WILLAMETTE VALLEY RIVER TOWNS AND STEAMBOATS

by

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This thesis describes the river towns along the Willamette River in Oregon. River conditions, adaptation of the boats to the river, and steamboat routes shown at ten year intervals illustrate the degree of accessibility of the various towns. Reasons for success or failure in light of factors of site, situation, efforts of townsite promoters or lack thereof are evaluated. Increase in population is used as a measure of success. Orientation to the river was reflected in town plans and location of land uses as shown in early maps and views.

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This thesis is made up of many fragments of information compiled over a number of years. Although I have made every effort to eliminate errors of detail and citation, I would appreciate correspondence from local residents and scholars who find mistakes.

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CHAPTER I

INTRODUCTION

The towns along the Willamette River were the points of contact between the Willamette Valley and the eastern U.S. during the frontier era in Oregon. As in other frontier areas, the river was the main interregional connection between places because movement over roads was slow. As people occupied land around these towns, they prospered as the link between the region and the outside world. Traffic in incoming merchandise and outgoing agricultural produce meant prosperity for the towns. Accessibility via the steamboat transportation network was the key to growth for these towns. Portland rose in importance as the regional juncture between ocean vessels and river steamboats. Those steamboats were the connection to other towns along the river and their hinterlands. The degree of accessibility for each town changed constantly as new roads were built and the river and steamboats were improved, and would change again with the coming of the railroad. The degree of accessibility these towns acquired in part explains their position in the hierarchy of places which existed by 1900.

However, accessibility was not the sole explanation for the relative growth rates of these river towns. Other factors which contributed to the success or failure of the river towns were site, in particular, susceptibility to flooding; varied efforts of townsite promoters to

improve the situation of their town relative to other places and successes in gaining internal improvements; and ease with which settlers could acquire clear title to the land. These factors make stories of the early development of these towns more intelligible.

The Willamette Valley is located between the Coast and Cascade Ranges in western Oregon. The Willamette River flows north through the valley to empty into the Columbia River. North of the Santiam River, much of the valley is hilly, while south of it the valley is a broad level plain. In 1848, the area for 40 miles south of the mouth of the Willamette was described as predominantly timbered, while further south it was predominantly prairie due to repeated burning by the Indians.[1]

Bowen's map of the Willamette Valley shows the streams and major topographical features of the Willamette Valley (see Figure 1).[2] The Santiam, Yamhill, and Tualatin are those tributaries which were navigated by steamboats at least for a time. The Tualatin Plains was an area of early settlement which several lower Willamette towns hoped to make their hinterland. The two largest prairie areas are on the east side of the valley. First, Champoeg County, then Marion and Linn counties, of which these areas are a part, would ship the greatest quantities of grain during the steamboat navigation era.

In Chapter I, describing the Willamette River transportation network, I attempted to answer the following questions: (a) What was the degree of accessibility for the different towns? (b) What were the river conditions that affected that accessibility? and (c) How often did the steamboats reach the different towns along the river? To answer these

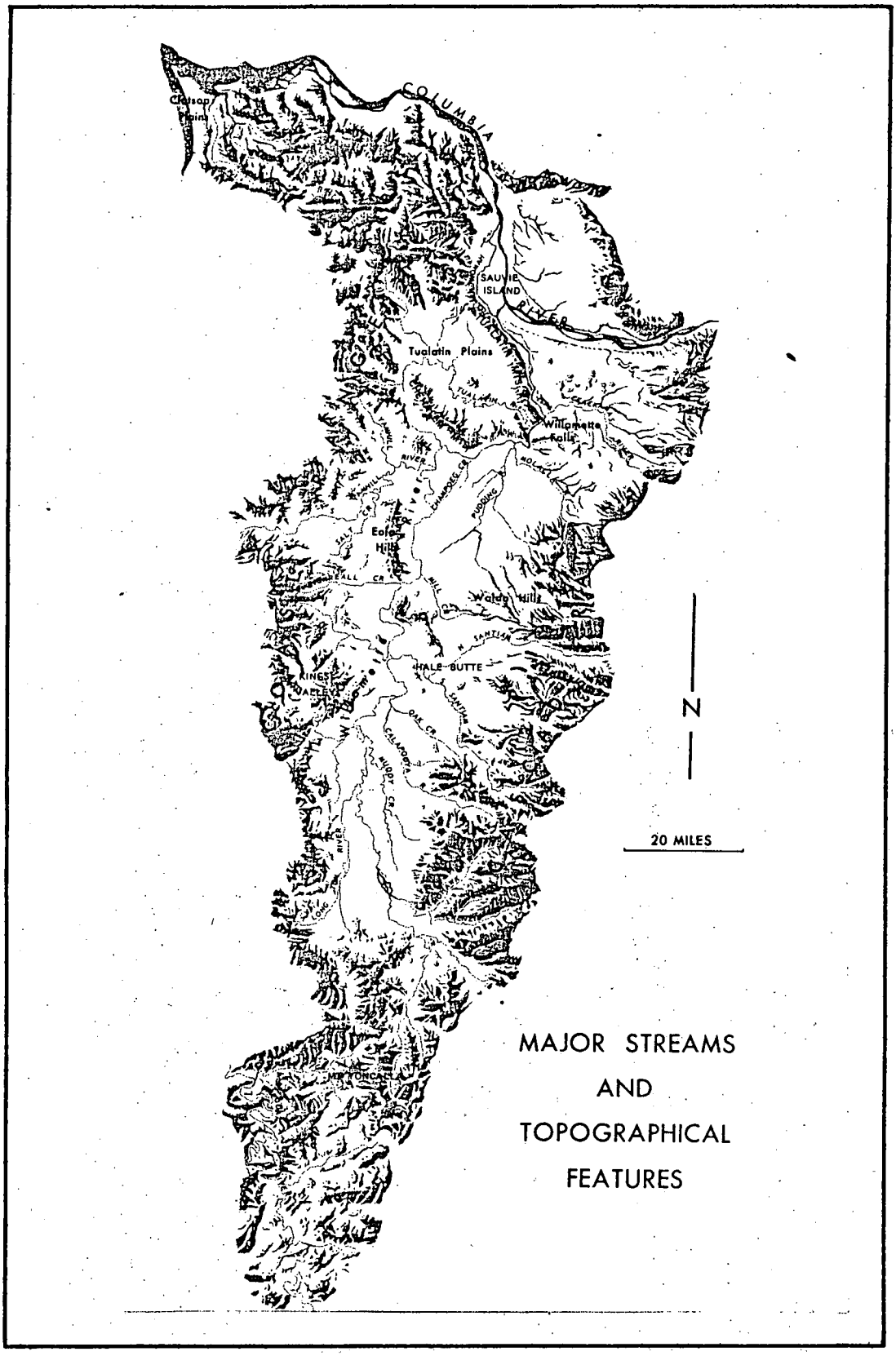


Figure 1. Willamette Valley Major Streams and Topographical Features by William Bowen. Used with permission of the University of Washington Press.

questions it was necessary to do some research on the steamboat transportation system itself. While not complete, the information I uncovered is presented in three sections: (a) river conditions, (b) boat types and their adaptation to the river, and (c) steamboat routes and schedules. Over time, as the river was made more navigable, as steamboat routes became regular and fixed, and as boats were increasingly adapted to the river conditions, the towns became more accessible.

Variations in water level and obstructions prevented some towns from receiving year-round service. The existence of a gravel bar downriver from a town could cause a steamboat to turn back if unable to cross it. River improvements in early years were done by town inhabitants and steamboat companies. Steamboats always attempted to go as far upriver as possible. As the river was improved, less time was spent hauling steamboats over bars. Savings in time meant savings in money as labor and insurance costs decreased. Snag removal meant boats were less likely to be damaged or sunk en route, so cargoes were safer.[3]

After 1871, the Corps of Engineers improved the river. Railroad building had begun in 1869, but river improvements were requested because freight rates were usually lower if towns had access to both river and rail shipping. Channel changes left some towns off the river.

Ascending rivers was more difficult, hence more costly, before the introduction of the steamboat. The steamboat decreased the amount of time required to reach upriver points. Steamboats were first introduced on the lower Willamette in 1850. The earliest ones ran from Oregon City to Astoria. As Portland emerged as an ocean shipping point, this route was divided. Steamboats ran daily between Portland and Oregon City, at

the Falls of the Willamette. Other routes linked Portland with Astoria to the northwest, Vancouver and the Cowlitz River to the north, and the Cascades to the east. I don't discuss these Columbia River routes.

Above the Falls at Oregon City, steamboats began operating in 1851. Three routes developed: (a) Oregon City to Dayton, Lafayette, and McMinnville; (b) Oregon City to Salem, Albany, and Corvallis; and (c) Oregon City to Eugene, at the head of navigation. On the first two routes, Dayton and Salem were accessible year-round, although it will be seen that the river had to be improved to Salem. The other points on each route became accessible as the river rose. Eugene and McMinnville were reached during periods of highest water only. Jefferson on the Santiam was apparently accessible during high water periods only. Attempts to introduce steamboat navigation on the Tualatin River failed for several years. By the late 1860s, boats were finally introduced by the Peoples Transportation Co., but only operated for a short time.

Steamboats made trips six days a week, sometimes twice a day, between Portland and Oregon City from the time they were introduced. Sunday service was not common, at least in the early years. Trips made three days a week became common between Oregon City and Dayton. The number of days per week boats ran to Salem, Albany, and Corvallis was highly variable. It was often twice a week to Corvallis in the summer and four times a week in the winter. Salem usually got visited more days per week than Corvallis, often getting five or six when Corvallis got four. Service to Eugene once a week was advertised, however, one day notices advertising individual trips on a specific day appeared for the same boats at the same time. These might occur close together or as much as

ten days apart. This implies service to Eugene was even more variable than the seasonal ads suggest.

Some steamboats were able to go farther upriver because of their smaller size and better design. A steamboat design suited to the Willamette had to evolve. Some early steamboats were imported from the East, while others were built based on patterns settlers had been accustomed to in the East or Midwest. Most were wooden, but a few were iron or iron hulled. The pilot house was built forward to enable pilots to see obstructions better.[4] Efforts were continually made to build boats which "drew" less water. Sidewheel, sternwheel, and propellor driven steamboats were tried in the early years. The propellor driven were the least common, since the propellor could easily be broken by coming in contact with an obstruction. After 1854, sternwheelers became the dominant type.

High pressure engines[5] were apparently used most often. These had a wider range of reserve power. A reserve power beyond the normal range was needed to ascend a difficult rapid, force a vessel over a bar, or avoid a snag suddenly appearing ahead--all conditions likely to be encountered on the Willamette River.

Chapter II describes the urban development along the river. Several more towns were begun than survived. The questions asked here are: (a) Where were these early towns? (b) What factors of site did town proprietors consider? (c) How did early town proprietors try to improve the situation of their towns? (d) How did these efforts affect the success of the towns? and (e) What were the reasons for failure of others.

Wade found that, on the frontier, most settlements were on the river, "deriving their importance and prosperity from water connections."[6] He notes that western townsites were chosen for their commercial promise.[7]

In the Willamette Valley, the first towns were along the river. Champoeg served as a grain shipping point for the French Prairie area. The first platting of towns occurred at Willamette Falls in 1842, followed by several below the Falls, platted in hopes of becoming the head of navigation for ocean vessels. Later, towns were platted throughout the valley, both above and below the Falls.

The survival of the river towns was attributable for the most part to the efforts of town promoters. They made efforts to gain access to both a hinterland and a position on the steamboat transportation network. In both cases, the ease and rapidity of connection was important, as well as the services and facilities the different towns provided. For example, of all the towns making efforts to connect with the Tualatin Plains, connection with Portland was most desirable because of access to ocean shipping at that point. Each town's situation underwent constant change. Many towns failed, and I examine the causes, in particular, the flood of 1861.

The measure of success used here is increase in population. A series of maps showing the population size of the river towns for each decade from 1850 to 1900 is analysed to discover the effect that: (a) position on the steamboat transportation network and, later, on the railroad routes, (b) damage from flood, (c) position on road network, and (d) efforts of town promoters had on town growth.

In Chapter III, the question asked is: How was the orientation to river transportation reflected in the internal layout of the towns? Wade points out that western cities were built in the image of those in the East, in particular, Philadelphia.[8] He describes the increasing disappearance of trees and grass,[9] the surrender of public ground,[10] the decrease in yard and lot size,[11] and continuous building in business districts which filled in empty spaces.[12]

In his view, "early planners connected regularity of design with cities,"[13] this "regularity giving the illusion of orderliness which settlers associated with cities."[14] Town plats tended to be long for maximum access to the river.[15] Names of streets reflected the river orientation, with a Front or Water Street, and streets numbered from the river.[16] The waterfront became commercialized and residential building moved inland.[17]

Town plats, early maps, and lithographic views are used here to describe the layout and internal structure of the towns. The grid plan was always used for the river towns in the Willamette Valley.

Initial plats were small, with frequent additions, particularly around 1850 when a town building boom occurred. Town plats were elongated because often settlers on adjoining donation land claims would each lay out a town. Sometimes this resulted in an upper and lower town until they grew together. Several towns have streets numbered from the water but a variety of names are used as well. Almost everyone had a Front or Water Street as elsewhere in the West and Midwest.

Steamboat landings formed the focus for the location of stores, warehouses, and mills which imported or exported goods. I have identified

steamboat landings on available historical maps. They were near ferry landings, often one street away. Boats moored to the bank of the river, called wharf boats, served the function of wharves before any true wharves were built. Wharf boats were in use in Portland and Oregon City in 1851. Wharves were in use in Portland by 1858, as can be seen in the lithographic view of Portland for that year. By 1865, passengers and freight were handled at different wharves. The location of other urban land uses is also described.

Figure 2 shows the location of the river towns considered in this study, which were those towns to the head of navigation on the Willamette, Yamhill, and Santiam Rivers. The Tualatin River is considered separately due to the repeated failure of attempts to provide steamboat service there, and I have excluded towns along that river from consideration.

Background of Settlement

Settlement of the Willamette Valley began in 1829 when French Canadians, formerly employed as trappers by the Hudson's Bay Company settled the area between the Willamette and Pudding Rivers. At that time, Britain and the United States jointly occupied the area. While final negotiations were going on, American promoters encouraged settlement as a way to win the area for the United States.

Americans began to arrive in the 1830s. Methodist missionaries, led by Jason Lee, came in 1834 and settled near Salem. Reinforcements for their settlement arrived in 1838 and again in 1840, after Lee's promotional tour through the Mississippi Valley and New England states.[18]

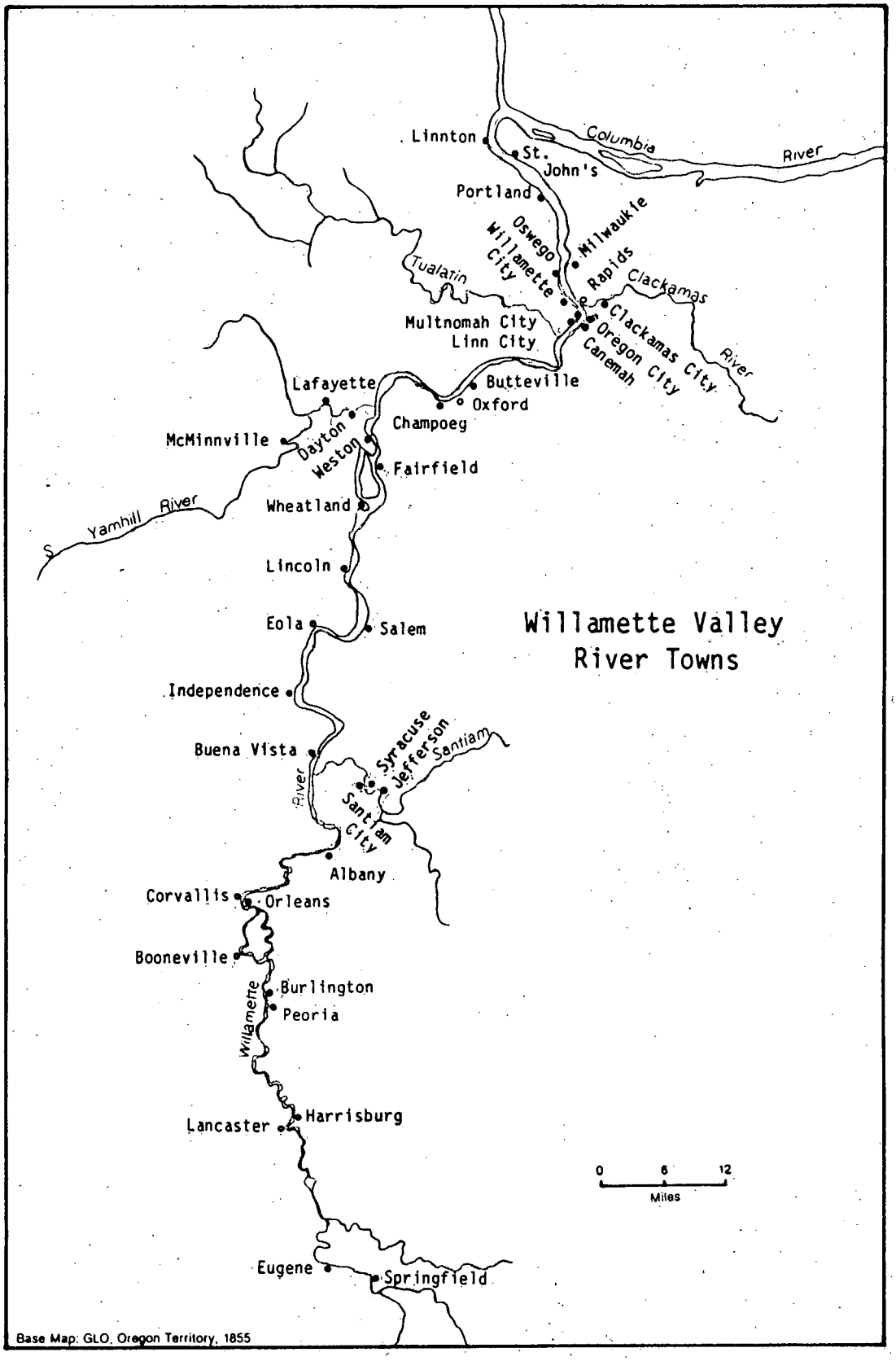


Figure 2. Willamette Valley River Towns considered in this study.

Settlers continued to trickle in throughout the 1830s: missionaries from other sects, settlers who had abandoned the Hudson's Bay Company's Puget Sound Agricultural Settlement, families or small groups from the East or Midwest, and other Americans formerly employed as fur trappers.

These settlers sold their wheat to the Hudson's Bay Company, and bought their supplies from them. By the time American settlement was being actively promoted, the Hudson's Bay Company had established a network of forts and trading posts in the area. In addition, agriculture and stock raising were undertaken in order that this Columbia Department of the Hudson's Bay Company might be self-sustaining. The company made additional profits selling wheat to the Russians in Alaska. The company established a warehouse at Champoeg, twenty miles above the Falls, where wheat was collected.[19] Settlers bought supplies at Fort Vancouver on the Columbia.

Annual overland migrations took place during the 1840s. Towns were platted during this decade as landowners saw an opportunity to sell lots to the increasing number of people coming in. The migrations of 1841 and 1842 were small, numbering about 100 and 150 respectively. A much larger number, between 800 and 900, came in 1843, perhaps because Senator Linn's bill to donate land to settlers passed the Senate that year.[20] By 1845, the Provisional Government census counted 2,000 people south of the Columbia River. An additional 2,000 came in 1845, and half that number in 1846. Two-thirds of the 5,000 who crossed the plains in 1847 probably came to Oregon.[21]

In 1848 the discovery of gold in California diverted a large number of migrants from the Northwest to the Sacramento River Valley and San

Francisco area. Also, many Oregon inhabitants left for the mines in 1848 and 1849 and some did not return. Those who did, profited from the demand for lumber, wheat, and fruit for shipment to San Francisco.

The Willamette River, which flows northward through the valley to join the Columbia River, was the main artery of transportation and trade during the period of Oregon's early settlement. The roads were primarily used to haul wheat and supplies to and from the nearest town or landing. Travel over them was slow and difficult because they were muddy in winter and dusty in summer. Most movement was by bateau, flatboat, scows rigged with sails, keelboats, canoes, or rafts.

In 1846, the first year the Oregon Spectator was published, ads were inserted for the Calapooiah, running on the lower Willamette, and the Mogul, Ben Franklin, and Great Western on the upper Willamette. Described as a sailing schooner,[22] the Calapooiah provided service between Oregon City, Portland, and Vancouver, Washington from 1844-1846.[23] She was apparently only able to reach Oregon City when the water level was high enough to permit passage over the Clackamas Rapids.[24] The Spectator editor stated the Calapooiah was "plying regularly between Fort Vancouver and Oregon City,"[25] but her schedule was actually more irregular than he implied, as is shown by the schedule to be found in a shipping report inserted in the June 11th issue of the Oregon Spectator. The Calapooiah arrived at Oregon City from Vancouver, Washington on the 4th of June, sailed to Portland on the 5th, and returned from Portland on the 7th.[26] Two other boats were built that May for operation on the lower Willamette,[27] but the length of time they operated and their schedules are unknown.

In April of 1846, the Ben Franklin and Mogul were advertised on the Oregon City-Champoeg route.[28] They were to run twice a week for a fare of fifty cents. The boats were capable of carrying between fifteen and twenty passengers. A one-way trip took between seven and ten hours.[29] Travelers often continued south from this point on land. Above Champoeg the current became stronger, the distance by water greater, and access to the river not easy until the mission at Salem fifty miles upstream was reached.[30]

In late May, 1846, the Spectator editor announced that a rival named the Great Western had appeared.[31] As seen in the following commentary, while slow, the service offered by these boats was more regular than anything available before, and so was considered a great convenience. Before this, travelers might wait at the Falls a week or more, daily expecting an opportunity for passage on a boat going upriver.

Oregon Rivers

> It is gratifying to see our noble rivers navigated by regular lines of packets. Instead of being compelled to wait at the falls a week or more, daily expecting an opportunity to get away, we can now time our journeys so that we can reach Oregon City on the sailing day of some of our splendid packet boats, and without any detention, find ourselves gliding along on the smooth waters of the Willamette.[32]

In October of 1846, the Mogul and Ben Franklin were again advertised as the "Passengers Own Line" in the announcement that they had been slipped into the water to ply between Oregon City and Champoeg for the season.[33]

Sometime during this period, George Pease ran a Hudson's Bay Company style batteau on the upper Willamette as far as Salem, and James Miller

operated a flatboat regularly between Canemah and Lafayette on the Yamhill River. The Canemah-Lafayette trip of thirty-five miles took two days for the trip upriver and one day to return.

In 1850, Leonard White began operating the Salem Clipper, a keelboat. As can be seen in the ad inserted below, navigation of the Willamette above the mouth of the Yamhill River was more difficult as the water level fell, and apparently not available year-round.

> Is the Willamette River navigable above the mouth of the Yamhill? The new Keel Boat "Salem Clipper"!!! will answer the question by informing the public that she has successfully navigated this "frightful" river during the summer, as far as Salem, and will continue to carry freight to Salem, or any other landing on the Willamette River, where there is sufficient business to justify it. This boat will continue to run from the falls to any accessible point in the country above.[34]

Connections between settlements would be improved with the introduction of the steamboat. It signaled a new era in the trade of the Columbia and Willamette Rivers.[35] Travel time, particularly upriver, was cut considerably.

> And a trip on the river above, where it used to consume at least three weeks in making it, can now, the water permitting, be made in the incredible short time of two days, and that too in a good comfortable steamer.[36]

The ramifications would be felt throughout the valley. That this was perceived is shown in the commentary to be found in the Oregonian for September 1851 after the steamboat had arrived in Albany.

> The importance and value of a regular and certain navigation of this river to the prosperity of the territory cannot fail to be appreciated by all. Heretofore the abundant produce of the fertile valley has been suffered to go to waste for want

> of a market. Our supplies have heretofore been transported in wagons, at great expense, from the cities below. Ten days are necessary to make the trip with teams, which it is hoped will now be effected in two or three days by steam. And thus a new impulse will be given both to the farming and mercantile interests of the community while we trust our social interests will also be not less improved and promoted by more frequent intercourse with our friends below.[37]

The availability of this new form of transportation, coupled with the expected increase in immigration from the passage of the Donation Land Act of September 27, 1850 encouraged the rapid growth of towns.

> Tis thus the change will be, and the day is not now very remote, when these rivers will be covered with the busy and ever "puffing steamer" transporting the produce from one section to the other. The towns already established will, in a short time, grow into cities, and new ones will be constantly springing up that will astonish all mankind with the rapidity of their growth.[38]

Notes

[1] Jesse Q. Thornton, Oregon and California in 1848 (New York: Harper, 1849).

[2] William Bowen, The Willamette Valley: Migration and Settlement on a Far Western Frontier (Seattle: University of Washington Press, 1978), p. 7.

[3] Constance McLaughlin Green, American Cities in the Growth of the Nation (Great Britain: John DeGraff, 1957), p. 45.

[4] Staff, Sternwheeler, "Columbia Gorge," Port of Cascade Locks, Cascades Locks, Oregon.

[5] Jacob Kamm Papers, Manuscript #1451, Oregon Historical Society, Portland, Oregon; John Gates Papers, University of Oregon Manuscript Ax 36, Eugene, Oregon.

[6] Richard C. Wade. The Urban Frontier (Chicago: University of Chicago Press 1959), p. 29.

[7] Ibid., p. 30.

[8] Ibid., pp. 314, 318, 321.

[9] Ibid., p. 311.

[10] Ibid., p. 29.

[11] Ibid., p. 311.

[12] Ibid.

[13] Ibid., p. 28.

[14] Ibid., p. 27.

[15] Ibid., p. 29.

[16] Ibid.

[17] Ibid.

[18] William Bowen, Migration and Settlement on a Far Western Frontier: The Willamette Valley to 1850, (Ph.D. dissertation University of California, Berkely, 1972), p. 21.

[19] Gunther Barth, Instant Cities: Urbanization and The Rise of San Francisco and Denver (New York, Oxford University Press, 1975), p. 84.

[20] Earl Pomeroy, The Pacific Slope, (Seattle: University of Washington Press) 1973 p.29.

[21] Bowen, The Willamette Valley, p. 13.

[22] Oregon Spectator 28 May 1846, p. 3:3, Oregon City, Oregon.

[23] Claude Rafael, "The First Steamer in Oregon," The West Shore, May, 1879, Portland, Oregon, p. 134.

[24] Oregon Spectator, 28 May 1846, p. 2:3, Oregon City, Oregon.

[25] Ibid.

[26] "Shipping Intelligence," Oregon Spectator, 11 June 1846, p. 3:3, Oregon City, Oregon.

[27] "Better Yet," Oregon Spectator, 28 May 1846, p. 2:3.

[28] Oregon Spectator, 30 April 1846, p. 3:3.

[29] Ibid., p. 2:2.

[30] Barth, Instant Cities, p. 84.

[31] Oregon Spectator, 28 May 1846, p. 2:3, Oregon City, Oregon.

[32] Ibid.

[33] Oregon Spectator, 1 October 1846, p. 3:2.

[34] Advertisements, Oregon Spectator, 31 October 1850 - 29 May 1851.

[35] Oregon Spectator, 11 July 1850, p. 2.

[36] Oregon Spectator, 7 October 1851, p. 2:2.

[37] Oregonian, 27 September 1851, p. 2:6.

[38] Oregon Spectator, 24 October, 1850, p. 1.

CHAPTER II

RIVER CONDITIONS

Since other parts of the United States had steamboat service in 1846, it is not surprising that the suitability of the Willamette for steamboat navigation was considered by Palmer in his trip upriver in that year. He traveled 125 miles above the Falls at Oregon City and interviewed those who had gone farther. He evaluated the channel, the obstructions, and the water level and current and pronounced conditions favorable for navigation with a little improvement.

> . . . Traveling up the river, five miles from the falls brings us to Rock Island [See Figure 3]. Here is said to be a serious obstruction to the navigation of the river. The difficulty exists in there being several peaks of rocks so elevated, as to be near the surface of the water in the low stage; and as the channels between them are very narrow, and the water quite rapid, boats are liable to run onto them. But the rock can be removed at an inconsiderable expense. It is fifteen miles above the falls to the first gravel bar, at which place, in low water there is but three feet in the channel.
>
> In traveling up the river about fifty miles, I found, in addition to the obstructions named, four other gravel bars, over some of which there were only thirty inches of water. In going the next seventy five miles, I approached the river several times, and found it to have a deep channel and smooth current. Persons who had navigated the river considerably further up, in their traffic with the Indians, informed me that it continued equally favorable for navigation. From what I saw and learned of intelligent persons, I think the smaller class of steamboats could for most part of the year ascend 200 miles above the falls.[1]

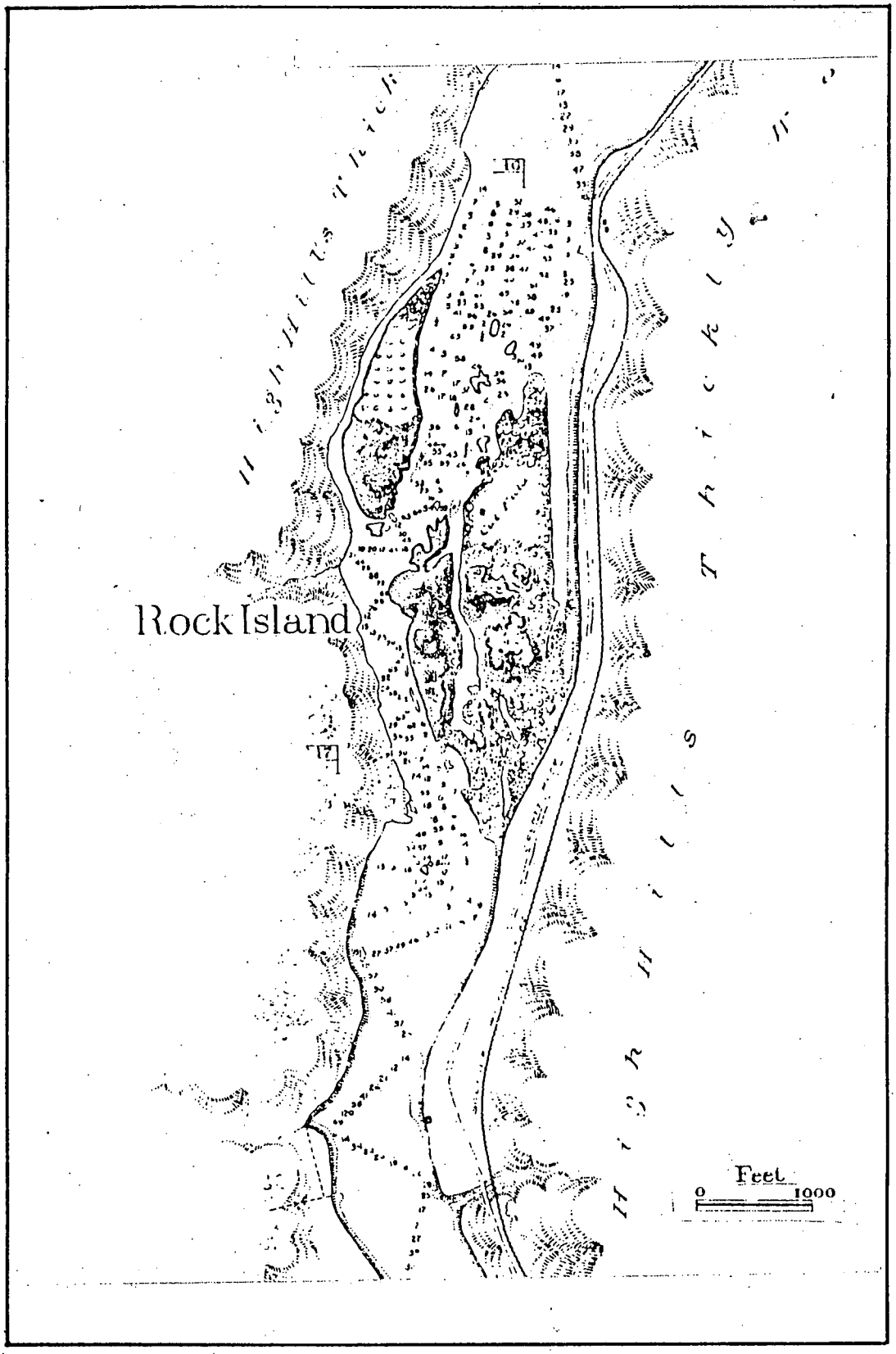


Figure 3. Rock Island - 1895. From The Upper Willamette, Sheet 13, U.S. Army Corps of Engineers, Portland, Oregon.

Water depth, current speed, riverbed characteristics, and channel conditions were important considerations because they could limit the length of the navigation season and determine the ease of steamboat transportation. Below Corvallis, the water depth was described in the Annual Report of the Corps of Engineers as ranging from three to twenty feet at low water, while above Corvallis it was from twelve inches to twelve feet.[2]

Water Level

An 1875 map of a survey of the upper Willamette between Salem and Independence Bar, too large to be reproduced here, describes the average depth of water in the line of deepest channel to be from ten to fourteen feet. Shoal areas, which occurred at various points, had a depth of from six to eighteen inches. The general velocity of the river was found to be three-fourths to one and one-half miles per hour, which could increase to six miles per hour at the rapids.[3]

Yearly water level variations on the lower and upper Willamette can be seen on water curves reproduced here, which were submitted with Annual Reports by the U.S. Chief of Engineers to the Secretary of War.[4] On the lower Willamette, the curves for 1879 and 1880 at Portland are presented (see Figure 4). Variations from year to year can account for variations in steamboat service from year to year. Changes are also apparent from month to month. The pattern on the lower Willamette is a rise in May or June, caused by backwater from the Columbia. Peaks in November, or January through March, reflect rises on the upper Willamette during the

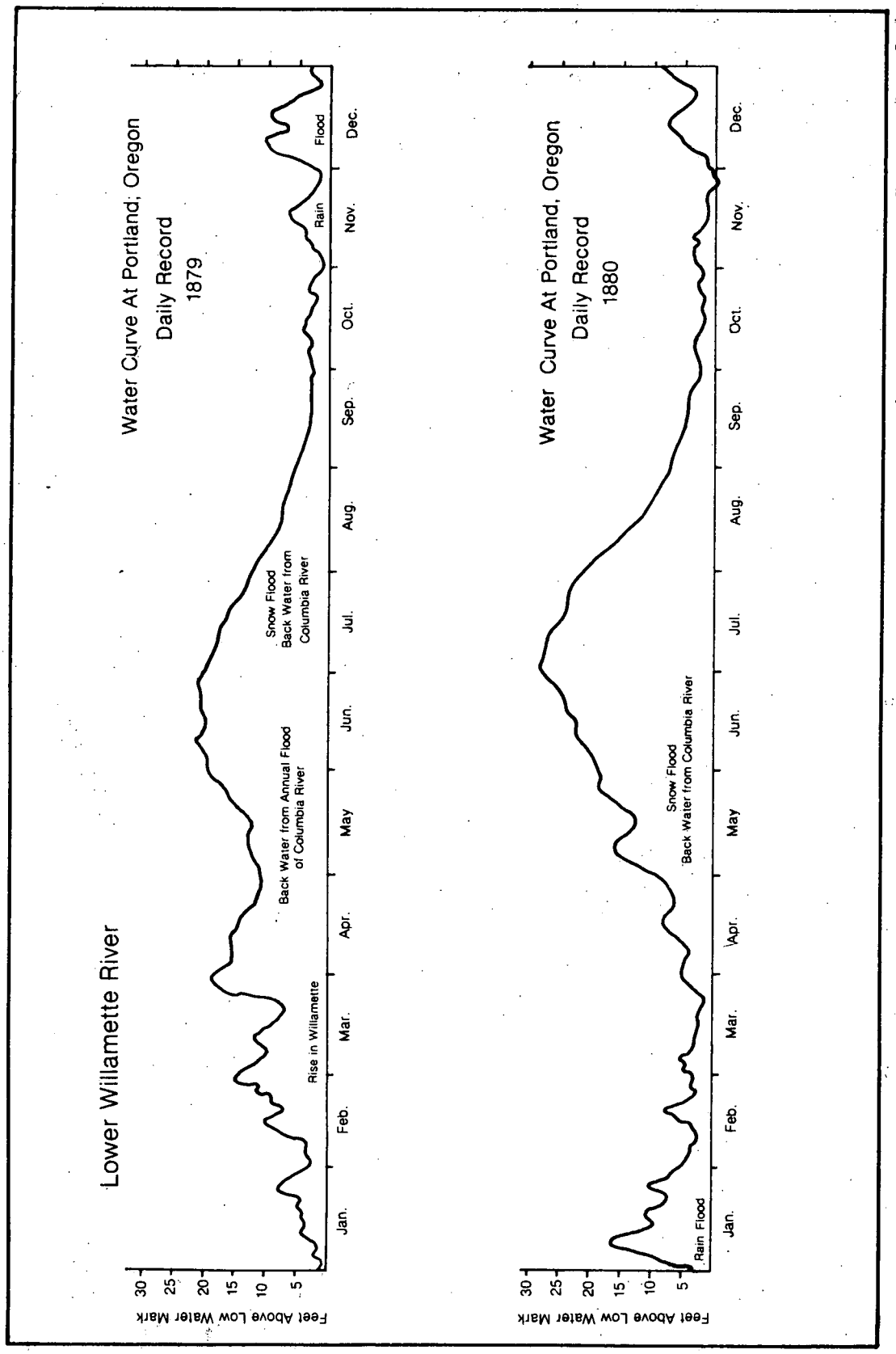


Figure 4. Water Curves at Portland, Oregon 1879-1880. W-350-4, W-365‡, Record Group 77, National Archives, Washington, D.C.

rainy season. The most significant low water period occurs from August to October.

On the upper Willamette high water periods are caused by rain during the winter months and some snow melt in the spring. The example shown here is at Albany for 1879 and 1880 (see Figure 5). The pattern shows the high water period beginning sometime in November with periodic rises from December to March. The water starts to drop in July, being the lowest during August and September. Yearly variations on the upper Willamette are significant because greater water depth in a particular year could allow the extension of service to a place not usually accessible, or may permit easy passage over a bar that normally caused a delay of an hour or more.

This variability in water level from year to year meant that the length of the navigation season varied also. The difficulty of dependence on the steamboat meant that it was necessary to wait for the rise in the river before shipment of produce could begin. Since the timing of the rise varied from year to year, the farmers were unable to take advantage of market fluctuations.

> The people of that rich and beautiful county [Polk] are for a large part of the year practically deprived of all means of transporting their produce to the point of shipment. This is the case with all the west side--except Washington and a part of Yamhill--while those on the east side, through which the railway passes, are compelled to choose between paying the high rates exacted by the railway company, or wait, along with the west side people, for the fall rains to bring the river to a navigable stage. This is not only a great inconvenience, but a positive damage to all parties so situated. They are shut out from the market for months, and can never count with any reasonable degree of certainty upon the time when the river will rise. One fall it is at practicable boating stage early in October, or even earlier than that. The next it may be late in December

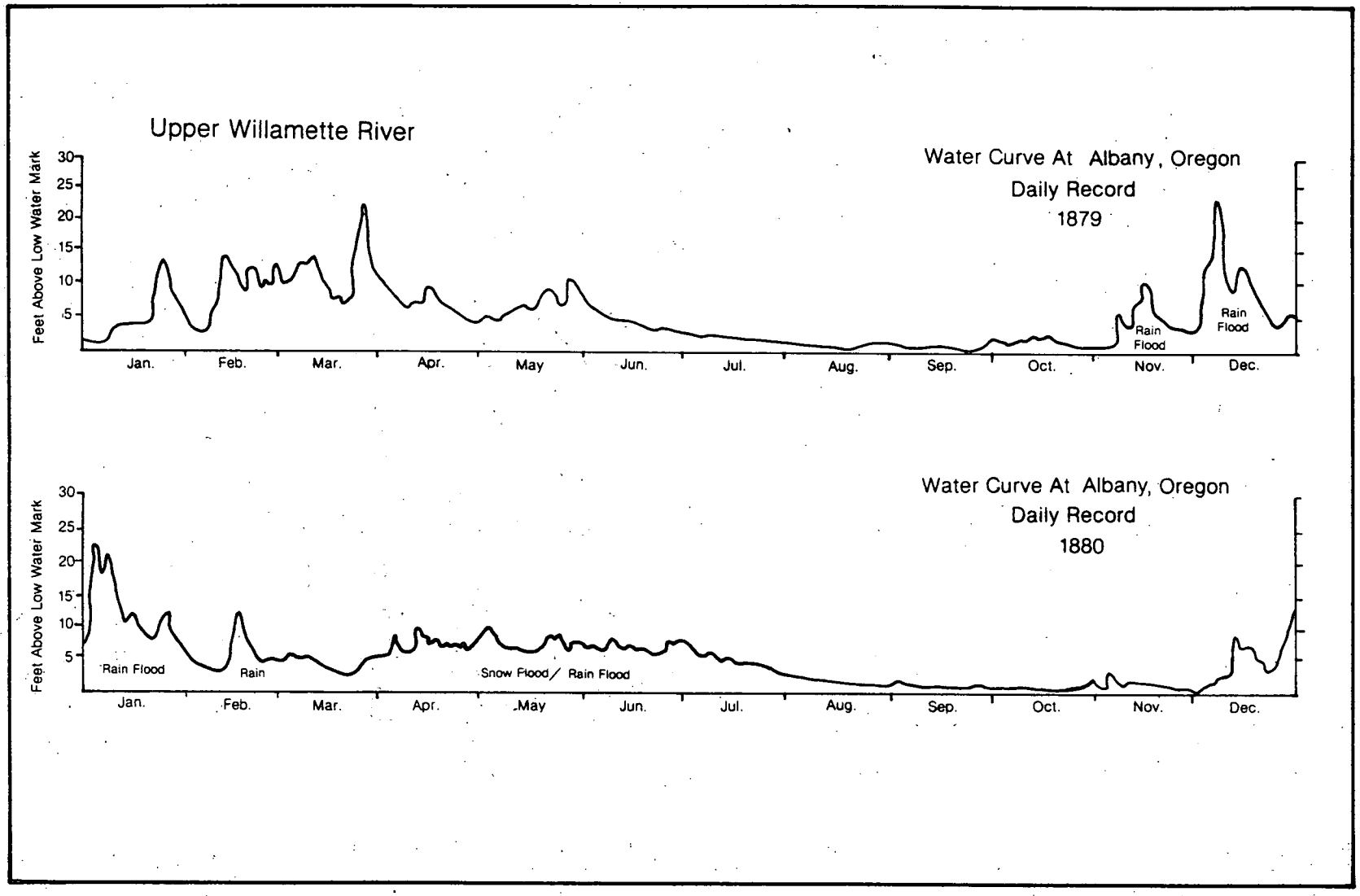


Figure 5. Water Curves at Albany, Oregon 1879-1880. W-350-4, W-365½, Record Group 77, National Archives, Washington, D.C.

> before a boat can ascend to any point within reach of the wheat farms. Thus are these farmers deprived of all opportunity to take advantage of the fluctuations of the market as they might do if they could lay down their produce in Portland on short notice, and at all seasons of the year; thus are they compelled to hold their grain when they might, with sufficient means of transportation, realize for it and have the money at interest, thus are they unable to contract for delivery to Portland at any definite time so as to secure the benefit of the cheapest rates of transportation hence to the foreign market. A merchant who charters a ship to sail from here at a time definitely specified must be sure of having his cargo ready to meet the ship in time to meet this condition, or else he must get the cargo at such prices as will allow of his paying demurrage for whatever period the vessel may be delayed. But those who are forced to depend on the river transportation cannot be sure of having the freight here at the specified time. So they must secure themselves in the other way suggested, or decline to purchase from the farmers so situated. In either case the burden falls on the farmer.
>
> The only way to remedy this is to improve the river. This is plain.[5]

Both high and low water periods presented difficulties for steamboat navigation. One of the most significant was the yearly cessation of service mentioned above. Boats were unable to ascend as far upriver or were limited in the amount of freight they could carry. For example, when the Enterprise was unable to reach Corvallis in 1866, freight and passengers were landed at Albany.

> Boats - The P.T. Co's. steamer Enterprise, in consequence of shoal water or the bars, failed to reach this place [Corvallis] yesterday, landing freight and passengers at Albany. The heavy draft boats will cease running to Corvallis until the "mist," "heavy dew" or some other agency shall furnish more water on the bars. . . . The Echo will still continue to run to this point.[6]

Falling water levels increased the time required to travel upriver. For example, the Active was several hours behind schedule on a trip to Corvallis in July, 1866.

> Stuck - The P. T. Co's steamer Active was several hours behind time, on Tuesday last, in consequence of getting stuck on Matheny's bar, below Salem. The river is getting very low, and ere long, if it continues to fall, the keen whistle of the boats will cease, for awhile to disturb our quiet slumbers. In the meantime, we shall return to the more primitive, if not more convenient, expeditious and high toned mode of freighting, and enjoy a practical experiment of steam vs muscle horse flesh, and dusty roads.[7]

Not all steamboats ceased running at once. For example, in mid-May of 1854, the Wallamet stopped running because of low water,[8] but the Fenix was still making trips twice a week between Oregon City and Lafayette,[9] and the Canemah was making "regular trips" between Oregon City and Corvallis.[10] By late June, it was reported that the Wallamet was to be launched over the Falls in order to be put into operation between Astoria and Oregon City.[11] At the same time, the Fenix was only going as high as Champoeg[12] and it was announced that the Canemah had "hauled off" for the season.[13]

Steamboats attempted to move as much freight as possible before the navigation season ended.

> Rushing - The P. T. Co's steamer, Echo, Capt. George Pease, touched at our wharf [Corvallis], on her return from Lancaster at 10:00 A.M. yesterday. She was well laden--Capt. Clark and all hands - handle freight. River falling and a great deal of freight to go down. Just as she left the Active arrived. She loaded principally with bacon.[14]

Late summer was the worst. In mid-August of 1853, the river was reported as quite low, making steamboating difficult both above and below the Falls.[15] In late summer, boats were not always able to go as far upriver as Oregon City, stopping instead at the "foot of the rapids."

These rapids were caused by a bar at the mouth of the Clackamas River formed by the sand and gravel brought down by the river (see Figure 6).

This situation required passengers and freight headed down river to transfer at the "foot of the rapids," and await the return trip of the boat to Portland.[16] The Lot Whitcomb advertised that freight would be forwarded from the "foot of the rapids" at the expense of the boat during periods of low water.[17] When the Columbia rose in the spring, backing water into the Willamette, boats were able to pass easily over the rapids.[18]

The fall rains were eagerly anticipated because they meant the resumption of steamboat navigation to points farther upriver. Merchandise accumulated at Oregon City during low water.

> Goods are accumulating at this point. The steamers above only run as high as Champoeg, regularly, and at furthest up to the mouth of the Yamhill River. Shippers and steamboat owners are anxiously waiting for a rise in the river. A large increase in business may then be expected. The river is gradually rising.[19]

Extra boats were put on the Portland-Oregon City route when the water level rose to accomodate the extra freight moving down the upper river.

> . . . after Thursday next we will have two steamers plying between Portland and Oregon City daily. The increase of business on the Willamette is in consequence of the rise in the river, which enable the boats above the falls to do an extra amount of freighting, and there is plenty for them to do.[20]

Steamboats always attempted to go as far upriver as possible as the water level began to rise, turning back when they could go no farther.

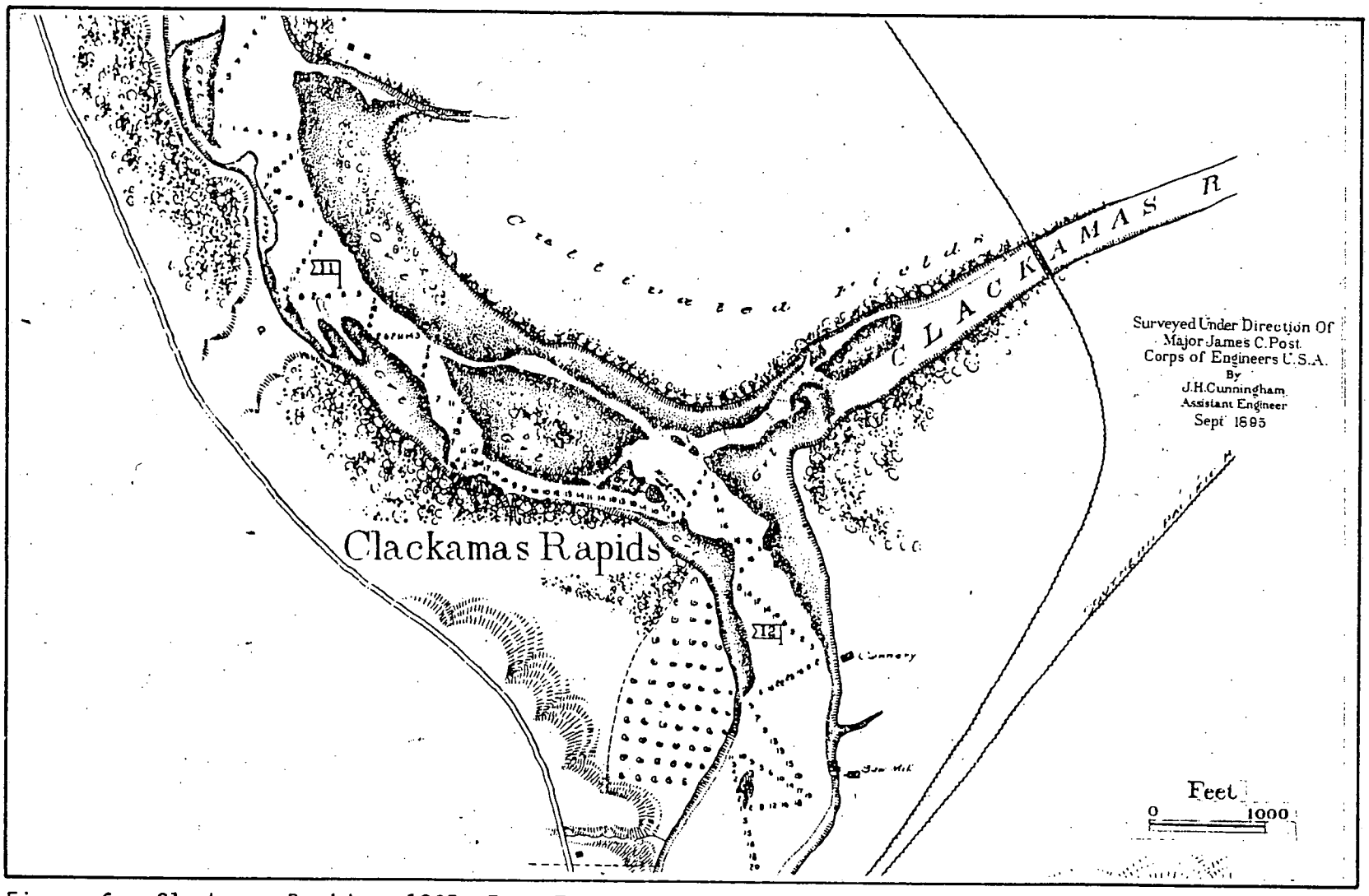


Figure 6. Clackamas Rapids - 1895. From The Upper Willamette, Sheet 14, U.S. Army Corps of Engineers, Portland, Oregon.

For example, in the first week of October 1851 the Canemah had been unable to go beyond Chrisman's Bar above Weston.[21] She came within six miles of Salem in late October 1851 before low water on one of the bars made it necessary for her to turn back.[22] On November 4th of that year, the river was high enough for steamboats to get to Marysville (Corvallis).

> . . . the rains have set in, in earnest--the river is quite full and still rising--there has been a rise of 4 feet --navigation has been resumed above to Marysville--the boats are quite active--and steamboat stock has ris [sic] considerably.23

Extremely high water was marked by excessive currents which made navigation difficult,[24] and meant a decrease in the amount of freight boats were able to carry.[25] Of three rises which occurred during the 1851-1852 navigation season, two were such that navigation was impeded.[26] The rise in January 1852, the worst, is described below.

> The recent rains . . . have caused this stream to rise some twenty feet above low water mark. It being the first rise of much consequence this winter, large quantities of driftwood is [sic] constantly running in the river, obstructing and rendering navigation for the time difficult and somewhat dangerous.[27]

Rock Island was a hazard to navigation during periods of high water. During the pre-steamboat era, flatboats occasionally capsized there.[28] Steamboats were harder to control during high water. Steamboat captains turned back if they thought they would be unable to get through without damaging their boats. In November 1853, navigation above the Falls was temporarily suspended.

> Navigation was suspended for several days above the falls last week. Rock Island was the barrier. It presented a frightful appearance. At such a stage of water it is impossible to stem the Cascades there presented.[29]

In an attempt to get by this obstruction the Fenix knocked a hole in the bottom.[30] The high water condition persisted into early December.

> Very heavy rains have fallen here for the past 8 or 10 days. The river has been running quite full, and a greater portion of the time the boats have not been able to make their way through Rock Island. During the time specified the weather has been comparatively warm. This will have the tendency to keep the waters up, by the melting of the snow in the mountains. No snow has fallen in the valley up to the present time.[31]

Merchandise also accumulated at Oregon City during periods of high water.

River Business

> Trade on the river Willamette is quite brisk; the boats are running daily between this city [Oregon City] and the towns below. The activity below and the temporary suspension of business above, caused goods to accumulate at this point, during the high water. At one time we were informed, over 200 tons were in store here, awaiting transshipment. They were soon cleared out when the boats were able to run through Rock Island. There are five boats running above the falls and four below.[32]

Extra power was needed to ascend upriver past the Clackamas Rapids when the water was high. In January 1873, the Maria Wilkins had difficulty ascending the river there because the water "swept over the rocks with such velocity that ascending steamboats were compelled to put forth extra power to pass that point."[33] As will be seen in the section on steamboat design, Willamette River steamboats had high pressure engines because of their ability to provide extra power.

Floods were dreaded, of course, because of the damage they caused. Service was suspended. The worst flood which occurred during the 1850-1900 period was that of December 1861, when the river rose thirty feet above low water mark.[34] Buildings, bridges, and fences were destroyed. Towns which had been platted on the lowest river terrace were washed away. Navigation was suspended for several days.[35] The effect of the flood on the towns themselves is further described in Chapter III.

Types of Obstructions

Ice

Occasionally, ice blocked the Columbia, lower Willamette, and sections of the upper Willamette. When ice blocked portions of the Columbia, small steamboats out of Portland traveled through Willamette Slough.[36] However, sometimes even this route was impassible.

The Columbia and lower Willamette were frozen in January of 1854,[37] 1856,[38] 1857,[39] and December of 1879.[40] The flood of 1861 was followed by a period of freezing weather that closed the river for two months.[41] The frequency of ice blockages prompted one person to call for the building of railroads.

Commerce Stalled in 1868

> If Portland expects ever to be a commercial city, it should take steps to become independent of river transportation at such a season as this. For several weeks the city has been cut off from all trade and communication, except by Jamieson's express. Now, is it not plain to every thinking man that a community cannot aspire to the activity of a commercial city, or hope for the wealth and prosperity which commerce commands, when it is liable to be cut off from all its traders and supporters for weeks and months together? As well might we expect

> the body to survive when all its veins and arteries are frozen and dead, as to expect any place aspiring to commercial prosperity, to flourish under such conditions. The remedy for this state of affairs is plain--railroads.[42]

Ice was less of a problem on the upper Willamette. When the Columbia and lower Willamette were frozen in 1856, the upper river was open.[43] In 1847, ice obstructed navigation by pre-steamboat craft in the vicinity of Rock Island.[44]

Bars

Another impediment to navigation was gravel bars. They formed wherever the river widened abruptly or separated into two or more channels. Gravel of varying size was carried downstream during annual river frishets.[45] As one went upriver, the gravel bars were covered with fewer inches of water and the rocks were larger. Improvements were required each year after fresh deposits were made.[46]

The number of bars increased as one went upriver. An 1876 report counted nine between Portland and Salem, besides Rock Island, fifteen between Salem and Corvallis, and thirty between Corvallis and Eugene, twenty-six of which were above Harrisburg.[47]

More significant than the actual number is the extent to which certain bars were obstructions to navigation. As can be seen on the reproduction of a map transmitted with the Annual Report for 1875 by the U.S. Engineers Office, most of those mapped and mentioned in reports and newspapers as hazards were above the mouth of the Yamhill River (see Figure 7). Two hazards below the mouth of the Yamhill River, Clackamas Rapids, and Rock Island have already been described.

Figure 7. The Willamette River from Portland to Eugene City - 1875. W-191, Willamette River, Oregon, Record Group 77, National Archives, Washington, D.C.

In 1852, the General Land Office Surveyor described Weston, on the Willamette above the mouth of the Yamhill, as the head of navigation during low water.[48] Chrisman's Bar, located just above Weston, was mentioned as an obstacle in July, August, and October of 1851,[49] causing steamboats to turn back when unable to cross it.

Of other obstructions between the Yamhill River's mouth and Salem, an 1871 report by the U.S. Engineers named Mathenys (on later maps marked Martineys) Bar, Beaver and Lone Tree Rapid, and Chitwood Bar the worst because the channel was narrower and full of bends at these places (see Figure 8).[50]

The following is a description of the method used by a steamboat to cross Chitwood Bar.

> In ascending the river, the boats hug the west bank until they arrive about 150 feet below the wing dam; a line is then taken from the boat and one end made fast to the pile, the other end remaining on board wound around the capstan; the boat then backs; the result is that she is carried into mid stream and held there by the line. The engine is then quickly reversed, a few feet of progress made, and the space line taken in. The probabilities are that by this time the boat is aground. She again commences to back, which throws a little water under her and causes her to rise a trifle on the wave so produced. The engine is again quickly reversed, and more progress made. This process is repeated sometimes for hours, until the boat reaches the pile, after which she has no more difficulty.[51]

Lone Tree Rapids was considered especially hazardous because the boats had to cross against the current above the bar and could easily be swept broadside against it. The 1871 report stated that improvement of the bars in this section would decrease the time required to travel from Oregon City to Salem by two hours and allow more freight to be hauled.[52] Union Bar was mentioned in an 1876 report as a major obstruction.[53]

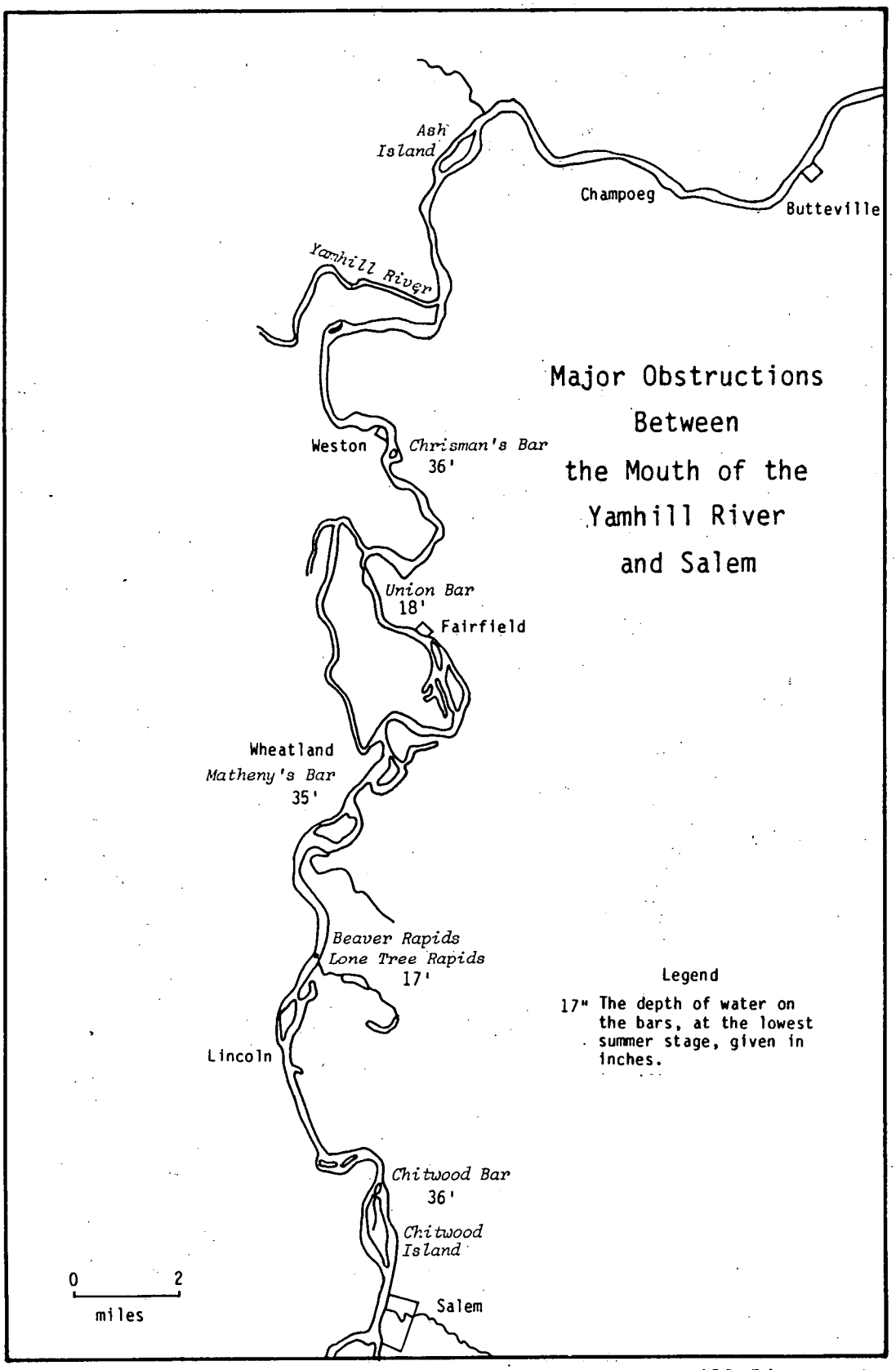


Figure 8. Major Obstructions Between Mouth of Yamhill River and Salem - 1875. From 191-1, Willamette River, Oregon, RG 77, National Archives, Washington, D.C.

Of obstructions between Salem and Corvallis, Humphreys Rocks (see Figures 9 and 10) between Independence and Buena Vista, and Bowers Bar (see Figure 11) between Albany and Corvallis were considered the worst. The engineer reporting in 1871 thought that navigation could be opened to Albany and Corvallis year-round if these two obstructions were improved.[54]

Humphreys Rocks (later Judson Rocks) were basalt outcroppings. Basalt also crops out at Rocky Rapids, Eola Rocks, and Rock Island.[55] The engineer's description of 1871 is included here as an example of the type of obstacle the steamboats encountered at these places.

> The bed of the river is gravel like that on the other shoals, but the obstruction consists of two rocky reefs, nearly parallel to each other, about 150 feet apart, putting out from opposite sides of the channel. The lower one projects from the south shore, and is 125 feet in length, by an average width of 75 feet. The upper reef puts out from an island on the north side of the channel for a distance of 250, and has an average width of 100 feet.
>
> These two obstacles cause the boat in ascending or descending, to make two sharp turns in contrary directions (like the letter S), and the current being rapid, nearly 400 feet per minute, has a tendency to throw a boat, in crossing, broadside on the lower reef, which is covered by two feet of water. The upper one is barely covered.[56]

The Channel

At medium stage the width of the river ranged from 400 to 2,000 feet. At low stage it decreased to a range of 150 to 1,000 feet. The steamboat channel, one-fourth the width of the river, ran from side to side.[57]

As can be seen on the 1875 map of the Willamette River from Portland to Eugene (see Figure 7), the channel above Corvallis splits into an east and west channel, and more sloughs are apparent, especially in the area

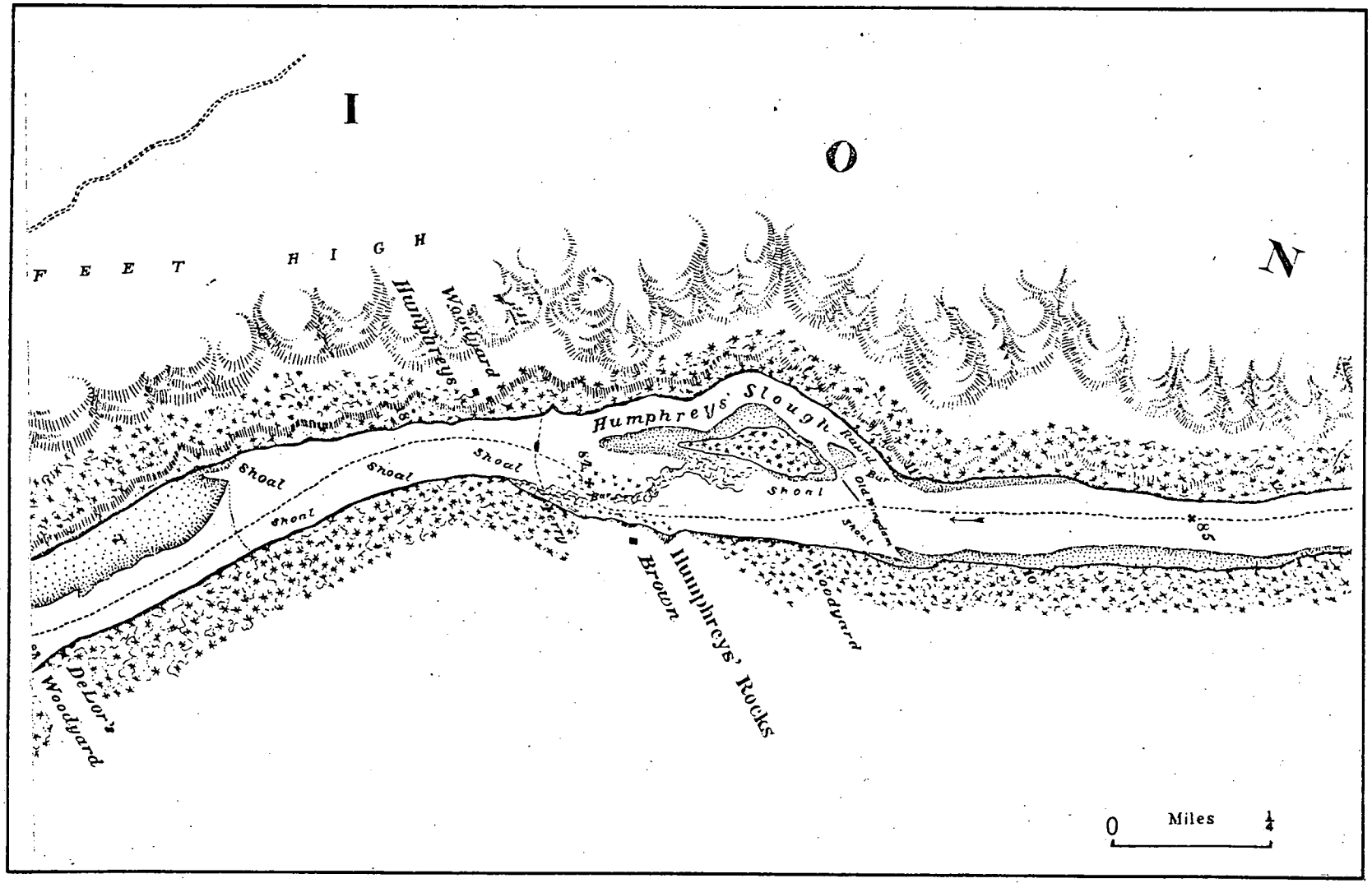


Figure 9. Section of the River Where Humphreys' Rocks Occur - 1875. From W-249-2, Upper Willamette River, Independence Bar to Albany. Record Group 77, National Archives, Washington, D.C.

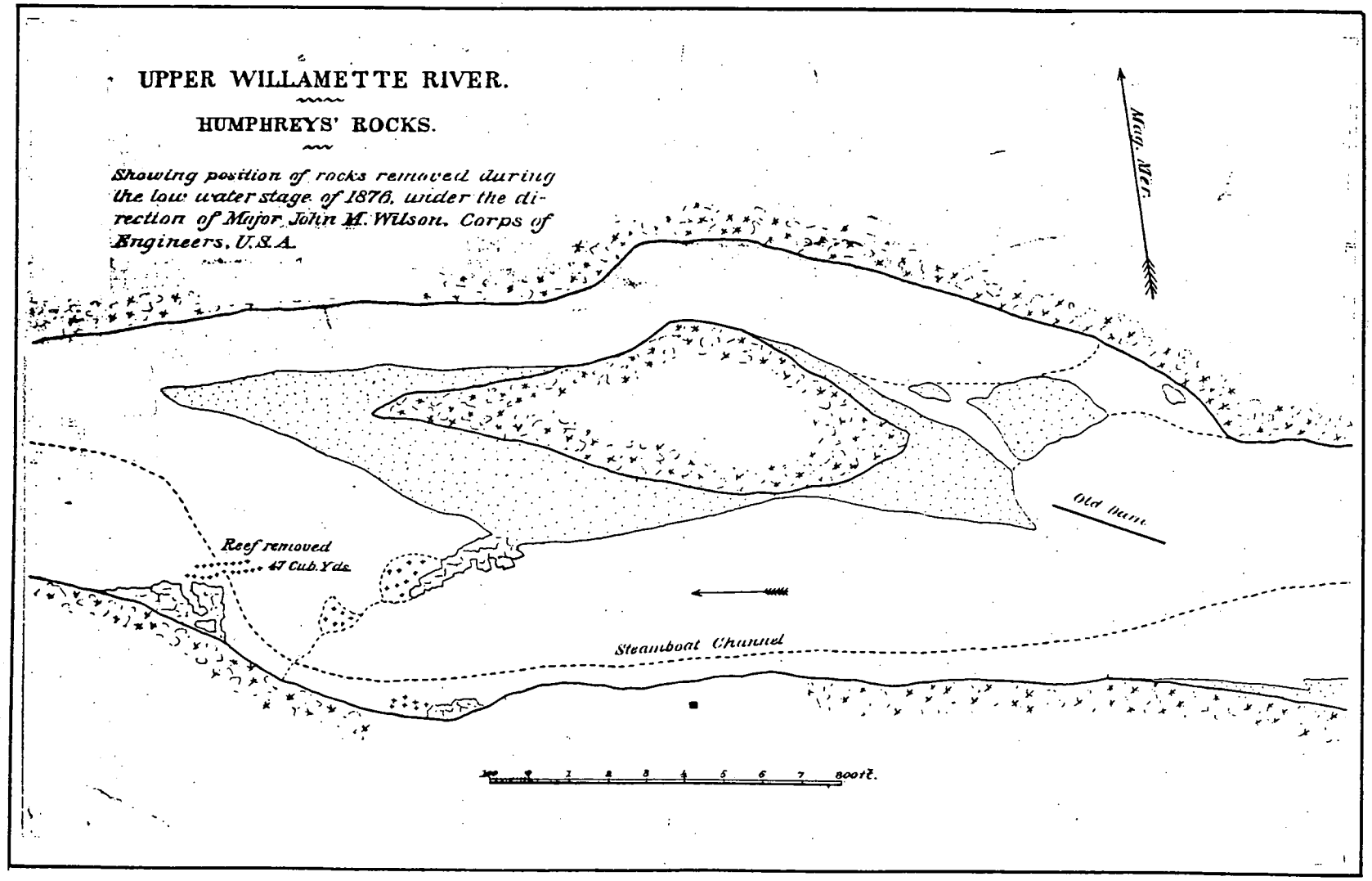


Figure 10. Humphreys' Rocks Located Between Independence and Buena Vista, 1876. W-284, Upper Willamette River, Record Group 77, National Archives, Washington, D.C.

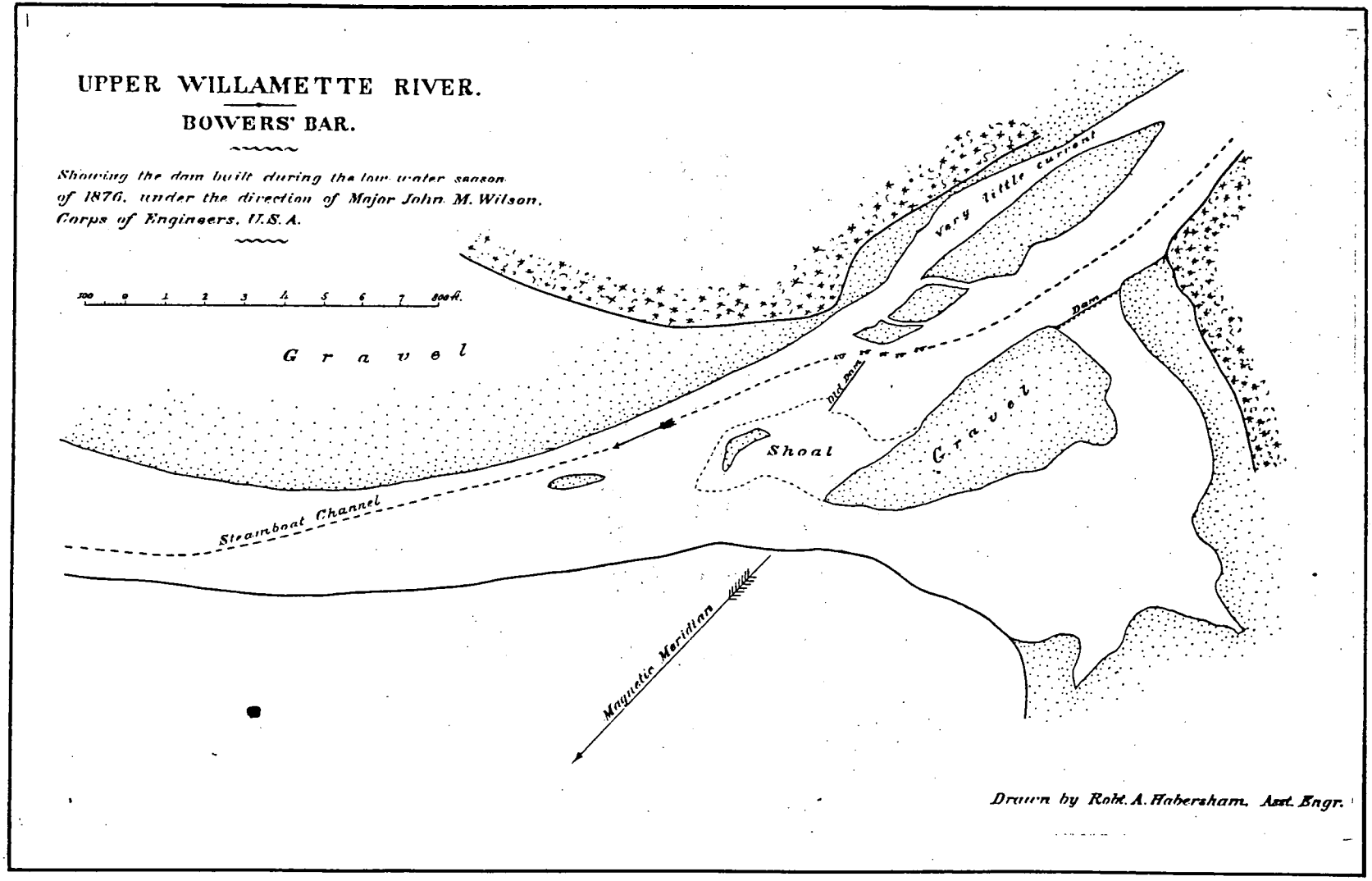


Figure 11. Bowers Bar, Located between Albany and Corvallis, 1876. W-284, Upper Willamette River, Record Group 77, National Archives, Washington, D.C.

north of Harrisburg labeled The Devil's Graveyard. Above Corvallis, the channel changed yearly so steamboat captains bringing their boats above Corvallis had to be prepared to encounter segments of the river they had not traveled before.

These channel changes could make some upriver towns inaccessible, at least for a time. When in February 1867, the channel changed, Lancaster and Eugene were inaccessible for a time.

> The River - The P.T. Co's. steamer Enterprise, Captain Miller, returned to this city [Corvallis] last Saturday evening about 8 o'clock; remaining till next morning. The Captain had been on an exploring condition, but could reach neither Lancaster or Eugene City, in consequence of the change in the channel and the formation of bars--about six miles below Eugene City, he found only 10 inches of water. This will preclude the possibility of reaching the above points, except at high stages of water.[58]

As the channel moved eastward, Lancaster was left off the river.[59]

Snags

The banks of the Willamette were timber covered and caved easily.[60] Snags and sawyers were trees which had fallen into the water after the banks had been undermined by the erosive action of the water. Along parts of the Willamette, cottonwood, maple, ash, alder, and willows covered the bottomland. Those that fell into the water floated downstream and came to rest in a shallow spot were called snags. Where they lodged, they obstructed the streams and collected gravel. Sawyers, named for the sawlike action given them by the current, were trees pointing downstream whose root end had become imbedded.[61] Both were

dreaded, because if not seen in time, they could tear holes in the wooden hulls of the steamboat.

As described in the Annual Report for 1876 of the Corps of Engineers, length of the snags ranged from 20 to 200 feet, and circumference from 4 to 20 feet.[62] The Annual Report for 1880 listed the number removed yearly since 1871 when government improvements began (see Table 1).

These were removed, cut up into small lengths, and thrown out onto the bank, far enough inland to be out of the way.[63]

Efforts and Types of Improvement

Efforts to improve the river for navigation were discussed as early as 1846, four years before the first steamboat began running. A memorial was to be proposed to Congress:

> . . . for the purpose of obtaining appropriations of money, to be expended in clearing away of obstructions to the free navigation of the Willamette River above the falls; also in clearing away obstructions below the falls; also in improving the mouth of the Columbia River.[64]

Although requests for appropriations were made in 1850 by Governor Gaines and Samuel Thurston,[65] and a bill was put before Congress that same year for a survey of the Willamette River to the head of navigation and of the Columbia River to the Cascades,[66] it appears that improvements in the early years were done by those in the towns that would benefit and by steamboat companies.[67] For example, the money required to improve the Clackamas Rapids was raised in Oregon City.[68] Improvements had been made by late 1851. A dredging machine had been purchased, but arrived too late to be put into immediate use that season.[69] A dam had been

Table 1. Number of Snags Removed 1871-1880

Year	Number of Snags Removed
1871-72	39
1872-73	222
1873-74	280
1874-75	900
1875-76	700
1876-77	901
1877-78	1,031
1878-79	753
1879-80	543

Source: U.S. Chief of Engineers, Annual Report of Major George L. Gillespie, Corps of Engineers, for the Fiscal Year Ending June 30, 1880. Appendix MM2 of the Report of the Chief of Engineers to the Secretary of War. House of Representatives Ex. Doc. 1, pt. 2, 46th Cong., 3rd Sess., Congressional Serial Set vol. 155, pp. 2284-2288.

constructed to turn the water into the channel on the right side of the island, using the force of the current to clear out the obstruction. An 1880 report evaluating the possibility of creating an eight-foot channel depth to Oregon City states that this dam probably made the navigation situation worse.[70]

In an editorial calling for river improvement, the Spectator editor encouraged the people of Salem to clear the river for the advancement of their town.[71] When a month later, the Multnomah, on an exploratory tour to Eugene, got stuck on Chrisman's Bar, twenty men from Salem helped the owners of the Multnomah improve the river at that place.[72]

Steamboat crews removed snags from the river.[73] In 1851, the editor of the Spectator remcommended that subscriptions be obtained for a fund to pay for snag removal, but it is not known if this was ever done.[74]

The People's Transportation Company, which operated in the 1860s, built wing dams on Mathenys, Chitwood, and Runaway Bars, and also removed snags.[75]

A wing dam was constructed by placing two logs diagonally across the current and holding them in position with piles at each end of the logs. Willow brush was lodged against the upper side and held in place by gravel (see Figure 12).[76] Sometimes logs not well anchored would be carried away during high water.[77] At places like Rock Island, rocks were blasted down to the low water line.[78]

Improvement of the river above Portland by the U.S. Corps of Engineers began in 1871 when the first surveys were made. Improvements consisted of scraping of bars, removal and cutting of timber from the

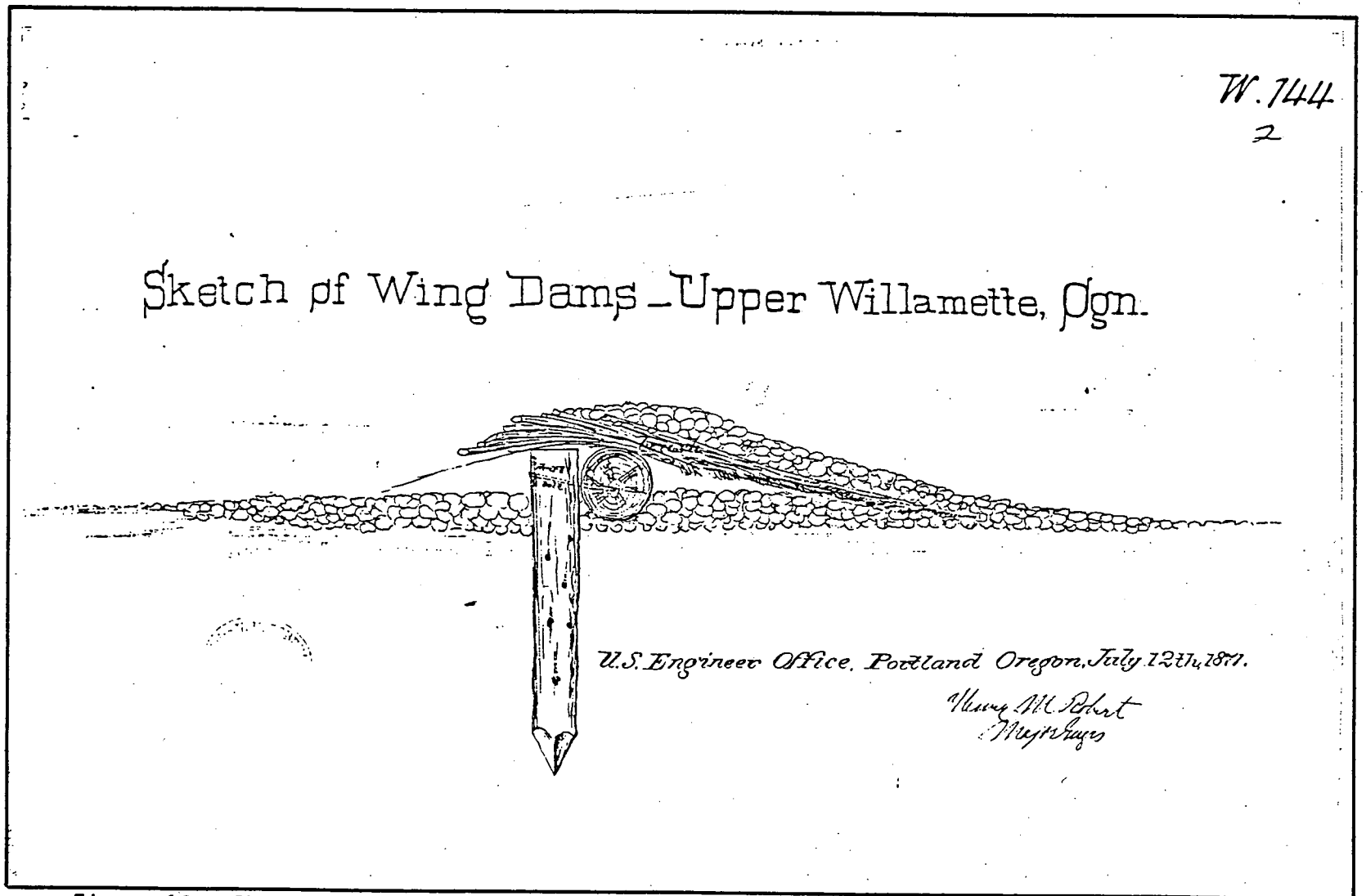


Figure 12. Sketch of Wing Dam, Upper Willamette. W-144, Record Group 77, National Archives, Washington, D.C.

banks which had either fallen or were about to fall in the channel, and the construction of wing dams to deepen the channel.[79]

Results of Improvements

Where in 1852, the GLO surveyor had declared Weston the year-round head of navigation as stated previously, in the Annual Report of the U.S. Chief Corps of Engineers for 1876, the engineer stated:

> . . . Boats drawing thirty inches loaded can now ply between Portland and Salem, a distance of 70 miles, at all stages of the river; between Salem and Corvallis, a distance of 44½ miles, at all times, except during very low water, or from November until July; and between Corvallis and Eugene City, a distance of 57½ miles during the winter and spring rise, which generally lasts about six months. From Eugene City to Springfield, 6 miles above, occasional trips have been made during high water but the total number accomplished thus far, I am informed, does not exceed ten.[80]

However, getting to Salem was not always easy. The same engineer made a supplemental report in which he admitted, that on a trip upriver in August, in a steamboat drawing twenty inches, "we were aground from 2 to 3 hours, and were absolutely hauled through the gravel bars by lines tied to trees on shore and carried to our windlass. The wheel of the boat was badly broken, and four rudders were carried away during the trip."[81]

Even after the introduction of the railroads, there was a demand for river improvement because water transportation offered competition which kept freight rates down. In 1876, 300 new wheat warehouses were built on the 60 mile stretch between Oregon City and Salem, which the reporting engineer credited to the improvement of the river which transported by

water at cheaper rates than the railroads.[82] At this time, the railroad was built down the east side of the valley to Eugene, but on the west only to St. Joseph, so some points on the west had no rail service.

The Falls at Oregon City required that freight and passengers be transferred between the upper and lower river routes. Building a canal was discussed as early as 1851.[83]

On the west bank of the Willamette, where the locks were eventually built, improvements were made as early as 1853. In that year a company of Californians, headed by Daniel Page of Page, Bacon and Company, San Francisco bankers, bought land. As described in The Oregonian for 1870, this company, named the Willamette Falls Milling and Transportation Company, built a steamboat, dry dock, warehouses, and boat basins above and below the falls for steamers to enter to receive or discharge freight and passengers. They also rigged hoisting machinery in the warehouse to transfer freight and passengers to and from steamers in the upper and lower boat basins.[84] The Oregonian editor was pleased with this arrangement because he believed that this arrangement would induce the upper river people to purchase supplies in his city, Portland, rather than Oregon City. Oregon City had usually been used because of the inconvenience of reshipping at the Falls.[85] In addition, they constructed a breakwater at that place from the upper basin to insure safe navigation.[86]

This company announced the completion of their warehouses and the opening of a line of steamers which would run from Portland to Corvallis in February of 1854.[87]

However, the steamboat business at the Willamette was undergoing a slump in 1854. Also, one of their steamboats had been burned while under construction in January; the Gazelle exploded in April and the Oregon sank. So the Willamette Falls Milling and Transportation Co., went out of business in April 1854. The financial firm of Page, Bacon and Company of San Francisco, California failed. To what degree the setbacks of this enterprise contributed to this failure were not investigated.

According to a flood damage report in the Oregon Argus for December 14, 1861, the Linn City Works, as they were then called, had been used to transfer freight between upper and lower boats since that time, but were washed away in the flood.[88] How the site was used beween 1861 and the construction of the canals and locks was not investigated.

In 1868, the Willamette Falls Canal and Locks Company was incorporated. An 1870 act of the Oregon Legislature authorized $200,000 from a federal internal improvement grant for the project. This act provided that the project be completed by January 1, 1873 and that the tolls not exceed fifty cents for freight and ten cents per passenger. The state was to receive 10% of the profits from these tolls for the school funds. However, only one payment was ever made (see Figure 13).[89]

> The locks and canal consist of a flight of four locks, each 210 feet long and 40 feet wide, and having a lift of about 10 feet each. These locks are at the lower end of the canal. A canal basin just above the flight of locks carrying the level of the upper pool is about 1,250 feet long and a guard lock 210 feet long at the upper end of this basin connects it with the upper level. An upper entrance about 1,000 feet long makes the total length of the canal, including the locks and entrance, about 3,500 feet.[90]

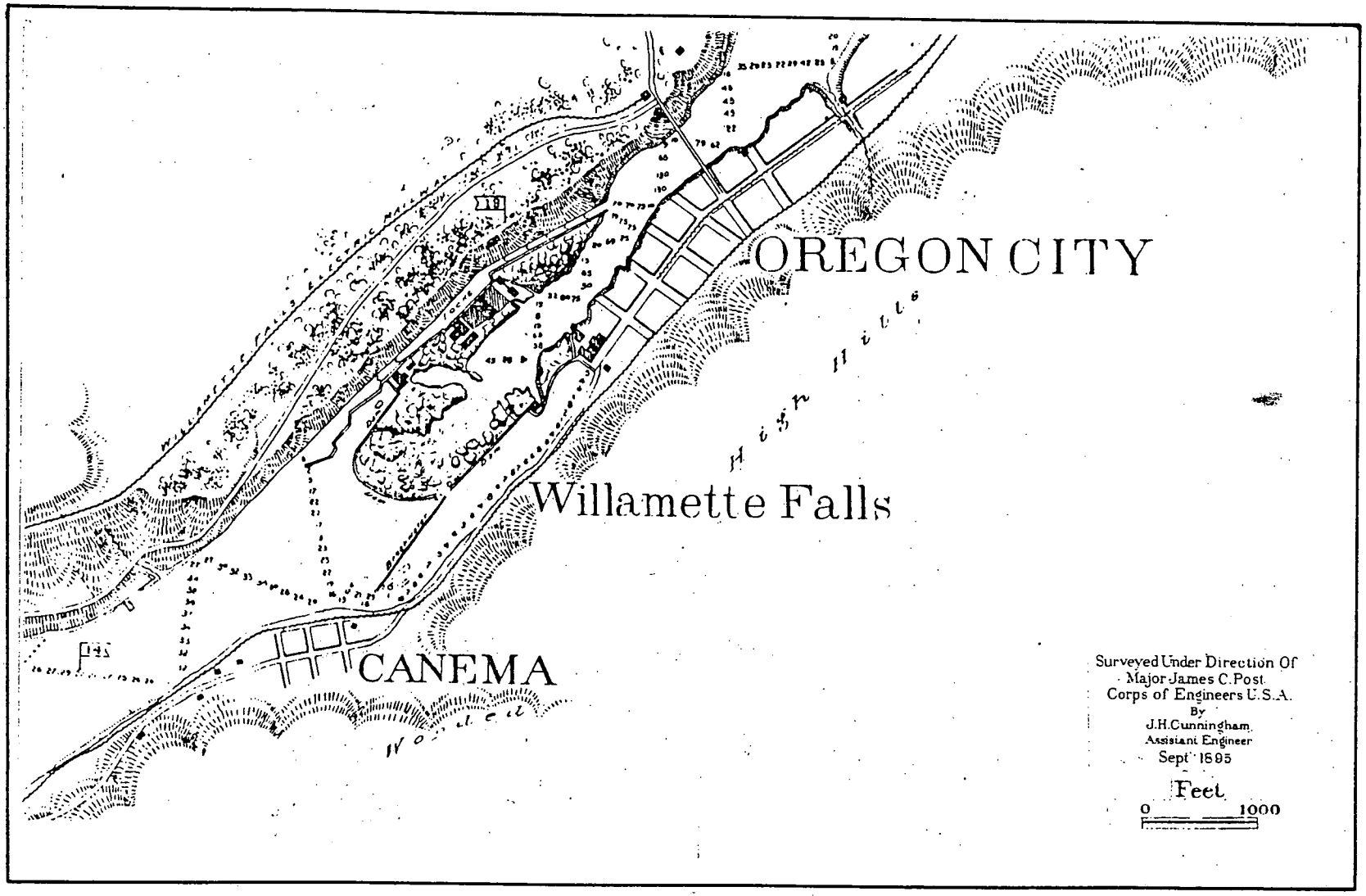


Figure 13. The Canal and Locks Around Willamette Falls at Oregon City - 1895. From The Upper Willamette, Sheet 14, U.S. Army Corps of Engineers, Portland, Oregon.

The canal and locks were sold on March 8, 1876 to the Willamette Transportation and Locks Company, which was later controlled by the Oregon Railway and Navigation Company, and again sold on August 24, 1892 to the Portland General Electric Company. In 1899, the Federal Government made surveys as to the feasibility of purchasing the canal and locks and did so soon after.[91]

On the east bank, McLoughlin had constructed a breakwater, which he rebuilt after the flood of 1853.[92] The People's Transportation Company, which operated in the 1860s, made all their improvements on the east bank. In the fall of 1865, they began to build a breakwater "extending from the brink of the Falls on the Oregon City side, almost to Canemah"[93] and a warehouse which was to be 150 ft long x 50 ft wide, with an inclined plane reaching to the river below.[94] Freight was to be raised and lowered at the warehouse, "on cars drawn by water power on the inclined plane."[95] In November of 1865, the Oregonian announced that a series of locks were being contemplated, and designs and estimates had been made. The locks were to connect the basin with the lower river, be forty feet wide, accommodate boats 170 feet in length, and were to have six feet of water over the miter sill. The People's Transportation Company was to construct these locks "when the business of the Willamette River would demand it."[96]

On the east side of the river, a portage road was used to transport freight and passengers between Oregon City and Canemah. The People's Transportation Company had a portage connecting a basin above the Falls with an area of quiet water below.

The Yamhill was the only tributary of the Willamette navigated for long periods. The Annual Report for 1875 by the U.S. Chief of Engineers described the Yamhill as a small river, flowing between steep banks, covered with thick brush and timber. The portion immediately below McMinnville was difficult to navigate because it was narrow and full of snags. Both McMinnville and Lafayette were only accessible during high water periods because there was a falls and a series of rapids below Lafayette (see Figure 14).[97] A canal was constructed near the turn of the century.[98]

According to the Annual Report for 1897 by the U.S. Chief of Engineers, the Santiam was considered navigable to Jefferson during high water stages, but after railroads arrived, there was not sufficient business to warrant steamboats running the river.[99] During the low water period, from about July to October, the depth of water on the shoals and riffles between Jefferson and the mouth of the Santiam varied from eight inches to two feet.[100] Snags, overhanging trees, and several abrupt bends were said to constitute hindrances to high water navigation but were not impassable obstructions.[101]

Navigation of the Tualatin was first promoted in May 1851. It was believed that a small steamboat would pay well on the twenty mile stretch above the rapids which obstructed the first three miles of the Tualatin above its mouth. A plank road was to connect the lower terminus of navigation with Linn City or Oregon City.[102]

Other obstacles besides the rapids were snags and drift. In November 1851 the Spectator editor encouraged Tualatin Plains' inhabitants to

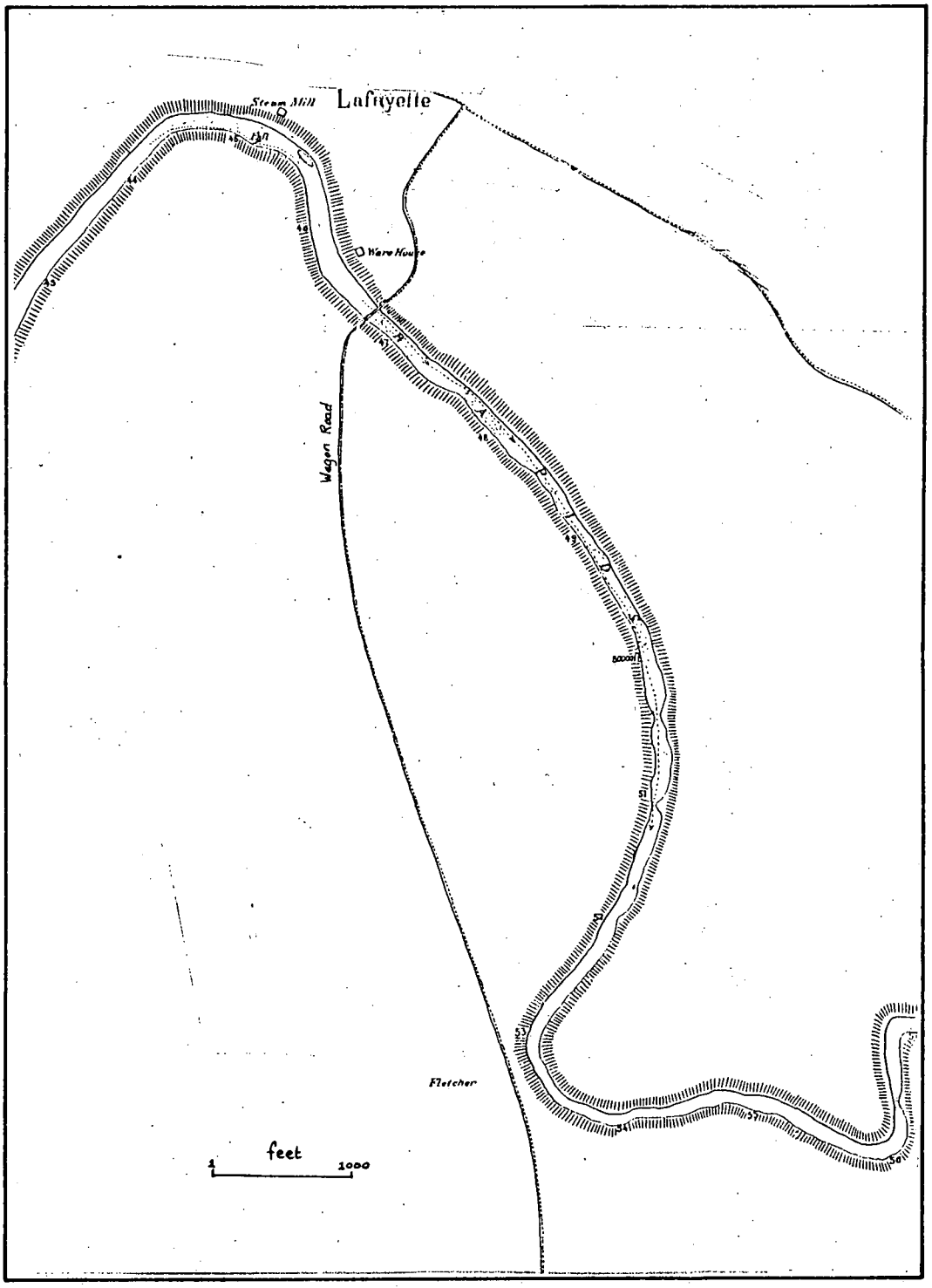


Figure 14. Rapids Below the Town of Lafayette on the Yamhill River - 1875. W-194 Yamhill River, Oregon. Record Group 77, National Archives, Washington, D.C.

clear the river so a boat could be placed on the river by December,[103] and did so again in July 1852.

There was still no service by September of 1853, although a charter had been granted.

> . . . every place where a steamboat is needed is being supplied with one, except the Tualatin River; it is still in the background. We hope, however, the period is near at hand when it will be supplied too. The charter granted to Mr. Cooper and others last winter, has not been complied with in any particular, we believe.[104]

In October of 1853, a dam and mill were constructed by James Moore above the rapids near the mouth of the Tualatin. The Spectator editor announced that navigation above this dam to the forks was "much talked of," but referred again to the need to clear the drift.[105]

The Tualatin River Transportation and Navigation Company stockholders met in October 1856 and decided to clear the river of obstructions and build a dam at Moore's mill. A liberal investment in stock was promised by the Oregon Milling and Transportation Company.[106]

The Swan, built by George Pease on the Tualatin in 1857, is identified by one source as the first steamboat on the Tualatin, but it was soon sold.[107] In September 1858, an ad appeared for the Hoosier #3 stating she would "positively commence running on Monday, September 20, 1858;[108] running during the season as far upriver as it is navigable." The ad disappeared after a short time.

In February of 1867, the People's Transportation Company's steamboat, Yamhill, began running on the Tualatin, despite bridges that required a hinge be put in the smokestack so the boat could pass beneath them during high water periods, and, in the summer, mosquitoes:

> Captain Kellogg informs us that the P. T. Company's steamer Yamhill is now making her regular trips on the Tualatin River as far as Hillsboro. He says there is plenty of freight--country produce--to come down from the head of navigation and way landings.[109]

Further extensions of service were planned so that boats could reach Centerville.

> Recent developments indicate that the navigation of the Tualatin River is not an enterprise to be derided, but that it will be at least measurably successful. The stream has been cleared of drift so that it is navigable for boats of 30 or 40 tons as far as Hillsboro, on one of its branches, and to a point within two and a half miles of Forest Grove on the other. The north fork, it is said, will be cleared of drift so that boats can run to Centerville, some four or five miles above Hillsboro. It is proposed by those who are engaged in the enterprise to deliver freight in Portland from any of these points at six dollars per ton.[110]

The benefits of navigation to the farmers of the Tualatin Plains were described:

> . . . the navigation of the Tualatin will prove of great advantage to the people who occupy the good farming country through which the stream takes its course. Hitherto they have been practically cut off from market for half the year, but if in the winter season they can hereafter ship their produce to Portland at the rates above mentioned, they will find the arrangement highly beneficial to their interests. That the stream will afford navigation for six or eight months during the year is an established fact. . . . During the summer season hauling is comparatively easy from the plains to Portland; but even then it is difficult enough. Transportation for the winter months is a great desideratum, since the occupations of the farmers during the season of good roads is such as to save them little time to haul his [sic] produce to market.[111]

In September 1868, Captain Kellogg removed snags and fallen trees, clearing the river for sixty miles from the mouth of the river. It was

planned that the Onward be placed on the Tualatin when the rains commenced, to provide service from Colfax to Emrich's Landing in Washington County.[112]

In 1869, the Tualatin River Navigation and Manufacturing Company was formed to construct a canal and locks at the mouth of the river.[113] After this canal was constructed, it was discovered that the water was too low for boats to pass through it. It was hoped the winter rains would increase the level enough to permit use of the canal during the 1872-73 season.[114]

These efforts to provide steamboat navigation on the Tualatin ceased after the introduction of the railroads. An 1897 report of the U.S. Chief of Engineers states that "steam navigation was carried on, when the stage of the river permitted, for a few years previous to the construction of the railroad on the south bank, but without success."[115]

Adaptation of Boats to the Willamette River

Besides the necessity of improving the river, boats had to be built which were adapted to the river. Some of the earliest boats were built in Oregon, but some boats were imported also.

In April of 1850, the Oregon Spectator editor announced that the machinery for a steamboat had arrived, "accompanied by the workmen and engineers necessary to construct it."[116] By June, others were under construction:

> We shall be looking, in the course of a couple weeks more for the arrival of the Senator Lynn, which is now rapidly being completed at Astoria, and intended to run between Astoria and this city [Oregon City]. We further learn that there is

> another steamer in progress of construction at Knighton's to ply on the Columbia and Willamette Rivers. Two others are also in contemplation for the Willamette above the Falls. These facts clearly indicate that Oregon is not destined long to move in a secondary orbit.[117]

The importation of steamboats was tried because for a time it was actually more expensive to build a boat in Oregon than to import it because of the high cost of labor.[118]

The Willamette was imported from Wilmington, Delaware in 1851, and the Eagle, Black Hawk, Major Redding [sic], Firefly, Washington, and Multnomah (see Figure 15) from Philadelphia, Pennsylvania.[119] Most of these imported steamboats were very small (see Table 2).

Steamboats varied in appearance at first, not only because some were imported, but because individual owners probably built the type they were familiar with and believed best suited to the river. Both eastern and western designs were used. The Lot Whitcomb was described as a Hudson River type steamboat (see Figure 16),[120] while the Wallamet was built in imitation of boats on the Mississippi (see Figure 17).[121]

The importance of the source of the steamboat or its design lies in the differences in the eastern and western steamboats. Eastern steamboats featured a low pressure engine, deep hull, and were designed for speed. They generally were equipped to carry more passengers.[122] Western steamboats were shallow in draft, had high pressure engines, and were designed to carry freight as well as passengers. The western steamboat had evolved on an industrial frontier where design and construction changes were common, becoming adapted to inland commerce on

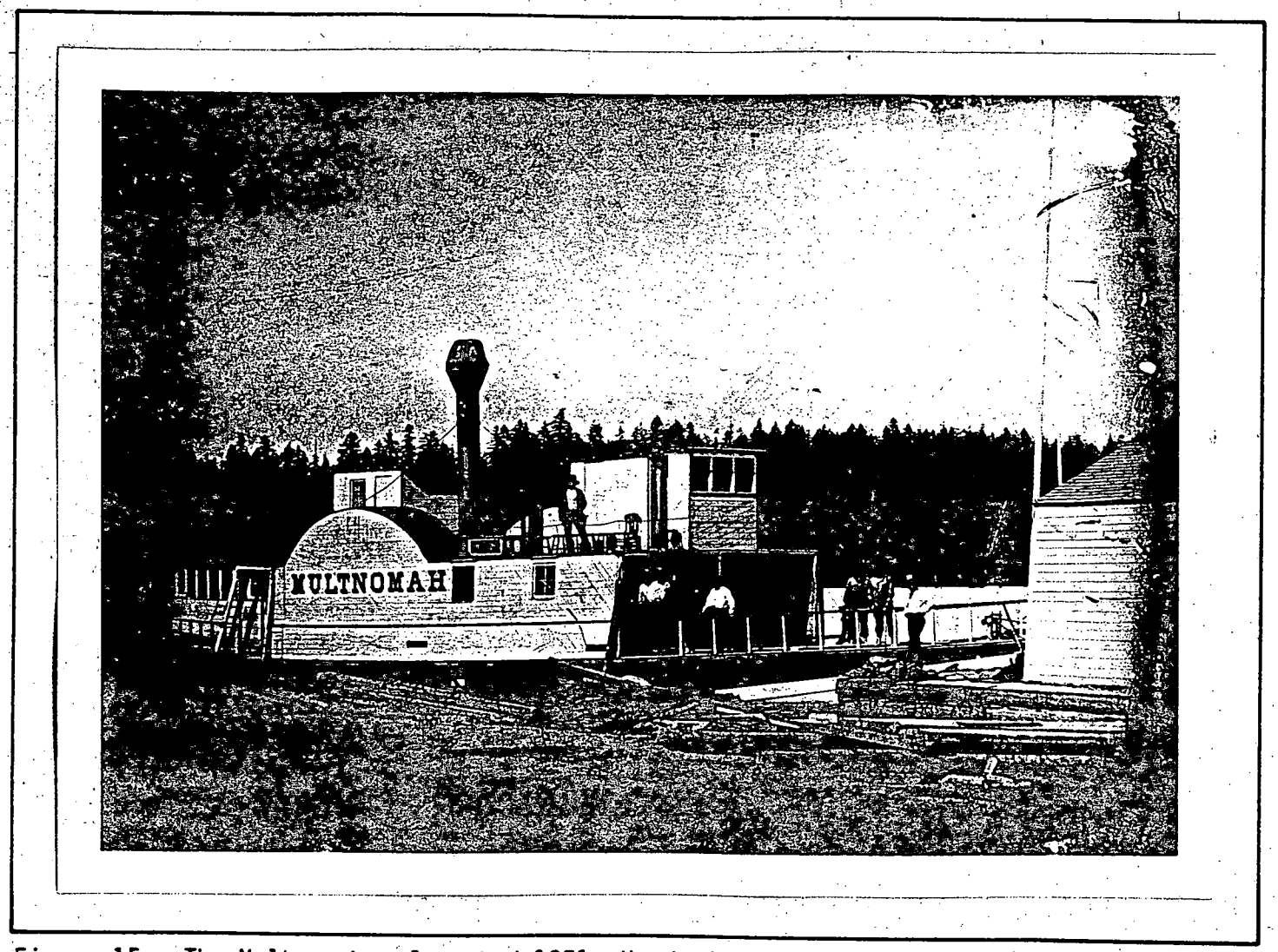


Figure 15. The Multnomah - Imported 1851. Used with permission of the Oregon Historical Society. Negative Number 10684.

Table 2. Imported Steamboats

Name	Length	Width	Hold	Measured Tonnage
Willamette	160	28	7	200
Eagle	35	8	4	15
Black Hawk	30	7	3	10
Major Redding [sic]	35	8	4	15
Firefly	25	6	3	10
Washington	40	20	5	20
Multnomah	100	18	6	75

Source: U.S. Chief of Engineers, "Steamboats Out of Service," Annual Report of Major George L. Gillespie, Corps of Engineers, for the Fiscal Year Ending June 30, 1880. Appendix MM1 of the Report of the Chief of Engineers to the Secretary of War. House of Representatives Ex. Doc. 1, pt. 2, 46th Cong., 3rd Sess., Congressional Serial Set vol. 155, pp. 2273-2274.

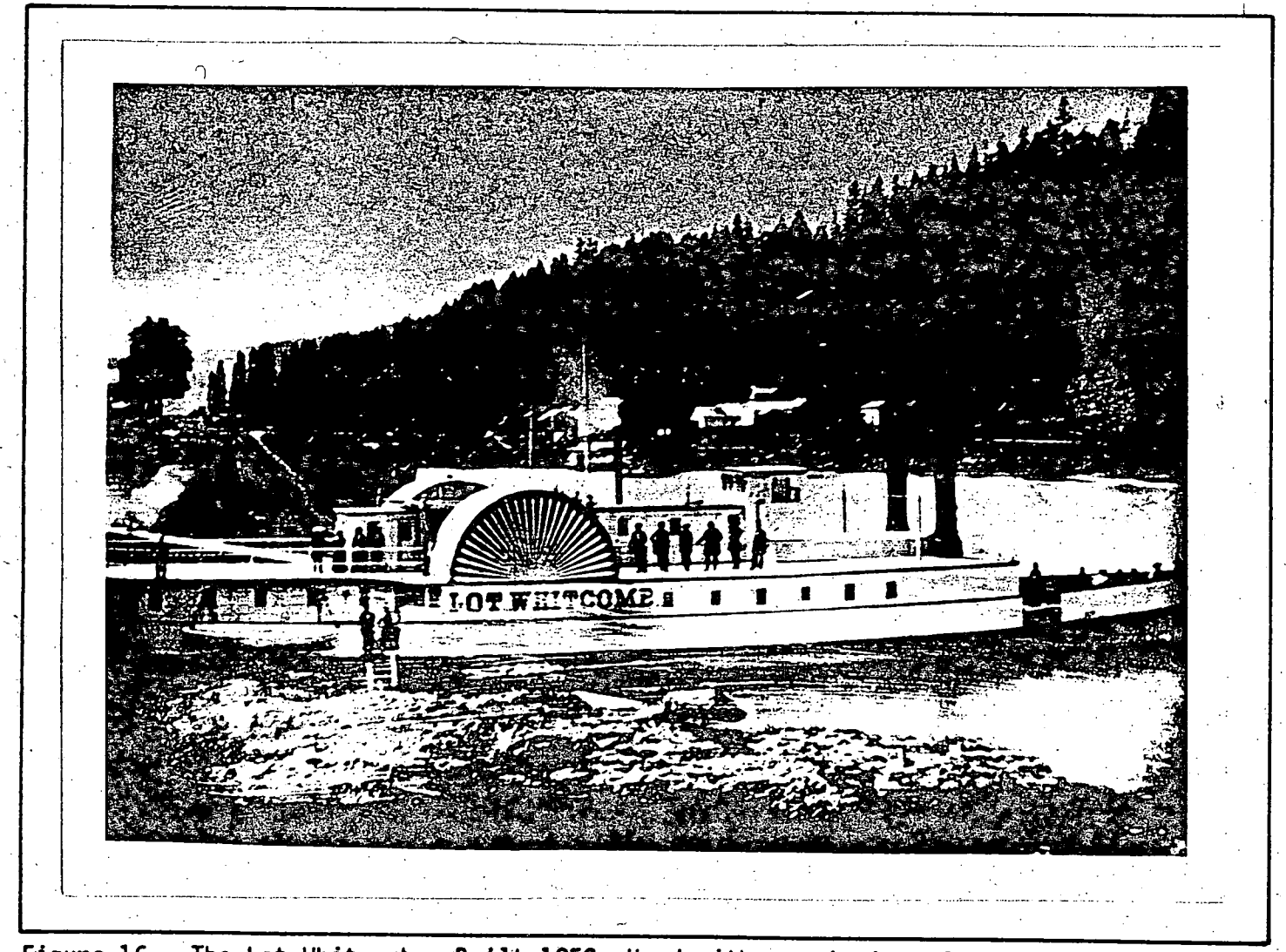


Figure 16. The Lot Whitcomb - Built 1850. Used with permission of the Oregon Historical Society. Negative Number 1639.

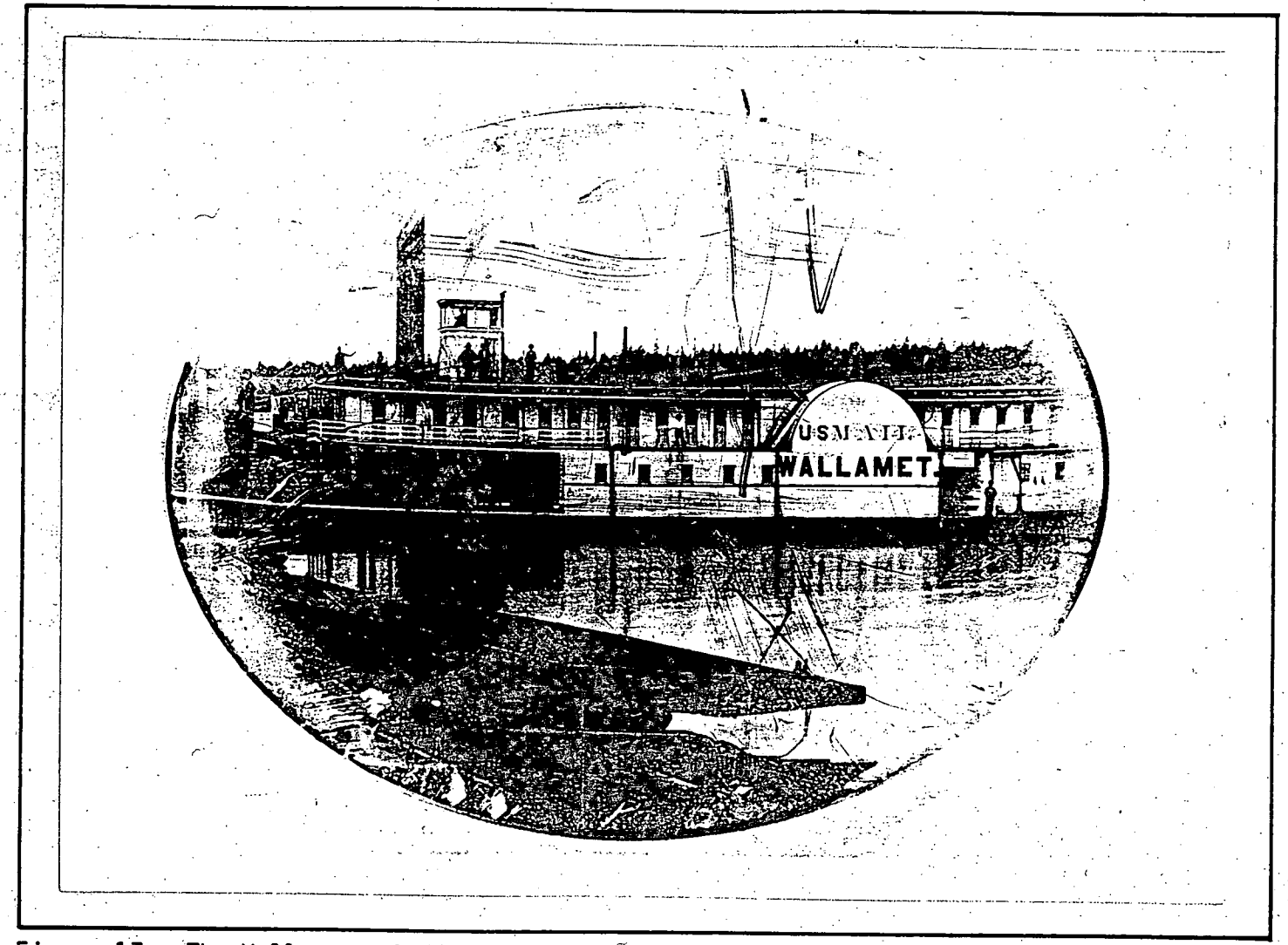


Figure 17. The Wallamet - Built 1853-1854. Used with permission of the Oregon Historical Society. Negative Number 3343.

the Mississippi-Ohio system by the early 1840s. These boats were low cost and short lived.[123]

Steamboats were constructed in the summer, to be completed to enter business in the fall. For example, construction of the Wallamet[124] and Belle of Oregon City[125] was begun in late May of 1853 and completed in October.

By the late 1850s (see Figures 18, 19, 20, and 21), steamboats began to appear very similar. New boat designs copied the size and capacity of successful boats.[126] What evolved were steamboats which were flat-bottomed, usually sternwheel boats using high pressure engines for the extra power required. The texas was moved forward probably to enable the steamboat captain to see the rock and gravel obstructions in the river (see Figure 22).[127] In later years, they became more ornate (see Figure 23).

The Gazelle, with a hull measuring 120 ft. in length and 20 ft. in width, a 6 ft. depth of hold, and a measured tonnage of 110, was described as a large class boat, "as large as they should be made in order to conveniently navigate the Willamette at its average stages of water."[128] Smaller steamboats replaced larger ones as water levels fell.

Another steamboat constructed by the same company that owned the Gazelle is described below. The dimensions of the cylinder together with the number and size of the boilers were the customary measure of a steamboat's power.[129] Steamboats commonly had two engines. Adding a second engine increased a boat's power as well as overcoming other disadvantages of boats run with only a single engine. With a single engine there was an "uneven flow of power resulting from the momentary cessation

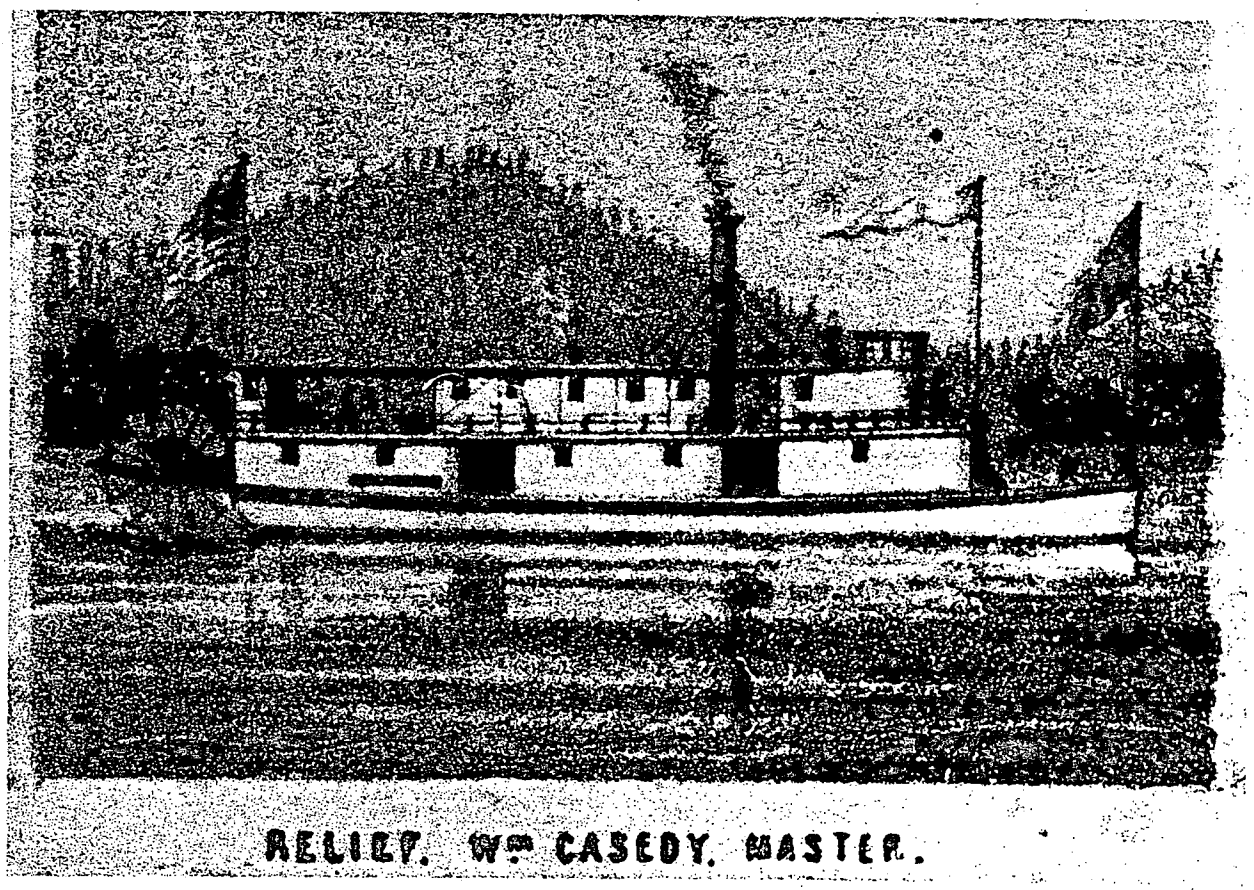


Figure 18. The Relief, from the 1858 Lithograph of Oregon City by Kuchel and Dresel. Used with permission of the Oregon Historical Society. Negative Number 4905.

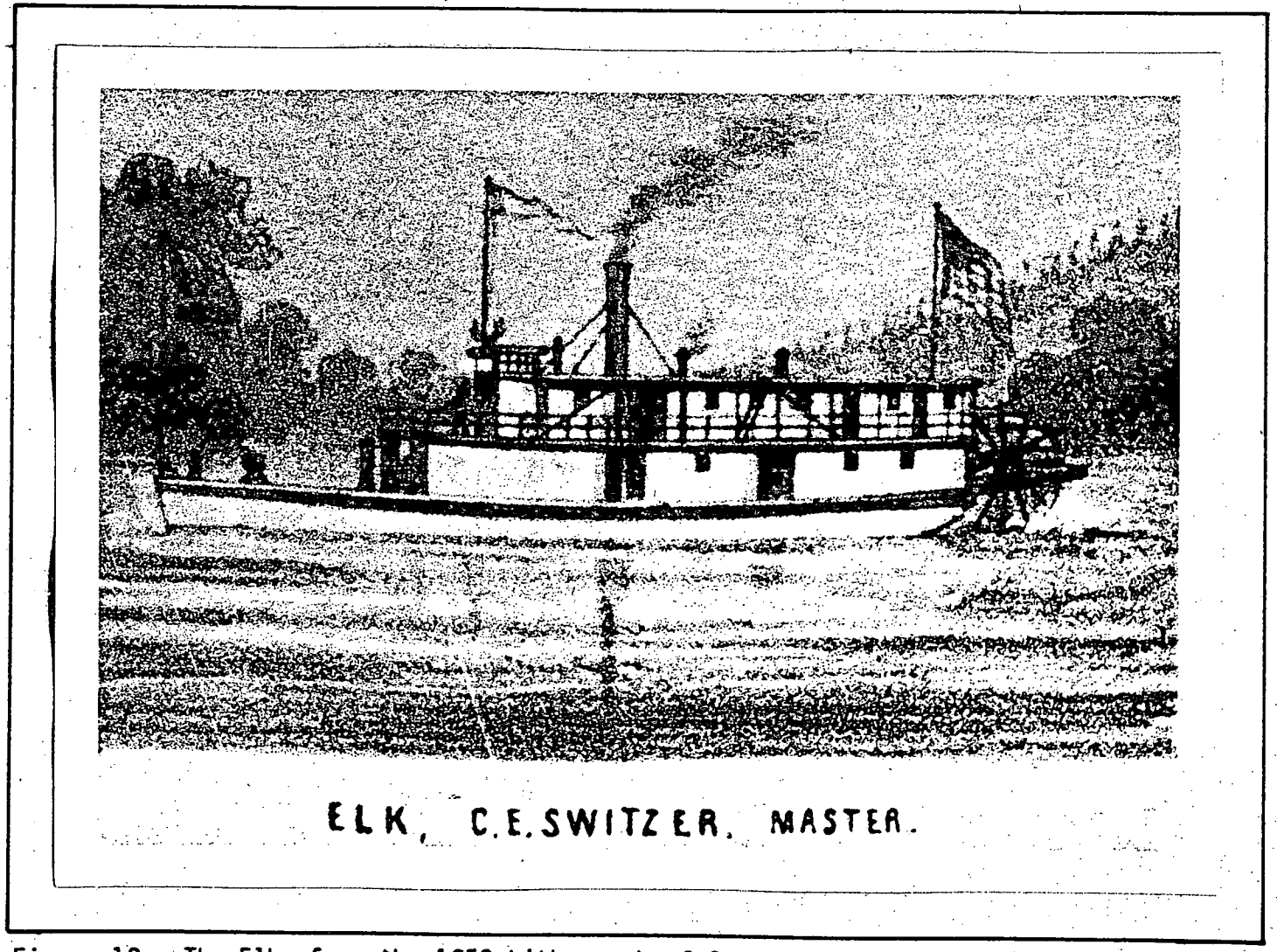


Figure 19. The Elk, from the 1858 Lithograph of Oregon City by Kuchel and Dresel. Used with permission of the Oregon Historical Society Negative Number 4905.

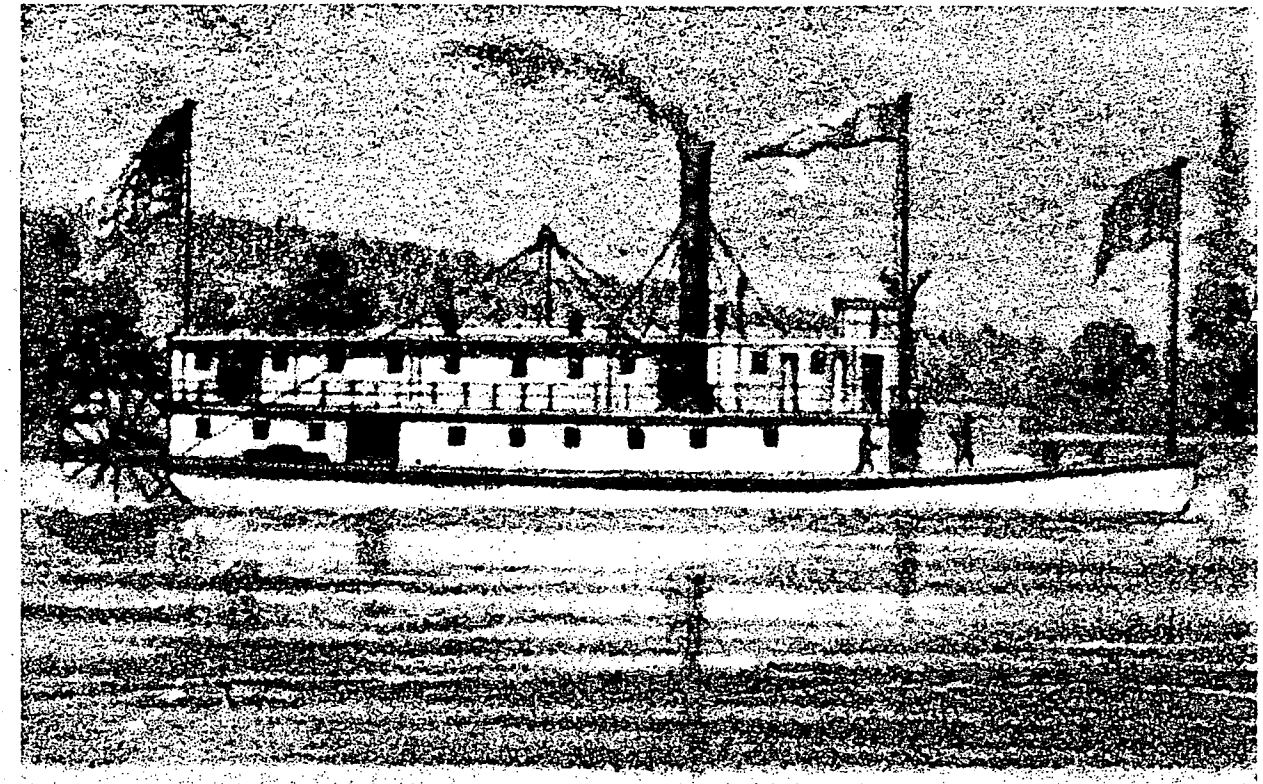


Figure 20. The Jennie Clark, from the 1858 Lithograph of Oregon City by Kuchel and Dresel. Used with permission of the Oregon Historical Society. Negative Number 4905.

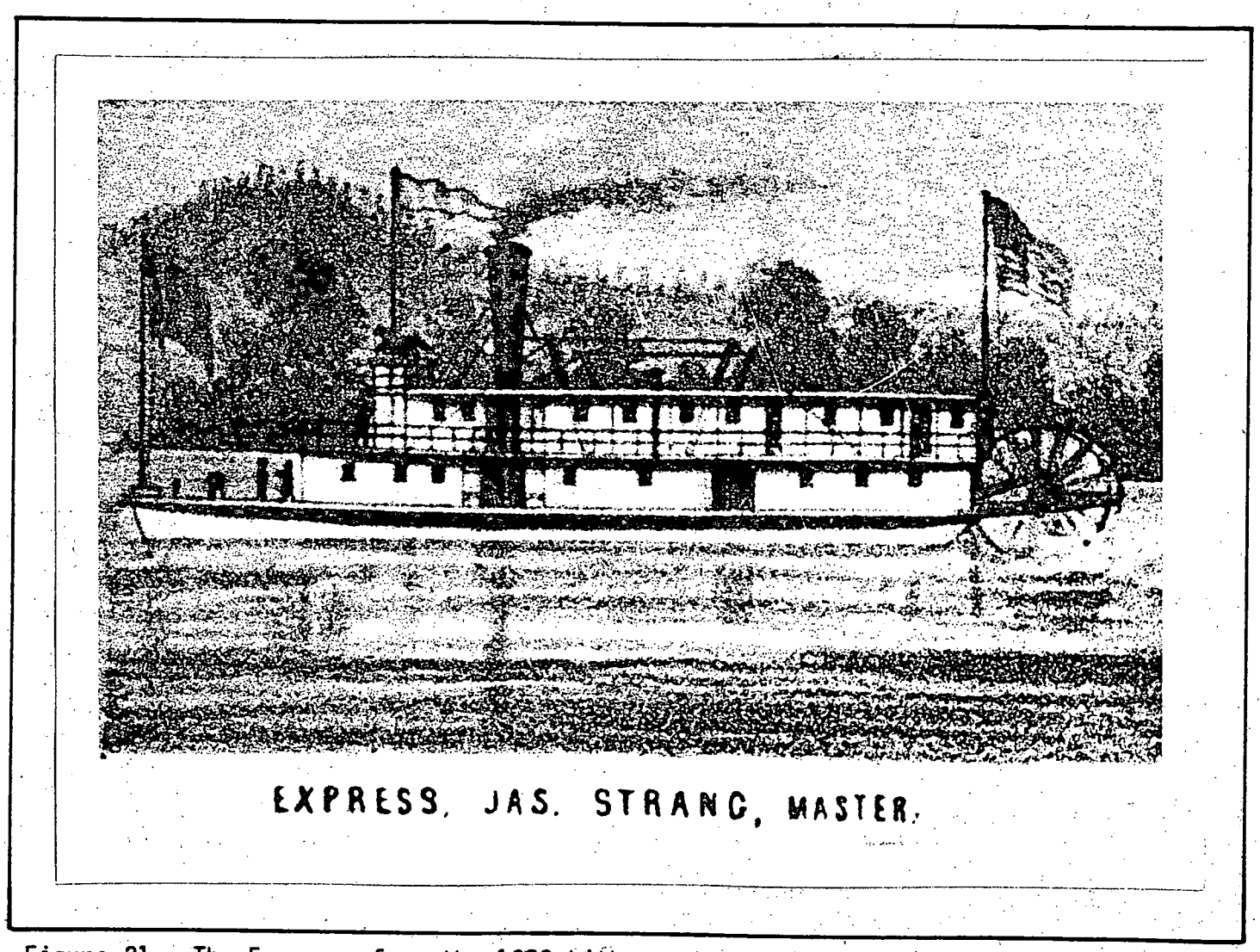


Figure 21. The Express, from the 1858 Lithograph of Oregon City by Kuchel and Dresel. Used with permission of the Oregon Historical Society. Negative Number 4905.

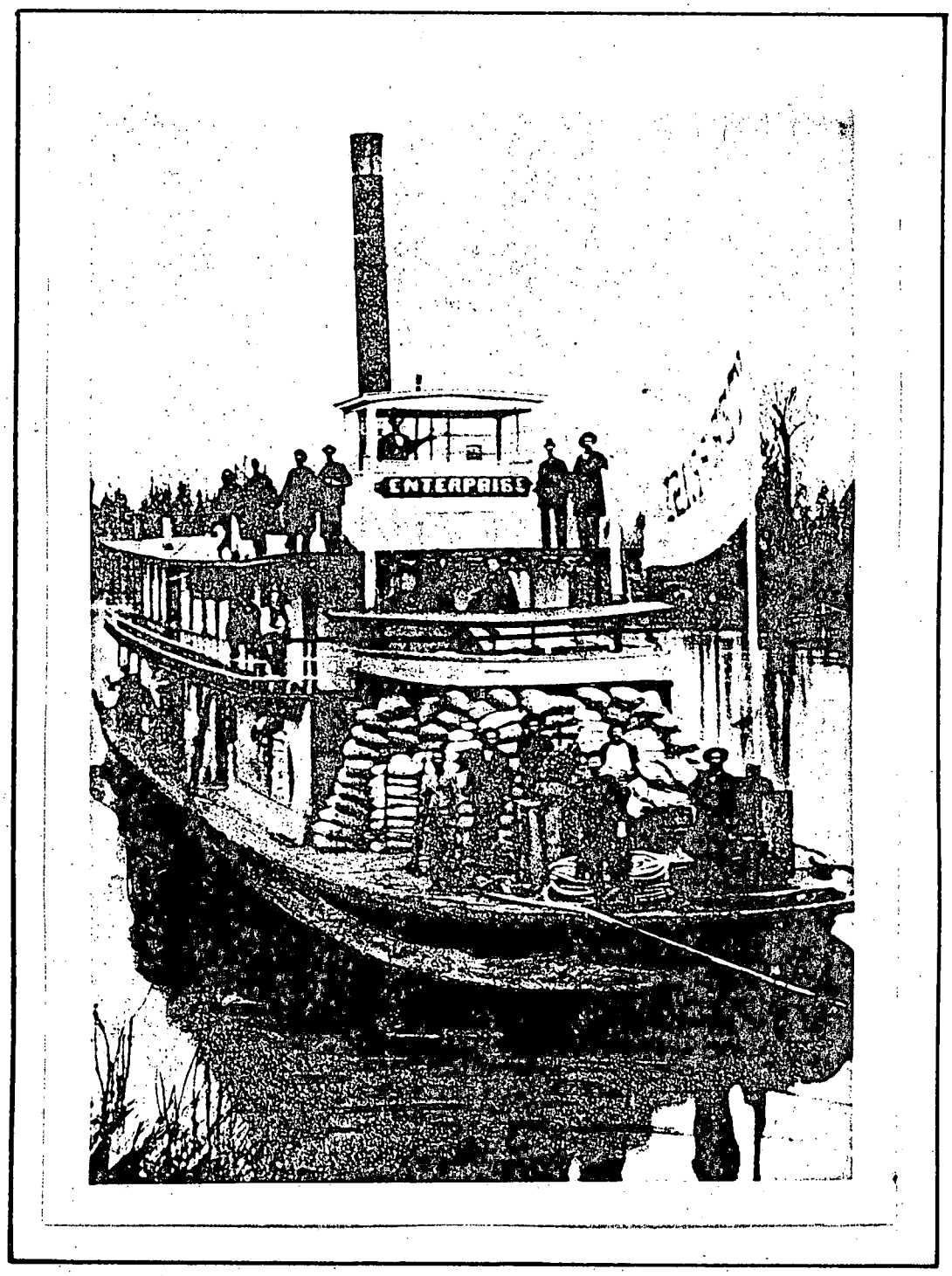


Figure 22. The Enterprise, 1860s. Used with permission of the Oregon Historical Society. Negative Number 38414.

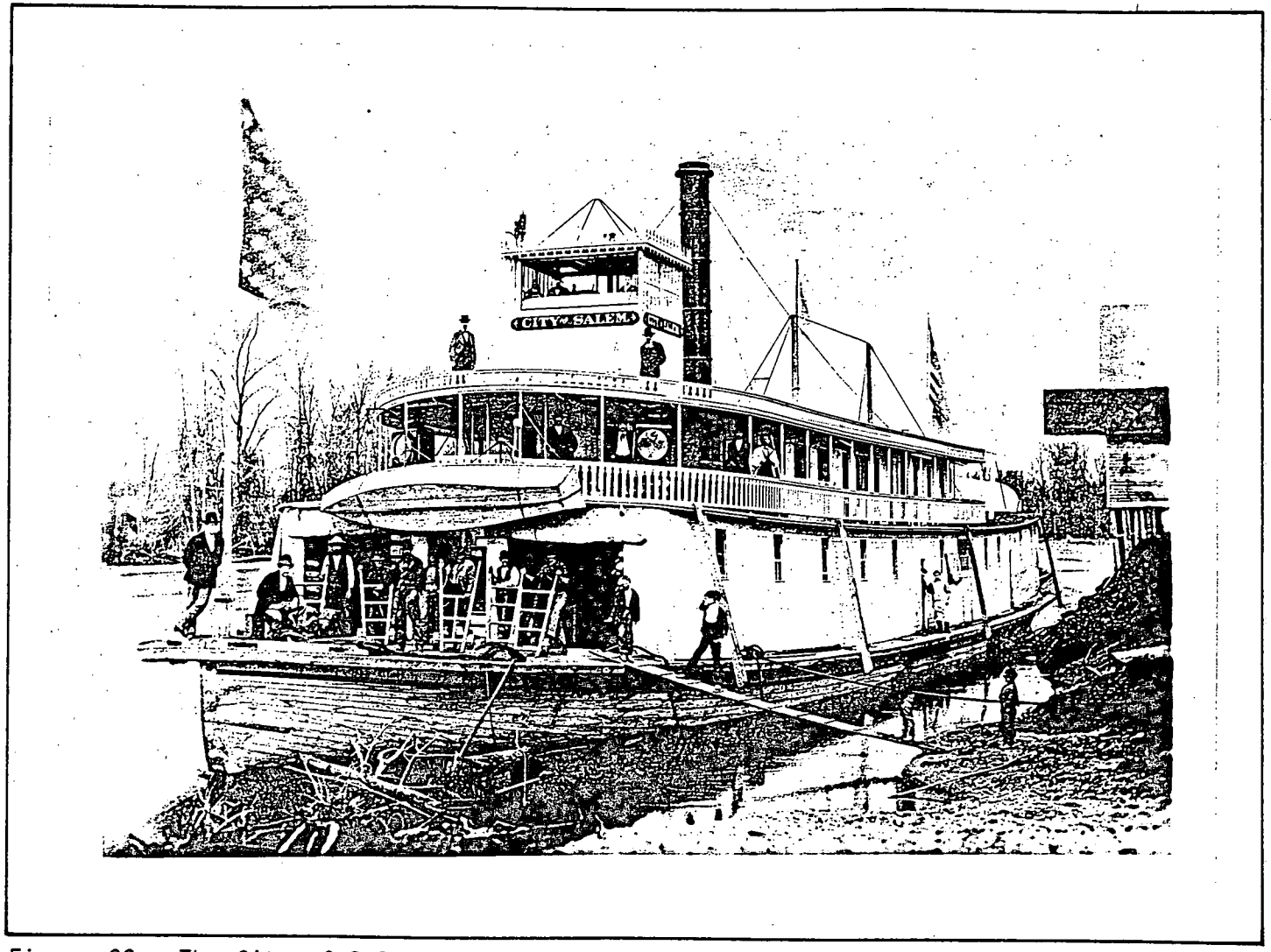


Figure 23. The City of Salem, Built 1875. Used with permission of the Oregon Historical Society. Negative Number 3330.

of the engine's motion at the end or dead point of each stroke,"[130] so the boat moved forward unevenly and vibrated. On the sidewheel steamboats each engine was connected separately with its own paddle wheel, while on the sternwheel steamboats they were "coupled to opposite ends of the paddle wheel shaft by cranks set at a ninety degree angle."[131] With each engine connected to its own paddle wheel, the wheels could be run in opposite directions for greater maneuverability and turning power, especially important where swift currents, sharp bends, and frequent landings made it difficult to depend on rudder action alone.[132]

Flues were usually twelve to sixteen inches in diameter and if well constructed, the same or greater thickness of iron than the boiler shell.[133] Two flues for each boiler was standard practice.[134]

> The new steamer of the "Willamette Falls Milling and Transportation Company" will have a great bearing on the water, and as of necessary consequence will be of light draught. The dimensions, etc., are as follows: length of keel 135 feet; length of deck 140 feet; beam 25 feet; and from out to out on the guard 39½ feet, and four foot hold; her tonnage is 151 tons, but she will carry 200 tons; it will be propelled by two engines, each cylinder measuring fourteen inches in diameter, and having four foot stroke; there are two boilers 26 feet in length and 42 inches in diameter, containing two flues in each of 15 inches, and all the ends are made of heavy wrought iron, with connecting rods running the entire length of the boiler, and also crosswise of the same. All the machinery and boilers too were manufactured at the "Sutter Iron Works," San Francisco.[135]

Engines for early steamboats were procurred in the East, imported from France, or as noted above, manufactured in San Francisco. By 1858, the Willamette Iron Works in Oregon City, owned by Rossi and Co., were providing machinery for some steamboats like the Relief.[136] Engines

continued to be purchased in San Francisco. The high pressure engines used in the Alert, built in 1866, were purchased in San Francisco.[137]

High pressure engines seem to have been the dominant type on the Willamette River, and were probably best for conditions there. The options were a low pressure condensing engine, or a high pressure non-condensing engine. In the latter, the steam drove the piston directly, and the steam exhausted into the air.[138]

High pressure engines weighed less, took up less space, were easier and cheaper to build, and had fewer moving parts which meant lower repair costs.[139] They also had a wider range of power. Their reserve power could be drawn upon when needed to ascend difficult rapids, force a boat over a bar, or avoid a snag suddenly appearing ahead,[140] all conditions likely to be encountered on the Willamette.

While one advantage of the low pressure engine was more economical use of fuel, this was not a consideration where fuel was abundant.[141] Before enough woodyards were established along the Willamette, boats were required to take enough for the entire trip or to carry axes and go ashore to cut wood when the supply ran out.[142] The first woodyard was established by Robert Newell in 1851 at Champoeg.[143] Maps made in 1875 by the U.S. Corps of Engineers of the Willamette from Salem to Eugene show several woodyards between Salem and Albany, with a concentration between Independence and Buena Vista (see Figure 24). No comparable map of the same time was found for the Portland to Salem stretch of the river, so it is not known whether a similar concentration of woodyards existed below Salem. Perhaps, this concentration indicates the point where most steamboats had to replenish their supply, particularly if

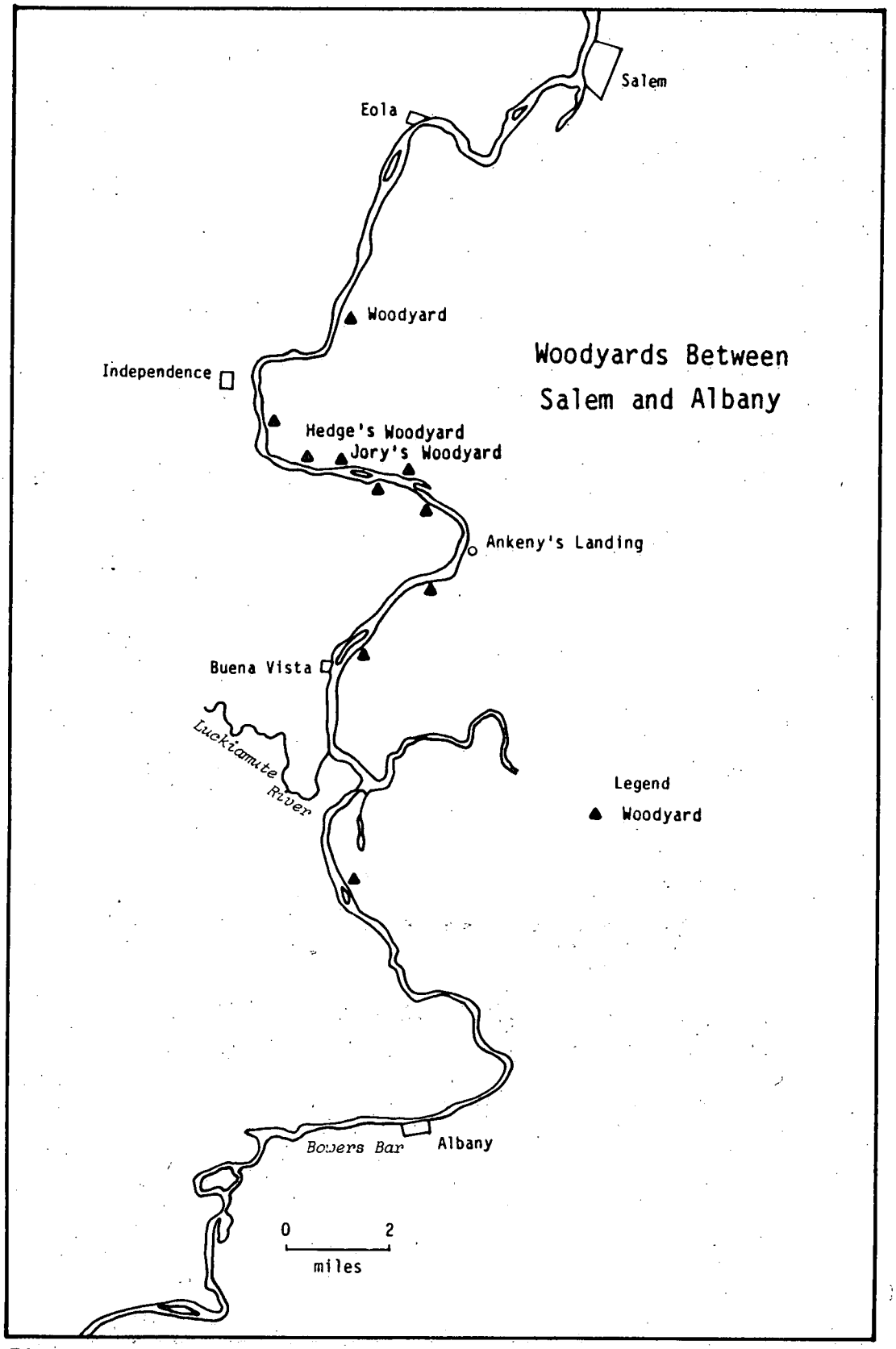


Figure 24. Woodyards Between Salem and Albany - 1875. From W-191-1, Willamette River, R. G. 77, National Archives, Washington, D.C.

they intended to reach Eugene, or had used a considerable amount in navigating the bars and rapids above the mouth of the Yamhill which required extra power. The Welcome, which ran at a speed of 14 mph, used one-half cord of wood per hour.[144]

How long a boat was able to operate depended on her construction. Efforts were continually made to build boats which drew less water. Since the river could not be improved for year-round navigation above Salem, the Spectator editor called for the construction of steamers adapted to the local rivers.

> Such boats of light draught and great power should be constructed, as will at once overcome the obstacles created by our stong currents, and in the dry season, that caused by the falling of the water, and consequent shallowness on many places of our streams.[145]

The Canemah, constructed in 1851, seemed to be so adapted. The Spectator editor proudly announced that "the Canemah, with her entire machinery on board, only draws 11 inches of water. This being the case, she will be able to freight from 50 to 100 tons of freight at any stage of water."[146] The boat drew seventeen inches when loaded.[147] Boats in use by the 1870s drew thirty inches, although some which drew twenty had been constructed.[148] By 1889, the construction of boats of light draft permitted the boats owned by the Oregon Pacific to reach Corvallis for all but two months of the year.[149]

Some steamboats were able to run when water levels were lower because they were smaller or, because of their design, drew fewer inches of water. For example, in August of 1851, the smaller Hoosier was still running when unusually low water caused the Washington to be withdrawn.

> The river above is said to be unusually low for this time of the year; although not as low by some 10 or 15 inches as at extreme low water. The Yamhill steamer runs regularly to Dayton, and has had the trade, since the withdrawal of the Geo. Washington, in her own hands.[150]

It was a common practice, especially in the early days when boat sizes and designs were more variable, for boats to be moved to a different route if they were unsuitable for upper Willamette service. Some returned when the water level increased. Others were taken off permanently and tried elsewhere.

The difficulty for the Washington was that she was a propellor steamboat, not suited for the upper Willamette because the propellors could easily be broken off when coming in contact with an obstruction.

> The sidewheel steamers appear to succeed best in shoal water. The propellors requiring to be submerged to give them power which subjects them to the possibility of coming in contact with the obstructions in the bed of the river. Though the bottom of the river in most of the shoal places is a compound of sand and gravel and cannot prove dangerous to the first mentioned class of steamers.[151]

Paddle wheels were preferable to propellors also because they worked well in either direction, were more easily repaired because they were of wood construction, and were more accessible for repair because they were out of the water in large part.[152]

After its introduction, sternwheelers were used almost exclusively on the upper Willamette.[153] Sternwheelers had been introduced on the lower river in 1855 when the Jennie Clark had been put on the Portland-Oregon City run. The first sternwheeler on the upper Willamette was the Enterprise.

After their rudder design was modified, sternwheelers were an improvement over sidewheelers because they were easier to handle, lighter, and since their paddle wheels weren't submerged as much, were able to run when the water level was lower.

Willamette River steamboats carried both passengers and freight. A boat might be switched to another route if the percentage of freight to passenger capacity made them unsuitable for Upper Willamette service. For example, the steamboat Wallamet (also spelled Willamette in some references) was able to accommodate 200 passengers.[154] In the summer of 1854, she was transferred from the upper Willamette to the lower because her passenger capacity outweighed her freight capacity.[155] In comparison, the smaller Enterprise was designed to carry fifty passengers.[156] On a trip made in 1852, the Canemah brought downriver 150 tons of grain and about 40 passengers.[157]

Boats could be withdrawn from the river for lengthening or the addition of more powerful machinery.[158] Steamboats were also withdrawn temporarily to repair damage. The length of time varied. The Lot Whitcomb sank and was disabled for two weeks after being dashed against the rocks[159] opposite Milwaukie.

> . . . the boat became perfectly unmanageable in the whirlpool, just above, or opposite Milwaukie, when descending the river on Friday of last week, and the force of the current being so strong as to dash her broadside against a ledge of rocks.[160]

When steamboats were damaged, transportation might be temporarily suspended.

> The propellors Washington and Eagle were both disabled for several days last week. The communication between this city and Portland, was in consequence temporarily suspended. The unarrival of the boats referred to for the time, was seriously felt by the traveling public, so important has the trade become between the two points above named.[161]

Usually, however, a damaged steamboat was just replaced by another. For example, when the Canemah collapsed both flues of one of her boilers, she was temporarily replaced on her route by the Fenix.[162] If the damage was substantial, the machinery would be removed and put in a new boat.

Steamboats could be damaged by encountering a snag. The type of damage varied. For example, the Oregon sank after encountering a snag,[163] while part of the wheelhouse was carried away when the Multnomah struck one.[164] Driftwood could damage wheels.[165] Propellors could be broken off in an attempt to run a shallow section of the river.[166]

Major and minor explosions occurred when flues collapsed.[167] The worst explosion occurred when the Gazelle exploded, killing 30 people.[168]

Some steamboats burned. One being built by the Willamette Falls Milling and Transportation Company was burned while under construction on the stocks a few days before it was to be launched, probably because of the potential competition it represented.

> The loss falls not only on the company, but it effects the interest of the entire up country trade. In the event of its running the price of transportation would have been lessened. The merchants above will regret its loss.[169]

Those in a town to be served by a particular steamboat invested in stock, often in an effort to ensure navigation to their town. In 1863, the citizens in Eugene invested in stock in a steamboat. While this

boat was a potential competitor of the P. T. Co., even those with stock in that company subscribed for stock in the new enterprise.

> . . . let me add that it is more than rumored here that another steamboat enterprise is on foot, to put a new boat on the river to ply between Canemah and Eugene City, and that something like $10,000 of the stock has already been taken, and a fair share of that in this place. The citizens of this place seem generally to express themselves that the plan, if put in operation, will secure what we have so long needed--a regular boat to this place. And, of course, the People's Company will welcome any new scheme that promises to develop the resources and build up the trade of the country, and thus increase the commerce of the river. . . . In fact, some of those who have taken stock here, are persons who have subscribed to the stock of the P. T. Company. . . .[170]

Some of those who invested in steamboats were merchants. For example, for a time, the Lot Whitcomb was owned by George Abernethy and Co.[171] The Allan was owned by Allan, McKinley and Company, who were in business in Oregon City.[172]

Both the Welcome and the Multnomah traveled at speeds of 14 mph. In June of 1852, the Multnomah made a trip from Portland to Oregon City in one hour, fifteen minutes.[173] While the rate of travel of steamboats may have varied, at this rate the running time to Salem would have been four hours, to Corvallis, seven and one-half, and to Eugene, eleven and one-half.

When the steamboat was first introduced, several exploratory tours were made by steamboats to discover how far upstream the river was navigable. The Washington traveled upriver in July 1851, reaching Dayton on the Yamhill River and Cincinnati on the Willamette.[174] The Multnomah attempted to reach Eugene in August 1851, but got stuck on Matheny's Bar[175] near Wheatland. However, points as far as Corvallis were reached

in September 1851 when the Multnomah made another attempt after the water rose.[176] Points between Corvallis and Harrisburg were first reached in December 1853 when the Fenix made an exploratory tour.[177] Eugene was reached by steamboat on March 12, 1857,[178] after a trip which took three days. Springfield was not reached for ten more years, in April 1867.[179]

The appearance of the steamboat was seen as the start of a new era in the trade of the Columbia and Willamette Rivers.[180] As seen in the commentary below, business increased with the lowered rates of freight and passage as communication became "easy, cheap and reliable." The fate of towns was determined.

River Trade

> Within the past summer important changes have dawned upon the commercial prospects of the interior of our Territory. Changes which have doubtless determined the destiny of many of the principal business points on the upper Willamette, and rendered communication with the upper country easy, cheap and reliable. Several first class steamers are already running above this city, and created new facilities for the transaction of a ripening and vigorous trade, fast developing itself between this city and the counties south. . . .
>
> Freight and passage on the rivers are comparatively low, and hence the great increase of business with the more remote sections of our Territory. The spirit of progression is eminently entertained by our citizens, and already the iron links of navigation are binding the interests of the towns and county south of us in close connection with those of our city, and convincing the most incredulous of the immense importance of our position.[181]

Routes and Schedules

The first steamboats operated independently, each operator choosing his own route and schedule. They tried several routes, not only because

of changing demands for service but because early boats had to be tested for suitability for particular river conditions. This irregularity is confirmed in the description of service available in October 1851.

> The facilities have so improved above the falls that we now have a daily boat to Champoeg, a distance of about 23 miles, and a boat every two days at a point some 11 miles farther up and a distance six miles above the junction, on the Yamhill river; and as soon as the water will admit of it, there will be a weekly communication between the falls and Marysville, the highest accessible point on the Willamette. The increasing business on the upper Willamette has not been commensurate with the multiplication of boats. But we confidently anticipate a great augmentation of trade, when the business of locating shall become systemized and regularly arranged so that a man on business can go from one point to another as fast as steam can carry him and return again at the precise time he wishes. Then, and not until then, can we expect order and strict punctuality, two of the most important things in successful trading.[182]

Service became more regular with the establishment of lines. While some boats still ran independently, many became part of a line. The formation of a line meant that steamboats were running acording to a schedule, usually to connect with boats on another route. The routes considered here are: (a) the Portland to Oregon City route on the lower Willamette; and on the upper river, (b) the Oregon City to Dayton, Lafayette, and McMinnville route; (c) the Oregon City to Salem, Albany, and Corvallis route; and (d) the Oregon City to Eugene route.[183]

On the lower Willamette, the first line was the Union Transportation Line, composed of the Black Hawk and Columbia offering service on the Portland to Oregon City route from September 1851 to January 1852.[184] When first introduced, the Columbia, and later the Lot Whitcomb, ran the entire distance from Astoria to Oregon City. After May 1851, when the

Black Hawk began running on the Portland to Oregon City route, a particular steamboat usually ran this section, connecting with other steamboats at Portland for Astoria.[185] After associating as a line, the Columbia left Portland in the morning, and the Black Hawk left Oregon City in the afternoon. Usually each apparently went the entire distance, but when boats were unable to reach Oregon City due to low water on the Clackamas Rapids, boats from Portland stopped at a place at first called Walling's Landing[186] and, after 1850, Willamette City, and those from Oregon City ran to the rapids and back.[187]

Another line on this route from November 1853 to July 1854 was the People's Line, composed of the Portland and Multnomah,[188] The Willamette Falls Milling and Transportation Company, which operated from February to April 1854, and the Citizens Line, which existed in 1856, both offered connecting service by one boat on the Portland to Oregon City route and others on the upper Willamette routes. The Willamette Falls Milling and Transportation Company, formed in early 1854, ran the Belle on the lower river and the Oregon and Gazelle on the upper Willamette.[189] The Enterprise ran on the upper Willamette in 1856 as part of the Citizens Line, connecting with the Portland on the lower Willamette[190] and in 1857 ran as part of the Enterprise Line,[191] connecting with the Express on the lower Willamette.

The Defiance and Citizens Accomodation Lines provided service only on the upper Willamette. The Defiance Line was composed of the Wallamet and Canemah, which were soon joined by the Fenix. This line began running in November 1853.[192] The Canemah and Fenix, renamed the Franklin, made up the Citizens Accomodation Line which ran during December 1854.[193]

Gold from California coming in payment for Oregon lumber, wheat, and other produce, and brought back by returning miners, financed the early steamboats. Oregon experienced an era of prosperity during the first half of the 1850s. By December 1851, boats were running as far as Marysville (Corvallis). Two boats provided daily service between Portland and Oregon City, and two were running on the upper Willamette once a week.[194] In February 1852, the Spectator editor reported that:

> . . . business is rapidly increasing on our rivers, and the boats are all doing a good business, and traveling has kept pace with the advance in business. A large portion of the trade with the mines passes up the Williamette Valley.[195]

In December 1853, trade was reported "quite brisk" with boats running daily between Oregon City and "the towns below." Five boats were running above the Falls and four below.[196]

By January 1854, the first hint of an economic slowdown was evident in the Spectator editor's comment: "a pretty heavy business is being done here this season, but it is divided among a great number."[197] By March 1854, he reported scarce freight and an overabundance of steamboats:

> The Willamette River is at a convenient stage, at the present time for steamboats. Freights are scarce. Only three steamers are making regular trips between this city and Salem, and only two are running to Corvallis. On the lower river, three steamers are doing the business, and we presume could do three times the amount if they had it to do. Capitalists would do better at most anything now than building Willamete river steamers. We've got a great plenty on hand, and two to spare.[198]

In October 1856, the Spectator editor reported that five boats were once again running on the upper river, with a sixth soon to be added.[199]

The number of advertisements began decreasing after 1855. Oregon experienced a depression from 1859 to 1861 after California's demand for lumber and produce declined. During this depression, several steamboats were tied up.[200] Rates of freight and passage were high as combinations were formed with those boats running, sharing profits with those tied up. The Farmers and Shippers Transportation Company was formed to promote the formation of transportation companies owned and operated by the farmers and shippers so that freight rates would reflect the actual cost of running the boat.[201]

The number of days per week boats ran, and the number of boats running to each town will serve as a measure of accessibility. The period in the 1850s for which the most ads are available is the 1853-1854 navigation season. Most of the ads shown below were inserted in December 1853 and ran until July 1854. The particular month shown in March 1854, the time the Spectator editor described as one with an overabundance of steamboats to carry the available freight, so readers should view this example as the greatest number of boats running, not as an average.

In March 1854, the Willamette Falls Milling and Transportation Company added a third boat to their line. Their announced schedule was as follows:

Willamette Falls Transportation Company
Through line of steamers from Portland to Corvallis

BELLE, OREGON and GAZELLE

The steamer BELLE, Capt. W. Wells, will make daily trips to and from Portland (Sundays excepted), leaving the company warehouse at half past 7 o'clock P.M.; Oregon City at 8;

Milwaukie, half past 8; arriving at Portland at half past 9. Returning, will leave Portland at 2 o'clock P.M.; arriving at the falls at 4 P.M.

Passage from the falls to Milwaukie--$1.00; Portland--$2.00 and returning at the same rate.

The Company's new and splendid steamer GAZELLE, Capt. R. Hereford, will commence her regular trips on Tuesday, March 14th, at 7:00 o'clock A.M. and will run as follows--

Leaving the Co.'s warehouse on Tuesdays and Fridays of each week at 7 o'clock A.M. Returning will leave Corvallis on Mondays and Thursdays of each week, at 7 o'clock A.M., touching at all intermediate landings.

Freight will be taken from Portland through by the line at the following rates:

From Portland to Milwaukie	per ton	$ 2.00
From Portland to Oregon City	"	3.00
From Portland to Buteville	"	10.00
From Portland to Champoeg	"	12.00
From Portland to Crawfords	"	14.00
From Portland to Weston	"	14.00
From Portland to Fairfield	"	15.00
From Portland to Salem	"	16.00
From Portland to Cincinnati & Independence	"	17.00
From Portland to Bloominton	"	18.00
From Portland to Albany & Corvallis	"	20.00

No extra charge on freight beyond the above rates.
Passengers will be taken by the steamer GAZELLE as follows:

From the Falls to Buteville	$ 1.00
From the Falls to Champoeg	1.00
From the Falls to Crawfords	1.50
From the Falls to Weston	1.50
From the Falls to Fairfield	2.00
From the Falls to Salem	2.50
From the Falls to Cincinnati	3.00
From the Falls to Independence	3.00
From the Falls to Bloomington	4.00
From the Falls to Albany	4.50
From the Falls to Corvallis	5.00

Meals will be charged extra, $1.00 each
No charge for lodging.

The steamer OREGON, Capt. J. D. Shields, will run as follows: Leaving the Company's warehouse on Mondays and Thursdays of each week at 7:00 o'clock A.M. for Salem, via Dayton and Lafayette, touching at all intermediate landings. Returning, will leave Salem Tuesdays and Fridays at 1:00 o'clock P.M., via Dayton and Lafayette.

Freight taken through by the "OREGON" will be charged at the following rates:

From Portland to Dayton and Lafayette	per ton	15.00
Buteville, Champoeg,)	"	same rate
Crawfords, Weston,)	"	as
Fairfield, and Salem)	"	Gazelle

Passengers taken by the Oregon:

From the Falls to Buteville, Champoeg and Crawfords	2.00
Dayton and Lafayette	3.00
Weston and Fairfield	3.50
Salem	4.00

No extra charge by this boat for meals or lodging.

Freights shipped from San Francisco or elsewhere to the care of our agent at Portland, F. R. Ferguson, will be received and receipted, and all rear charges paid, and forwarded without delay. Special care will be taken of all freight and baggage shipped by this line. This line offers inducements to Merchant and Shipper, as all freights pass direct from one boat to the other, at the Falls, by the aid of machinery, thus avoiding all exposure consequent to hauling through wet weather and over muddy roads, as is the case by other lines. Grain and other produce taken . . . at low rates.[202]

Competing with the Belle on the lower Willamette were the Portland and Multnomah as mentioned before, running as the People's Line:

People's Line

Steamers
Multnomah and Portland
After this date the steamers
Multnomah Capt. Hoyt
Portland Capt. Murray
will run in connection to and from Portland, as follows:

The "Portland" will leave Oregon City at 9 A.M.
will leave Portland at 2 P.M.
The "Multnomah" will leave Portland at 9 A.M.
will leave Oregon City at 2 P.M.

Freights or Passage
at reasonable rates. Apply on board.[203]

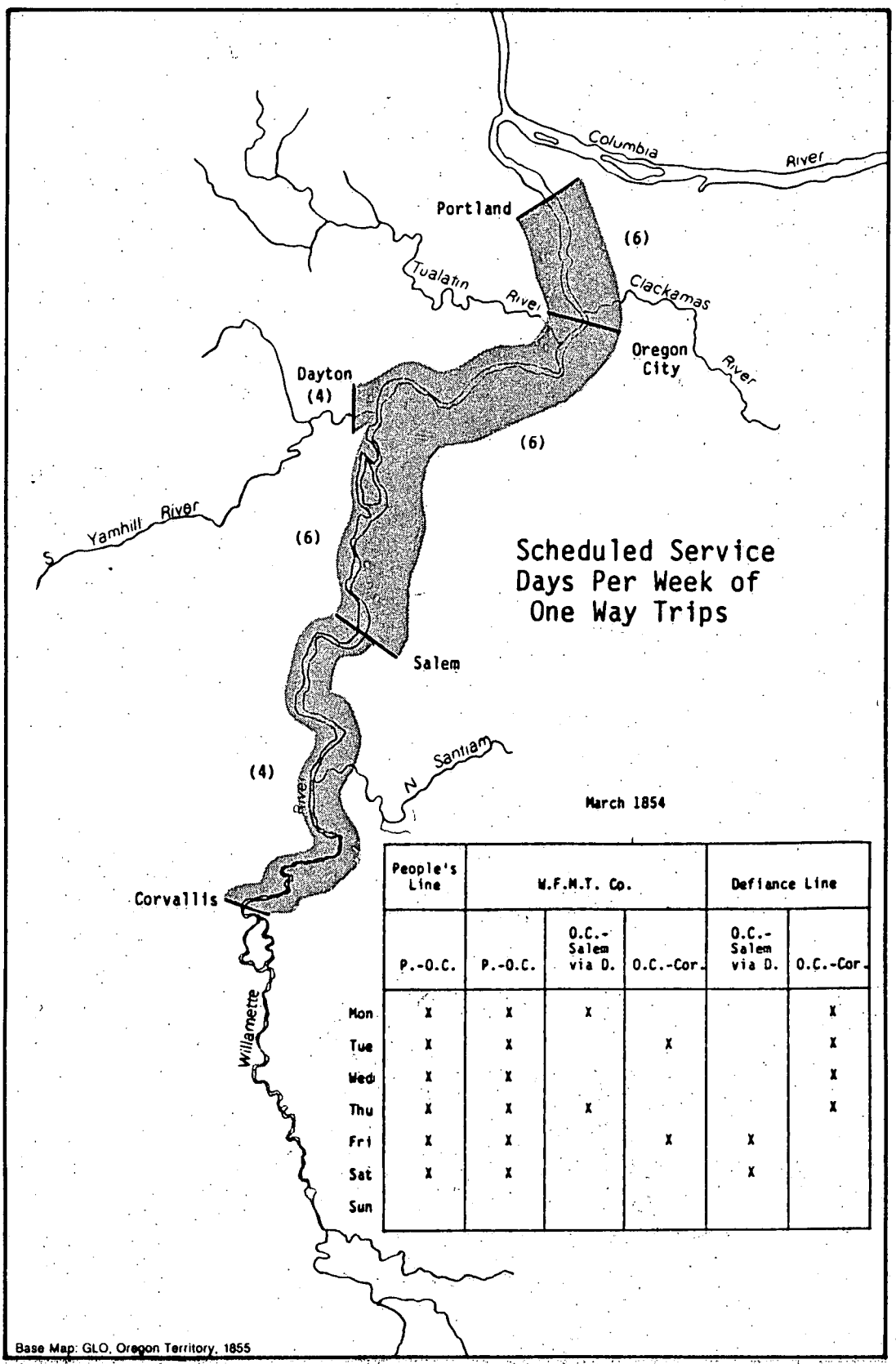
The iron steamer Allan, advertised for the "towing of ships, flats or batteau from Vancouver or any point below, to Portland, or to the rapids below Oregon City, and vice versa."[204]

Competing with the Willamette Falls Milling and Transportation Company on the upper Willamette was the Defiance Line, whose advertisement reads as follows:

> Defiance Line of Steamers
> Wallamet, Canemah and Fenix
>
> | | |
> |---|---|
> | Wallamet | Capt. A. F. Hedges |
> | Canemah | Capt. Charles Bennet |
> | Fenix | Capt. Jno. Miller |
>
> Daily Line
>
> One of the above line of boats will leave Canemah every morning:
>
> On Monday, Tuesday, Wednesday and Thursday for Marysville and intermediate landings.
>
> On Fridays and Saturdays for Salem and Yamhill.
>
> For Freight or Passage
>
> Apply to captains on board, or at the new warehouse in Canemah. There will be a carriage in attendance upon the arrival and departure of either of the boats of the above line, to convey passengers to and from Canemah and Oregon City. No storage charged on freight shipped on this line, at the new warehouse in Canemah.[205]

About the same time, the Wallamet advertised trips to Corvallis on Mondays and Thursdays.

As shown on the map for 1854 (see Figure 25), boats ran to Salem six days a week, five days a week to Corvallis, and four days a week to Dayton and Lafayette. Three boats ran as far as Salem on Mondays and Thursdays, two on Tuesdays and Fridays, and one on Wednesdays and Saturdays. Two boats ran as far as Corvallis on Mondays, Tuesdays, and Thursdays and



	People's Line	W.F.M.T. Co.			Defiance Line	
	P.-O.C.	P.-O.C.	O.C.-Salem via D.	O.C.-Cor.	O.C.-Salem via D.	O.C.-Cor.
Mon	X	X	X			X
Tue	X	X		X		X
Wed	X	X				X
Thu	X	X	X			X
Fri	X	X		X	X	
Sat	X	X			X	
Sun						

Figure 25. Number of Days per Week Steamboats Ran Upriver - March, 1854.

one on Wednesdays and Fridays. One boat ran to Dayton on Mondays, Thursdays, Fridays, and Saturdays.

Three boats ran six days a week between Portland and Oregon City. The trip took about two hours. Unless connections were made at Oregon City between upper and lower Willamette River steamboats, morning departure times ranged from 8 a.m. to 10 a.m. When boats were part of a connecting line, departure times were closer to 6 a.m. Departure times on connecting lines were earlier in the summer to compensate for the increased amount of time required to get over the bars on the upper Willamette.

Advertisements for points above Willamette Falls were not found in the Oregonian from July to November 1854, so no comparison between winter and summer schedules can be made for 1854. Lack of ads may reflect the poor economy, a low water level, or the use of a different type of advertising.

As stated earlier, advertisements decreased after 1855 and several boats were tied up during the economic slowdown which began in 1859. Advertisements do not begin to increase again until 1863. During the 1860s the People's Transportation Company was the main operator on the Willamette River. Competitors came along in the form of companies like the Willamette Steam Navigation Company, with their own line of connecting steamboats on the upper and lower Willamette, or independent steamboats; e.g., the Echo, which provided service on the upper Willamette where required.

In October 1865, the navigation season was extended due to the competition between the Willamette Steam Navigation Company and the People's Transportation Company.

> The present is the first season that steamboats have made regular service up the Willamette until this late in the year. This is mainly owing to the fact that two lines have been in competition for the trade and travel; . . .[206]

The period December 1865 to December 1866 will be described here. Ads for the People's Transportation Company, the Willamette Steam Navigation Company, and the Echo can be shown. The boats of the W.S.N. Co., and the Echo were purchased by the People's Transportation Company in 1866.

On December 9, 1865, the People's Transportation Company inserted the following notice which ran until February 13, 1866:

> People's Transportation Company's Notice
>
> From and after this day until further notice
> The steamer Senator
> will leave Portland for Oregon City every morning at 7 o'clock, carrying the U.S. mails.
> The steamer Rival will leave Oregon City daily (Sundays excepted) at 8 o'clock A.M. Returning, will leave Portland at 2 o'clock P.M.
> The steamer Reliance will leave Canemah every Monday and Thursday upon the arrival of the Senator from Portland, for Corvallis and intermediate points.
> The steamer Enterprise will leave every Tuesday morning, for Eugene City and intermediate points.
> W. K. Witherell, Esq., will be in attendance on Capt. Couch's wharf to receipt for all freight shipped for Upper Willamette.[207]

On the same day, the Willamette Steam Navigation Company's advertisement for the steamer Active appeared and ran until February 1, 1866.

Notice

The Willamette Steam Navigation Company's steamer Active
Capt. J. T. Apperson Master
will leave Canemah every Tuesday and Friday at 10 o'clock A.M. for Salem, Albany and Corvallis.
Portland[208]

D. W. Burnside
Pres. W.S.N. Co.

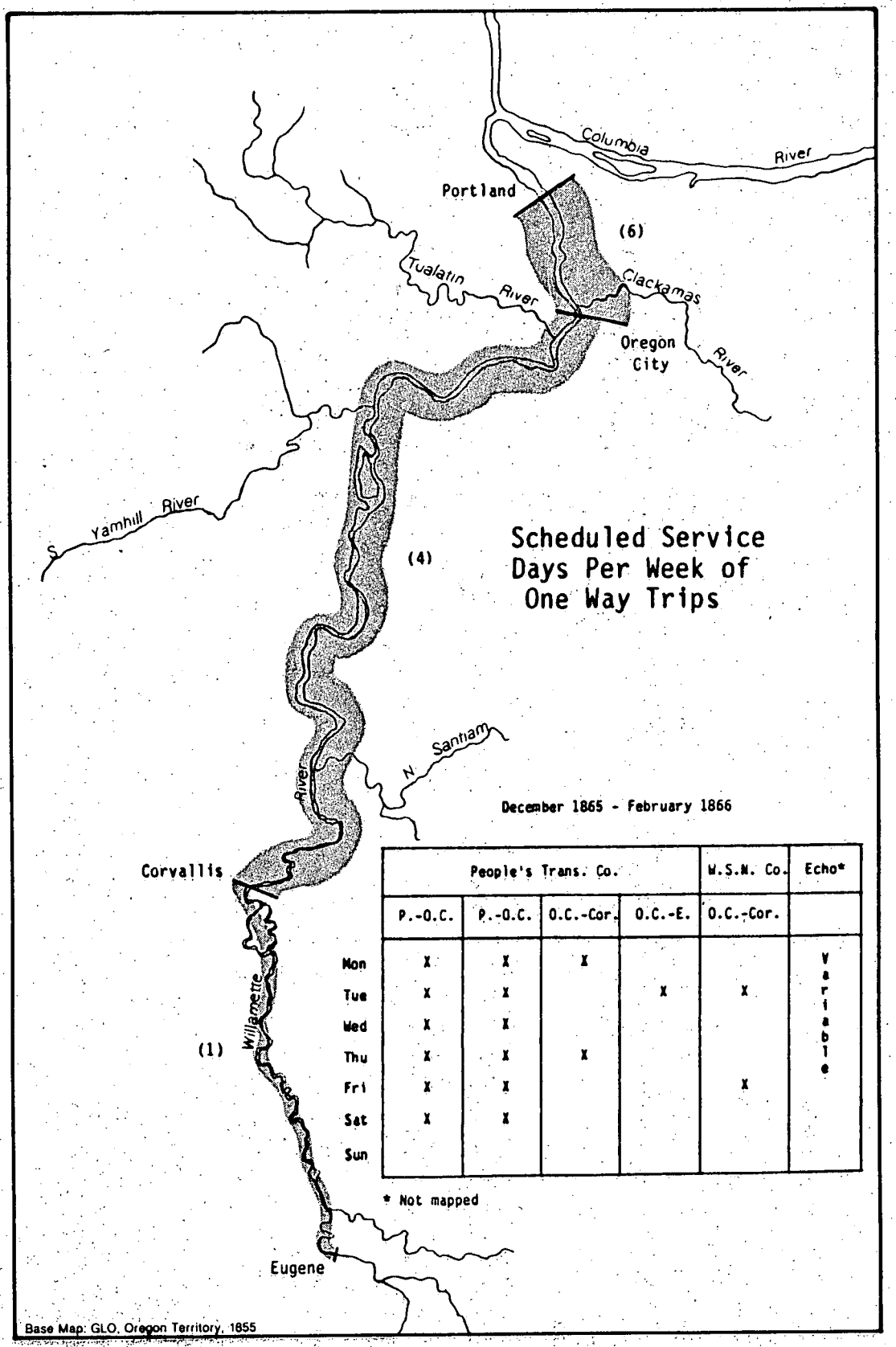
The steamboat Echo was running independently at the time, making trips about once a week to Eugene. Ads for the Echo announced individual trips. Four were inserted in December, one for Friday, December 8th, which is shown below and, one each for Saturday, December 16, 1865; Saturday, December 23, 1865; and Saturday, December 30, 1865.

Independent Steamer
Echo
will leave Canemah
for
Eugene City and intermediate points on Friday, December 8th, 1865.

H. H. Johnston will be in attendance to receive freight at all hours of the day at Couch's Wharf. Shippers will be particular to mark receipts "Steamer Echo". Passengers wishing to patronize the "Echo" will buy no tickets.[209]

Portland A. P. Ankeny

As can be seen on the map (see Figure 26) showing this service for the 1865-1866 winter navigation season, there was service six days a week by two boats between Portland and Oregon City. Boats ran as far as Corvallis four days a week. Twice a week boats ran as far as Eugene. If they also stopped at Corvallis, then Corvallis would have had two boats stop twice a week. As happened in the 1850s, it can be assumed that boats for Corvallis stopped at Dayton.



	People's Trans. Co.				W.S.N. Co.	Echo*
	P.-O.C.	P.-O.C.	O.C.-Cor.	O.C.-E.	O.C.-Cor.	
Mon	X	X	X			Variable
Tue	X	X		X	X	
Wed	X	X				
Thu	X	X	X			
Fri	X	X			X	
Sat	X	X				
Sun						

* Not mapped

Figure 26. Number of Days per Week Steamboats Ran Upriver - December, 1865 to February, 1866.

In late January 1866, rates of freight and passage were lowered as the competition became keener between the two companies.

> Trade on the Willamette--opposition has firmly set in on the Willamette River. Rates of freight and passage have become greatly reduced. The steamers are making their regular trips above and below the Falls, but no freight of great amount is taken, in consequence of the present high water. Active times are expected throughout the coming season.[210]

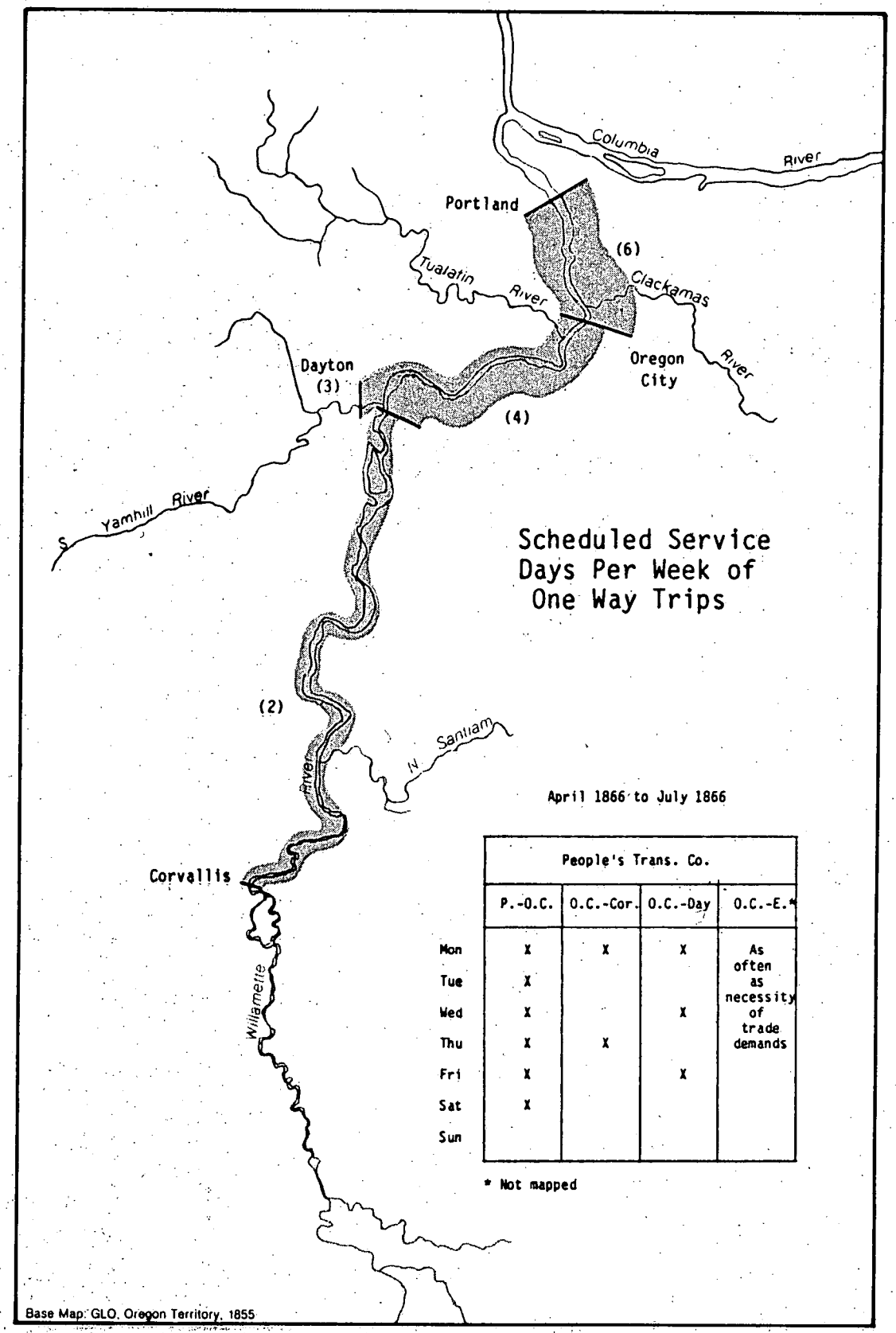
Beginning in mid-February, 1866 passengers were carried for free. On February 2, 1866, the Willamette Steam Navigation Company announced that the Alert would run 6 days a week between Portland and Oregon City, connecting with the Active, which was still running on Mondays and Thursdays to Corvallis.[211]

The Spring Arrangement for the People's Transportation Company, announced in mid-February 1866, had only one change. Only one boat ran between Portland and Oregon City.[212] The same schedule was reinserted in March with lowered rates of fare.[213] By April 1866, the People's Transportation Company owned the boats of the Willamette Steam Navigation Company,[214] as well as the Echo. The Echo had continued to run independently from January through April, making one trip in January, two in February, five in March, and one in April.[215]

In the ad which ran from April to July 1866, the People's Transportation Company used these boats on the routes they had formerly run on, alternating them with the other boats the company owned (see Figure 27).

People's Transportation Company
Notice

From this date until further notice the
steamers



	People's Trans. Co.			
	P.-O.C.	O.C.-Cor.	O.C.-Day	O.C.-E.*
Mon	X	X	X	As often as necessity of trade demands
Tue	X			
Wed	X		X	
Thu	X	X		
Fri	X		X	
Sat	X			
Sun				

* Not mapped

Figure 27. Number of Days per Week Steamboats Ran Upriver - April, 1866 to July, 1866.

"Senator" or "Alert"
will leave Lincoln House Wharf, every morning, (Sundays excepted) at 7 o'clock for Oregon City connecting with the steamers "Reliance," "Fannie Patton," or "Active" on Monday and Thursday of each week, for Salem, Albany and Corvallis and intermediate points, and with the steamer "Union" on Monday, Wednesday and Friday of each week for Dayton, Lafayette and intermediate points.

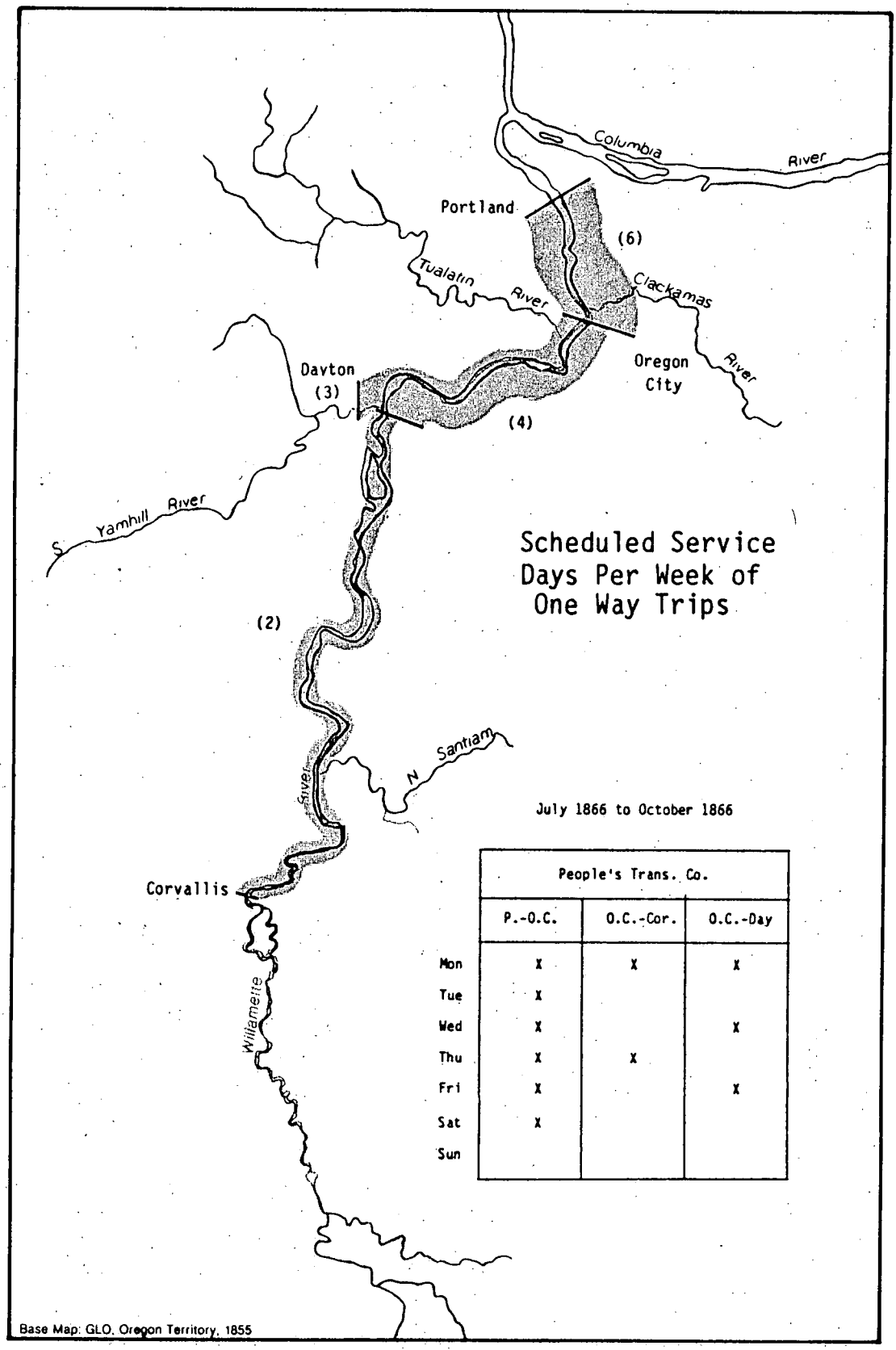
Steamers "Enterprise" or "Echo" will be dispatched for Eugene City and intermediate points as often as the necessity of the trade demands.[216]

A. A. McCully
Pres., People's Trans. Co.

In the ad which ran from July 24, 1866 to October 4, 1866, no service to Eugene was advertised. The Echo or Enterprise made the Monday and Thursday trips as far as Corvallis. The Union made trips Mondays, Wednesdays, and Fridays to Dayton. The Senator continued to make daily trips between Portland and Oregon City.[217] As can be seen in comparing the maps for December 1865 (see Figure 26) and July 1866 (see Figure 28), points between the mouth of the Yamhill River and Corvallis were visited by steamboats half as many days per week, and points above Corvallis not at all in July.

During the month of October 1866, no service was available above Salem. The Senator ran six days a week between Portland and Oregon City, leaving at 6 a.m. The Echo or Enterprise traveled to Salem on Mondays, Tuesdays, Wednesdays, Fridays, and Saturdays and the Union to Dayton on Monday, Wednesdays, and Fridays.[218] So, on three days of the week points between Oregon City and the mouth of the Yamhill had access to two boats (see Figure 29).

The ad which ran during November 1866 extended service by the Enterprise or Echo to Albany on Mondays, Tuesdays, Thursdays, and



	People's Trans. Co.		
	P.-O.C.	O.C.-Cor.	O.C.-Day
Mon	X	X	X
Tue	X		
Wed	X		X
Thu	X	X	
Fri	X		X
Sat	X		
Sun			

Figure 28. Number of Days per Week Steamboats Ran Upriver - July, 1866 to October, 1866.

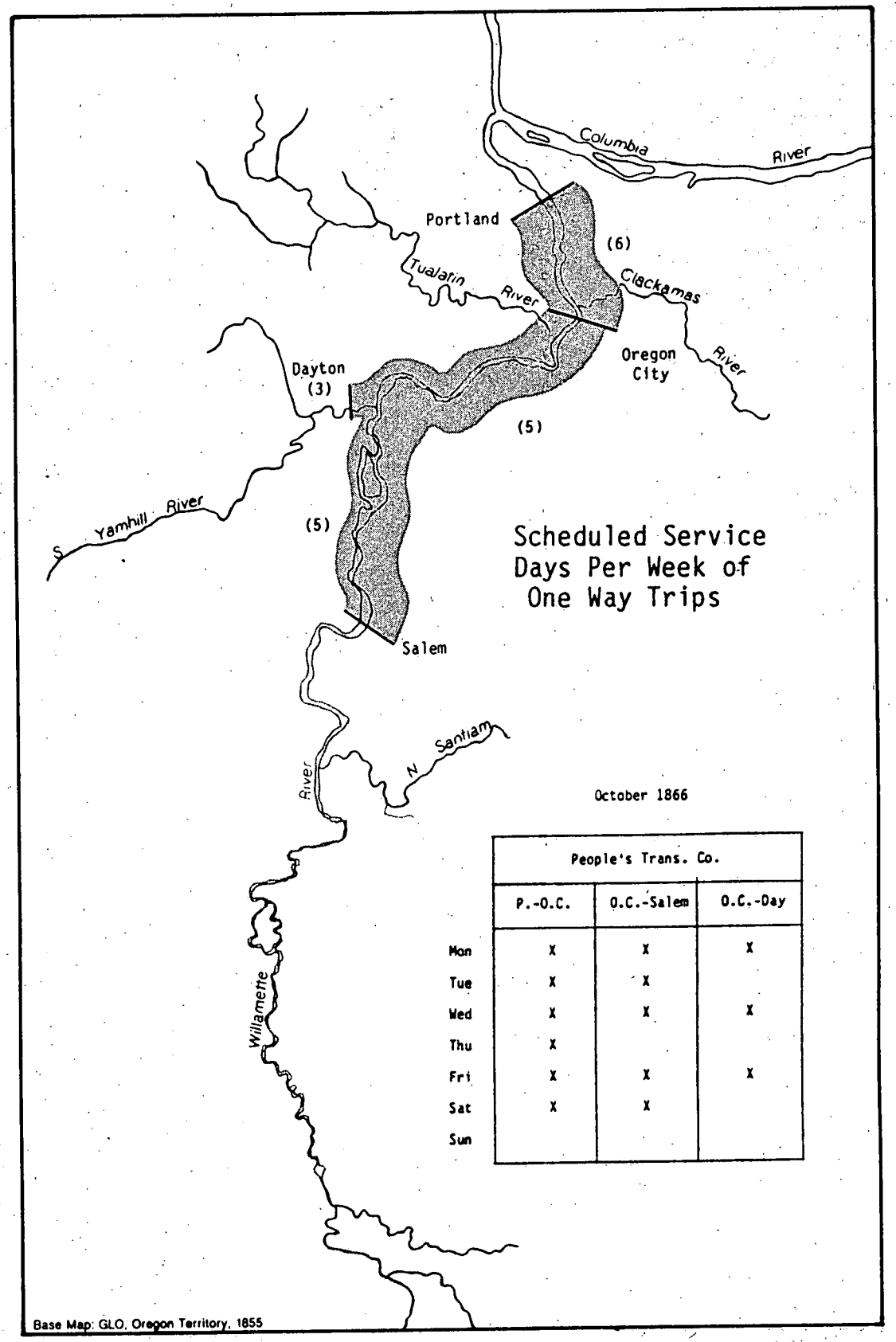


Figure 29. Number of Days per Week Steamboats Ran Upriver - October, 1866.

Fridays (see Figure 30). The Senator still ran 6 days a week between Portland and Oregon City, and the Union still ran to Dayton three days a week.[219]

On December 8, 1866, the People's Transportation Company inserted their winter season ad. Service to points above the mouth of the Yamhill River differed from the December 1865 ad, in part perhaps because there were no competitors, but ads in succeeding years differed in number of boats used and number of days per week steamboats visited particular towns also, even when there were no competitors. The ad for December 8, 1866 reads as follows:

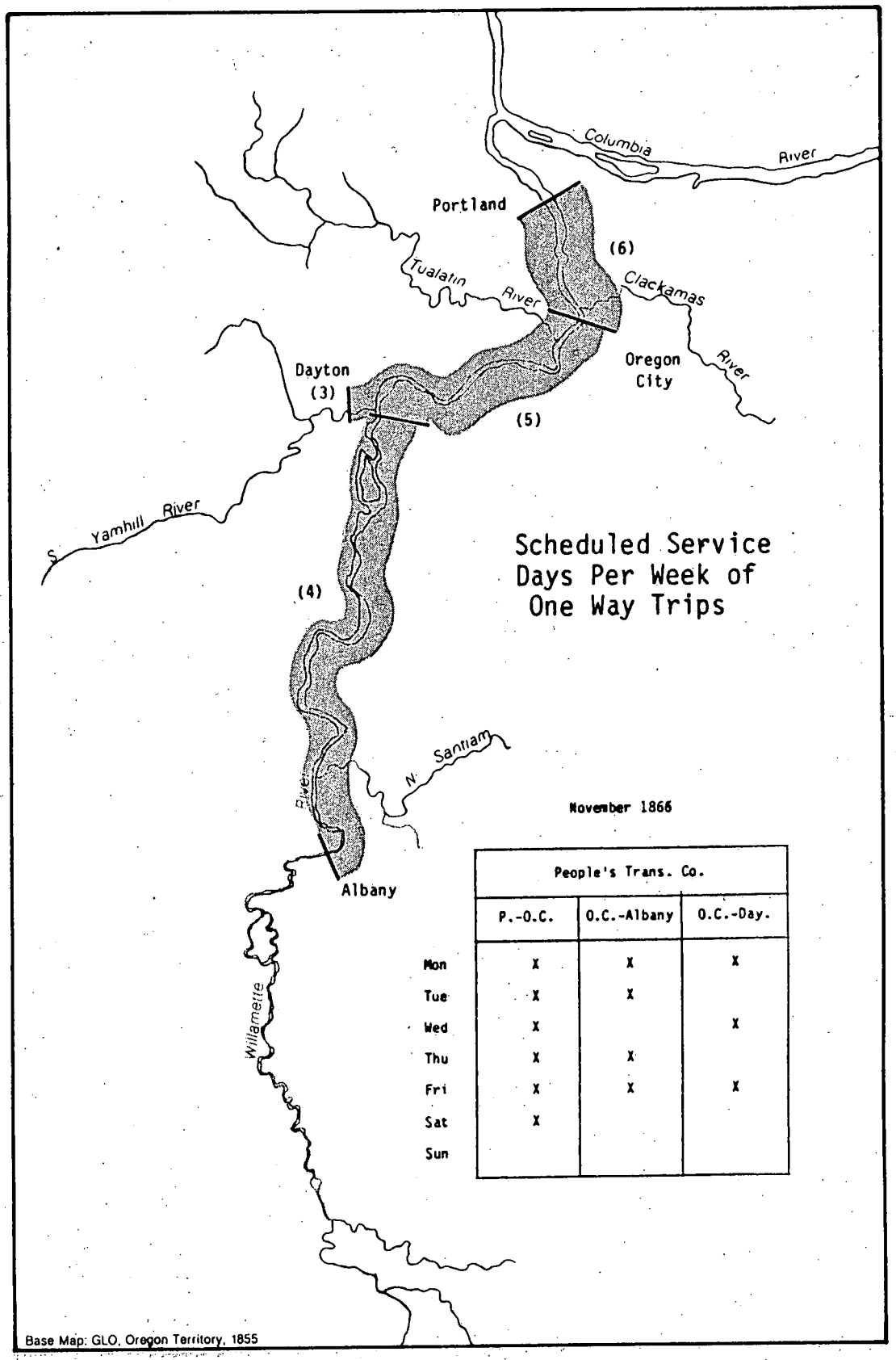
People's Transportation Company
Notice

Until further notice the steamer Alert
will leave Portland daily, at 7 A.M.
for Oregon City
connecting with the steamer Reliance
for Corvallis
on Monday and Thursday of each week
Also with the Fannie Patton
for Corvallis
on Tuesday and Friday of each week
Also with the Active
for Eugene
on Wednesday of each week
Also with the steamer Union on Mondays,
Wednesdays and Fridays of each week
for Layayette and intermediate points.[220]

Dec. 8, 1866

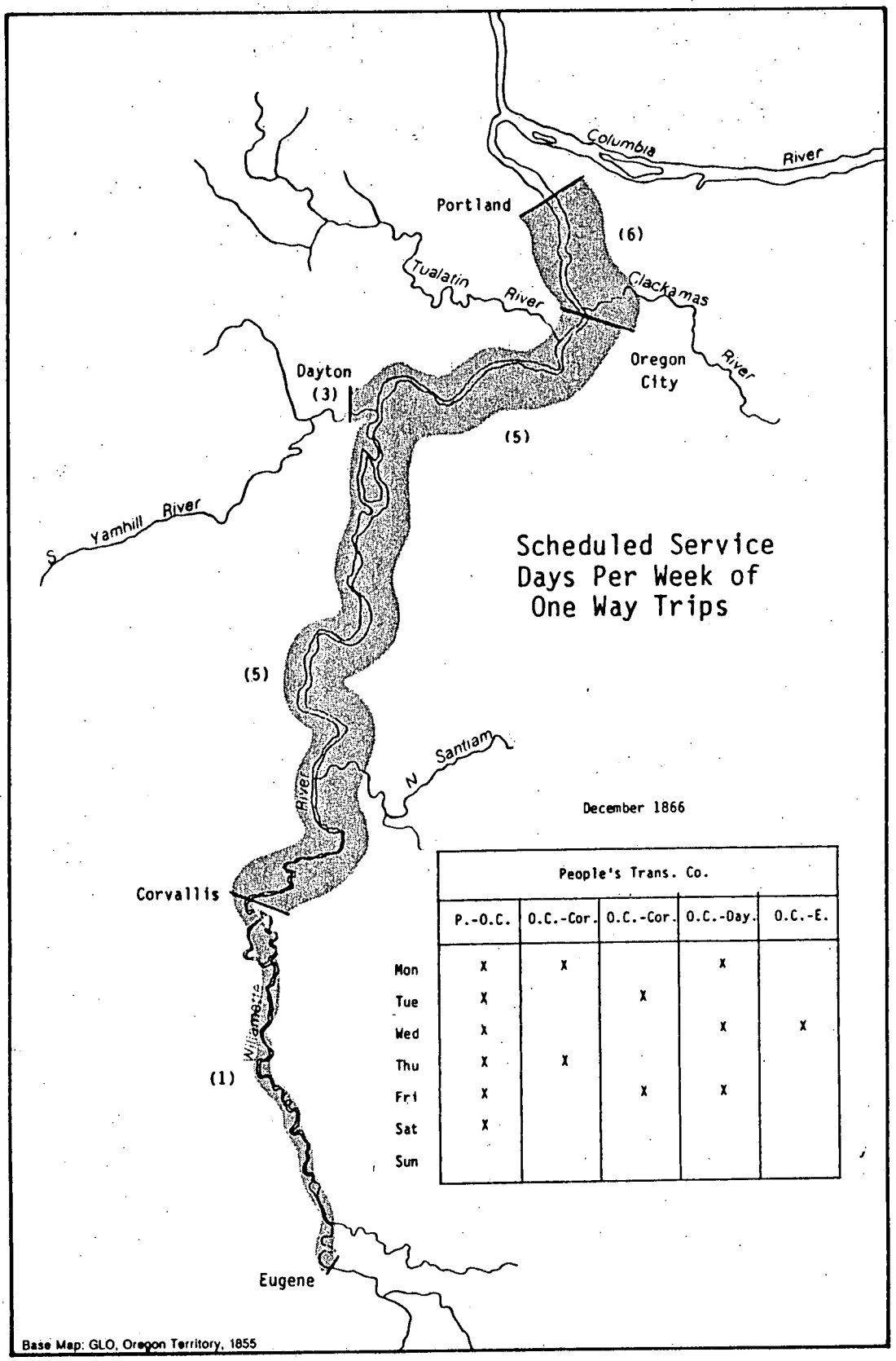
A. A. McCully
Pres. P. T. Co.

As shown on the map (see Figure 31), points on the Willamette to Corvallis were visited by a steamboat five days a week, while those above Corvallis only one day a week. As usual, points on the Yamhill River were visited three days a week and those between Portland and



	People's Trans. Co.		
	P.-O.C.	O.C.-Albany	O.C.-Day.
Mon	X	X	X
Tue	X	X	
Wed	X		X
Thu	X	X	
Fri	X	X	X
Sat	X		
Sun			

Figure 30. Number of Days per Week Steamboats Ran Upriver - November, 1866.



	People's Trans. Co.				
	P.-O.C.	O.C.-Cor.	O.C.-Cor.	O.C.-Day.	O.C.-E.
Mon	X	X		X	
Tue	X		X		
Wed	X			X	X
Thu	X	X			
Fri	X		X	X	
Sat	X				
Sun					

Figure 31. Number of Days per Week Steamboats Ran Upriver - December, 1866 to February 1867.

Oregon City six days a week. Points between Oregon City and the mouth of the Yamhill River had access to two boats three days a week.

This one year example of the type of service offered by the People's Transportation Company gives a sense of the seasonal variation in the schedule due to variations in water level. For places between Corvallis and Eugene, steamboat service was most certain for three to five months, December to February or April. It was worst in late summer and early fall when the wheat harvest would have taken place.[221] Points above the mouth of the Yamhill River also experienced the greatest variation in the number of boats and number of days per week steamboats visited them.

Accessibility for all points on the Willamette River would change with the coming of the railroads. During the 1870s steamboat navigation encountered its first competition from the railroads. Railroads had many competitive advantages. They were able to run year-round, unhampered by periods of high and low water. They could be extended into areas inaccessible to steamboats. The larger the area reached by the railroads became, the greater the amount of business generated. Railroads could build direct lines between settlements, cutting the distance between places. Eventually they would provide a faster connection to national markets.

Those who invested in railroads bought into steamboat companies. Once they gained control of steamboats, railroads raised freight rates. Competing companies were formed and people were encouraged to patronize them despite the railroads' threats and new rates, lowered in an effort to drive these new companies off the river.

Agitation for railroads had begun in 1854 and probably reflected the first attempts to provide service to places inaccessible by water. Route surveying for what was to become the Oregon and California Railroad began on Oct. 4, 1867 for the west side line and March 1868 for the east side line. Construction of both began in April 1868.[222] Both lines were taken over by Ben Holladay. The first twenty miles of track were completed from East Portland to Oregon City in January 1869. When the lines were reorganized in 1870, the east side line was named the Oregon and California Railroad, the west side named the Oregon Central Railroad. The Oregon Central was completed to St. Joseph on the Yamhill River by November 1872. The Oregon and California reached Salem by October 1870; Albany by December 1870; and by October 1871 the Willamette was crossed south of Harrisburg and Eugene was reached.

In January 1871, the Calliope began service. This was the first steamboat to connect with a railroad, the Oregon and California Railroad. After connecting with the "cars" at Rock Island, the Calliope ran to McMinnville on Tuesdays, Thursdays, and Saturdays, and made the return trip Mondays, Wednesdays, and Fridays.[223] This notice ran only a week and no other notice appeared.

In late August 1871, the sale of the People's Transportation Company was rumored.[224] In September 1871, all steamboats except the Senator, running between Portland and Oregon City, ceased running while sale negotiations were ongoing.[225] Ben Holladay purchased the company and incorporated the Willamette Transportation Company.[226]

This company operated a daily boat on the Portland-Oregon City route, adding a second from early January 1872 to early March 1872.

On the upper Willamette, service was provided to Dayton and Corvallis. Passengers for Dayton and intermediate points on the river were to take the "cars" to Canemah, where they transferred to the steamboat Dayton on Mondays, Wednesdays, and Fridays. From December 1871 to March 1872, this route was extended to Lafayette. From mid-December 1871 to late February 1872, the Fannie Patton ran to Corvallis on Mondays and Thursdays. The policy of the railroad seemed to be to run boats above Dayton only during the winter navigation season, and only to a limited extent.

In October 1872, the Willamette River Transportation Company was incorporated. They announced their intention of engaging in navigation to Eugene on the Willamette, to Lafayette on the Yamhill and to Jefferson on the Santiam.[227]

This company formed to compete with the railroad companies because freight rates increased after the railroad absorbed the People's Transportation Company. In October 1872, an editorial appeared in the Oregonian complaining about the high freight rates charged:

> What benefit is a railway to a people who are thereby forced to pay more for carrying their produce to the shipping port than they had to pay when they had no railway? When the river transportation is, no matter by what means, forced to a higher point than the necessary cost of freight on the river would be, independently of outside enterprises, there is cause for complaint among the farmers, and the time for competition has arrived. That such a state of affairs as does exist today on the Wallamet River is proved by the undeniable fact that the already high charges on wheat from Albany put on board ship at Portland was run up $1.35 higher after the river carrying passed into the hands of the railway.[228]

In March 1873, a rate war occurred. The Willamette River Transportation Company reduced rates to points served by both rail and

steamboat. All freight except grain and flour was transported for about half the railway rates and grain and flour for two-thirds of the railroad rates.[229] The railroad companies reduced rates in order to drive the Willamette River Transportation Company off the Willamette. The Oregonian editor reported that the farmers seemed determined to patronize the opposition.[230] The railroad companies responded by sending a person through the valley to intimidate the shippers of grain. Shippers were told the opposition had no backing and could only last a short time, and that as soon as it was withdrawn the railroad would charge double rates to any shipper who patronized the opposition. When this did not work, the railroad dropped freight rates to $1.00 per ton to Portland regardless of its point of origin. However, shippers patronized the Willamette River Transportation Company.[231] In 1874, U. B. Scott began running the Ohio on the upper Willamette.

The time period shown here as an example is 1875. Where possible, both railroad and steamboat schedules will be described to give the reader a sense of the increased accessibility some towns acquired. As stated earlier, distance between two places by railroad was often less than that by water. The U.S. Corps of Engineers Annual Report for 1875 listed the river and rail distances for points on the Oregon and California Railroad (see Table 3).

The distances saved increased as one traveled to upriver places. Also, the express train to Albany made the 82.5 mile trip in four hours and thirty-five minutes, a rate of 19 mph. While express trains would have been faster than freight trains, this rate is faster than the 14

Table 3. Distance Between Towns by Rail and River

Distance from Portland	Miles By River	By Railroad	Diff.
Oregon City	12	16.16	
Salem	70.5	53.69	16.81
Albany	104.5	82.50	22.0
Harrisburg	151	107.6	44.4
Eugene	175	125.73	49.27

U.S. Chief of Engineers, Annual Report of Major N. Michler, Corps of Engineers, for the Fiscal Year Ending June 30, 1875. Appendix GG2 of the Report of the Chief of Engineers to the Secretary of War. House of Representatives, 44th Cong., 1st Sess., Ex. Doc. 1, No. 2, Congressional Serial Set vol. 1676, p. 772.

mph rate of the steamboats, so trains not only traveled a shorter distance, they were as fast or faster than the steamboats.

The companys operating during the sample period were the Willamette River Transportation Company's steamers, operated in competition to the Oregon Steamship Company, the O.S.S. boats which connected with the railroads, and the steamboat Ohio, which operated independently. In every case, it will not be possible to map the schedule of the Oregon Steamship Company. These ads did not always name the destination and the number of boats running on the upper river. When the Oregon City Enterprise was consulted in addition to the Oregonian, the question was further complicated. Throughout the year 1875, the following advertisement appeared in the Oregon City Enterprise, even during periods when Eugene, Harrisburg, and McMinnville would not have been accessible due to low water.

OREGON STEAMSHIP CO.'S
STEAMBOAT NOTICE!

Str. E. N. COOKE,
Will leave OREGON CITY for PORTLAND every day [Except Sunday,] at 7½ o'clock A. M. Returning, will leave Portland for Oregon City at 2½ o'clock, P. M.

Str. ALICE,
Will leave OREGON CITY for CORVALLIS every Monday and Thursday of each week.

Str. DAYTON,
Will leave OREGON CITY for MCMINNVILLE, LAFAYETTE and DAYTON and all points between, every Monday, Wednesday and Friday of each week. Leaves the Basin at 8 o'clock, A. M., and connect with the train at Canemah at 9, A. M.

Str. ALBANY,
Leaves OREGON CITY for HARRISBURG and EUGENE, and all intermediate points every week.

Str. FANNIE PATTON,
Leaves OREGON CITY for ALBANY and
all intermediate points between twice
every week. J. D. BILES, Agent,[232]
Oregon City,
February, 11, 1874

So while the above advertisement gives a sense of the schedule during the winter months, the ads in the Oregonian will be used to describe the seasonal variation in the steamboat service.

On November 9, 1874, the Willamette River Transportation Company inserted the following advertisement for service to Albany, Corvallis, the Yamhill River, and Astoria.

The Willamette River Trans-
portation Co.'s Steamers

Will leave the Central Wharf between Washington and Alder streets, as follows:
Steamer "GOV. GROVER" for Corvallis, on Monday and Thursday, at 6 A. M.
Steamer "WILLAMETTE CHIEF" for Albany, on Tuesday and Friday at 6 A. M.
Steamer "SHOSHONE" for Points on the Yamhill River, on Monday, Wednesday and Friday at 8 A. M.
Steamer "BEAVER" for Astoria, Tuesday, Thursday and Saturday, at 6 A. M.
Lightering and Towing of Vessels between Portland and Astoria at REDUCED RATES.[233]

FRANK T. DODGE, Agent

The ad for November 9, 1874 for the Oregon Steamship Company which had been running since September 1874 in the Oregonian, listed a boat on the Portland-Oregon City route and a connection at Oregon City with the boat to Dayton. Later ads listed upriver points in the freight rate section. These freight rate sections will be used to evaluate how far upriver the boats traveled.

OREGON STEAMSHIP COMPANY'S
STEAMBOATS.

NOTICE.
FROM AND AFTER MONDAY,
Sept. 22d, the steamer
E. N. COOKE
Will leave OREGON CITY every day (Sunday excepted), at 7:30 A. M. for Portland, returning, will leave Portland for Oregon City at 2:30 P. M.

Passengers for DAYTON and all intermediate places will take CARS at 7:30 A. M., connecting at Canemah with the steamer DAYTON on Monday, Wednesday and Friday, connecting at Oregon City with the O. & C.R.R. Co. at 8 P. M. on Tuesday, Thursday and Saturday for Portland.

THROUGH TICKETS sold at the Office of the O. & C.R.R. Co., at REDUCED RATES.

All freight by this line delivered to consignees FREE OF DRAYAGE.

Freight received until 5 P. M.[234]

J. D. BILES, Agent.

In early November 1874, the Ohio was running to Salem. As was true in other decades, the schedules of the independents were the most variable. A complete description of the Ohio's schedule will be supplied later in this paper.

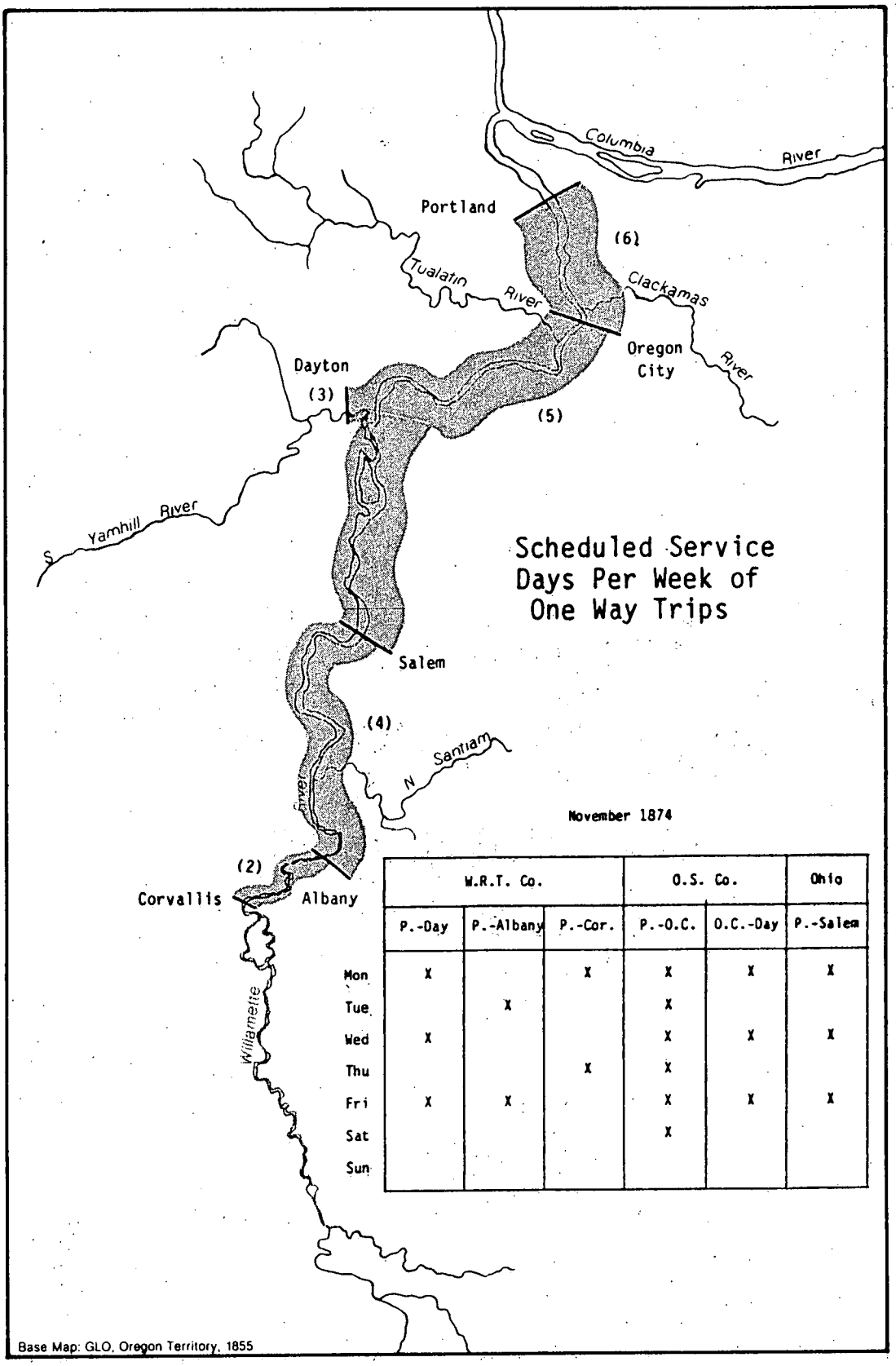
THE LIGHT DRAFT STEAMER,
OHIO

WILL LEAVE W.R.T. CO.'S WHARF, PORTLAND, at 5 A. M. FOR SALEM, On Monday, Wednesday and Friday of each week.
Returning, leave Salem at same hour on Tuesday, Thursday and Saturday, until further notice.

Rates on Freight reasonable. Fare $1.00

U. B. Scott, Master[235]

When mapped (see Figure 32), the combined schedules show that boats ran six days a week between Portland and Oregon City. Since boats of the Willamette River Transportation Company and the Ohio started their



	W.R.T. Co.			O.S. Co.		Ohio
	P.-Day	P.-Albany	P.-Cor.	P.-O.C.	O.C.-Day	P.-Salem
Mon	X		X	X	X	X
Tue		X		X		
Wed	X			X	X	X
Thu			X	X		
Fri	X	X		X	X	X
Sat				X		
Sun						

Figure 32. Number of Days per Week Steamboats Ran Upriver - November 1874.

trips from Portland, there was more than one boat on this route five days a week. One to four boats were traveling on the upper river during the week. Places between Oregon City and Salem were reached five days a week, places between Salem and Albany four, and those between Albany and Corvallis, two days a week.

By this date, the Oregon and California Railroad was running a train each way between Portland and Roseburg six days a week, an express train each way between Albany and Portland, and a freight train each way between Portland and Junction City. The Oregon Central was running a train each way between St. Joseph on the Yamhill River and Portland six days a week. These routes are shown on the General Land Office Map for 1876 (see Figure 33) and the schedules are shown as follows:

OREGON & CALIFORNIA R. R. CO.

To Take Effect Sunday, Aug. 2d, 1874 at
4 A. M.

DAILY (EXCEPT SUNDAY)
As Follows:

PORTLAND AND ROSEBURG

LEAVE		ARRIVE	
Portland.....	7:30 A. M.	Roseburg.....	7:10 P.M.
Roseburg.....	5:00 A. M.	Portland.....	4:15 P.M.

ALBANY EXPRESS TRAIN
DAILY, (EXCEPT SUNDAYS)
As follows:

LEAVE		ARRIVE	
Portland.....	3:50 P. M.	Albany.....	8:25 P. M.
Albany.....	5:30 A. M.	Portland.....	10:05 A. M.

FREIGHT TRAINS
DAILY, (EXCEPT SUNDAYS) AS FOLLOWS:

LEAVE		ARRIVE	
Portland.....	6:15 A. M.	Junction.....	6:00 P. M.
Junction.....	5:45 A. M.	Portland.....	5:15 P. M.

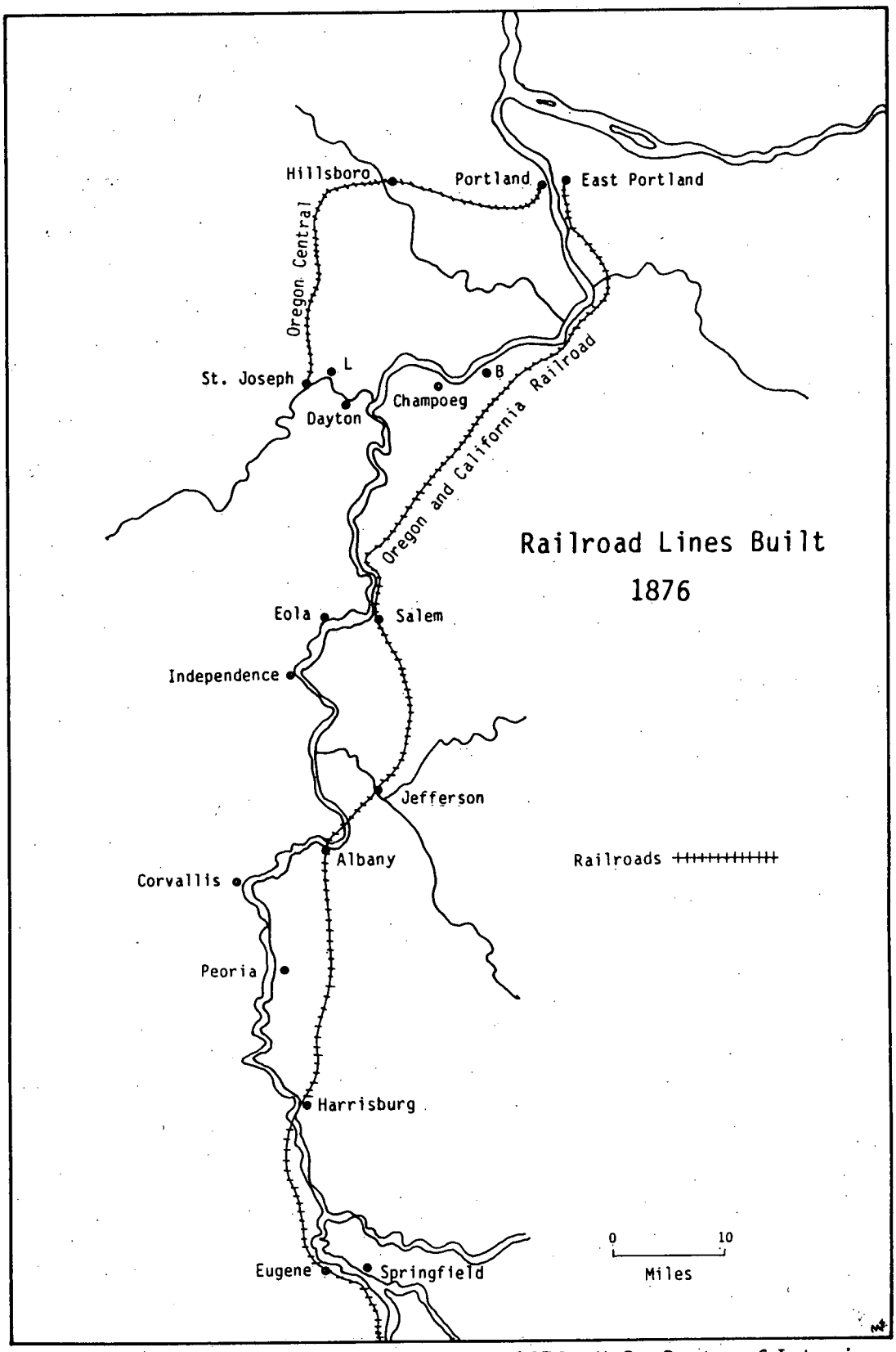


Figure 33. Existing Railroad Lines - 1876. U.S. Dept. of Interior, G.L.O., Oregon.

The Oregon and California Railroad Ferry makes connection with all Regular Trains.

Close connections are made at ROSEBURG with the Stages of the Oregon and California Stage Company.

Tickets for Sale to all the principal points in California and the East at Company's Office, Cor. F and Front Sts., at Ferry Landing, Portland.

Storage will be charged on freight remaining in Warehouse over 24 hours. Freight will not be received for shipment after 5 o'clock P.M.

E. P. ROGERS, Gen'l Freight and Passenger Agent

J. BRANDT, Jr., Gen'l. Sup't.[236]

THE OREGON CENTRAL R. R. CO.

To take Effect Monday, March 30th, 1876, at 6 A. M.

Daily Trains will run between

PORTLAND AND ST. JOSEPH

AS FOLLOWS:

LEAVE		ARRIVE	
Portland.....	2:00 P. M.	St. Joseph.....	7:00 P. M.
St. Joseph.....	6:00 A. M.	Portland.....	10:00 A. M.

Connecting at Cornelius with Stages for Forest Grove at St. Joseph for all points South and West--Lafayette, McMinnville, Amity, Monmouth, Independence, Buena Vista and Corvallis.

Passengers received at Fourth street siding on giving signals to the train, but are prohibited from getting on or off the train at any other point on the street.

Passengers getting on the train at Ticket Stations without tickets will be charged twenty-five cents extra.

On and after Sunday, August 16, there will be no trains run on Sundays.

Freight received at the Company's New Warehouse and will not be received for shipment after 4 P. M.

J. BRANDT, JR.[237]

In December 1874, the schedule for the Willamette River Transportation Company was the same, but the route of the Ohio was extended to Corvallis. However, the boat ran only on Mondays and Thursdays.

OHIO!
INDEPENDENT LINE:

THE LIGHT DRAFT STEAMER,
OHIO,

Leaves the Wharf foot of Alder street, Portland, for Salem, Albany, Corvallis, and all intermediate points on Mondays and Thursdays of each weeek. Leaves Corvallis on return Wednesdays and Saturdays, until furhter notice. No delays on account of low water. Rates of freight reasonable. For any further information apply on board, or to G. L. Lindsley, Agent on the wharf.

U. B. SCOTT, Master.[238]

The schedule of the Oregon Steamship Company as listed in the Oregonian is shown below. The Welcome was on the Portland-Oregon City route, the Dayton on the Oregon City-Dayton route, and the Alice on the Oregon City-Corvallis route. The E. N. Cooke and Fannie Patton were running somewhere on the upper river after connecting with the Welcome at Oregon City, but how far upriver is not known. Since no advertisements were found in the Eugene Register-Guard, and other boats were only running as far as Corvallis, it can probably be assumed that they were running as extra boats, perhaps to Salem or Albany. "Notice by poster" implies a changing schedule.

NOTICE.

UNTIL FURTHER NOTICE THE STEAMER WELCOME will leave the dock foot of Ash street (O.S.N. Co's wharf) at 6 o'clock A. M. every morning (Sunday excepted), for Oregon City, connecting with the Steamer ALICE on Monday and Thursday for Corvallis and intermediate points and on other days with the FANNIE PATTON and E. N. COOKE, of which due notice will be given by Posters.

FARE, ONE DOLLAR.

For Butteville, Champoeg, Dayton and Lafayette, connecting with Steamer DAYTON on Monday, Wednesday and Friday.

Fare, 75 Cents.

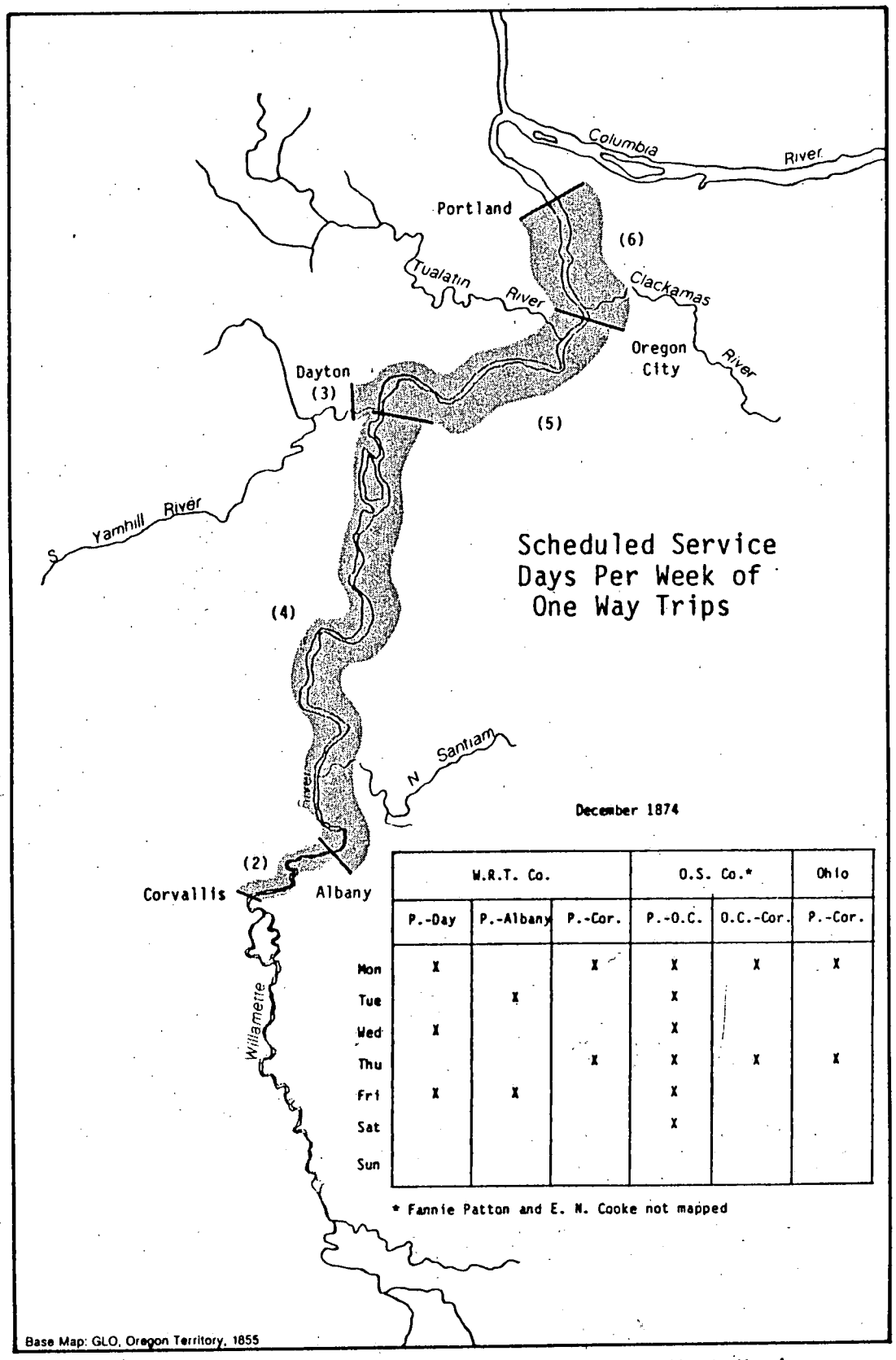
All up freight to Corvallis or Lafayette and intermediate points for One Dollar per Ton.

Freight received on the Dock of the O.S.N. Co., or O.S.S. Co., for any of the above points.
Through Freights to Astoria forwarded without delay at the lowest rates.
All Freight delivered free of drayage.
J. D. BILES, Agent.[239]

The change from the November map is the additional number of boats running to Corvallis (see Figure 34).

The schedule of the Ohio changed December 29, 1874, announcing service to Salem and Albany. From February 25, 1875 to August 30, 1875, service by the Ohio was announced on a trip-by-trip basis. From the February 5, 1875 issue to the March 18, 1875 issue, Harrisburg was advertised as a destination point. From the March 23, 1875 issue to the May 20, 1875 issue, Eugene was the destination. In the month of June 1875, one trip to Harrisburg and two to Eugene were advertised. During July, the destination was Corvallis, and in August, September, October, and the first half of November was Salem. For the rest of November 1875, the advertised destination was Harrisburg, and finally Eugene again in early December 1875.[240]

In November 1875, the City of Salem, also owned by U. B. Scott, began running. On November 4, 1875, a trip to Albany was advertised,[241] on November 8th and November 15th, a trip to Corvallis.[242] On November 24th, November 29th, and December 13th, trips to Harrisburg were advertised.[243] During the latter parts of December, ads for trips to Harrisburg and Eugene were inserted.[244] A sample of the type of ad found February 25, 1875 is as follows:



	W.R.T. Co.			O.S. Co.*		Ohio
	P.-Day	P.-Albany	P.-Cor.	P.-O.C.	O.C.-Cor.	P.-Cor.
Mon	X		X	X	X	X
Tue		X		X		
Wed	X			X		
Thu			X	X	X	X
Fri	X	X		X		
Sat				X		
Sun						

* Fannie Patton and E. N. Cooke not mapped

Figure 34. Number of Days per Week Steamboats Went Upriver - December, 1874.

OHIO!
INDEPENDENT LINE:

THE LIGHT DRAFT STEAMER,
OHIO,
Leaves Pacific Wharf, foot of Salmon street, FRIDAY, Feb. 26, for Harrisburg and all intermediate points on the Willamette river.

U. B. SCOTT, Master
M. O. LOWNSDALE, Agent,[245]
on the Wharf.

While there were often three advertisement a month, only one was inserted in April 1875 and September 1875.

The schedule of the Willamette River Navigation Company inserted February 20, 1875 and shown below, consisted of a boat twice a week to Harrisburg and one to Astoria:

THE WILLAMETTE RIVER TRANSPORTATION
CO.'S STEAMERS

Will leave the Central Wharf between Washington and Alder streets, as follows:
FOR HARRISBURG and intermediate points on the Willamette River, on Monday and Thursday at 6 A. M.
FOR ASTORIA--Steamer BEAVER--Monday, Wednesday and Friday, at 6 A. M.
Lightering and Towing of Vessels between Portland and Astoria AT REDUCED RATES.

FRANK T. DODGE, Agent.[246]

This schedule remained in effect until April 10, 1875 when the boat to Harrisburg began running only as far as Corvallis,[247] and again on July 23, 1875 when that boat only went as far as Albany.[248] After August 4, 1875, no advertisements for this company were inserted until November 10, 1875.

The Oregon Steamship Company's ad for February 25, 1875 lists freight rates for Harrisburg so it is assumed boats went that far upriver.

NOTICE

UNTIL FURTHER NOTICE THE Str. SENATOR will leave her dock foot of F street every day (Sundays excepted), at 2:30 P. M. for Oregon City.

Passengers for Dayton and intermediate points will take cars at 7:30, connecting at Canemah on Monday, Wednesday and Friday of each week.

Rates of Freight:

Corvallis to Portland.....$2.50
Albany and Salem..... 2.00
Harrisburg..... 3.00

All freights delivered in Portland free of drayage.
Up Freight, $1.00 per Ton.
Freight forwarded to Astoria with dispatch.

J. D. BILES, Agent.[249]

The advertisement inserted in the Oregonian for June 5, 1875 listed the E. N. Cooke and the boat to Dayton on Mondays and Thursdays. No places farther upriver appear even in the freight rates portion of this ad until July 2, 1875 when Albany appears.

NOTICE.

UNTIL FURTHER NOTICE The Str. E. N. COOKE will leave her dock foot of F street, every day (Sundays excepted), at 2:30 P. M. for Oregon City.

Passengers for Dayton and intermediate points will take cars at 7:30, connecting at Canemah on Monday and Thursday of each week.

Rates of Freight--Down:

From Albany and all intermediate points on the Willamette to Portland, including drayage.....$1.25
Up Freight..... 1.00

All freights delivered in Portland free of drayage.
Freight forwarded to Astoria with dispatch.

J. D. BILES, Agent[250]

While the variability of the Ohio schedule and the uncertainty of the Oregon Steamship Company's schedule make the above schedules difficult to map, what is apparent is the seasonal change in service. Places as far as Harrisburg were reached in February, and Albany in July. There was a further decrease when the Willamette River Transportation Company ceased running in August.

The ad which appeared November 10, 1875 for the Willamette River Transportation Company was almost identical to the ad for the preceding November. The boats were different and boats ran to Dayton on Tuesdays, Thursdays, and Saturdays instead of Mondays, Wednesdays, and Fridays. The boat to Albany ran on Tuesdays and Fridays and the boat to Corvallis on Mondays and Thursdays.[251]

In addition to the boat six days a week between Portland and Oregon City and the boat to Dayton, the Oregon Steamship Company freight rates section of the advertisment lists Salem, so it is presumed boats were running that far upriver.[252] At that time, the Ohio was running to Harrisburg.

In the schedule announced January 1876 for the Willamette River Transportation Company, the Corvallis boat also went to Harrisburg, and the boat to Albany ran four days a week.

THE WILLAMETTE
TRANSPORTATION AND LOCKS CO'S

STEAMERS leave PORTLAND from the Central Wharf, between Washington and Alder streets as follows:

FOR DAYTON--Tuesday, Thursday and Saturday at 7 A. M.
FOR ALBANY--Monday, Tuesday, Thursday and Friday, at 6 A. M.
FOR CORVALLIS AND HARRISBURG--Monday and Thursday, at 6 A.M.

For Lightering and Towing of Vessels
Between Portland and Astoria apply at the office of the Company, near corner of Front and Washington streets.

FRANK T. DODGE, Agent.[253]

The ad for the Oregon Steamship Company had not changed by mid-January 1876. In May 1876, the Willamette Transportation and Locks Company, controlled by the Oregon Steam Navigation Company, purchased the property of the Oregon Steamship Company. The sale included the transfer of the E. N. Cooke, Bonanza, Success, Dayton, Fannie Patton, Alice, the basin at the Falls, the water privileges, the workshop and wharf at Oregon City and at other points along the river.[254]

Another company formed in response to the high rates was the People's Protective Transportation Company, made up of the S. T. Church and the McMinnville. In March 1877, the Spring Valley Grange published a resolution to patronize the People's Protective Transportation Company and the J. W. Cochran Company. The resolution stated that since purchasing the Oregon Steamship Company, the Oregon Steam Navigation Company had monopolized business on the Willamette River and charged exorbitant rates. Grangers were encouraged to patronize the People's Protective Transportation Company. Merchants, warehousemen, and millers were warned that grangers would not patronize them unless they joined their cause. In May 1877, further resolutions were announced resolving to sustain the U. B. Scott Company, in addition to the People's Protective Transportation Company and J. W. Cochran Company, in preference to the Willamette Transportation and Locks Company.[255] In November 1877, an article stated that the arrangement of patronage guaranteed by the

various granges had not been met so the owners were considering selling the McMinnville and S. T. Church.[256]

So, most of the efforts to provide steamboat transportation in the 1870s, in addition to that provided by the railroads, appears to have been done by those interested in competitive freight rates. An editorial written in 1873 stated the expectation that the railroads would carry the passenger traffic and that boats would become principally freight carriers, as on the Sacramento and San Joachin Rivers.[257]

Those competing with the railroad-operated steamboats operated their boats on similar schedules, possibly because of the guaranteed patronage. The Ohio in particular seemed to venture farthest upriver.

When competing steamboats were introduced, freight rates between Albany and Portland dropped.[258] In addition, farmers around Scio resolved to haul their wheat to Albany or Jefferson in order to ship by river. Up freight for merchants and farmers was to be shipped to Salem or Albany and hauled from there.[259]

During the 1870s, those places above Salem not served by railroads still experienced a seasonal break in service by steamboats. The same seasonal variations in the number of days per week and number of boats running occurred. However, the number of trains running and the schedules they kept only varied slightly in departure time.

Except for irregular service by the Ohio, places above Harrisburg received less regular service than they had during the 1860s.

The high freight rates charged by the railroad companies also produced efforts to acquire other connections. In 1875 a forty mile canal

between Albany and McKenzie Fork was planned, as well as a railroad connecting Corvallis and Yaquina Bay.[260]

In the 1880s, steamboats were increasingly run in connection with the railroads. The two major companies operating were the Oregon Pacific Railroad and the Oregon Railway and Navigation Company, successor to the Oregon Steam Navigation Company. Independently operated steamboats inserted ads for short periods on an irregular basis, usually advertising to do towing, freight hauling, or for excursions. Excursions will be described later in this paper.

According to the advertisement inserted November 13, 1884, the Oregon Railway and Navigation Company was running a boat between Portland and Dayton on Mondays, Wednesdays, and Fridays, and one to Corvallis on Mondays and Thursdays. The narrow gauge railroad division ran trains on Mondays, Wednesdays, and Fridays to West Stayton and Brownsville on the east side line, and to Airlie on the west side. Connections could apparently be made to Woodburn and Whites via the Oregon and California Railroad.

OREGON R'Y & NAVIGATION CO.

MIDDLE COLUMBIA RIVER DIVISION,
DAILY, EXCEPT SUNDAY.
Boat leaves Portland for Dalles at 1 A. M.
Boat arrives at Portland from Dalles at 5 P.M.

Leave Portland for	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Astoria & Low-Columbia.....	6 A.M.	6 A.M.	6 A.M.	6 A.M.	6 A.M.	6 A.M.
Dayton, Or....	7 A.M.	.....	7 A.M.	.....	7 A.M.	.....
Salem..... Corvallis.....	6 A.M.	.....	.....	6 A.M.	.....	.....

NARROW GAUGE DIVISION, EASTSIDE,
Between PORTLAND and WEST STAYTON,
via O. & O.R.R. to Woodburn.

Trains for West Stayton leave Portland at 7:30 A. M. on Mondays, Wednesdays and Fridays.

For Brownsville (via Lebanon Junction) leaves Portland at 4 P. M. on Monday, Wednesday and Friday.

WESTSIDE
BETWEEN PORTLAND, SHERIDAN AND AIRLIE
via O. & O.R.R. to Whites

Leave Portland at 9 A. M. Returning, leave Airlie for Portland at 6 A. M.

Freight for all points on Narrow Gauge Division will be received and forwarded by the O. & O.R.R. East and Westside Divisions, respectively.

General Offices on Front and T. Sts.

C. H. PRESCOTT,
Manager,

A. L. STORES,
O.F.A.P. Agent[261]

A. L. MAXWELL, Ticket Agent.

The Oregon and California Railroad had a mail train running both ways six days a week between Ashland and Portland and the Albany express route had been extended to Lebanon. The west side division schedule consisted of a mail train both ways, six days a week between Portland and Corvallis, and an express to McMinnville. These routes are shown on the 1884 General Land Office Map (see Figure 35).

OVERLAND TO CALIFORNIA
VIA
Oregon & California R. R.
And Connections,
69 Hours between Portland and San Francisco.
Only 24 hours' Staging.
Fare to San Francisco $32: to Sacramento $3
Leave Portland at 7:30 A. M. daily (except Sunday).
Arrive at San Francisco 6:30 P. M., third day.

Close connections made to Ashland with stages of the California and Oregon Stage Company.

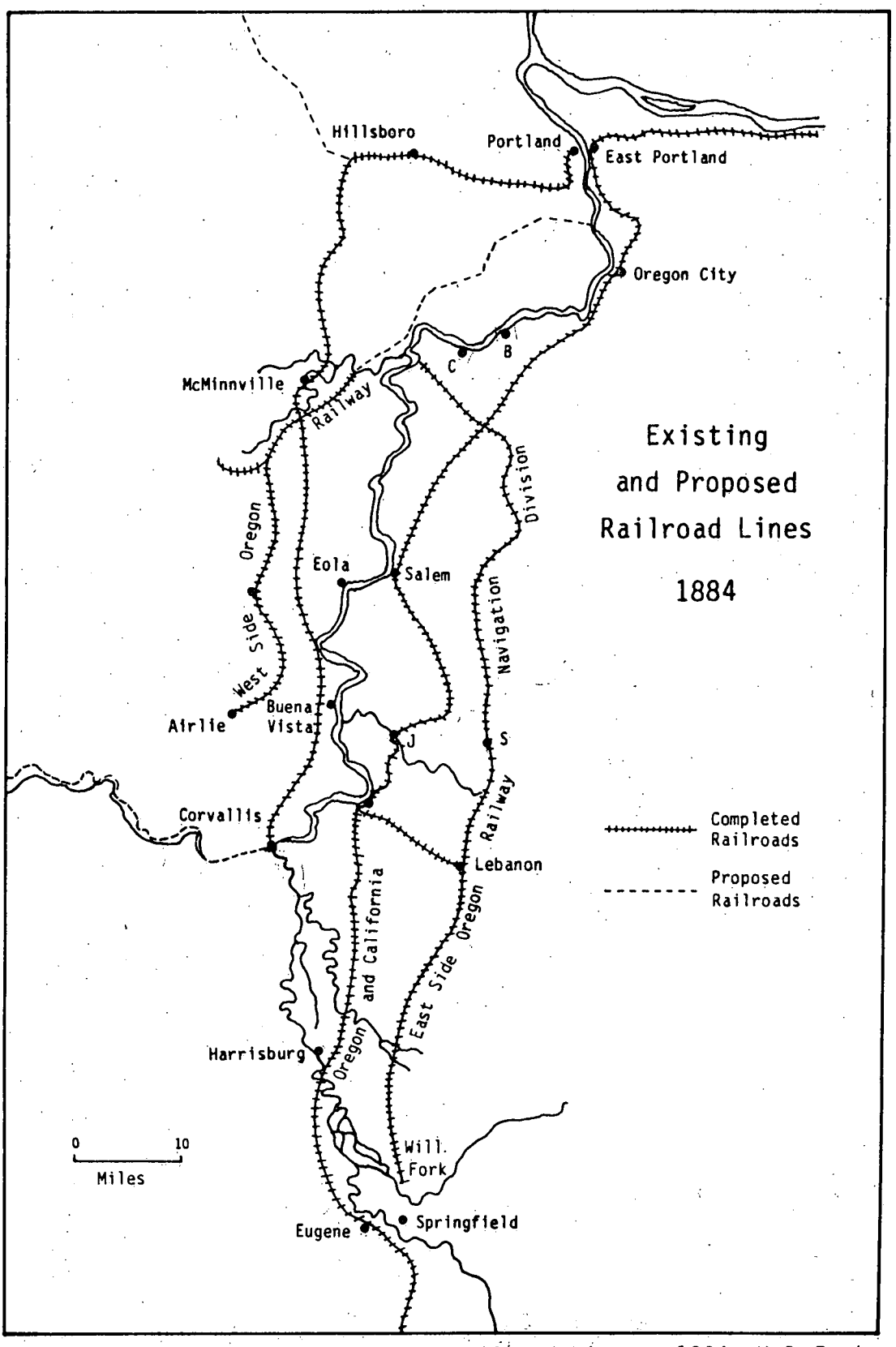


Figure 35. Existing and Proposed Railroad Lines - 1884. U.S. Dept. of Interior, G.L.O., Oregon.

(DAILY EXCEPT SUNDAY)
East Side Division.
BETWEEN PORTLAND AND ASHLAND.
Mail Train.

LEAVE.		ARRIVE.	
Portland.....	7:30 A. M.	Ashland.....	4:45 A. M.
Ashland.....	8:45 P. M.	Portland.....	4:35 P. M.

Albany Express Train

Portland.....	4:00 P. M.	Lebanon.....	2:30 P. M.
Lebanon.....	4:45 A. M.	Portland.....	10:00 A. M.

Pullman Palace Sleeping Car leaves Portland Mondays and Thursdays. Returning, leaves Ashland Tuesdays and Fridays. The O. & O.R.R. Ferry makes connection with all the regular trains on the East Side Div. from foot of F St.

West Side Division.
BETWEEN PORTLAND AND CORVALLIS.
Mail Train.

LEAVE.		ARRIVE.	
Portland.....	9:00 A. M.	Corvallis.....	4:00 P. M.
Corvallis.....	6:30 A. M.	Portland.....	3:20 P. M.

Express Train.

LEAVE.		ARRIVE.	
Portland.....	5:00 P. M.	McMinnville.....	6:00 P. M.
McMinnville.....	6:45 A. M.	Portland.....	8:00 A. M.

Local tickets for sale and baggage checked at company's up-town office, cor Stark and Second streets. Tickets for principal points for California can only be procurred and baggage checked at company's office,
Corner F and Front Sts., Portland, Ore.
Freight will not be received for shipment after 8:00 o'clock P. M. on either the East or West Side Divisions.

R. KOEHLER,
Manager.

E. P. ROGERS,
G. F. & Pass. Agent[262]

The steamboat schedules for boats operated by the railroads seldom changed, and then only slightly. The above advertisement for the Oregon Railway and Navigation Company changed on May 28, 1885 to two days a

week, Monday and Thursday to Dayton, Salem, and Corvallis[263] and ceased entirely in July 1885.[264] On September 10, 1885, the schedule appeared again with trips three days a week to Ray's Landing.

Oregon R'y & Navigation Co.

WILLAMETTE RIVER

Boats leave Portland at 7 A. M. Mondays, Wednesdays and Fridays, for Ray's Landing and way points, returning Tuesdays, Thursdays and Saturdays.

N. P. Train, to connect with Puget Sound line or Victoria, etc., every day at 11:45 A. M.[265]

In October, Dayton was substituted[266] for Ray's Landing as a destination, and on November 10, 1885 it was Corvallis four days a week.[267] Beginning Nov. 21, 1885, boats ran to Corvallis five days a week and to Dayton three days a week.

Oregon R'y & Naviagation Co.

WILLAMETTE RIVER

Boats leave Portland at 6 A. M. every day except on Saturday for Corvallis and way points, returning every day except Sunday. Boats leave Portland at 7 A. M. Monday, Wednesday and Friday, for Dayton and way points, returning Tuesdays, Thursdays and Saturdays.

A. L. MAXWELL, Ticket Agent,
JNO. J. BYRNE, Gen. Pass. & Ticket Agent.[268]

No towns above Corvallis were served by railroad operated steamboats. The Oregon Steam Navigation Company ran steamboats to Corvallis only seven months of the sample year shown, whereas in earlier decades Corvallis was reached nine months of the year. Service to Dayton, which had been year-round in earlier decades, ceased four months of the year.

The Oregon Pacific Railroad between Corvallis and Yaquina Bay began running in October 1885. River steamers connected with the trains at Corvallis.[269]

Unlike the preceding decade, no company formed in opposition to the railroads. There are few advertisements for independently operated boats. As stated earlier, they may have advertised using a different method. When advertisments appeared they ran for very short periods. Two such ads that appeared are those for the A. A. McCully and the Salem which apeared in the November 12 and 13, 1884 issue of the Oregonian.

The Independent Willamette St.
A. A. McCULLY

Is now receiving freight for
Salem, Independence, Albany, Corvallis
And all intermediate landings on Willamette river,
making two and three trips per week.
Office and landing foot of Salmons at. For particulars
inquire of Z. J. HATCH, Agent, 213½ Front st. 11a[270]

Steamer Salem

Will contract to carry Wheat at lowest rates, also, JOB TOWING on lower Willamette and Columbia rivers. Charters for Picnics and Excursions cheap.
Apply on board or Postoffice Box 844, Portland.[271]

Ads for these boats appeared again the following fall.[272] Note that the above ads, particularly that for the Salem, emphasized the carrying of bulk freight, towing, and charter for excursions. Before the introduction of the railroad, steamboats had carried a variety of freight, as well as passengers, and towing and excursions had been done in addition to the regular service they provided, not as a livelihood.

Excursions were commonly offered on Sundays and holidays. During the 1850s, 1860s, and 1870s, these excursions took place on the 4th of July, or when a fraternal organization or a church sponsored a trip, or were just announced as "pleasure excursions." They were announced on an individual basis. During the 1880s, the number of excursion runs on the Portland-Oregon City route greatly increased. Single trips were still announced, like the one of the City of Quincy shown below to give the reader a sense of the escape from the city these excursions provided.

Sunday Excursion

From the dust and heat of the city a day's recreation at the foaming and dashing Willamette Falls. Fishing for young salmon, visiting the Indian Cave, and a promenade on the bluffs at Oregon City. The elegant steamer City of Quincy leaves Morrison St. dock at 10 o'clock
Sunday, May 29th, 1881
Only a limited number of tickets to be sold. No disreputable persons allowed on the steamer. Tickets to be had at D. W. Prentice and Co. Music Store or at Morrison St. dock
Round trip. . . . . 75 cents[273]

In addition to the type of excursion announced above, regular schedules were maintained by steamboats. An example of this type of ad is that run for the City of Sellwood, beginning in September 1884, and occurring during much of 1885. The September 1884 ad permitted residents of Sellwood to buy twenty round-trip tickets for $1.00,[274] when the normal round trip ticket price was 25¢. This special price for frequent travelers suggests use of the steamboats by commuters.

SELLWOOD TIME TABLE.
The steamer CITY OF SELLWOOD

Will make regular trips from foot of Taylor street each day between Portland, Sellwood, Milwaukie and Oswego, touching at

City View Park, Red House and River View Cemetery every trip.
WEEK DAYS--Leave Sellwood 6:20, 8:30 A. M.; 1, 3:30 and 5 P. M. Leave Portland 7 and 11 A. M.; 2, 4 and 6:20 P. M.
SUNDAY TRIPS--Leave Sellwood 7, 9:30, 10:30 and 11:30 A. M.; 3:30 and 5 P. M. Leave Portland 8, 10 and 11 A. M.; 2, 4 and 6 P.M.
At 7 A. M. and 2 P. M. leaves Portland for Milwaukie, White House and Oswego. Returning, leaves Oswego at 8 A. M. and 3 P. M., touching at all intermediate points up and down.[275]

The White House, which later became known as the Riverside Hotel and Driving Park, is shown under the name of Riverside, across the river from Milwaukie on the 1889 portion of the map of Multnomah County showing the Portland area (see Figure 36).[276] Riverview Cemetery was across the river from Sellwood and City View Park and race track north of Sellwood.

By 1887, West Shore magazine was promoting Oregon City as a home for summer residences for Portlanders.[277] The Latona ran on the Portland-Oregon City route during 1885,[278] as part of the People's Line. She became part of the Oregon City Transportation Company, which in 1893, ran the Latona as an excursion boat on the Portland-Oregon City route, at the same time the Oregon Water Power and Railway Company provided electric interurban service between the two points. Under an agreement between the two companies, tickets were interchangeable. Passengers could take the steamboat one way and the interurban the other.[279]

In 1888, an advertisement for daily excursions on the upper Willamette to Ray's Landing, with the return trip to be by railway, was inserted.

Daily Excursions
on
Upper Willamette River
"City of Salem" Steamer

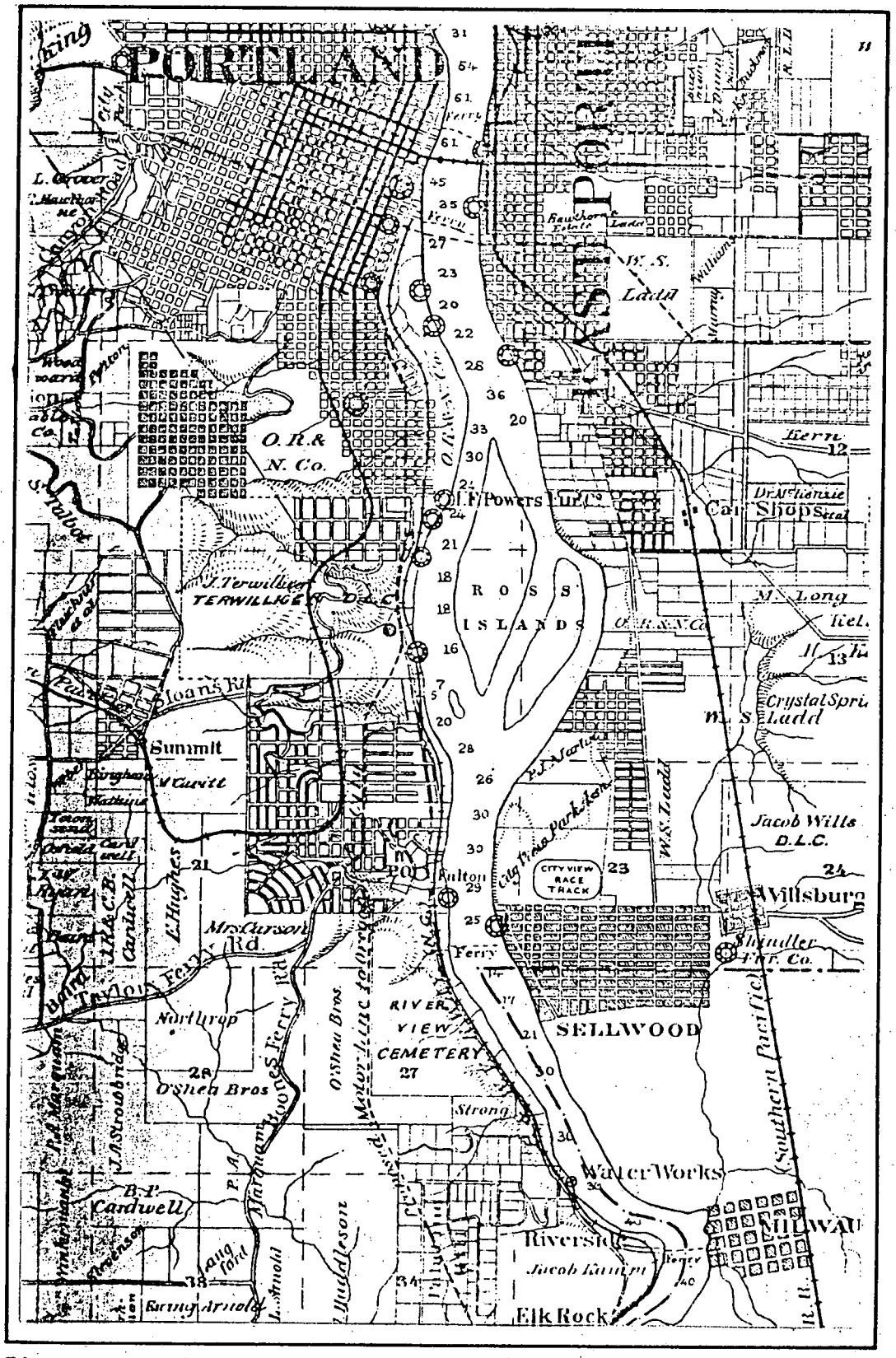


Figure 36. Riverside, City View Park, and the Racetrack North of Sellwood. Multnomah County, 1889 R. A. Habersham.

between
Portland, Oregon City, Butteville, Champoeg and Rays', and return same day by railway, Tuesdays, Thursdays and Saturdays.

Alder street wharf	7:00 A. M.	Round trip	Good
Oswego	7:45 A. M.	1.25 to and	for
Oregon City	8:25 A. M.	from Portland	Railway
Boones Ferry	10:30 A. M.		or
Butteville	11:15 A. M.		Steamer
Champoeg	11:45 A. M.		
Rogers (Newberg)	12:15 P. M.		
Rays' Landing	1:00 P. M.		
Fulquartz (per Railway)	1:30 P. M.		
Portland (per Railway)	2:45 arrive		

or leave Portland by Portland and Willamette Valley Railway at 10:30 A. M. on Mondays, Wednesdays and Fridays, and return same day by steamer, reaching Portland at 6 P.M.
40 miles steamer and 30 miles railway.[280]

The Oregon Railway and Navigation Company, in its Annual Report for 1887 regarding the entire Columbia River Division stated:

> The business of the River division has been so nearly absorbed by the rail line that it now serves mainly as a feeder to the rail lines, and its value is therefore limited to that purpose.[281]

The steamboats operated by the railroads continued to be confined to that portion of the river below Corvallis in the 1890s, the companys continuing to run boats between Portland and Dayton, and Portland and Corvallis.[282]

The Oregon Railway and Navigation Company continued to operate boats on the river until 1916,[283] and the Oregon City Transportation Company until 1919.[284]

The Willamette river's water level variations resulted in a seasonal break in steamboat service above the mouth of the Yamhill River. While

river improvements extended the head of navigation from Weston to Salem, yearly improvements had to be made, and even then, falling water levels could delay the arrival of the steamboat. The schedules for points above the year-round head of navigation reflect the changing water level. Steamboats went as far upriver as they could, and the steamboat schedules reflect the extension from Salem to Albany, then to Corvallis, and finally as far as Eugene. Not only were Albany and Salem accessible longer periods of the year, they usually had boats stopping more days per week than points upriver. Dayton experienced a much more regular schedule, getting year-round service and almost always three days a week. With the coming of the railroad, only the most profitable portions of the routes were used. One wonders if had their been no competitors, would the railroads have cut back service even more. Those upriver were forced to ship by railroad, competitors extending steamboat service for a time, but by the 1880s the railroads appear to have cut off all competition. What effect the financial panic of 1873 and the following depression had on the attempts of the independents was not investigated.

Accessibility for the towns changed with the coming of the railroad. Some towns were left off the railroad, and lost population when businesses left. Those towns that acquired railroad connections could extend their hinterlands. However, some, for example, Albany, Dayton and Lafayette, competed with new towns founded by the railroads. Towns that acquired railroad connections and kept steamboat connections had lower freight rates. In the following chapter, the growth of the towns will be described and the factors of accessibility, efforts of town promoters, and site will be considered.

Notes

[1] Reuben Gold Thwaites, "Palmers' Journals of Travels over the Rocky Mountains 1845-1846," Early Western Travels 1748-1846, vol. 30, (Cleveland, Ohio: Arthur H. Clark Co. 1906), pp. 166-167.

[2] U.S. Chief of Engineers, Annual Report of Major N. Michler for the First Six Months of the Fiscal Year Ending 30 June 1876, Appendix FF11 of the Report of the Chief of Engineers to the Secretary of War. House of Representatives, 44th Cong., 2nd Sess., Ex. Doc 1, pt. 2. Congressional Set vol. 1744, p. 654.

[3] U.S. Chief of Engineers, Explanation on "Map of the Upper Willamette River from Salem to Independence Bar" by Major N. Michler, June 1875, transmitted with the Annual Report for the Fiscal Year Ending 30 June 1876, Appendix GG of the Report of the Chief of Engineers to the Secretary of War. House of Representatives, 44th Cong. 2nd Session, Ex. Doc. 1, pt. 2. Congressional Serial Set, vol. 1676, Record Group 77, Map W-294-1, available from the Cartographic and Architectural Branch, National Archives, Wash. D. C.

[4] The Congressional Serial Set, available in the Documents Section of U.S. Govt. Depository Libraries contains reports by the U.S. Engineers Office to the Secretary of War who in turn submitted his reports to Congress. Reports covering river and harbor improvements for several harbors and inland waterways in the U.S. are available. When maps are not bound with the report or are listed as not printed, it is advisable to check with the National Archives concerning the availability of these maps. The maps, water curves and profiles uncovered in the course of this research are part of Record Group 77, Chief of Engineers Civil Works Map File, organized by date, map maker and/or annual report writer. Reports for 1871, 1873, 1875, 1876, 1896, 1904 were found covering the Willamette River and are listed in Bibliography under the entry: U.S. Engineers Office. Maps are listed under: U.S. National Archives.

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[6] Corvallis (Oregon) Gazette, 28 July 1866, p. 2:1.

[7] Gazette, 21 July 1866, p. 3:1.

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[10] Ibid., p. 2:1.

[11] Oregon Spectator, 23 June 1854, p. 2:5.

[12] Ibid.

[13] Ibid., p. 2:6.

[14] Corvallis (Oregon) Gazette, 14 July 1866, p. 2:3.

[15] Gazette, 19 August 1853, p. 2:5.

[16] Gazette, 4 August 1854, p. 2:4

[17] Portland (Oregon) Weekly Oregonian, advertisements 31 July 1852, p. 3:4, to 27 November 1852.

[18] Oregon Spectator, 19 June 1851, p. 2.

[19] Oregon Spectator, 12 November 1853, p. 3:1.

[20] Portland (Oregon) Morning Oregonian, 29 November 1864, p. 3:1.

[21] Morning Oregonian, 7 October 1851, p. 2:1.

[22] Oregon Spectator, 21 October 1851, p. 3:1.

[23] Oregon Spectator, 4 November 1851, p. 2:4.

[24] Norbury L. Wayman, Life on the River: A Pictorial History of the Mississippi, the Missouri, and the Western River System, (New York: Crown Publishers, 1971), p. 254.

[25] Portland (Oregon) Daily Oregonian, 26 January 1866, p. 3:1.

[26] Oregon Spectator, 6 January 1852, p. 3:4; 3 February 1852, p. 2:2; 2 March 1852, p. 2:3.

[27] Oregon Spectator, 6 January 1852, p. 3:4.

[28] Milwaukie (Oregon) Western Star, 6 February 1851, p. 2:5 in W.P.A. Transportation Volume, Oregon City Public Library, Oregon.

[29] Oregon Spectator, 26 November 1853, p. 2:4.

[30] Ibid.

[31] Oregon Spectator, 3 December 1853, p. 3:2.

[32] Oregon Spectator, 10 December 1853, p. 2:5.

[33] "Through the Locks," Daily Oregonian, January 1873, p. 3:1.

[34] U.S. Chief of Engineers, Annual Report of Major N. Michler, Corps of Engineers, for the Fiscal Year ending 30 June 1876, Appendix FF 11 of the Report of the Chief of Engineers to the Secretary of War, House of Representatives, 44th Congress, 2nd Session Ex Doc. 1, Part 2 Congressional Serial Set Volume #1744, p. 654.

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[36] U.S. Chief of Engineers, Annual Report of Major G. L. Gillespie, Corps of Engineers, for the Fiscal Year ending 30 June 1880, Appendix MM 1 of the Report of the Chief of Engineers to the Secretary of War, House of Representatives 46th Congress, 3rd Session Congressional Serial Set Volume 1955, p. 2256; Appendix FF 11, 1876, p. 647.

[37] Oregon Spectator, 21 January 1854, p. 2:3.

[38] Oregon City (Oregon) Oregon Argus, 5 January 1856, p. 2:3.

[39] Oregon Argus, 3 January 1857, p. 2:1.

[40] U.S. Chief of Engineers, Annual Report of Major Gillespie, Appendix MM 1, 1880, p. 2256; Annual Report of Major N. Michler, Appendix FF 11, 1876, p. 647.

[41] Harvey W. Scott, History of Oregon Country, vol. 5, p. 129; see also Oregon Argus, 18 January 1852, p. 2:4. "Suspension of Navigation," Oregon City (Oregon) Enterprise, 25 January 1868; "Transportation Held Up by Ice," in W.P.A. Transportation Volume, Oregon City Public Library.

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[52] Ibid., p. 12.

[53] U.S. Chief of Engineers, Annual Report of Major N. Michler. . ., 1876, Appendix FF 11, p. 661.

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[55] U.S. Chief of Engineers, Supplement, Annual Report of Major Michler. . ., 1876, Appendix FF 11, p. 654.

[56] U.S. Chief of Engineers, Report of W. H. Heuer, 1871, p. 9, 10.

[57] U.S. Chief of Engineers, Annual Report of Major Michler, 1876, Appendix FF 11, p. 654.

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[60] U.S. Chief of Engineers, Annual Report of Major Michler, 1876, Appendix FF 2, p. 635.

[61] Norbury Wayman, Life on the River, p. 258.

[62] U.S. Chief of Engineers, Annual Report of Major Michler, 1876, Appendix FF 2, p. 635.

[63] U.S. Chief of Engineers, Annual Report of Major Michler, 1876, Appendix FF 2, p. 635.

[64] Oregon Spectator, 15 October 1846, p. 2:4.

[65] Oregon Spectator, 4 December 1850, p. 2:5; also 12 December 1850, p. 2:6; 18 April 1850, p. 3; 24 December 1853, p. 2:6.

[66] Oregon Spectator, 12 December 1850, p. 2.

[67] Oregon Spectator, 10 July 1851, p. 2; 9 August 1851, p. 2; also U.S. Chief of Engineers, Annual Report 1876, FF 2, p. 634.

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[72] Oregon Spectator, 9 September 1851, p. 2:6.

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[90] Ibid., p. 9.

[91] Ibid., p. 5.

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[93] Oregonian, 19 September 1865, p. 2:1.

[94] Ibid.

[95] Ibid.

[96] Harvey W. Scott, History of the Oregon Country, vol. 3, p. 95-97.

[97] U.S. Chief of Engineers, Annual Report of Major N. Michler, 1875, Appendix GG 6, p. 70.

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[101] Ibid.

[102] Oregon Spectator, 22 May 1851, p. 2; see also 12 June 1851, p. 2.

[103] Oregon Spectator, 3 July 1852, p. 2; 18 November 1851, p. 2:3.

[104] Oregon Spectator, 2 September 1853, p. 3:1.

[105] Oregon Spectator, 20 October 1853, p. 2:4.

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109 Daily Oregonian, 26 February 1867, p. 3:1.

110 Daily Oregonian, 1 April 1867, p. 2:1.

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161 "A New Steamboat Burned," Oregon Spectator, 13 October 1853, p. 2:2.

162 Oregon Spectator, 19 August 1853, p. 2:6.

163 Oregon Spectator, 24 March 1854, p. 3:1.

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178 Oregonian, 21 March 1857, p. 2.

179 Daily Oregonian, 22 April 1867, p. 3:1.

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181 "River Trade," Oregon Spectator, 11 November 1851, p. 2:1.

182 Oregon Spectator, 7 October 1851, p. 2.

183 In order to describe the type of service different towns received, I checked steamboat ads in the Portland Oregonian for a forty year period. They were not always continuously inserted. When a boat was changed from one route to another, or a company or boat ceased operating, the ads disappeared. Gaps in the data may also reflect the use of posters instead of newspapers as an advertising medium. The ads may have only been inserted when a change took place, or when a new company or boat were available. In any case, there would have been a need to reach a larger audience. Independent steamboat operators advertised for shorter periods of time than did the larger companies, usually because they offered more varied service than the companies. During periods of depression, fewer steamboat ads appeared.

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212 Daily Oregonian, 14 February 1866, p. 2.

213 Daily Oregonian, 16 March 1866, p. 2.

214 Daily Oregonian, 26 April 1866, p. 2.

215 Daily Oregonian, 4 January 1866, p. 2:4; 30 January 1866, p. 2; 2 February 1866, p. 3; 26 February 1866 p. 2; 7 March 1866, p. 2; 9 March 1866, p. 2; 14 March 1866, p. 2; 16 March 1866, p. 2; 20 March 1866, p. 2; 6 April 1866, p. 2.

216 Daily Oregonian, 26 April 1866, p. 2.

217 Daily Oregonian, 24 July 1866, p. 2.

218 Daily Oregonian, 4 October 1866, p. 2.

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222 Donald G. Holtgrieve, "Historical Geography of Transportation Routes and Town Development in Oregon's Willamette Valley," (Ph.D. dissertation, Department of Geography, University of Oregon), p. 88.

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224 Oregonian, 23 August 1871, p. 3:1.

225 "The Wallamet Steamboat Line," Morning Oregonian, 4 September 1871, p. 3.

226 Oregonian, 7 September 1871.

227 Oregonian, 26 October 1872, p. 3.

228 Oregonian, 29 October 1872, p. 2:1; see also 17 February 1873, p. 2:1; 20 February 1873, p. 2:1.

229 Editorial, Oregonian, 6 March 1873, p. 2:2.

230 Oregonian, 22 March 1873, p. 2.

231 Oregonian, 4 June 1873, p. 2; 24 June 1873, p. 1.

232 Oregon City Enterprise, 20 November 1874, p. 1:2, ran to December 1878.

233 Oregonian, 9 November 1874, p. 2:3.

234 Ibid., p. 3:7.

235 Ibid.

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239 Ibid.

240 Oregonian, 21 November 1874, p. 2:2; 5 February 1875; 15 February 1875, p. 2:3; 19 February 1875; 25 February 1875; 9 March 1875; 18 March 1875; 23 March 1875, p. 2:6; 28 April 1875, p. 2:2; 5 May 1875, p. 2:4; 14 May 1875, p. 2:6; 20 May 1875; 1 June 1875; p. 2:2; 12 June 1875, p. 2:3; 23 June 1875; 7 July 1875; 13 July 1875; 20 July 1875; 27 August

1875; 30 August 1875, p. 2:2; 7 September 1875, p. 4:4; 16 October 1875, p. 3:6; 18 October 1875, p. 4:6; 12 November 1875, p. 2:2; 15 November 1875; 29 November 1875; 8 December 1875; 18 December 1875, p. 4:6.

241 Oregonian, 4 November 1875, p. 2:3.

242 Oregonian, 8 November 1875, p. 2:2; 15 November 1875, p. 2:2.

243 Oregonian, 24 November 1875, p. 2:2; 29 November 1875; 13 December 1874, p. 4:6.

244 Oregonian, 20 December 1875, p. 2:3; 24 December 1875, p. 4:6; 25 December 1875; 29 December 1875.

245 Oregonian, 25 February 1875, p. 2:3.

246 Oregonian, p. 2:6.

247 Oregonian, 10 April 1875, p. 2.

248 Oregonian, 23 July 1875, p. 2.

249 Oregonian, 25 February 1875, p. 2:3.

250 Oregonian, 23 July 1875, p. 2:6.

251 Oregonian, 20 November 1875, p. 4:6.

252 Oregonian, 20 November 1875, p. 4:6.

253 Oregonian, 10 January 1876, p. 4:6.

254 Oregonian, 29 May 1876, p. 3:2.

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257 "The River Open," Daily Oregonian, 3 January 1873, p. 2:1.

258 "Competition in Transportation," Daily Oregonian, 1 March 1875, p. 1:4.

259 Ibid.

260 Ibid.

261 Oregonian, 13 November 1884, p. 3:1.

262 Oregonian, 13 November 1884, p. 3:1.

263 Oregonian, 28 May 1885, p. 7:7.

264 Oregonian, 10 July 1885, p. 4:7.

265 Oregonian, 10 September 1885, p. 4:3.

266 Oregonian, 8 October 1885, p. 7:7.

267 Oregonian, 10 November 1885, p. 4:7.

268 Oregonian, 21 November 1885, p. 4:7.

269 Oregonian, 8 October 1885, p. 7:7; 10 November 1885, p. 4:7; 21 November 1885, p. 4:7.

270 Oregonian, 12 November 1884, p. 4:2.

271 Oregonian, 13 November 1884, p. 3:2.

272 Oregonian, 27 August 1885, p. 4:6; 22 October 1885; 11 September 1885, p. 13.

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276 Portland and Vicinity, (Portland: L. Samuel, Publisher, 1887), p. 13.

277 "The City at the Falls," West Shore, August 1887 (Portland: L. Samuel, Publisher), p. 583.

278 Oregonian, 21 November 1885, p. 4; 9 February 1885, p. 4.

279 George F. Jones, Through the Willamette Valley: Little Trips by Land and Water for Little Money, jointly provided by the Oregon Water Power and Railway Company and the Oregon CIty Transportation Company (Portland: Press of Bushong and Company, 1903).

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284 Ibid., p. 65.

CHAPTER III

TOWN DEVELOPMENT

The steamboat stimulated the growth of towns and improved established trade patterns.[1] As a regional marketing system, it fed local trade into external markets.[2] The demand for Oregon lumber and wheat from the California gold rush areas brought an increase in exports. A steamship line and two lines of sailing vessels provided dependable service between Portland and San Francisco.[3] As a commentator reported in 1852, milling was "a principle [sic] interest in Oregon."[4] Of the products of new mills which were built, "some was for commerce and some for home consumption."[5] Towns, both those that had been established earlier and those platted during this era of prosperity, competed for the export trade. Local trade was attracted to those places with access to exterior markets. Begun on a more or less equal footing, a system of relationship between the towns developed, as some towns grew faster than others and acquired functions not available at smaller places.

Each townsite owner believed his location to have unique advantages which would result in its eventual development as a great city. The first towns in the Willamette Valley were laid out in the early 1840s (see Figure 37). The dates used here are based on written accounts of when the townsite owner laid out the town (see Appendix A). Recording the plat often occurred later. Oregon City and Linn City, platted in

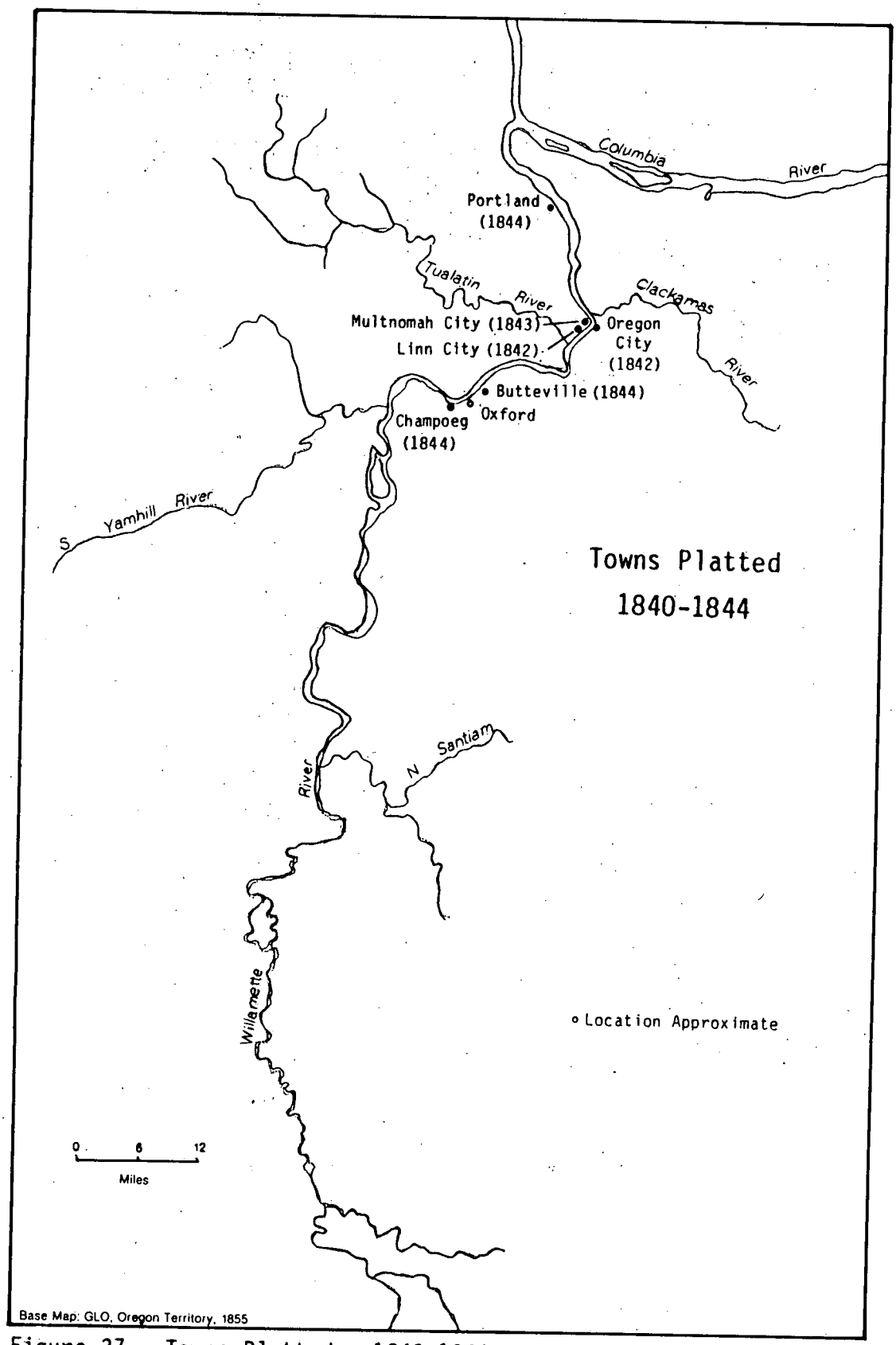

Figure 37. Towns Platted - 1840-1844. See Appendix for sources of plat dates.

1842, and Multnomah City, platted in 1843, were located at Willamette Falls, where potential as a water power site was recognized. Choice of sites for river towns was often based on its presumed advantage as a shipping point.[6] Linnton and Portland, platted in 1844 and 1845, were sited on the lower Willamette. On the upper Willamette, Champoeg, Oxford (which may or may not have been the same as Champoeg),[7] and Butteville were platted in 1844.

Additional towns were platted as settlement spread southward (see Figure 38). A town named Atchison was laid out in 1847 on the Wheatland site.[8] Cincinnati became Eola and Marysville became Corvallis.

During the 1850s, an era of town building mania occurred with the prosperity occasioned by the flow of gold from California into the area. Several more towns appeared (see Figure 39).

Dates for some towns were not found, so the General Land Office Survey maps made between 1851 and 1853 were checked to determine whether the town may have been in existence. Surveyors were directed to record information about towns. The amount of detail recorded varies from surveyor to surveyor. What were probably larger towns were often mapped using a varying number of squares. Four squares mark the site of Fairfield.[9] In other cases, individual buildings are shown. For example at Weston, the steamboat landing and a storehouse are shown.[10] The sites of Wheatland, Lincoln, and Buena Vista are shown as Matheny's Ferry, Dokes Ferry, and Halls Ferry and no buildings are shown, so if these towns had been platted, they may not yet have begun to grow.[11] No buildings appear on the site of Orleans,[12] platted across the river from Corvallis. Several squares mark the town of Boonville.[13] The ferry and

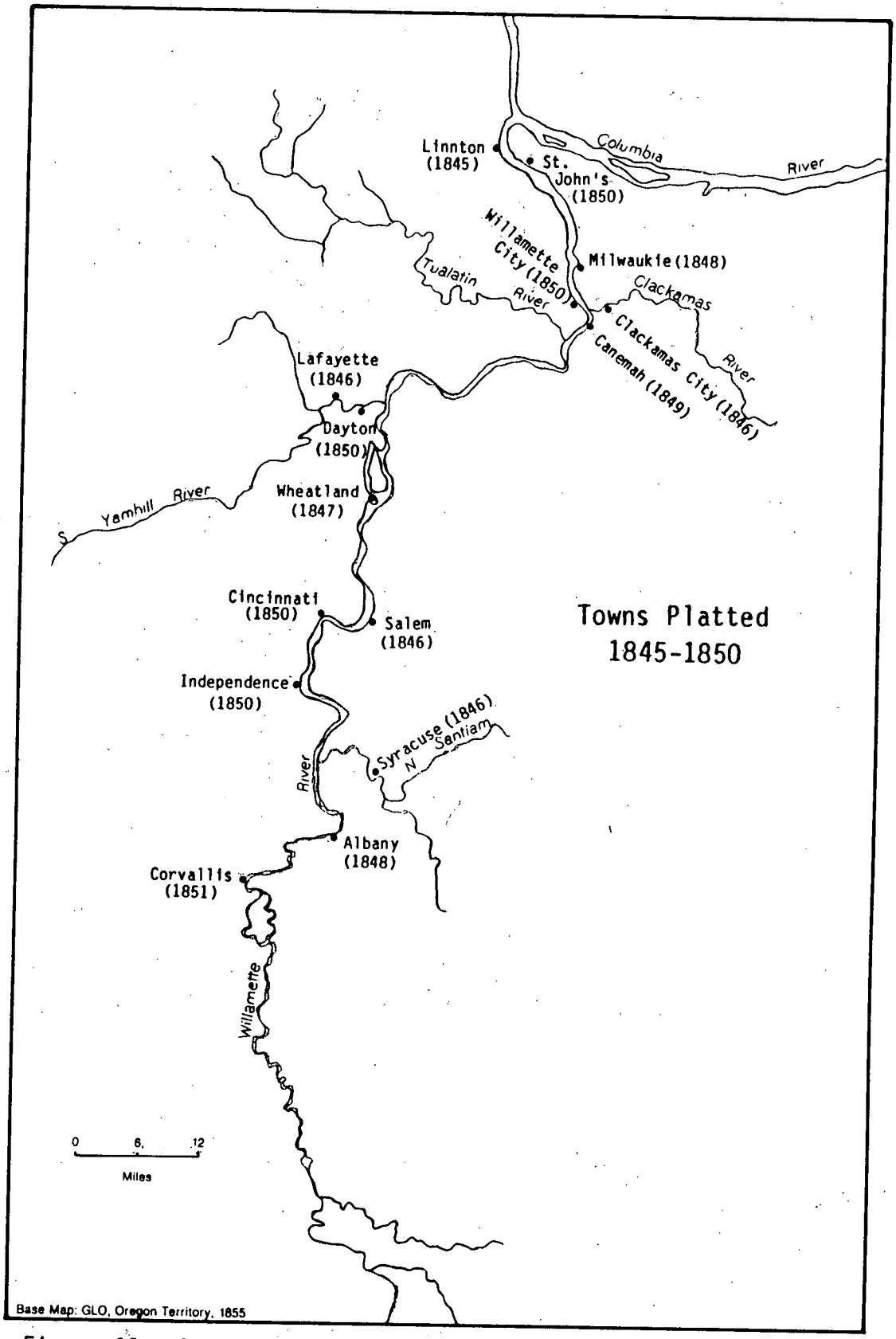

Figure 38. Towns Platted 1845-1850. See Appendix for sources of plat dates.

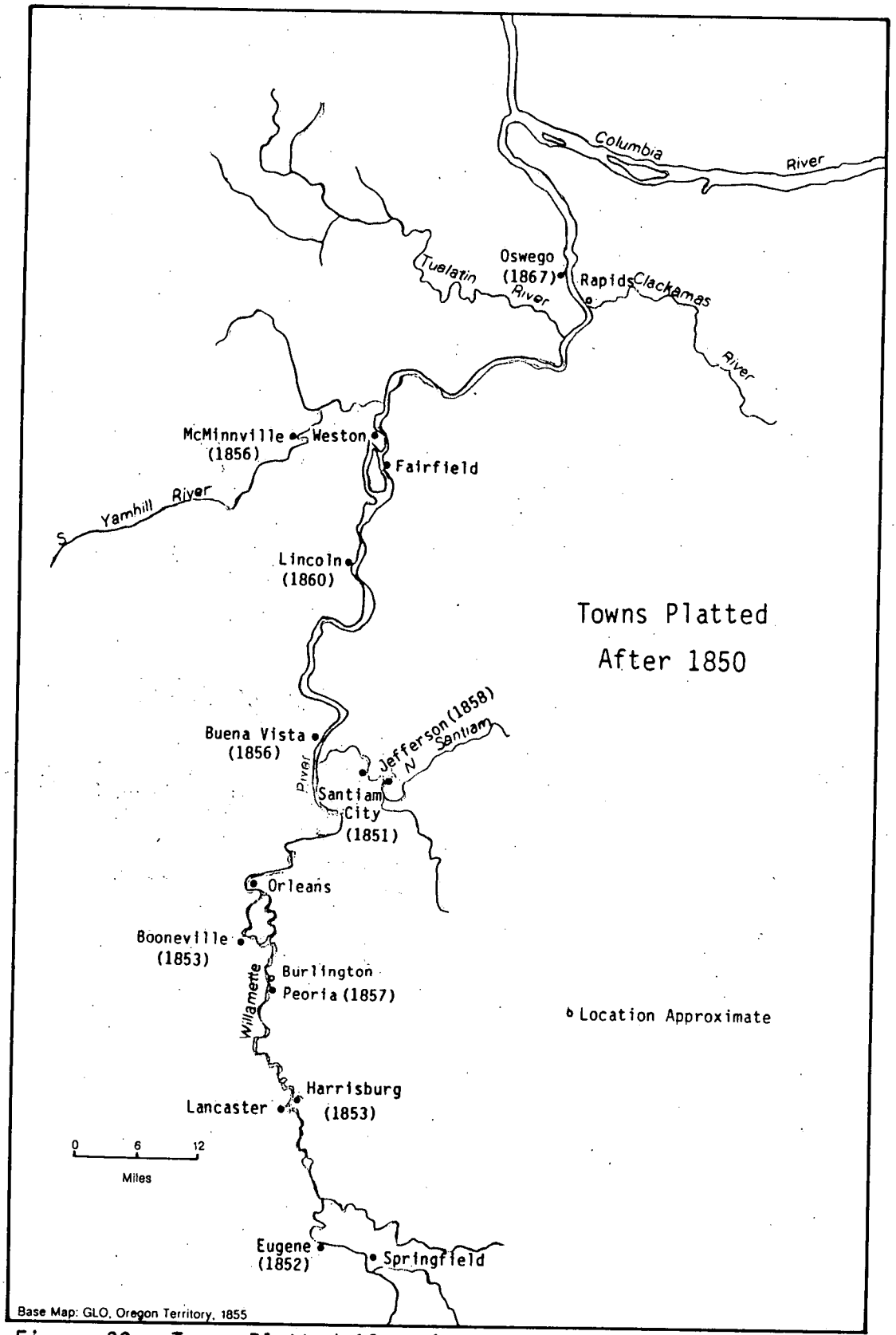

Figure 39. Towns Platted After 1850. See Appendix for sources of plat dates.

three buildings, labeled Smith's, Martin's, and Donald's store, which Corning[14] says made up the early town of Burlington, appear in section 6 of Township 13 South, Range 4 West. Nothing noting the existence of a town occurs at Spores or Forgeys, the future sites of Lancaster and Harrisburg, respectively.[15] This township was surveyed in October 1853. By the time the steamboat Fenix arrived at that point in December 1853, Forgey had laid out the town of Thurston (Harrisburg).[16]

Although Eugene Skinner had platted the town of Eugene in April 1852,[17] only the ferries and houses of Skinner and Briggs appear on the township map dated 1853.[18] The town of Rapids, near Clackamas Rapids, was mentioned by Israel Benjamin in a journal of his tour through Oregon in 1861.[19]

Additional sections were laid out in towns already established. In many cases, townsite owners on adjoining Donation Land Claims platted these additions or new towns. When Theodore Winthrop passed through the Willamette Valley in 1853, he noted this clustering of towns at Marysville (Corvallis), where Dixon's addition to Marysville[20] was platted on his Donation Land Claim. In addition, the town of Orleans was platted across the river from Marysville.

> Whenever one has hit upon a good site for a town, his next neighbor starts a rival one so that there are often two settlements within a quarter mile in open warfare.[21]

This clustering occurred at the Falls, where Multnomah City adjoined Linn City.[22] At Albany, what is recorded as Hackleman's Addition to Albany, on Albany's town plat, appears as New Albany on the Surveyor's Map for 1852 (see Figure 40).[23] North Salem was platted in 1850.[24]

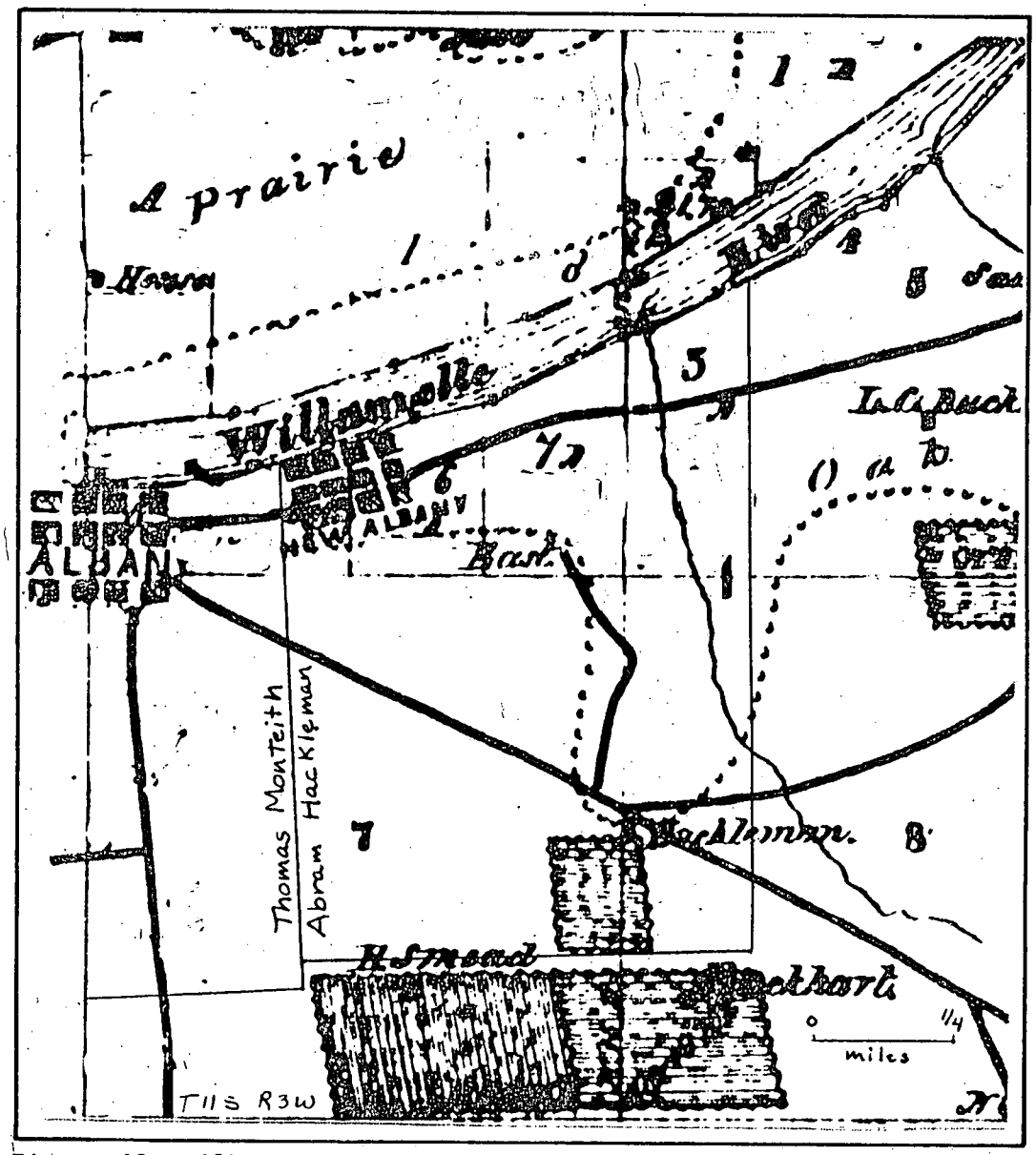

Figure 40. Albany and New Albany. U.S. Dept. of Interior, G.L.O., Survey, T.11S., R.3W.

Townsite owners advertised the advantages of their town announcing lots for sale, and newspaper editors promoted their towns. The water power and portage site at the Falls was believed destined to make Linn City and Oregon City great. At that time, Oregon City was the point at which people purchased their supplies rather than at Portland because of the additional expense of the extra freight transfer at the Falls. The Spectator's editor proclaimed that at some future date Green Point, Multnomah City, Linn City, and Oregon City would one day all be part of a great city.[25]

Townsite owners of Clackamas City and Buena Vista advertised that their sites were high and dry; C. Pickett stating that his town (Clackamas City) was ten feet above high water marks.[26] In addition, the Buena Vista townsite owner proclaimed the healthfulness of his site, "there being no swamps or wet lowland about this place."[27] Champoeg's site was an open area in the forest which permitted easy access to the river. Several Willamette Valley river towns began as ferry crossings. No bridges crossed the Willamette in the 1870s and every town history seems to record the operation of a ferry by a settler or town proprietor. Besides, Wheatland, Buena Vista and Lincoln, mentioned earlier, Hilden records that Harrisburg, Dayton, and Jefferson began as ferry crossings.[28] Syracuse began as Hale's Ferry.

As important as the site, was the situation of these towns in relation to their hinterland and transportation facilites. In some cases, situation was the sole attribute of a town. Howison describes the site of Linnton as "mosquito ridden and overshadowed by huge fir trees,"[29]

but its situation was "a natural depot for the produce of the well settled Tualatin Plains."[30]

While roads were a secondary mode of transportation because their muddy condition in the winter made travel over them slower than travel by steamboat--or earlier, flatboats--they provided access to shipping points. Early river town promoters made efforts to connect with the farming areas in their hinterlands.

Many towns hoped to be the depot for the Tualatin Plains as Linnton did. Linn City was for a time, as shown by the road marked as Warre's map of Oregon City (see Figure 41), but as Sidney Moss explained:

> But when they open[ed] a road direct to Portland that was a place where ships could land, the farmers could get their goods at a cheaper rate, with a better road, and the farmers went there.[31]

Besides the road the promoters of Portland built to the Tualatin Plains, they also built one up the east side of the river to Oregon City. This road appears on Warre's Oregon City map.[32]

Other towns built connecting roads to Oregon City. The town of Willamette City announced the opening of a road from their landing at the foot of Clackamas Rapids:

> Thereby furnishing a safe means for conveying merchandise, etc., to Linn City, Oregon City, and above the Willamette Falls. . . . As the steamer Columbia discharges and takes in at this place her cargo to and from the above places, this arrangement will facilitate the trade of the surrounding country to a great extent.[33]

The position of Willamette City relative to Oregon City, Linn City, and Clackamas City is shown on the map reproduced from General Land

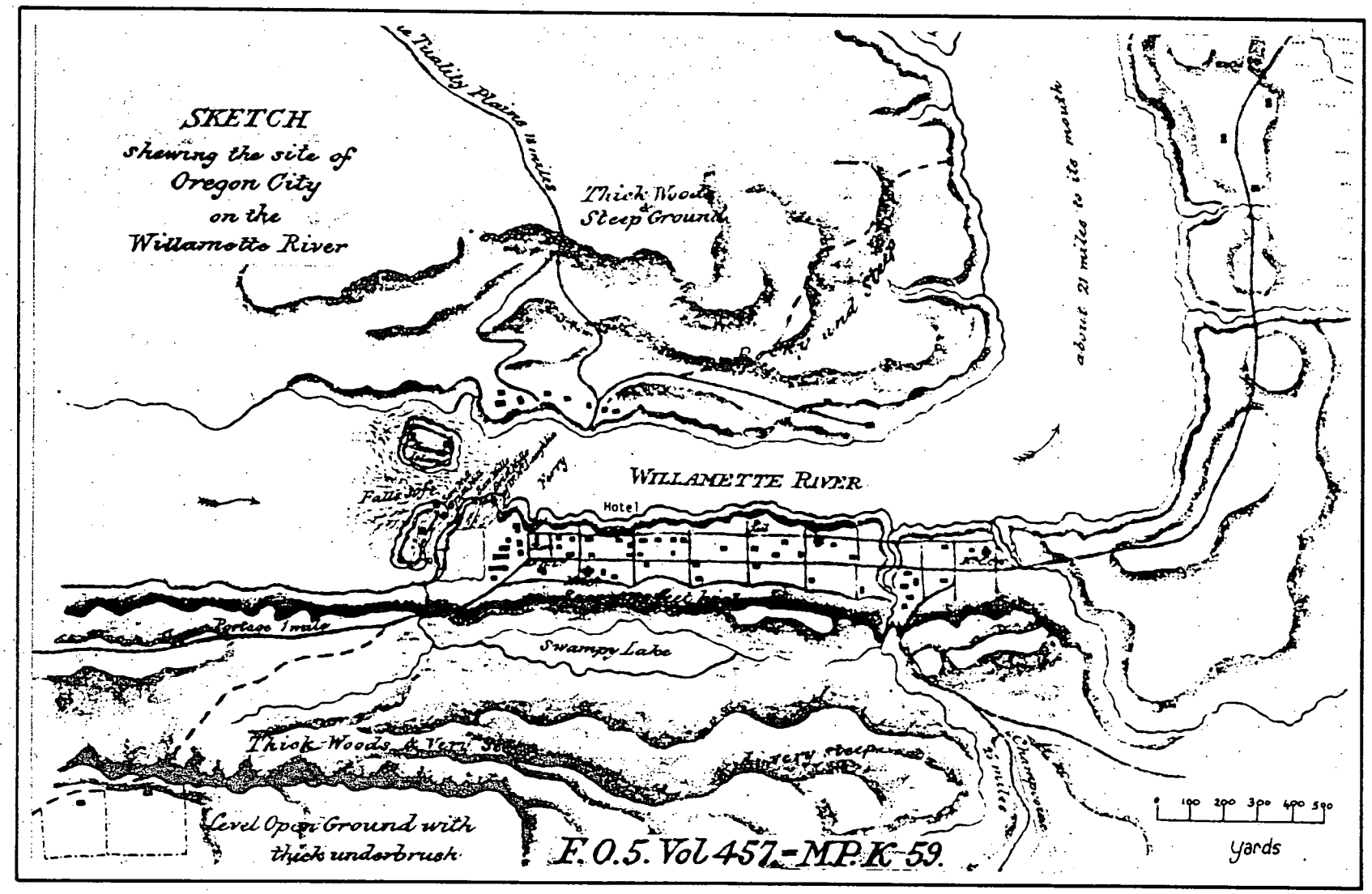

Figure 41. Warre's Map of Oregon City Showing Roads from the Tualatin Plains, Portland, and Champoeg to Oregon City, 1844. Original at Public Record Office, Kew, England F.O.5. Vol 457. M.P.K. 59.

Office Surveyor's maps done in the 1850s. Whether one of the roads shown was meant or a more direct one built is not known (see Figure 42).

Use of this road would probably have been seasonal, since when the river rose, steamboats were able to go the entire distance to Oregon City.

Some towns were on through roads. The road network in 1855 as taken from a General Land Office map of the state of Oregon is shown in Figure 43. Champoeg lay on the route between Fort Vancouver and California used by the Hudson's Bay Co.[34] Corvallis and Lafayette were both on routes used by miners headed for California.[35] Lafayette advertised the ability to accommodate miners in an ad for the Lafayette mining store.[36] Oregon City was on the Barlow road, the entrance to the Willamette Valley for many immigrants. When steamboats could go no farther, merchandise for upriver points was left at Salem, Albany, and Corvallis and transported by wagon upriver. Whether it may also have been left at landings is not known. The towns would have had merchants or commission agents willing to accept freight. Roads to Salem, Albany, and Fairfield may have been more heavily traveled by those bringing wheat to ship. Halbakken identifies Linn and Marion Counties as the major wheat producing counties of the valley.[37]

At the Falls, Absalom Hedges blasted a lower portage road between Oregon City and Canemah, and Robert Moore put one through on the Linn City side. The upper portage road shows on Warre's map of Oregon City (see Figure 41).

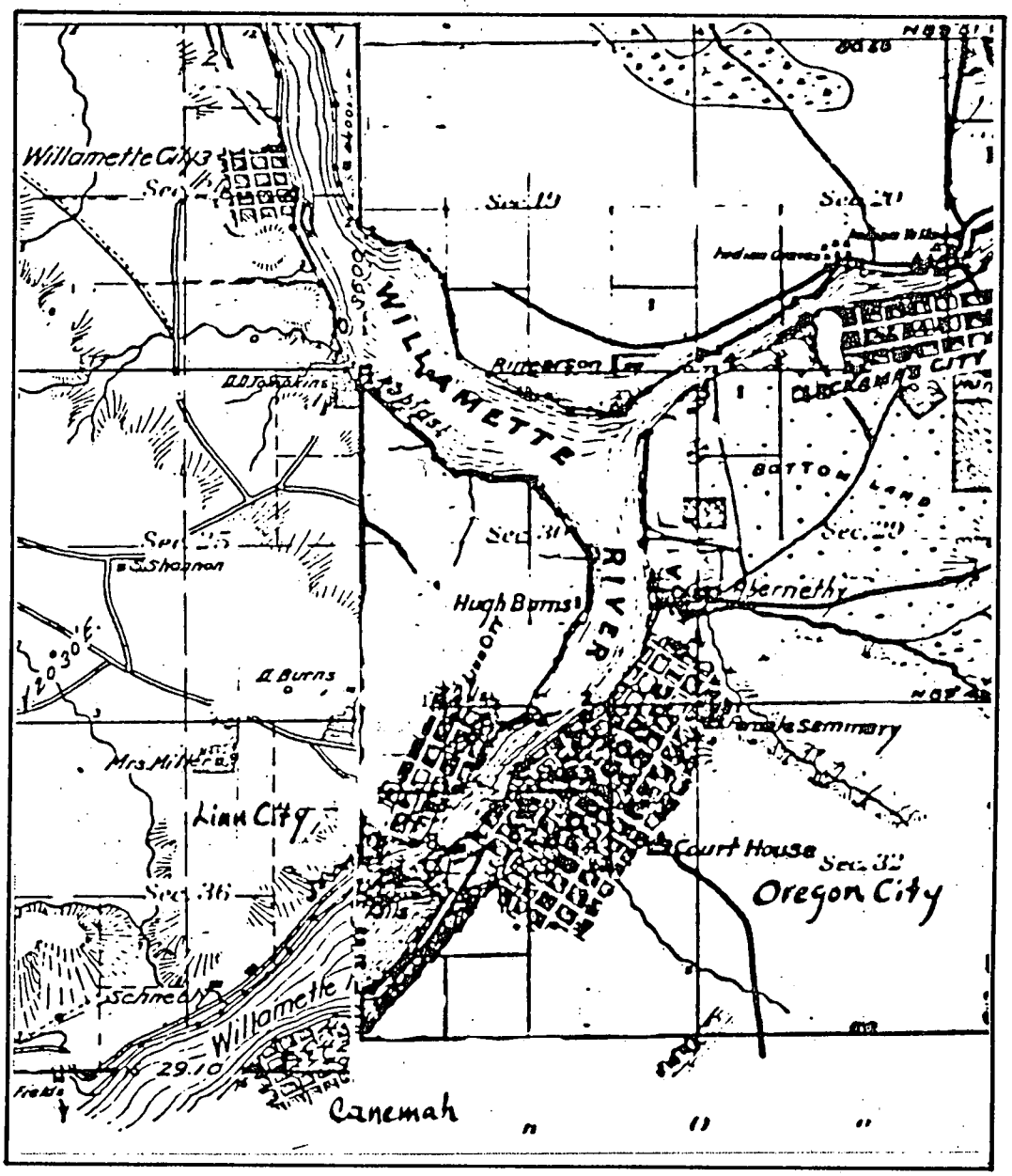

Figure 42. Relative Positions of Willamette, Oregon and Linn Cities. U.S. Dept. of Interior, G.L.O. Survey. T.2.5, R.1.E. and T.2.S., R.1.W.

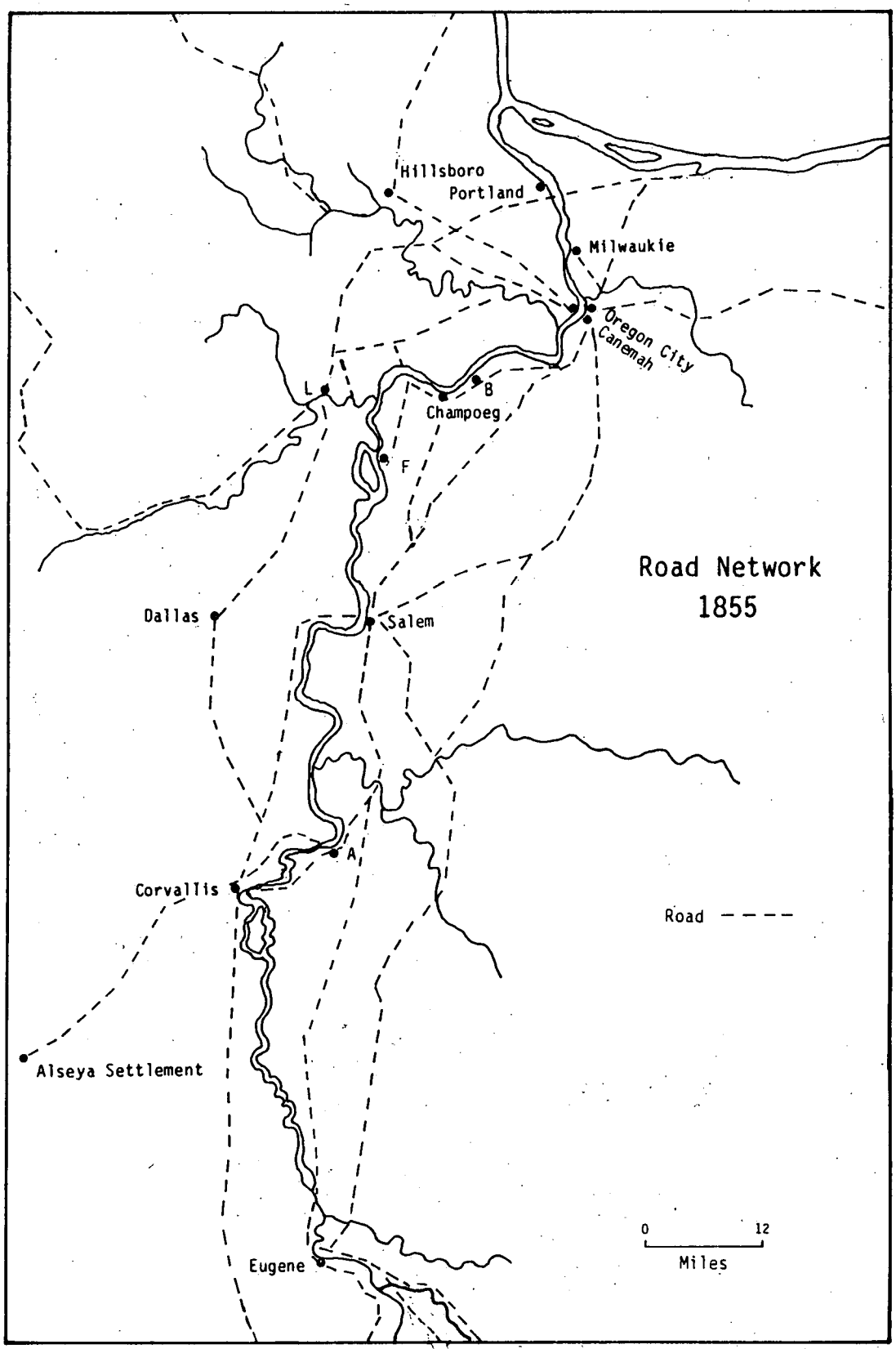

Figure 43. Road Network - 1855 from U.S. Dept. of the Interior, G.L.O. map of Oregon Territory.

In addition to attempts to connect with their hinterlands and other towns by building roads, town promoters attempted to improve transportation facilities by investing in steamboats to ensure service to their town. The Spectator editor pointed out that investment in steamboats would save merchants in freight costs:

> . . . the employment of a small steamer on the Willamette to do the carrying business would save its own cost in a year to the merchants of this city in the cost of freight. And at the same time, merchandise would be delivered here more safely, dryly and expeditiously. Our Portland neighbors, it will be seen, are making a noble effort to promote the steam navigation of our rivers. We are also informed that Mr. Hedges of Falls City intends during the coming season to put a steamboat on the Willamette above the Falls.[38]

The coming of the steamboat was viewed as the signal of a new era in the trade of the Columbia and Willamette.[39] The availability of this new form of transportation, coupled with the expected increase in immigration from the passage of the Donation Land Act of September 27, 1850, was expected to encourage the rapid growth of towns.

> Tis thus the change will be, and the day is not now very distant, when these rivers will be covered with the ever "puffing steamer," transporting the produce from one section to the other. The towns already established will, in a short time, grow into cities, and new ones will be constantly springing up that will astonish all mankind with the rapidity of their growth.[40]

Also, when the Fenix ascended to the town of Thurston (Harrisburg) in December 1853, the reaction of the people upriver to the presence of the steamboat was that "every countenance both old and young beamed with delight, and towns innumerable sprang up in imagination."[41]

The proprietor of the Thurston (Harrisburg) townsite, William A. Forgey, donated several town lots "of first choice,"[42] to the officers and owners of the Fenix. Other efforts by townsite owners included: Lot Whitcomb's building of the steamboat that bore his name; the clearing of the river by the people of Salem to improve service to their town, an action also taken by Oregon City residents with respect to the Clackamas Rapids.

As was shown in Chapter II, steamboat navigation was seasonal above the mouth of the Yamhill River. In 1852 Weston was the year-round head of navigation. By 1875, the river had been improved so that boats could get to Salem year-round if the steamboat captains were willing to spend two hours to drag the boat over the bars. Boats were unable to go beyond Salem by August and resumption of steamboat navigation above that point could occur anytime from September to November. Boats always went as far upriver as they could. They only got to Eugene during high water months in winter and if the water was high in the spring. Boats ran to Portland daily, Dayton three times a week, Salem from two to six, and to Corvallis and Albany two to five, and Eugene once a week or as often as the depth of water permitted.

Besides efforts to improve connections to their towns, promoters made efforts to attract population by donating lots, especially to those who would set up a business. In several cases, promoters donated lots for schools, churches, county courthouses, as well as the state or territorial capital. At Eugene, Albany, and Corvallis land was donated for a county courthouse. The Montieths of Albany donated "ten acres of land directly west of the courthouse site."[43] The proceeds from the sale of

this land were to be set aside for the construction of the new courthouse.[44] Hugh Burns offered to donate thirty lots in Multnomah City and erect a building fifteen by thirty-five feet, and one and one-half stories high for the seat of the provisional government.[45] The town proprietor of Buena Vista made a similar offer when promoting his town for the state capital. McLoughlin donated a block of land for the Female Seminary at Oregon City,[46] as well as giving lots to the Methodists for a church.[47]

Successful towns had some combination of a favorable site, good connections by road to their hinterlands, a degree of accessibility to other towns and ocean shipping via steamboat, and energetic town promoters. The town promoters are of primary importance in a consideration of town growth because their efforts can improve a mediocre site or gain an improved position on a transportation route. Improved accessibility can enable a town to achieve a higher ranking in a hierarchy of places.

Equally important to understanding the development of a particular area is the opposite case. Why did some towns fail?

In the case of river towns, one factor of town failure was destruction by flood. Some early Willamette river towns were located on the alluvial deposits or first terrace, which were usually flooded when the river rose. Extensive damage at the Falls occurred with each flood. While the flood of 1861 was the worst to occur, other flood years were 1844, 1881, and 1890.[48] In still other years, high water caused considerable damage, particularly to the business and industrial sections of the towns which were usually located closest to the river. Not all these high water years have been documented to my knowledge, so damage

which occurred during the 1849 and 1853 high water periods is presented here in detail to illustrate the sort of destruction the towns experienced.

The destruction caused by the flood of 1861 has been fairly well described so will be used as an example of flood damage. Other than to note that considerable damage was done, Brands states that available sources do not describe the extent of damage done at Oregon City or other towns in the Falls area by the flood of 1844.[49]

In December 1849, a freshet washed away the beef market on Water Street, the Red Store and Couch's and Co., and left the storehouse of Cranfill and Simpson on its end in the water at Oregon City.[50] A later report states:

> From what information we have been able to obtain we feel assured that nearly all the mills in the territory have been swept away or seriously injured. Those on the west side seem to have experienced the greatest damage. It will require the expenditure of some thousands of dollars to repair all the injuries experienced by the Oregon City mills, though fortunately they were not swept away. O'Neals' mill in Polk Co., the new mill just being erected at Yamhill Falls, and the Clackamas mills are all a total loss. It will cost some $40,000 or $50,000 to repair the damage done on Water Street in Oregon City, including the street itself and the houses.[51]

In 1853, considerable damage was done again in the Falls area. The Oregonian reported that several houses had been carried away at Linn and Oregon Cities, the sawmills on the island adjoining Oregon City and the bridge connecting it to Oregon City were swept away but the island gristmills were still standing (see Figure 41). Dr. McLoughlin's sawmill was swept away. A wharf boat sunk at Canemah.[52]

Elsewhere in the valley, Dayton suffered the loss of General Palmer's mills. Champoeg was inundated. The bridges over the Yamhill were damaged, but not washed away.[53] At Portland, Coffin's wharf was carried away as well as a portion of Norton's wharf.[54] Portland apparently consistently suffered less flood damage than Oregon City.

The most extensive flood damage occurred during the flood of 1861. Reports used here appeared in the Oregon Argus at Oregon City and the Oregonian at Portland, based on eyewitness accounts or quotes from the Corvallis Union or Albany Democrat. Information is more detailed concerning the larger towns. The type of damage ranged from loss of entire towns at some locations and little or no damage at others. Here the type of site selected by the townsite owner had a bearing on the degree of damage suffered by a particular town. As expected, those towns on the lowest terraces and alluvial deposits suffered the worst damage. It is known that Orleans and Champoeg were carried away. These towns are on the lowest terrace.[55] Only the houses remained undamaged at Santiam City and Jefferson.[56] Syracuse is not mentioned which suggests that it may have been destroyed earlier. Some houses were washed away at Butteville,[57] and the warehouse at Wheatland as well.[58]

Damage to towns on higher terraces usually consisted of losses of commercial establishments or mills which were closest to the river. A sawmill was lost at Milwaukie,[59] and those at Albany almost completely destroyed.[60] At Salem, DuRellis' Mill and the cidar manufactory as well as the wharf built the previous summer were carried away.[61] Wheat was spoiled at Independence.[62] At Portland, the wharf between Washington and Alder Streets was swept away, as well as a portion of Coffins, and

the rear portico of the Bank Exchange Saloon.[63] Eugene was reported partially covered, the damage to property not great, and Harrisburg was reported under water.[64] Peoria was high and dry.[65]

Damage to the towns at the Falls was extensive. Once again, Oregon City reported the worst damage. The water was four feet deep in Main Street and most of the frame storehouses were swept from their foundations. Many houses were swept away there.[66] The bridge to the Island Mills was destroyed.[67]

The Linn City Works, which had been built in 1852-1853, were used to transfer freight between boats on the upper and lower rivers. These were washed away, as were the Oregon City Mills, and the breakwaters on both sides of the rivers, the Island Mills, and the Willamette Iron Works. Businesses and houses were damaged.[68] A list of property owners and their losses appeared in the Oregon Argus for December 14, 1861. In all, the loss at Oregon City was $170,000.[69]

On the Yamhill River, Dayton again suffered damage. William and Lippincott's Store, as well as several other buildings were destroyed. At Lafayette, water rose to the eaves of Wolfe's warehouse, but no loss of building was reported. All bridges crossing the Yamhill were swept away. This damage was caused by backwater from the Willamette. Water backed up behind Rock Island, saving, it was believed, Oregon City from worse damage.[70]

In those towns where rebuilding took place, some rearrangement undoubtedly took place as those sites which were found easily flooded were abandoned. The value of other sites not easily flooded would increase. Hilden states that businesses at Dayton moved away from the

river,[71] and it may be expected that this was true at other sites also. The Oregon Argus editor emphasized the need to locate new improvements where damage was less likely:

> We have had opportunity however to learn lessons which may be of great value to us in making improvements hereafter. The water in this freshet, was ten or twelve feet higher, opposite Oregon City, than in the freshet of January, 1853, and any permanent improvements located hereafter should be prepared for still higher water. Some particular points may be much more easily guarded against the violence of a freshet than others, and these will probably be seized as points for improvement first.[72]

Besides loss from flood, townsite ventures failed when a change in the channel caused a city to be left without access to shipping. Such was the case for Lancaster and Boonville, located south of Corvallis along the section of the river where channel changes occurred yearly.

Just as efforts of townsite promoters can assist town growth, so some actions can work against the success of towns. Some, like the proprietors of Linnton, were absentee owners. Others sold lots for high prices. Sidney Moss stated that McLoughlin originally sold lots at Oregon City for whatever price he could get, but later attempted to sell them for high prices, particularly to potential buyers from Portland and San Francisco.[73]

Access to water power was another issue. Palmer stated that Robert Moore's town of Linn City did not grow as much as Oregon City because he would not sell water power.[74] Moss states that McLoughlin would not lease him "water enough to turn a grindstone."[75]

The degree to which uncertainty of land titles affected the growth of towns can only be partially answered here. It appears to have been

a problem throughout the 1850s, to have affected some towns more than others, and at the very least to have resulted in less willingness to invest in improvements.

When the Donation Land Law passed September 27, 1850, some settlers claimed sites where towns already existed and for a time proper ownership was in question. The Oregon Spectator editor described the situation:

> Subsequent to the passage of the law of September 27, 1850 granting donations of the public lands to settlers in Oregon, various speculators pounced on the different townsites in the territory, in which they were all settled. They were in all cases the first settlers on the various tracts, and claimed on the passage of the law above mentioned, the right to locate their 640 acre warrants so as to cover not only the portions of the various towns occupied by themselves, but by others. The Surveyor General of Oregon decided in favor of their various claims thus ousting all other persons who had also settled in the different towns of the territory, and improved the respective lots they occupied.[76]

The Legislative Assembly of the Territory of Oregon memorialized Congress concerning the matter, stating that section 4 of the Donation Land Law which voided any land sales made before patents were received:

> . . . operates prejudiciously to the interests of our Territory, retarding the growth of our Towns and villages, rendering insecure and uncertain all investments in real estate in said towns and thereby cripling the business and energy of our Territory.[77]

The Oregonian editor echoes this concern and called for an amendment which would enable investors to obtain title quickly:

> One of the most important considerations is that our present donation law, which all admit to be defective, should be amended in many particulars . . . memorialize Congress for such

> amendments . . . so as to obtain at an early date a title to his land. This is preminently necessary in townsite claims. Without a title to land no city or town can advance in business, wealth or happiness; without a good and valid title, no capitalist will invest his money in improvements; without improvements the country will lag behind the advancement of the age, and other points possessing less inducement will attract capital and enterprise away.[78]

In a later column, the editor claimed that for Portland in 1853:

> The business of this city was retarded and all manner of obstructions thrown in the way of improvement, by the constant personal difficulties between the proprietors.[79]

In 1854, the land department refused to grant patents to the proprietors of the Portland land claim.[80] In that year, House Bill 316 passed which:

> . . . provides that the donations hereafter to be surveyed in Oregon and Washington, claimed under the provisions of the Act of September 27, 1850, shall, in no case, include a town site, or lands settled upon for the purposes of business or trade, and not for agriculture; and that all town sites shall be subject to the operations of the Act of May 23, 1844 . . . for the relief of the citizens of towns upon the lands of the United States, under certain circumstances.[81]

The May 23, 1844 act reads as follows:

> . . . that whenever any portion of the surveyed public lands has been or shall be settled upon and occupied as a town site, and therefore not subject to entry under the existing preemption laws, it shall be lawful, in case such town or place shall be incorporated, for the corporate authorities thereof, and if not, incorporated, for the judges of the county court for the county in which such town may be situated, to enter, at the proper land office, and at the minimum price, the land so settled and occupied, in trust, for the several use and benefit of the occupants thereof, according to their respective interests; the execution of such trust, as to the disposal of lots in such town, and the proceeds of the sales thereof, according to their respective interests; the execution of which

> trust, as to the disposal of the lots in such town, and the proceeds of the sales thereof, to be conducted under such rules and regulations of the State or Territory in which the same is situated: Provided, that the entry of the land intended by this act be made prior to the commencement of the public sale of the body of land in which it is included, and that the entry shall include only such land as is actually occupied by the town, and be made in conformity to the legal subdivisions of the public lands authorized by the Act of April 24, 1820, and shall not in the whole exceed 320 acres.[82]

As a result of these decisions, the Common Council authorized the mayor in 1854 to enter a 320 acre claim for the citizens of Portland.[83] However, the legislature of Oregon continued to memorialize Congress regarding the difficulty of finalizing sales and donations of land due to the decision of the Commissioner of the General Land Office.

> AND WHEREAS, many of the early emigrants to Oregon Terrirtory and many who arrived in Oregon since the passage of the donation law, have made selection of claims under the provisions of the donation law, and, as far as possible, complied with all the provisions of said donation law, and expended large sums of money in improving said claims in cultivation, creating buildings, stores, mills, and machinery, that was absolutely necessary to meet the wants and necessities of the country, thereby in many instances making it necessary for the original settlers to donate or sell small parcels of land to accommodate and encourage mechanics, merchants, and professional men, who do not hold adversely to the original settlers, but claim their title from them, thereby forming a small town or city;
>
> AND WHEREAS, many of the settlers have complied with all the provisions of the donation law, and procured certificates of title from the proper officer;
>
> AND WHEREAS, the Commissioner of the General Land Office has returned some of said certificates to Oregon, deciding that lands occupied for town sites, and for purposes of trade and commerce, cannot be held by settlers under the donation law, and are reserved from settlement by the preemption laws of the United States;
>
> AND WHEREAS, the Supreme Court of the Territory of Oregon, in a late decision, declared that the preemption laws of June 22, 1838, September 4, 1841, and the act of May 23, 1844, were not applicable to, or operative in the Territory of Oregon;
>
> AND WHEREAS, a large proportion of the valuable part of those claims upon which townsites have been located is in the

hands of second holders, some of whom are non-residents, and holding by a succession of titles from the original proprietors, none of whom are holding adversely to the claimants under the donation law;

AND WHEREAS, the settlers upon claims that the wants of the people of Oregon required should be used for purposes of trade and commerce, and town sites, have been greatly embarassed by the decision of the Commissioner of the General Land Office, and been prevented from perfecting the titles to their claims, and therby rendered unable to make good their bonds and agreements to parties to whom they have sold or donated lands and lots in good faith, thereby creating disappointment and embarrassment in their titles;

AND WHEREAS, the decision of the Supreme Court of the Territory of Oregon gives general satisfaction to the people of Oregon, who understood that the donation law opened all of the lands in Oregon to settlers, excepting only the lands reserved by it, and that the provisions of the donation law, if carried out, would work the greatest good to the greatest number: therefore,

Resolved by the Legislative Assembly of the Territory of Oregon, That our Delegate in Congress be and he is hereby instructed to use his influence with the Congress of the United States to procure the passage of a law that will place all settlers holding claims that the exigencies of the country have required to be occupied as town sites, or for purposes of trade and commerce, upon the same footing and position, as to right to hold, as settlers upon lands used for agricultural purposes alone.

Passed January 23, 1855.[84]

The Portland patent as requested by the Common Council was approved in 1858. Persons who had purchased lots were to be given a deed from a Commissioner appointed by the Common Council. These people were to file a claim in writing and pay $5.00 for each lot. Other town lots were to be sold.[85] Before this plan could be put into action, the Commissioner of the General Land Office, on October 18, 1858 set aside the patent granted to the Common Council and the land reverted to the Donation Land claimants: Stark, Lownsdale, Chapman, and Coffin.[86]

During this time, property changed hands as if the title were clear. Lots were sold with the understanding that the town proprietor would pass title as soon as he acquired it. Purchasers were given a quit claim deed. The lot was still considered part of the original land claim as regarded obtaining title, but the lot owners exercised all ownership rights, including resale.[87]

At Oregon City, section 11 of the Donation Land Act had granted the land to the legislative assembly of Oregon, rather than to McLoughlin, a British citizen. Thurston apparently promoted this provision from fear that the Hudson's Bay Company employees or the Puget Sound Agricultural Company settlers would attempt to claim large tracts of land.[88]

Those who had purchased lots before March 1849 were to receive patents for them. Many of these lots were in that part of the city on the lower basalt bench on which actual settlement had taken place so controversy over this area would have made settlers less willing to invest in Oregon City lots and improvements when there were other places nearby. After the flood of 1861, the Oregon Argus editor expressed the hope that the land title question would be resolved so that investors would be willing to put money in improvements.[89]

The Oregon legislature requested that Congress return the claim to the McLoughlin family in 1856, but when that request went unanswered, accepted the claim in 1862 and promptly sold it to the family.[90]

At North Salem, laid out in 1850, both McClane and Boon claimed the area on which the town was located under the Donation Land Act. The Salem Directory for 1871 states that the long litigation resulting from this hindered the improvement of the town.[91] In order to protect the

claim of the Oregon Institute at Salem for the Methodist Missionaries, the land was put in the hands of W. H. Wilson, who was to claim it under the terms of the Donation Land Act, giving two-thirds of the proceeds from the lot sales. According to J. Quinn Thornton, Wilson not only failed to do this, but also apparently tried to press some Salem property owners for additional money for a clear title.[92]

Corvallis and Dayton apparently had no unusual title problems. The Historical Atlas of Marion and Linn Counties states that Albany had no title problems.[93] In the case of Lafayette, the townsite owner died. A resurvey of his claim exists which suggests that some sort of claim question existed there. The death of the townsite owner may also have been a factor in the decline of Milwaukie, Linn City, and Oregon City. Corning quotes the Oregon Argus for April 6, 1851, a few years after the death of Moore:

> On the opposite side of the river is Linn City--one of those townsites of which much was said and written some ten years ago. There are a few pleasant residences on the site--but the expectations of its rapid growth have long since ceased.[94]

This commentary appeared before the flood of 1861 so any damage done was to a town already in decline.

Some towns grew quickly, particularly with the yearly influx of immigrants. Oregon City benefitted from its position at the end of the Barlow Road. Early settlers often arrived destitute and lived in towns until farmland or a steady job could be obtained.[95] McLoughlin offered jobs in the mills to early immigrants, or hired them to cut timber.[96]

As can be seen in the descriptions given below, a sawmill, gristmill, wheat storage warehouse, or a store were often the first buildings erected in a town. These functions reflect the settlers' needs for basic supplies as well as the primary components of their economy, or way of making a living.

Travelers' accounts give a sense of the size and functional diversity which occurred as the town grew. The number of functions is tied to increase in population since some functions require a certain number of people to serve in order to survive. The type of function not only reflects the economy but the income of its inhabitants and rate of building activity. Some functions require or at least attract other functions. As can be seen in Table 4, listing functions at Oregon City from 1843 to 1867, the number of mills, especially sawmills increased, which could reflect the demands of the California market as well as the increase in population. By 1846, diversification is apparent, with the addition of functions which serve special needs, like a hatter or tailor, and those which require a larger population, like an attorney, because their services are demanded less often. Palmer commented that several carpenters and masons were in constant employment,[97] a reflection of the rapid rate of building.

When Warre returned in June 1846, one year after his first visit, he commented:

> The village at the falls has much improved in appearance. Many buildings have been erected and the trees cleared from the adjacent heights.[98]

Table 4. Functions at Oregon City 1843-1867

	Hastings Autumn 1843	Burnett 1844	Warre 1845	Palmer 1846	Dec. 12, 1850 Western Star	1867 Pac. Coast Directory
Stores	4	4		4	36*	
Mills - Flour	2	1	2	2	2	1
Mills - Other	2					2**
Mills - Saw		2	3	3	5	1
Hotel	1		1		3	2
Churches			2	2	4	2***
Houses			80	100		
Jail			1			
Taverns				2	x	4
Hatter				1		0
Tannery				1		0
Tailor				3	1	0
Cabinet Mkrs.				2	2	0
Cooper						
Blacksmith				2		0
Physicians				1	x	1
Attorneys				3	6	3
Printing Ofc.				1		3
Lath Machine				1		0
Brickyard				1		
Jewelry & Watchmkr.				1	1	0
Clothing				2	2	2
Drug Store					8-10	4
Silversmiths				2		
Boot Maker					1	2
Confectionary					1	3
Hardware					1	0
Crockery					x	2
Bakery					x	0
Barber					2	
Saddler					2	2
Tinware Manu.					1	
Plow Manu.					1	1
Foundry					1	1
Daguerreotyper					1	1
Dentist					1	1
Courthouse					1	
Schools					1	1
Carpenters				x	2	

Table 4--(Continued)

	Hastings Autumn 1843	Burnett 1844	Warre 1845	Palmer 1846	Dec. 12, 1850 Western Star	1867 Pac. Coast Directory
Masons				x	x	
Carriage & Wgn. Mkr.					x	2
Merchants - Gen.						
Stationary						1
Furniture						9
Groceries & Prod.						
Lumber						1
News & Newspaper Agent						1
Academies						4
Painters - House						1
Stables - Livery						1
Butchers						1
Gunsmiths						1
Dry Goods						2
Insurance Agts.						2
Booksellers						1
Boot Dealer						3
Machinist						2
Storage						1
Surveyor						1

* Some of functions listed below are included in this count.

** 1 woolen and 1 paper mill.

*** This count includes clergymen.

SOURCE: Travellers' Accounts, Newspaper Account, 1867 Directory

NOTE: x = no number given

The other towns in the valley were just getting started in 1846 when Palmer and Howison passed through and recorded the progress made. Even those platted about the same time were in varying stages of development. Some, like Linnton, lacked promise for future development, in the eyes of these travelers. Howison described Linnton thus:

> It contains only a few log houses, which are overshadowed by huge fir trees that it has not yet been convenient to remove. Its few inhabitants are very poor and severely persecuted by mosquitoes day and night. Not one of its proprietors resides on the spot, and its future increase is, to say the least, doubtful.[99]

In contrast to the dark, mosquito-ridden town of Linnton, which not even its proprietors wanted to live in, Howison was impressed with the town of Portland, more promising, not only because of its site, but because of the efforts of the town proprietor to make it more so, as well as the make-up of the population--industrious mechanics who were heads of families:

> Eight or nine miles above Linnton . . . we come to a more promising appearance of a town. It has been named Portland by the individual under whose auspices it came into existence, and mainly to whose efforts its growth and increase are to be ascribed . . . Pettygrove. . . .
>
> Twelve or fifteen houses are already occupied, and other buildings, and with a population of more than 60 souls, the heads of families mostly industrious mechanics, its prospects of increase are favorable.[100]

In addition to Oregon City, Palmer recorded his impressions of Linn City and Multnomah City, platted the same year as Oregon City, but much smaller and made up of residences mostly, perhaps, at Linn City because

the proprietor would not sell water power rights. About Linn City, he says:

> When I left there were about 15 buildings in this village, inhabited mostly by mechanics. The proprietor had refused to sell water power, which was doubtless one of the reasons why more emigrants did not settle in it.[101]

And about Multnomah City:

> There were but a few buildings, and some mechanics settled in it.[102]

On the upper river, Palmer described three places--Butteville, Champoeg, and Salem, each with at least one function:

> Eight miles from Pudding River is a village called Buttes. There were but a few cabins in it when I left. The proprietor has erected a warehouse to store the wheat they might purchase of the settlers.
>
> South of Buttes three miles is the village of Champoic. . . . It contains a few old shabby buildings, and a warehouse owned by the company [Hudson's Bay].
>
> At the Institute there reside about 15 families. . . . The Methodist missionaries have erected a saw and grist mill . . . now owned by resident citizens. . . . At this place a town [Salem] is laid out.[103]

The settlers depended on the Hudson's Bay Company to market what they could not sell to incoming immigrants. Few American vessels visited the area, but the Hudson's Bay Company had a contract to supply wheat to the Russians in Alaska and had established other connections with the Sandwich Islands. This arrangement was satisfactory until 1846 when more wheat and lumber were produced than the Hudson's Bay Company needed to make its commitments. Howison described full warehouses and

lumber piled around mills awaiting purchase in his description of his tour in 1846.[104] Prices for what was sold were low.

He attributed the economic slowdown to the lack of a fixed currency, remoteness of the Willamette Valley from the rest of the U.S., and uncertainty of the foreign market, and most of all, to the hazardous nature of navigation in and out of the Columbia which resulted in high freight rates and insurance premiums.[105]

Conditions improved somewhat during 1847 when a large immigration arrived, and there was some demand from California for Oregon produce.[106] In July 1848, news of the discovery of gold in California reached Oregon. The gold brought back by returning miners and sent in payment for produce brought an era of prosperity to Oregon. Passage of the Donation Land Act on September 27, 1850 increased the number of people coming to Oregon to settle.

Portland grew rapidly as a result of her position as the connecting point between the Willamette Valley and the California mines. By 1850, Portland was only slightly smaller than Oregon City, the population of Portland being 805 and that of Oregon City 933, according to Bowen.[107] As can be seen on Figure 44, these two places were much larger than any other river town for which population estimates are available. Salem was the next most populated place, but much smaller, with a population of 291. The populations of the remaining places ranged from 30 to 125.

As can be seen on Table 5 comparing functions by size of city in 1850, Portland had 18 stores compared to Oregon City's 36. However, Portland was growing so fast that in late 1851 it was described as having 35 wholesale and retail stores, 2 tin shops, 4 public taverns,

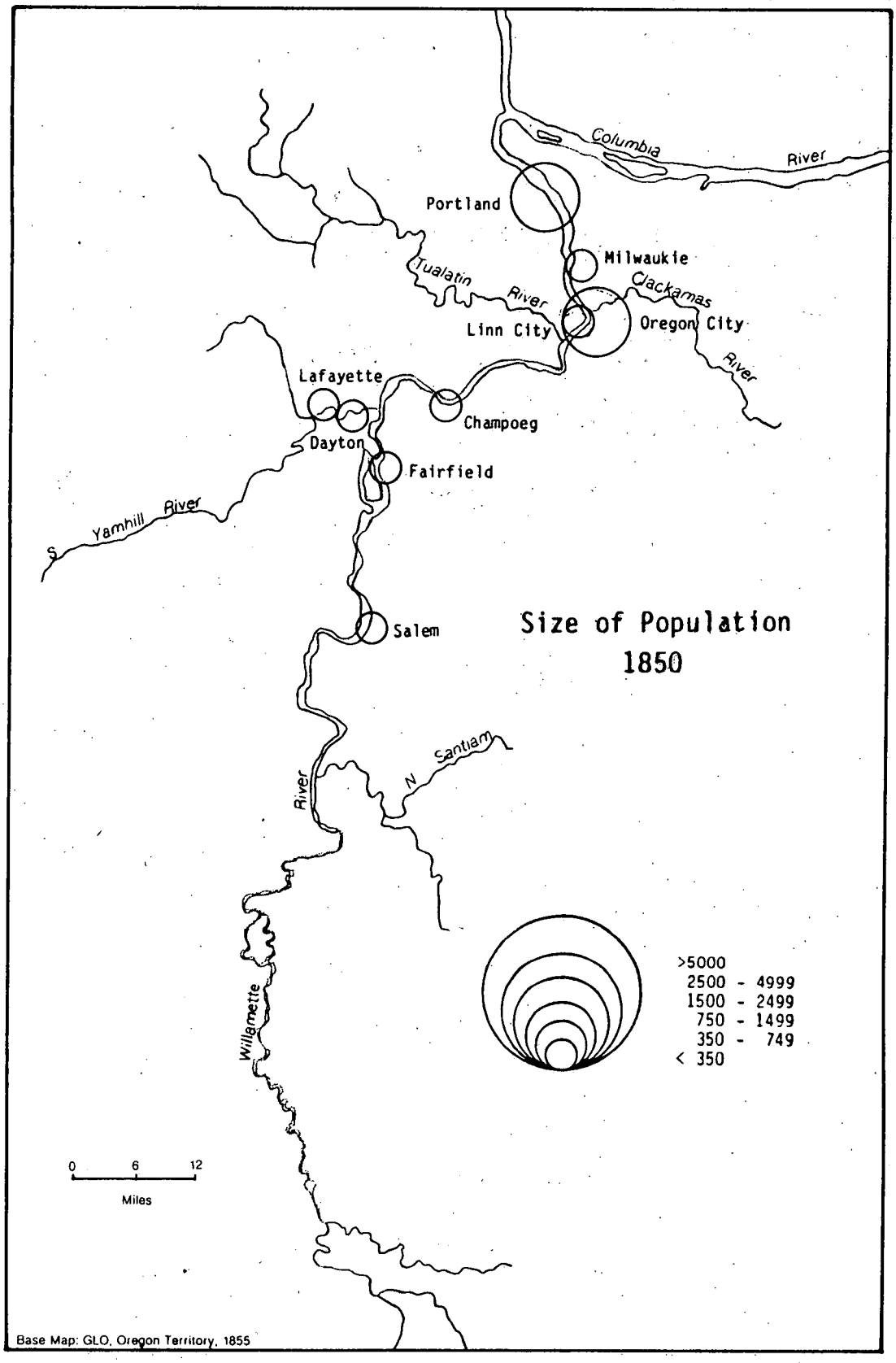

Figure 44. Size of Population - 1850 from Bowen, Willamette Valley, and Holtgrieve, Historical Geography.

Table 5. Partial List of Functions by Population Size in 1850

	Oregon City[1] (933)	Portland[2] (805)	Salem (291)	Lafayette[9] (125)	Milwaukee[3] (103)	Dayton[4] (50)	Fairfield[5] (30)	Places for Which Population Estimates Not Available: Albany[6]	Syracuse[7]	Weston[8]	Butteville[10]
Stores	36	18		6-8	3	2	1			1	3
Jewelry & Watchmkr.	2										
Clothing	8-10										
Drug Store	1										
Boot Maker	1				1						
Confectionary	1										
Hardware	1										
Crockery	x										
Liquor	x										
Bakery	2										
Barber	2										
Tailor	1										
Saddler	1										
Tinware Manu.	1		No		1						
Cabinet Shop	2		Data		1						
Blacksmiths	x		Collected		1						
Plow Manu.	1										
Foundry	1										
Brickyard	1										
Daguerreotyper	1										
Dentist	1										
Physicians	6					1					
Lawyers	20					1					
Churches	4	2									
Courthouse	1										
Schools	2				1						

Table 5--(Continued)

	Oregon City[1] (933)	Portland[2] (805)	Salem (291)	Lafayette[9] (125)	Milwaukee[3] (103)	Dayton[4] (50)	Fairfield[5] (30)	Places for Which Population Estimates Not Available: Albany[6]	Syracuse[7]	Weston[8]	Butteville[10]
Post Office					1						
Printing					1						
Warehouse					1						
Tavern					3						
Sawmills	5				2			1	1		
Sawmill (being)					1						
Gristmill (built)					1						
Hotels	3					1					
Flour Mills	2							1			
Houses							3-4	15	15-20	few inhabitants	
Public Boardings		6									

NOTE: x = no number given.

SOURCES are listed as follows:

1 Western Star, Dec. 26, 1850
2 Rep, John W., p. 350, quotes Howison, November 1850
3 Western Star, Nov. 20, 1850
4 Hilden, p. 123
5 Vol. R16, p. 118, T5S, R3W
6 P. 238, Gen. Descrip. T line Between T9-105 & R3 & 4 West on Microfilm for T115R, 5W, Vol. 4R
7 Ibid.
8 Vol. R15, p. 2 of 4, July 20, 1852, T4S, R3W General Description
9 Ibid.
10 Vol. R9 T3S R1W Surveyor's Notes

2 steam sawmills, 1 steam flouring mill, 6 or 8 public drinking shops with billiard tables, 1 wine and spirit manufactory, and a variety of mechanic shops.[108] Oregon City, on the other hand, had in January 1853, a little over a year later, suffered losses from high water. So, even though Fisher described Oregon City in a positive vein in August 1853, by that time it had probably begun to decline relative to Portland. He said there were 4 wholesale stores and 14 retail dry goods stores, as well as a foundry, and stated there were several large business houses going up. Whether the 18 stores mentioned above are the total number is not known, so it is not certain whether this represents a decrease from the 36 counted in 1850. He described the population as ever changing but with a trend toward permanent increase.[109]

Layayette had a larger number of stores[110] than might be expected because of its position on the road to the mines. Milwaukie was declared to have "prospects of a rapid increase"[111] by a newspaper published there.

By 1852, the surveyors of the General Land Office were working throughout the Willamette Valley. The surveyors described Fairfield as a place with 1 store and 3 or 4 houses.[112]

Of the places for which no population estimates are available, the surveyors descriptions will be used as a measure of their relative size. Weston was similar to Fairfield in that it had 1 store and "a few inhabitants.[113]

Albany and Syracuse were larger than Weston and Fairfield, and of similar size. Syracuse had 15 or 20 houses and 1 sawmill.[114] Albany had 1 saw and 1 flouring mill in addition to 15 houses.[115] If

Holtgrieve's method of assigning 5 occupants per household[116] is applied to Albany and Syracuse, then these places would have had populations of about 75. Butteville had 3 stores and a number of other buildings.[117]

Besides calculating urban populations in 1850 for Portland, Oregon City, Milwaukie, Linn City, Lafayette, and Salem, Bowen described other characteristics of these urban places. The following comments refer to patterns he found in those towns: Urban centers accounted for 25% of Oregon's 1850 population.[118] The highest percentage of city dwellers were from New England or were foreign born: 58% of the New Englanders and 60% of the foreign born lived in cities. More than 30% of those from the middle Atlantic states and Ohio were urbanites. Other mid-western and southern source areas accounted for only around 20%, with the fewest coming from Missouri and Tennessee. Most Canadians lived in Portland or Oregon City. Males outnumbered females three to one in Portland. Oregon City also had more males than females, while in Salem and Lafayette the ratios were more balanced.[119]

During this era of prosperity in the early 1850s, many towns were platted both along the river and throughout the valley. Many town promotion schemes had yielded little actual growth however, according to a Linn County resident reporting in 1852:

> There is, of course, a great deal of town making going on, particularly on paper. The "store," that notable place in the country, usually denotes the piece of ground, in which hope has pictured a fair city. The principal part of these town sites may, however, be profitably cultivated in wheat for some years to come.[120]

By 1853, the boom had begun to slow down. Bushrod Wilson, living in Corvallis, wrote the following in a letter to Minneapolis, written in mid-December 1853:

> Times has changed in Oregon some, the mining trade is not as brisk as it was formerly--owing to the number of new harbors being found on the coast nearer the mining district. . . . Merchandising is not as good as it has been owing to the great number engaged in it and the competition in trade.[121]

By 1854, Oregon lost its share of the lumber and provisions market when California began producing for its own needs. The markets had become saturated with goods.[122]

In 1855, also, the time limit for the Donation Land Law ran out. Immigration declined rapidly as the decade went on due to the Indian wars in other parts of Oregon and the attraction of the booming mid-west.[123] Bushrod Wilson reported that there were few chances for speculation, the principal one being to watch the California produce market and ship according to demand there.[124] He had also considered speculating in town property but explained why conditions were not good for that type of venture by 1857.

> As for speculating in town property, I thank you for the advice. I have had that in view ever since I came to Oregon. We are too remote. Isolated almost from the older states. There is no great influx of Immigrants. Six years ago when California was filled with the mania of making towns, Oregon was alike affected, half of the towns then started in Oregon, where some men lost fortunes, are not known now. We must have the material to make towns of a large floating population is not the commodity. It gives an air of briskness but no stability.[125]

In 1858, Wilson reported that there had been no overland immigrations for three years. In addition, Oregon suffered a depression between 1859 and 1861. Merchants in the towns had difficulty meeting obligations and several firms failed.[126]

Milwaukie is an example of a town which had stagnated by 1859. The effect of the economic slowdown, death of its founder and possibly proximity to Portland and Oregon City was evident. As described by a visitor:

> This once promised to be a thriving little town, but its progress has been impeded. It remains only a small village in which a number of houses are vacated and going to decay.[127]

With a population estimated by Holtgrieve of 175 for 1860, an increase of only 72 over Bowen's 1850 estimate, Milwaukie remained in the smallest population size category on the map made for 1860 (see Figure 45). Oregon City remained in the same population size category. Holtgrieve estimated an 1860 population of 888 for Oregon City, a decrease from the 933 estimated by Bowen in 1850. By 1860, Oregon City's town proprietor had died, its land title questions were only beginning to be sorted out, and it had suffered flood damage in 1849 and 1853. It retained its position as a freight and passenger transfer point between the upper and lower Willamette.

Portland had continued to increase relative to other places, due to its position as a connecting link between river steamboats and ocean shipping. With a population of 2,874, it was almost three times as large as the next biggest river town, Albany, with an estimated population of

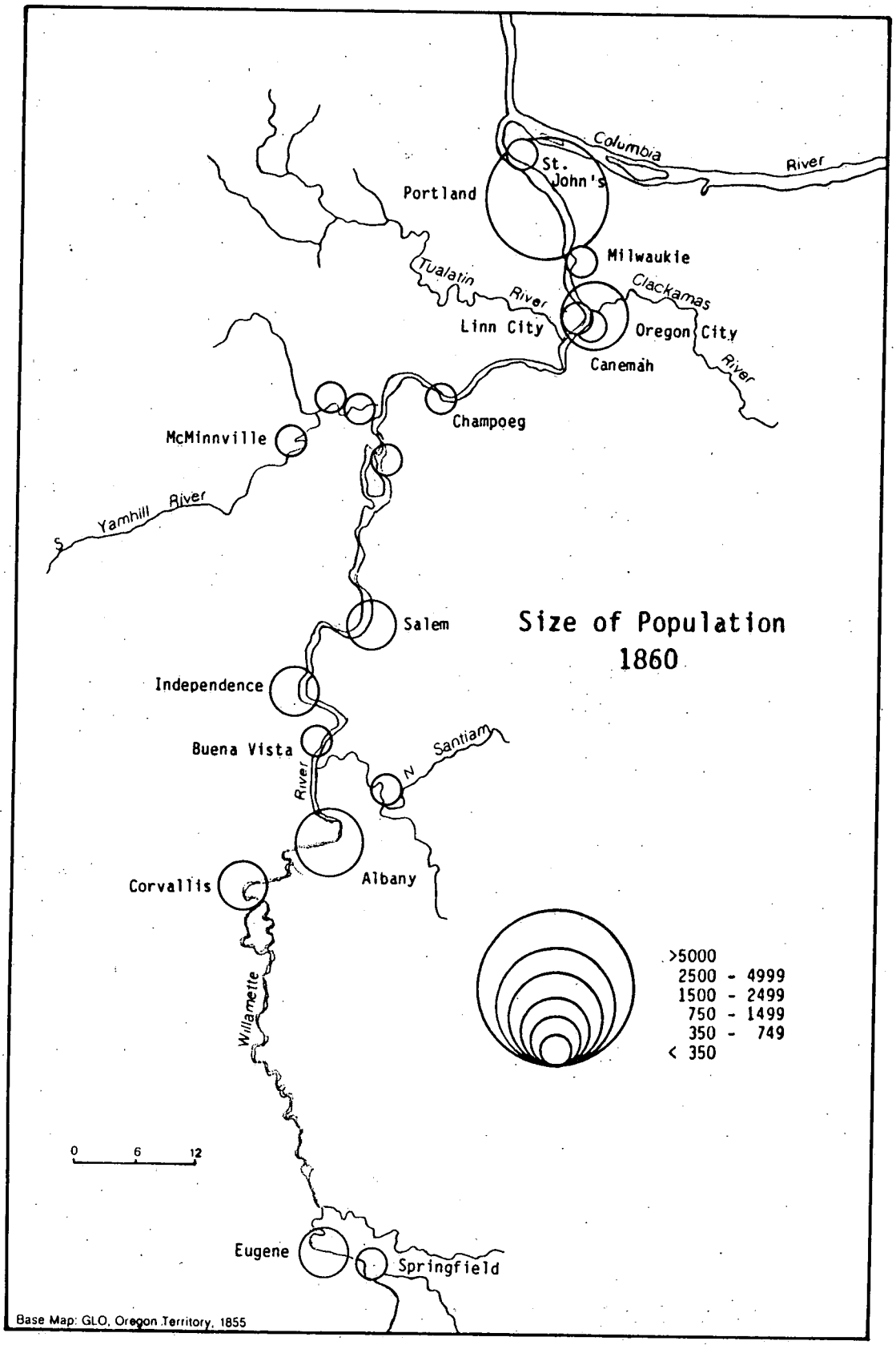

Figure 45. Size of Population - 1860 from Estimates by Holtgrieve, Historical Georgraphy, Appendix A.

1,000. Several factors could account for the rapid rise of Albany. Halbakken names Linn County as a main wheat producer. Both fall sown varieties and spring sown varieties were planted, and harvested in July and August.[128] Albany would have been a main shipping point for much of this wheat, particularly for those points to the south when Albany was accesssible to steamboats and points farther upriver were not. This wheat shipment may explain why boats stopped at Albany four days of the week.

Traveler's accounts for the 1860s were not readily available, so after the flood of 1861 not much is known about the towns until 1867 when the Pacific Coast Directory appeared. From this directory I made Table 6, showing the number and type of function by city in 1867. Towns were arranged by population size in 1870 (see Figure 46), the closest date for which population estimates are available. Portland continued to increase faster than other Willamette Valley towns and Albany remained the second largest place. The Willamette Valley and Cascade Mountain Wagon Road, built in 1864, was declared to have "contributed to the material prosperity of Albany by drawing a trade to it that it would have otherwise been unable to obtain."[129] In the 1880s, West Shore magazine described Albany as a town which had always had active town promoters.[130] Salem, McMinnville, Corvallis, and Eugene all increased enough to move into the next size category.

In comparing the total number of functions, listed at the bottom of each column, the city which has the second highest number of functions is not Albany, the second largest, but Salem, the capital city.

Table 6. Number and Type of Function by City in 1867

(A)	8293 Portland	1722 Albany	1382 Oregon City	1139 Salem	900 Corvallis	861 Eugene	500 McMinnville	500 Independence	300 Harrisburg	300 Lafayette	300 Canemah	217 Milwaukie	200 Linn City	200 Dayton	180 Butteville	200 Jefferson	120 Buena Vista	75 Fairfield	25 Champag	150 Springfield	Eola	Peoria	Lancaster
Blacksmiths	5	4	1	6	5	6	1	2	2	2						1	1					4	2
Carpenters	2	10	2	1		2			5	4						2						3	2
Carriage & Wgn. Mks.	3	4	1	2	3	4	2		4			1				1	1				1		1
Merchants - Gen.	27	14	9	10	8	12	4	2	3	5		1				3	3	2	1		1		3
Physicians	8	5	3	7	5	6			3	3		1					2				1	3	1
Apothecaries	3	1	2	3	2	2	1		1								1		1			1	
Drugs & Medicines	4	1	2	4	2	2	1		1								1		1			1	
Harness & Saddling	5	2	1	2	2	2	2		2					1							1	1	
Potteries																	1				1	1	
Stationary	8	1	1	1	1	1													1			1	
Stoves & Tinware	5	2	1	2	1	2			1													1	
Agrical. Imp.	5	2	1	1	1	1															1		
Attorneys	24	4	3	10	6	4			2	3		1							1		3		
Blacksmiths & Wgn. Mks.				1																	1		
Bootmakers	10	1	3	2	2	2	1					1					1				1		
Contractors	3						1														1		
Coopers	3	1		2	2				1												1		
Furniture	7	3	1	5	1				1			1									1		

Table 6.--(Continued)

(B)	8293 Portland	1722 Albany	1382 Oregon City	1139 Salem	900 Corvallis	861 Eugene	500 McMinnville	500 Independence	300 Harrisburg	300 Lafayette	300 Canemah	217 Milwaukie	200 Linn City	200 Dayton	180 Butteville	200 Jefferson	120 Buena Vista	75 Fairfield	25 Champaeg	150 Springfield	Eola	Peoria	Lancaster
Hotels	14	1	2	3	1	1		1	2	1		1											
Groc. & Prod.	31	8	4	11	2														1				
Lumber	5		1	2	2	1					1												
Mills - Flour	1	2	1		1	1	1					1				1	1		2				
News & Newspaper Agent	2	1	1																1				
Saw Mills	2	2	1	2	2	1																	
Clergymen	7	7	2	2	4					2		2		1			1						
Academies	1			1						1		1											
Foundries	4	1	1	1								1											
Orchardists												2											
Dentist	6	2	1	2	1					1													
Liquors, Retail	17	2	4	4	3	2		1	2	1													
Cattle Brokers								1															
Produce	2							1															
Colleges	1			1	1		1																
Jewelers	4	1	1	1	2	1	1																
Painters - House	5	2	2	3	1	2	1																
Photographers	4	1		2	1	1	1		2														
Undertakers	1	1					1																
Watchmakers	2	1	1		2	1	1																
Stables, Livery	4	2	2	3	2	2			1														

Table 6.--(Continued)

(C)	8293 Portland	1722 Albany	1382 Oregon City	1139 Salem	900 Corvallis	861 Eugene	500 McMinnville	500 Independence	300 Harrisburg	300 Lafayette	300 Canemah	217 Milwaukie	200 Linn City	200 Dayton	180 Butteville	200 Jefferson	120 Buena Vista	75 Fairfield	25 Champaeg	150 Springfield	Eola	Peoria	Lancaster
Butchers	9	2	2	1	2	1			2														
Gunsmiths	4	2	1	1	1				1														
Hairdressers	5				1				1														
Clothing - Rtl.	13	6	4		3	5																	
Crockery - Glassware	4			1		1																	
Dry Goods - Retail	11	5	3	2	5	5																	
Ferries		2				2																	
Furnishing Goods - General	3				1	1																	
Hardware	6	4	2	2	3	3																	
Hides & Wool				1		1																	
Insurance Agts.	7	2	1	3	2	2																	
Iron & Steel	5	2	1	1	2	1																	
Leather Dealers	3			1	1	2																	
Notaries	3			3	1	1																	
Paints, Oils, Gloss	4	2		1	2	1																	
Saddletree Mkrs.					1	1																	
Stationery	8	1	1	1	1	1																	
Tailors, Mrchts.	15			3	1	1																	

Table 6.--(Continued)

(D)	8293 Portland	1722 Albany	1382 Oregon City	1139 Salem	900 Corvallis	861 Eugene	500 McMinnville	500 Independence	300 Harrisburg	300 Lafayette	300 Canemah	217 Milwaukie	200 Linn City	200 Dayton	180 Butteville	200 Jefferson	120 Buena Vista	75 Fairfield	25 Champag	150 Springfield	Eola	Peoria	Lancaster
Varieties	1				1	1																	
Washing Mach.	1	1				1																	
Woolen Goods	2					1																	
Cigars	5				1																		
Bakers	5	1	2	1	1																		
Medicines - Pat.				1	1																		
Mills - Planing	1	2		1	1																		
Painters - Coach	1			1	1																		
Pumps - Force & Lift	3	1			1																		
Stage Lines	2			2	1																		
Auctioneers	2			1																			
Book Sellers	4	1	1	2																			
Boot Dealers	4		1	1																			
Boots & Shoes - Whsl.	4			1																			
Carriage Trim.	1			1																			
Claim Agts.	1			1																			
Expresses	1			1																			
General Agts.	2			1																			
Machinists	4	1	1	1																			
Marble Yards	2	1		1																			

Table 6.--(Continued)

(E)	8293 Portland	1722 Albany	1382 Oregon City	1139 Salem	900 Corvallis	861 Eugene	500 McMinnville	500 Independence	300 Harrisburg	300 Lafayette	300 Canemah	217 Milwaukie	200 Linn City	200 Dayton	180 Butteville	200 Jefferson	120 Buena Vista	75 Fairfield	25 Champaeg	150 Springfield	Eola	Peoria	Lancaster
Merchants - Comm.	8	4		2																			
Merchants - For.	4	3		2																			
Money Brokers	4			1																			
Music Dealers	5	1		1																			
Packets	2			1																			
Publishers	1			2																			
Railroads				1																			
Real Estate	3			1																			
Restaurants	1			1																			
Sewing Machines	4			1																			
Turners - wd - Ivory	2	1		1																			
Veterinary Surg.				1																			
Mills - Woolen			1	1																			
Storage		1		2																			
Bag Makers	1		1																				
News & Newspaper Agts.	2	1	1																				
Surveyors	1		1																				
Engravings	3	1																					
Looking Glass & Picture Frame	2	1																					

Table 6.--(Continued)

(F)	8293 Portland	1722 Albany	1382 Oregon City	1139 Salem	900 Corvallis	861 Eugene	500 McMinnville	500 Independence	300 Harrisburg	300 Lafayette	300 Canemah	217 Milwaukie	200 Linn City	200 Dayton	180 Butteville	200 Jefferson	120 Buena Vista	75 Fairfield	25 Champaeg	150 Springfield	Eola	Peoria	Lancaster
Plumbers	4	1																					
Architects	2																						
Assayers	2																						
Bankers	2																						
Banks	2																						
Boat builders	1																						
Book Binders	1																						
Brick Makers	1																						
Broom Makers	1																						
Carpets	4																						
Carriage & Wgn. Stk.	1																						
Cigars - Whsl.	4																						
Civil Eng.	2																						
Clothing - Whsl.	6																						
Coffee & Spice Mills	2																						
Collecting Agts.	2																						
Confectioneers	2																						
Coppersmiths	1																						
Dental Goods	1																						
Drayman	2																						

Table 6.--(Continued)

(G)	8293 Portland	1722 Albany	1382 Oregon City	1139 Salem	900 Corvallis	861 Eugene	500 McMinnville	500 Independence	300 Harrisburg	300 Lafayette	300 Canemah	217 Milwaukie	200 Linn City	200 Dayton	180 Butteville	200 Jefferson	120 Buena Vista	75 Fairfield	25 Champaeg	150 Springfield	Eola	Peoria	Lancaster
Dressmakers	1																						
Dry Good - Whsl.	6																						
Feed	3																						
Flour Dealers	3																						
Fruits	2																						
Fur Dealers	1																						
Gas Filters	1																						
Gas Works	1																						
Gold & Dust Dealers	4																						
Groceries - Whsl.	4																						
Gunpowder	1																						
Hat & Cap Manuf.	1																						
Hats & Caps	2																						
Hatters Stock	1																						
Hose & Belting	3																						
Lamps	1																						
Lime & Cement	1																						
Liquors - Whsl.	5																						
Locksmiths	1																						
Match Manuf.	1																						
Math Instru. Mks.	1																						

Table 6.--(Continued)

(H)	8293 Portland	1722 Albany	1382 Oregon City	1139 Salem	900 Corvallis	861 Eugene	500 McMinnville	500 Independence	300 Harrisburg	300 Lafayette	300 Canemah	217 Milwaukie	200 Linn City	200 Dayton	180 Butteville	200 Jefferson	120 Buena Vista	75 Fairfield	25 Champag	150 Springfield	Eola	Peoria	Lancaster
Medical Inst.	1																						
Milliners	4																						
Millinary Goods	5																						
Musical Instru.	4																						
Native Wine	1																						
Notions	5																						
Opticians	1																						
Paper Hanging	3																						
Paper Dealers	2																						
Photographic S & K	1																						
Physicians - Female	1																						
Plumbers Stock	2																						
Provisions	6																						
Provisions - Repackers of	1																						
Salt Dealers	2																						
Searchers Records	1																						
Soap Manuf.	1																						
Soda Water Manuf.	1																						
Stair Builders	1																						

Table 6.--(Continued)

(I)	8293 Portland	1722 Albany	1382 Oregon City	1139 Salem	900 Corvallis	861 Eugene	500 McMinnville	500 Independence	300 Harrisburg	300 Lafayette	300 Canemah	217 Milwaukie	200 Linn City	200 Dayton	180 Butteville	200 Jefferson	120 Buena Vista	75 Fairfield	25 Champag	150 Springfield	Eola	Peoria	Lancaster
Steamships & Steamboats	5																						
Surgical & Dental Instruments	1																						
Teachers - Music	2																						
Turpentine Manuf.	1																						
Upholsterers	3																						
Upholstery Goods	2																						
Water Works	1																						
Totals:	252	147	82	166	110	91	37	20	8	25	1	17	0	2	0	8	3	2	10	0	17	17	9

SOURCE: Pacific Coast Directory, 1867 - Henry Langley

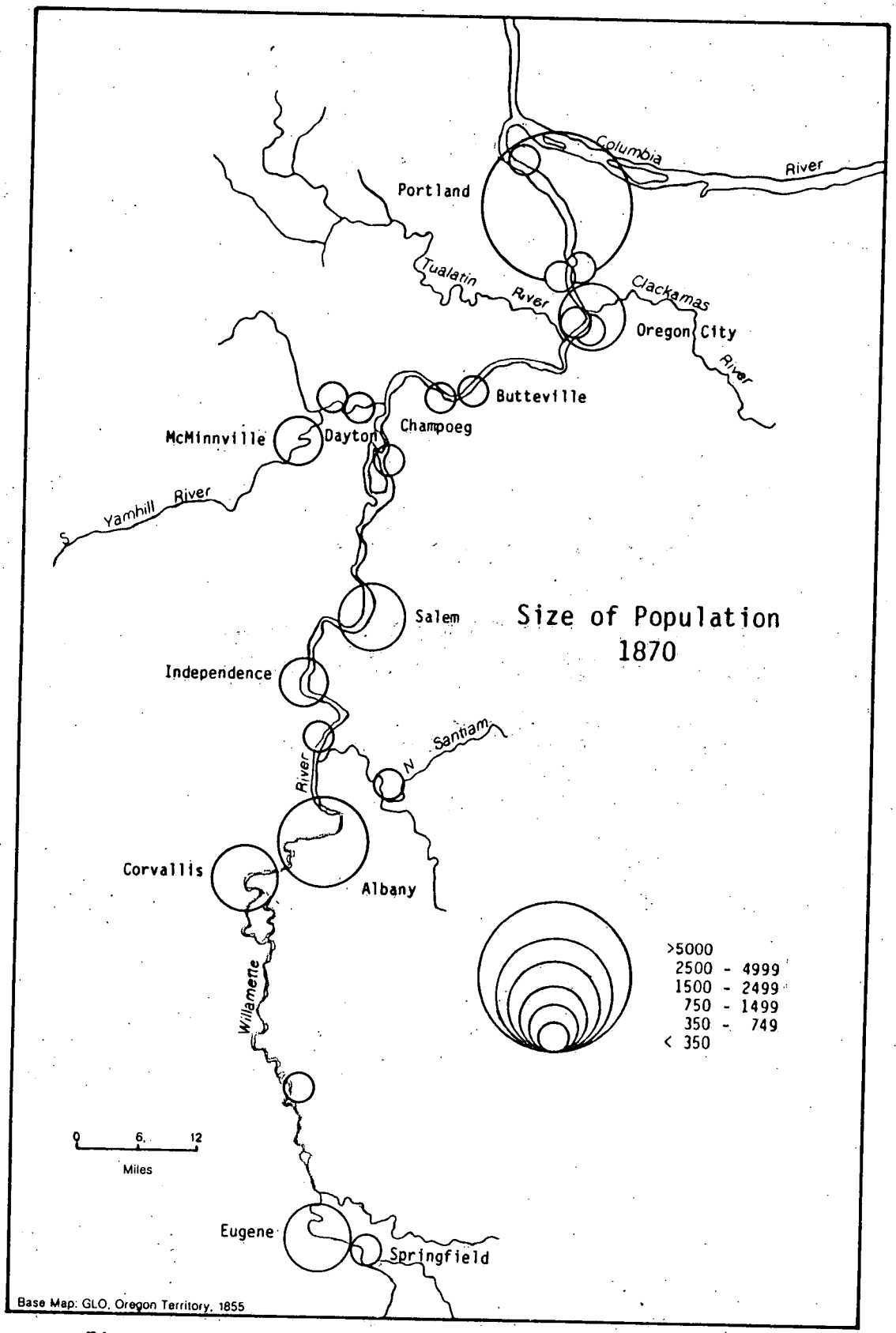

Figure 46. Size of Population - 1870 from Estimates by Holtgrieve, Historical Geography, Appendix A.

Besides having a higher number of functions, Salem had a greater diversity of functions than Albany. As a capital city, which Salem was finally permanently designated in 1864,[131] it had more of those functions which resulted from: (a) the need to provide transportation and accomodations for travelers, e.g., hotels and stages; (b) the need to entertain, e.g., liquor stores; (c) to transact legal business, e.g., attorneys and notaries, and (d) the presence of more money, e.g., tailors and shoe shops. The functional diversity is shown best in that portion of the chart devoted to functions found in the four top cities. The presence of the office of the railroad two years before one was constructed in Oregon suggests the presence of a lobbyist.

Oregon City continued to decline in relative importance. Although its population was still greater than Eugene's, Oregon City had fewer functions. Its decline may be associated with proximity to Portland. Canemah and Linn City also had relatively few functions for their size reflecting their also becoming increasingly in the shadow of Portland, just as earlier they may have suffered from being too close to Oregon City.

The low number of functions reported for Independence and Springfield may reflect their proximity to Monmouth and Eugene. The low number of functions reported for Dayton and Butteville may reflect a lack of rebuilding after the flood of 1861. Champoeg is known to have rebuilt on higher ground and is here listed as having ten functions. Given the mismatch between number of functions and population for the other cities, it would be difficult to guess what the population of Eola, Peoria, and Lancaster would have been. Eola was close to Salem

so may have had fewer functions, and Lancaster may have already begun to lose population as the river channel changed, and continued to lose when the railroad was built.

Towns left off the railroad declined as businesses moved to places with railroad connections. For example, Sternberg and Sanders, a general merchandise store, moved from Lancaster to Junction City.[132] Peoria businesses moved to Halsey and Shedd.[133]

Towns on the railroad increased their accessibility as the railroad decreased the distances between places because it was faster and permitted the establishment of new connections. As can be seen on the map showing railroad lines completed by 1876 (Figure 33 in Chapter II), Portland was connected, at least by ferry, to both west and east side lines. Of the next five largest towns in 1870--Albany, Oregon City, Salem, Corvallis, and Eugene--only Corvallis was not on a rail line. The growth of Albany and Eugene in particular, in succeeding decades can probably be attributed to railroad connections. Corvallis was not connected until 1880.

Jefferson was on the line, but proximity to Albany may have negated this advantage. Just as a town can have an advantage if, as the head of navigation it is the farthest point reached, towns which for a time are railheads and which provide a special reason to stop may derive an advantage from a railroad connection. Albany was the railroad mealstop and may have drawn larger numbers of those needing to ship freight because there were more services provided there.

Harrisburg was close but apparently not actually on the line at first. An article in the Oregonian, describing Linn County towns in

1873, noted Harrisburg had access to shipping by water in winter and spring.[134]

According to Holtgrieve, most railroad companies followed the policy of connecting major cities, giving smaller ones the option of contributing to the railroad by cash or land donations, or of being left off the route.[135] Perhaps this is the reason the railroad platted St. Joseph rather than connecting with Lafayette on the Yamhill.

As was shown in the transportation section, daily express trains ran to Albany and daily freight trains as far as Junction City in the mid-1870s. While Albany may have gained accessibility by acquiring the railroad, the area from which it drew wheat for shipment was probably diminished. In 1873, Shedd was said to have a favorable position for shipping and storing wheat, while Halsey was described as being "in the heart of the prairie."[136] Fortunately for Albany, the area known as Albany prairie usually had higher yields of wheat.[137]

An 1874 article about Yamhill County towns stated that St. Joseph got the lion's share of the freight, which had formerly gone by river at Lafayette, due to the "convenience and dispatch of the west side railroad."[138] But, merchants at Lafayette and McMinnville still got the business trade.[139]

In 1879, McMinnville and Lafayette were said to have made "little progress in ten years."[140] At the same time the narrow gauge had reportedly done much to improve Dayton. While the trade generated by farmers who had hauled their wheat to town had been lost, the coming of the railroad had offset that.[141] Dayton and Lafayette had each moved into a larger size category by 1880 (see Figure 47). In the case of Lafayette,

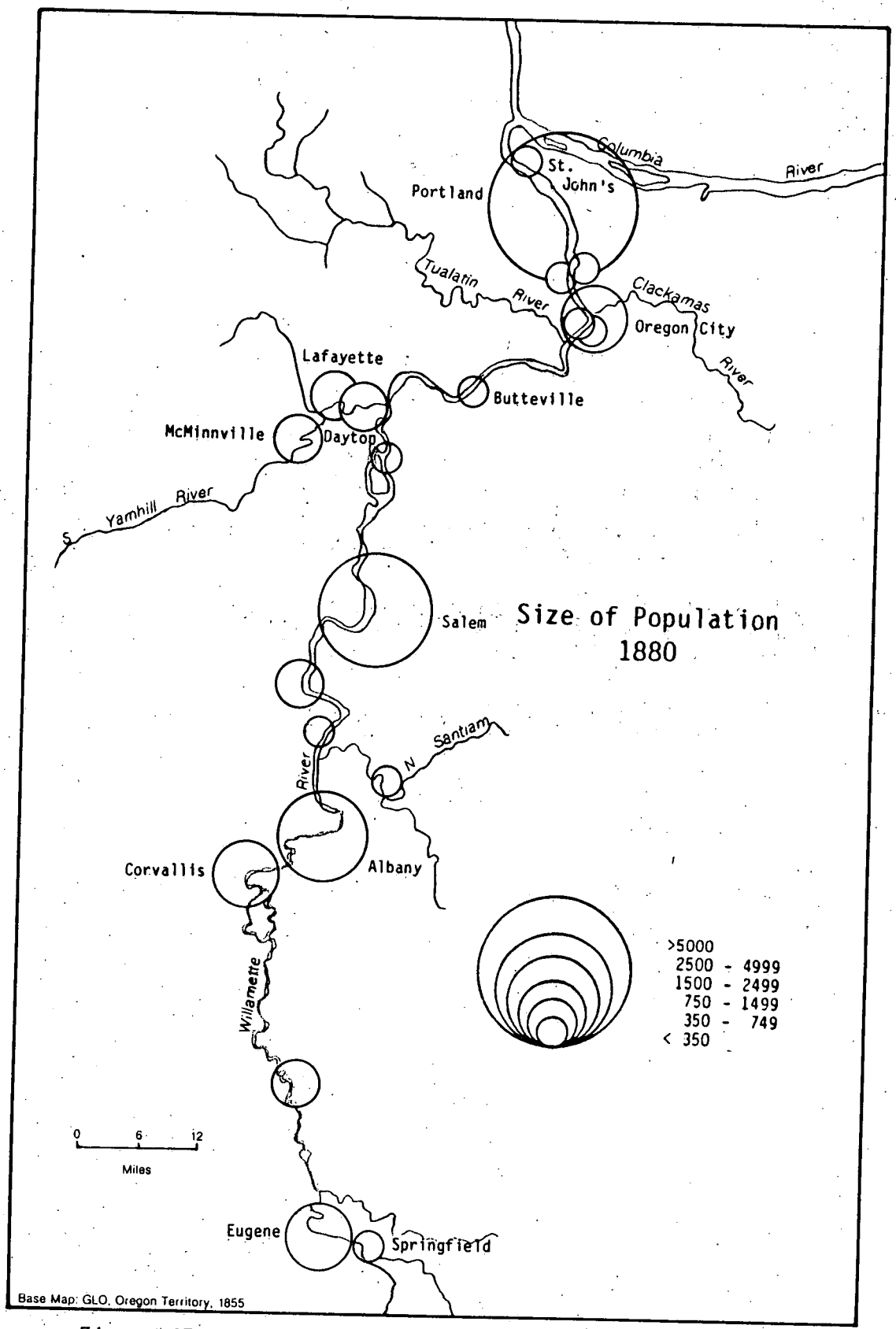

Figure 47. Size of Population - 1880 from Estimates by Holtgrieve, Historical Georgraphy, Appendix A.

the increase from 300 to 396 was enough to move it into the next category. Dayton's population changed from 200 to 368, and McMinnvilles's from 500 to 670. St. Joseph was dismantled by 1879 when it was no longer the railhead,[142] so some of these places could have absorbed the population of St. Joseph.

The most significant change on the 1880 map, is the emergence of Salem as the second largest town in Oregon. The actual increase was from 1,139 to 2,538. The Capitol was permanently located at Salem in 1864. A major factor of growth during the seventies was the locating of several state institutions there. The state constitution provided that all public buildings of the state be located in Salem. Besides the then new state capitol, built in 1874, Salem had the state penitentiary, located there in 1864, with construction of permanent buildings begun in 1870. An appropriation to start the school for the blind was passed in 1872, and the first of many appropriations passed to establish the school for the deaf was made in 1870.[143] All these new state functions would have generated new jobs and attracted population. The state asylum was granted to Salem in 1880, the actual move from East Portland taking place in 1883.[144]

As shown on the map of railroad lines built by 1884 (see Figure 35 in Chapter II), the railroad net had increased considerably by that time. Albany, Corvallis, and Eugene moved into larger population size categories by 1890, as did McMinnville and several towns in close proximity to Portland (see Figure 48).

McMinnville was described as "a dull place before the coming of the railroad."[145] Using Holtgrieve's estimates, its population doubled

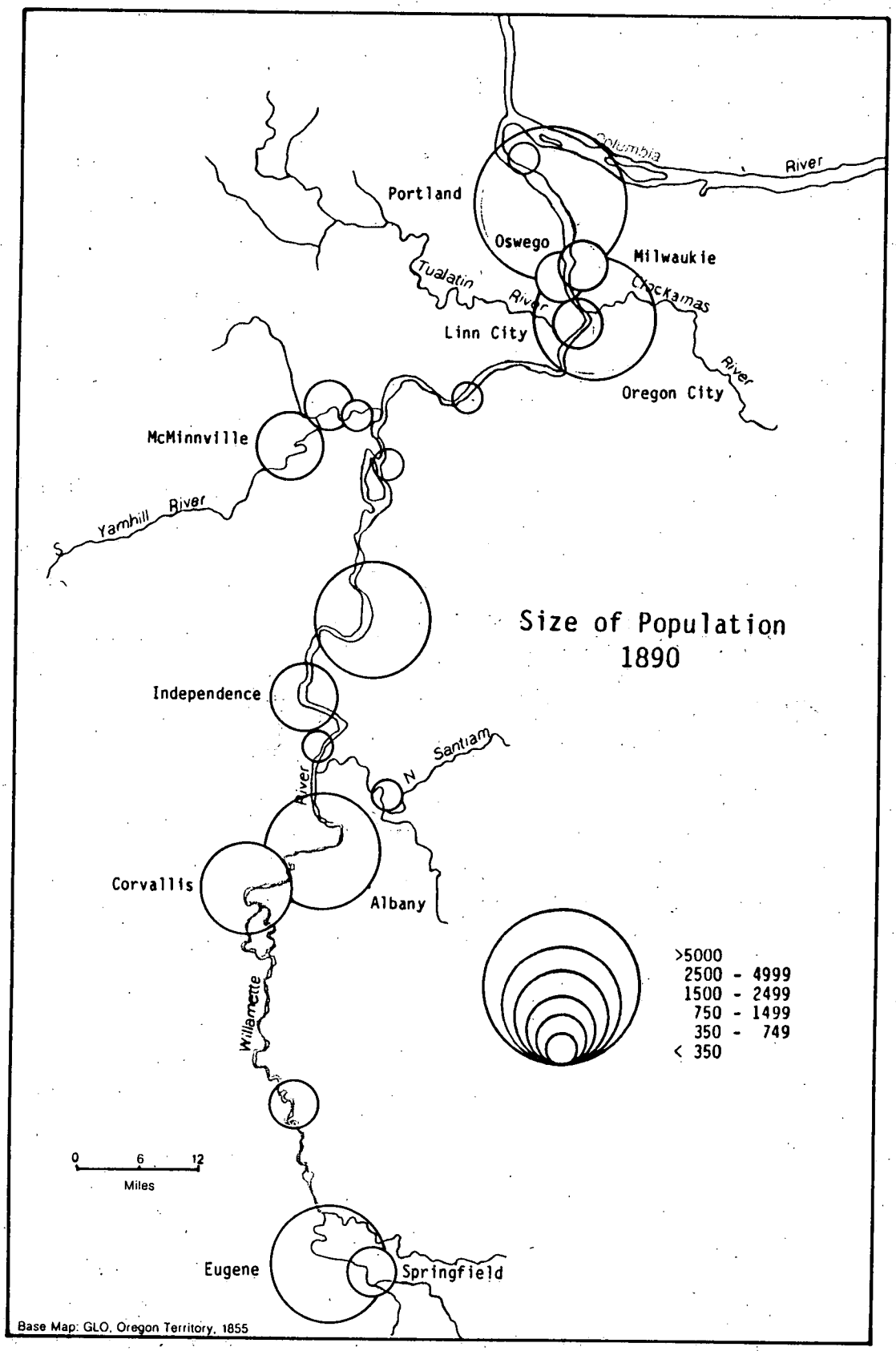

Figure 48. Size of Population - 1890 from Estimates by Holtgrieve, Historical Geography, Appendix A.

between 1880 and 1890, from 670 to 1,368. Also in 1888, it became the county seat of Yamhill County, replacing Lafayette.[146] Independence was said to handle one-third the grain in Polk County in 1883, but it grew by only 10 during the decade.[147]

While investment by the state had been considerable during the 1870s, Salem business was said to have increased only a slight degree prior to 1882, having "been under a cloud the last eight or ten years." A new mill and warehouse proposed in that year were regarded as a sign of change.[148] However, Salem's population only grew by about 800 between 1880 and 1890 so new investment was probably not considerable.

Although wheat rust affected the crop in Linn County about 1881, and Albany business was said to be "overdone" and times "slow" and "hard",[149] by the end of the decade the population had increased by 1,200. With both river and rail connections by 1888, Albany was said to be in "a better position to demand cheap rates from the transportation companies that touch the city than is any other town in the valley."[150]

Eugene's population increased by 1,700. Here the coming of the railroad made a significant difference in the ability to ship freight in response to market demands. Steamboats ceased running as far upriver as Eugene after the railroads came because by the time the water had risen far enough for boats to reach it, the grain had already been harvested and shipped.[151] Trains brought new settlers. A connection by rail to Florence was contemplated, and the connection to the Oregon Railway and Navigation Company's east side line expected,[152] although it later went through Springfield, as seen on the 1897 map showing railroads constructed by that date (see Figure 49).

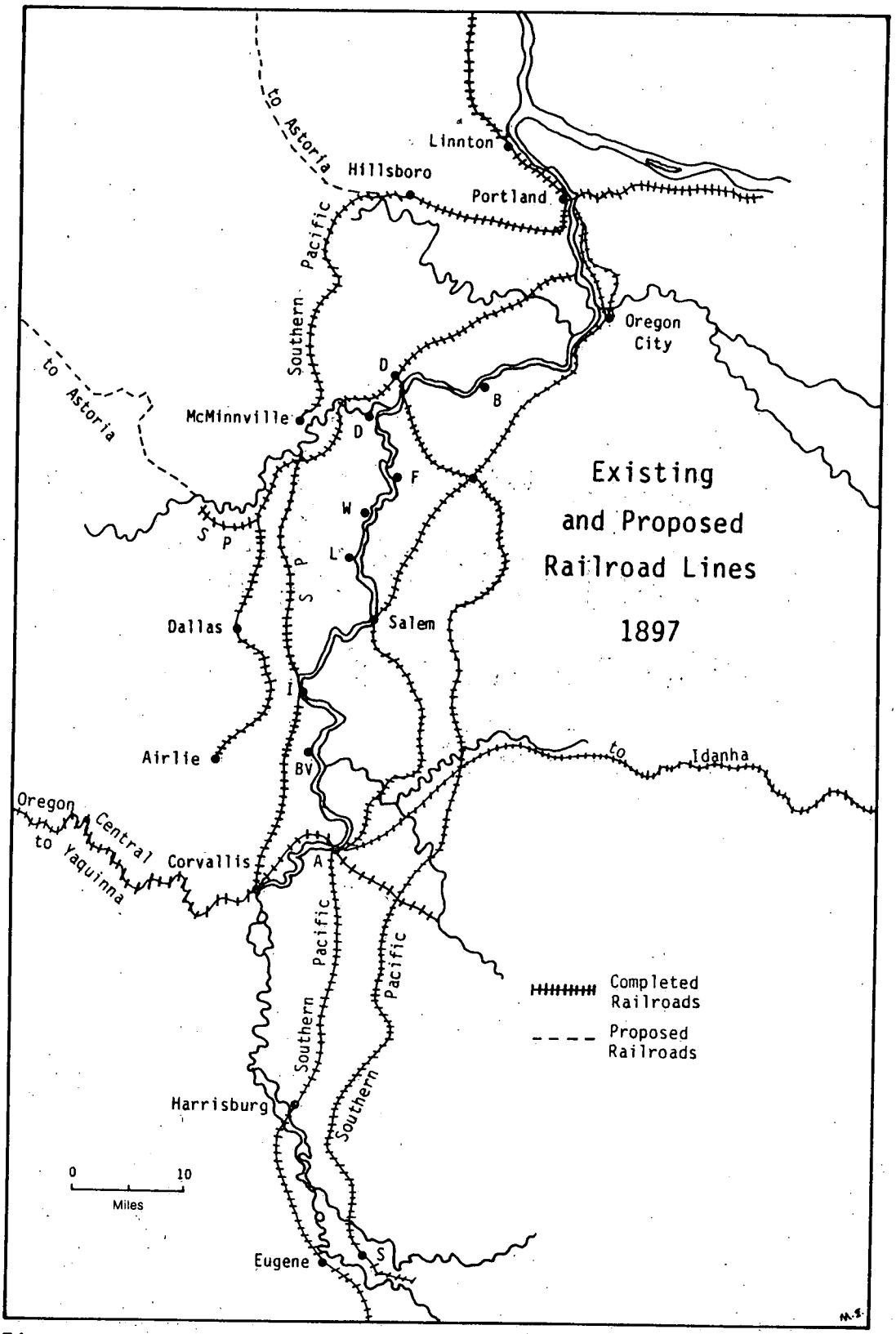

Figure 49. Existing and Proposed Railroad Lines - 1897, U.S. Dept. of Interior, G.L.O. map of Oregon.

Towns in close proximity to Portland were becoming tied in as suburbs with increasing counnections via daily steamboat lines and electric interurbans, as described in Chapter II. Articles on Oregon City increasingly stressed the possibilities for manufacturing there,[153] pointing out that water powered mills polluted the air less than steam powered mills, rather than the possibility of Oregon City becoming the most important city in Oregon, as was true in the 1840s. As part of this promotion as a manufacturing point, Oregon City in 1888 was once again intent on improving the Clackamas Rapids for better access to Oregon City by boats of deep draft.[154] For recreation, roads suitable as "boulevards for the resort of the Portland driving public" were to be completed between Portland and Oregon City.[155]

Portland was connected to a transcontinental line in 1883. Between 1880 and 1890 the population increased from 17,577 to 46,385, and by 1900 was 90,426, far greater than the next largest Willamette Valley town (see Figure 50). As can be seen on Figure 49, by 1897 Corvallis and Albany had made connections to Yaquina Bay and Idanha. However, Yaquina Bay was not a good harbor and the extension from Idanha further east was never built so neither connection brought the added business that each town sought.

In conclusion, a variety of factors affected the success or failure of particular river towns. Besides an acceptable boat landing, an important site factor was susceptibility to flooding. Entire towns or the business portion of some towns were lost, in the case of towns at the Falls and Dayton, several times, from flood or high water. The advantage of water power ensured a willingness to rebuild which was not

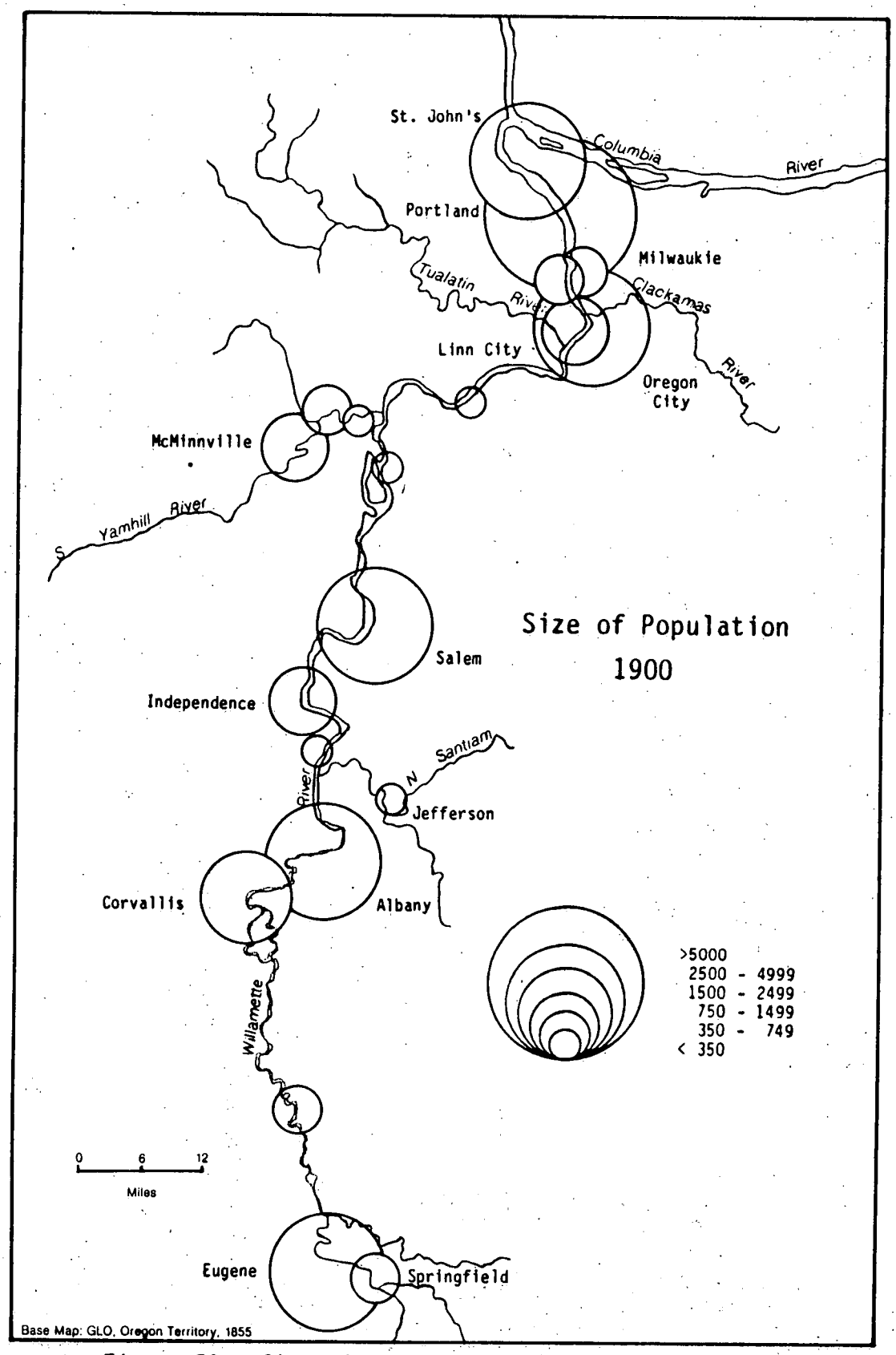

Figure 50. Size of Population - 1900 from Estimates by Holtgrieve, Historical Geography, Appendix A.

as apparent at other town sites. Dayton's year-round accessibility to steamboats probably encouraged rebuilding there. As was seen, rebuilding sometimes entailed rearrangement of use of the site. Those parts of town easily flooded were less likely to be used again.

Ease of movement between places and connections to other places were an important factor. Several towns sought connections to the Tualatin Plains, but Portland's access to ocean shipping caused farmers to switch from Linn and Oregon Cities to Portland.

Parts of the Willamette Valley were cut off for portions of the year from the steamboat transportation network. Places like Eugene, in that situation, grew slowly until the railroad arrived. Albany benefited the most from its steamboat connection because it was probably accessible to steamboats when freight was ready to be shipped, and would draw those who would have otherwise gone to Salem as soon as the boats could reach that point. Albany may have benefited also from fewer squabbles over land titles. Salem experienced a growth spurt during the decade it acquired several state institutions.

Towns left off the railroad network entirely like Peoria suffered the indignity of the loss of businesses when they packed up and moved to railroad towns.

The town promoter, as a decision maker, was also a major factor. His willingness to invest in the site and convince others to do the same could result in a town surpassing its neighbor.

No fixed formula for town growth is proposed here. The combination and degree of importance of these factors was different for almost every town. The same factors could be tested elsewhere but the resulting story would be unique to that place.

Notes

[1] Carl O. Sauer, The Geography of the Ozark Highland of Missouri, Geographic Society of Chicago, Bulletin No. 7, (Chicago: University of Chicago Press, 1920), p. 111.

[2] Roberta Balstad Miller, City and Hinterland Contributions in American History, No. 77, (Westport Conn: Greenwood Press 1979), p. 156.

[3] Arthur Throckmarton, "Moguls of the Middle Columbia" in Panorama of a Century, The Oregonian, 11 February 1959, p. 39C.

[4] Oregon Spectator, 3 February 1852, p. 2.

[5] Ibid.

[6] Richard C. Wade, The Urban Frontier, (Chicago: University of Chicago Press 1959) p. 33.

[7] John A. Hussey, Champoeg: Place of Transition (Portland Oregon: Oregon Historical Society, 1967), p. 200.

[8] Howard McKinley Corning, Willamette Landings (Portland: Oregon Historical Society, 1973), p. 84.

[9] U.S. Dept. of Interior, Bureau of Land Management, G.L.O. Survey Map, Township 5 South, Range 3 West, December 1852, Portland, Oregon.

[10] U.S. Dept. of Interior, Bureau of Land Management, G.L.O. Survey Map, Township 4 South, Range 3 West, Section 22 and 27, December 1852, Portland, Oregon.

[11] U.S. Dept. of Interior, Bureau of Land Management, G.L.O. Survey Map, Township 5 South, Range 3 West. December 1852 (Wheatland); Township 6 South, Range 3 West, March 1852 (Lincoln); Township 9 South, Range 4 West, November 1852 (Buena Vista).

[12] U.S. Dept. of Interior, Bureau of Land Management, G.L.O. Survey Map, Township 11 South, Range 5 West, August 1852.

[13] U.s. Dept. of Interior, Bureau of Land Management, G.L.O. Survey Map, Township 12 South, Range 5 West, May 1853.

[14] Corning, Willamette Landings, p. 150-151.

[15] U.S. Dept. of Interior, Bureau of Land Management, G.L.O. Survey Map, Township 15 South, Range 4 West, June 1853, Portland, Oregon.

[16] Oregon Spectator, 17 December 1853, p. 2:1.

[17] Personal Communication, Margaret West Archivist, Lane County Historical Museum, Eugene, Oregon.

[18] U.S. Dept. of Interior, Bureau of Land Management, G.L.O. Survey Map, Township 17 South, Range 3 West, October 1853.

[19] Israel J. Benjamin, Three Years in America 1859-1862 Vol. II, Book III Translated by Charles Reznikoff. (Philadelphia: The Jewish Publication Society of America 1956), p. 161.

[20] Plat of Dixons 1st Addition to Corvallis, Surveyors Office, Benton County.

[21] The Canoe and the Saddle To Which Are Added His Western Letters and Journals, ed. John H. Williams (Tacoma: John H. Williams, 1913), p. 255.

[22] Plat of Linn City, Clackamas County Surveyors Office.

[23] Plat of Albany, Linn County Surveyors Office; U.S., Dept of the Interior, Bureau of Land Management, G.L.O. Survey Map, Township 11 South, Range 3 West.

[24] J. Neury Brown, compiler Salem Directory for 1871, (Salem, Oregon: Snyder and Cook 1871), p. 29.

[25] Oregon Spectator, 13 Dec 1849, p. 2:2.

[26] "Town Lots," Oregon Spectator, 5 February 1846, p. 3:4.

[27] Corning, Willamette Landings, p. 140.

[28] Clark G. Hilden, "An Historical Geography of Small Town Main Streets in the Willamette Valley, Oregon" (Ph.D.dissertation, Dept. of Geography, University of Oregon 1980), p. 11.

[29] Neil M. Howison Ltd. "Report of Lieutenant Neil M. Howison on Oregon, 1846" Portland, Oregon: Oregon Historical Quarterly 14 (1913) Reprinted from U.S. COngress, House of Representatives, 30th Congress, 1st Session, Misc. Doc. No. 29, p. 42.

[30] Ibid.

[31] Sydney Moss, "Picture of Pioneer Times at Oregon City," Narrative and Remarks presented at Oregon City, Oregon, 18 June 1878. Used with permission of the Bancroft Library, University of California, Berkeley, p. 45-46.

[32] Howison, "Report on Oregon 1846", p. 42

[33] Oregon Spectator, 12 September 1850, p. 3.

[34] Sydney Moss, "Picture of Pioneer Times at Oregon City." Used with permission of the Bancroft Library, University of California, Berkeley, p. 5.

[35] Corning, Willamette Landings, p. 112-113.

[36] Oregonian, 17 May 1851, p. 3.

[37] David S. Halbakken, "A History of Wheat Growing in Oregon During the Nineteenth Century," p. 42, 34.

[38] "Navigation of the Willamette", Oregon Spectator, 27 December 1849, p. 2.

[39] Oregon Spectator, 11 July 1850, p. 2.

[40] Oregon Spectator, 24 October 1850, p. 1.

[41] Oregon Spectator, 17 December 1853, p. 2.

[42] Ibid.

[43] Floyd C. Mullen, The Land of Linn: An Historical Account of Linn County, Oregon. (Lebanon, Oregon: Dalton's Print. 1971, p. 34.

[44] Ibid.

[45] Corning, Willamette Landings, p. 50

[46] Oregon Spectator, 1 November 1849, p. 2.

[47] Oregon Journal, 14 October 1958, Vertical File - Cities - Oregon City, Oregon Historical Society, Portland, Oregon.

[48] M. D. Brands, "Flood Runoff in the Willamette River, Oregon." U.S., Dept. of the Interior, U.S. Geological Survey, Water Supply Paper 968-A, p. 1.

[49] Ibid., p. 12.

[50] Oregon Spectator, 27 December 1849, p. 2.

[51] "The Late Freshet", Ibid., 10 January 1850, p. 2.

[52] Oregonian, 8 January 1853, p. 2.

[53] Ibid., 15 January 1853, p. 2.

[54] Ibid.

[55] Oregon Argus, 14 December 1861, p 2:3; Weekly Oregonian, 14 December 1861, p. 1:5.

[56] Weekly Oregonian, 14 December 1861, p. 1:5.

[57] Ibid.

[58] Ibid.

[59] Ibid., 7 December 1861, p. 3:3.

[60] Oregon Argus, 14 December 1861, p. 1.

[61] Weekly Oregonian, 14 December 1861, p. 1:5.

[62] Ibid.

[63] Daily Oregonian, 5 December 1861, p. 3:1.

[64] Weekly Oregonian, 21 December 1861, p. 1:3.

[65] Ibid.

[66] Weekly Oregonian, 14 December 1861, p. 1:5.

[67] Daily Oregonian, 5 December 1861, p. 3:1.

[68] Oregon Argus, 14 December 1861, p. 2:4,5.

[69] Ibid., p. 2:5.

[70] Ibid., 28 December 1861, p. 2:3.

[71] Clark G. Hilden, "An Historical Geography of Small Town Main Streets in the Willamette Valley, Oregon," p. 30.

[72] Oregon Argus, 14 December 1861, p. 2.

[73] Sydney Moss, "Picture of Pioneer Times at Oregon City," Used with permission of Bancroft Library, University of California, Berkeley, p. 48-49.

[74] Corning, Willamette Landings, p. 35.

[75] Sydney Moss, "Picture of Pioneer Times at Oregon City." Used with permission of the Bancroft Library, University of California, Berkeley, p. 49.

[76] Washington Star, 20 April 1854, as quoted in Oregonian, 10 June, 1854, p. 2:4.

[77] Oregon Territory, Memorial Asking Congress to Amend the Land Law of Oregon, Document #5559. Available at Oregon Historical Society, Portland, Oregon.

[78] Weekly Oregonian, 18 December 1852, p. 2.

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[80] Oregonian, 24 June 1854, p. 2; see also Oregonian, 3 June 1854, p. 2;3; and 10 June 1854, p. 2:2; 2 September 1854, p. 2:1.

[81] U.S. Congress, Debate about Donation Land Law, 22 June 1854, Congressional Globe, p. 1476.

[82] Act of May 23, 1844 "For the Relief of the Citizens of Towns Upon the Lands of the United States, Under Certain Circumstances," Public Statutes at Large. 5, 657 (1850).

[83] Portland, Oregon, City Council Minutes, 1854.

[84] Oregon Territory, Relative to Town Sites, Special Laws passed by Legislative Assembly at the 6th Regular Session began and held at Salem, 4 December 1854, p. 57-58. Printed: Corvallis, 1855.

[85] Portland, Oregon, City Council Minutes, 1858.

[86] Multnomah County Records, Manuscript 1275 B, Miscellaneous Records, Multnomah County Records Once Part of Washington County Records. Title Abstracts consisting of Land Book, Lot Book, Reference Book, Plat Book by James Thorne, Oregon Historical Society, Portland, Oregon.

[87] Testimony of A. L. Lovejoy, Photostatic copies of the first map of the town of Portland, Oregon, 1845, depositions of the original proprietors, deeds, transfers and agreements, of the owners of the Portland Land Claims. Deposited in the Oregon Collection. University of Oregon, Eugene [u.d.] Oregon Coll. 979.5491, p. 566. Questions and Answers numbered 381, 391, 392, 407, 410.

[88] U.S. Congress, Debate about Donation Land Law, Congressional Globe, vol 23, sec. 3, p. 1078 (1854).

[89] Oregon Argus, 14 December 1861, p. 2.

[90] Harlow Head, "The Oregon Donation Acts," (M.A. Thesis, University of Oregon, 1969), p. 96.

[91] J. Henry Brown, Compiler, Salem Directory for 1871, (Salem, Oregon: Snyder and Cook, 1871), p. 31.

[92] J. Quinn Thornton, "History of Title to Real Estate in Salem," following p. 108 in Salem Directory for 1874, (Salem, Oregon; E. M. Waite), p. 7.

[93] Edgar Williams and Company, Illustrated Historical Atlas of Marion and Linn Counties, Oregon, (San Francisco: Edgar WIlliams and Co. 1878, reprinted Salem, Oregon: Marion County Historical Society, 1975-1976), p. 26¼.

[94] Oregon Argus, 6 April 1861, as quoted in Corning, Willamette Landings, p. 42.

[95] Donald Holtgrieve, "Historical Geography of Transportation Routes and Town Development in Oregon's Willamette Valley," p. 14.

[96] William Bowen, Willamette Valley, p. 65.

[97] Reuben Gold Thwaites, Early Western Travels, vol. 30, pp. 159-160.

[98] Henry Warre as quoted in Joseph Schafer, "Documents Relative to Warre and Vavasour's, Journey through the Willamette Valley, 1844-1846," Oregon Historical Quarterly Vol. 10, March 1909, (Portland, Oregon: Oregon Historical Society), p. 76.

[99] Howison, "Report on Oregon 1846," p. 2.

[100] Ibid.

[101] Reuben Gold Thwaites, Early Western Travels, vol. 30, p. 163.

[102] Ibid.

[103] Ibid., p. 179, 180, 181.

[104] Howison, "Report on Oregon 1846," p. 40.

[105] Ibid., p. 39.

[106] Arthur Throckmorton, "The Frontier Merchant in the Early Development of Oregon," p. 71.

[107] William Bowen, The Willamette Valley, p. 61.

[108] Ezra Fisher, "Letter to Benjamin Hill," 30 January, 1852 in Oregon Historical Quarterly, vol 17; (Portland: Oregon Historical Society, 1916), pp. 449-450.

[109] Ezra Fisher, "Letter" 23 August, 1853, Oregon Historical Quarterly, vol 19, 1918, p. 246.

[110] U.S. Dept. of the Interior, Bureau of Land Management, Surveyors Notes, General Township Description, Township 4 South, Range 3 West, vol. R15, 20 July 1852, Portland, Oregon, p. 2 of 4.

[111] Western Star, 20 November 1850.

[112] U.S. Dept. of the Interior, Bureau of Land Management, Surveyors Notes, Township 5 South, Range 3 West, vol. R16, Portland, Oregon, p. 118.

[113] Ibid.

[114] U.S. Dept. of the Interior, Bureau of Land Management, Surveyors Notes, General Description of Township Line between T9 and 10 South and Ranges 3 and 4 West on microfiche for T11 South, Range 5 West, vol. 4R, Portland, Oregon, p. 238.

[115] Ibid.

[116] Holtgrieve, "Historical Geography of Transportation Routes," p. 256.

[117] U.S. Dept. of Interior, Bureau of Land Management, Surveyors Notes, Township 3 South, Range 1 West, vol. R9.

[118] Bowen, "Willamette Valley," p. 16.

[119] Ibid., p. 55.

[120] "Matters in Linn County," Oregon Spectator, 3 February, 1852, p. 2:6.

[121] Bushrod W. Wilson, Letters of Bushrod Wilson to Joseph P. Wilson, 1846-1875, Manuscripts Collection, University of Oregon, Eugene, Oregon, 18 December 1853, p. 2.

[122] Throckmorton, "Moguls of the Middle Columbia," Panorama of a Century Section, p. 39C; Oregonian, 11 February 1859, p. 39C.

[123] Ibid.

[124] Bushrod W. Wilson, Letters of Bushrod Wilson to Joseph P. Wilson, 1846-1875, 10 March 1857, p. 1.

[125] Ibid.

[126] Throckmorton, "Moguls of Middle Columbia," p. 39C.

[127] H. S. Nedry, "Diary of a Tour," Oregon Historical Quarterly vol. 46, (Portland: Oregon Historical Society, 1945), p. 249.

[128] Halbakken, "A History of Wheat Growing in Oregon," p. 7.

[129] Edgar Williams, Illustrated Atlas of Marion and Linn Counties p. 26¼, San Francisco, 1878.

[130] "A City of the Willamette," West Shore, July 1888, no. 7, p. 376.

[131] "Willamette Valley Edition," Supplement to the Oregonian filed between 17 November 1888 and 18 November 1888, No page numbers.

[132] Corning, Willamette Landing, p. 164.

[133] Ibid., p. 157.

[134] "Linn Co. Towns," Oregonian, 1 December 1873, p. 1:4,5.

[135] Holtgrieve, Historical Geography, p. 118.

[136] "Linn Co. Towns," Oregonian, 1 December 1873.

[137] Ibid.

[138] "Yamhill Co. Towns," Oregonian, 24 January 1874, p. 1:5,6. See also Oregonian, 15 January 1874, p. 1:3,4.

[139] Ibid.

[140] "West Side," Oregonian, 30 September 1879, p. 1:5.

[141] Ibid.

[142] Oregonian, 30 September 1879, p. 1:5.

[143] "Willamette Valley Edition," Oregonian, filed between 17 November 1888 and 18 November 1888.

[144] Ibid.

[145] Oregonian, 1 January 1883, p. 1:5,6; p. 12:2.

146 "City of McMinnville" West Shore, April 1889, Portland, Oregon, p. 213.

147 Oregonian, 1 January 1883, p. 12:2.

148 Ibid., p. 1:3.

149 Ibid.

150 "Willamette Valley Edition," Oregonian, filed between 17 November 1888 and 18 November 1888. No page number. Section on Albany.

151 Ibid., Section on Eugene.

152 Ibid.

153 Ibid., Section on Oregon City.

154 Ibid.

155 Ibid.

CHAPTER IV

RIVER TOWN LANDSCAPE

As a settlement area, the river town has a particular pattern. In this chapter I describe the morphology of the river town landscape. The term morphology as used here is the interpretation of form and structure from a historical point of view. The focus on the river resulting from the importance of water connections can be seen in the pattern of arrangement of its parts, or landscape. The parts or features of the landscape and their relation to each other are identified.

Considered here are: (a) the size, shape, and orientation of town plans and lots; (b) the streets as to width, degree of straightness, and names; (c) the landing areas which were the core of the town's activity because of the importance of shipping and receiving; (d) the location, shape, and composition of the commercial, industrial, and residential areas; (e) the changing density, style, and size of buildings; and (f) the increasing specialization of function, as well as the changes which occurred after the coming of the railraod.

Town Plans

I collected town plats, when available, from county surveyors. The plats were recorded in the 1850s, late 1860s, or after 1880. In describing river town plans, only those plats from the 1850s and 1860s

have been used because they more clearly reflect the patterns of the time. The plats registered in the 1860s are often plats redrawn to replace those destroyed in fires. The redrawn plat usually included newly platted areas as well as the original area.

The amount of land subdivided at first was small. St. John's, for example, consisted of 8 whole and 4 fractional blocks along the river (see Figure 51), while Booneville consisted of 9 blocks (see Figure 52). The original survey of Portland was 8 blocks long and 2 blocks deep (see Figure 53).[1] At Oregon City, 2 rows of blocks between 1st and 8th streets were surveyed in 1842 by Sidney Moss (see Figure 54).[2] At Salem blocks between the river and Church Street were surveyed in 1846 (see Figure 55).[3]

In anticipation of growth, particularly during periods of speculation, additional land was subdivided. In 1844, an additional 76 blocks were surveyed at Oregon City, bringing the total to 92. In 1849, blocks 93 to 179 were surveyed (see Figure 54).[4] By 1845, Portland had expanded to a total of 35 blocks with additional sections set aside for the property owners. The irregular numbering of blocks 27 through 35 suggests that they may have been added 1 or 2 at a time (see Figure 53).

In 1850, Oregon experienced a period of town building fever as the flow of gold into the area brought a period of prosperity. New towns were platted and additional blocks were added to existing towns. For example, in 1849, 24 blocks had been surveyed at Lafayette, but in 1850, an additional 61 were platted (see Figure 56).[5] Probably a similar situation occurred at Milwaukie (see Figure 57). At Salem, the area north of State Street and from Church to Capital Street was added.[6]

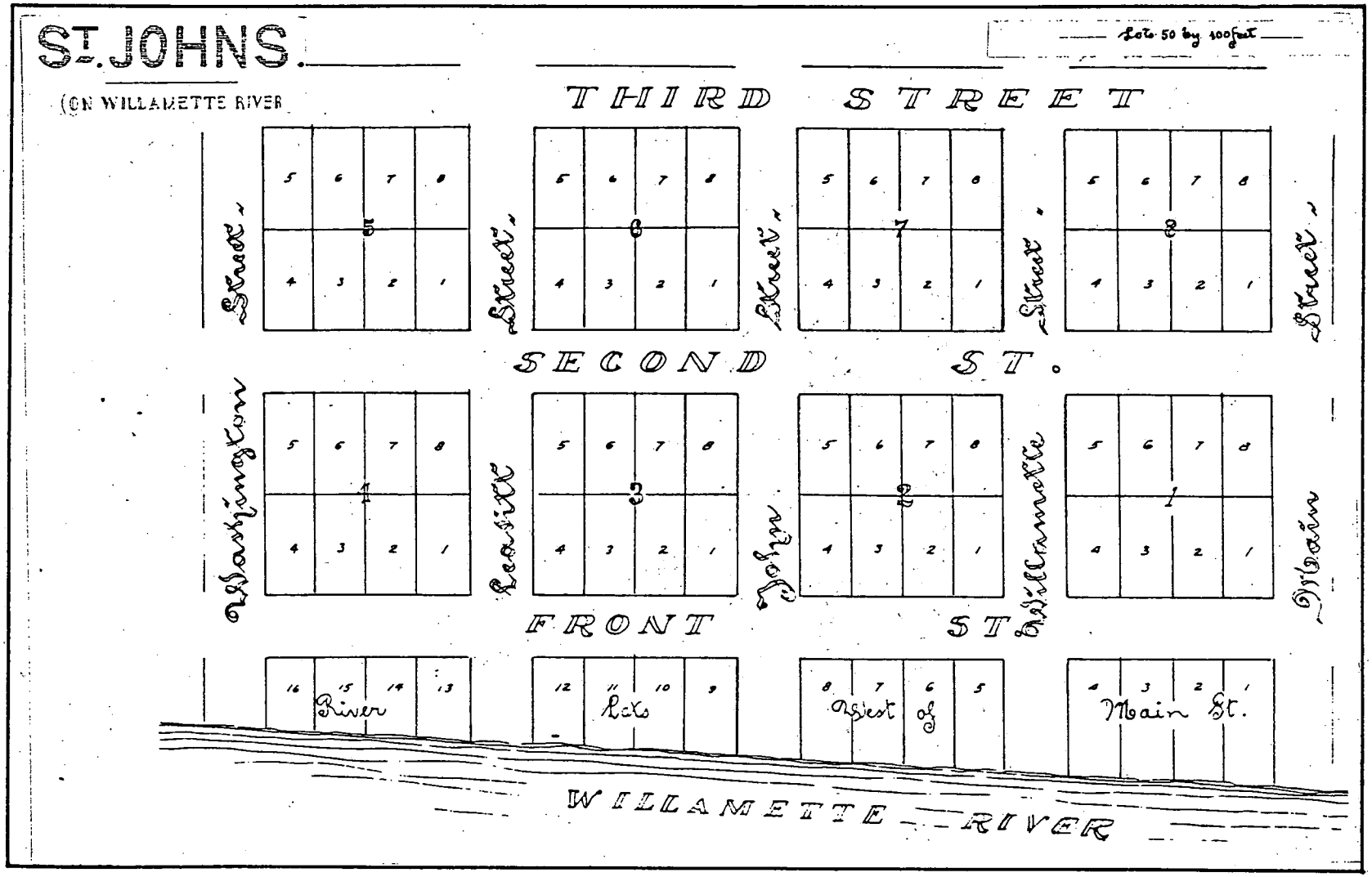


Figure 51. Plat of St. Johns - recorded 1850. Multnomah County Surveyor.

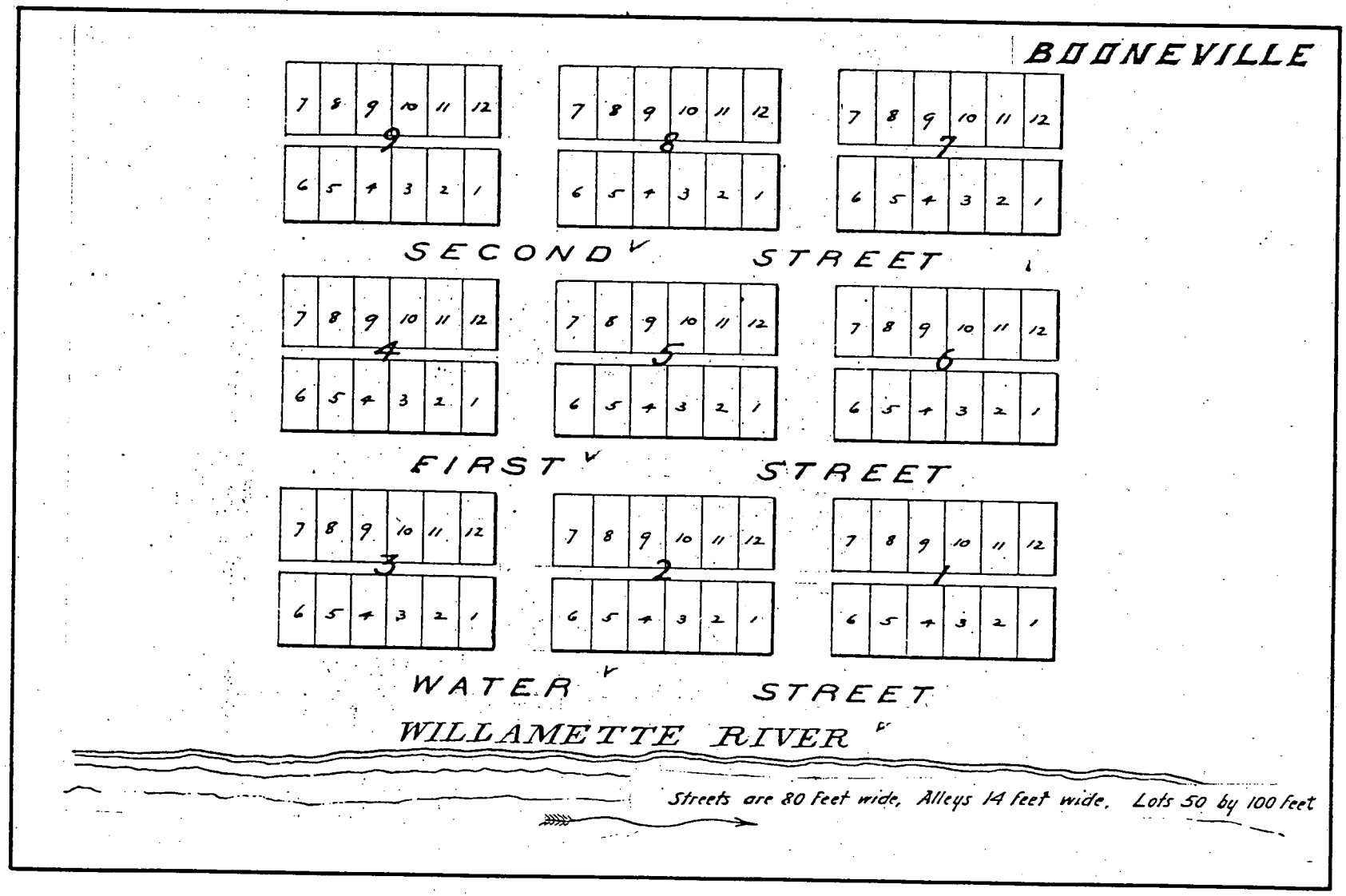


Figure 52. Plat of Booneville - recorded 1853. Benton County Surveyor.

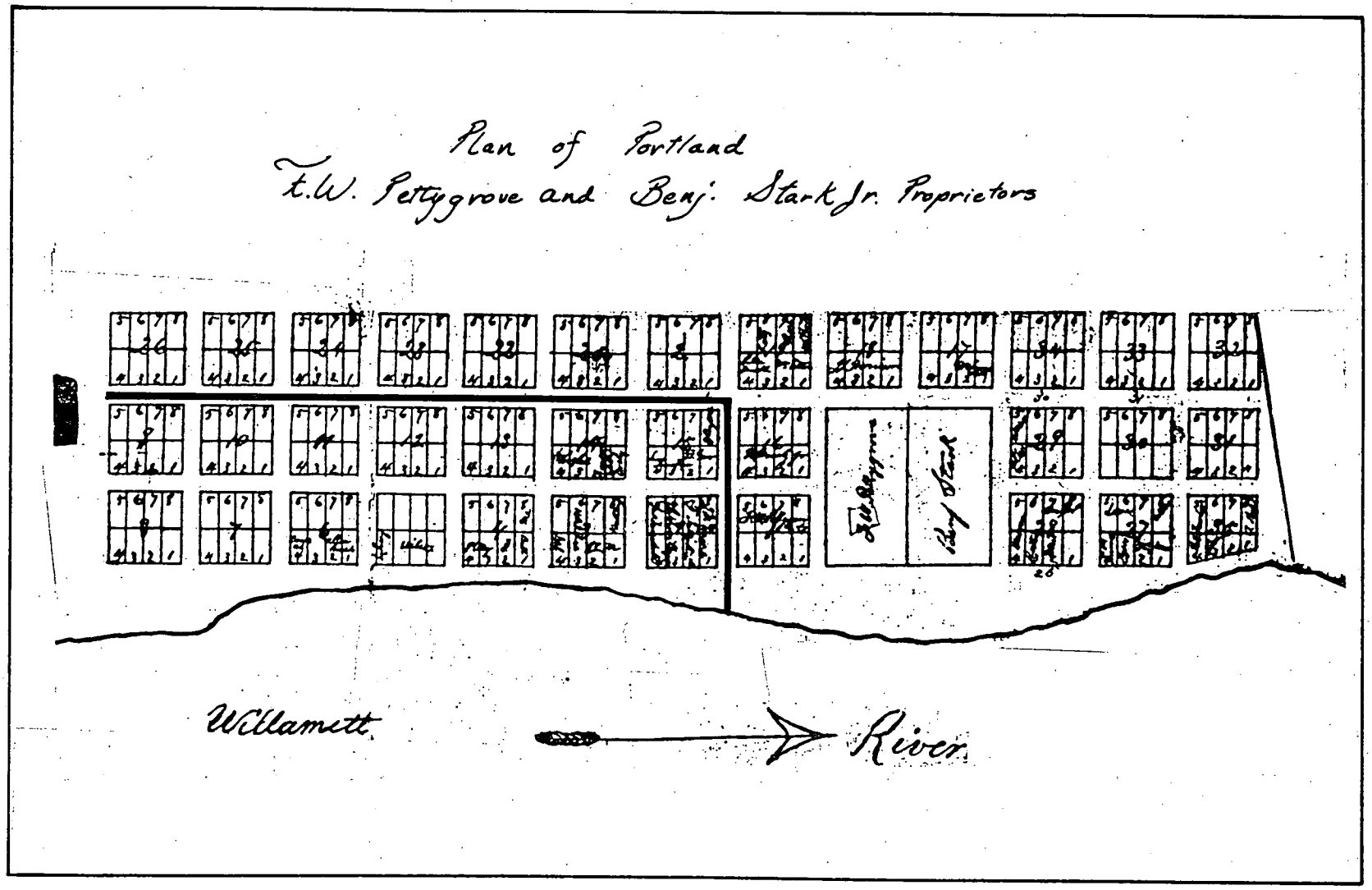


Figure 53. Plan of Portland - 1845. Reproduced from Reps, Cities of the American West. Area of original survey outlined.

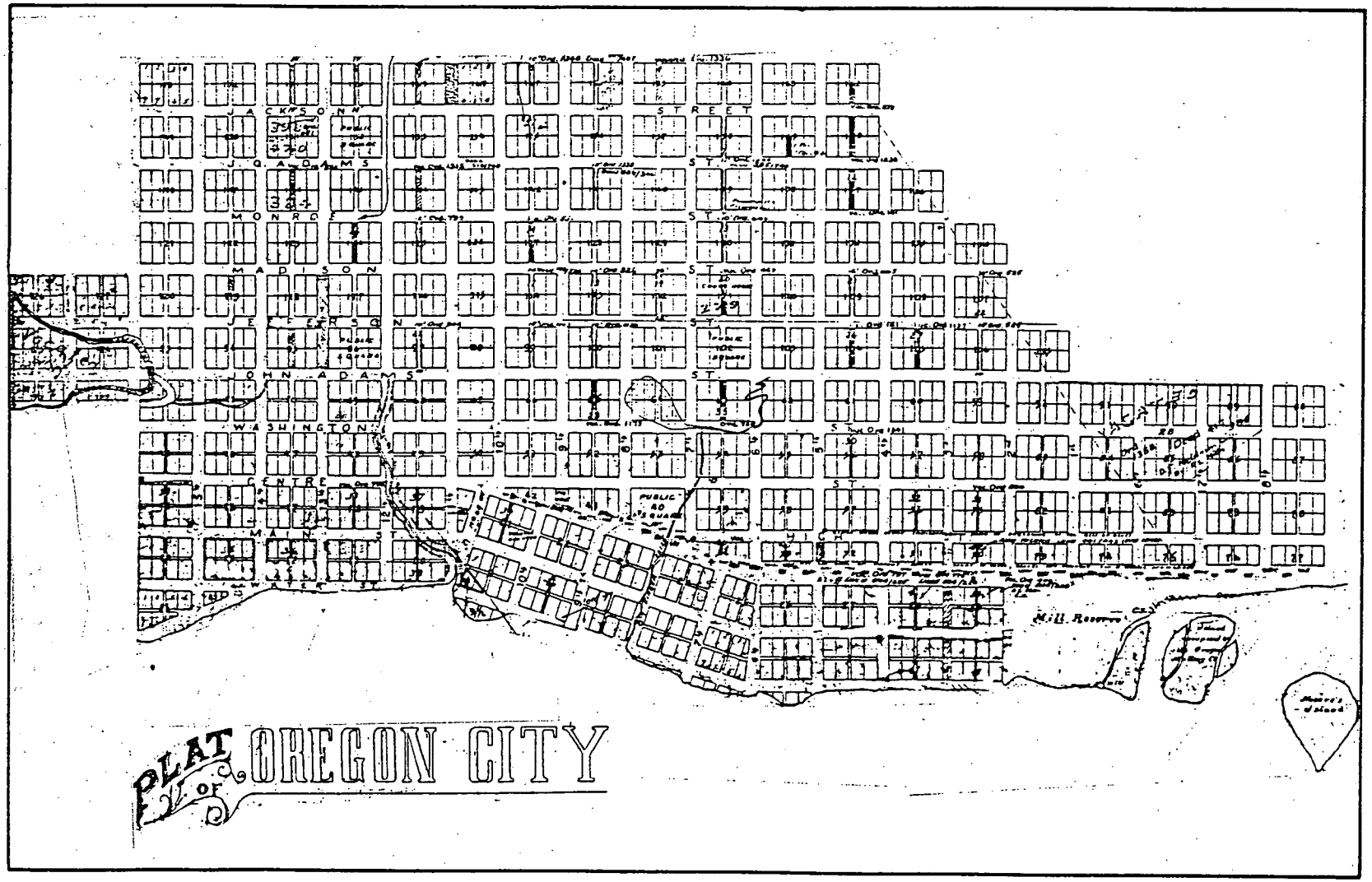


Figure 54. Plat of Oregon City - recorded 1850. Area surveyed by 1844 between Washington and Willamette River. Map from Clackamas County Surveyor.

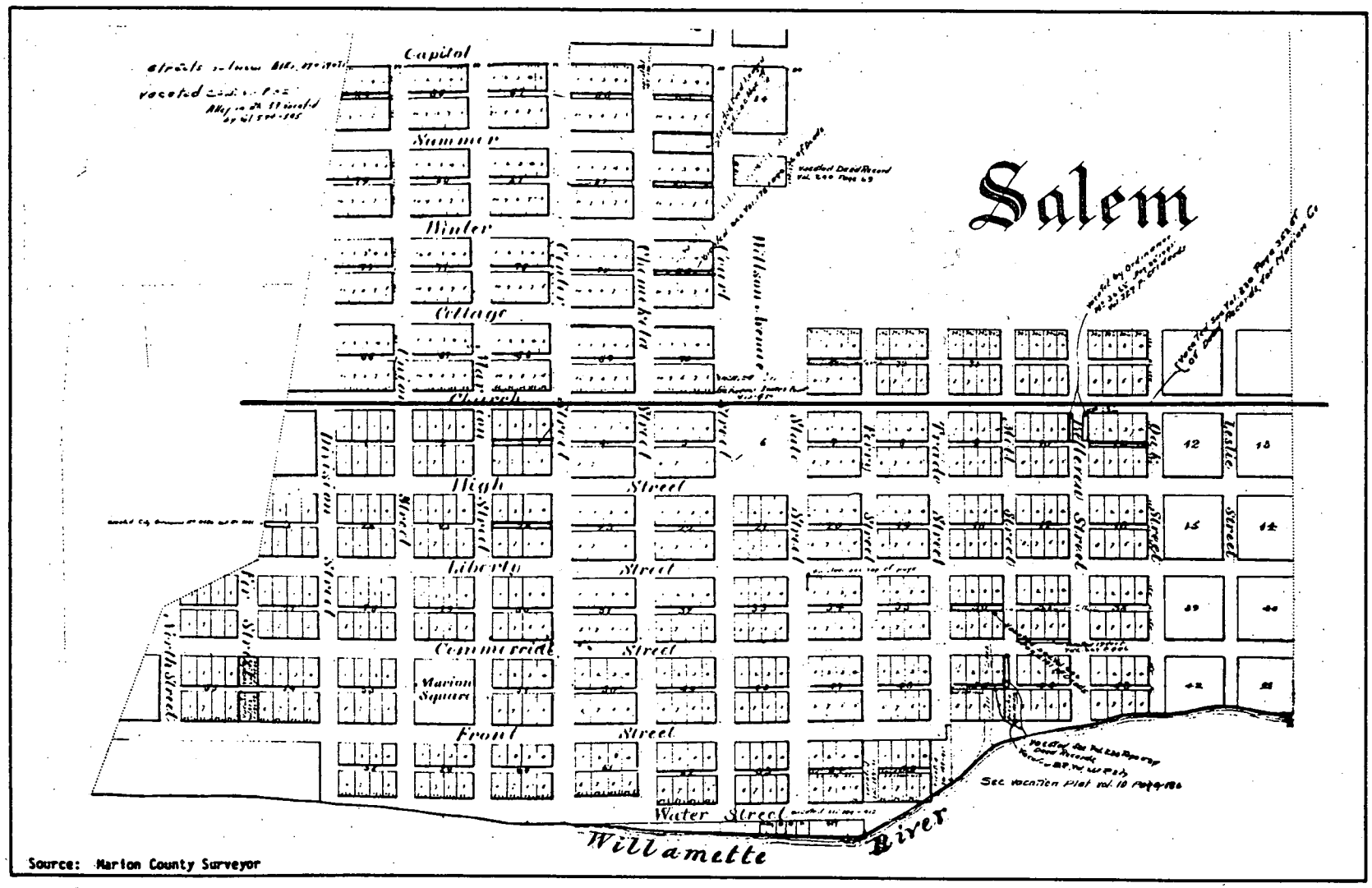


Figure 55. Plat of Salem - recorded 1850. Area surveyed in 1846 between Church Street and Willamette River. Map from Marion County Surveyor.

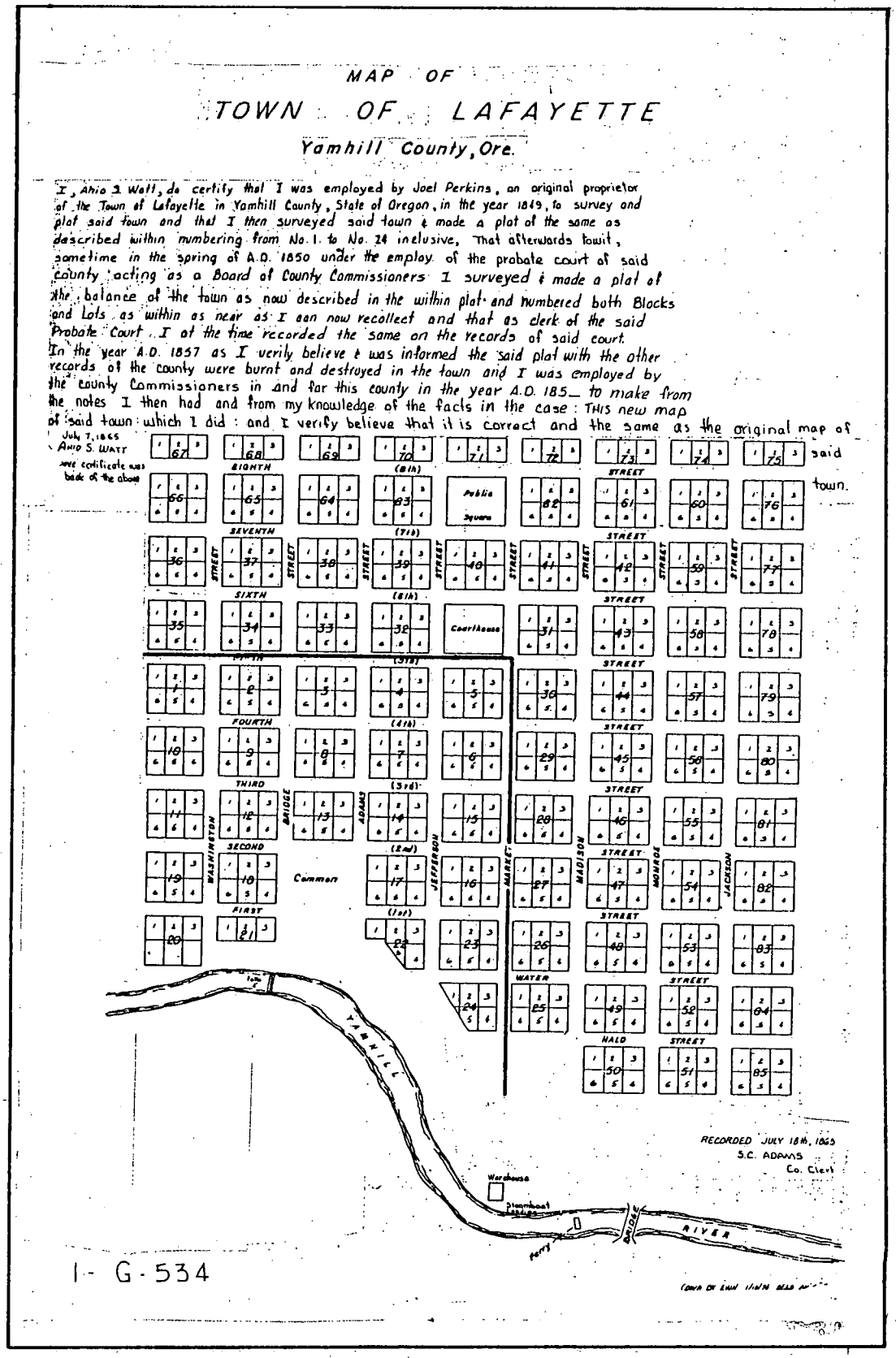


Figure 56. Plat of Lafayette - recorded 1865. Area surveyed in 1849 outlined. Remainder surveyed in 1850. Map from Yamhill County Surveyor.

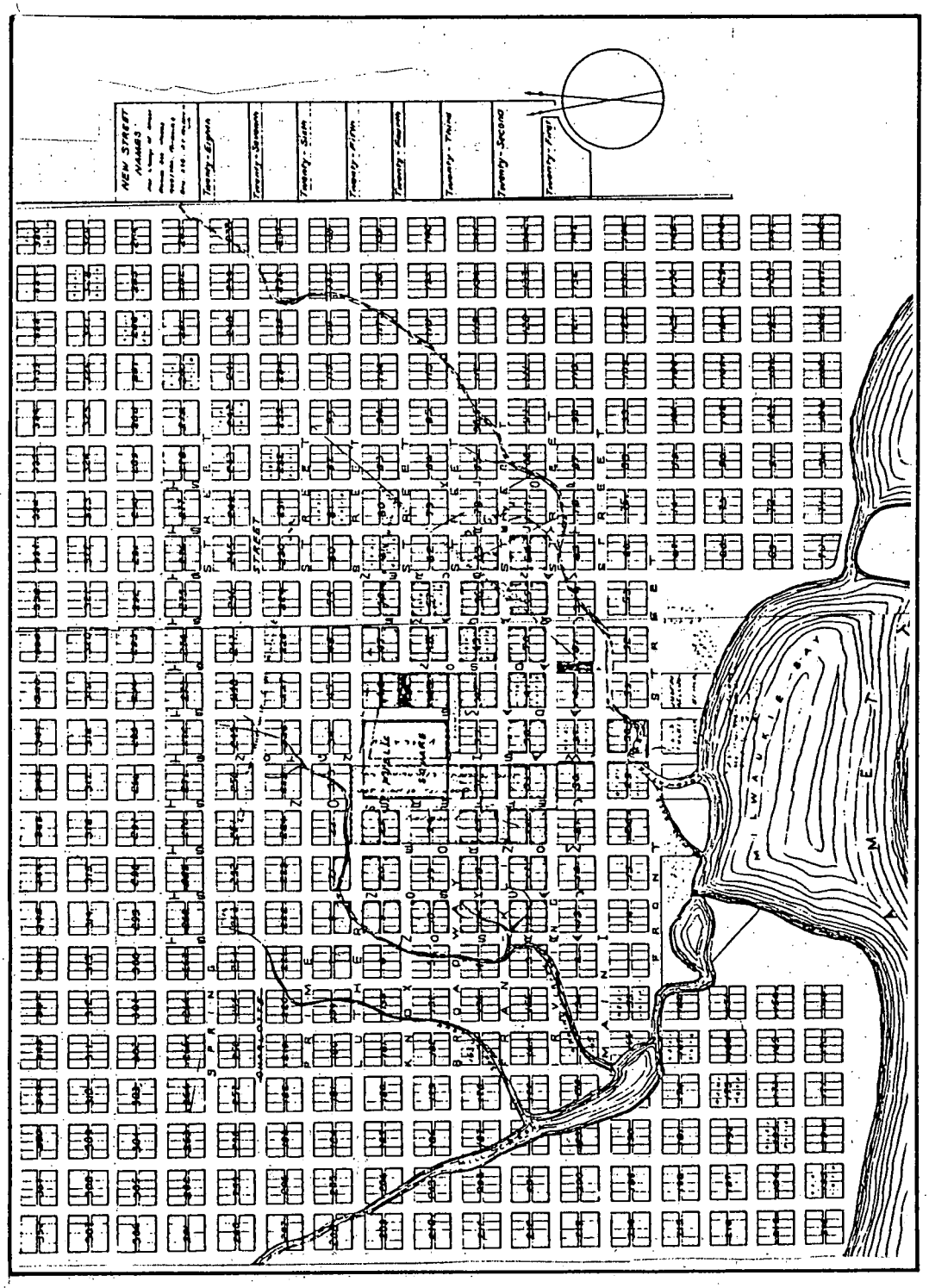


Figure 57. Plat of Milwaukie - recorded 1865. Map from Clackamas County Surveyor.

Townsites were to be recorded with the county clerk according to Territorial Laws.[7] Only one such townsite entry, Lounsdales map of Portland, has been found to date (see Figure 58).

In many cases, these early plats were rectangular in shape, the long axis parallel to the river, as seen in the 1851 plat of Marysville (see Figure 59), later renamed Corvallis. In addition, Marysville serves as an example of a town where additional land was platted on an adjoining land claim, further lengthening the town. Dixon's addition to Marysville (see Figure 60), platted in August 1851, increased the length of the town by one-third (see Figure 61).

This platting on different claims usually resulted in an upper and lower town, as can be seen on the map of Albany and New Albany made in 1852 by the General Land Office Surveyors (see Figure 40 in Chapter II). Additions on adjoining land claims also occurred at Portland and Independence. At Linn City, another town, Multnomah City, was platted next to it. Only the name, Multnomah City, appears in the lower right of the Linn City plat (see Figure 62). At Salem, the town of North Salem, consisting of "29 blocks, whole and fractional," was platted in 1850 (see Figure 63).[8]

Streets were usually 60 to 80 feet wide, but Salem's were wider--100 feet. Usually the street nearest the river was named Front or Water Street. In the case of Salem, both were used. Then they were numbered consecutively from the river, as seen on the plats of Lafayette and Marysville (Corvallis) (see Figures 56 and 59). The cross streets were named for presidents, trees, rivers, early pioneers, or according to function, i.e., Ferry or Market Street. Corvallis, Lafayette, and

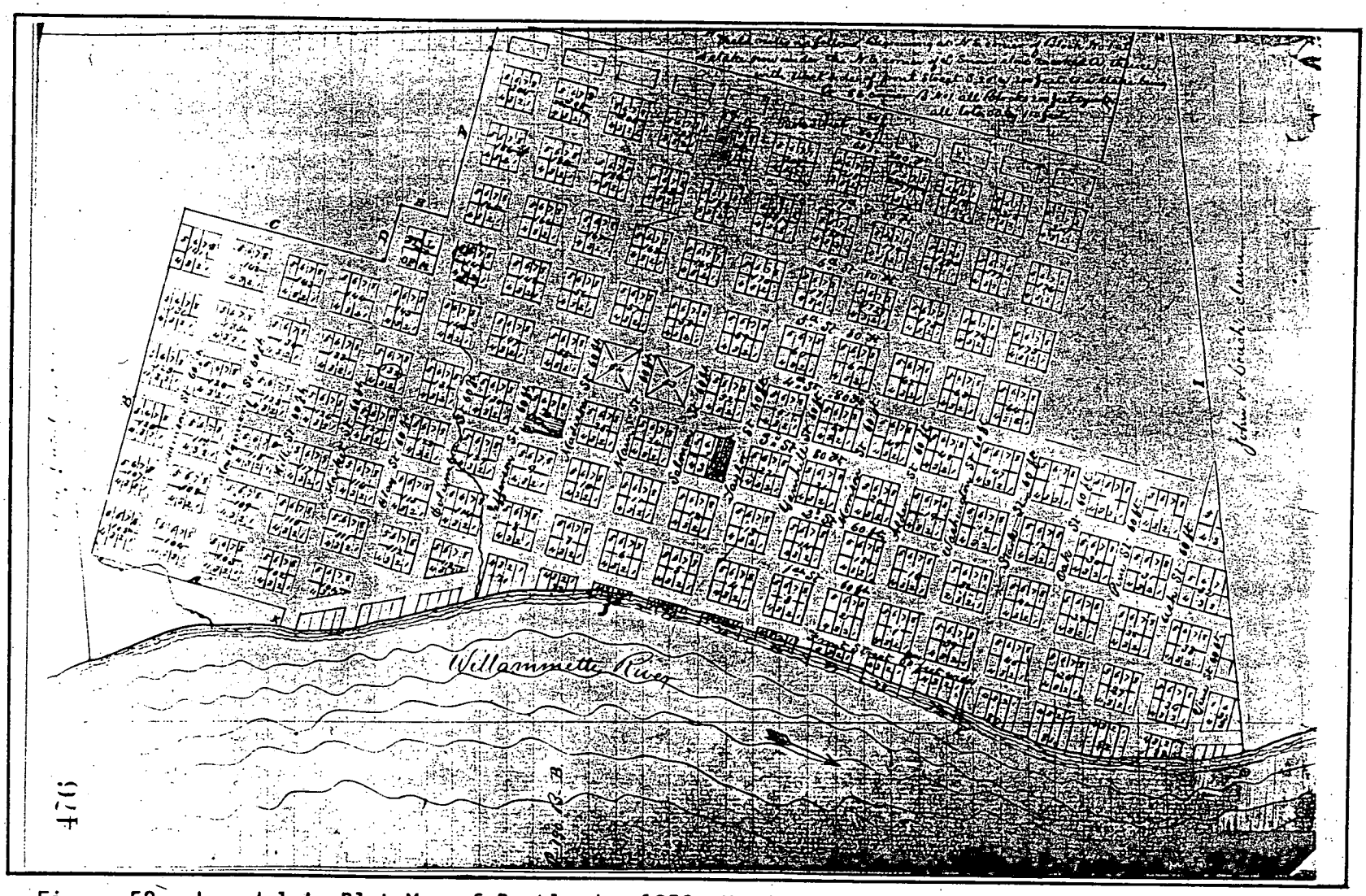


Figure 58. Loundale's Plat Map of Portland - 1852. Used with permission of the Oregon Historical Society. Negative Number 23567.

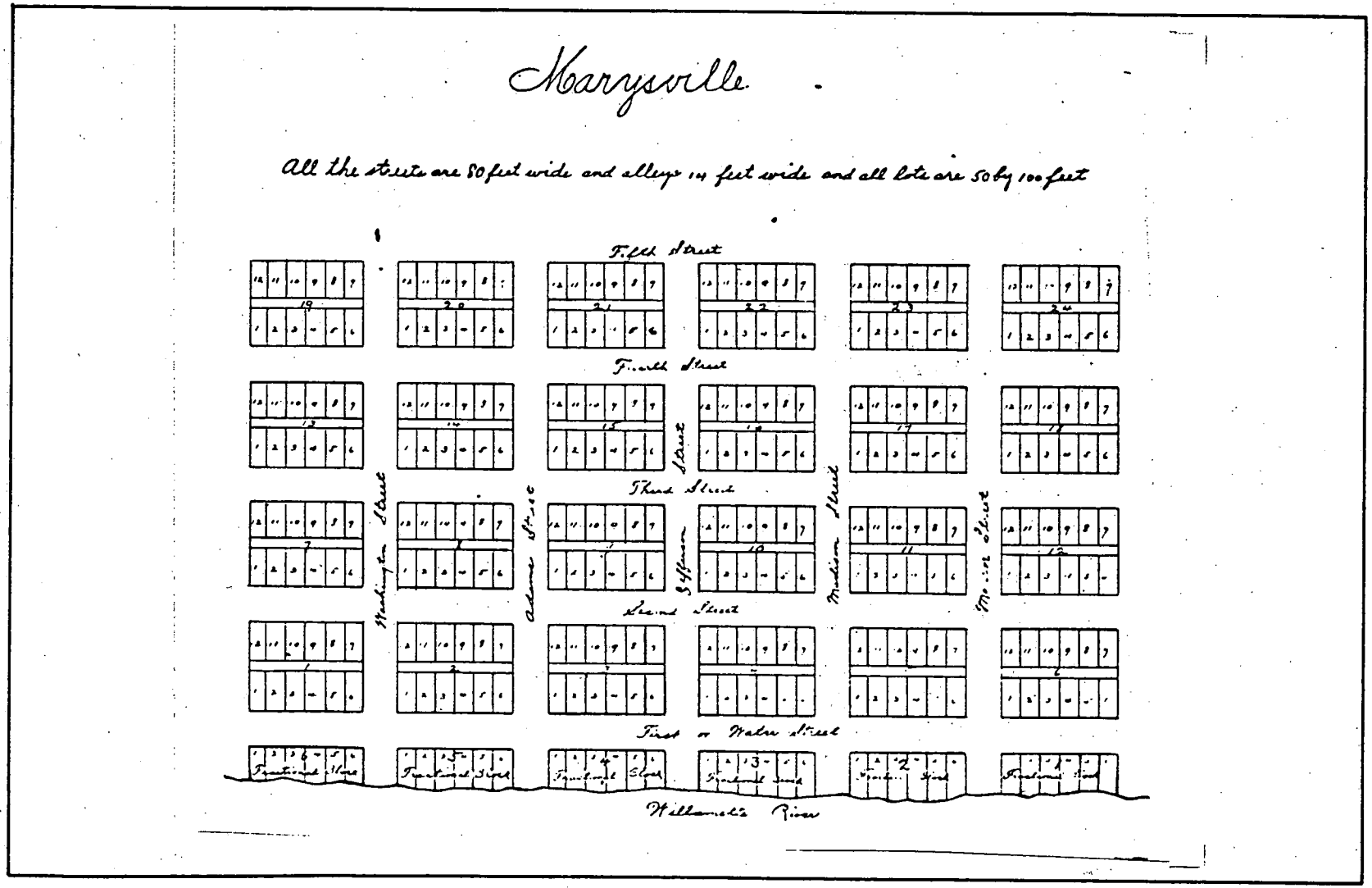


Figure 59. Plat of Marysville - recorded February, 1851. Benton County Surveyor.

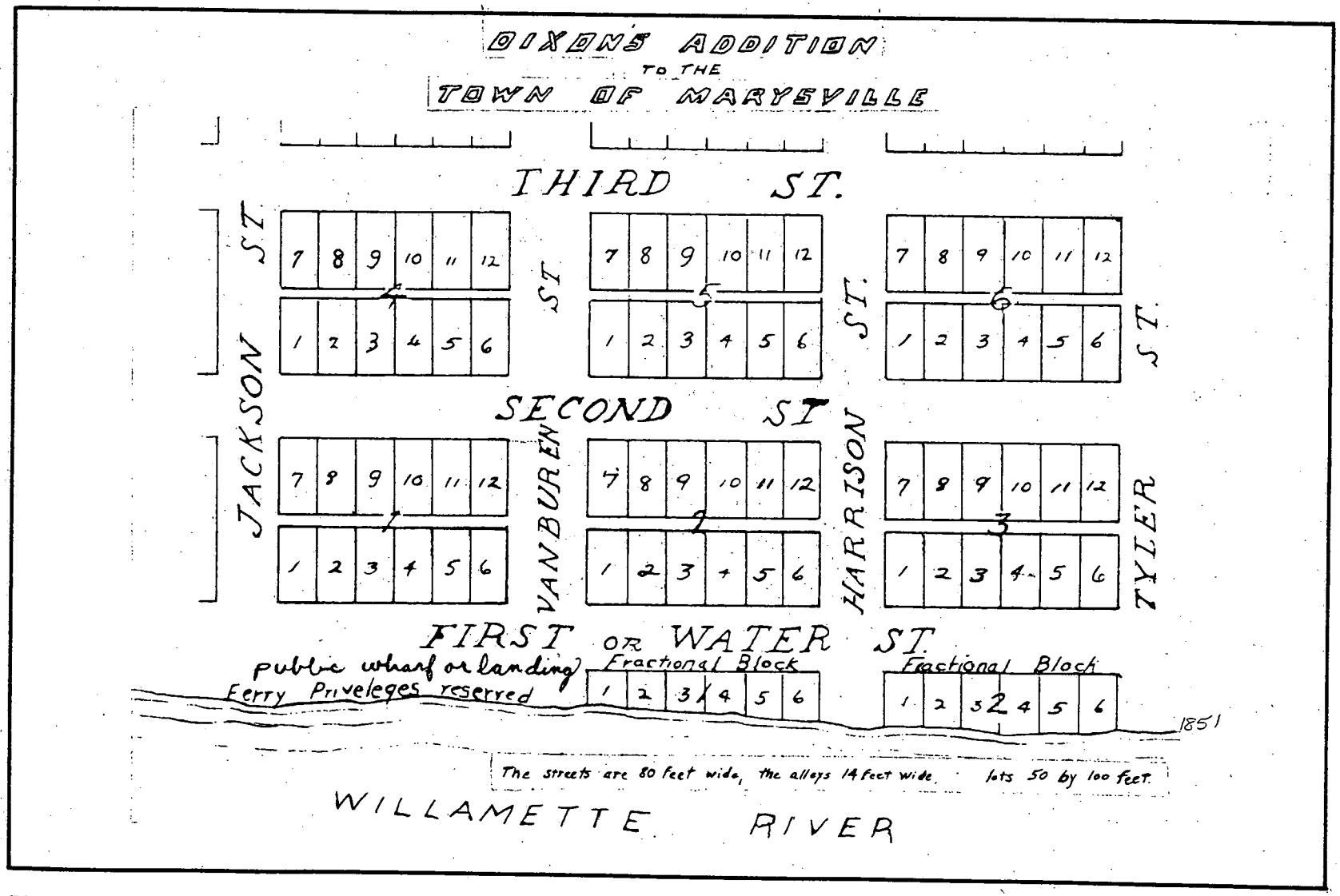


Figure 60. Plat of Dixon's Addition to the Town of Marysville - August, 1851. Benton County Surveyor.

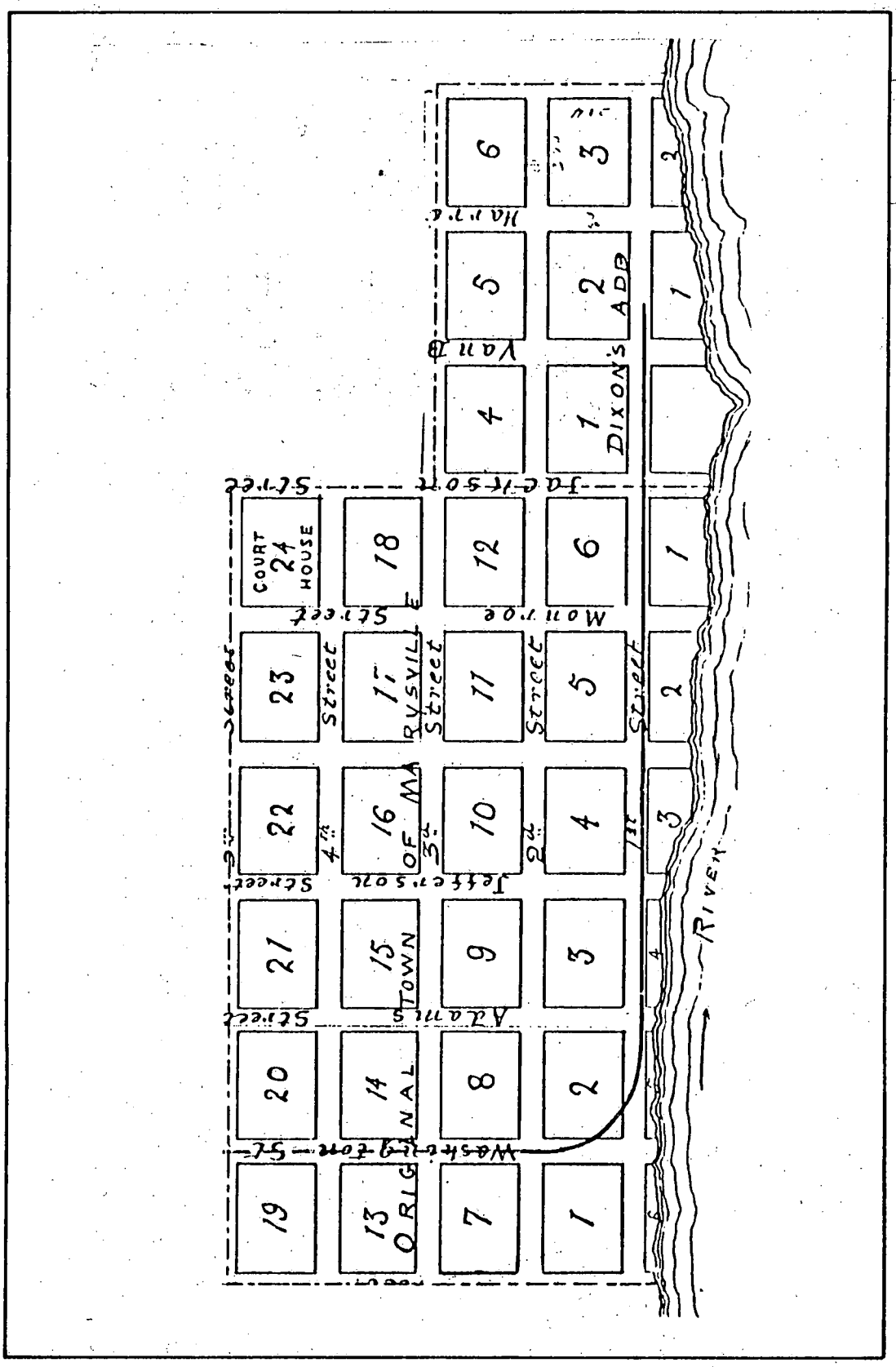


Figure 61. Relative Positions of Plat of Marysville and Dixon's Additions. From Map of Corvallis Additions, Oregon Historical Society Map Collection.

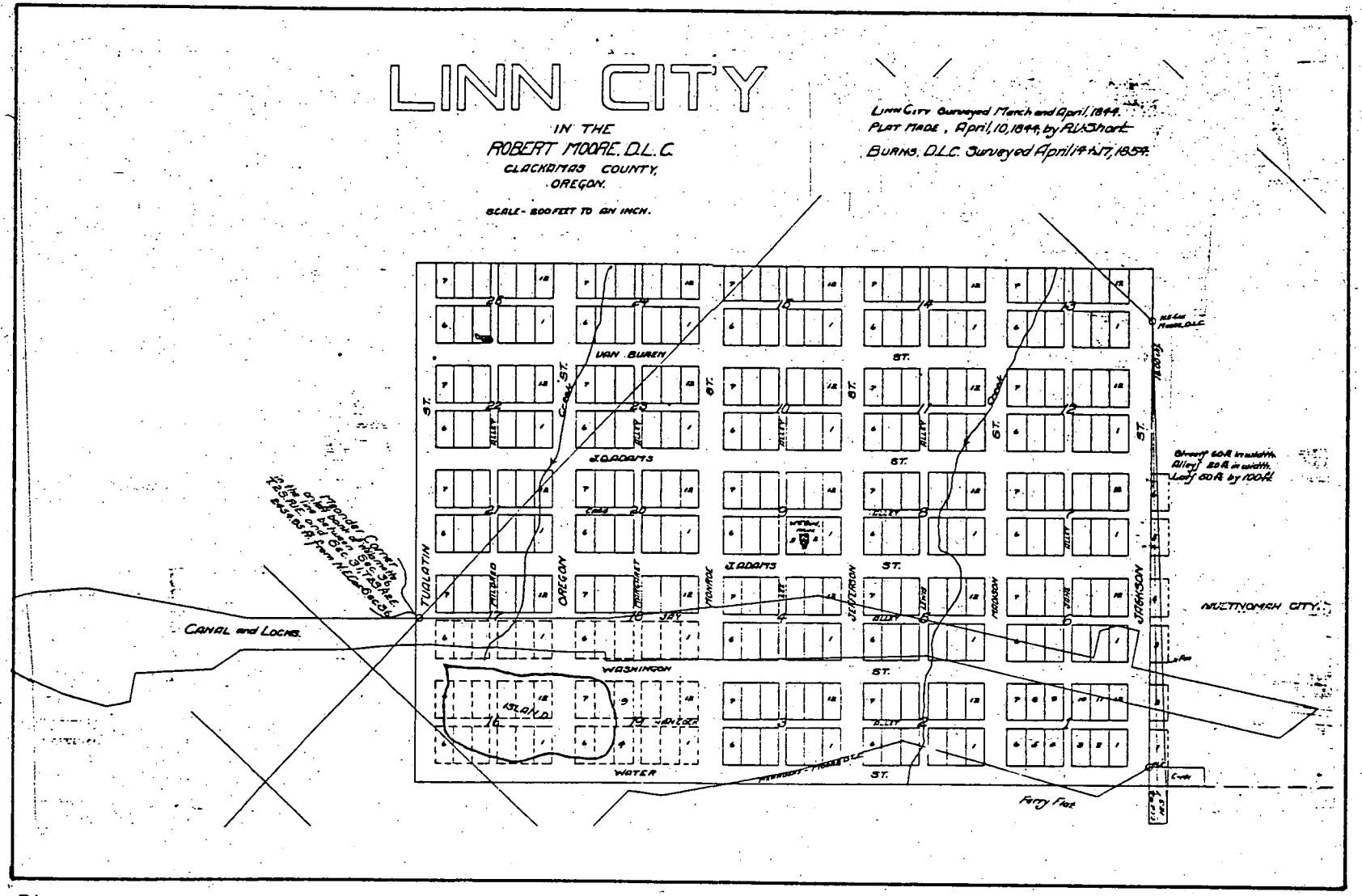


Figure 62. Plat of Linn City - 1844. Multnomah City adjoined on the right. Map from Clackamas County Surveyor.

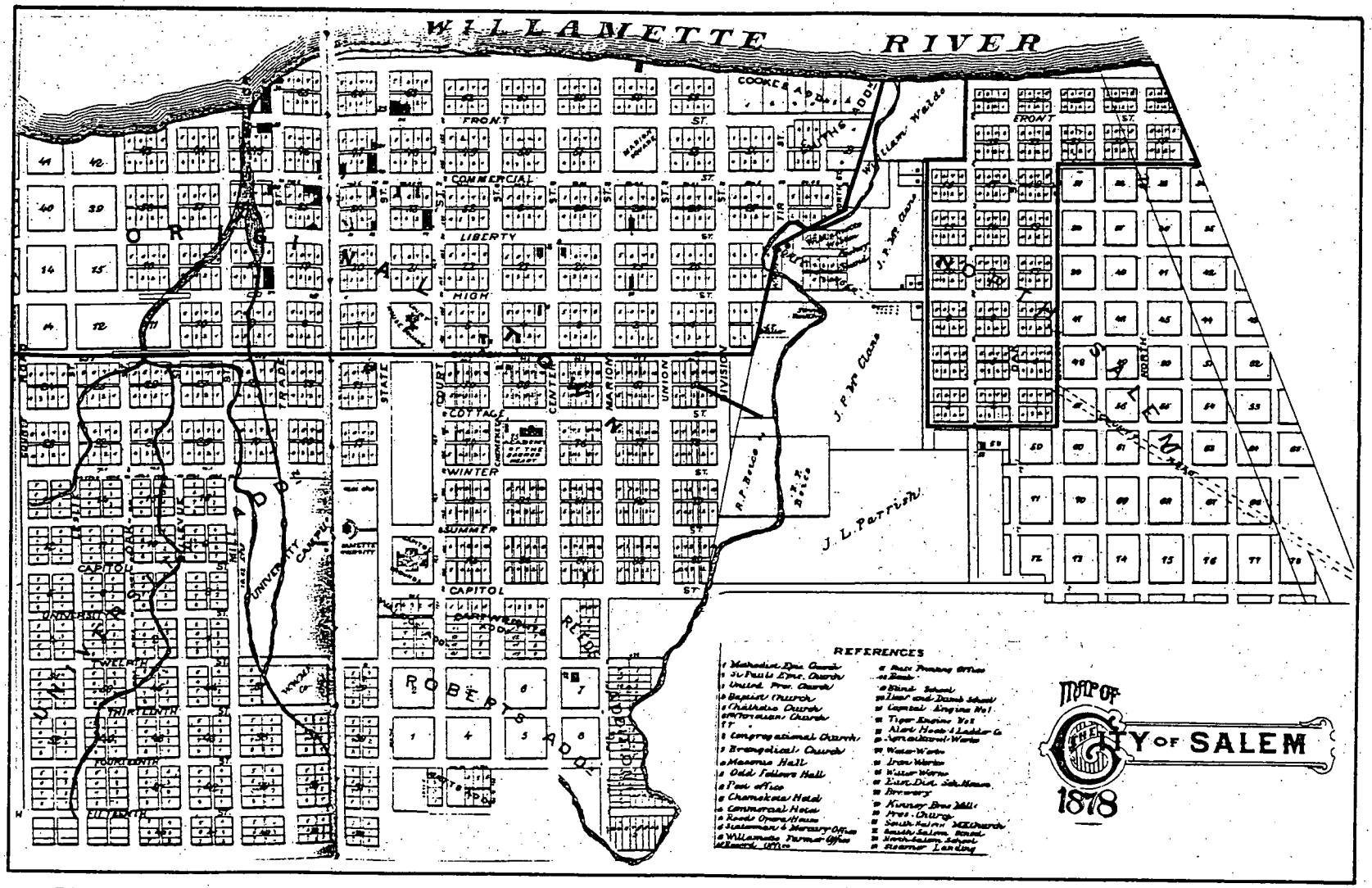


Figure 63. The Original Plats of Salem and North Salem are outlined on this map from the 1878 Historical Atlas of Marion and Linn Counties.

Oregon City are examples of the numbers/names of presidents combination, however, at Oregon City the streets are numbered from the Falls, the most important feature on that site. At Canemah, the streets may have been numbered from an upper boat landing (see Figure 64). At Linn City, the names of the presidents are used on streets running in both directions (see Figure 62). The cross streets on the Eola, St. John's, Albany,[9] and Harrisburg (see Figures 51, 65, 66, and 67) plats were named for trees, rivers, or early pioneers. Some towns have streets leading from the river named for the function they serve, as at Dayton or Lincoln (see Figure 68), where the road to the Ferry was named Ferry Street. Other towns have unique naming patterns like Salem, Champoeg, Jefferson, Peoria, Fairfield, and Buena Vista (see Figures 55, 69, 70, 71, 72, and 73).

The narrowest lots were 50 feet wide. Additions platted in different years had lots of varying widths. For example, that part of Salem platted during the 1850 era of speculation has lots narrower than the original plat. Lots east of Church and north of State, the 1850 addition, were 66 feet wide, while those west of Church and north of State were 82½ feet wide, and those south of State to Bellevue were 74½ feet wide.[10]

Lots on most plats were oriented with the short side to the river to permit maximum number of lots with river frontage. At Dayton, lots were oriented in two directions, possibly to permit maximum number of lots with frontage along a thoroughfare like Ferry Street (see Figure 68).

Some land was set aside for public use, courthouse squares, and parks. On Lounsdale's 1848 map of Portland (see Figure 58), blocks 53

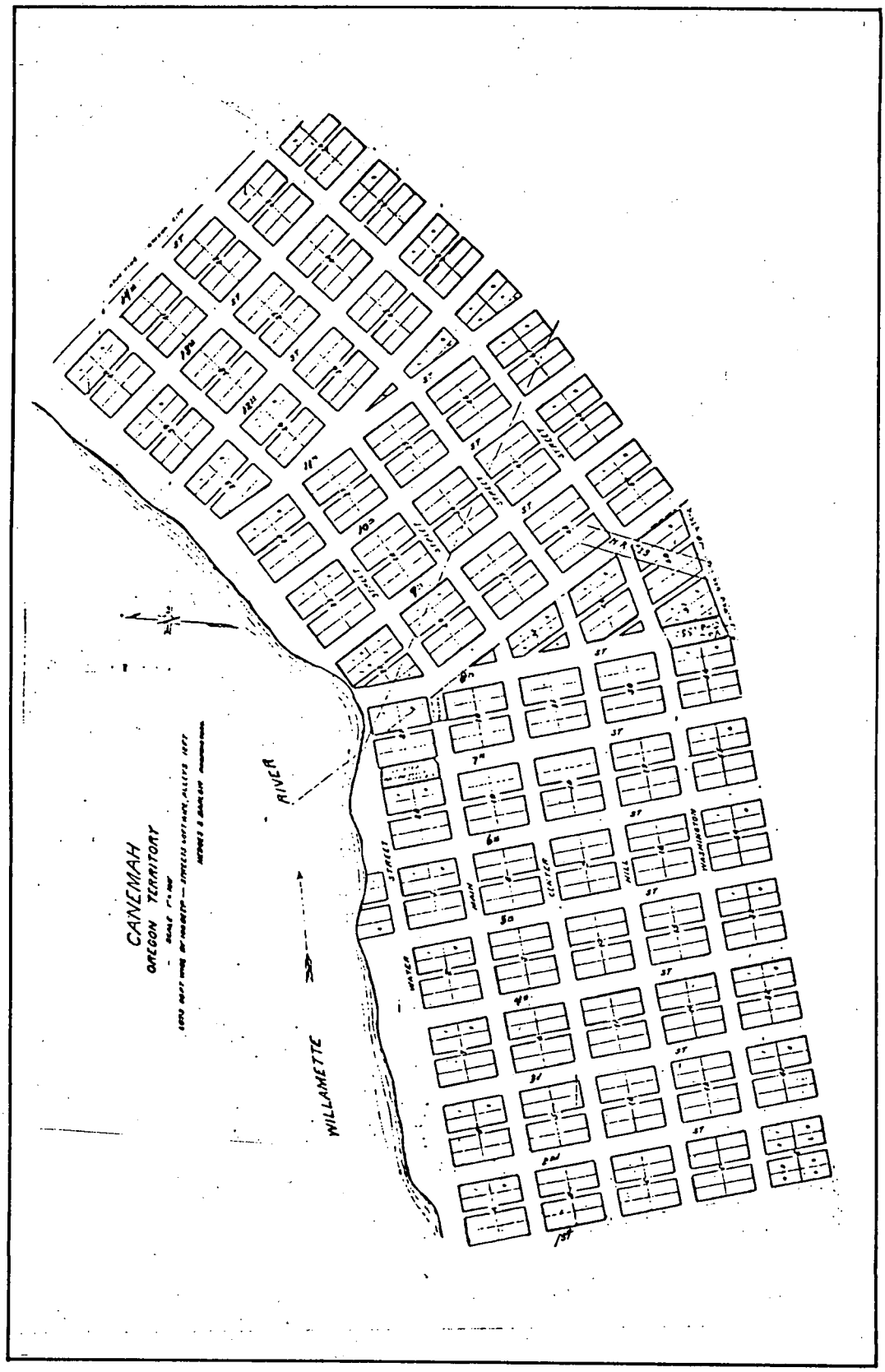
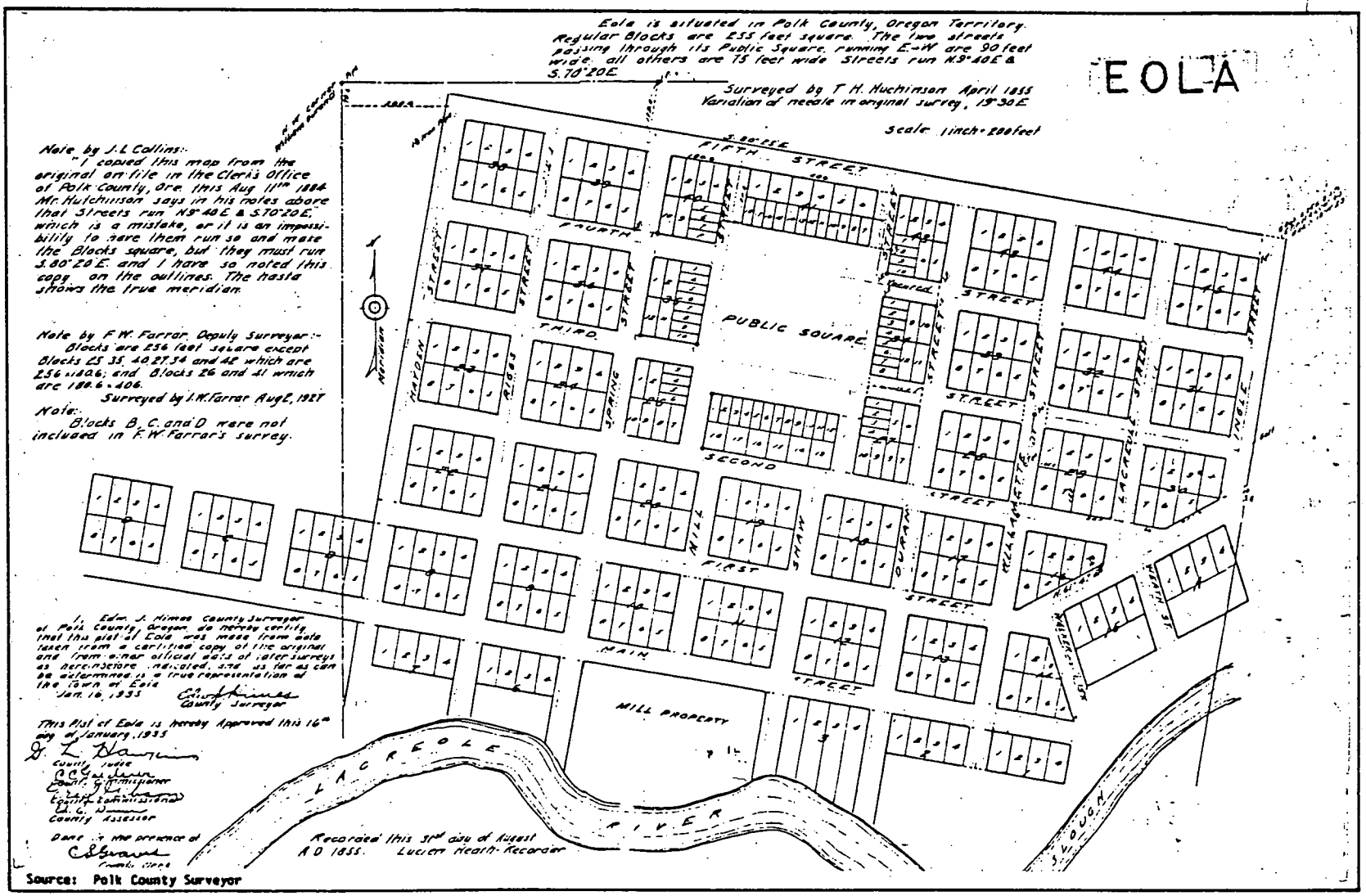


Figure 64. Plat of Canemah - Recorded 1865. Streets are numbered consecutively from left to right. Map from Clackamas County Surveyor.



Source: Polk County Surveyor

Figure 65. Plat of Eola - Recorded 1855. Polk County Surveyor.

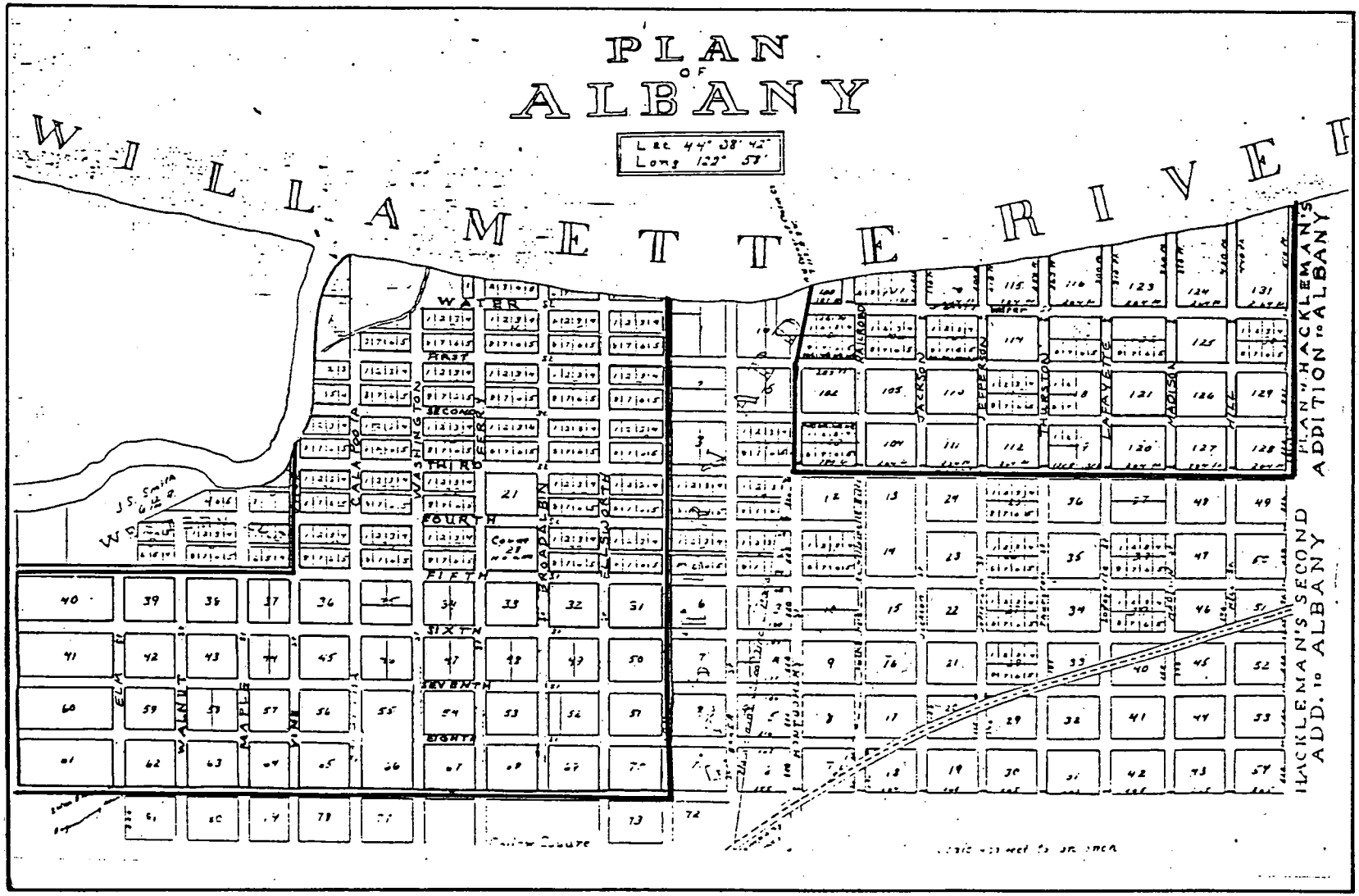


Figure 66. A Portion of the Plat of Albany - Recorded 1871. Original town outlined on the left, and Hackleman's 1st Addition outlined on the right.

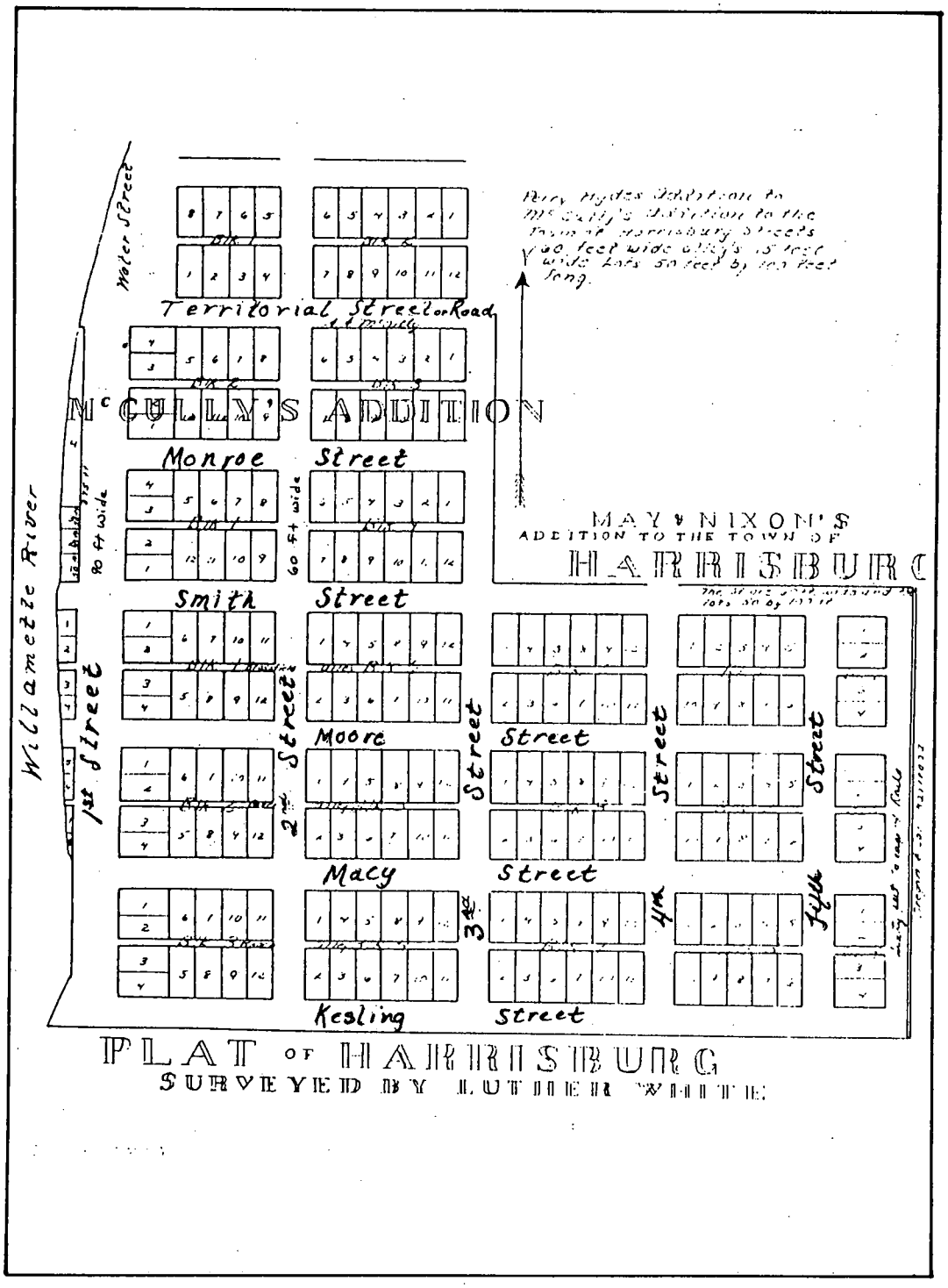


Figure 67. Plat of Harrisburg as Resurveyed and Recorded in 1866. Linn County Surveyor.

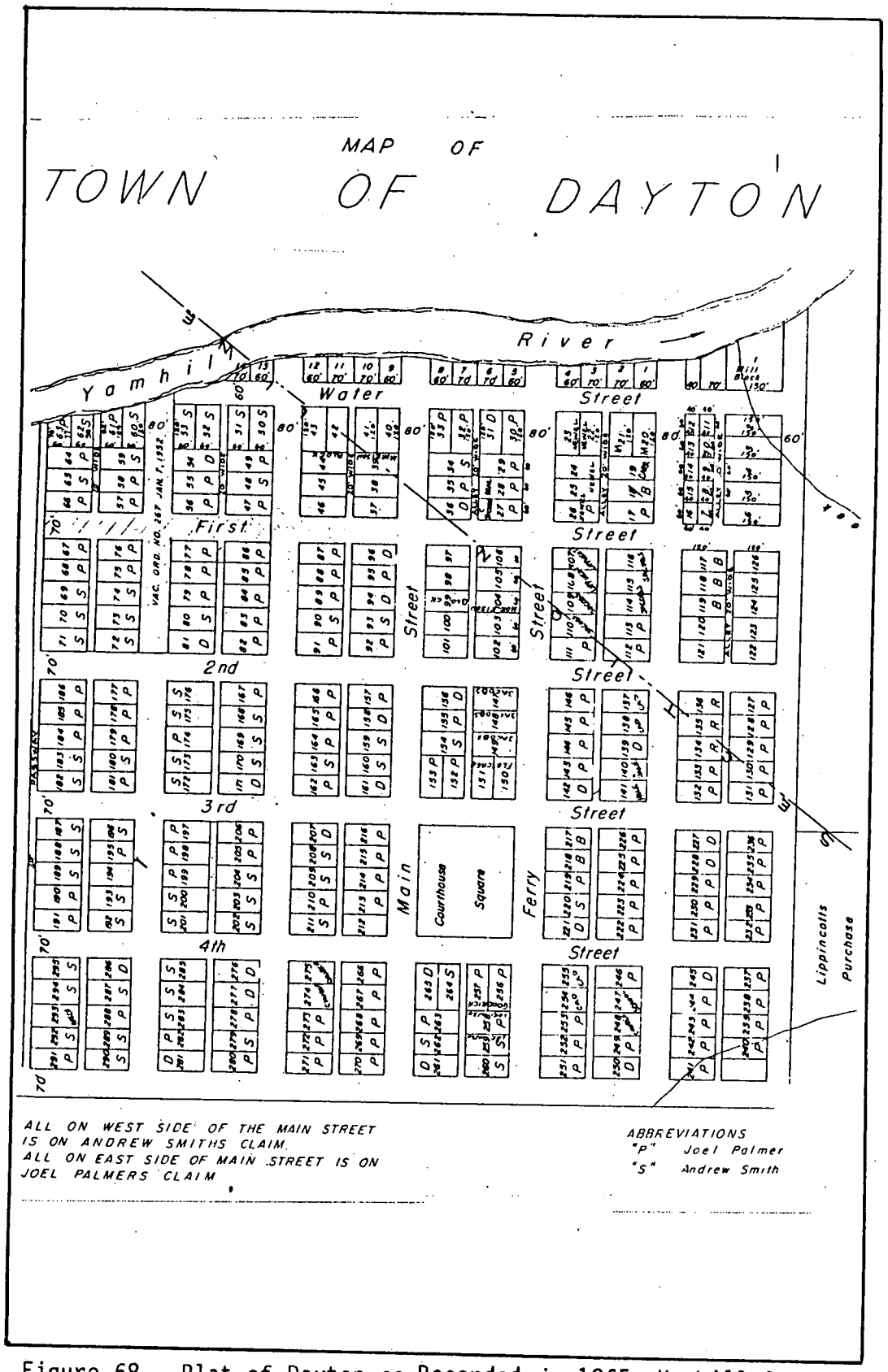


Figure 68. Plat of Dayton as Recorded in 1865, Yamhill County Surveyor.

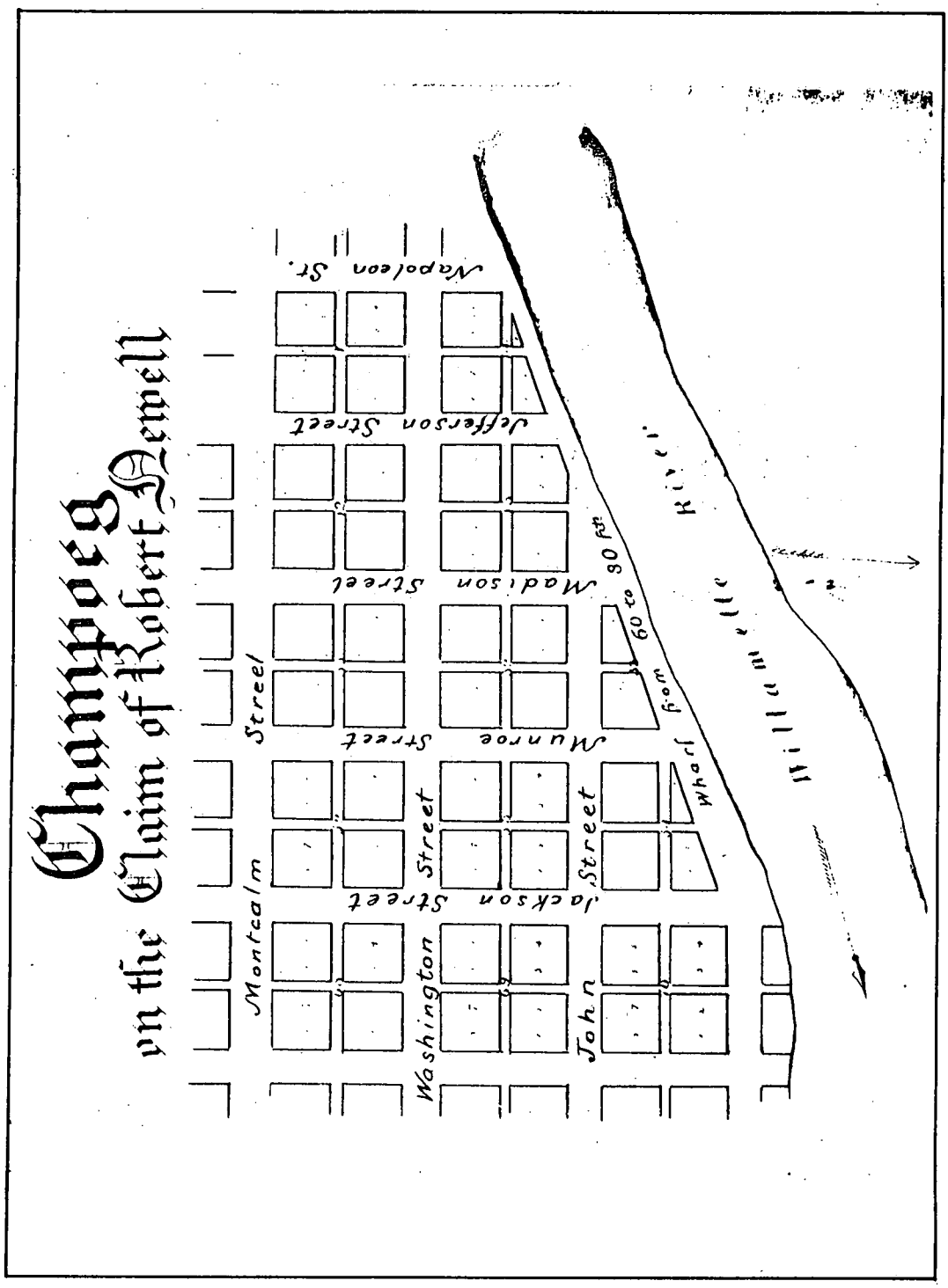


Figure 69. Plat of Champoeg as Recorded in 1853. Marion County Surveyor.

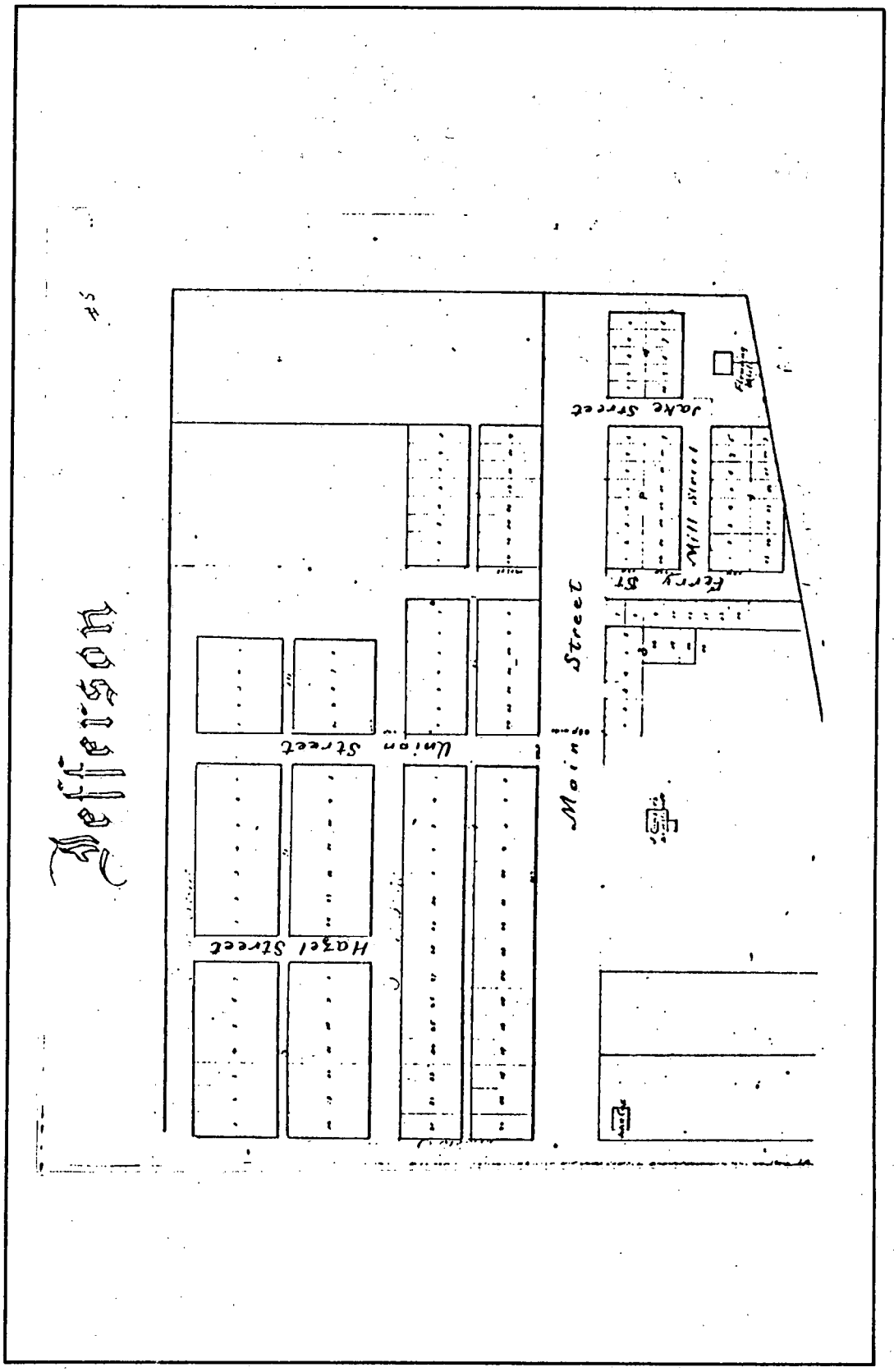


Figure 70. Plat of Jefferson Marion County Surveyor.

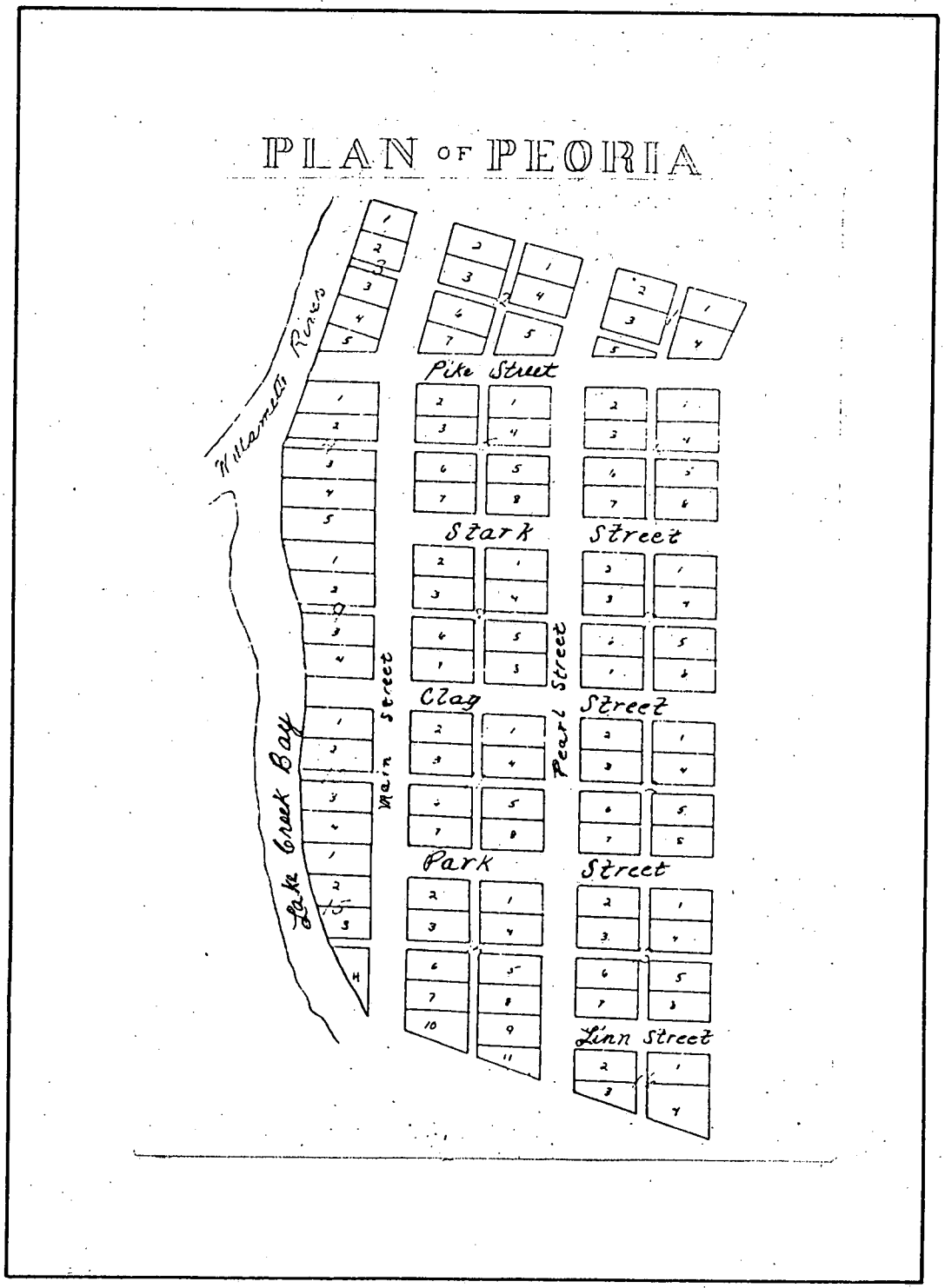


Figure 71. Plat of Peoria, Linn County Surveyor.

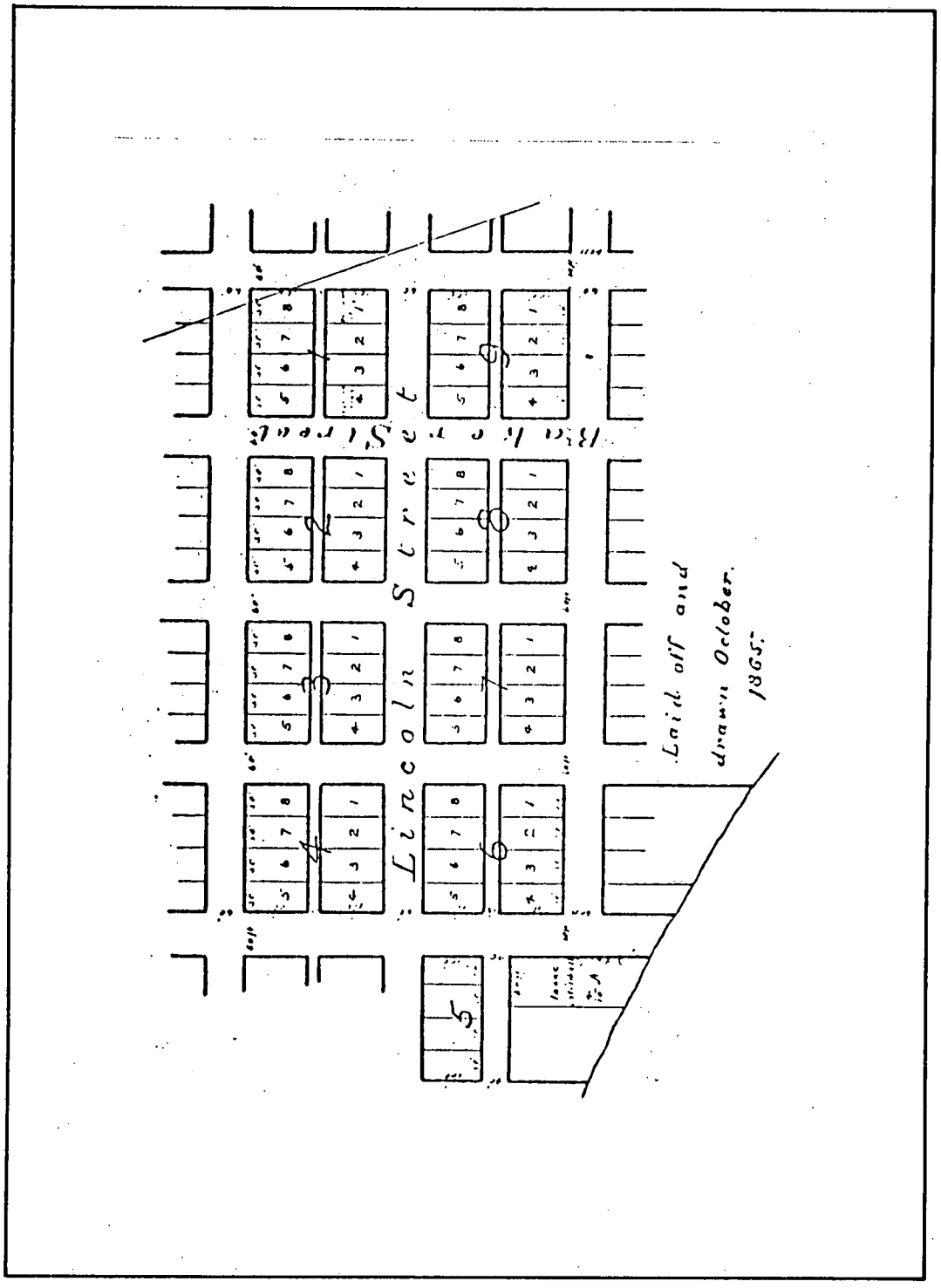


Figure 72. Plat of Fairfield as Laid Out and Drawn in 1865. Marion County Surveyor.

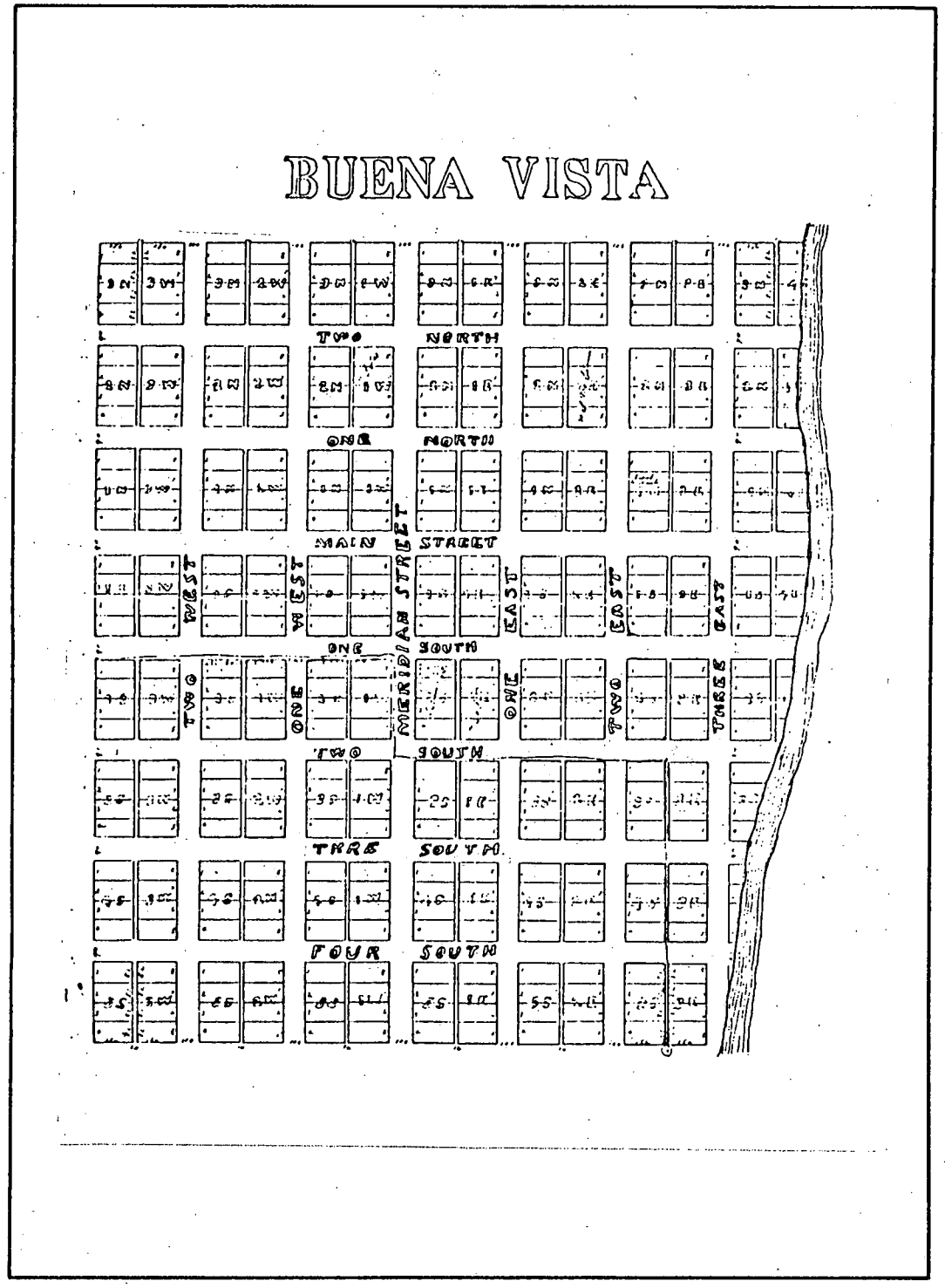


Figure 73. Plat of Buena Vista, Polk County Surveyor.

and 54 are set aside, as well as a string of blocks west of 7th which became Portland's park blocks. Two blocks were set aside for public markets--#132 and 172. At Oregon City, blocks 96-102 were set aside for public use.

Whether riverfront areas were in public or private hands varied from town to town and was apparently a controversial issue. The Oregon Spectator editor issued a warning to the immigrants of 1847 concerning townsite owners who retained ownership of streets, alleys, wharfs, and landings.[11] While some plats show fractional lots platted along the river front, in at least some towns the intent was to prohibit building along the river bank. When Lovejoy laid out Portland, he stated they "did not intend there be any building on the water's edge."[12] The Oregonian for June 24, 1854 announced the affirmation of the district court decree granting a perpetual injunction against erecting buildings on the river bank.[13] Dixon's addition to Marysville shows a public levee, and the plat of Champoeg shows an area set aside for wharves (see Figure 69).

When, in steamboat advertisements, the destinations were named, the ad usually included the words "and way points." How the number and location of landings, other than those in the towns, changed over time was not investigated. The names of the landings listed in Howard McKinlay Corning's, Willamette Landings, are associated with river features or early pioneers. Sometimes the river features are named for early pioneers. Since information passed between river pilots by word of mouth, it is not surprising that the rocks near Humphrey's Donation Land Claim became known as Humphrey's Rocks. Where the locations of

landings and the time of their existence is uncertain, a comparison of the list and the Donation Land Claim Index maps would be helpful. Maps produced by the office of the U.S. Chief of Engineers could also be used to date the landings. Between 1875 and 1895 the name of Humphrey's Rocks changed to Judson's Rocks, possibly because the landowner changed. Whether the number of landings increased or decreased after the introduction of the railroad is uncertain. All efforts to provide transportation on the Willamette after the introduction of the railroads were spearheaded by farmers. The U.S. Chief of Engineers Report for 1876 mentions the building of 300 new warehouses along the river after the river was cleared.[14]

For the towns, steamboat landings were identified on available historical maps (see Table 7). As expected, they were close to the Ferry landings, which represented the best landing sites (see Figures 74, 75, 76, and 77), although some towns, like Wheatland, had several favorable landing sites (see Figure 78). They were probably located one street away so the traffic of the two would not interfere. To what extent townsite owners modified their sites to create favorable landing areas was not investigated. The most common method of extending the landing areas and protecting the merchandise was the use of wharfboats or wharves. Wharfboats were used as early as 1851, at least at Portland[15] and Oregon City, and appear to have been replaced by wharves by the mid-sixties. A wharfboat is a boat moored to shore, used in areas where the water level fluctuates considerably. In 1861, at Oregon City, Chris Taylor was granted a five year lease of the lower landing by the city

Table 7. Steamboat Landings Within Towns

	Towns	Steamboat Landings
1.	Portland	Wharves at the foot of streets from Taylor to Vine St.[1]
2.	Oregon City	Foot of 2nd Street[2]
3.	Butteville	Foot of Butte Street[10]
4.	Champoeg	Near foot of Napoleon St.[11]
5.	Lafayette	Foot of Market Street[5]
6.	Dayton	Foot of Alder Street[6]
7.	Lincoln	Foot of Ferry Street[7]
8.	Salem	Foot of Trade Street[3]
9.	Independence	Foot of Boat Landing Street[12]
10.	Albany	Wharves at the foot of Ferry, Broadalbin, and Jefferson Streets[4]
11.	Corvallis	Foot of Jackson - donated by Dixon Ferry at foot of Van Buren[8]
12.	Harrisburg	Ferry landing south of Kesling Street[9]

1 1867 Directory Steamboat Ad
2 1845 Map
3 1878 Atlas of Marion and Linn Counties
4 Ibid.
5 Town Plat
6 Comparison of Town Plat and 1852 Surveyor's Map
7 Estimate based on location of grain warehouses and name of street
8 Land donated by Dixon for public levee, Plat 1851 - Dixon's add to Marysville
9 1878 Atlas of Marion and Linn Counties
10 Estimate from 1851 Surveyor's Map
11 Hussey, Champoeg: Place of Transition
12 Ogilbe, Map of Polk Co. Oregon, 1882

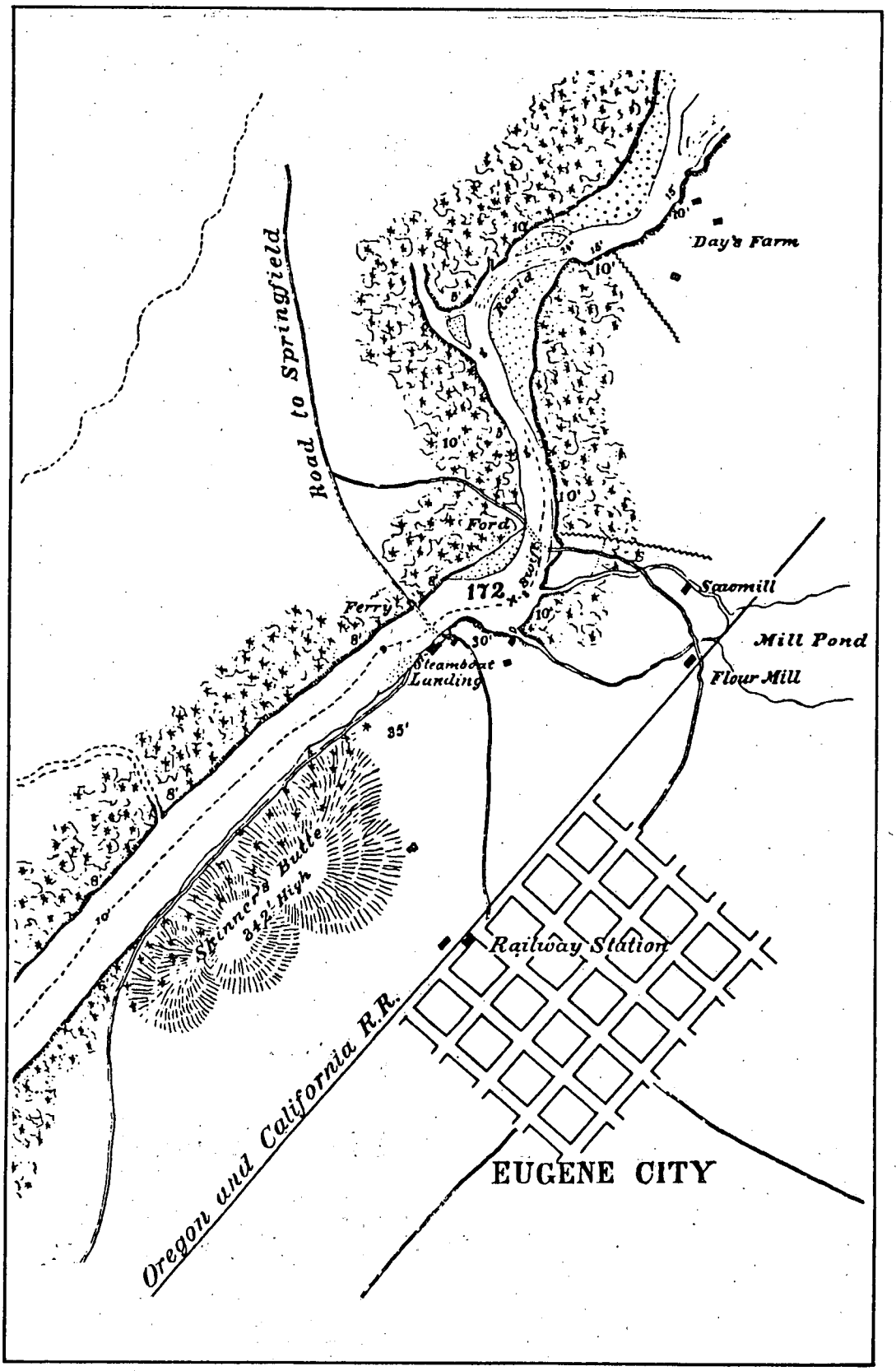


Figure 74. Steamboat Boat Landing at Eugene as shown on W-249-3, Upper Willamette River Survey, Harrisburg to Eugene City. R.G.77, National Archives, Washington, D.C.

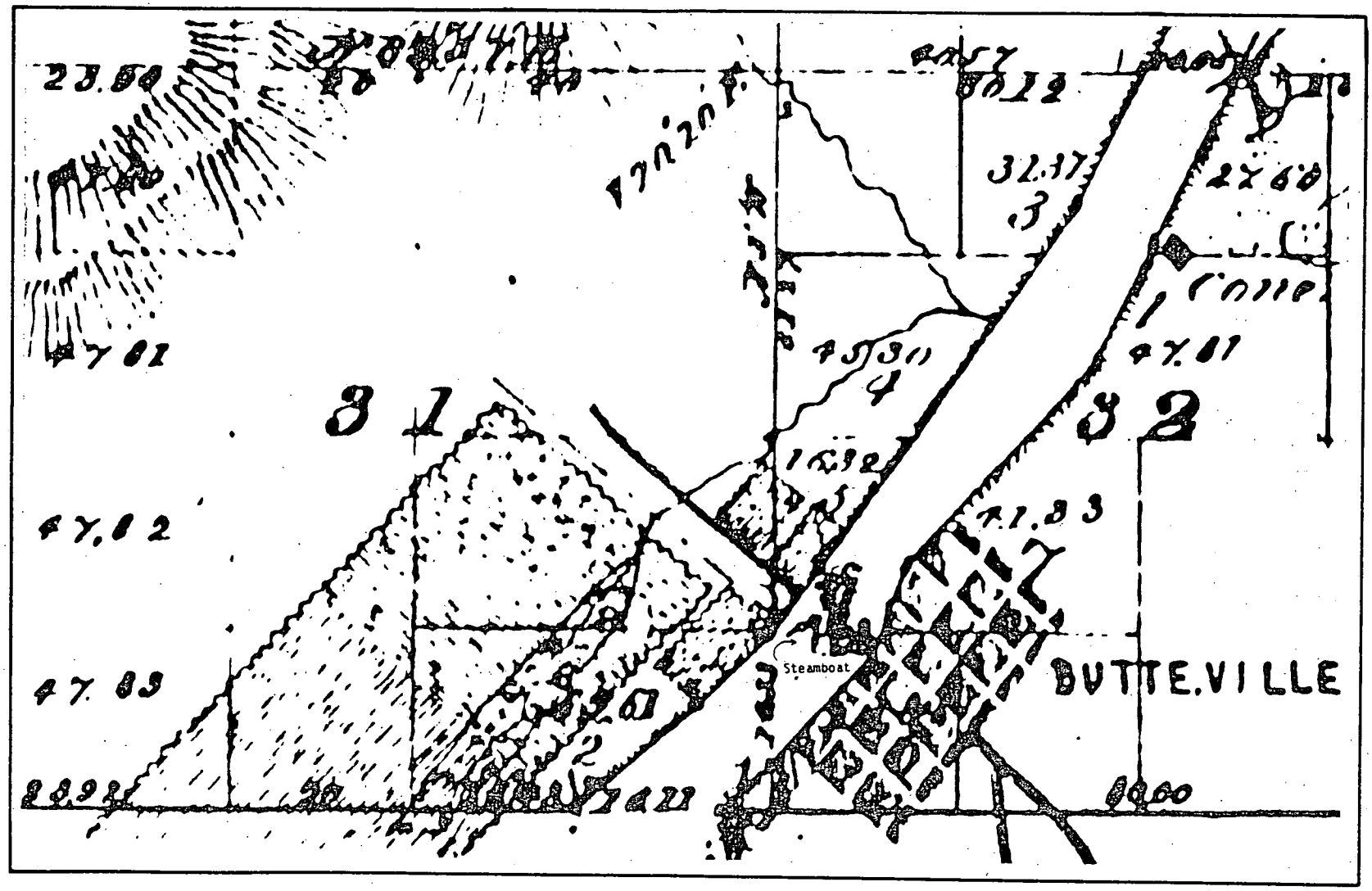


Figure 75. Steamboat Landing at Butteville. U.S. Dept. of Interior, G.L.O. Survey, 1852. T.3.S, R.1.W.

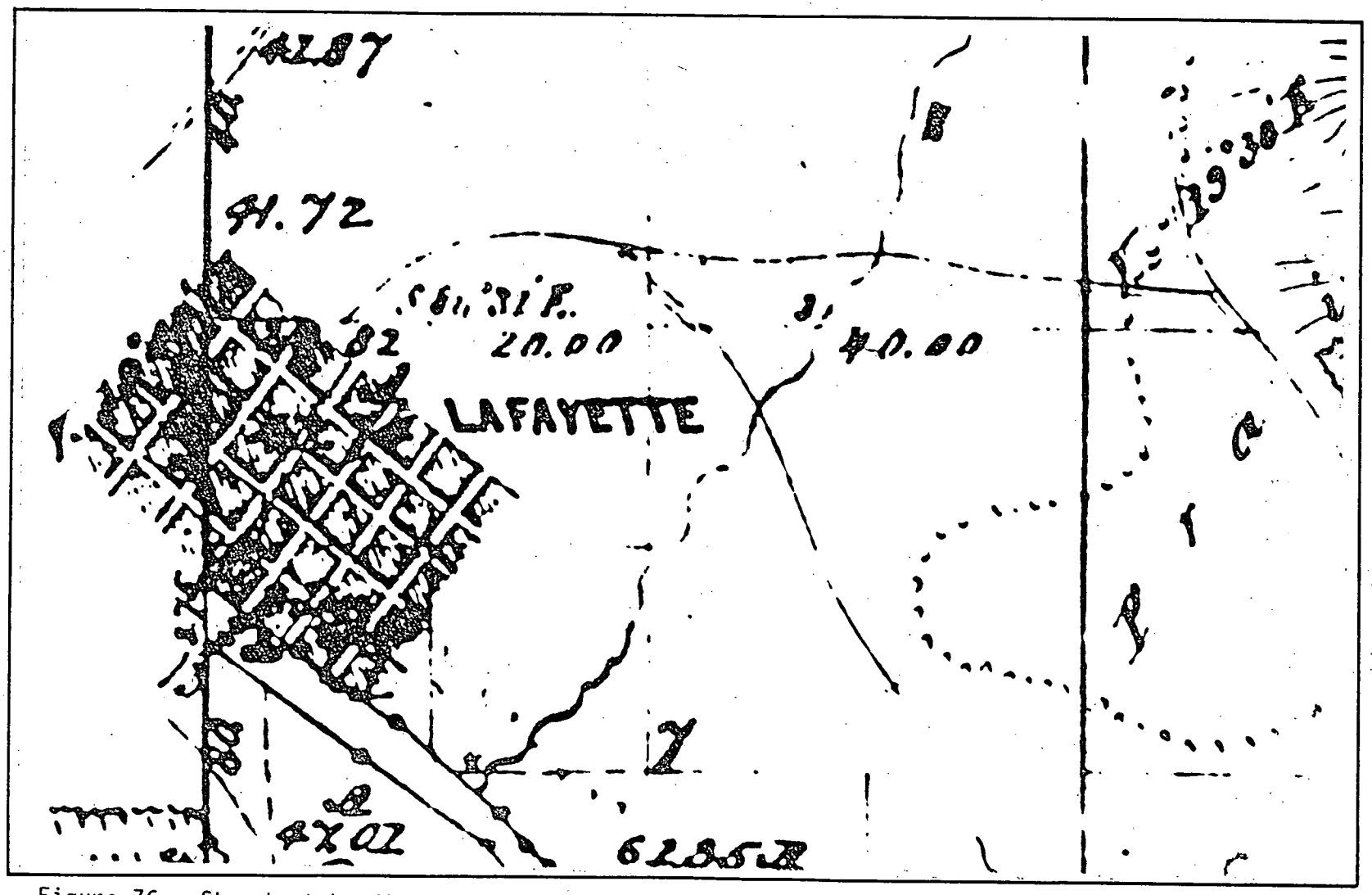


Figure 76. Steamboat Landing at Lafayette. U.S. Dept. of Interior, G.L.O. Survey, 1852. T.4.S., R.3.W.

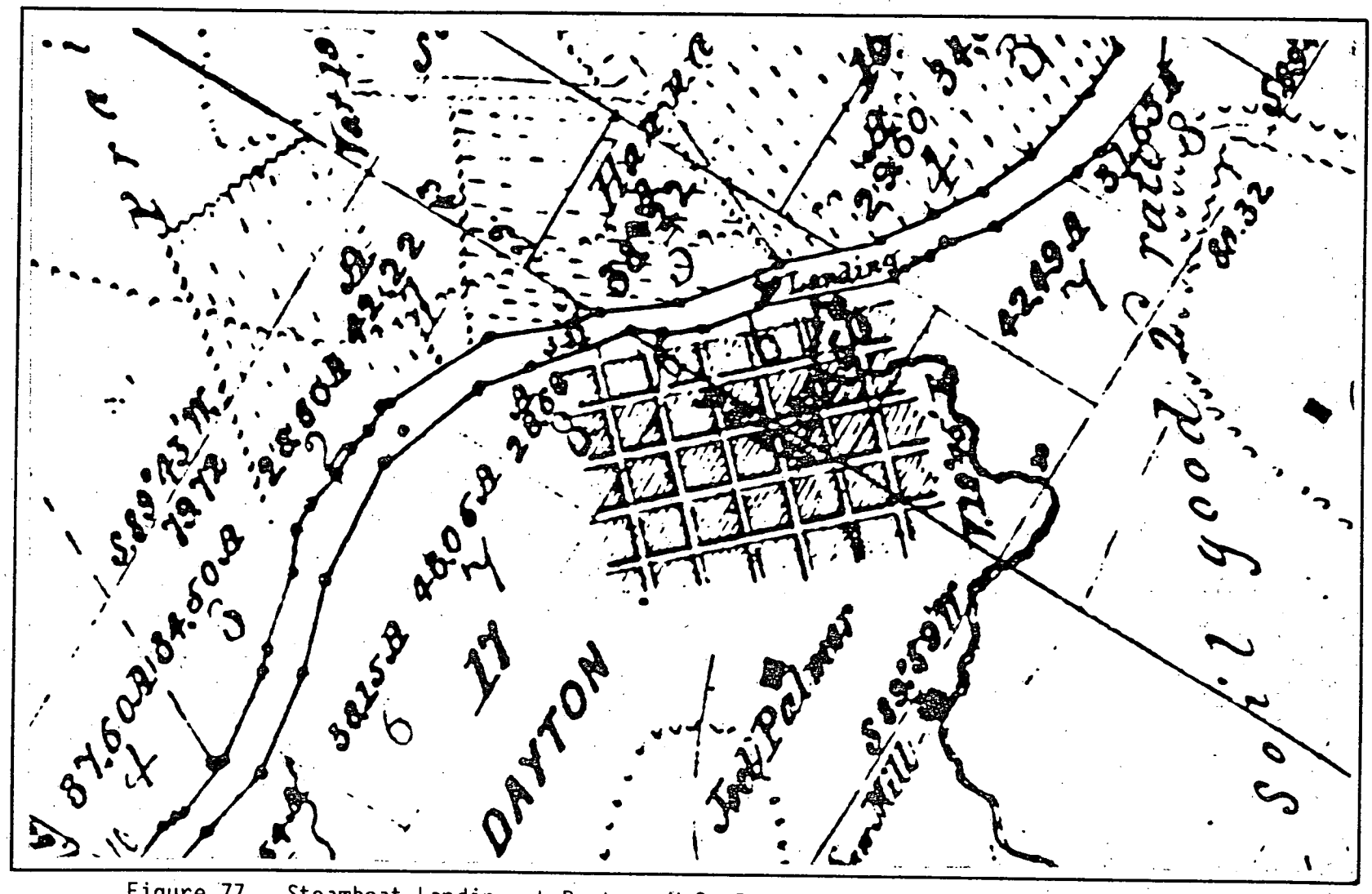


Figure 77. Steamboat Landing at Dayton. U.S. Dept. of Interior, G.L.O. Survey, 1852.

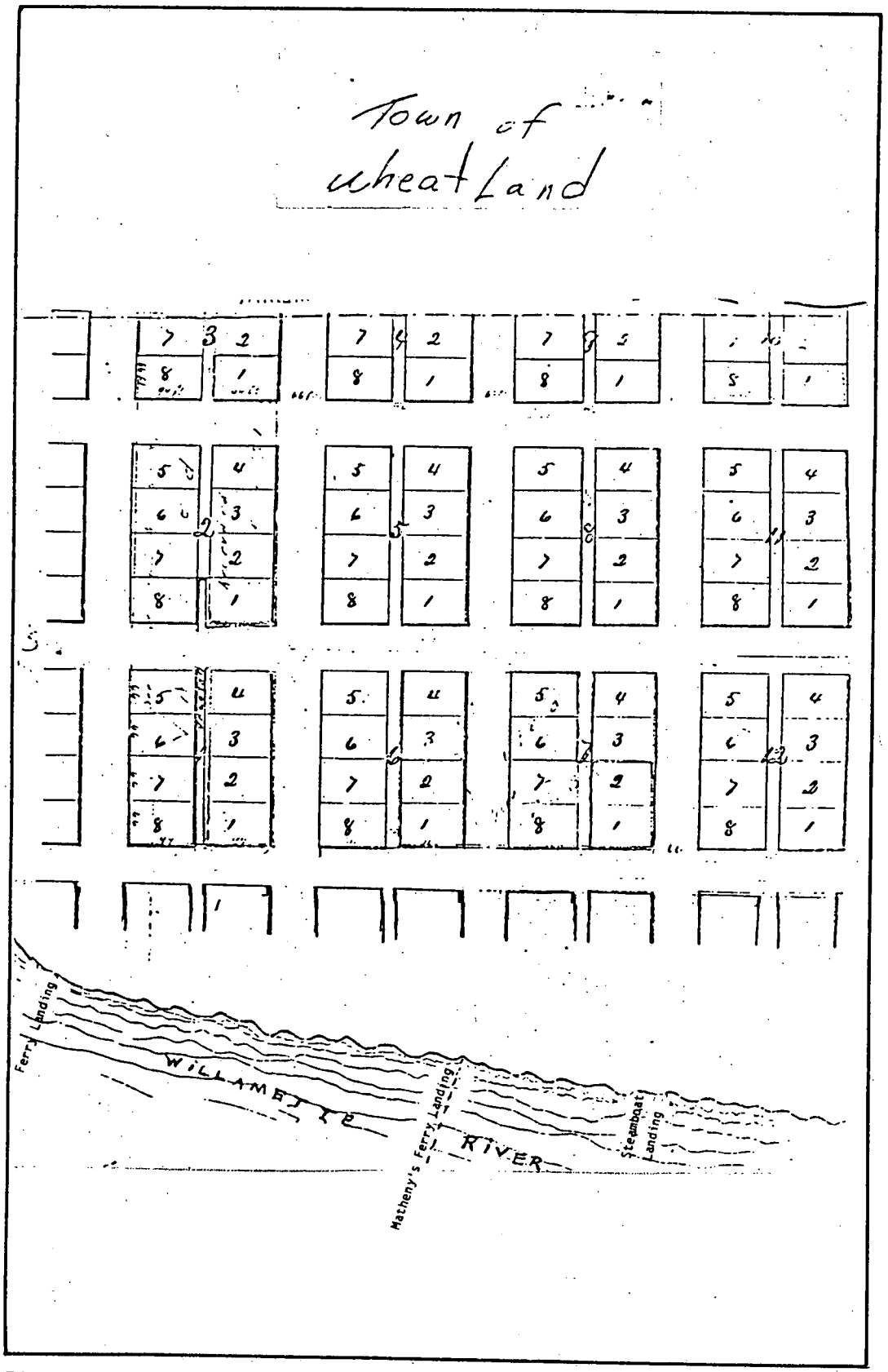


Figure 78. Steamboat Landing at Wheatland as shown on town plat. Yamhill County Surveyor.

council to keep a wharfboat there for storing freight from above or below.[16] Wharfboats were lost in floods, and when no warehouse or wharfboat was available, freight was left on the bank in the rain.[17] No pictures of wharfboats were found, but I assume what looks like a flat-boat with a cabin built on it in an 1858 lithographic view of Portland is a wharfboat.

These steamboat landings formed the focus for the location of stores, hotels, warehouses, and mills, which were those functions which had the greatest need for outside connections. Many early histories of the river towns record the locations of the first buildings near the landings. The store of Hartless and Sinclair, in Corvallis, was located near the landing,[18] for example. This clustering of functions can be seen on the 1845 map of Oregon City made by British Lt. Warre while on a reconnaissance tour through the Willamette Valley (see Figure 41 in Chapter III). The grist and sawmills, located on the millraces blasted out of the rock, and a store are identified near the landing. The hotel is on the riverbank a few blocks away. McLoughlin held the area near the mills as a mill reserve which may have prevented a tighter clustering. The Island Mills belonged to the Methodists. The other buildings become more widely spaced the farther from the boat landing they were. A portage road leads from the ferry to Canemah, and Main Street connects to roads leading to Champoeg and Portland. The smaller size of Linn City across the river is apparent. As described by Warre, Oregon City at this time:

> . . . contains about 300 inhabitants, two churches of wood, two grist and three sawmills, and about 80 houses, with one exception, built of wood.[19]

A lithographic view (see Figure 79), made about the same time in color, shows the buildings painted white with red roofs, except for a cluster of smaller buildings near the river which may have been older. While they vary in size, most of the buildings are very similar in style. McLoughlin's Mills are larger than the others. The hotel, along the bank to the left in the picture, is of similar size and style to the mills. These serve as examples of the type of multiple use buildings being constructed at the time. With few changes, a building could be made to serve a new function. Palmer states that in 1843 the site was covered with a dense forest but, as the view shows, there are no trees visible within the city limits.[20]

Cyrus Walker described Oregon City's main street in 1849. His description, written down in 1909 from memory, is used here to give a sense of the internal arrangement of the town.

> At this time as near as can be remembered the mills, stores and houses of families and their location was as follows beginning at the west end of the city. Along the riverfront--first was the Island Mills, then Dr. McLoughlins Flouring Mill. Immediately below it was the landing for the ferry between Oregon and Linn Cities. . . . Next in O. C. came the Hoods, then Capt. Kilburns residence, and immediately east, his store.
>
> Across the street, intersecting Main Street, was the Barlow House [the Hotel] next the Sounders home and near it the mint building; where were coined the Beaver $5.00 gold pieces, . . . Dr. Lacey lived next east, then Mr. Robbs place; that reached from riverfront to Main. Next was Mr. Price . . . then the McGruders, then Holderidge, the cooper . . . Dr. Barclay was perhaps next, then came the Catholic Church. Across the gulch--running down from the bluff was the T'Vault home, on the river bank.
>
> Along or near Main street north side was first a store just--south of McLoughlins mill, conducted by some Frenchmen, who came in '49. . . .

> Next was McKinley's store about the middle of the block north and south, then Gov. George Abernethys brick store, facing Main Street; then H. Campbells; then the soldiers barracks; and just east--a building erected for a store, but for a time used as a bakery.
>
> Across another street from the river to Main Street was the Robb front yard. Next was Prices blacksmith shop, at the time occupied by the Webb's. . . . Then along Main Street--were Mr. Berry . . . , the Bucks; (I think) Holderidges Cooper shop, the residence of R. R. Thompson and his furniture shop. . . . At the west end of the bridge across the gulch was Caufields store. East of the bridge was the Catholic Church grounds. . . .
>
> On the south side of Main Street beginning at west end were buildings as follows.
>
> First stood the McLoughlin home; next, that of Gen. M. M. McCarver. . . .
>
> Back near the Bluff was the Methodist Church. . . . On the corner east of the church grounds was a saloon and bowling alley; then the Moss Tavern. . . . East of the Tavern was Holderness' store, then back near the bluff was Gen. Medorem Crawfords. . . . On the elevation beyond Crawfords were the Bewleys. Fronting Main Street was the Rev. Walker mansion, with its basement and two stories. . . .
>
> Back towards the Bluff was the Briggs family.
>
> Then along Main Street was Berry's tailoring establishment, a gun shop, and the Methodist parsonage; occupied by Rev. David Leslie.
>
> In this vicinity as near as remembered lived Judge S. S. White; . . . Also Col. Taylor; . . . Also the Comforts; and the Kester Brothers.
>
> Across the gulch near the bluff was Stephen Meek, and his slaughter yard. . . . Lastly around the point of the hill lived Rev. G. H. Atkinson.[21]

This description gives a sense of the character of this early town. A residence, such as Kilburn's, is near his store,[22] the store shown on the 1845 map. Other stores are located at this end of town, for example, the French Store, behind McLoughlin's mill on the Mill Reserve,[23] and Abernethy's brick store. Warner explains that the transportation costs within a city were so high that it was advantageous to locate as close as possible to the boat landing.[24] The Barlow House is the hotel shown on the 1845 map. The 1851 view by George Gibbs (see Figure 80) shows

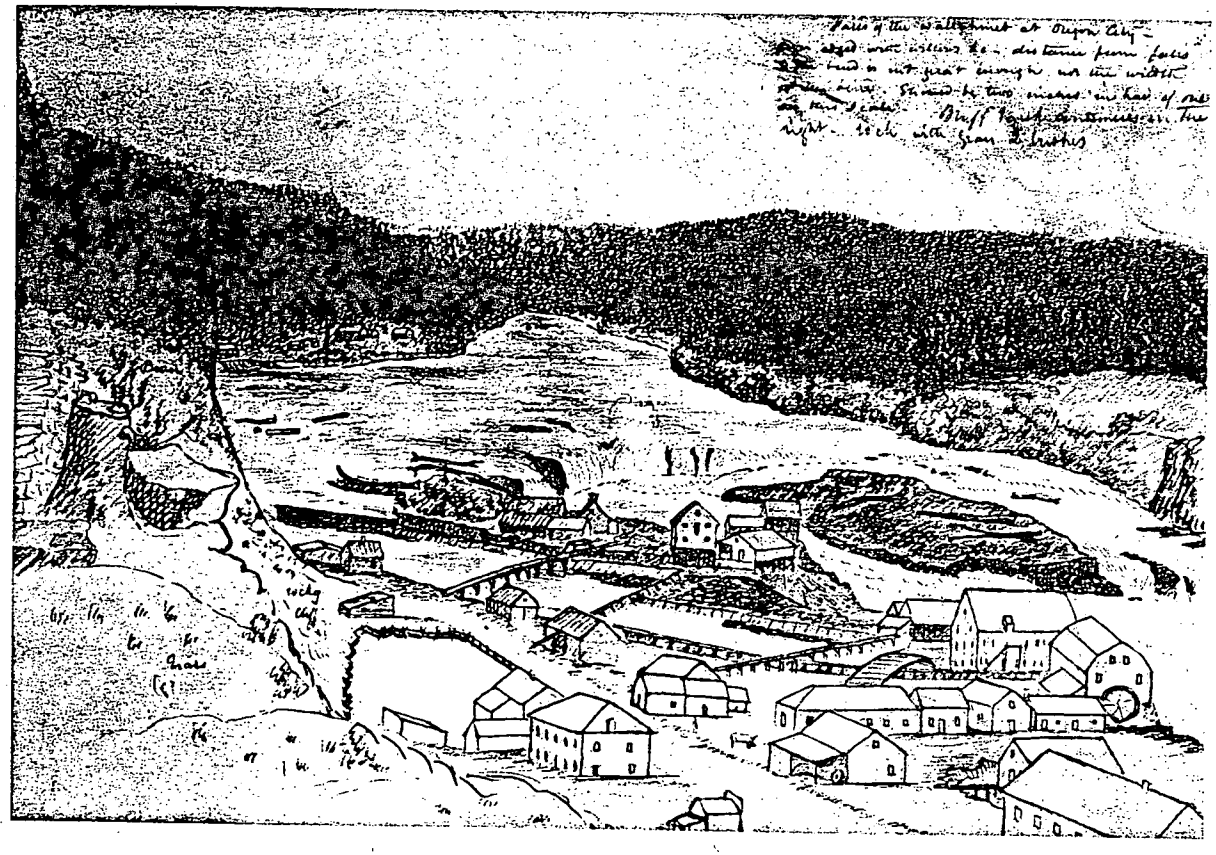


Figure 80. Oregon City and the Falls of the Willamette. Drawn by George Gibbs about 1851. The Smithsonian Institution, National Anthropological Archives. Negative Number 2854-F-12.

this business portion of the town. Bridges connected the Island mills to the main part of town. Buildings line the road up from the ferry. The large building in the left foreground is McLoughlin's house.

At Champoeg, as seen in the view by George Gibbs made in 1851 and the map by Hussey to show Champoeg in 1852, the warehouses and stores were strung out along the river bank (see Figures 81 and 82). The Dupuis stage connected with the steamboats when low water prevented their ascent upriver. Hussey states another steamboat landing was at the southern terminus of the ferry landing.[25]

At Butteville, as seen in the view made in 1852, the grain warehouse was located close to the water (see Figure 83). The sacks of wheat were slid down the ramp to the awaiting steamboat. Because of its size, the larger building above the grain warehouse may have been a store or warehouse for general merchandise. Some storage facilities must have been available at Butteville because freight was landed there when boats were unable to reach upriver points. A correspondent writing in August 1851, stated:

> The merchandise destined for Salem is landed at Buteville, and from thence conveyed by land, a distance of twenty-five miles, over a level prairie country.[26]

The town of Burlington probably appeared similar to Butteville and Champoeg. In 1853 it had two dwellings, two stores, one smithy and a ferry.[27]

The prosperity engendered by the gold rush resulted in a flurry of remodelling, painting, and general investments in improvements at Oregon

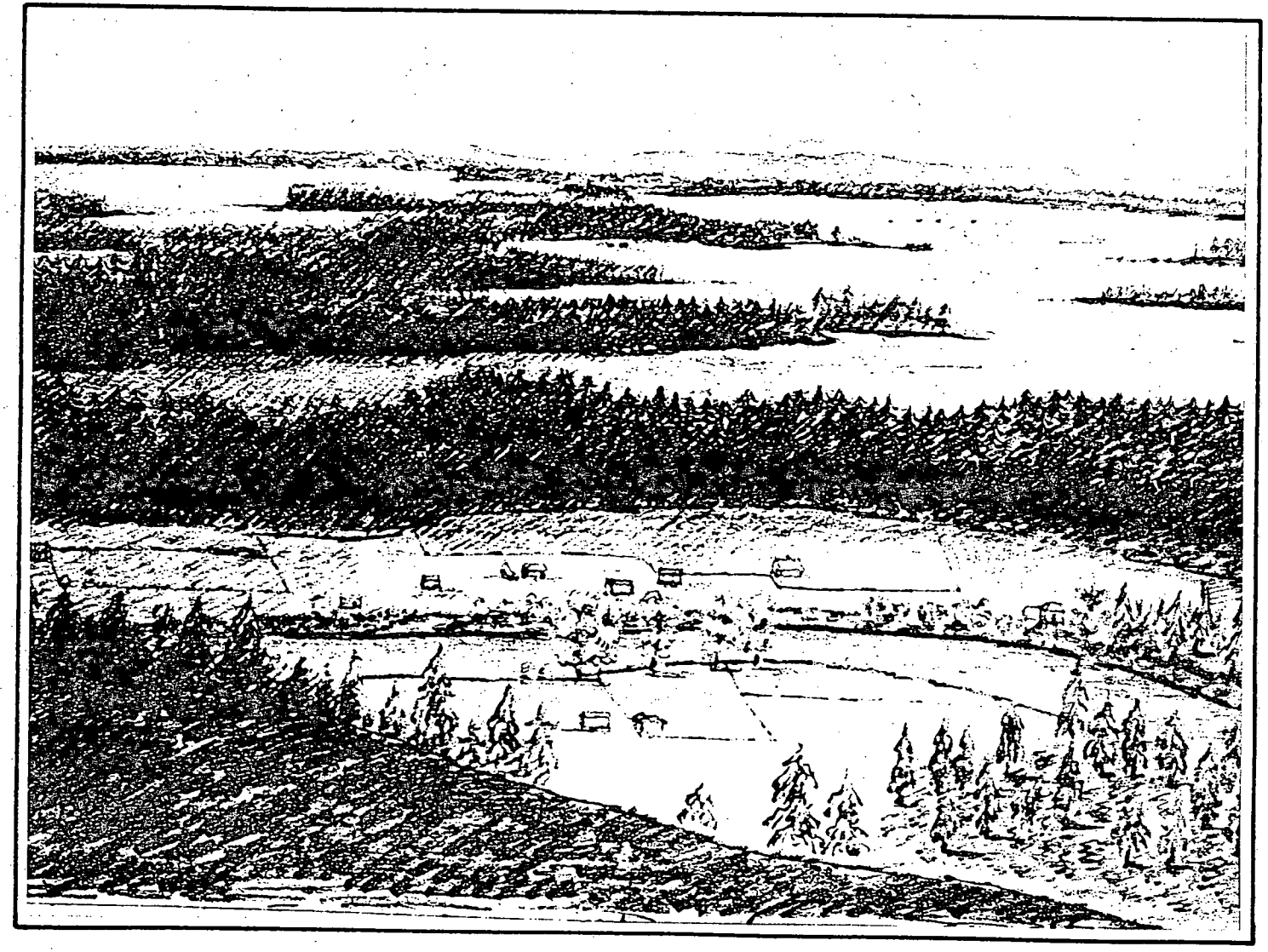


Figure 81. Champoeg and French Prairie. Drawn by George Gibbs, about 1851. Used with permission of the Smithsonian Institution, National Anthropological Archives. Negative Number.

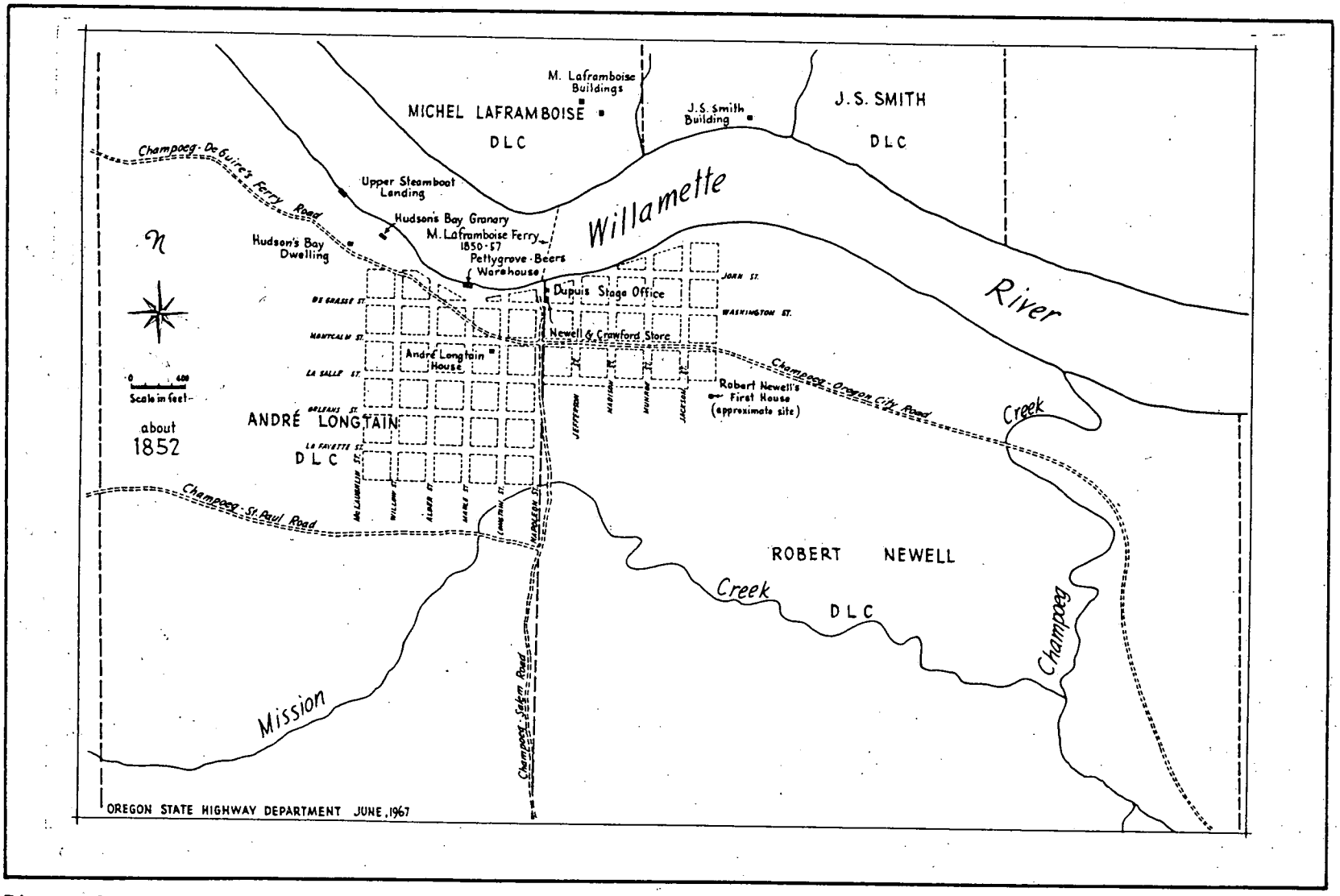


Figure 82. Champoeg - 1852. From Hussey, Champoeg: Place of Transition. Used with permission of the Oregon Historical Society.

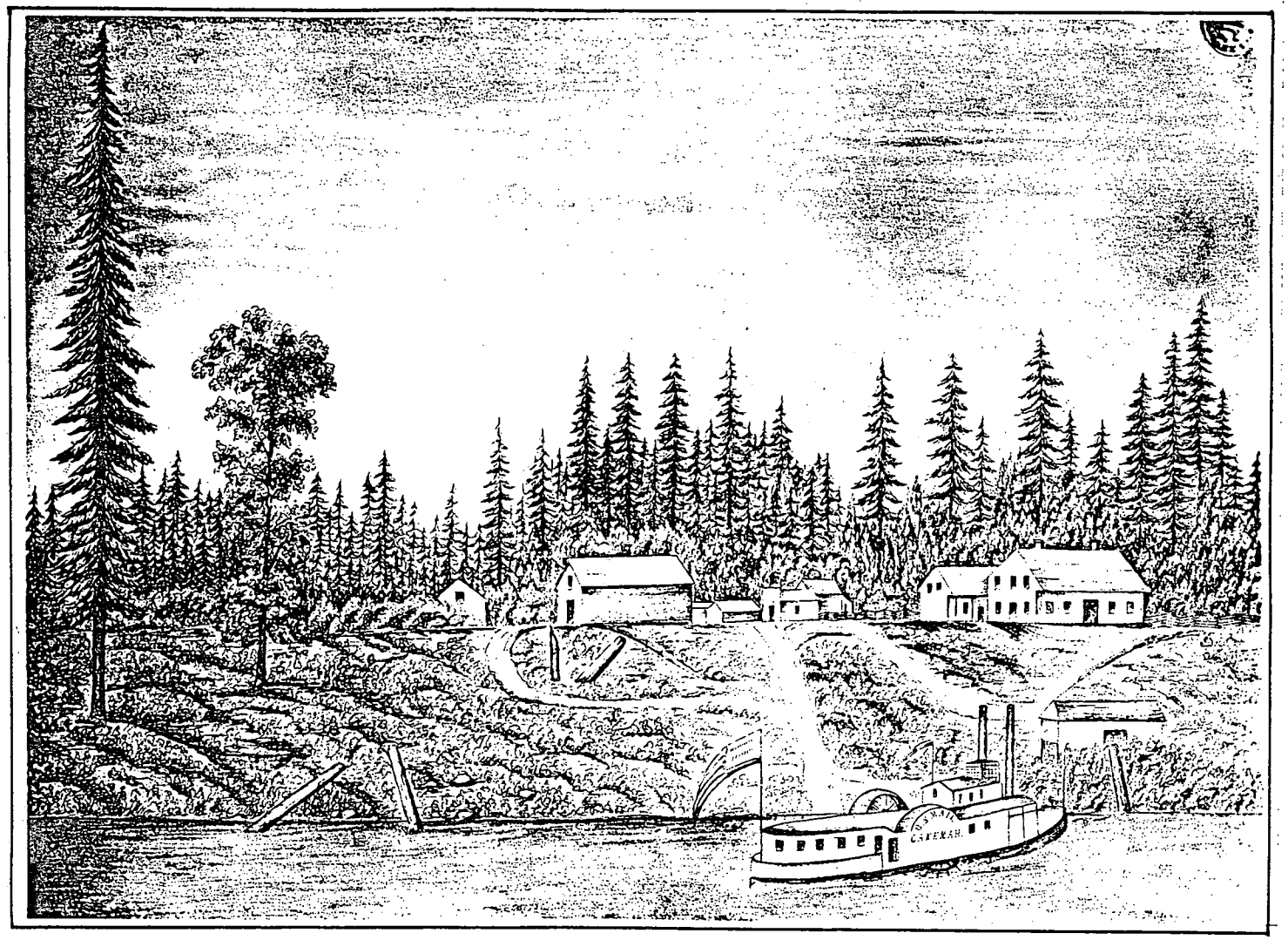


Figure 83. Butteville - 1852, by John Jameson. Used with the permission of the Oregon Historical Society. Negative Number 484.

City. New buildings were larger, and painted white. Carpenters advertised their willingness to build "in the latest eastern styles."[28] The Oregon Spectator editor commented:

> In looking over the city, it is very easy to distinguish the old era and the new, or what was accomplished before the discovery of the gold mines and what after it. Most of the buildings erected before that period, are small, and but few having been painted, look old and brown, while those of a late date are mostly large and elegantly furnished.[29]

The price of everything increased, for example, town lots. According to Henry Coke, passing through Oregon City in 1852:

> Buildings are springing up in all directions, and lots of land yet uncleared are being bought up at high prices. Small wooden houses, with no more than two or three rooms, rent at 150 to 200 dollars a month. A lot of 160 ft. by 100 ft. cannot be bought near the town for less than 200 dollars. Plans are actually being made for public promenades and other ornamental improvements. . . .[30]

Additional stores and businesses were built near others. A hotel called the Silver House was opened on Front Street in Oregon City in 1851.[31] Preston and O'Neil opened a wholesale trade establishment near George Abernethy's brick store.[32] Ferdinand Behrn erected a business house opposite Abernethy's brick store in 1853.[33] Several buildings were remodelled, sometimes including the addition of another story. Both hotels in Oregon City, the Main Street House[34] and the Oregon House,[35] were remodelled.

New buildings replaced old, or larger buildings were found in new locations.[36] New buildings were usually larger, with more stories.[37]

Merchandise lines were expanded.[38] Some became wholesale establishments.[39] Some new buildings were brick.[40] Sometimes buildings themselves were moved,[41] for example, the Methodist Church.

Some new businesses reflected the new mode of transportation. A new foundry and machine shop built at Oregon City in 1854 was expected to supply engines and castings for new steamboats as well as mills:

> The establishment of a machine shop and foundry had been too long neglected, and previous to the erection of this one now in operation at Oregon City, our people engaged in the building of steamboats, saw and grist mills, have been under the economic necessity of getting their engines, castings etc., from the States. We were pleased to learn from the Proprietor that he is in readiness to supply all in the Territory who are building steamboats, mills, etc.[42]

Streets were graded. Streets in Oregon City were uneven and several times the Spectator editor lauded the removing of hills and filling of holes in the streets,[43] and called for streets graded in line with the buildings.[44] Owners and able-bodied men were required to put in one day's labor per year on the streets and alleys, according to an 1853 Oregon City ordinance.[45] In 1853, portions of some streets were macadamized, i.e., finished with a layer of small broken stone.[46]

Besides the rebuilding, which resulted from the increased money supply, damage by fire occurred often and contributed to the changing character of the town's appearance. During the 1850s, cisterns supplied the water to fight fires. How much damage was sustained often depended on the wind direction and how close the burning building was to others. Often replacements were brick, viewed as fireproof.[47]

During the late 1850s, the economic slowdown meant that improvements were done on a smaller scale--replacing fences and painting houses. Less building was done.[48]

Lithographic views of Oregon City, Corvallis, Portland, Eugene, and Salem dated 1858 exist. Those of Portland, Oregon City, and Corvallis are used here. In comparing the 1858 and 1845 views of Oregon City (see Figure 84), that portion of the settlement to the right of the jail appears more densely settled. Most of the buildings are two story. The cluster at the Falls shows larger buildings had replaced the ones formerly adjacent to McLoughlin's mills. The remodelling of the Oregon House at 3rd and Water Street,[49] above and to the right of the ferry, is apparent. In this view it has a double porch. The Methodist Church, above the steamboat and to the left, had been moved into the residential section. The Catholic Church no longer appears on the bank, but appears in the views of individual buildings which make up the border on the original lithograph, so it was probably moved. The jail on the river bank, which was near the end of town in the 1845 view, appears in the middle in this view, giving a sense of how the city had doubled in size in the intervening years.

The business section of town is to the right of the jail running from 1st to about 5th Street. A few building locations have been determined. Two general merchandise stores were near the location later occupied by the woolen mills. Between 3rd and 4th on Main were two general merchandise stores, a tin and copperware shop, a livery and feed stable, and a saloon. Two saloons and a livery stable were some of the buildings located between 4th and 5th.[50] The three story building above

the steamboat and to the left was used as the territorial capital building, the Oriental Hotel, the county courthouse, and the first free reading room at different times.[51]

The residential section, is for the most part, in the left half of the view. McLoughlin's House was originally at 3rd and Main and other houses may have still been in the older part of the city. Most lots are surrounded by fences and trees have been planted. The following advertisement is inserted here as an example of the type of residential property available then:

> The subscriber offers for sale his residence in Oregon City.
>
> There are two full lots, well fenced, with bearing fruit trees, and shrubbery of the most desirable kinds, together with a stable and a well.
>
> The house is one and a half stories, well plastered, with seven rooms, pantry, closets, drain and celler.
>
> The location is one of the most desirable in the city, easy of access, and commanding a beautiful view of the river. . . .[52]
>
> Sept. 26, 1857 Thomas Pope

The frequent mention of two lots per dwelling suggests that this may have been the rule.[53]

By the time this 1858 view was taken, Oregon City had suffered from the high water of 1849 and 1853. The cluster of small buildings formerly located between the mills and hotel are missing. Perhaps this was one location consistently flooded so these lots were no longer built upon. Perhaps it is the angle difference between the two views, but buildings in the 1858 view do not appear to be hugging the bank as they do in the 1845 view.

Also seen in the 1858 Oregon City Lithograph are a portion of Linn City and in the distance beyond the Falls, Canemah. At Linn City, the building near the Falls could be the freight transfer warehouse built by the Willamette Falls Milling and Trading Company in 1853-54. Few buildings appear on the Linn City side of the river. Buildings lost in the high water of 1853 may not have been replaced, given the proximity to Oregon City.

The 1858 view of Corvallis shows an open townsite with buildings strung out along the site (see Figure 85). The grain warehouse is on that portion of the riverbank which slopes down to the water. In 1857, there were 2 doctors, 8 general stores, 2 groceries, 2 drug stores, 2 harness shops, a photographer, jeweler, hotel, a livery stable, a restaurant, a log schoolhouse, a sawmill, a grist mill, 2 blacksmith shops, and 4 saloons. Mills in Corvallis were steam powered.[54] The flat topped building in the center is probably a brick building. Both J. S McInteeny and J. C. Avery had brick buildings;[55] J. C. Avery's was at the corner of 2nd and Adams.[56] Stock and Kaufman's general city hotel merchandise store was one door north of J. C. Avery's.[57] A saloon was across the street from the city hotel[58] and there was a restaurant nearby.[59] In addition to the city proper on the claims of Avery and Dixon, nearby land claim holders cut up land for house lots in 20 acre parcels:

A Good Chance on Better Terms

> Persons desirous of securing a small piece of land adjoining Corvallis, for family residences, now have an opportunity. Mr. S. M. Stout, as will be seen by reference to our advertising columns, offers to sell his entire claim, 200 of which,

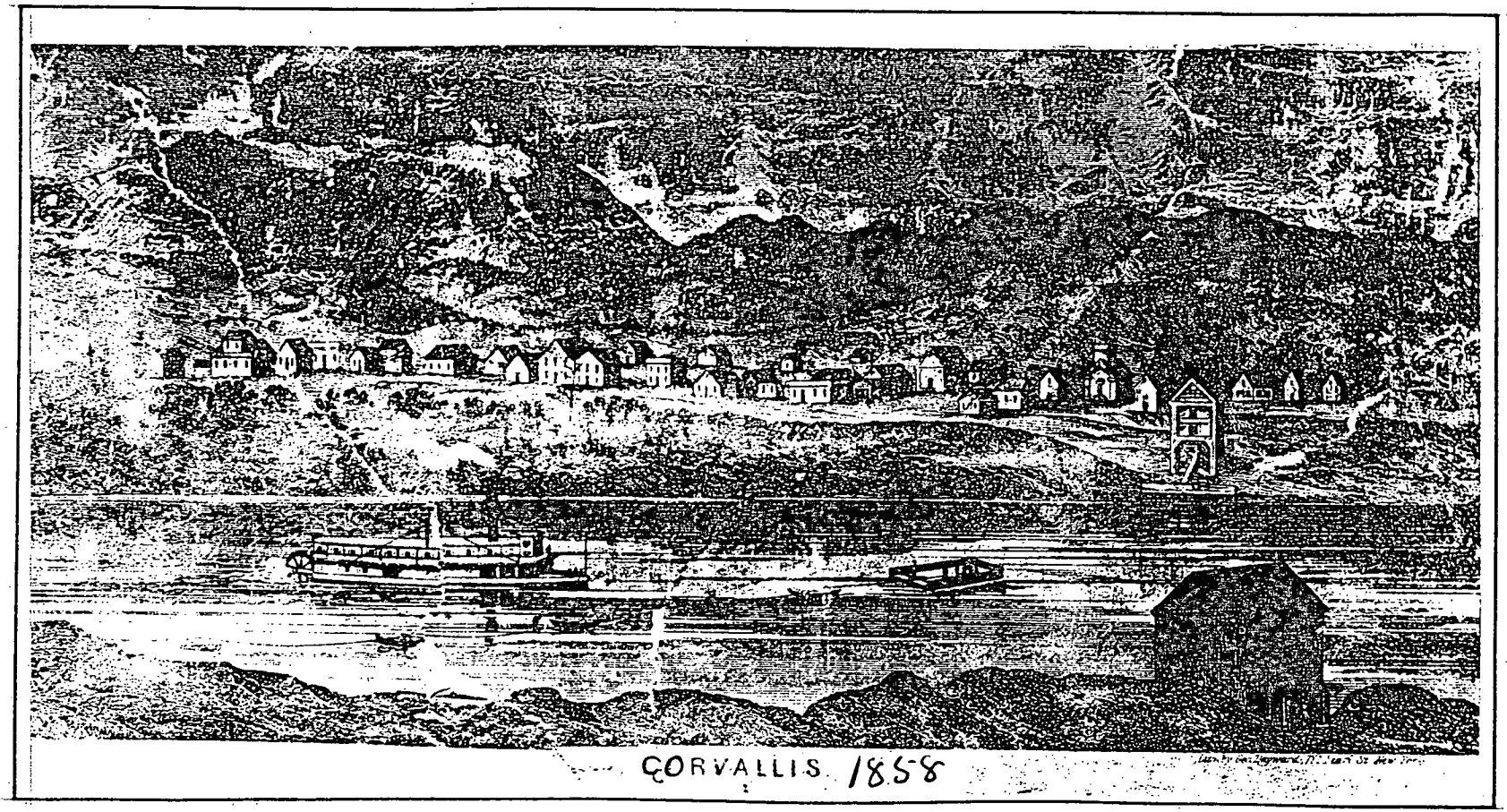


Figure 85. Corvallis - 1858, by George Hayward. Used with permission of the Oregon Historical Society. Negative Number 4300.

> he proposes to cut up in lots of 20 acres each. Mr. Stout's land is of the best quality for farming purposes, and lays so near town as to be within convenient distance of our school. He offers great inducements to such as desire a location convenient to a good school. The terms are certainly liberal. If a few more of the large claim holders near town were to follow suit, and secure a family to every 80 acres, at least, it would add much to the business and interest of our county and city. We hope that Mr. Stout will find a ready sale for his valuable lands, and that it may induce other large landholders to a similar course. Now is the time to get good healthy locations with a small tract of land convenient to town.[60]

Across the river from Corvallis was the town of Orleans. The warehouse is seen on the riverbank in the lithograph of Corvallis. By 1856, it also had a store, a sawmill, and several homes. Within the next five years it acquired a larger store, blacksmith shop, a brewery, and more homes.[61] Most of the buildings were ruined in the flood of 1861.

The lithograph for Portland in 1858 (see Figure 86), shows the city that had surpassed Oregon City in population by the 1860 census. The city is more compact, with several streets of adjoining buildings in what was probably the commercial section. They fill the entire lot and are a mixture of wooden box-shaped buildings with gable end to the street, false-front wooden and brick buildings. As was apparent in the 1845 view of Oregon City, the wooden box-shaped building with the gable end facing the street was the oldest form.[62] In contrast to the smaller towns, there were many more wooden false-front buildings which gave the buildings the appearance of a place of business.[63] Here, too, are brick buildings which fill two lots and are three stories in height.

Along the waterfront, steamboats are tied up at wharfboats, the greatest number at the base of what appears to be Washington Street.

Figure 86. Portland - 1858, by Kuchel and Dresel. Used with permission of the Oregon Historical Society. Negative Number 5495.

Wharfboats were the earliest answer to the changing water levels experienced at towns along the Willamette. Later, as seen in the 1865 view of Portland, two story wharves were built. The largest building along the shore with the steamboat tied to it could be the forerunner of the Oregon Steam Navigation Company wharf and warehouse, located between Pine and Ash.

The residential section on the left is similar to those in the other views, houses surrounded by fences on large lots. There are fewer trees in the city proper in this and the Corvallis views.

As did other Willamette Valley towns, the Portland economy suffered from 1859-1861 when the California wheat market was lost. Besides losing the income from wheat handling, Portland merchants suffered losses when other Willamette Valley merchants they supplied could not pay their debts. The flood of 1861 caused further losses.[64] However, with the discovery of gold in Idaho in 1862, and foreign trade, new business and residential buildings were under construction by 1863.[65] Rushes continued to occur to 1865.

In the 1865 view (see Figure 87), wharves, instead of wharfboats, occur at several locations along the river. A smaller section of the city is shown, only to Taylor or Yamhill on the left. More of the business establishments are full two story buildings, replacing the false-front wooden one story buildings seen in the 1858 view. Also, more evident, are a greater number of brick business structures. That portion of the residential section shown reveals more substantial buildings and a filling in of spaces.

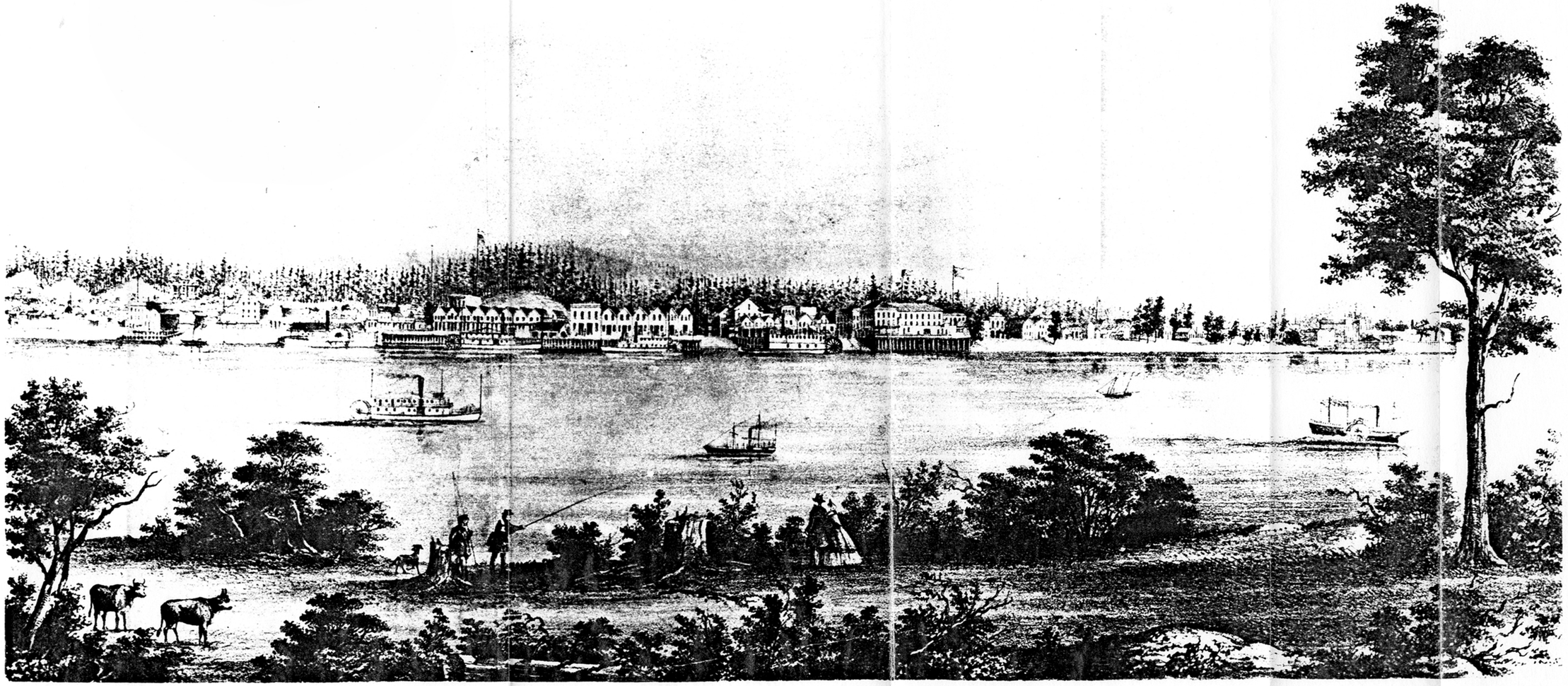


Figure 87. Portland - 1865. Used with permission of the Oregon Historical Society. Negative Number 5491.

To further describe the city in this period, I made a map of the Front and 1st Street district using the 1867 Portland Directory (see Figure 88). This map is only a partial reconstruction since only those businesses for which a numbered address was available were mapped. Both No. 51 and 53 Front Street were described as located on the corner of Oak and Front Street, so they were placed on either side of Oak on this map and numbers for other businesses located with reference to those two. Even numbers were assigned to the eastern side of Front based on the location in North Portland of the Allen and Lewis Co., listed in the 1867 tax assessor's list for Multnomah County available at the State Archives, as owning lots 1 and 2 in that block and listed in the directory as at 18, 20, and 22 North Front. Lot locations were assigned according to the numbering systems given by the town proprietors when subdividing their land claims. Blocks originally had 8 lots to a block. To assign addresses to places between 51 Front and Allen and Lewis, I numbered backward to Vine where the division between North Front and Front seemed to occur, then numbered from #1 North Front to #18, 20, 22 where Allen and Lewis were located. The numbering worked most satisfactorily when each block was divided into 16 lots, and spaces left for Vine and Ash. Further research may show that the lots were not all the same size or in some other way prove this map incorrect, in particular in the Vine - A Street area. Further lot subdivision is seen in the area between Yamhill and Morrison on Front, where a gunsmith, a merchant, a tobacco shop, and an unknown function each have half lots. These were listed in the directory by a ½ following the number. This area was probably the first where further subdivision took place because

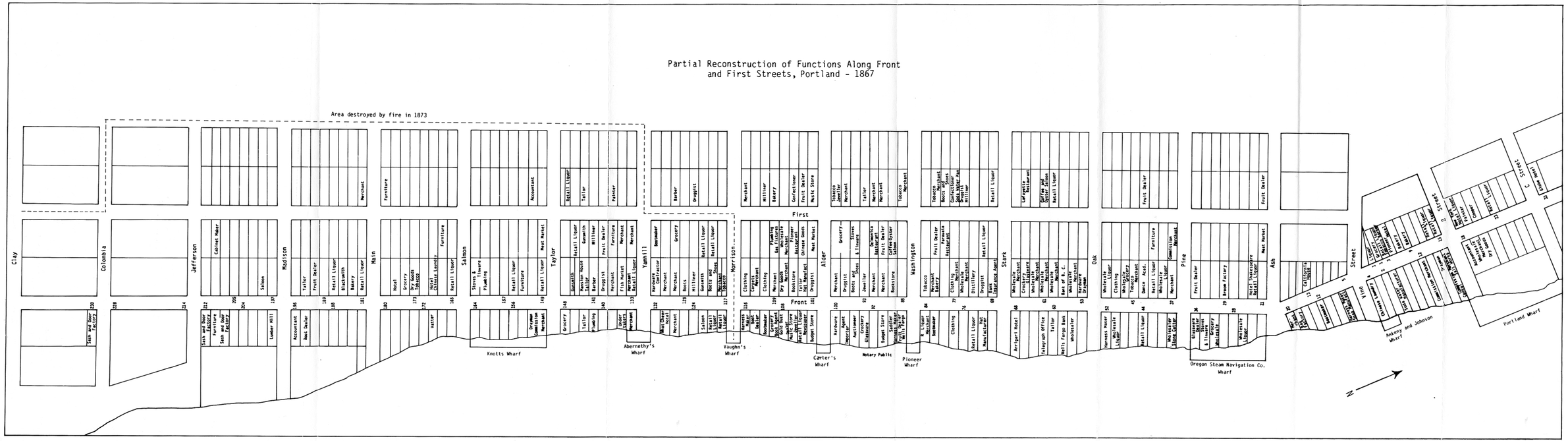


Figure 88. Partial Reconstruction of Functions Along Front and First Streets, Portland, 1867. Data from the Portland Directory for 1867 by S. J. McCormick.

most small retail shopkeepers would have needed less space and been less able to afford it.

According to Snyder in Stumptown Triumphant,[66] sailing vessels moored at the foot of Taylor Street, and Portland's first wharf was located at the foot of Washington Street.

Several wharves were listed in the 1867 Portland Directory.[67] Whether the list there is complete was not investigated. The size shown on the map I constructed is my own estimate based on the description given. For example, Abernethy's Wharf, listed as "at the foot of Yamhill Street," is shown attached to his warehouse at 134 Front Street, as well as at the foot of Yamhill. Pioneer Wharf was described as "at the foot of Washington Street." The Oregon Steamer Navigation Company's Wharf was described as "between Pine and Ash Streets." Steamships stopped at the foot of "B" Street, where the Portland Wharf run by Couch and Flanders was located. As stated earlier, the People's Transportation Company picked up passengers at the foot of Washington Street in 1865. According to an 1864 ad,[68] the boat left Couch's Wharf, and stopped at Vaughn's Wharf to pick up passengers. The independent steamboat Echo, accepted freight at Couch's Wharf.[69] By February of 1867, the People's Transportation Company had their own dock at the foot of "A" Street.[70]

Most commission and wholesale merchants were located north of Stark Street, or very close to the wharves. Many commission agents were located near "B" Street. These agents imported and sold a variety of merchandise. For example, McCracken, Merrill and Co. at # 14 and 16 Front were shipping, commission, and forwarding merchants for flour,

grain, bacon, lard, fruit, lime, cement, plaster, salt, sugar, coffee, rice, and pulu.[71]

Some merchants who handled both retail and wholesale had offices in different parts of the city. For example, Everding and Beebe, wholesale and retail dealers in flour, bacon, corn meal, hominy, oat meal, pearl barley, and farina,[72] were located at No. 10 North Front and No. 125 and No. 150 Front. Most merchants imported direct so merchandise most difficult to transport was handled and stored near the wharves. Merchandise was transported through town by draymen, and their offices were usually associated with the commission merchants.

Banks, as potential financiers and insurance agents, were located between Oak and Washington on Front. Wells Fargo was also a gold dust dealer and was across the street from the Bank of British Columbia at 57 Front. Ladd and Tilton were at 69 Front and the 1st National Bank on the 2nd floor at 73 Front.

Hotels like the New York Hotel or the Globe Hotel may have served as temporary quarters for the boat crews or the traveling public. However, the other hotels were located about a block apart between Stark and Taylor, closer to the passenger wharves, so perhaps most travelers stayed there. The Arrigoni was at 1st and Stark; the Lincoln at Washington and Front; the Washington at 2nd and Alder; the Western at 1st and Morrison; and the Mansion on Front between Yamhill and Taylor. Two more were located between Salmon and Main.[73]

Retail liquor establishments, a label which apparently covered saloons as well as liquor stores, were located on North Front or were

associated with hotels, as were barber and tobacco stores. Some restaurants may have been located in hotels. No mention appears in the advertisements. All others are located on 1st, between Oak and Washington.

Most of the retail establishments are located south of Stark, closer to the residential area. Bakeries, groceries, fruit dealers, and meat markets were most likely to be closer to the residential areas, being south of Yamhill or on 1st Avenue. Boot and clothing stores, tailors, bookstores, and other establishments which shoppers might frequent less often, were concentrated between Yamhill and Stark.

I made another map of second floor offices (see Figure 89) to use as an indicator of the core of the city. That use was concentrated between Morrison and Oak, as seen on Figure 83. These offices were occupied by attorneys, accountants, milliners, and architects. Where two functions listed the same address with no indication of which story was occupied by either function, that function which required less space, had no heavy equipment nor several pieces of merchandise, might generate less profit and therefore be less able to afford high rent was placed on the second floor.

I made a map of the use of east-west streets to compare with passenger landing areas (see Figure 90). Concentration of use of streets leading from the river is between Morrison and Stark, in particular on Morrison and Washington. Location was based on the information that Peter Burk, drayman who resided at 47 Yamhill, owned Lot 5 in Block 21, according to the 1867 Assessor's List for Multnomah County, available at the State Archives, and that the Labbe Bros., at 30 and 32 Washington, owned a fraction of Lot 8, Block 16. Use of this numbering system is

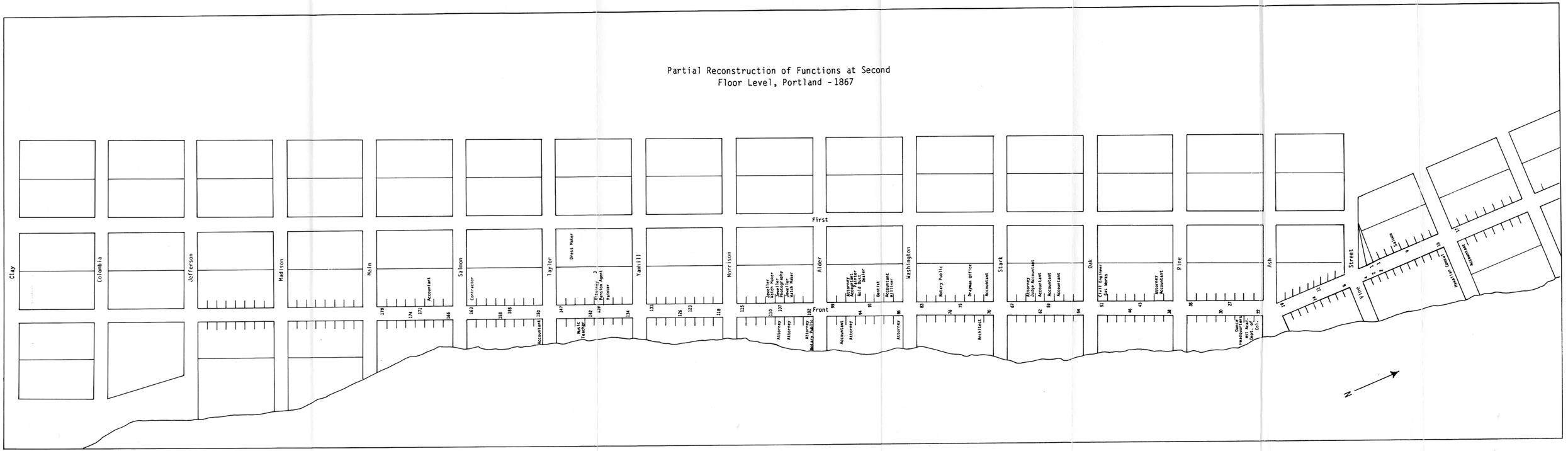


Figure 89. Partial Reconstruction of Functions at the Second Floor Level, Portland, 1867. Data from the Portland Directory for 1867 by S. J. McCormick.

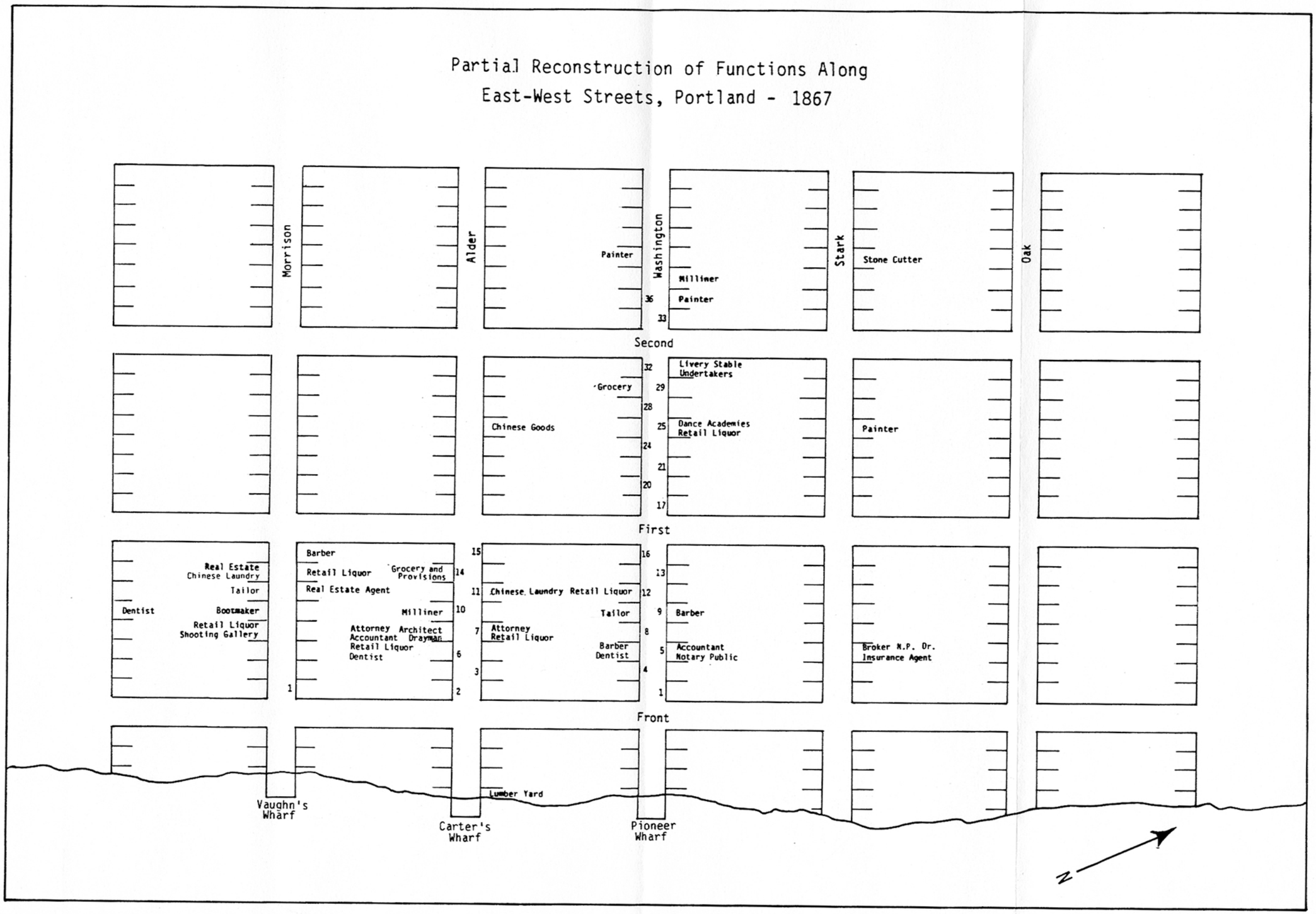


Figure 90. Partial Reconstruction of Functions Along East - West Streets, Portland, 1867. Data from Portland Directory for 1867 by S. J. McCormick.

also found on the 1879 Sanborn Atlas Maps covering this section of Portland. Some of the functions shown may have attracted the traveler, for example, the retail liquor establishments. Others, like milliners and the Chinese laundries, may have located there because of the low rent.

I made another map of the residences using the 1867 directory (see Figure 91). Only ten percent of the residences could be mapped because of the low number of numbered addresses available. Other residences were described, for example, as located "on 4th between Oak and Stark." Since it was uncertain which side of 4th was meant, only numbered residences, or those specifying a corner, were mapped. Homes of merchants were clustered between Washington and Morrison, west of 3rd. Boat captains, including Captain Ainsworth, were found on 2nd, between Ash and Oak, while steamboat engineers were found on 3rd, between Morrison and Yamhill. Several people lived in hotels and boarding houses. Most of the boarding houses were between Stark and "B" Street, or between Main and Columbia. The foundry, broom factory, and iron works owner lived along 2nd and 3rd, south of Salmon. Lawyers, market owners, and dentists were more likely to live in the southern section of the city, while tailors, laborers, carpenters, and clerks lived in the northern section. Some lived next to their business establishments. Henry Weinhard lived next to his brewery near the edge of town.

As long as water transportation remained important, value of land along the river remained high and functions devoted to commerce lined the waterfront. When in 1872, Frances Fuller Victor took a trip upriver to Portland, she described the ugly backends of buildings and warehouses

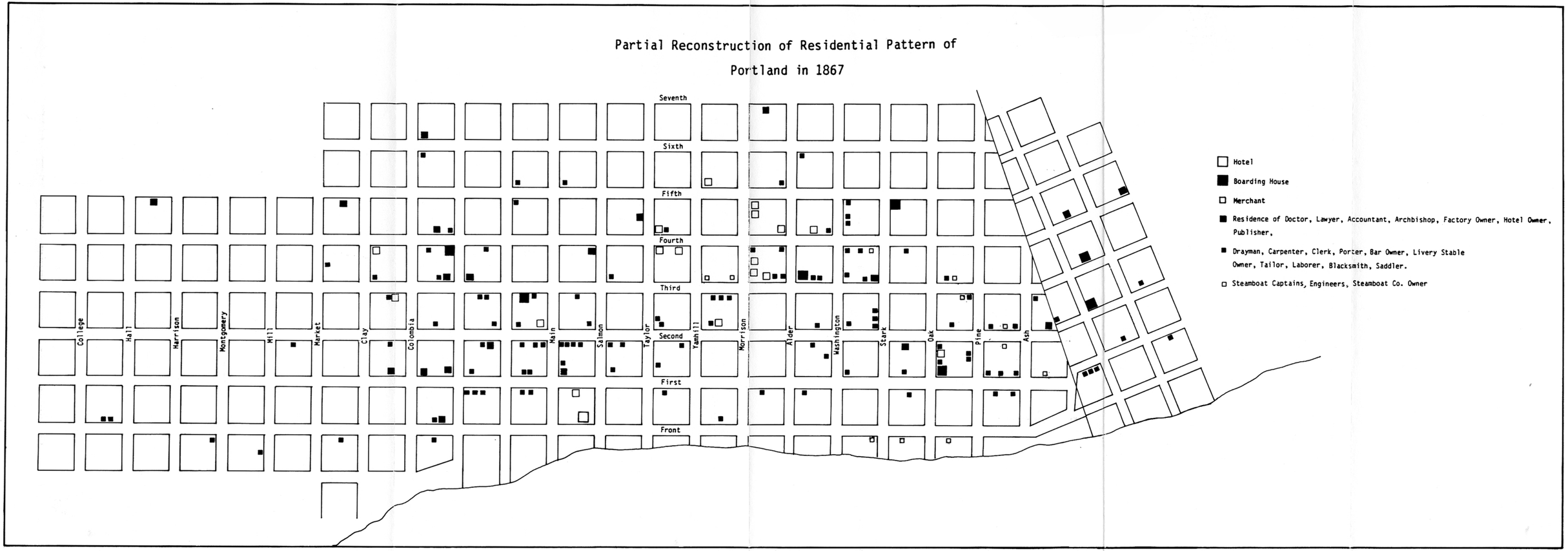


Figure 91. Partial Reconstruction of Residential Pattern of Portland in 1867. Data from Portland Directory for 1867 by S. J. McCormick.

lining the river in her description of Portland which follows, and is shown in the 1873 view (see Figure 92).

> As we approach Portland we observe . . . the evidence of forests sacrificed to the growth of a town; and the increasing good taste and costliness of the buildings going up or recently built in the newest portions of the City. . . . Passing by . . . the first few blocks of stores and warehouses, with their ugly rears toward the river, we haul up alongside a handsome, commodious wharf. . . .
>
> Portland is . . . a . . . town of about 9000 inhabitants; well paved, with handsome public buildings and comfortable home like dwellings . . . .[74]
>
> . . .It is at present supplied with plank sewers. . . . A water company supplies the city with water; and a gas company furnishes gas for lighting the streets, public buildings and stores and such private dwellings as are not too remote from the mains. The surveyed limits of the city include about three square miles; the higher ground at the back being very desirable for residences from its superior healthfulness and the fine views to be obtained.[75]

On August 2, 1873,[76] after this view was made, a fire destroyed the area from Clay to Morrison between the river and 1st Street, and from Columbia to Yamhill on Second (see Figure 88). Given the area, mostly retail establishments and homes would have been destroyed. By the date of the fire the railroad had been built, beginning at the north end of town. As seen on page 3 of the 1879 Sanborn Atlas reproduced here, the railroad is located near an ocean shipping point, the Oregon Steamship Company warehouse. Until connected to the national network, the railroad would serve as a regional feeder so this connection was important for a time. As long as water transportation remained important, subsequent land use decisions would reinforce the pattern begun during the steamboat transportation era. As seen on pages 3, 4, 10, and 11 of the

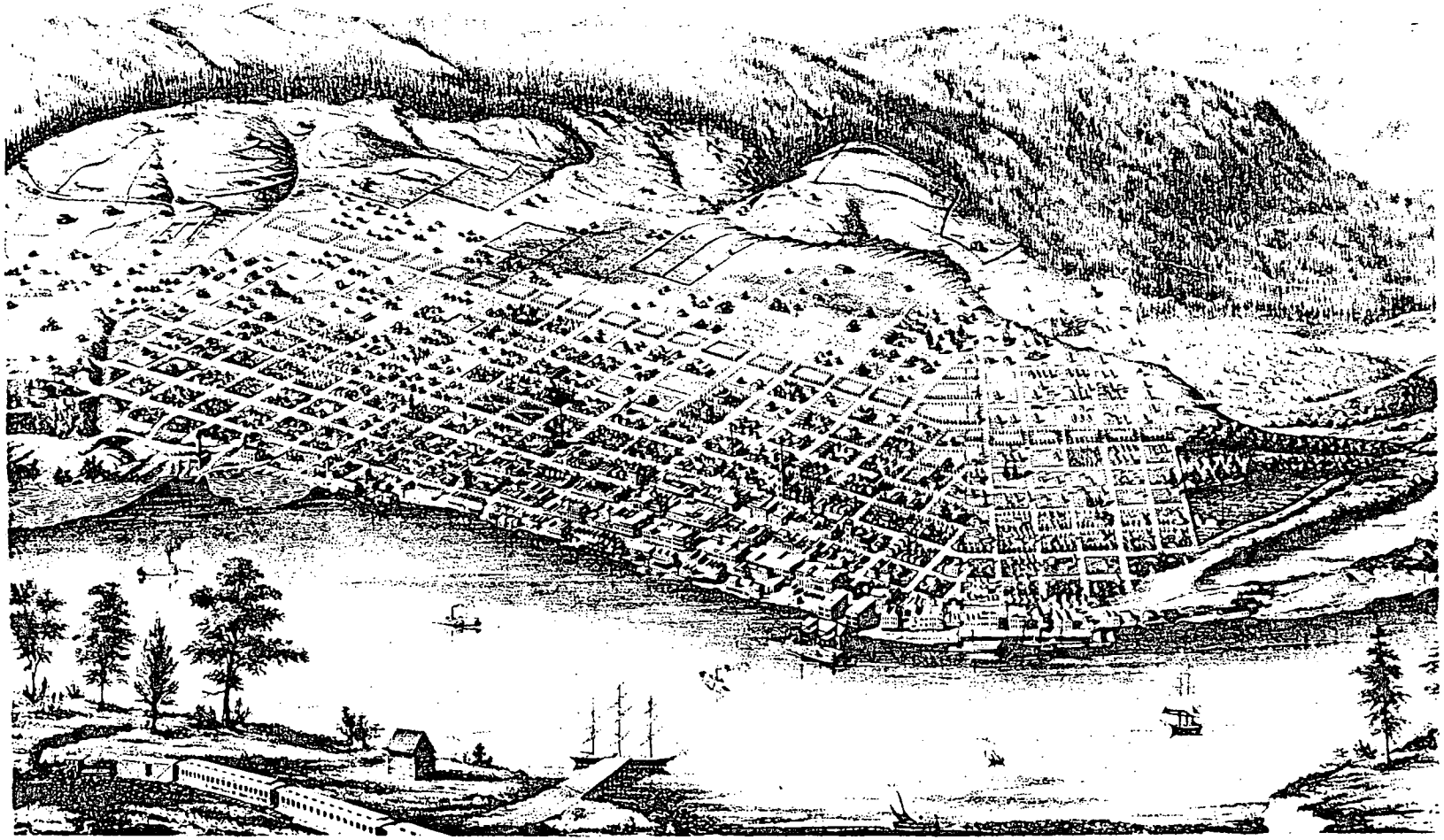


Figure 92. Portland - 1873. G. T. Brown. Used with permission of the Oregon Historical Society. Negative Number 26176.

1879 Sanborn Atlas sheets reproduced here (see Figures 93, 94, 95, and 96), Front Street is given over totally to warehouses, factories, and wholesale functions. Several establishments owned by the Chinese are located on Front, between Salmon and Yamhill in the district that had been burned, an indication of the lesser importance of this area.

In anticipation of the national railroad connection, and as a result of the fire of 1873, there is a migration of functions northward, with a filling in of the area north of A Street and a greater use of First Street on the 1879 map in comparison to the 1867 map. For example, the Bank of British Columbia has moved to the triangular block at Vine and Front. The Public Market is located at 1st and Ash.

When describing Portland in 1887, L. Samuel said that Front Street was almost exclusively commission and wholesale houses,[77] a continuation of the earlier pattern. He states that the chief retail thoroughfare was on First Street from Yamhill to E. All the banks were on this street. Property commanded a high price, was owned by the older citizens and rarely changed hands.[78] Second Street north of Yamhill had begun to be built up also, by this time.[79] Washington Street had become a major thoroughfare, lined with businesses.[80] Morrison, east of Second had become a retail street,[81] as had Third Street. The location of the retail district along Yamhill represents a major shift from the pattern shown on the 1867 map. The concentration of uses on Morrison and Washington was begun during the earlier steamboat transportation era. As can be seen by referring to the ads for the 1880s, ALder, Taylor, Morrison, and Salmon continued to be used as passenger landing areas.

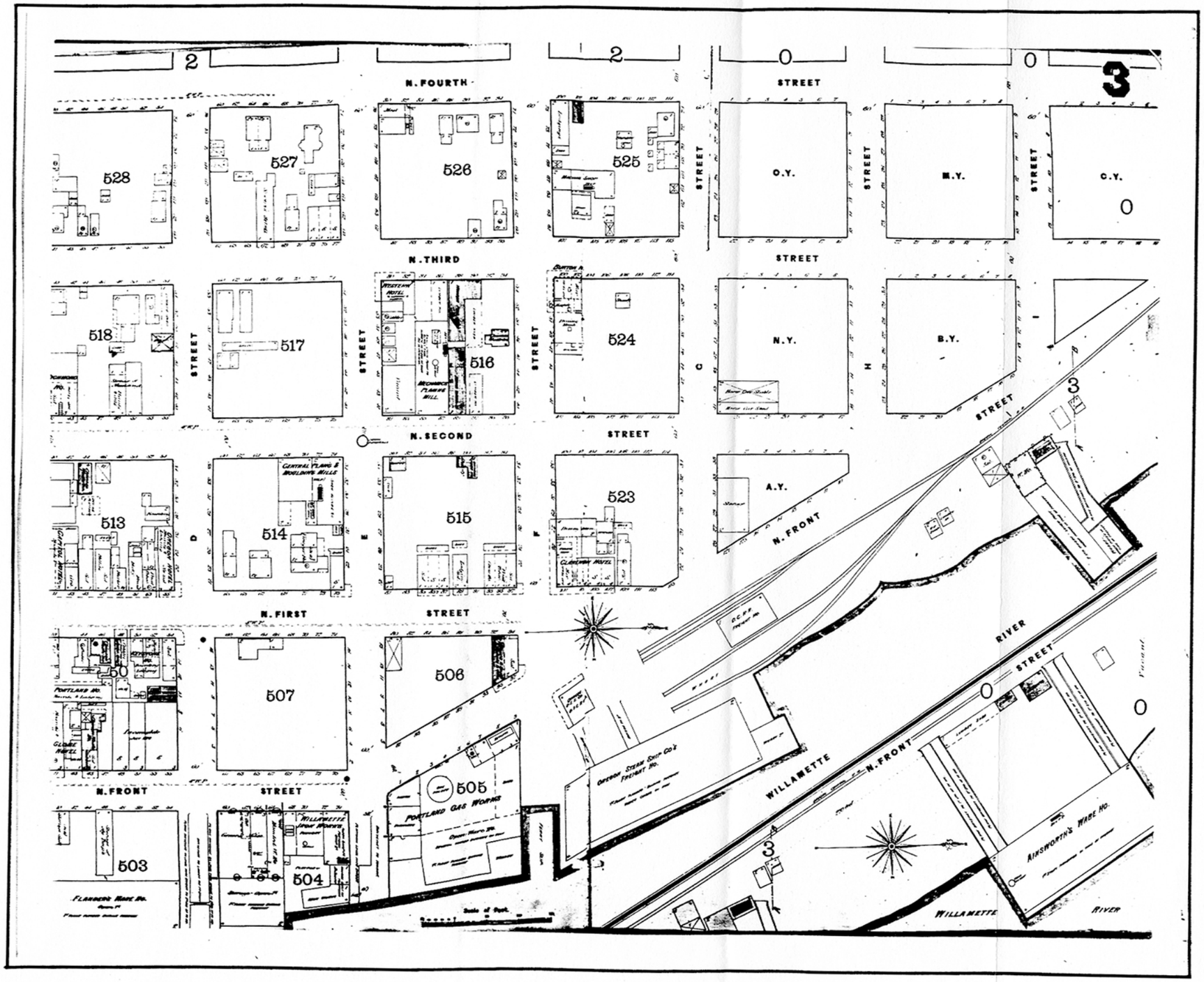


Figure 93. Reproduction of Page 3 from the Sanborn Atlas of Portland, 1879.

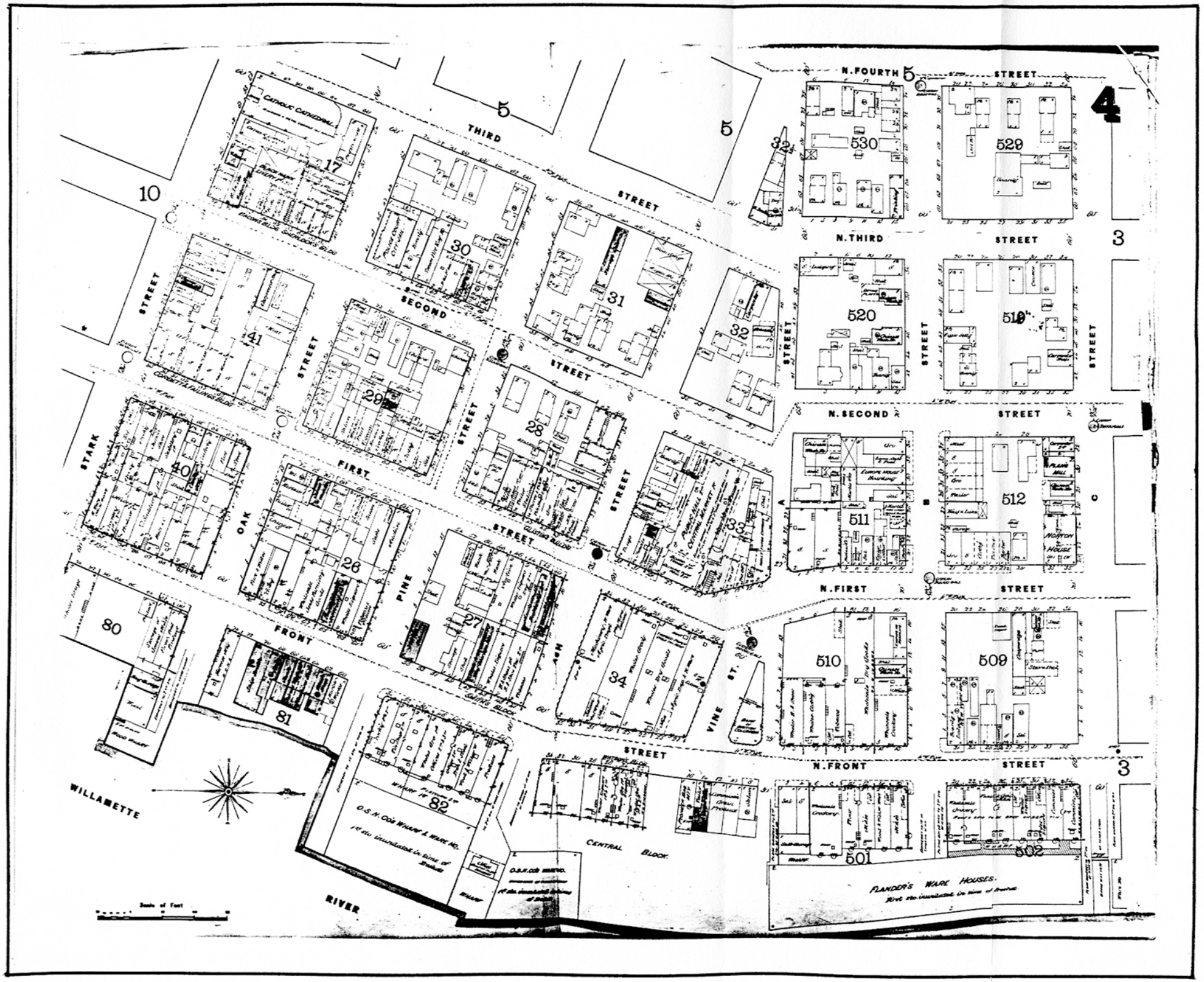


Figure 94. Reproduction of Page 4 from the Sanborn Atlas of Portland, 1879.

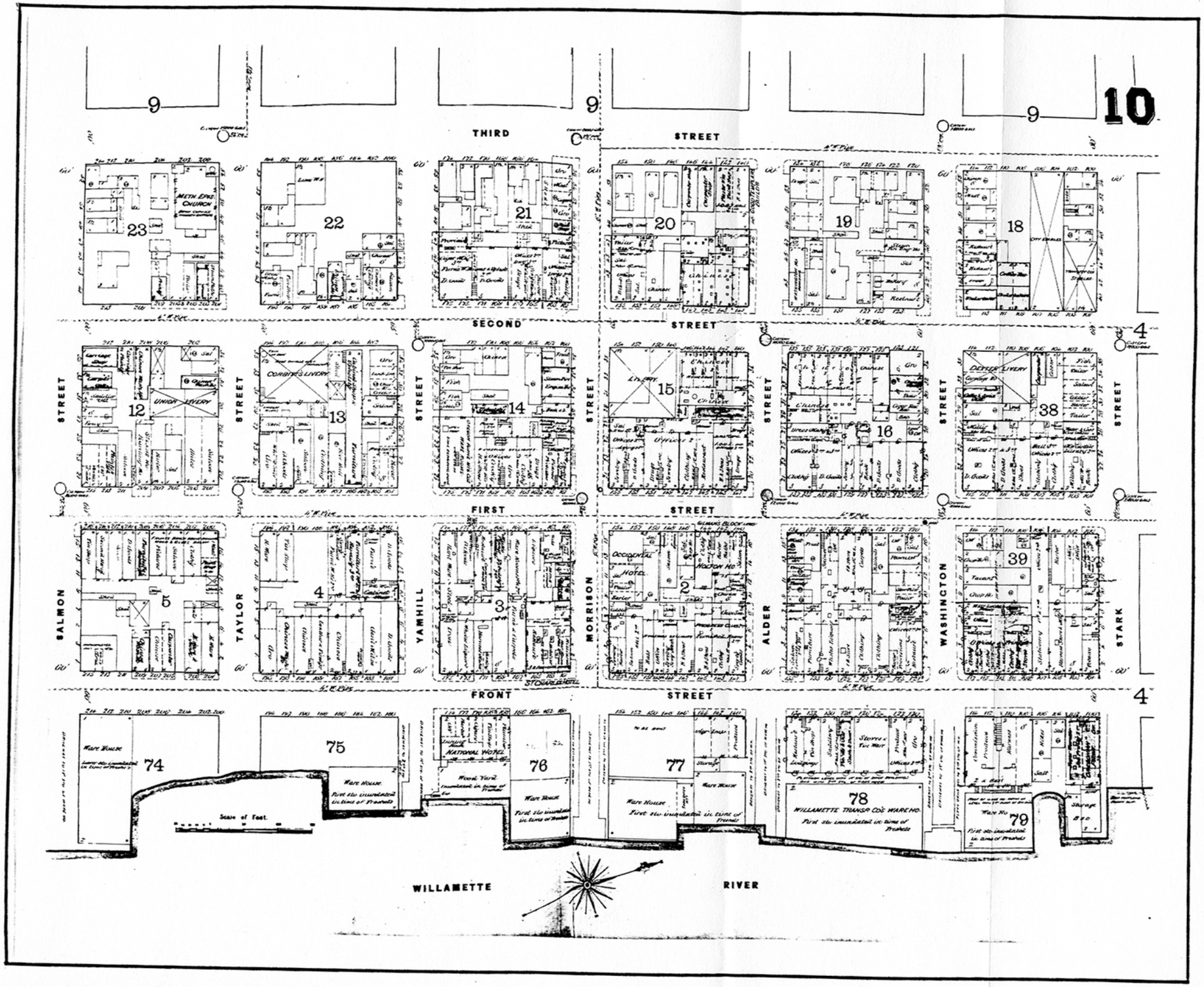


Figure 95. Reproduction of Page 10 from the Sanborn Atlas of Portland, 1879.

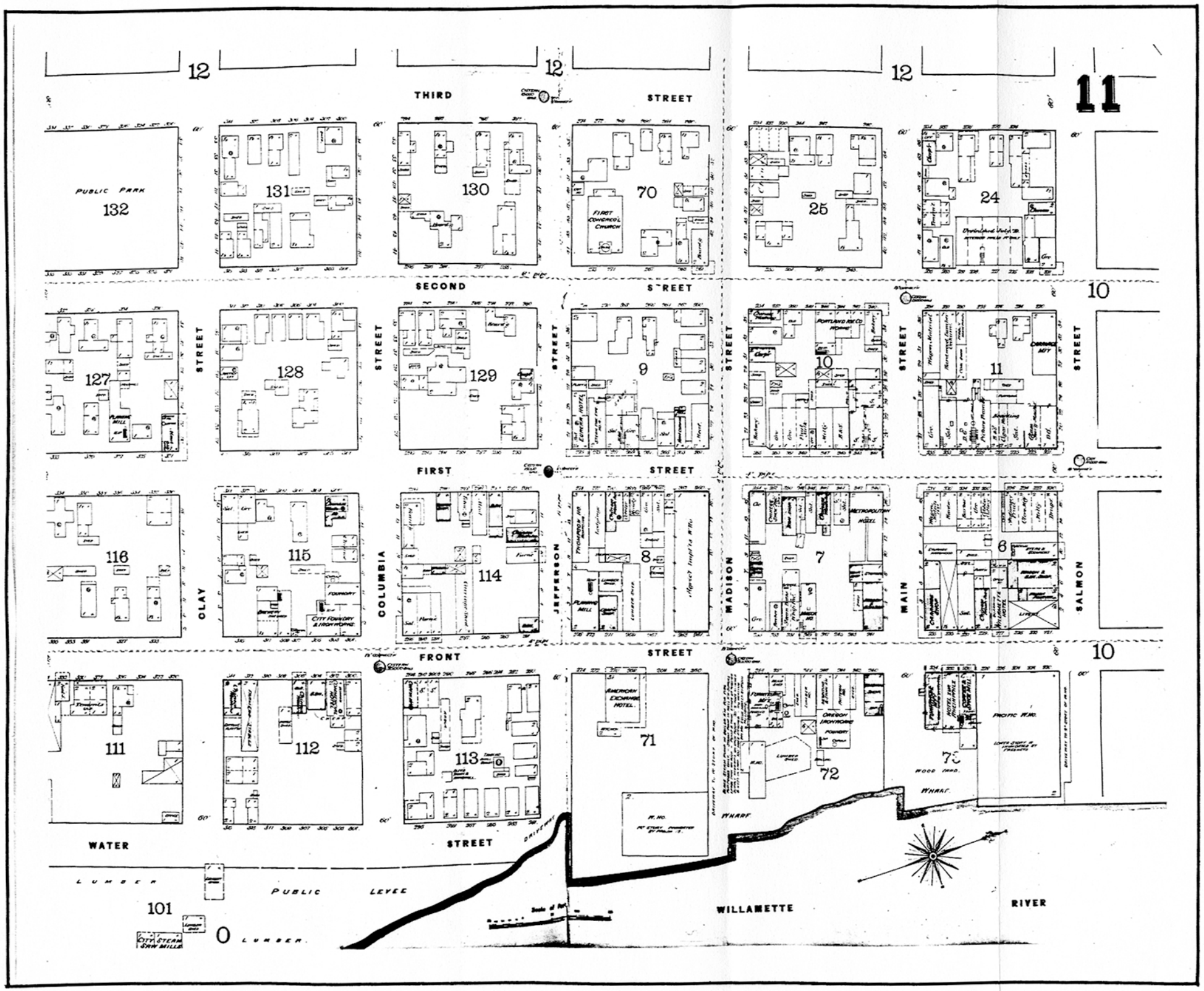


Figure 96. Reproduction of Page 11 from the Sanborn Atlas of Portland,1879.

The location of streetcar lines in Portland also reinforced patterns of use of Morrison, Washington, and other streets.

In other towns as well, the waterfront area remained important as long as river transport was available. See, for example, the map of Oregon City in 1889 (see Figure 97). When available, transportation by water was cheaper. At Albany, as seen on the 1878 map (see Figure 98), spurs were built to riverfront mills and warehouses to pick up manufactured goods and deliver merchandise during seasonal periods when steamboat navigation ceased. The same pattern appears at Corvallis as late as 1905, although by this time a wheat warehouse is shown near the railroad line at Band 7th Street (see Figure 99).

The gradual shift of wheat warehouses, and I assume, other functions as well, began in the 1880s, when direct connection to the national railroad network occurred. The 1882 map of Independence shows three warehouses on Fractional Block 3 of Hill's Addition to Independence (see Figure 100). By 1887, 3 of 4 warehouses in Independence were described as on the railroad by West Shore magazine. The 4th, a large one, was on the river.[82]

Without railroad connections, the sort of change which would occur in a town like Lincoln, here mapped in 1882 (see Figure 101), would be the gradual loss of functions to nearby towns with rail connections.

While the individual histories of the towns vary, the recurring patterns in the descriptions can be used to describe the typical elements of a river town. Here mapped as "River City" (see Figure 102), the plat is longer than it is wide, and blocks are subdivided into lots with

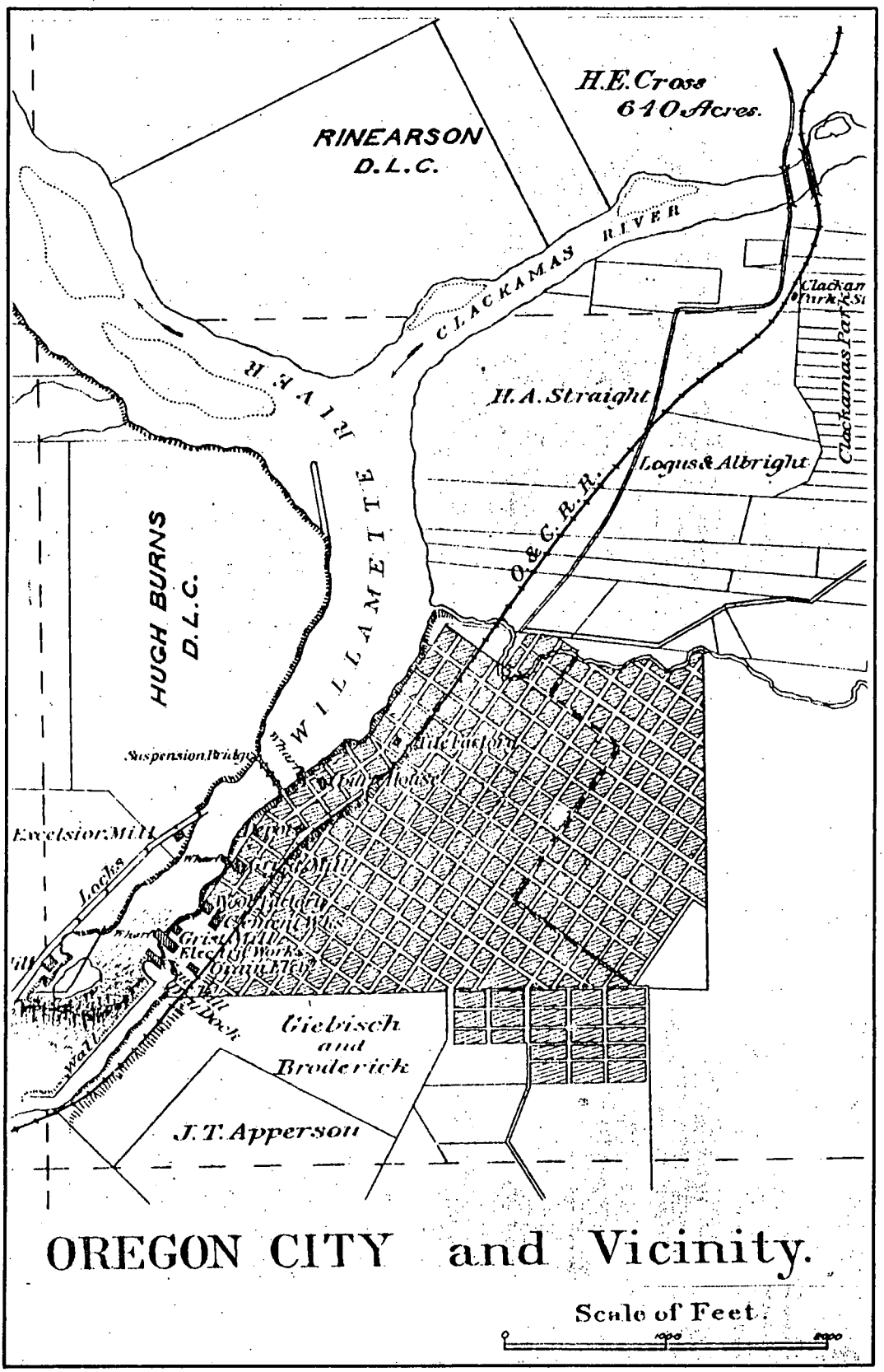


Figure 97. Wharfs Along the Waterfront at Oregon City. From Map of Multnomah County by R. A. Habersharm, 1889.

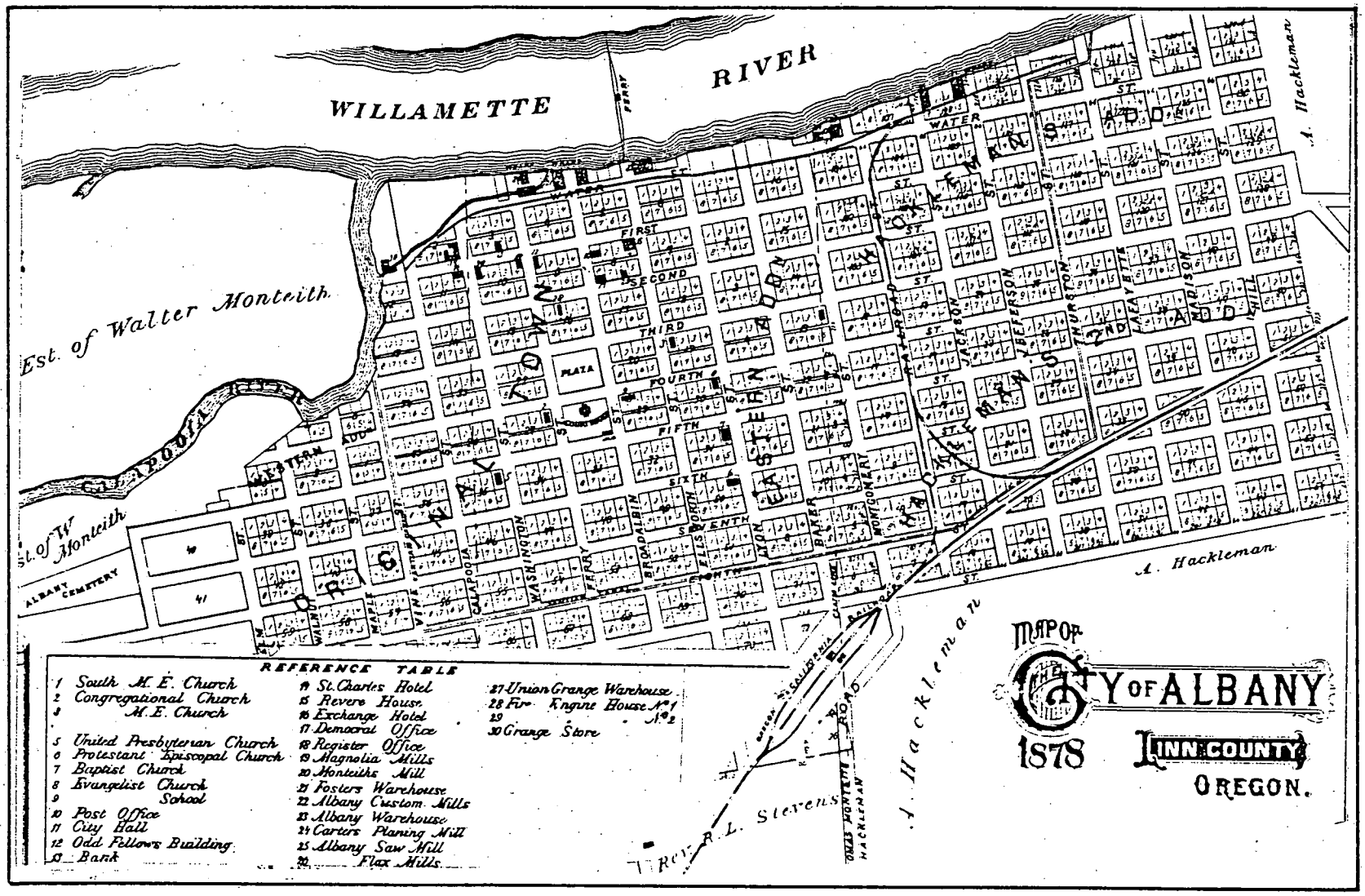


Figure 98. Railroad Spur Along Waterfront at Albany, 1878. From Historical Atlas of Marion and Linn County, 1878.

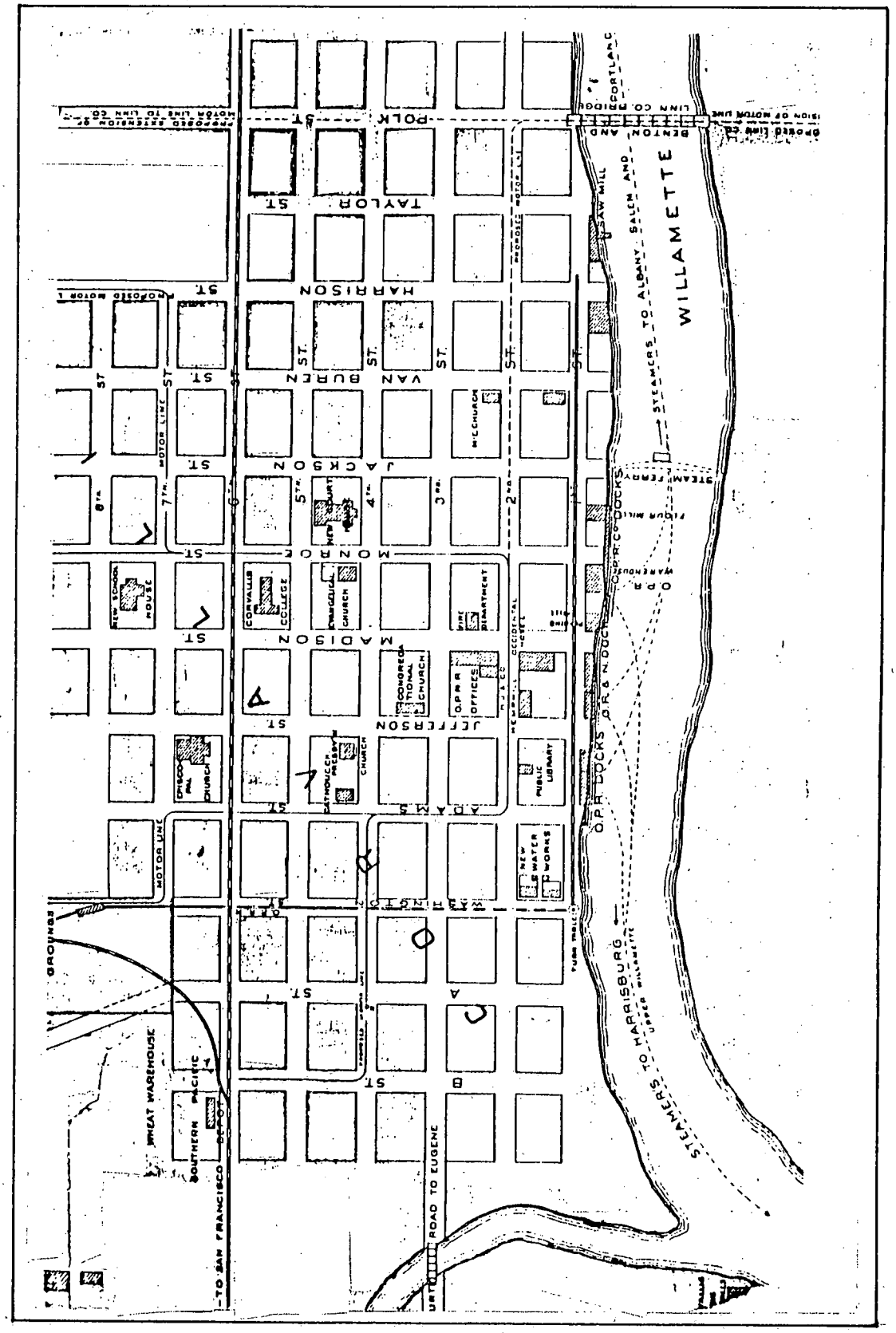


Figure 99. Corvallis in 1905. Oregon Historical Society Map Collection, Portland, Oregon.

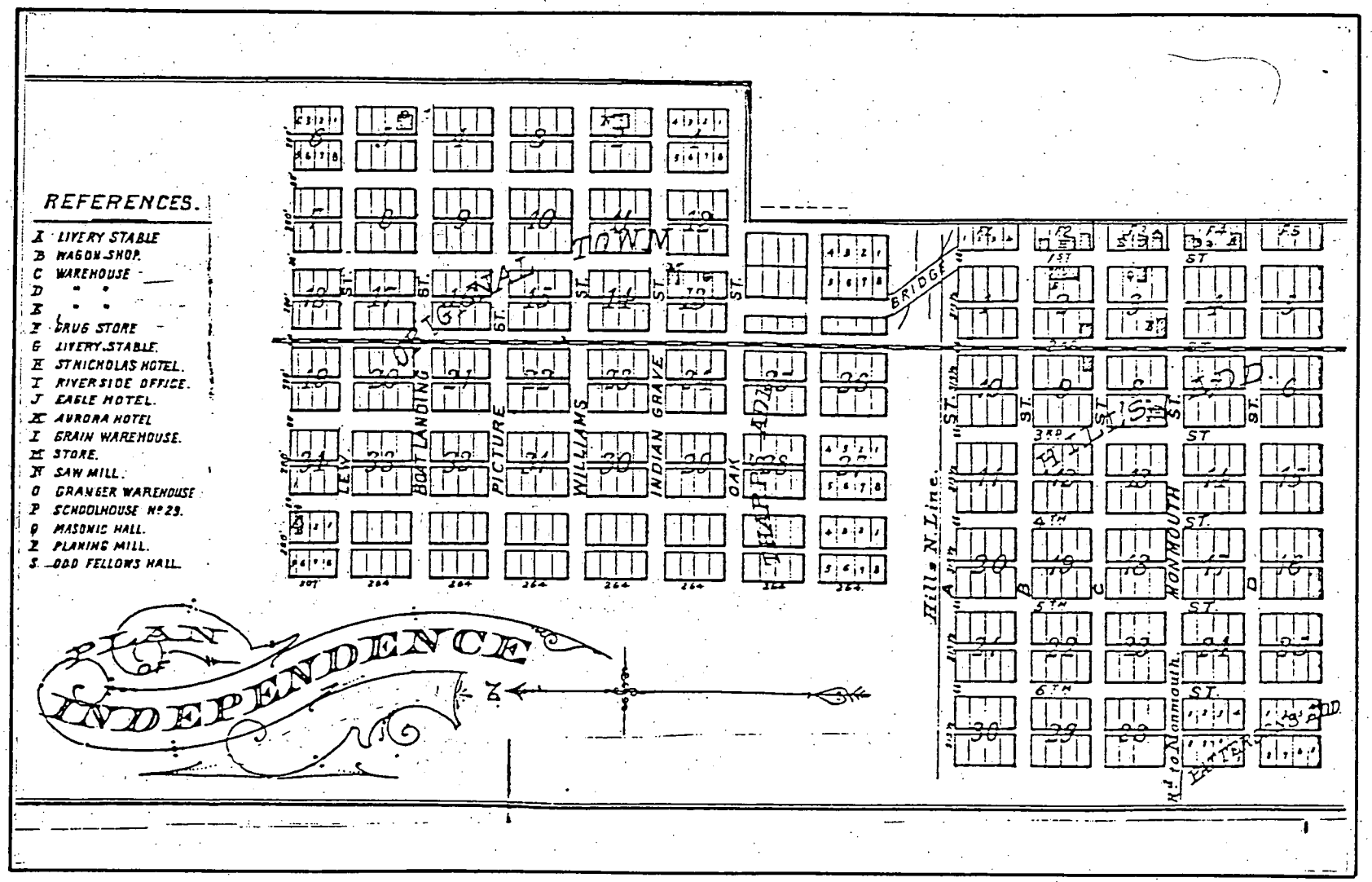


Figure 100. Independence, 1882. Map of Polk County, Portland, Oregon: H. W. and T. H. Ogilbe.

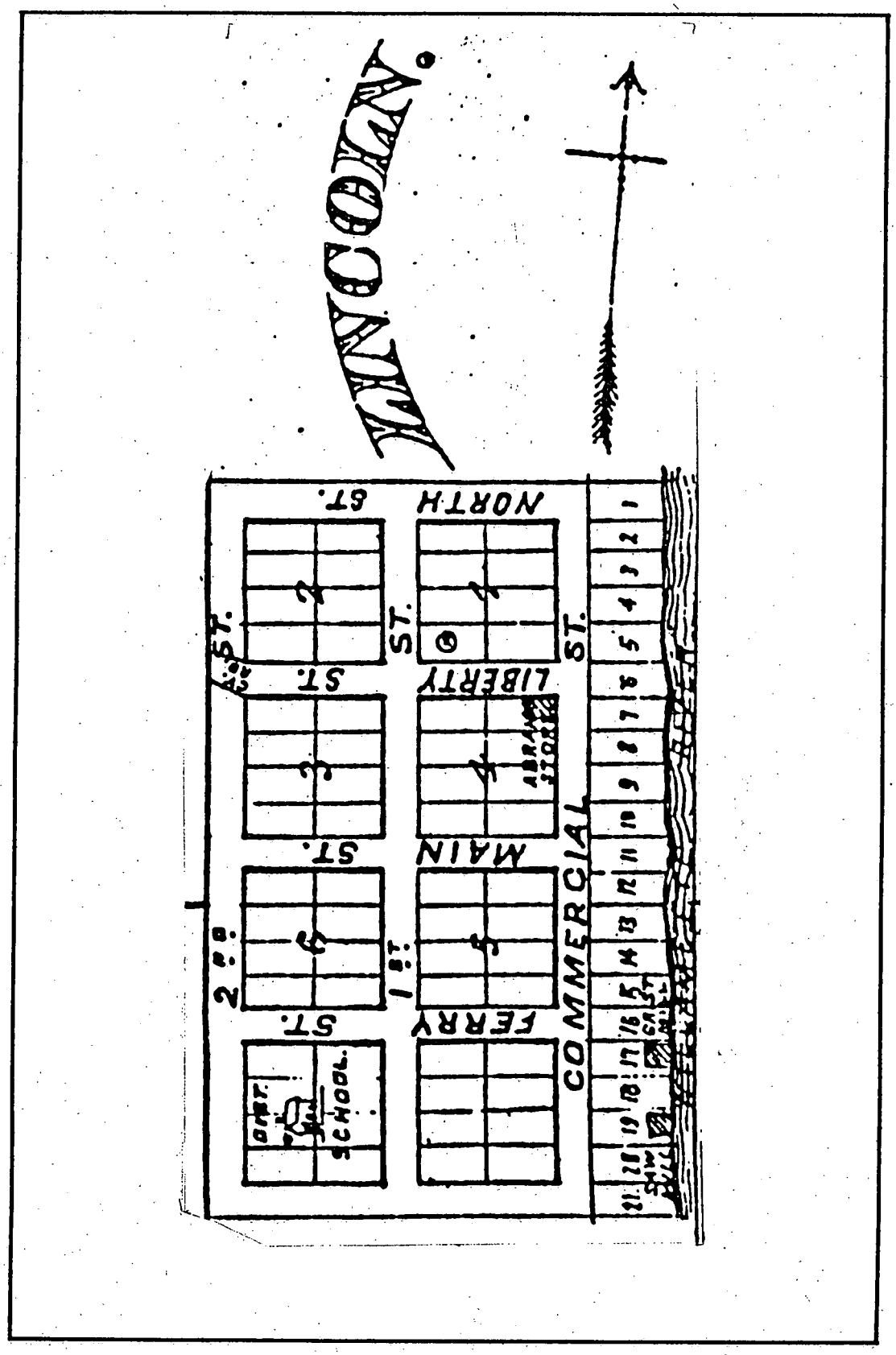


Figure 101. Lincoln, 1882. Map of Polk County, Portland, Oregon: H. W. and T. H. Ogilbe.

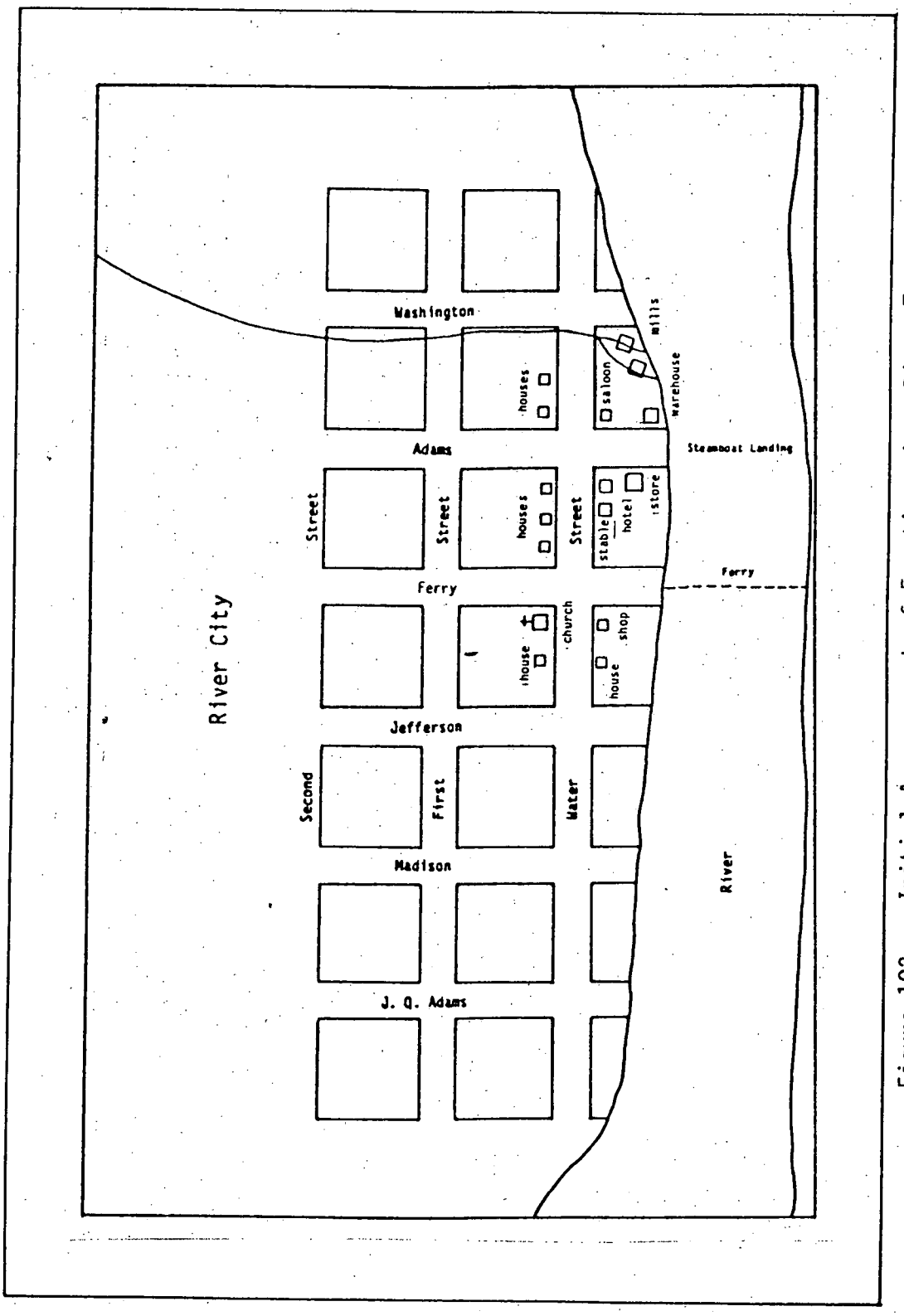


Figure 102. Initial Arrangement of Functions in a River Town.

maximum frontage on the river. As a reflection of the importance of water transportation, waterfront areas served as the focus for the location of stores and mills needing outside connection. The main thoroughfare was the primary settlement strip with a concentration of activity near the landing. Millraces were dug or blasted through rock for driving water powered mills; some steam mills were also built. The primary commodities for shipment were housed in warehouses located close to the water's edge for ease of transfer, particularly if the mud banks were slippery. Later the roads leading from the landings, or perhaps the landing areas were macadamized. Nearby were the stores, at first only for the sale of general merchandise. Later, if the town grew, wholesale suppliers built warehouses and stores. There was often a hotel, livery stable, saloon, church, and a blacksmith shop. Early residences were built near the mills and stores. As population grew and land values increased, sorting of functions occurred; those lots with best access to shipping were vacated by businesses that had little need to be near the landing areas. Periods of prosperity permitted the selling of land near the landing at a profit and areas originally set aside as open space soon disappeared. While fires caused losses for individuals or groups of store or mill owners, they stimulated the replacement of old buildings for new. Brick, not only the symbol of permanence, but believed fireproof, was a primary building material of the second buildings on the site. Loss from flood educated the inhabitants as to which lots were more flood prone, and these perhaps were not used again.

With continued growth, one landing area became insufficient so the natural landing area was expanded by the construction of wharves in several locations. Front Streets became devoted exclusively to functions involved in the receipt, storage, and shipment of freight. Retail functions located with better access to customers, on streets leading from ferry or passenger landing areas and residential districts, as shown on the later version of River City showing general land use areas (see Figure 103).

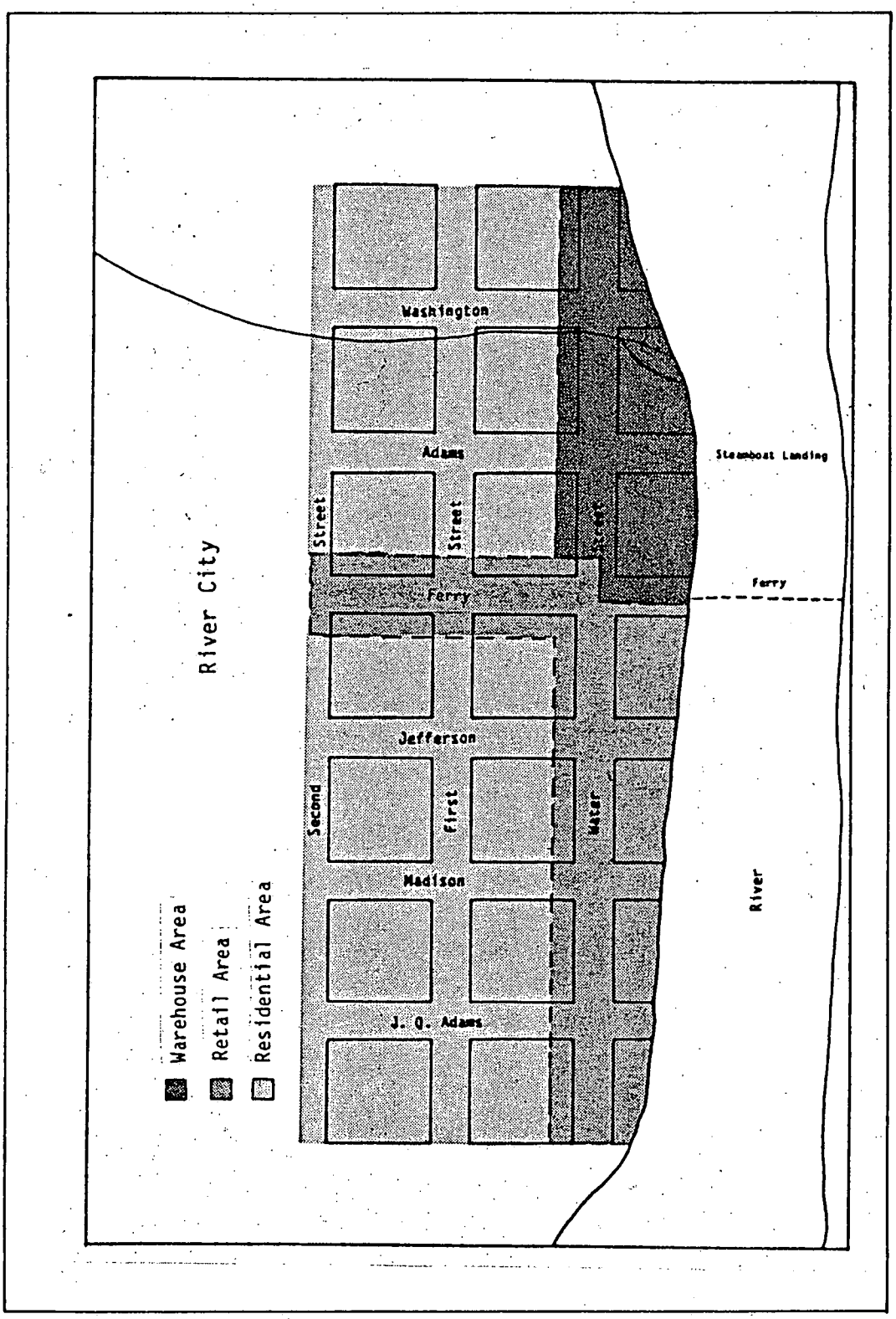


Figure 103. Later Clustering of Functions.

Notes

[1] John W. Reps, Cities of the American West: A History of Frontier Urban Planning (Princeton, N. J.: Princeton University Press, 1979), p. 346.

[2] Sidney Moss, "Picture of Pioneer Times at Oregon City." Used with permission of the Bancroft Library, University of California, Berkeley.

[3] J. Henry Brown, compiler, Salem Directory for 1871, (Salem, Oregon: Snyder & Cook, 1871), p. 21 and 29.

[4] Plat of Oregon City, Clackamas County Surveyor, Oregon City.

[5] Plat of Lafayette, Yamhill County Surveyor.

[6] Brown, Salem Directory for 1871, p. 21 and 29.

[7] Oregon Territory.

[8] Brown, Salem Directory for 1871, p. 29.

[9] Doris Doherty and Alice Orr, Ah Yes I Remember It Well, (Albany OR: Doherty) 1976, p. 9, 10, 11.

[10] "Diagram of City of Salem, 1874," Salem Directory (Salem, Oregon: E. M. Waite, 1874).

[11] "To the Immigrants of 1847," Oregon Spectator, 30 September 1874, p. 4:1, 2.

[12] A. L. Lovejoy, The Founding of Portland, Microfilm PA-44-54, used with permission of the Bancroft Library, University of California, Berkeley, p. 33.

[13] Oregonian, 24 June 1854, p. 2:2.

[14] U.S. Chief of Engineers, Annual Report of Major N. MIchler, Corps of Engineers for the First Six Months of the Fiscal Year Ending June 30, 1876, Appendix FF1 of the Report to the Secretary of War, vol. II, pt. II, House of Representatives, Ex. Doc. 1, pt. 2, 44th Cong., 2nd Sess., Congressional Serial Set, Vol. 1744, Washington Govt. Printing Office, 1876, p. 636.

15 Weekly Oregonian, 3 March 1855, p. 3:1, ad for U.S. Mail Line; Oregon Argus, 26 October 1861, p. 2:2.

16 Oregon Argus, 4 May 1861, p. 2:6.

17 Oregon Argus, 26 October 1861, p. 2:2.

18 Bruce Martin, "History of Corvallis 1846-1900," (M.A. Thesis, Dept. of History, University of Oregon, 1939), p. 9.

19 "Documents Relative to Warre and Vavasour's Military Reconnaissance in Oregon 1845-1846," Joseph Shafer ed., Oregon Historical Quarterly vol. 10, (Portland: Oregon Historical Society, 1909), p. 92.

20 Reuben Thwaites, "Palmer's Journal," Early Western Travels vol 30, p. 159-160.

21 Cyrus Walker, Glimpses of Old Oregon, A description of Oregon City in 1849 written at Albany, Oregon 26 October 1909. Copy available at the Oregon Historical Society. Used with permission of Beinike Library Yale University, New Haven, Conn.

22 Ibid.

23 John McLoughlin, "1857 Probate File," State Archives Territorial Document #61A-97.

24 Howard Chudacoff, Evolution of American Urban Society, (Englewood Cliffs, New Jersey: Prentice Hall Inc., 1975), p. 65.

25 John A. Hussey, Champoeg: A Place of Transition, (Portland, Oregon: Oregon Historical Society, 1967), p. 205.

26 Oregon Spectator, 2 September 1851, p. 2:5.

27 Floyd Mullen, Land of Linn: An Historical Account of Linn County, Oregon (Lebanon, Oregon: Dalton's Print, 1971), p. 49.

28 Oregonian, 4 December 1850, p. 4:4.

29 Oregon Spectator, 22 July 1851, p. 2:4.

30 Henry J. Coke, A Ride Over the Rocky Mountains to Oregon and California, (London: Richard Bentley, 1852), p. 329.

31 Oregon Spectator, 7 October 1851, p. 3:3.

32 Statesman, 30 April 1853, p. 2:7.

[33] Oregon Spectator, 19 August 1853, p. 2:2.

[34] Oregon Spectator, 10 July 1851, p. 2.

[35] Oregon Spectator, 13 March 1851, p. 3; June 1851, p. 2.

[36] Oregon Spectator, 5 November 1853, p. 3:2; 11 February 1854, p. 2:2.

[37] Oregon Spectator, 19 November 1853, p. 2:5; 19 August 1853, p. 2:2.

[38] Oregon Spectator, 7 January 1854, p. 2:2.

[39] Oregon Spectator, 19 August 1853, p. 2:2.

[40] Oregon Spectator, 7 October 1854, p. 2:3.

[41] Sidney Moss, Picture of Pioneer Times at Oregon City, p. 22.

[42] Oregon Spectator, 7 January 1854, p. 2:3.

[43] Oregon Spectator, 11 November 1851, p. 2:3.

[44] Oregon Spectator, 11 July, 1850, p. 2.

[45] Oregon City Road Duty Ordinance, July 1853, H.R.S. File VII B in WPA Oregon City Proper Volume, Oregon City Public Library.

[46] Oregon Spectator, 26 August 1853, p. 3:1.

[47] Oregon Argus, 1860, p. 2:3, WPA Oregon City Miscellaneous File; Oregon Argus, 26 July 1856, p. 2:3, WPA Miscellaneous vol.; Oregon Argus, 12 July 1856, p. 2:2; Oregon Statesman, 3 January 1854, p. 2:7; Corvallis Oregon Weekly Union, 14 January 1860, p. 2:2; Oregon Argus, 29 September 1860, p. 2:2; Oregon Spectator, 5 November 1853, p. 3:2; Oregon Argus, 20 September 1856, p. 3:3.

[48] Oregon Argus, 17 May 1856, p. 2:1.

[49] Oregon Argus, 22 August 1857, p. 3:1.

[50] 2nd Annual Territorial Days Souvenir Edition, Oregon City Enterprise, 20 August 1936, p. 24-25.

[51] Ibid.

[52] Oregon Argus, 26 September 1857, p. 3:1.

[53] Oregon Argus, 17 December 1859, p. 3:1; Oregon Argus, 7 August 1858, p. 3:1.

[54] "Our City," Oregon Weekly Union, 14 May 1859, p. 2:3.

[55] "Advertisements," Occidental Messenger, 26 September 1857, p. 3.

[56] Ibid.

[57] Ibid.

[58] Ibid.

[59] Ibid.

[60] Oregon Weekly Union, 24 December 1859, p. 3:3.

[61] "The Centennial Story: Corvallis Started as Three Villages," Section I, p. 2, Corvallis Gazette Times.

[62] Clark G. Hilden, "An Historical Geography of Small Town Main Streets in the Willamette Valley, Oregon," p. 176.

[63] Willard B. Robinson, "Northwest Architecture 1843-1893," (M.A. thesis, Rice Institute, April 1960), p. 24.

[64] Paul Merriam, "History of Portland 1840-1890," (Ph.D. dissertation, Department of History, University of Oregon, Eugene, Oregon), p. 219.

[65] Ibid., p. 220.

[66] Eugene Snyder, Early Portland: Stumptown Triumphant (Portland, Oregon: Binsford and Mart, Publishers), 1970, p. 67.

[67] S. J. McCormick, Portland Directory for 1867 (Portland, Oregon: A. G. Walling, 1867), p. 89.

[68] Daily Oregonian, 2 February 1864, p. 2:5; 26 September, 1864, p. 2:4.

[69] Ibid., 14 December 1865, p. 2:4.

[70] Ibid., 26 February 1867, p. 2:3.

[71] S. J. McCormick, Portland Directory for 1867 (Portland, Oregon: A. G. Walling, 1867), p. 1.

[72] Ibid., p. 54.

[73] Ibid., p. 97, 99.

[74] Mrs. Frances Fuller Barrett Victor, All Over Oregon and Washington (San Francisco: J. H. Carmany and Co., 1872), p. 147.

[75] Ibid., p. 153.

[76] U.S. Dept. of Interior, National Register of Historic Places. Nomination Form - Statement of Significance, Yamhill Historic District File, Oregon Historical Society, Portland, Oregon.

[77] Portland and Vicinity, (Portland, Oregon: L. Samuel, 1887), p. 15.

[78] Ibid., p. 11.

[79] Ibid., p. 7.

[80] Ibid., p. 3.

[81] Ibid., p. 4.

[82] "A Gem of the Willamette," West Shore, August 1887, Portland, Oregon, p. 636.

CHAPTER V

CONCLUSION

Considered here were questions about accessibility, the importance of proximity to other places, the role of town promoters, and the location of towns on flood prone sites as they related to the success or failure of the river towns. Also considered was the reflection of the importance of water transportation in the internal arrangement of the river towns.

The steamboat transportation network along the Willamette River was investigated to determine the influence it had on the founding and growth of the river towns. What was important was the ease of connection to other places. Towns were able to grow faster if they had the advantage of good connections. Portland emerged as the connection beween ocean and river shipping.

Portland and Oregon City at the Falls were always linked, as were points between Oregon City and Salem on the Willamette, and Oregon City and Dayton on the Yamhill. Settlers eagerly awaited the rise in the river to go farther upriver. Steamboats went as far upriver as possible, turning back when low water on a bar made it impossible to ascend further. This meant that freight for upriver points was landed at the furthest accessible point when boats could not reach the town designated on the freight. Passengers continued their journeys by stage.

The advantage of good connections is best seen when comparing the growth rates of towns north of Corvallis, with good connections, to towns south of Corvallis, or on the upper reaches of the Yamhill and Santiam, with poor connections. Eugene, for example, was at a definite disadvantage because service was poor.

When comparing the growth rates of towns which had good connections to each other, other factors affecting town growth: site; connection to a hinterland and its size; proximity of other places; and efforts of town promoters, enter into consideration as well.

Although Salem was the year round head of navigation, it may have only drawn large numbers of potential shoppers during the part of the year the legislature was in session. Proximity to Portland contributed to the decline of several cities, in particular, Oregon City which also suffered repeated flood loss and land title problems.

Some of these towns attempted to enhance their accessibility by acquiring railroad connections. Those towns on rail lines grew as the railroad increased their accessibility by decreasing distances between places because it was faster and permitted the establishment of new connections. With both river and rail connections, Albany had the advantage of lower freight rates. The ability to ship in response to demand by railroad was most beneficial for Eugene, where steamboat service had been the least reliable. Towns left off the railroad declined, as was the case at Peoria, as business moved to Halsey and Shedd, places with railroad connections and service to upriver points by steamboat decreased.

A landscape reflecting the importance of water transportation emerged with a concentration of early functions--mills, stores, hotels--needing outside connections near the landing areas. With the continued importance of waterborne commerce, the street closest to the river was given over to warehouses and offices of commission merchants, while retail functions concentrated on streets leading from the passesnger landing areas and the second street from the river, with residential areas beyond them.

APPENDIX A

FIRST

DATE TOWN LAID OUT BY TOWNSITE OWNER

Town	Year	Source
Linnton	1845	"A List of Early Townsites," Eugene E. Snyder, Early Portland: Stumptown Triumphant (Portland: Binsford and Mort, Publishers, 1970), p.v
St. Johns	1850	Town Plat
Portland	1844	Snyder, Stumptown Triumphant
Milwaukie	1848	Snyder, Stumptown Triumphant
Oregon City	1842	Snyder, Stumptown Triumphant
Canemah	1849	p. 60, Willamette Landings
Linn City	1842	Snyder, Stumptown Triumphant
Multnomah City	1843	Snyder, Stumptown Triumphant
Clackamas City	1846 [?]	p. 55, Willamette Landings
Dayton	1850	Ruth Stoller, Old Yamhill, p. 15, p. 22.
Lafayette	1846	Ruth Stoller, Old Yamhill. Lafayette: Yamhill County Historical Society 1976 p. 35.
McMinnville	1856	Ruth Stoller, Old Yamhill, p. 49.

Town	Year	Source
Butteville	1844	Ben. Maxwell, Capital Journal, Oct. 26, 1954, sec. 3, p. 1, "Butteville Quiet Now But Has Quite a History"
Champoeg	1844	Hussey, Champoeg: Place of Transition
Salem	1846	Brown Directory of Salem, 1871, p. 21.
Eola	1855	Town Plat
Cincinnati	1850	p. 132, Willamette Landings p. 36, Hist. of Linn Co.
Albany	1848	p. 110 Willamette Landings
Peoria	1857	Ben Maxwell, Capital Journal, "Tiny Peoria Host of Grain Ports," Salem, Feb. 21, 1957.
Jefferson	1858	Jesse Douglas, pp. 195-212, "Beginnings of Jefferson," OHQ, Vol. 32, p. 319.
Syracuse	1846	Ibid., p. 204
Santiam City	1851	Ibid., p. 205
Harrisburg	1853	Oregon Spectator, December 17, 1853.
Wheatland	1847 (as Atchison)	p. 94, Willamette Landings
Marysville	1851	Town plat
Booneville	1853	p. 153, Willamette Landings
Independence	1850	Capital Journal Centennial Edition, p. 18, sec. 2, June 9, 1959, "Old Independence Former Hop Center."

Town	Year	Source
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Buena Vista	1856	p. 140, Willamette Landings
Eugene	1852	Personal Communication Librarian, Lane County Historical Museum, Eugene.

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W-194 Yamhill River, Oregon. Map to Accompany Annual Report for 1875, by N. Michler. Appendix GG6. Record Group 77, Civil Works Maps File, National Archives, Cartographic and Architectural Branch, Washington, D.C.

W-249-1 Salem to Independence Bar. Upper Willamette River. Maps to Accompany Annual Report for June, 1876. Appendix FF, surveyed under direction of Major N. Michler, by Robt. A. Habersham, July and Sept. 1875. Author: Major John M. Wilson. Record Group 77, Civil Works Maps File, National Archives, Cartographic and Architectural Branch, Washington, D.C.

W-249-2 Independence Bar to Albany. Upper Willamette River. Maps to Accompany Annual Report for June, 1876. Appendix FF, surveyed under direction of Major N. Michler, by Robt. A. Habersham, July and Sept. 1875. Author: Major John M. Wilson. Record Group 77, Civil Works Maps File, National Archives, Cartographic and Architectural Branch, Washington, D.C.

W-249-3 Harrrisburg to Eugene City. Upper Willamette River. Maps to Accompany Annual Report for June 1876. Appendix FF, surveyed under direction of Major N. Michler, by Robt. A. Habersham, July and Sept. 1875. Author: Major John M. Wilson. Record Group 77, Civil Works Maps File, National Archives, Cartographic and Architectural Branch, Washington, D.C.

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