. 35, page 171.

consumers whose customs and wants are similar to those in the producing region, makes the domestic market much more predictable. Sometimes, however, changes in the protective tariff policy of our own government raise considerable clamor among producers of timber products who fear competition from foreign woods. The Northwest's industry seems to be effected mainly by Canadian producers; therefore, the tariff regulations relating to that country are generally a sore spot. Aside from the importation of tropical cabinet woods, the only importations of any significance are those from Canada, which make up an average of about 2% of the entire consumption of the United States. It is evident that the tropical hardwoods would have little effect on the markets for products of the Pacific Northwest, but the imports from Canada tell a different story. Canada's exports to this country are principally of a low priced character. This makes it difficult for the Northwest's producers, with whom Canada directly competes, to dispose of the large quantities of similar low grade material that result from the manufacturing processes.

Chapter VI

RECIPROCITY AND CANADIAN TRADE

There has always been a great difference between the policies of the United States and Canada concerning trade and tariff. Nearly always all goods brought into the United States from Canada have been subject to the same duties as those brought from any other foreign country. On the other hand, Canada has long had three tariff schedules, with the rates for most commodities varying considerably under each. Namely, these were the highest, or "general" tariff, which was applicable to imports from countries with which Canada had no most-favored-nation treaties (Including the United States until January 1, 1936); the "intermediate" tariff which applied to a large number of non-British countries included under Canadian and British most-favored-nation treaties; and the "lowest" tariff which applied (And continues to apply) to imports from the British Empire countries. With a few non-British countries, Canada has had treaties fixing rates, on specific items, below the intermediate rates.

From 1854 until 1866 there was in effect a commercial reciprocity treaty between the United States and Canada. Under it there was free trade between the two countries in the larger part of the commodities exchanged. But after the expiration of this agreement there was no satisfactory treaty adopted for some time. There were, however, several unsuccessful attempts made to bring about the restoration of a similar reciprocity treaty between the two countries. Probably the most important of the attempts took place in 1911

with the proposed reciprocity agreement of that year. It took the form of an understanding that the two countries would concurrently enact legislation according specific tariff treatment to each other. The Government of the United States performed its part by the Act of July 26, 1911. Section one of this Act was conditional upon the enactment of reciprocal legislation by the Canadian Parliament, action which the Parliament failed to take, so that Section one remained inoperative. Had the agreement gone into effect, many articles would have gone free between the two countries, some merely continued on the free list but others theretofore dutiable changed to the free list. Reductions in duties would have been effected on large numbers of other commodities. Section two of the Act of July 26, 1911, did go into effect, however. It provided that wood pulp, newsprint, paper, and other paper and paper board of which wood pulp is the component material of chief value (If the value of the product were not more than four cents a pound) should be admitted free of duty, provided that Canada should impose no export duty or charge on such items. Since 1911 wood pulp and newsprint paper (Under specified value limits during the Act of 1913) have entered the United States free of duty.

During the 25 years, 1911 to 1936, prior to the signing of the recent trade agreement with Canada, the United States greatly increased tariff barriers effecting Canadian products. Linked with other causes, these tariff barriers had worked to decrease the trade between the two countries in many commodities to insignificant figures from what had been a rapid rate

of exchange. As early as 1922, the British Columbia lumbermen had realized that their markets on the East Coast of the United States might be easily lost. In October, 1922, the Victoria Chamber of Commerce, at the insistance of a lumberman member, asked the Donimion authorities to withdraw the duty of 25% charged on imported lumber planed on more than one side, lest the rate of duty imposed by Canada be used as an excuse to place a higher tariff against Canadian lumber entering the United States. Further reductions in the share of Canadian imports supplied by the United States resulted from the increase in tariff differentials maintained by Canado against American and in favor of the United Kingdom's products.

After the War, and particularly since 1929, definite efforts were made by Canadian lumbermen to develop larger foreign markets for Canadian products. Due to these efforts for wider distribution of Canadian lumber, many foreign markets that formerly held an important place in the waterborne trade of the Pacific Northwestern States were jeopardized, or lost entirely. It was in 1929, almost three years before the passing of the United States Revenue Act of 1932, that, at the Ottawa Conference, the British Columbia lumber industry took part in securing a preference of 10% on the c.i.f. (Charges, insurance, and freight) value in the British markets for Empire lumber. This preference along with an exchange situation more favorable to the Canadian producer than to the American exporter, proved sufficient to give to the British Columbia industry all that part of the British market

formerly shared with the Pacific Coast States of Washington and Oregon. This shift of markets is shown by Table VI; see also Appendix.

TABLE VI

British Columbia Shipments
Percent of Total

Shipments	1929	1936
Canadian Domestic	54.9	36.6
" to U.S.	27.5	10.7
Other Waterborne	17.6	52.7
Total	100	100

Source: U.S.Dept.Com. Yearbook 1938

In 1934 our government enacted legislation effecting the tariff policies between the United States and Canada. Under the authority of the Act of Congress approved June 12, 1934, entitled "An Act to Amend the Tariff Act of 1930," and commonly referred to as the Trade Agreements Act, an agreement was entered into between the United States and Canada. This agreement was signed at Washington, D. C., on November 15, 1935, and went into effect provisionally on January 1, 1936, in both countries. In exchange for substantial concessions obtained from Canada, the United States granted concessions to that country on some 99 products. Among the more important of these items was forest products. The duty into the United States was lowered on Douglas fir and western hemlock lumber, subject to quota limitations, and shingles, wood pulp, and pulpwood were admitted free of duty.

The actual effects of the reciprocal trade agreement upon the markets and prices of the products of the Northwest

are doubtful and practically impossible to determine accurately. There are probably true grounds for discontent on the part of the lumber industry of this region. This discontent seems justified when it is considered that, for the most part, concessions were made to Canadian products only on commodities as to which that country is by far the principal source of an article imported into the United States. It might be said that the lumber industry has the same claim as other protected industries, and that if protection is right on general principles, lumber is and should be no exception to the rule.

From the past few paragraphs it can be seen that there are outside influences even on the domestic markets for timber products of the Pacific Northwest. Nobody can accurately predict the future of the Northwest's waterborne commerce, therefore, until they are able to predict the future of our Trade Agreements Program. For the immediate future, the rate at which Canadian producers use up the annual quota allowed them by the United States will be a factor effecting the competitive position of the domestic producer, especially in the markets supplied by water-borne products.

SUMMARY

The Pacific Northwest's lumber industry has gone through a transition of exploration, migration, development, and expansion. We have seen that at first the lumber industry only expanded rapidly enough to satisfy the demands of the settlers. The problems of distribution during this era of beginnings were given little consideration, and so the practical lessons presented by the era are not apparent. Next, the period of expansion with its many problems presented a fair cross section of the problems that confront us today. Solutions for such problems as unsound, disorganized policies of distribution, poor facilities for distribution, and unfavorable tariff regulations adopted during the period of expansion even today are considered sound. In other cases attempted solutions for problems encountered give us a basis for formulating a solution for similar cases today. Then, it became evident during the recent period, from 1914 to the present, that many problems of the waterborne trade of this region were unpredictable and, to a certain extent, unsolvable. It was during this recent period that the opening of the Panama Canal made the maritime trade of the Northwest's timber products a truly important function of the lumber industry.

After the waterborne commerce of timber products began to assume importance in the industry, it was pointed out, certain specific attempts were made to facilitate the distribution by water of lumber, logs, pulp, etc. These attempts took the form of advantageous freight rates and tariff schedules in foreign markets, and similar attempts in domestic

markets aimed at overcoming unfavorable competition. Finally, the brief history of the United States' tariff policy as it pertains to the lumber industry showed that there must be correlation between any prediction of the future of the waterborne commerce and the policies included in our Trade Agreements Program.

The findings of this thesis do not show the entire solution to the problems of the lumber industry, for at the same time as it is necessary to have markets for the products it is also necessary to have those producing aware of the aspect of the other problems. In the past the lumber cut has tended to be governed by financial requirements instead of by demands of the market. The movement to unload stumpage while the opportunity lasted has been a serious cause of overproduction, and subsequent waste, in the West. Temporarily, something may have been gained by using outside markets as an outlet for this overproduction, but such trade was a sign of weakness, not of strength. If in the future the timber supply of the Pacific Coast region is preserved by proper silvicultural and economic methods, it can be expected that waterborne commerce will ever be important in the distribution of the lumber products.

It is impossible for any concrete conclusions pertaining to the future of the Northwest's industry in the foreign markets to be drawn from this thesis. The outcome of the present world economic and political debacle will have a large influence on what actually will eventuate. However, at least in the domestic service, the flexibility of water

transportation, indicated not only by its relatively cheaper rates but also in its greater freedom on the whole from a centralized political authority, undoubtedly will maintain this method of transportation in its superiority over other forms of transportation. In this capacity water transportation will play an important part in the domestic commerce of the Northwest's lumber industry. It will help in continuing the progressive development of this region with the corresponding maintenance of this industry's importance in the economy of the nation.

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APPENDIX I

TABLE VII

FOREIGN EXPORTS OF LUMBER AND LOGS

Board Feet

	British Columbia	Washington	Oregon
1919	102,352,106	205,853,852	78,721,095
1920	139,465,301	323,656,021	177,965,479
1921	161,958,580	330,876,474	208,914,767
1922	189,195,532	579,148,247	310,976,942
1923	268,734,393	761,378,301	425,754,687
1924	218,022,807	778,218,488	427,550,208
1925	216,486,485	771,197,829	380,307,810
1926	312,174,186	1,010,831,581	471,274,336
1927	346,421,488	1,153,147,986	443,143,642
1933	633,071,894	477,068,035	167,939,354
1934	830,729,555	509,279,462	210,508,406
1935	791,965,096	378,434,292	185,696,347
1936	1,042,954,030	324,794,319	173,482,160
1937	998,701,542	362,392,044	247,548,080
1938	1,036,377,562	153,059,872	131,519,311
1939	1,284,456,037	263,372,498	138,781,616

Source: P.L.I.B.

APPENDIX III

TABLE VIII

WATERBORNE LUMBER SHIPMENTS FROM PACIFIC NORTHWEST TO SPECIFIED FOREIGN MARKETS

Thousand Board Feet

	to AUSTRALIA		NEW ZEALAND		SOUTH AFRICA	
Year	Northwest	B.C.	Northwest	B.C.	Northwest	B.C.
1924	203,131	34,848	14,036	12,169	8,689	10,681
1925	201,437	40,288	13,068	12,619	9,662	8,875
1926	240,216	36,809	10,359	16,201	12,633	17,652
1927	298,048	53,502	10,202	10,847	7,618	18,562
1928	181,957	29,843	6,922	8,531	10,504	13,626
1929	224,236	41,493	10,355	8,559	14,113	15,889
1930	81,803	33,077	6,743	6,416	12,861	17,686
1931	26,742	50,803	272	2,579	7,519	13,120
1932	10,986	125,551	58	979	8,900	5,664
1933	6,904	123,732	88	1,300	6,806	18,213
1934	11,659	128,141	287	2,957	16,530	25,275
1935	23,425	129,492	43	3,792	11,168	28,349
1936	5,545	125,448	94	6,072	15,638	61,133
1937	11,231	158,400	0	5,415	26,093	49,015

Source: P.L.I.B.; Table 25, Reference 8.

TABLE VIII
(Con't)

WATERBORNE LUMBER SHIPMENTS FROM PACIFIC NORTHWEST
TO SPECIFIED FOREIGN MARKETS

Thousand Board Feet

	UNITED KINGDOM and CONTINENT		CHINA		JAPAN	
Year	Northwest	B.C.	Northwest	B.C.	Northwest	B.C.
1924	52,918	41,527	167,091	25,596	612,812	79,108
1925	86,903	53,845	152,754	10,783	515,714	67,671
1926	57,641	41,575	200,914	4,616	725,900	177,193
1927	154,422	36,427	157,667	9,179	741,433	191,597
1928	235,512	67,076	215,894	16,902	776,359	219,362
1929	284,384	69,904	334,652	43,323	464,838	192,412
1930	305,805	98,038	212,286	55,224	315,561	150,870
1931	169,875	82,890	214,497	53,854	325,864	138,852
1932	43,339	108,314	131,562	53,341	233,664	60,031
1933	55,534	271,073	253,518	130,596	212,355	60,657
1934	37,116	455,697	342,942	108,127	176,444	80,278
1935	31,005	455,861	185,345	91,232	285,518	43,079
1936	32,962	666,272	129,851	102,743	175,647	33,123
1937	51,928	648,364	187,509	47,635	178,285	30,677

Source: P.L.I.B.; Table 25, Reference Number 8.

APPENDIX III

TABLE IX

TOTAL WATERBORNE SHIPMENTS OF LUMBER FROM WASHINGTON AND OREGON

Thousand Board Feet

Year	Total Foreign	Total Domestic and Foreign
1920	501,622	1,694,168
1921	539,616	1,774,347
1922	890,125	3,126,383
1923	1,187,133	3,753,994
1924	1,205,769	3,959,130
1925	1,151,506	4,298,619
1926	1,482,106	4,847,321
1927	1,596,292	4,828,399
1928	1,629,512	4,925,527
1929	1,613,065	4,734,666
1930	1,111,184	3,677,901
1931	916,423	3,050,482
1932	537,038	1,850,578
1933	645,007	2,198,789
1934	719,788	1,889,456
1935	564,131	2,290,067
1936	498,277	2,400,072
1937	609,940	2,719,380
1938	284,579	2,182,882

Source: Reference 11c, Table 46.