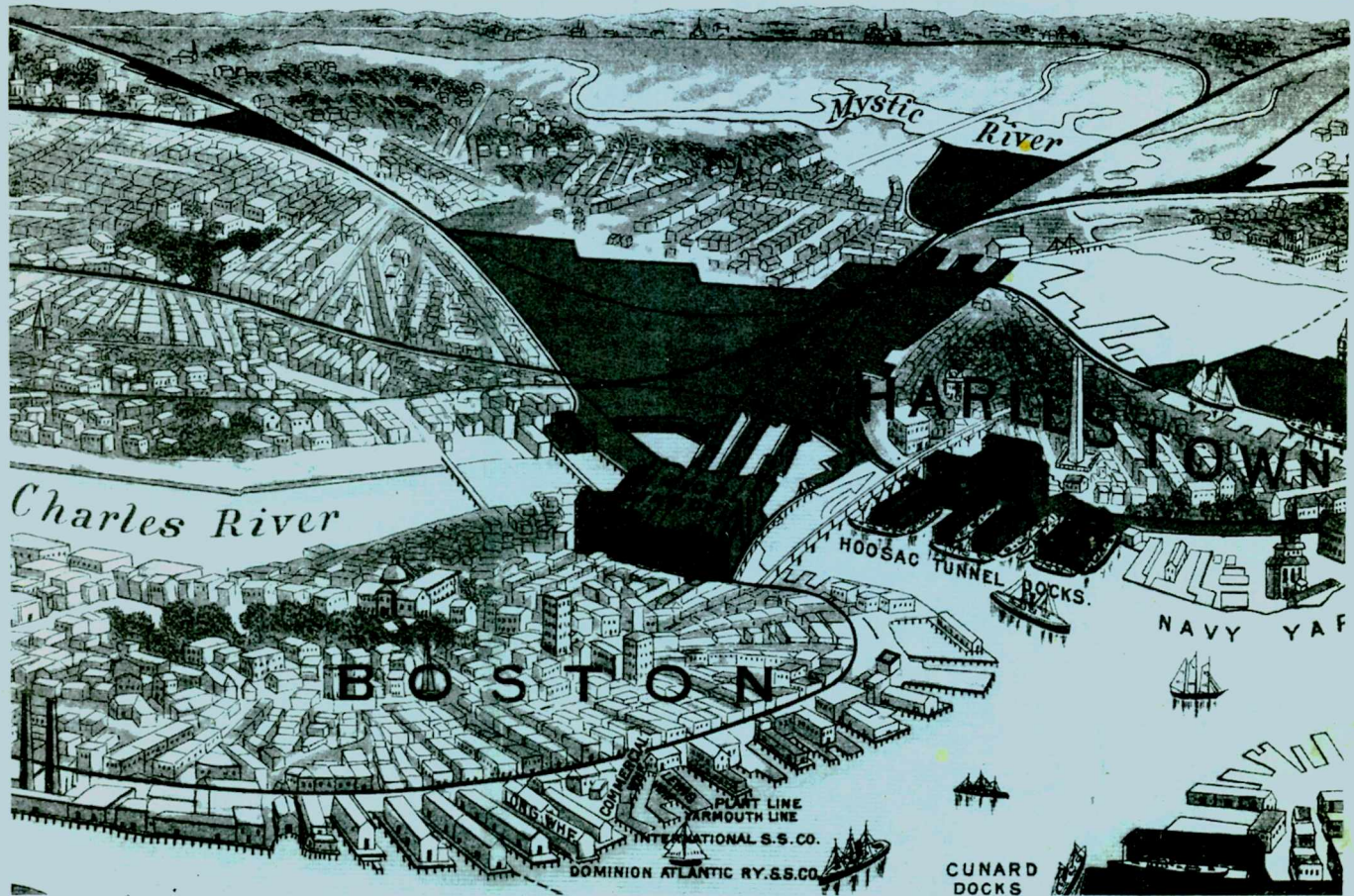


HOOSAC DOCKS: FOREIGN TRADE TERMINAL



A SPECIAL HISTORY STUDY FOR BOSTON NATIONAL HISTORICAL PARK

CULTURAL RESOURCE MANAGEMENT STUDY NO. 11

DIVISION OF CULTURAL RESOURCES
NORTH ATLANTIC REGIONAL OFFICE
NATIONAL PARK SERVICE
U.S. DEPARTMENT OF THE INTERIOR

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North Atlantic Regional Office, National Park Service

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HOOSAC DOCKS: FOREIGN TRADE TERMINAL

A CASE OF
THE EXPANDING TRANSPORTATION SYSTEM
LATE IN THE NINETEENTH CENTURY

A SPECIAL HISTORY STUDY

BOSTON NATIONAL HISTORICAL PARK

PAUL O. WEINBAUM

CULTURAL RESOURCE MANAGEMENT STUDY NO. 11

DIVISION OF CULTURAL RESOURCES
NORTH ATLANTIC REGIONAL OFFICE
NATIONAL PARK SERVICE
U.S. DEPARTMENT OF THE INTERIOR

BOSTON, MASSACHUSETTS
1985

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INTRODUCTION

The Boston National Historical Park contains within its boundaries adjacent to the Charlestown Navy Yard, a part of an historically important dock area. The piers there formerly served the railroad that coursed the Hoosac Tunnel and connected New England to the American West. The Tunnel, completed in 1875, is the "Great Bore" of American railroad annals whose backers sought to divert western freight from the port of New York to the port of Boston.¹ Although, in fact, that diversion did not happen - the port of Boston continued to rank a very distant second to the port of New York at best² - one-half of Boston's foreign trade, between the early 1880s and 1905, did center about the terminus of the Hoosac Tunnel's rail line.

Evidence of the historical terminal at the peak of its activity - the late 1890's - has survived the rebuilding of the piers in the 1940s and the more recent use of this waterfront area for recreational and other purposes. Within Boston National Historical Park itself is the most northerly part of the dock terminal: the attached warehouse structure Hoosac Stores 1 and 2, the site of a passenger building, railroad tracks, a portion of the roadbed, the end of the railroad's main line at Hoosac Stores 1 and 2, a railroad spur to the Navy Yard, and a small parcel of land on the landward side of the historical pier 7. Outside of the park's boundaries, the scene has changed dramatically, but, with the wharf adjacent to the Charlestown Bridge bordering the terminal to the southeast, and Water Street (now Constitution Road) bordering the terminal on the land side, Hoosac Stores 1 and 2, the historic Hoosac Stores 3 (located at the southerly end of the docks), and the railroad's right-of-way strongly suggest the dock area's general configuration. The tracks parallel Water Street and

1. Edward Chase Kirkland, Men, Cities and Transportation, A Study in New England History, 1820-1900, 2 vols. (Cambridge: Harvard University Press, 1948), I: 387-432 passim.

2. About 50 percent of the nation's foreign trade was carried through the port of New York.

"connect" the two Hoosac warehouses.³ The regional historical significance of the area has warranted nominating these structures and the right-of-way for inclusion in the National Register of Historic Places.

3. See appendix A for historical maps. The right-of-way was "a strip of land twenty-five feet in width, more or less." Mortgage Deed, The Hoosac Dock and Elevator Company to the Suffolk Savings Bank for Seamen and others, "Suffolk Registry of Deeds, received for record April 5, 1887, 1766:1. The quitclaim for Swett's (Gage's) Wharf described the right-of-way as "about twenty-four feet wide." Henry Lyon et al. to the Hoosac Tunnel Dock and Elevator Company, Suffolk Registry of Deeds, received and entered October 21, 1881, 1541:156.

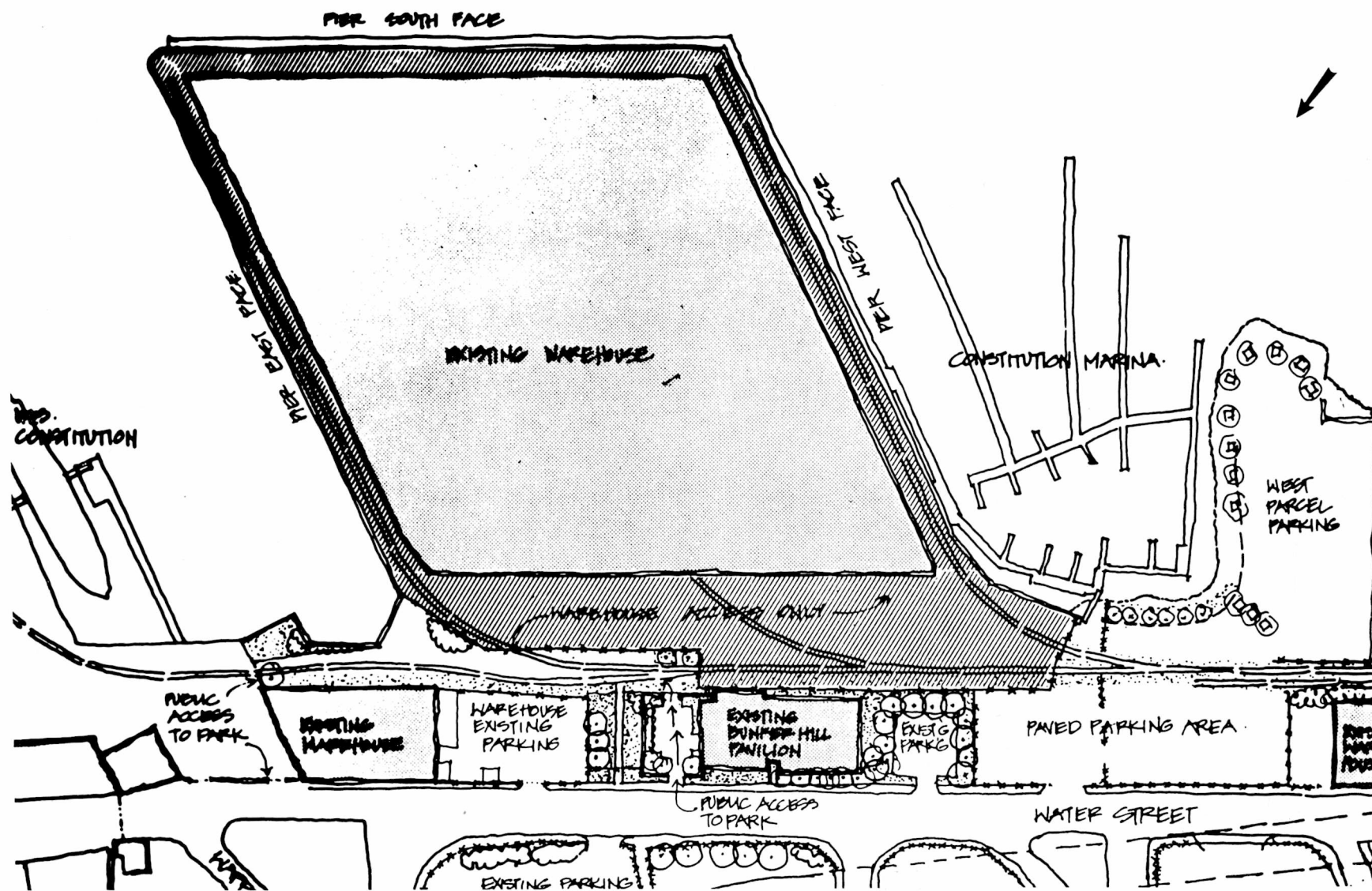


Figure 1. Hoosac Pier area in 1982. The existing Water Street warehouses are Hoosac Stores 1 & 2 and Hoosac Stores 3.

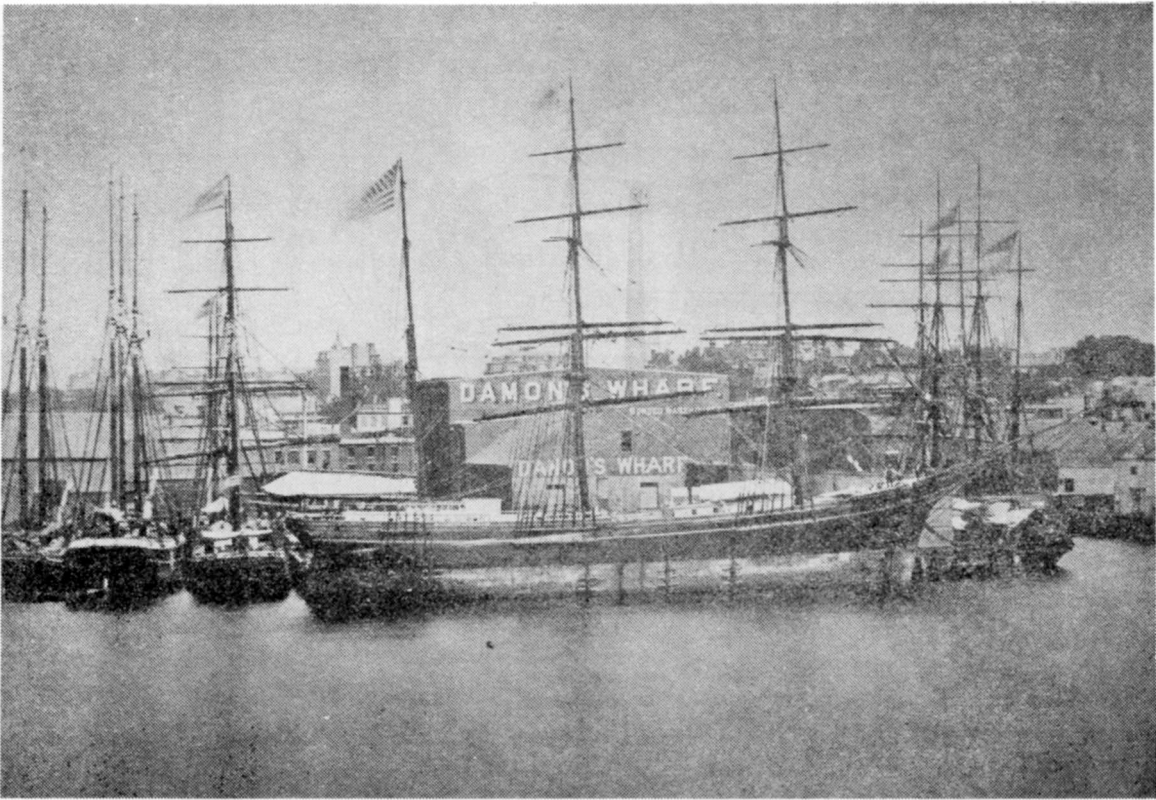


Figure 2. Damon's Wharf about 1875, several years before it became part of the Hoosac dock terminal.



Figure 3. The Hoosac dock terminal in 1911. The grain elevator, in the background, towers over the dock sheds.

HOOSAC DOCKS: ERA OF PROSPERITY

The docks of Charlestown, Massachusetts south of the Navy Yard acquired fame in the nineteenth century when entrepreneurs engaged in the exotic business of shipping ice from local ponds to London and such warm weather ports as Havana, Rio de Janeiro, and Calcutta.⁴ Frederick E. Tudor began the trade in 1806, using a wharf adjacent to the Charlestown Bridge. When competitors ended Tudor's monopoly in the 1840's, the trade spread from Tudor's Wharf to wharves between it and the Navy Yard - the location of the Hoosac docks forty years later.⁵ The railroad facilitated the transportation of ice beginning in the 1830's.⁶

By the 1880s, the remarkable ice business began to decline, and by 1900, Portland and other ports in Maine took most of what trade remained (table 1). By 1900, these Charlestown docks had instead become the terminus for the export of grain and provisions originating in the West. These items, transported hundreds of miles, replaced the ice which had come from several miles away.

After 1880, the docks - by then corporately owned and renamed after the Hoosac Tunnel - were lengthened and widened for steamship use. The major freight categories consisted of: grain, merchandise, and livestock from west of Buffalo; and local packing house products, meal from

4. See Philip Chadwick Foster Smith, "Crystal Blocks of Yankee Coldness: The Development of the Massachusetts Ice Trade from Frederick Tudor to Wenham Lake," Essex Institute Historical Collections (July 1961), p. 231 for a listing of the ports to which ice was shipped in the 1850's.

5. See Smith, "Crystal Blocks," pp. 212-30 on Tudor's competitors; W. H. Bunting, compiler and annotator, Portrait of a Port (Cambridge: The Belknap Press of Harvard University Press, 1971), pp. 6 and 60; Addison Gage, Fitchburg Railroad and the Ice Business (Boston: Wright and Potter Printers, 1868; [William B. Stearns], Reply to Addison Gage's Memorial, Entitled, Fitchburg Railroad and the Ice Business, 1868 (n.p., 1868).

6. Alvin F. Harlow, Steelways of New England (New York, Creative Age Press, Inc.), p. 237. The Charlestown Branch Railroad was taken over by the Fitchburg Railroad in the 1840s.

TABLE 1

ICE SHIPPED FROM THE PORT OF BOSTON AND PORTS IN MAINE,
1860 to 1900
(In Tons)

	1860	1870	1880	1890	1900
Boston	43,500	62,633	39,384	16,480	1,378
Portland & other Maine ports	146	1,180	4,793	19,046	10,483

SOURCE: Philip Chadwick Foster Smith, "Crystal Blocks of Yankee Coldness: The Development of the Massachusetts Ice Trade from Frederick Tudor to Wenham Lake," Essex Institute Historical Collections (July 1961), p. 232 (Ibid., p. 231 for a listing of the ports to which ice was shipped in the 1850s).

local flour mills, and local livestock. Also included was freight destined for west of Buffalo, and imported merchandise, bleach and soda ash, paper stock, and livestock for shipment to east of Buffalo. The dock company set rates for sixty specific items.⁷ Sugar consistently was the most significant import,⁸ and grain the most important export.

Steamship lines used specific piers, and, as the railroads owned or controlled the piers, railroad and steamship data can be broken down by dock area.⁹ When this

7. Ira M. Flagg, agent, Hoosac Tunnel Dock and Elevator Company, to J. R. Haskwell, local agent, Fitchburg Railroad, Boston, February 6, 1882, Hoosac Tunnel Dock and Elevator Company Files (hereafter cited as HTD & EC Files), Boston & Maine Railroad Archives (hereafter cited as B & M RR Archives); Hoosac Tunnel Dock and Elevator Company, Wharfage Rates, n.d., HTD & EC Files, B & M RR Archives.

8. Bill of Sale of Personal Property, Damons' Wharf, Ann F. Damon, Teresa Damon, Charlotte A. Peabody to the Hoosac Tunnel Dock and Elevator Company, HTD & EC Files, B & M RR Archives; Bill of Sale of Personal Property, Fitchburg Railroad Company to the Hoosac Tunnel Dock and Elevator Company, Caswell's Wharf File, B & M RR Archives.

9. Railroad-steamship contracts contained the following clause, the wording ordinarily varying insignifi-

Hoosac Tunnel Dock and Elevator Co.

IRA C. FLAGG, AGENT.

P. O. ADDRESS:
Water Street, Charlestown.

Boston, March 8th 1882.

Statement of Freight received from Fitch R.R. in Feb'y 1882.

<i>Line Grain.</i>	<i>4488030 lbs</i>
<i>Connecting Roads Grain.</i>	<i>246850 "</i>
<i>Line Mds.</i>	<i>1428659 "</i>
<i>Connecting Roads Mds.</i>	<i>293100 "</i>
<i>Local Mds.</i>	<i>376000 "</i>
<i>Fresh Beef.</i>	<i>341846 "</i>
<i>Live Stock</i>	<i>120000 "</i>
<i>Local Grain & Storage.</i>	<i>503490 "</i>
<i>Storage Mds. & Ice.</i>	<i>316035 "</i>

Ira C. Flagg Agt.
per E. Hartshorn

Figure 4. Freight received from Fitchburg Railroad in February 1882.

is done, the relatively great activity of the Fitchburg Railroad's Hoosac docks becomes clear. In 1899, about 45 percent of all steamships sailing from Boston to Europe sailed from the Hoosac docks, and three other pier complexes together made up the balance: the Boston & Albany terminus in East Boston, the Boston & Maine Mystic River wharf in Charlestown, and the wharves in South Boston.

Of the steamship lines berthing at the Hoosac docks, one, the Warren Line, printed a tally of exports. It also ordinarily provided greater service to the port of Boston than any other transatlantic line. Routinely in the 1880s and 1890s, Warren Line steamship sailings equaled between 35 and 50 percent of all sailings to Liverpool and 20 to 25 percent of all sailings to Europe.¹⁰ The Warren Line's annual tally contained dissimilar units of quantity - for example, barrels, cases, bags, bundles, crates, and tubs. It did not rank the major exports for either quantity or value. Nevertheless, the tally lists the full range of goods exported by the primary user of the port of Boston.¹¹ For 1895 - a year the Warren Line effected 85 of the 326 steamship sailings from Boston to Europe - the list specifies more than 150 separate commodities, from agricultural goods to zinc dross, including such items as 1,813 bags of coconuts, 10,263 empty packages, and 79,235 boxes of stove polish. The following were the major items of export:

apples, barrels	67,989
beef, quarters	209,993

cantly from contract to contract: "The party of the first part agrees that during the continuance of this agreement all steamers, if any, managed or controlled by it from time to time and regularly employed in the trade between the ports of Boston and Liverpool, shall dock at the piers and berths above provided for, and not elsewhere within the port of Boston." (See Boston & Maine Railroad, contracts 2302 and 3880 - this citation is from contract 2303 - B & M RR Archives). See Appendix E for full text of contract 2302. See Also Edwin J. Clapp, The Port of Boston: A Study and a Solution of the Traffic and Operation Problems of Boston, and Its Place in the Competition of the North Atlantic Seaports (New Haven: Yale University Press, 1916), pp. 28-29.

10. Boston Chamber of Commerce, Ninth Annual Report (Boston, 1895), p. 148 Idem., Sixteenth Annual Report (Boston, 1902), p. 182. (The Boston Chamber of Commerce's annual reports are hereafter cited as BCC, Report[s]).

11. Massachusetts, State Board of Dock and Terminal Facilities, Report, January 1897, p. 130.

cotton, bales	139,680
flour, sacks	255,602
grain, corn, bushels ..	2,060,720
grain, wheat, bushels .	2,680,169
lard, pails	231,326
livestock, cattle	47,628
lumber, pieces	185,312
provisions, boxes	126,992
stoves, pieces	427,399

The Warren Line in 1895, exported 36 percent of the corn shipped from the port of Boston, 37 percent of the wheat, 41 percent of the cattle, 50 percent of the fresh beef, and 48 percent of the cotton.¹² The Warren Line was sufficiently important to indicate clearly the items shipped via the Hoosac docks; these items included all of the port of Boston's major exports.

After 1887, Fitchburg Railroad freight statistics also reflect directly upon the Hoosac docks' operation. In 1899, the railroad exported about 1,000,000 tons of freight (or nearly 50 percent of the 2,057,573 foreign tons that cleared the port);¹³ and it had begun a three year construction program that would increase its export capacity by 600,000 tons.¹⁴

The railroads stored grain for export in grain elevators at dockside pending shipment, and specific figures are available. (In 1899, grain and grain products comprised 21 percent of Boston's exports by value.¹⁵ The Fitchburg Railroad's Hoosac docks grain elevator, built in the early 1880s, originally had a storage capacity of 600,000 bushels. It was more heavily used than the one at East Boston, which had a greater capacity,¹⁶ and, during the 1890s, the railroad nearly tripled the Hoosac Elevator's capacity to 1,750,000 bushels. Table 2 shows the grain exported from Boston via elevator between 1887 and 1899 and the nearly six-fold increase in this period of just thirteen years.

12. Ibid., pp. 110-11; BCC, Report, 1895, p. 199.

13. Fitchburg Railroad Company, Fifty-ninth Annual Report for the Year Ending June 30, 1900 (Boston: E.I. Drisko, Co., Printer, 1900), p. 7; BCC, Report (1899), p. 150.

14. Fitchburg Railroad Company, Report, p. 7.

15. BCC, Report (1899), p. 235.

16. The Hoosac Elevator's capacity was increased from 600,000 bushels (BCC, Reports, p. 127) to 1,000,000

TABLE 2
GRAIN EXPORTED BY STEAMSHIP VIA TIDEWATER
GRAIN ELEVATORS, 1887 TO 1899
(In Thousands of Bushels)

Year	Hoosac	Grand Junction	Mystic*	New England
1899	19,351	12,235	5,185	24
Percentage	53	33	14	<1
1898	15,123	11,481	7,128	67
Percentage	45	34	21	1
1897	12,176	10,324	4,057	554
Percentage	45	38	15	2
1896	8,849	8,184	3,188	477
Percentage	43	40	15	2
1895	6,654	4,425	1,390	92
Percentage	53	35	11	1
1894	5,277	2,465	1,751	383
Percentage	53	25	18	4
1893	3,845	4,754	1,688	751
Percentage	35	43	15	7
1892	6,351	4,091	1,990	4
Percentage	51	33	16	<1
1891	4,246	2,825		10
Percentage	60	40		<1
1890	3,458	2,250		33
Percentage	60	39		1
1889	3,747	3,368		574
Percentage	49	44		7
1888	1,962	2,533		8
Percentage	44	56		<1
1887	2,892	3,546		--
Percentage	45	55		--

SOURCE: BCC, Reports, 1887-98).

*The elevator began operating in 1892.

The Fitchburg was also the major participating railroad in the export of live animals, a trade in which Boston led the nation.¹⁷ In the 1880s as animal exports increased and more and more animals came into Boston from west of New York state and Canada, so the share of the trade taken by the Fitchburg Railroad increased as well (see figure 5). By the mid 1890s, the railroad was routinely transporting 60 to 80 percent of the live animals arriving at the stockyards in Watertown and Brighton. The Warren Line listing strongly suggests that 60 to 70 percent of the stockyard animals were exported from the railroad's Hoosac docks facility.¹⁸

As of July 1, 1900, the Boston & Maine Railroad leased the Fitchburg Railroad and the Fitchburg thereafter became part of the Boston & Maine system.¹⁹ The acquisition makes it possible to assess the kind and amount of freight exported by the two railroads in 1900 and 1901.

For 1900-1901, the first year of combined operations, the Boston & Maine's receipts reflected the Fitchburg Railroad's long-haul-freight-for-export bias. While Boston & Maine passenger receipts increased 49 percent, grain elevator receipts - albeit involving much smaller amounts of money increased 454 percent (see table 3).

Commodities showing an increase of 100 percent or more in tons carried included, for the most part, those items that were basic to American trade - grain, livestock, and packinghouse products - items to which the Boston & Maine because of its previous New England orientation did not have access (table 4) (see also figure 6).

The Boston & Maine, by noting the "very satisfactory increase" in the foreign trade with Europe, "particularly

bushels (Ibid., 1898, p. 134). It was probably increased again after a fire destroyed the original elevator in April, 1898 (see Appendix B).

17. Bunting, Portrait of a Port, p. 13.

18. Ibid for photographs showing cattle ships at the piers (9.10, 9.11, 9.13); BCC, Reports, 1886-99 (see transportation of stock statistics)

19. Boston & Maine Railroad, Sixty-Eighth Annual Report of the Directors, for the Year Ended June 30, 1901 (Boston: Rand Avery Supply Company, Printers, 1901), p. 7, hereafter railroad annual reports are cited as B & M RR, Report); The Boston & Maine Railroad purchased the Fitchburg Railroad in 1919 (Ibid., p. 5).

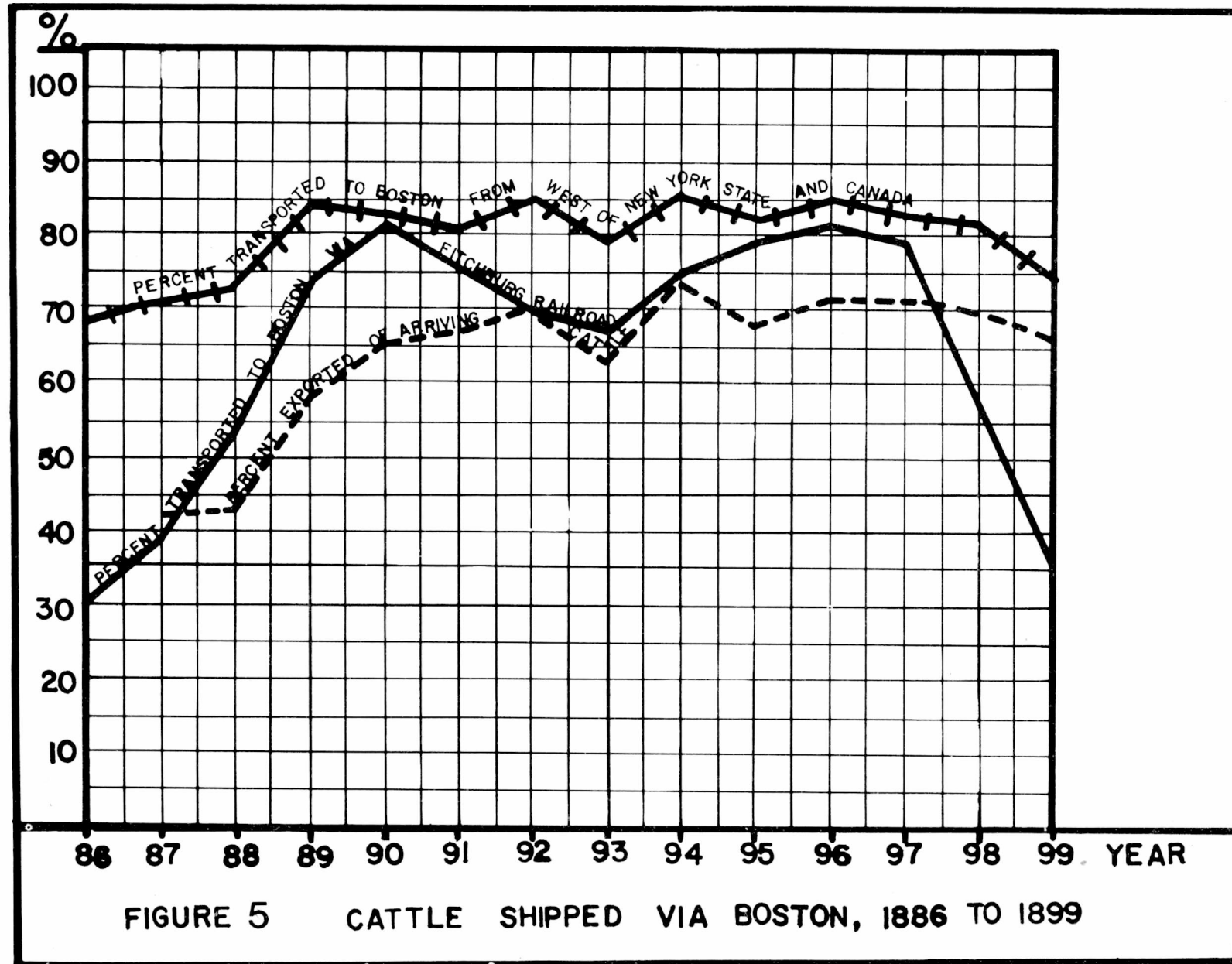


TABLE 3

RECEIPTS OF THE BOSTON & MAINE RAILROAD, 1900 AND 1901
(In Dollars)

	Passenger Dept.	Freight	Grain Elevator	Investments, etc.
1901	12,526,159	17,880,746	327,768	640,944
1900	10,162,100	11,986,441	62,499	654,874

SOURCE: Boston & Maine Railroad, Sixty-Eighth Annual Report of the Directors, for the Year Ended June 30, 1901 (Boston: Rand Avery Supply Company, Printers, 1901), p. 6.

over the Fitchburg Division,"²⁰ signaled the importance of the Hoosac docks in general. Between 1880 and 1900, the docks clearly connoted prosperity and economic control to those who owned them.

20. Ibid., p. 13.

TABLE 4
COMMODITIES IN TONS CARRIED BY
THE BOSTON & MAINE RAILROAD,
1900 AND 1901

Commodity	Year Ending 6/30/1901	Year Ending 6/30/1900
Agricultural implements	45,795	8,675
Grain	1,598,502	701,682
Livestock	258,519	104,860
Metal, bar and sheet	128,515	39,805
Packinghouse products--except dressed meats	509,839	119,780

SOURCE: Boston & Maine Railroad, Annual Report, pp. 6-7.

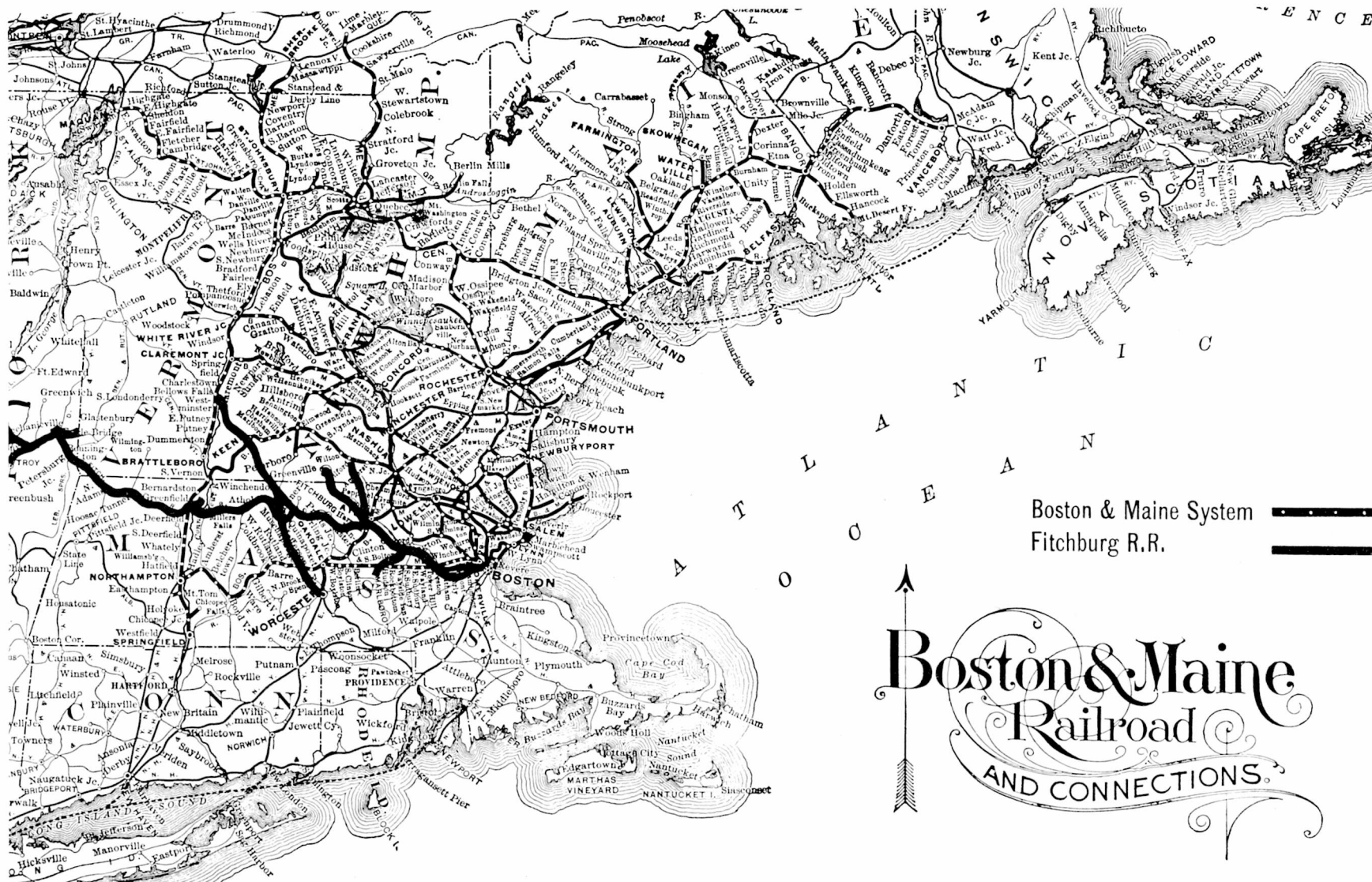


Figure 6. Boston & Maine Railroad and connections in 1900. The Boston & Maine, with its extensive regional network, differs markedly from the Fitchburg, with its much more limited trackage.

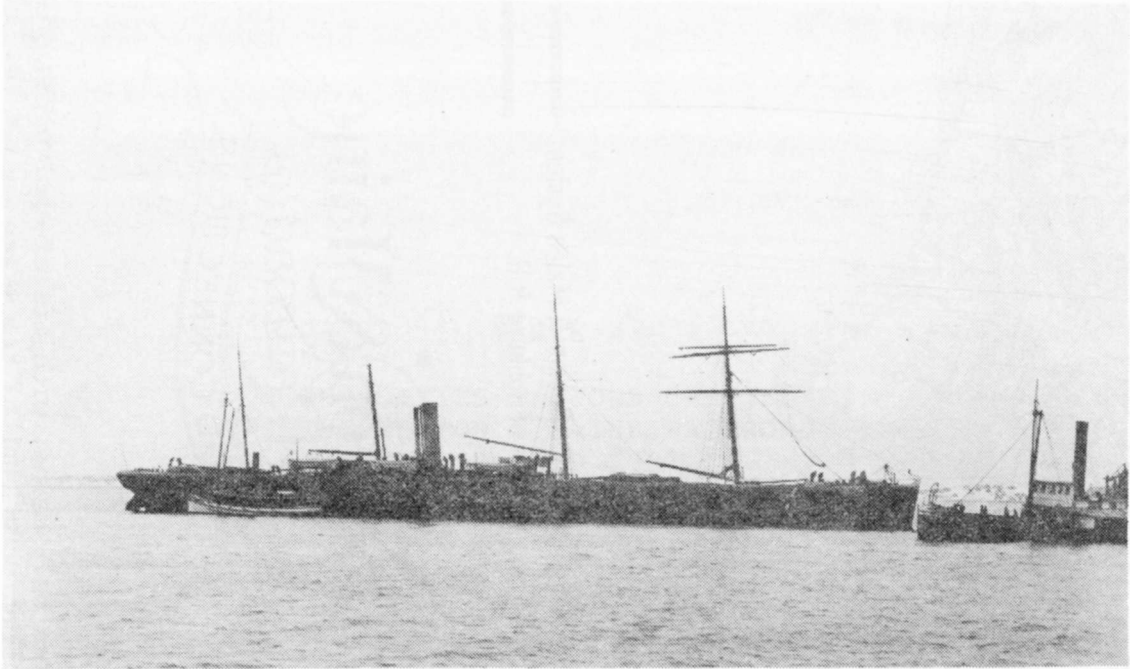


Figure 7. The Venetian (Wilson and Furness-Leyland Line), shown aground and wrecked in Boston's outer harbor, in March 1895. The ship had left the Hoosac docks on her final voyage with a cargo that included 845 sheep, 645 cattle, 3,000 quarters of beef, and 16,00 bushels of wheat.

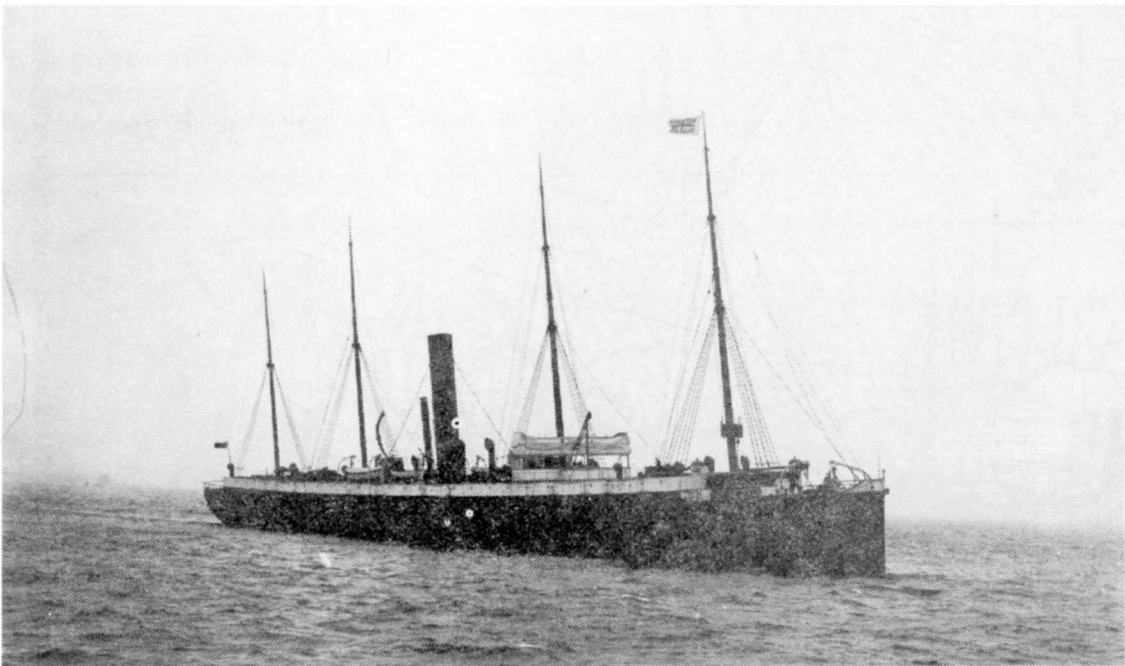


Figure 8. The Ohio (Wilson Line) in 1901 steaming out of the Boston & Maine's Mystic River docks. A wooden house that extended the ship's entire length presumably housed cattle. Built in 1881, the Ohio had originally been rigged with sails for auxiliary power.

BOSTON'S ROLE IN AMERICA'S FOREIGN TRADE

The building of capacious grain elevators . . . the incipency of docks for the largest class ocean steamers, the immense increase of foreign exports . . . the extension of railway lines north, west, and across the Mexican border . . . are writing for us a history as rapid as remarkable.

—Boston Board of Trade, 1883

The port of Boston's prosperity late in the nineteenth century followed years of decline.²¹ The Cunard Line augured the turnabout. It resumed regular steamship service in 1871 after having discontinued it in 1869. Later, in the 1870s, the Warren and other lines - the Leyland, the Allan, the Anchor lines included - also established runs to English and other European ports.²² From none in 1869, steamship sailings from Boston to foreign ports increased steadily. Sailings numbered 100 in the late 1870s and 350 in the late 1890s.²³

Boston's revival coincided with steam's replacement of sail as the motive power for crossing the Atlantic and with the general upsurge in trade, especially in the 1870s (table 5). The rail network linking the American interior to the ocean ports was also completed at this time. Freight rates of Massachusetts railroads declined every year in the 1870s and were 41 percent lower in 1879 than they had been in 1871 (passenger rates, by comparison, declined 16 percent).²⁴

21. Bacon's Dictionary of Boston, 1886, s.v. "Commerce of Boston," "Steamships and the Steamship Trade of Boston."

22. Ibid.

23. Bunting, Portrait of a Port, p. 13; Boston Board of Trade, Report, pp. 62-64.

24. Boston Board of Trade, Twenty-Ninth Annual Report (Boston, 1883), p. 62; Bunting, Portrait of a Port, p. 13. Steamers carried about 95 percent of Boston's foreign trade in 1901, although sailing vessels still comprised 30 percent of the world's maritime tonnage (BCC, Report, 1899, p. 147).

TABLE 5
U.S. AND BOSTON EXPORTS, 1870 TO 1900
(In Millions of Dollars)

	U.S.	Boston	Wholesale Commodity Index
1870	377	14+	135
1880	824	66	100 82*
1890	845	72	56.2*
1900	1,371	124	56.1

SOURCE: Historical Statistics, pt. 1, series E52, pt. 2, series U213; BCC, Report, 1901, p. 255; Massachusetts, State Board on Dock and Terminal Facilities, Report, January, 1897, p. 104.

Receipts that promised delivery to the next carrier - through bills of lading - enabled such ports as Boston to engage in the shipment of western produce. In the 1870s and 1880s, the Boston & Albany and the Fitchburg railroads built tidewater grain elevators that automated the transfer of grain from elevator to ship and they both also engaged in the freighting of cattle from the West for export.²⁵ In the 1880s and 1890s, the Fitchburg Railroad, following the lead of the Boston & Albany, further expanded the port's capacity.

Boston carried on its foreign trade in the context of a still largely agricultural national economy. For the United States in general, food and raw materials predominated among both imports and exports, and a major trade in consumer manufactured goods, with the notable exceptions of textiles, awaited developments in twentieth century technology. At the end of the nineteenth century, sugar, coffee, fruits, and nuts together comprised 25 percent of imports by value and major raw materials - hides, skins, crude rubber, raw silk, and raw fibers - totaled 24 percent (see table 6). (Textiles comprised another 10 percent.) Breadstuffs, provisions (meat and dairy products), live animals (especially cattle), and cotton totaled 58 percent of U.S. exports, and the leading industrial exports - iron and steel manufactures and refined mineral oil - comprised only 12 percent (see table 7).

Boston took a part in this agricultural trade and ranked high as a port despite its distance from the sources of supply and production. In the mid-1890s, agricultural goods comprised 65 to 75 percent (by value) of all American exports, manufactured goods only 20 to 25 percent. In 1896, Boston's exports were 82 percent agricultural and only 17 percent manufactural (mining, forest, and fishery product exports were 6 to 8 percent for the nation and 1 percent for Boston).²⁶

At the end of the nineteenth century, the port of New York took half the nation's foreign trade, but Boston led among the second tier of ports (see table 8). These secondary ports divided into two groups: the North Atlantic ports - Baltimore, Boston, and Philadelphia - depended on the export of breadstuffs, provisions, and live

Historical Statistics, pt. 2, series Q331-45; Massachusetts, Board of Railroad Commissioners, Twenty-Eighth Annual Report of the Board of Railroad Commissioners. January, 1897, p. 68.

25. Bacon's Dictionary of Boston, s.v. "Steamships."

26. BCC, Reports, 1886-99 (see exports).

TABLE 6
SELECTED LEADING IMPORTS INTO THE UNITED STATES,
YEAR ENDING JUNE 30, 1899, BY VALUE

Sugar	\$94,964,120
Percentage of all imports	14
Coffee	55,274,646
Percentage	8
Chemicals	42,668,731
Percentage	6
Hides and skins	41,998,045
Percentage	6
Rubber, crude	31,876,342
Percentage	5
Silk, raw	31,827,061
Percentage	5
Fibers, manufactured	25,132,495
Percentage	4
Total imports	\$696,116,854

SOURCE: BCC, Report, 1899, p. 236.

TABLE 7
 SELECTED LEADING EXPORTS FROM THE UNITED STATES,
 YEAR ENDED JUNE 30, 1899, BY VALUE

Breadstuffs	\$273,999,699
Percentage of all exports	23
Cotton, Unmanufactured	209,564,774
Percentage	17
Provisions	175,508,605
Percentage	15
Iron, steel, manufactures of	93,715,951
Percentage	8
Mineral oil, refined	50,200,518
Percentage	4
Animals	37,880,916
Percentage	3
Total exports	\$1,204,123,134

SOURCE: BCC, Report, 1899, p. 232.

animals (and secondarily cotton [see table 9]); the southern ones - New Orleans and Galveston - depended mostly upon the export of cotton. Boston exported 10 percent of the nation's grain and about 25 to 30 percent of its provisions and live animals. The port, after 1890, ordinarily ranked first in the export of cattle, with an annual shipment of more than 100,000 head; it ranked third in meat packing, with the local packing houses annually slaughtering as many as 1,500,000 head.²⁷ Figure 9 illustrates the extensive area from which the port drew its exports.

TABLE 8
IMPORTS AND EXPORTS OF LEADING PORTS,
PERCENT OF TOTAL U.S., 1896

New York	48.83
Boston	9.81
New Orleans	6.41
Philadelphia	5.48
Baltimore	5.44
San Francisco	4.51
Galveston	3.36
Total, seven ports	83.84

SOURCE: BCC, Report, 1896, p. 152

England, the cornerstone for the export trade in agricultural staples and agricultural goods - i.e. food items and manufacturer's materials - imported 50 percent of America's exports in order to supply its industry and to feed its people,²⁸ but it did not return manufactured goods to the U.S. in the same proportion. In Boston's case, England, in 1899, for example, took 86 percent of the port's exports but provided only 29 percent of its imports. The Dutch East Indies, a source of vegetable fibers, accounted for 11 percent of Boston's imports; Egypt, a source of

27. Ibid., 1901, pp. 166 and 168; Massachusetts, State Board on Dock and Terminal Facilities, Report, p. 77.

28. BCC, Report, 1899, p. 146; U.S. Department of Commerce, Bureau of the Census, Historical Statistics of the United States: Colonial Times to 1970, bicentennial ed., pt. 2, series U317 and U324 (hereafter cited as Historical Statistics).

TABLE 9
LEADING EXPORTS FROM BOSTON, YEAR
ENDING JUNE 30, 1899, BY VALUE

Provisions	\$49,880,567
Percentage of Boston exports	39
Breadstuffs	26,266,069
Percentage	21
Animals	10,255,970
Percentage	8
Leather	10,235,348
Percentage	8
Cotton	8,088,779
Percentage	6
Iron and manufactures of	4,122,477
Percentage	3
Total exports	\$127,162,843

SOURCE: BCC, Report, 1899, p. 235.

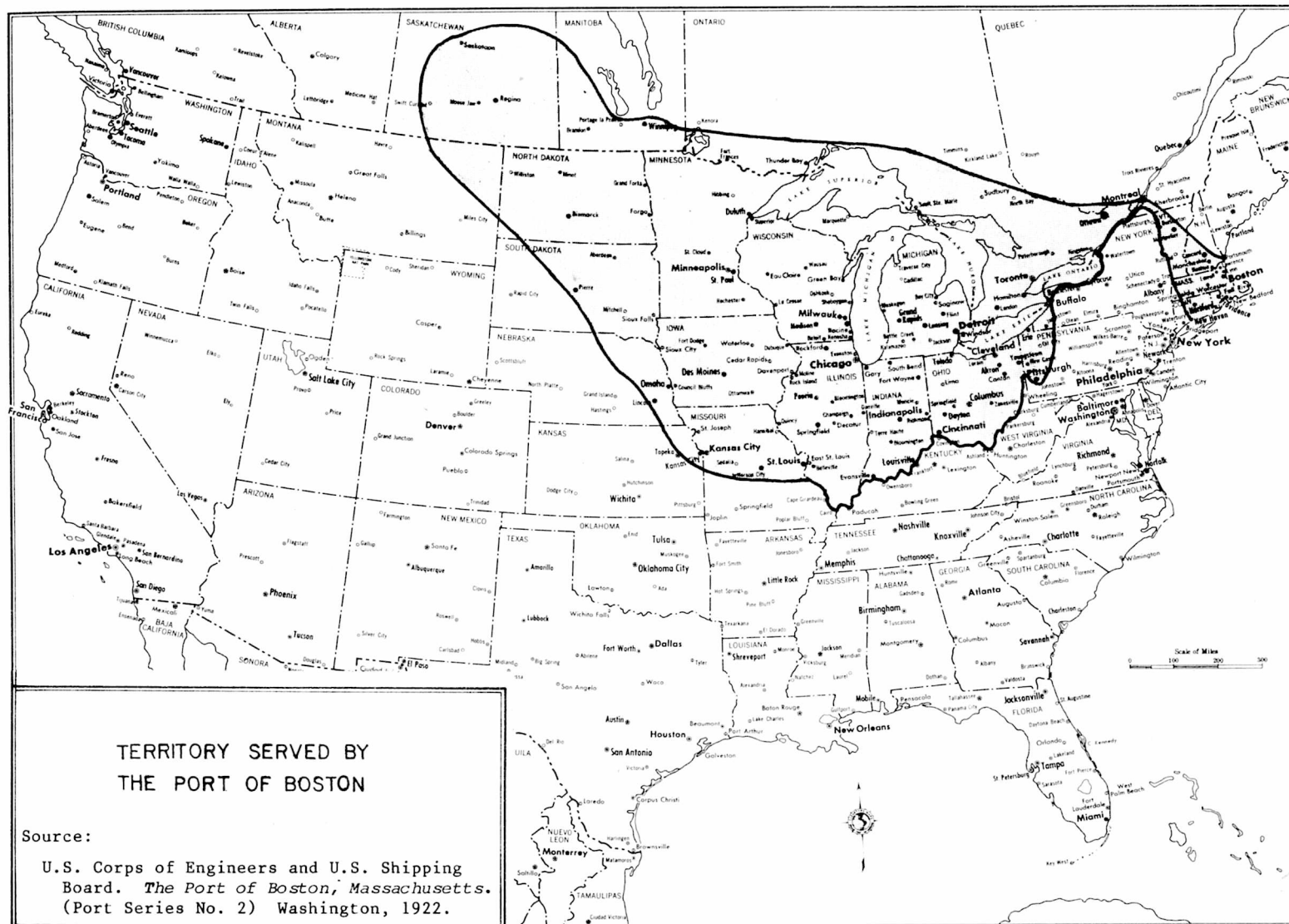


Figure 9

cotton, 8 percent, and the British East Indies, a source of Indian rubber, 6 percent (see tables 10 and 11).

Boston's industrial hinterland gave the port an advantage over its rivals, for New England industry depended upon raw materials of foreign origin. Hides, skins, wool, cotton, fibers, vegetable grasses, leather, hemp, and flax were destined for the nearby shoe, fabric and textile-related industries. In 1899, these items together accounted for about 40 percent of Boston's imports (see table 12). Boston imported 15 to 20 percent of all U.S. imports of hides, skins and raw fibers, one-half of the unmanufactured wool and leather, and nearly all of the (Egyptian grown) cotton. One-half of imported machinery also came through the port.²⁹

The port of Boston's increasing prosperity, however, did not directly reflect the needs of regional industry. Rather, it visibly depended upon agricultural exports originating in the continent's interior. The port prospered most when exports exceeded imports in value (see figure 11). Late in the nineteenth century, the port's share of America's export trade increased steadily, rising from 2 1/2 percent of the U.S. total in 1870 to 10 percent in 1899: from 1870 to 1874 exports ranged between 2 1/2 percent and 4 1/2 percent, from 1875 to 1880 between 6 1/2 and 8 percent, from 1881 to 1891 between 7 1/2 and 9 percent, and from 1892 to 1899, between 9 1/2 and 10 percent (see figure 10). In contrast, imports, during this period, showed no trend. They ranged between 7 1/2 and 11 percent of U.S. imports throughout the years.

Cattle and grain exports signified Boston's role as an important agricultural way station. The shipment of cattle began in the mid 1870s and increased from 50,000 to 150,000 head annually.³⁰ The shipment of grain, which peaked at about 15,000,000 bushels in 1880 reached a new high in 1896 and continued to rise to more than 35,000,000 bushels in 1899.³¹

In the late nineteenth century, agricultural exports increased relative to other exports as well as absolutely.

29. BCC, Report, 1899, pp. 235 and 237; National Shawmut Bank, The Port of Boston: A Foreign Market for the Surplus Products of New England (Boston: National Shawmut Bank, 1916), p. 31.

30. BCC, Reports, 1886-99 (see exports).

31. See table 2 for annual statistics between 1887 and 1899; BCC, Report, 1893, p. 212 for 1880.

They declined for the U.S. as a whole (see table 13). This development boded ill for the port in the twentieth century, when foreign trade included a higher proportion of manufactured consumer goods, but at the time, it evidenced well the ties that bound Boston to America's heartland, more than a thousand miles away.

TABLE 10

EXPORTS FROM BOSTON, 1899, BY AREA AND PERCENT

England	86
Scotland	4
Germany	2
Three leading countries	92

SOURCE: BCC, Report, 1899, p. 233.

TABLE 11

IMPORTS INTO BOSTON, 1899, BY AREA AND PERCENT

England	29
Dutch East Indies	11
Egypt	8
Germany	7
British East Indies	6
France	6
Seven leading countries	67

SOURCE: BCC, Report, 1899, p. 233.

TABLE 12
LEADING IMPORTS INTO BOSTON, YEAR ENDING
JUNE 30, 1899, BY VALUE

Sugar and molasses	\$10,932,236
Percentage of Imports	17
Hides and skins	7,249,569
Percentage	11
Wool	4,966,933
Percentage	8
Cotton	4,963,714
Percentage	8
Fibers and vegetable grasses	3,926,342
Percentage	6
Chemicals, drugs, and dyes	3,691,477
Percentage	6
Iron and manufactures of	2,701,380
Percentage	4
Leather	2,590,072
Percentage	4
Hemp and flax	2,032,722
Percentage	4
Total imports	\$63,428,076

SOURCE: BCC, Report, 1899, p. 234.

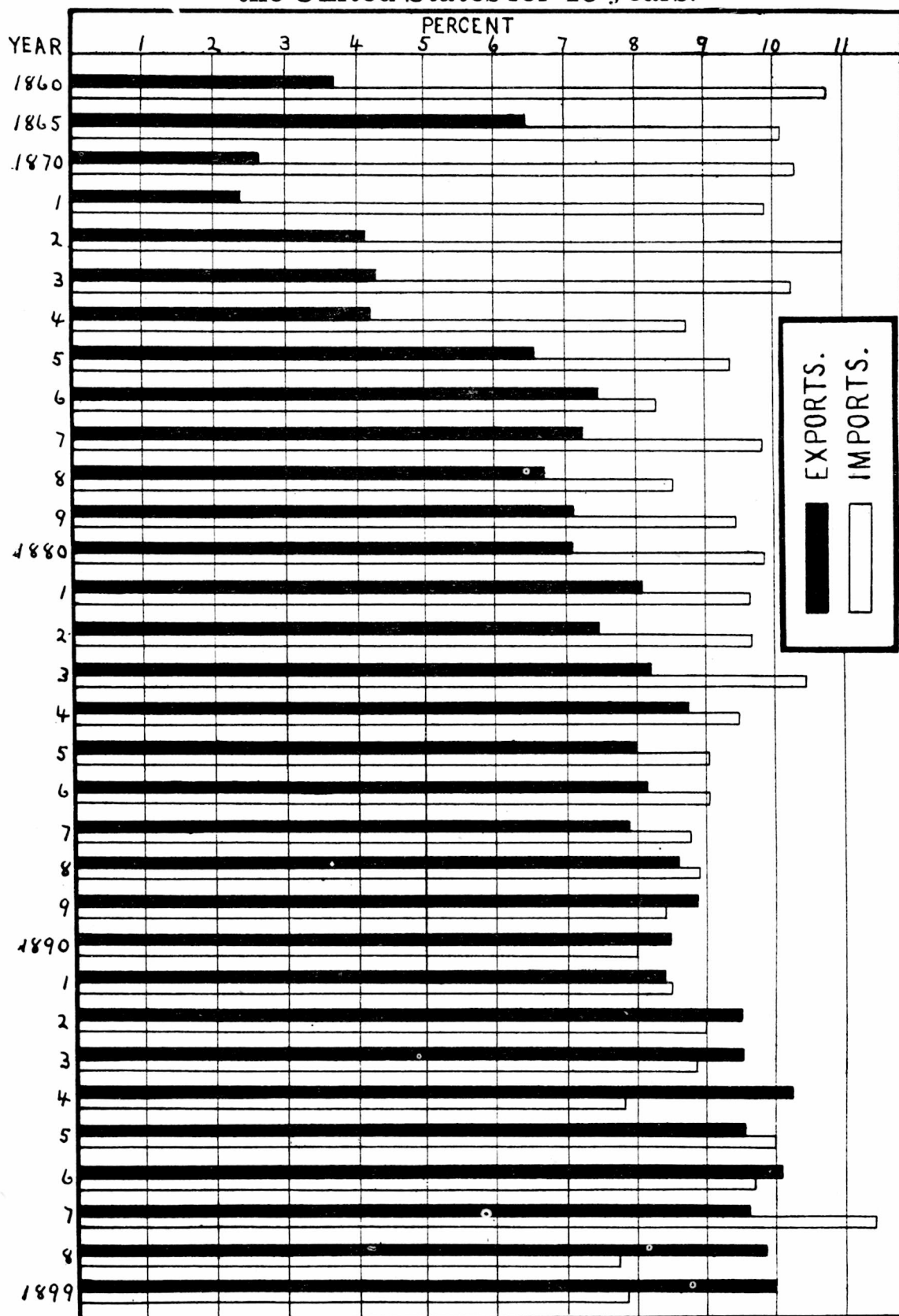
TABLE 13
RELATIVE VOLUME (PERCENTAGE) OF EXPORTED COMMODITIES,
BY CATEGORY, 1870 and 1895

Commodity Origin	United States		Boston	
	1870	1895	1870	1895
Agriculture	80.06	69.68	51.22	84.70
Manufacturing	14.41	23.14	33.76	13.86
Mining	1.06	2.35	.14	.08
Forest	3.21	2.62	6.08	.94
Fisheries	.61	.68	5.74	.06
Miscellaneous	.65	.53	3.06	.36

SOURCE: BCC, Report, 1895, p. 133.

NOTE: The dates refer to fiscal years ending June 30.

Percentage for the port of Boston of total Foreign Trade of the United States for 40 years.



1860-1874 inc., fiscal years ending June 30; 1895-1898, Calendar years.

Figure 10

Graphic Showing Exports and Imports at Boston for twenty-four years; also principal articles of Exports during 1906.

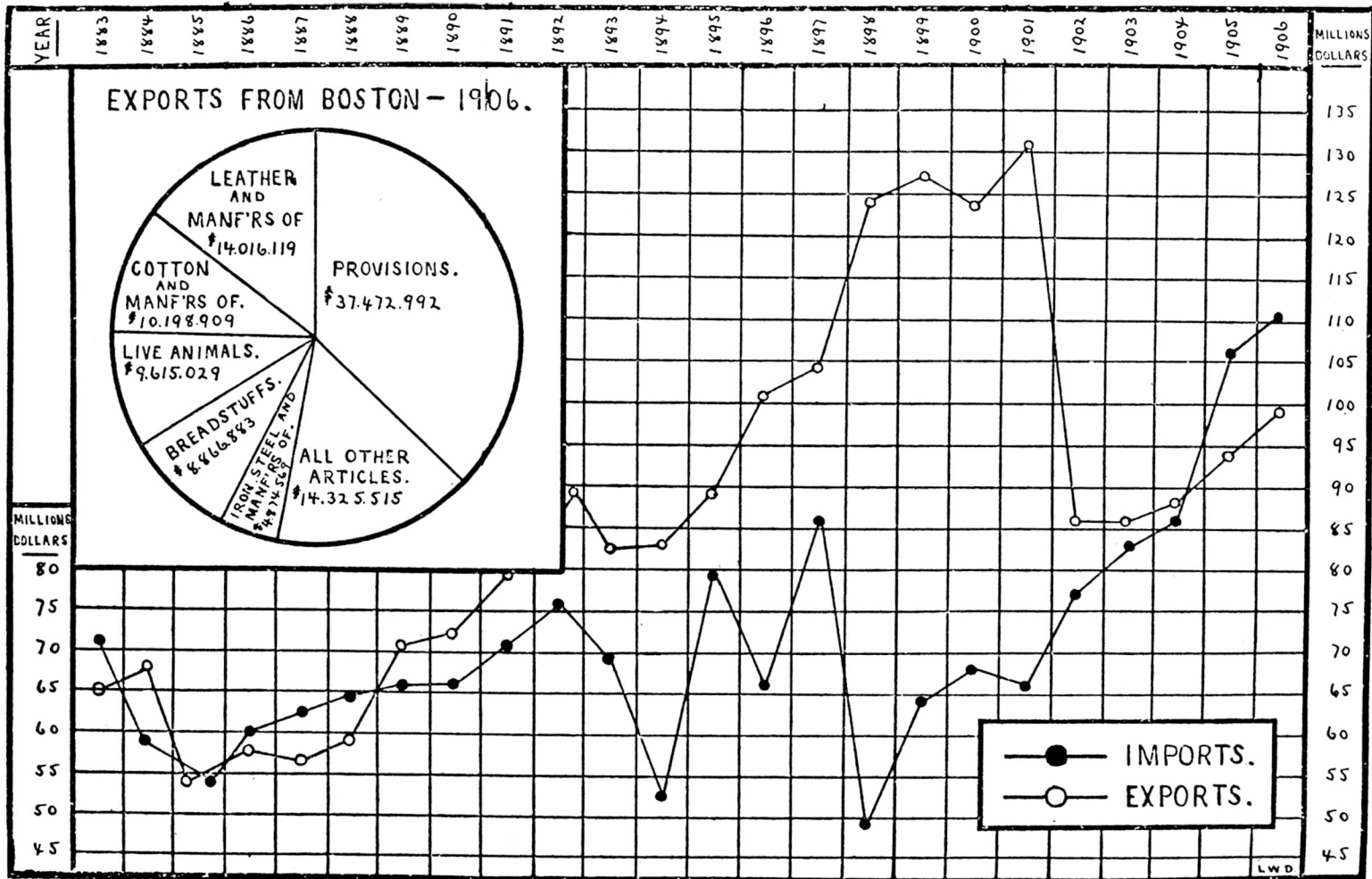


Figure 11

HOOSAC TUNNEL LINE.

The Shortest Line between New England and the West.

CHAS. S. TAPPEN, Manager, Rochester, N. Y.

AGENCY FOR WESTBOUND BUSINESS

250 Washington Street, Boston.

THROUGH BILLS OF LADING

At Lowest Rates to all points West, Northwest and Southwest.

I. J. BASSETT, Agent.

Foreign Freight Department, 5 MERCHANTS EXCHANGE, BOSTON.

Agents at all Principal Western Cities are prepared to furnish
most favorable terms and

THROUGH BILLS OF LADING

In connection with the various Steamship Lines to all
European cities.

Boston Terminus at Hoosac Tunnel Dock and Elevator Co.
Delivery made to all Steamship Lines without Expense.

ALBERT CUSHMAN, Foreign Agent.

Figure 12. An early 1880s advertisement for the Hoosac Tunnel Railroad promoting facilities for transporting foreign-bound freight.

THE FITCHBURG RAILROAD CONSOLIDATION

Judged by modern standards, the efficiency of a railroad depends no more upon the length and quality of its roadbed and the character of its equipment than upon the adequacy and excellence of its terminals. As a chain is no stronger than its weakest link, so a railroad can be no more efficient than its terminals permit it to be.

Unlike most foreign ports, those of America, so far as distribution of imports and exports are [sic] concerned, owe their existence to the railways instead of to rivers and canals. The railroad terminals are the foci of foreign shipping.

--Massachusetts, Commission on
Metropolitan Improvements, 1909

In the 1870s, at the beginning of Boston's foreign trade resurgence, the Fitchburg Railroad owned two port facilities - Constitution Wharf, on the central Boston waterfront; and the adjacent Hittinger's and Caswell's wharves in Charlestown - but it did not itself use its Charlestown property.³² The railroad lightered goods for export over to Constitution Wharf, where it owned a 160,000 bushel capacity grain elevator.³³ There, it did relatively little export business:

During the calender [sic] year 1879, the foreign business over this road was done altogether by the Hoosac Tunnel Line.

For a portion of the year they had the Allan Line Steamers for Glasgow, and the Leyland Line for Liverpool, running to and from Cons't Wh'f: but most of the time the

32. F. L. Parker to W. B. Stearns, July 14, 1880, HTD & EC Files, B & RR Archives.

33. Carroll D. Wright, The Social, Commercial, Manufacturing Statistics of the City of Boston (Boston: Rockwell and Churchill, City Printers, 1882), p. 150.

Liverpool Line, only, was their direct ocean connection. Some freight was brought, and delivered across the harbor by lighters, an expensive and inconvenient method of transportation.

The accommodations at Constitution Wh'f were inadequate for the business done, the cost of handling enhanced, and the means of reaching the wharf causing much extra expense, through having to work nights and for other reasons.³⁴

Early in the 1880s, with control of the port of Boston passing to the railroads generally,³⁵ the Fitchburg Railroad acquired a 37.4 percent interest in the new Hoosac Tunnel Dock and Elevator Company operating out of Charlestown's Charles River docks.³⁶ In practice, the railroad provided the dock company with long haul bulk freight for transshipment to steamships; while the dock company, on its part, eased the movement of freight and increased the business of the railroad. In 1886, the dock company agreed to devote, free of charge, the second story of its pier sheds "as far as necessary" to the temporary storage of freight for export received from the railroad.³⁷ The Fitchburg Railroad purchased the docks outright in 1887,

34. Parker to Stearns, July 14, 1880. In September 1876, the Shawmut Elevator Company, in the course of constructing a 100,000 bushel grain elevator on Constitution Wharf, signed a five-year agreement with the Fitchburg Railroad for the storage of grain for export to be transported to the Wharf via the Union Freight Railway in central Boston. Apparently the Fitchburg Railroad preferred to lighter the grain to Constitution Wharf. (Contract between the Shawmut Elevator Company and the Fitchburg Railroad, September 3, 1876, Fitchburg Railroad Files, B & M RR Archives.) On the Fitchburg Railroad's limited foreign trade facilities, see also Memorandum of Agreement, Hoosac Tunnel Dock and Elevator Company, Fitchburg Railroad Company, The New York Lake Erie and Western Company, Relating to Freight Etc., July 26, 1880, HTD & EC Files, B & M RR Archives.

35. Tracks were laid on the piers of East Boston in 1851, but the railroads did not take possession of the principle docks until after the Civil War. See Boston Board of Trade, Thirtieth Report, p. 41.

36. HTD & EC, General Lists for 1881 to 1886, HTD & EC Files, B & M RR Archives.

37. Indenture (lease), Fitchburg Railroad Company to

taking possession of a grain elevator, wharves, docks, storage sheds, bonded and unbonded warehouses, and probably a steamship passenger building as well.³⁸

As the Boston National Historical Park owns Hoosac Stores 1 & 2, the Hoosac dock area's major warehouse, specific reference to storage structures is made here. In 1922, the U.S. Army Corps of Engineers studied the port of Boston and noted the year of construction or remodeling of twenty-one of the thirty-nine warehouses then in use. Seventeen of the twenty-one dated from the period of 1890 to 1910, the era during which port activity peaked.³⁹

The historical pattern continued at least into the 1920s. The railroads still owned the docks:

Boston is well equipped with warehouses suitable for handling a large foreign and domestic business. . . . Unfortunately the private warehouses best adapted for general storage purposes were handicapped by the competition of rail owned terminals which offered free dockage and absorbed in the line haul rate other terminal expense which private waterfront warehouses must meet from the revenue of the terminal itself.⁴⁰

Both dutiable and nondutiable imported merchandise was stored in the warehouses. Wool and sugar were the items of greatest value. Other stored commodities included non-cigar leaf tobacco and, less importantly, earthen, stone and chinaware; skins for morocco; and tin plates (see table 14). In Hoosac Stores 1 and 2, the Fitchburg Railroad

Hoosac Tunnel Dock & Elevator Company, July 26, 1886, HTD & EC Files, B & M RR Archives.

38. See the maps in appendix A; also see Transfer of Property, Hoosac Tunnel Dock and Elevator Company to Fitchburg Railroad Company, Suffolk Registry of Deeds, received for record April 15, 1887, 1767:264.

39. U.S. Army, Corps of Engineers and United States Shipping Board, The Port of Boston Massachusetts (Washington, D.C.: Government Printing Office, 1922), pp. 58-59. A partial listing of waterfront warehouses is included in Review of Boston, Mass. with a Representation of Her Leading Business and Professional Firms ([Boston]: The Boston Herald, 1896), p. 62.

40. U.S. Army, Corps of Engineers and U.S. Shipping Board, Port, p. 55.

TABLE 14

INVENTORY OF IMPORTED MERCHANDISE IN STORAGE AT THE PORT OF BOSTON
AT THE END OF SELECTED FISCAL YEARS, 1892 TO 1899
(Percentage of Total Value)

1892	1895	1896	1899
Unmanufactured wool 66	Sugar 37	Sugar 38	Unmanufactured wool 39
Skins for Morocco 5	Leaf tobacco (non-cigar) 18	Leaf tobacco (non-cigar) 22	Sugar 19
Leaf tobacco (non-cigar) 5	Skins for Morocco ... 8	Earthen, stone, and chinaware 6	Hides of cattle 4
Unpolished glass 8	Earthen, stone, and chinaware 5	Skins for Morocco 4	Leaf tobacco (non-cigar) 2
Total leading warehoused imports 78	68	70	64

SOURCE: U.S. Treasury Department, The Foreign Commerce and Navigation of the United States for the year ending June 30, 1892, table 21; for the year ending June 30, 1895, table 8; for the year ending June 30, 1896, table 8; for the year ending June 30, 1899, table 8.

stored wool,⁴¹ and it likely stored the other commonly imported commodities there as well.⁴²

When the Fitchburg Railroad superceded the Boston & Albany in Boston's foreign trade in the late 1880s, it assumed control of a transportation system that others - the state, the Hoosac Tunnel Dock & Elevator Company, and several railroads - had largely built. Freight converged from the west via the New York, West Shore and Buffalo Railroad into the Hoosac Tunnel in Western Massachusetts, and a direct railroad line connected the tunnel to the docks in Charlestown.

The state constructed the Hoosac Tunnel, the link between Massachusetts and the west, after it assumed responsibility for a failing private effort.⁴³ When it opened in 1875, the tunnel at 25,081 feet, was North America's longest railroad tunnel and the world's second longest.⁴⁴ The Hoosac Tunnel took more than fifteen years to construct and Hoosac Mountain saw the first use of new methods of construction in the United States. In the course of construction, power compressed air drills replaced hand drills and nitroglycerin replaced black powder for boring through the rock.⁴⁵ (The tunnel is entered in the National

41. F.E. Cabot to Edmund D. Codman, March 12, 1897, HTD & EC Files, B & M RR Archives (see appendix F for full text).

42. Edwin J. Clapp, The Port of Boston: A Study and a Solution of the Traffic and Operating Problems of Boston, and Its Place in the Competition of the North Atlantic Seaports (New Haven: Yale University Press, 1916), p. 7.

43. Carl R. Byron, A Pinprick of Light: The Troy and Greenfield Railroad and Its Hoosac Tunnel (Brattleboro, Vermont: The Stephen Greene Press, 1978), p. 22 and passim.

44. Ibid., p. 69. The tunnel's length of 4 3/4 miles was exceeded in 1875 only by that of the Mount Cenis Tunnel in the Savoy Alps. The European tunnel - constructed about the same time - was 7 5/8 miles long. In 1875, while several European tunnels exceeded 3 miles in length no American tunnel exceeded 1 1/2 miles. Next to the Hoosac, the longest American tunnels were the Baltimore of the Baltimore and Ohio Railroad, 6948 feet; and the Great Bend of the Chesapeake & Ohio Railroad, 6449 feet. (Unsourced magazine clipping, HTD & EC Files, B & M RR Archives.)

45. Byron, A Pinprick of Light, pp. 25 and 34; United States Department of the Interior, National Park

National Register of Historic Places and in the Historic American Engineering Record.)

The state still owned the tunnel and the railroad running through the tunnel in 1879 when it authorized the Hoosac Tunnel Dock & Elevator Company to build the Hoosac docks, the connecting steamship facility in Charlestown. The company was "to construct and maintain docks, wharves, elevators, warehouses and other buildings" specifically "for the reception, storage, delivering and forwarding of freight to be received or sent to the Hoosac Tunnel."⁴⁶

The act of incorporation also empowered the Hoosac Dock Company:

- 1) "for a period of one year to take and hold by purchase or otherwise," any land between the harbor commissioners' line and Water Street and between the Navy Yard and Tudor's Wharf;
- 2) to "at any time" make purchases for a terminal within this area, such purchases to include wharves, land, docks, and buildings;
- 3) with the harbor commissioners consent, to extend the wharves beyond the commissioners' line.

In addition, the act permitted railroad and steamship companies connecting in some way with the Hoosac Tunnel's railroad and engaged in foreign trade at the port of Boston to hold stock in the dock company and to vote at all meetings of the corporation. The act also required that the Fitchburg Railroad Company connect its tracks to those of the dock company.

The connection between the Hoosac Tunnel and the Hoosac docks is unmistakable:

It shall be the duty of said corporation hereby created, to receive and store at reasonable rates and under reasonable regulations, and so far as their capacity may admit, all freight received, or to be sent through the Hoosac Tunnel, that shall be offered to said company.

Service, National Register of Historic Places, Inventory and Nomination Form, "Hoosac Tunnel," November 2, 1973.

Said corporation shall make no discrimination for or against any railroad corporation desiring to do business on its premises, but if it shall not at any time have facilities for transacting all the business offered, it shall give preference to freights received, or to be sent, through the Hoosac Tunnel.⁴⁷

The Hoosac Tunnel Dock & Elevator Company took about four years to rebuild the docks. During 1881, the company took possession of the wharves - Hittingers, Damon's, Swett's (Gage's) and part of Tudor's and purchased a small parcel of land from the railroad for a total of 502 acres. It obtained licenses to extend all of the wharves to the new commissioners' line and, excepting Gage's, widened, straightened, and lengthened them.⁴⁸ The Hoosac Company removed the buildings on the old wharves and built a grain elevator (capacity - 600,000 bushels and enlargeable),⁴⁹ two-story sheds, and bonded and unbonded warehouses. Pier construction was completed in September 1882, and, by early 1883, the Furness and West Harlepool lines used pier 3, the Allan Line pier 4, and the Leyland Line pier 5.⁵⁰ The company, which had leased Gage's Wharf unimproved terminated the lease in 1884 in order to extend that wharf.⁵¹ With this last improvement, the docks acquired a form that did not significantly change until the late 1890s.⁵²

47. Massachusetts, Private and Special Statutes (1879) c. 277.

48. HTD & EC, Director's Report, Second Annual Meeting, 1881, HTD & EC Files, B & M RR Archives; see also appendix A.

49. HTD & EC, "Cost Estimate for Building & Building Addition," November 22, 1880, HTD & EC Files, B & M RR Archives.

50. HTD & EC, Director's Report, 1882, HTD & EC Files, B & M RR Archives. The Fitchburg Railroad did not connect with the Erie Canal immediately, and the Leyland Line, the first steamship company to use the piers, had first to send some inbound ships to New York for outgoing cargoes. Ibid. See appendix A for site structures.

51. HTD & EC, Director's Reports, 1884, 1885, HTD & EC Files, B & M RR Archives.

52. The Fitchburg Railroad, prior to the incorporation of the Hoosac Tunnel Dock & Elevator Company, owned the two wharves between the Navy Yard and Gage's Wharf (Caswell's and Barnard and Hittinger's). In 1885, the

The Hoosac Company's boosters envisioned the docks as a major foreign trade terminal - "a grand distribution centre"⁵³ - but the New York and New England Railroad at the time of the Hoosac Company's incorporation, had sought to thwart the terminal's creation. The railroad blocked the Hoosac's negotiated purchase of twenty-five acres in South Boston, from the state;⁵⁴ and it later objected to extending the harbor commissioners' line in the Charlestown area as a further narrowing of the Charles River.

In replying to the New England Railroad, the harbor commissioners prophesied the Hoosac docks' success. The Board of Commissioners claimed that corporate apathy and businessmen's "want of faith in the growth of the export business surprised it," and that it had "very carefully considered the objections to the extension desired" of wharves beyond the old harbor line. The commissioners noted the Hoosac Company's act of incorporation: "Nothing but an extraordinary commercial need could have justified the powers conferred upon the company" to take possession of privately owned land. The commissioners gave their approval for the Charlestown wharves to develop into a major terminal.⁵⁵

The appearance on the historic scene of the Fitchburg Railroad was meteoric. In 1880, the railroad, although second in importance to the Boston & Albany Railroad, carried less than half of the latter's freights (see table 15). In 1900, it became a lessee of the Boston & Maine Railroad, transforming the latter into the area's major foreign trade carrier. During the twenty years intervening the Fitchburg Railroad purchased or acquired control of all the railroads from Boston to the Hoosac Tunnel and then beyond into New York state.⁵⁶ It changed from a local and regional carrier into the major long-haul freight handler

railroad extended and combined the two wharves. Plan showing extension of Caswell's Wharf, Charlestown, Massachusetts, December 1884, approved by Harbor and Land Commissioners, May 21, 1885, Fitchburg Railroad Files, B & M RR Archives (Copy, Professional Services Branch, Boston National Historical Park [Hereafter Prof. Services]).

53. Boston Board of Trade, Twenty-Ninth Annual Report, p. 62.

54. Ibid.

55. Massachusetts, Harbor and Land Commissioners, First Annual Report for the Year 1879, pp. 16-17.

56. Francis B. C. Bradlee, The Boston & Maine Railroad: A History of the Main Road, with its Tributary

TABLE 15
FREIGHT CARRIED BY RAILROADS WITH TERMINALS
IN BOSTON, 1880

	Tons	Freight/Passenger Car Ratio
Boston & Albany	3,310,539	30.37
Fitchburg	1,546,950	38.30
Old Colony	1,371,449	9.05
Boston & Lowell	1,068,230	10.42
Eastern	1,021,999	10.43
New York and New England	968,549	15.63
Boston & Maine	810,122	10.80
Boston & Providence	660,468	7.33

SOURCE: King's Handbook of Boston, 4th ed (1881) s.v. "The Railway Clearing House Associates."

entering Boston, New England's largest city and major port. Declining rail rates and increased corporate indebtedness reflect the railroad's expansion and illustrate how it was possible for the railroad to handle freight terminating so far from the center of agricultural production. (See tables 16 and 17.)

The Fitchburg Railroad's success and national developments affected an issue of large concern - the comparative prosperity of the secondary Atlantic ports - so the climax to the Hoosac docks' development lies far afield in Washington, D.C. The railroad, late in the 1890s, sought to expand its dock facilities by infringing upon the Boston Navy Yard. The matter came before Congress, economic arguments shifted from state to nation, and opposition arose. Maryland senator Arthur P. Gorman, a leading Democrat, objected to a private use of federal property that would disadvantage the port of Baltimore. The Navy, however, saw a need for a major coaling station and the Fitchburg Railroad was allowed to expand, provided that it constructed and maintained an enlarged slip that included federal as well as its own property. The Boston & Maine, as successor to the Fitchburg Railroad, adhered to this agreement until the 1940s.⁵⁷

Lines (Salem, Massachusetts: Essex Institute, 1921), p. 70; Harlow, Steelways of New England, p. 258. With the purchase of the Hoosac docks, the Fitchburg Railroad stopped using Constitution Wharf and terminated its lease to John Nichols who operated Caswell's Wharf. Constitution Wharf Company and Fitchburg Railroad, "Agreement, Termination of Lease," Fitchburg Railroad Files; and "Bill of Sale of personal property," John C. Nichols to Fitchburg RR Cp., July 12, 1886, B & M RR Archives. Also, Deed, Anne F. Damon and others to the Hoosac Tunnel Dock & Elevator Company, Suffolk Registry of Deeds, dated December 28, 1880 and entered February 8, 1881, 1515:325 (this deed cites deed of Samuel D. Harris and others, trustees, to Samuel W. Damon, Middlesex Registry of Deeds, dated October 18, 1850, 561:140).

57. U.S. Department of the Interior, Branch of Historic Preservation, Historic Structure Report: Architectural Data Section Pier 1 and 2, Vol. 1, Historical Background, Charlestown Navy Yard, Boston National Historical Park, Massachusetts, by Mary Jane Brady and Merrill Anne Wilson, pp. 20-23; see also B & M RR, "Contract for the Enlargement of the slip or Dock at the Southern Boundary of the U.S. Navy Yard at Boston, Massachusetts" and related documents, Contract 2116, B & M RR Archives.

TABLE 16
FREIGHT RATES, FIVE LEADING MASSACHUSETTS RAILROADS
(In Dollars per Ton Mile)

	1870	1880	1890
Boston & Albany	2.19	1.21	1.11
Boston & Maine	4.45	2.56	1.76
Fitchburg	4.81	1.37	.99
New England		2.86	1.22
New York, New Haven & Hartford	4.09	2.41	2.07

SOURCE: Massachusetts, Board of Railroad Commissioners, Annual Report. January, 1900, Public Document No. 14 (Boston: Wright & Potter Printing Co., State Printers, 1900), p. 23.

TABLE 17

FITCHBURG RAILROAD FREIGHT TRAFFIC, 1880 TO 1899

	Tons	Percentage via Hoosac Tunnel	Percentage of Total Tonnage
Westbound			
1880	497,059	15	32
1885	586,710	18	27
5 year increase in tonnage 15 percent			
1890	1,004,061	8	
5 year increase in tonnage 71 percent			
1895	923,005	13	21
5 year decrease in tonnage 8 percent			
1899	960,654	11	18
4 year increase in tonnage 4 percent			
Eastbound			
1880	1,049,891	33	68
1885	1,571,573	29	73
5 year increase in tonnage 50 percent			
1890	2,967,257	24	75
5 year increase in tonnage 89 percent			
1895	3,496,422	27	79
5 year increase in tonnage 18 percent			
1899	4,250,549	35	82
4 year increase in tonnage 22 percent			

SOURCE: Fitchburg Railroad Company, Fifty-ninth Annual Report of the Directors, for the Year Ending June 30, 1899 [Title page reads June 30, 1896!] (Boston: E.I. Drisco, Co., Printer, 1900) p. 21; BCC Report (1899), p. 150.

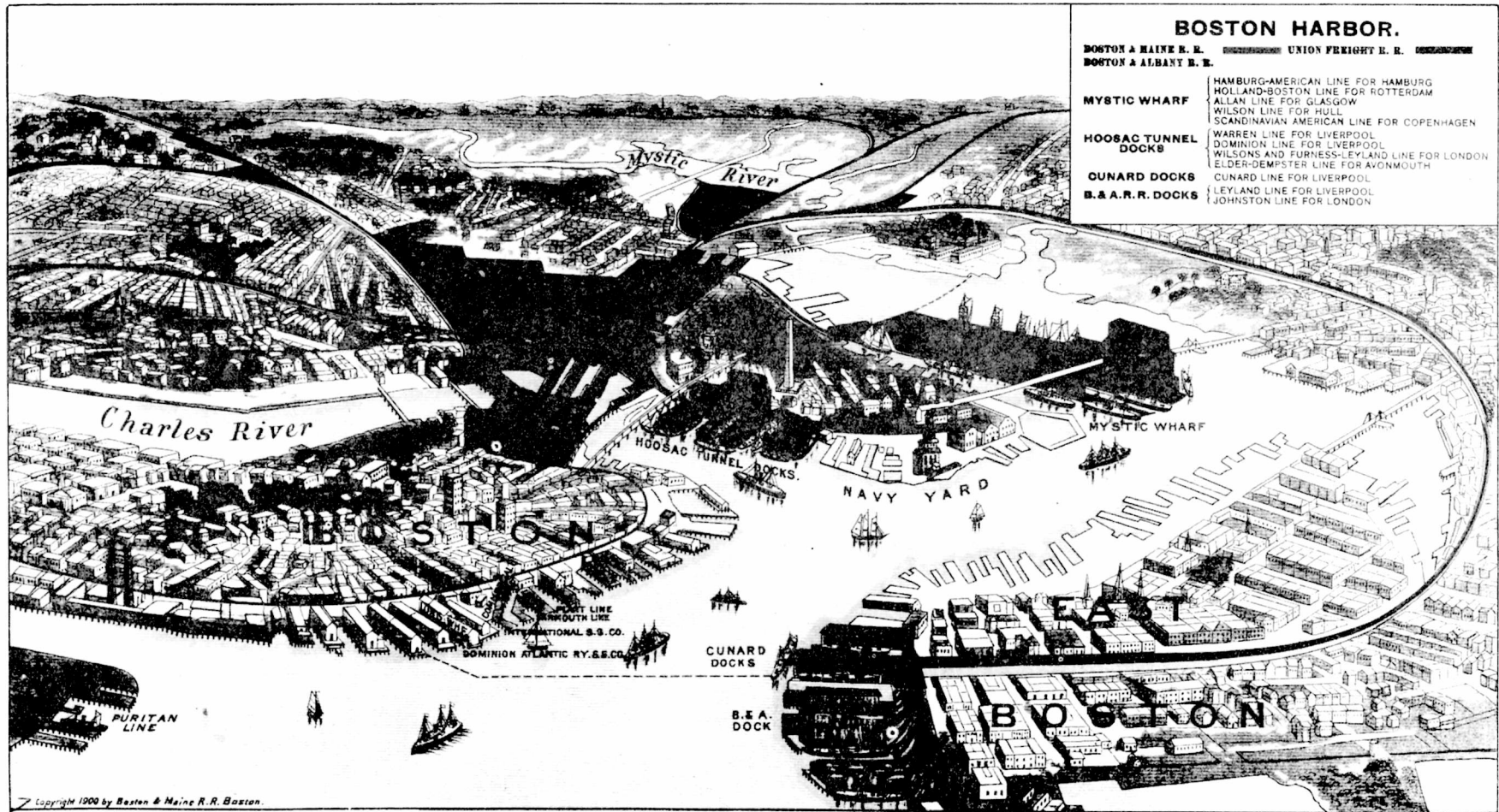


Figure 13. Boston Harbor in 1900.

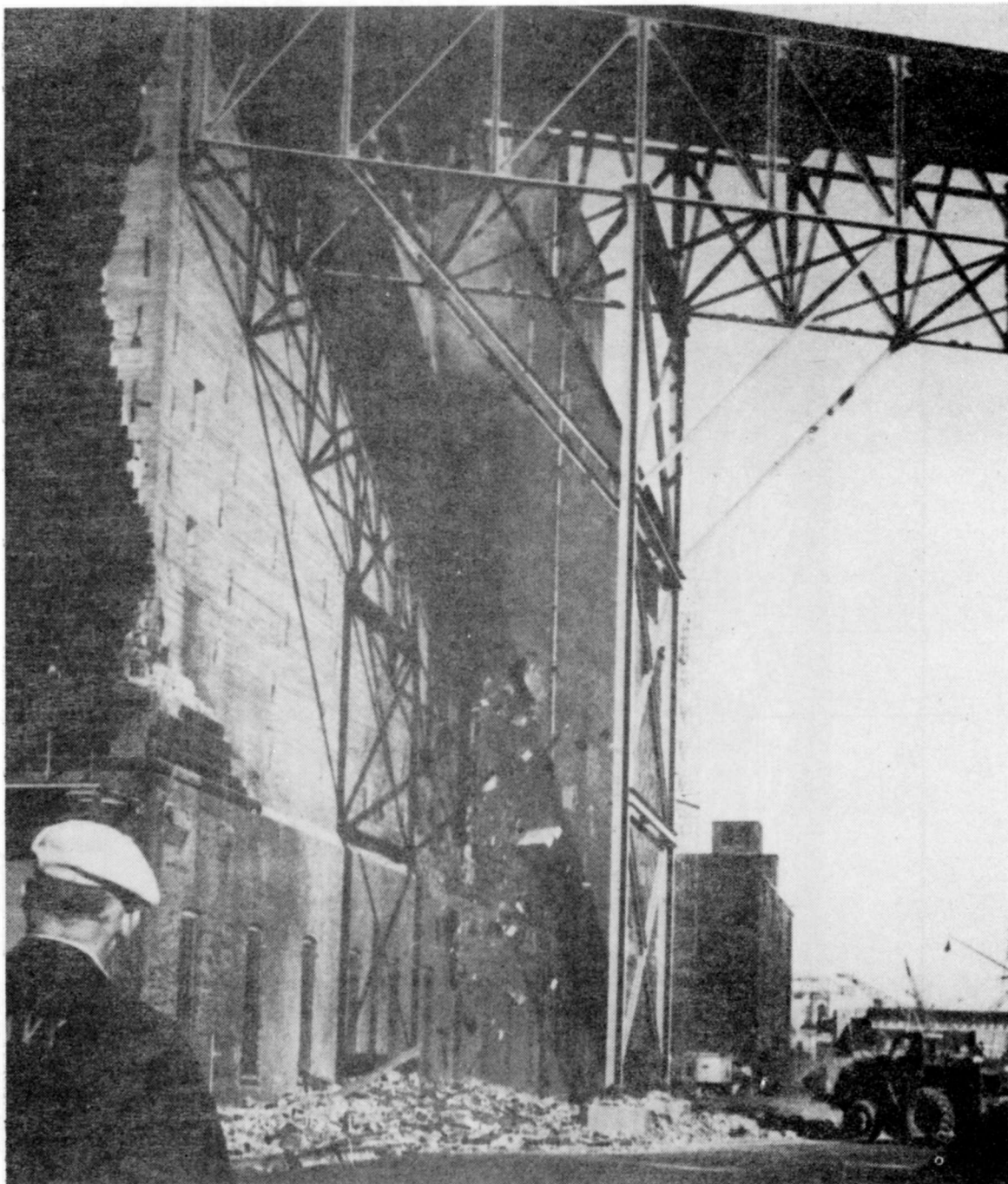


Figure 14. The Hoosac grain elevator in December 1953. Missing are large sections of the exterior wall which had begun to collapse in early November. The view is from the railroad right-of-way looking towards Hoosac Stores 1 & 2.

THE TWENTIETH CENTURY

The Hoosac dock terminal's prosperity culminated in a burst of activity. The late 1890s saw the building of Hoosac Stores 1 and 2 (1895), the expansion of pier 7, the construction of the Fitchburg Slip (1899-1901), a dock shared with the Boston Navy Yard, and the purchase and conversion to a warehouse of Hoosac Store 3, an 1875 structure once owned by the Cunningham Iron Works (1897). The railroad also purchased a building on Tudor Wharf.⁵⁸

In 1900, the Boston & Maine Railroad leased the Fitchburg Railroad and abruptly became the major railroad engaged in the port's foreign trade. For the year ending June 30, 1907 the Boston & Maine received 62 percent of all freight exported from Boston and transported 72 percent of all freight imported. Of imported freight destined for west of Buffalo (15 percent of all imported freight), the Boston & Maine had a near monopoly - it shipped 91 percent (see table 18).

But the Boston & Maine enjoyed a short-lived triumph, for the role of both the port and the Hoosac docks in America's foreign trade declined rapidly (see table 19). Boston's exports fell from 9.7 percent of U.S. exports in the 1890s to 1.3 percent in 1922. Ships which brought in raw materials for area industries now had to go to other ports for their return cargoes.⁵⁹ Technology, facilities, and the cost of transportation may all have played a role, but, at least in part, the situation for Boston worsened because U.S. agricultural exports declined relative to other exports (see table 20). In addition, Montreal increased its share of the Canadian trade.⁶⁰

58. Fitchburg Railroad, Miscellaneous Corporate Records, Fitchburg Railroad Files, B & M RR Archives. Also, compare the plan of the Hoosac Tunnel docks compiled from Boston's [?] Plans, September 5, 1894, Fitchburg Railroad Files, B & M RR Archives, with the plan of Yard-11, Hoosac Tunnel Docks, May 2, 1963, Blueprint Files, Engineering Department, Boston & Maine Railroad (copies, Prof. Services).

59. Bunting, Portrait of A Port, p. 17; National Shawmut Bank, Port of Boston, p. 31.

60. Bunting, Portrait of a Port, p. 17.

TABLE 18
FOREIGN TRADE OF BOSTON'S RAILROADS, 1907

Description	Boston & Maine	Boston & Albany	Other Lines
Export Tonnage	790,884	473,416	6,000
Percentage	62.3	37.2	0.5
Import Tonnage	519,239	153,505	52,088
Percentage	71.6	21.1	7.3
Percent of total railroad tonnage	3.0	8.1	0.4
Import freight f/points west of Buffalo (tons)	106,864	5,997	4,971
Percentage	90.7	5.1	4.2

SOURCE: Massachusetts Commission on Metropolitan Improvements,
Public Improvements for the Metropolitan District (Boston: Wright &
Potter Printing Co., State Printers, 1909).

TABLE 19

EXPORTS FROM LEADING ATLANTIC PORTS, 1904 AND 1913
(In millions of dollars)

	Boston	Philadelphia	Baltimore	New York
1904	88	67	84	505
1913	71	72	117	928
Percent change	-19	+7	+39	+84
Increase in wholesale commodity prices, 1904 to 1913 14 percent				

SOURCE: Edwin J. Clapp, The Port of Boston: A Solution of the Traffic and Operating Problems of Boston, and Its Place in the Competition of the North Atlantic Seaports (New Haven: Yale University Press, 1916), p. 115; Historical Statistics, pt. 1, series E 40.

While the foreign trade declined, the Hoosac docks aged and fell into disrepair. The wooden pier and tin-covered wood sheds were criticized as old and no longer adequate. In 1909, a state-created commission on metropolitan improvements reported that "even cursory examination shows that these docks are very limited," and "entirely confined" to the area between the Navy Yard and the Charles River Bridge. "It is inevitable," the commission reported, "that the Boston & Maine management will soon be confronted with the necessity of selecting a new site for modern docks, to accomodate vessels of heavy tonnage."⁶¹ In fact, the Boston & Maine did divert some traffic to its nearby Mystic River facilities.

As recently as 1930, the Hoosac docks received Scandanavian wood pulp, but by then they depended also on the less prestigious coastwise trade, receiving cotton from the South and other than water-transported goods.⁶² Hoosac Stores 1 and 2 housed imported canned goods and liquor, and, secondarily such miscellaneous items as bagged

61. Massachusetts, Commission on Metropolitan Improvements, Public Improvements, pp. 133, 159.

62. Interview with Richard Parkhurst, former director of the Boston Port Authority, February 18, 1982.

TABLE 20

PRINCIPLE AGRICULTURAL EXPORTS FOR BOSTON AS A
PERCENTAGE OF TOTAL EXPORTS, 1904 AND 1913

	1904	1913
Provisions	42	25
Cotton/cotton manufactures	15	17
Breadstuffs	14	13
Live animals	13	<1
Total	84	55

SOURCE: Clapp, Port of Boston, pp. 114-15.

coffee, tea, and rubber.⁶³ The Massachusetts Port Authority reconstructed the docks in the late 1940s to their present configuration, modernizing the grain elevator.⁶⁴ After a brief renaissance, however, the area lost all connection to its historic use. In the 1960s, the completion of the St. Lawrence Seaway, an all-water route to the American interior, diverted whatever long haul trade had remained. The docks fell into disuse, the grain elevator was taken down, and Hoosac Stores 1 and 2 acquired the epithet of the Chocolate Factory.⁶⁵ Today, only the former warehouses, the railroad right-of-way, and the geography of the site indicate the location of Boston's major foreign trade terminal eighty years ago.

63. Interview with Leo Pistorino, former customs broker, May 18, 1982.

64. Boston Sunday Post, May 21, 1950.

65. Massachusetts Port Authority, Annual Report, 1963, p. 11; 1966, pp. 3, 8-9; 1967, p. 6. (No reference is made to the Hoosac docks elevator after the 1969 report). United States Department of the Interior, National Park Service, National Register of Historic Places, Inventory-Nomination Form, "Hoosac Stores 1 & 2; Hoosac Stores 3," Files, Boston National Historical Park.

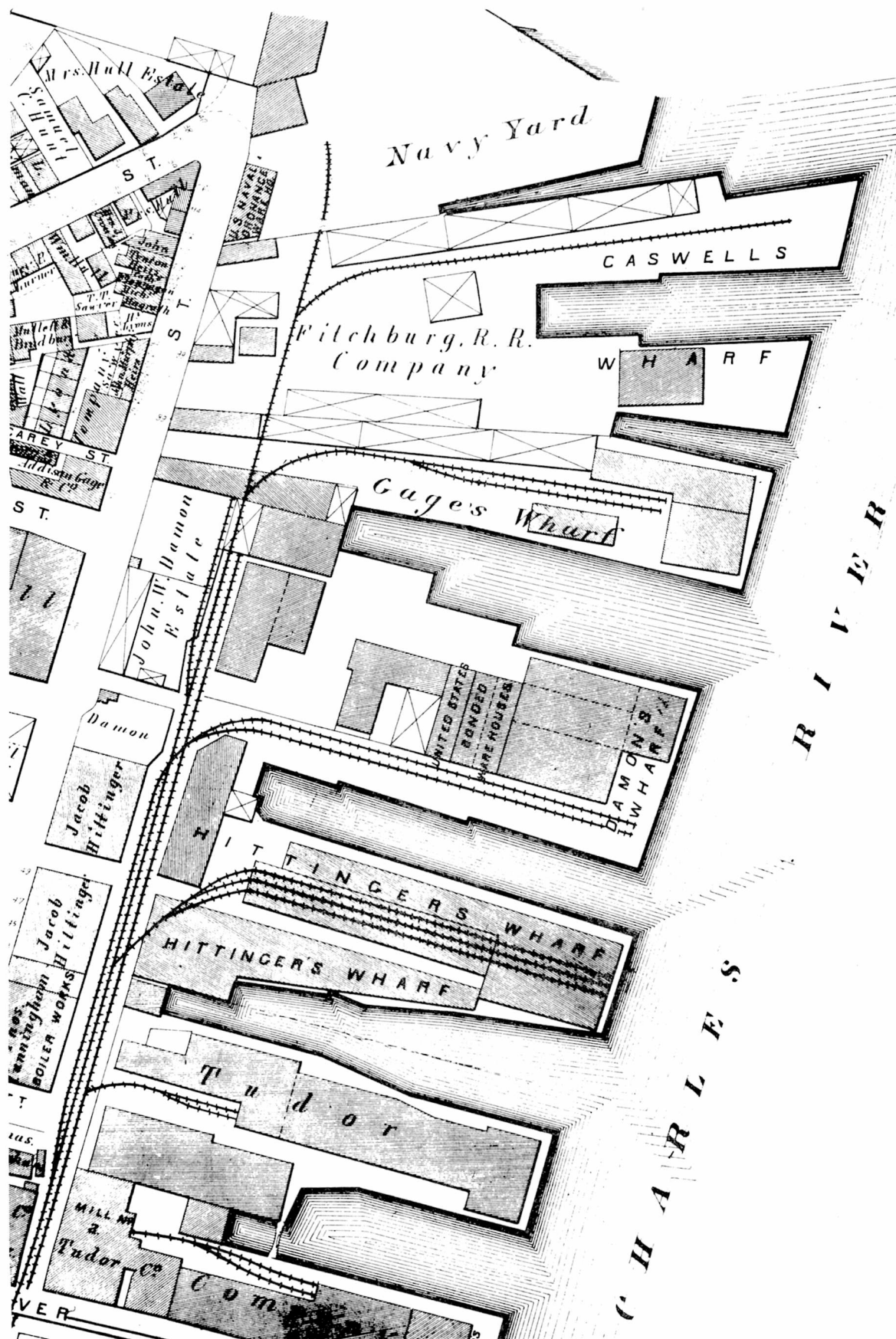
APPENDICES

APPENDIX A

MAPS OF THE HOOSAC DOCK AREA

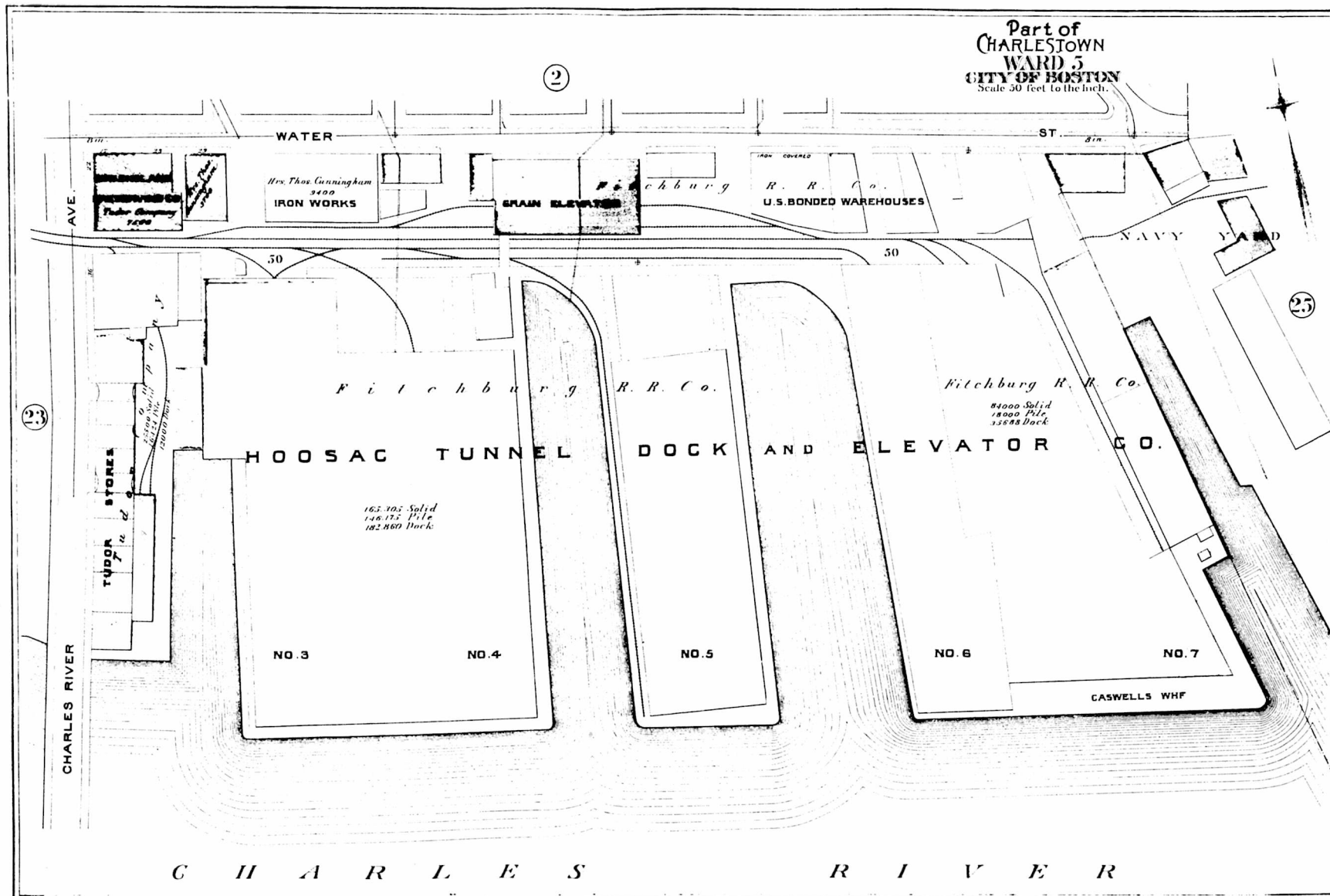
- Map 1. 1874. Before the establishment of the Hoosac Dock and Elevator Company.
- Map 2. 1885. After renovations made the Charlestown, Charles River docks into a major steamship terminal.
- Map 3. 1892. After the Fitchburg Railroad purchased the Hoosac Dock and Elevator Company.
- Map 4. 1922. Before the reconstruction of the piers in the mid twentieth century (and including all historical structures still standing).

Map 1. Before the establishment of the Hoosac Dock and Elevator Company (Hopkins Atlas, 1874).

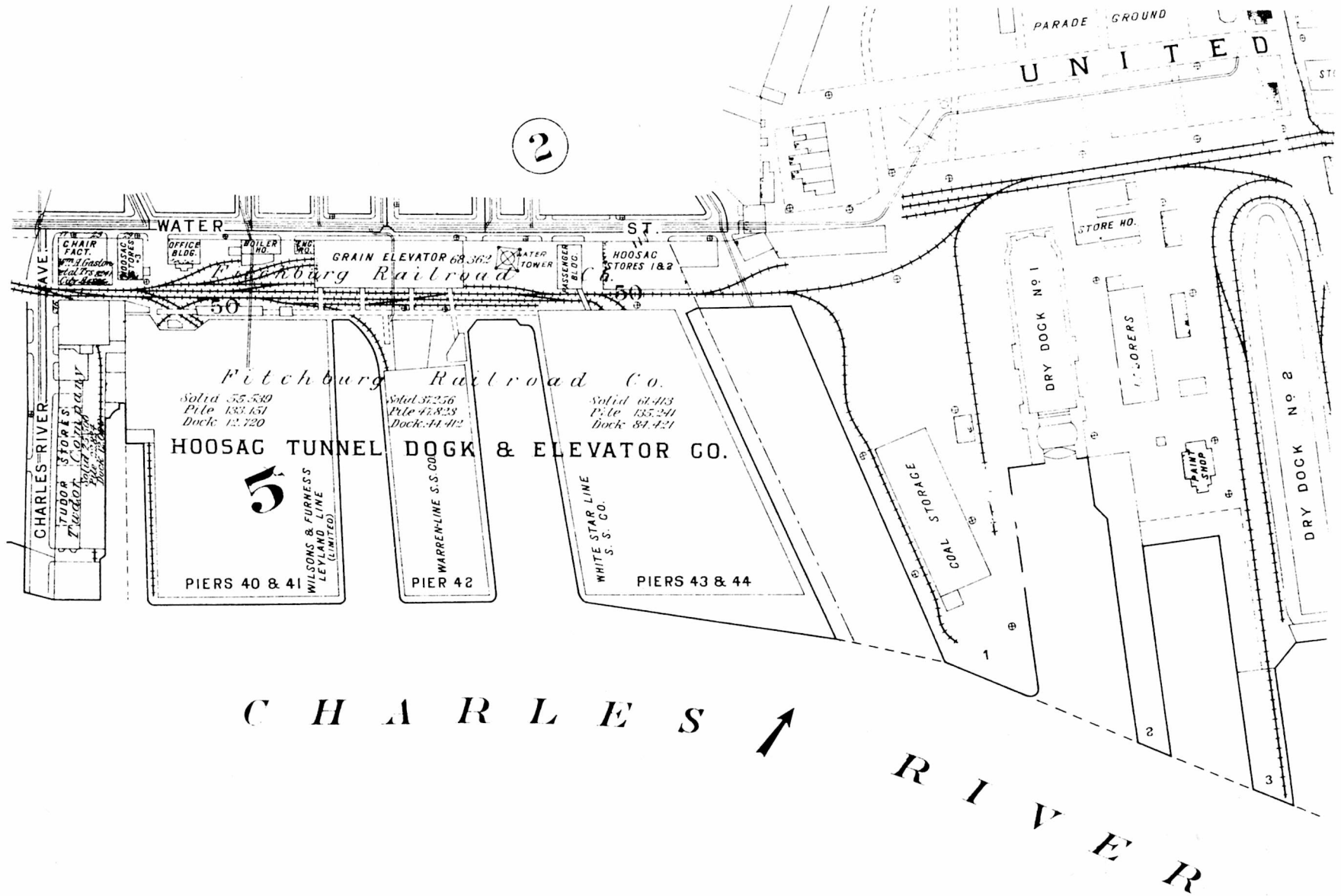


Map 2. After renovations made the Charlestown, Charles River docks into a major steamship terminal (Bromley Atlas, 1885).

Map 3. After the Fitchburg Railroad purchased the Hoosac Dock and Elevator Company (Bromley Atlas, 1892).

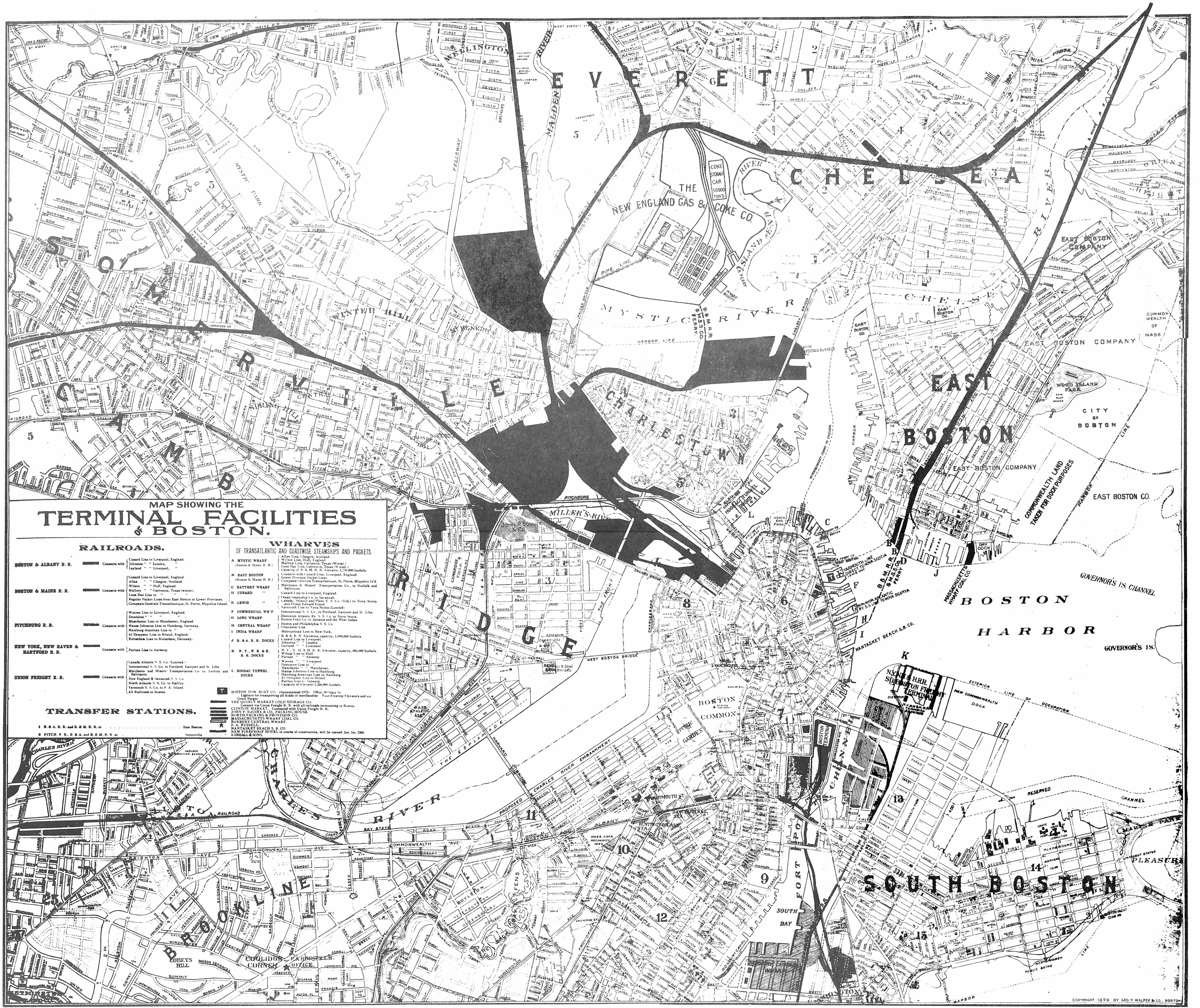


Map 4. Before the reconstruction of the piers in the mid twentieth century (including all historical structures still standing) (Bromley Atlas, 1922).



APPENDIX B

MAP OF THE TERMINAL FACILITIES OF BOSTON, 1900



MAP SHOWING THE TERMINAL FACILITIES & BOSTON.

RAILROADS.

- BOSTON & ALBANY R.R.** Connects with
Albany, N.Y. via New York, N.Y.
Connects with
Albany, N.Y. via New York, N.Y.
- BOSTON & MAINE R.R.** Connects with
Portland, Me. via Bangor, Me.
Connects with
Portland, Me. via Bangor, Me.
- WITCHBURG R.R.** Connects with
Witchburg, Mass. via Andover, Mass.
Connects with
Witchburg, Mass. via Andover, Mass.
- NEW YORK, NEW HAVEN & HARTFORD R.R.** Connects with
New York, N.Y. via New Haven, Conn.
Connects with
New York, N.Y. via New Haven, Conn.
- UNION FREIGHT R.R.** Connects with
New York, N.Y. via New Haven, Conn.
Connects with
New York, N.Y. via New Haven, Conn.

WHARVES OF TRANSATLANTIC AND COASTWISE STEAMSHIPS AND PACKETS.

- A. MYSTIC WHARF**
Connects with
Albany, N.Y. via New York, N.Y.
- B. EAST BOSTON**
Connects with
Albany, N.Y. via New York, N.Y.
- C. BATTERY WHARF**
Connects with
Albany, N.Y. via New York, N.Y.
- D. CUNARD**
Connects with
Albany, N.Y. via New York, N.Y.
- E. LEWIS**
Connects with
Albany, N.Y. via New York, N.Y.
- F. COMMERCIAL WHARF**
Connects with
Albany, N.Y. via New York, N.Y.
- G. LONG WHARF**
Connects with
Albany, N.Y. via New York, N.Y.
- H. CENTRAL WHARF**
Connects with
Albany, N.Y. via New York, N.Y.
- I. INDIA WHARF**
Connects with
Albany, N.Y. via New York, N.Y.
- J. B.A.R.R. DOCK**
Connects with
Albany, N.Y. via New York, N.Y.
- K. N.Y. & H.R. DOCK**
Connects with
Albany, N.Y. via New York, N.Y.
- L. ROOSEVELT DOCK**
Connects with
Albany, N.Y. via New York, N.Y.

TRANSFER STATIONS.

- 1. B.A.R.R. and B.A.R.R. H.** East Boston.
- 2. B.I.T.H. R.R. and B.A.R.R. H.** South Boston.

APPENDIX C

PROJECTED USE OF THE HOOSAC TUNNEL DOCKS BY THE FITCHBURG
RAILROAD, 1880 (Typed copy of handwritten original)

F. L. PARKER
Traffic Manager

Boston, July 14th, 1880

W. B. Stearns, Esq.
Prest. Boston, --

Dear Sir:

Estimated profits of Dock Co. --

During the calendar year 1879, the foreign business over this road was done altogether by the Hoosac Tunnel Line.

For a portion of the year they had the Allan Line Steamers for Glasgow, and the Leyland Line for Liverpool, running to and from Cons't. Wh'f.: but most of the time the Liverpool line, only, was their direct ocean connection, and delivered across the harbor by lighters, an expensive and inconvenient method of transportation.

The accomodations at Constitution Wh'f, were inadequate for the business done, the cost of handling enhanced, and the means of reaching the wharf causing much extra expense, through having to work nights and for other reasons.

Taking the business as done under such circumstances, and basing the revenue of the new Company upon its elevating grain, we may reasonably assure them of success from the start

4500 cars or 54,00 Tons freight @ 30c	\$16,200.00
7000 cars or 3,500,000 Bush. grain, 1 1/4	\$43,800.00
Total	<u>\$60,000.00</u>

From wharfage, storage, rents,	
profits on labor, for the year say,	\$40,000.00
	<u>\$100,000.00</u>

This income based on one line of steamers only, one inconvenient wharf, and without doing nearly all we might do, under more favorable circumstances.

The figures are bassed [sic] upon a business of less than 40 cars per day, for a year of 300 days, but taking the most conservative estimate of the future of the Erie systems, and reckoning only one half of that as coming, we may count upon 1000 cars of freight per day for export, or

may count upon 1000 cars of freight per day for export, or 250 per cent, of what last years [sic] business amounted to, and we should have revenue from about 30,000 cars of \$250,000.00, and, for operating expenses, allowing 50% is amply sufficient, leaving \$125,000.00 net earnings, or .08% on \$1,500,00.00 on invested capitol.

The figures do not include the heavy increase in business for the future dependent upon terminal facilities, nor do they include revenue from west bound traffic, at, 40c per ton: from storehouses conveniently located: or from the large local business, such a scheme as contemplated will certainly create.

The more I look into this matter, the more certain seems the prospect of a financial success, if the thing is properly carried out, and if started soon.

Yours truly,

F. L. Parker

APPENDIX D

WARREN LINE EXPORTS FROM BOSTON TO LIVERPOOL, 1895

Exports from Boston to Liverpool by the Warren Line of Steamships during the Year 1895.

Agricultural goods, packages,	5,195	Duck, rolls,	40
Apples, barrels,	67,989	packages,	17
cases,	260	Dyestuffs, barrels,	6
Asbestos, bags,	1,000	Effects, packages,	5
Bark, bundles,	10	Eggs, cases,	2,786
Beef, quarters,	209,993	Electro-plates, boxes,	27
Beeswax, cases,	149	Emery cloth, packages,	22
Belt dressing, packages,	83	Emery wheels, packages,	20
Belting, bundles,	2	Empty packages,	10,263
Bicycles and parts, packages,	114	Extract, barrels,	945
Blacking, packages,	2,544	Feathers, bales,	57
Blocks, crates,	711	Fish, drums,	325
pieces,	72,129	packages,	324
packages,	928	Flaxseed, sacks,	142
Bones, bags,	317	Flour, barrels,	926
Books, packages,	19	sacks,	255,602
Brass, packages,	44	Furs, bales,	82
barrels, old,	7	Glucose, barrels,	2,370
hogsheads, old,	13	Glue, barrels,	5
packages, old,	9	Grain, barley, bushels,	9,860
Brushes, cases,	12	corn, bushels,	2,060,720
Bungs, barrels,	598	wheat, bushels,	2,680,169
Butter, boxes,	212	Grape sugar, bags,	3,000
tubs,	82	Hair, bales,	4,963
packages,	175	Handles, packages,	4,631
Canned goods, cases,	28,472	Hardware, packages,	410
Capstans,	13	Hay, bales,	30,974
Caramel butter, tubs,	25	Heaters,	34
Carriages and parts, packages,	8	Hemp, bales,	4,600
Castings, packages,	478	Hides, dry, bales,	151
Castors, packages,	12	green salted, bales,	73
Chair stock, packages,	63	bundles,	1,923
Cheese, boxes,	86,521	Hominy, barrels,	3
Churns, packages,	17	Hoofs, bags,	368
Cigarettes, cases,	4	Hops, bales,	820
Clover seed, bags,	60	Horns, bags,	56
Cocoanuts, bags,	1,813	Horn tips, bags,	2,803
Conduit, coils,	31	Household goods, packages,	514
Confectionery, packages,	166	Indigo, chests,	45
Copper, bale,	1	Iron pipes, packages,	897
Corn meal, sacks,	20	Knives, cases,	30
barrels,	5	Lamp-black, barrels,	113
Cottolene, packages,	1,350	Lard, barrels,	250
Cotton, bales,	139,680	half barrels,	12,351
bags,	325	boxes,	12,933
Cotton-seed, sacks,	7,889	cases,	1,622
oil, barrels,	1,433	crates,	50
Cranberries, boxes,	201	firkins,	6,455
crates,	50	pails,	231,326
Crayons, cases,	279	tierces,	25,313
Crucibles, barrels,	97	Leather, finished, bags,	42
Cutch, boxes,	100	bales,	11,229
Cutting-blocks, packages,	76	bundles,	2,492
Desks, cases,	911	cases,	1,507
Domestics, bales,	1,128	rolls,	45,614
cases,	391	rough, bales,	1,171
packages,	523	bundles,	9
Drills, cases,	30	scrap, bags,	26,786
Duck, bales,	50	bales,	156
bolts,	498	barrels,	259

Exports from Boston, etc. — Concluded.

Leather, scrap, bundles,	40	Rope, coils,	4
cases,	325	Rosin, barrels,	5,950
casks,	3	Rubber goods, packages,	903
rolls,	7	Rum, barrels,	145
sole, bales,	4,328	hogsheads,	477
cases,	7	kegs,	25
rolls,	236	punchons,	120
remnant, rolls,	29	Sand, barrels,	12
Leather goods, packages,	43	Sand paper, packages,	510
Live stock, calves,	121	Scales, cases,	18
cattle,	47,628	Sewing machines,	3
sheep,	67,446	Shoes, cases,	1,529
Logs,	723	Shoe goods, packages,	83
Lumber,* bundles,	13,782	Shooks, packages,	36
pieces,	185,312	Sieve rims, crates,	20
Machinery, packages,	1,780	Skins, bales,	6
Match blocks, pieces,	2,144	casks,	13
Medicine, packages,	154	Soap, packages,	1,350
Metal, packages,	1,243	Sodium, barrels,	33
Miscellaneous, packages,	503	Sponges, packages,	5
Missionary goods, packages,	13	Starch, barrels,	500
Mutton, carcasses,	550	Staves, pieces,	427,399
Nails, cases,	216	Steel rollers,	4
Nickel matte, casks,	66	Stove polish, boxes,	79,235
Oatmeal, boxes,	8	Sugar, bags,	1,500
sacks,	12,630	Sugar meal, bags,	4,000
Oil, barrels,	2,359	Syrup, barrels,	202
tierces,	398	Tacks, packages,	959
lard, barrels,	50	Tallow, barrels,	3,448
palm, casks,	608	hogsheads,	135
Oil, red, barrels,	500	tierces,	1,146
Oilcake, sacks,	3,876	Tape, rolls,	56
Oleo-oil, tierces,	153	Tar, barrels,	374
Organs, cases,	441	Tobacco, cases,	14
Organ materials, packages,	17	hogsheads,	918
Paint, packages,	64	half hogsheads,	250
Paper, cases,	3	tierces,	90
rolls,	324	package,	1
Paper stock, packages,	10	Tripoli, barrels,	341
Photo-goods, cases,	8	sacks,	400
Pigs, carcasses,	5,118	Troches, cases,	190
Pitch, packages,	106	Washers, cases,	12
Poles,	3,240	Waste, bales,	4,005
Printed matter, cases,	1,423	Wax, bags,	25
Provisions, barrels,	4,340	barrels,	2,495
half barrels,	162	tubs,	56
boxes,	126,992	packages,	182
cases,	8,389	Whiskey, cases,	231
kegs,	45	Wire, packages,	75
tierces,	7,341	Woodenware, packages,	160
packages,	26	Wood pulp, bundles,	1,061
Prunes, boxes,	3,640	rolls,	664
Radiators, packages,	220	Woodwork, packages,	22
Rags, bales,	165	Wool, bales,	157
Rivets, kegs,	105	bags,	72
Rolled oats, barrels,	727	Zinc dross, barrels,	108
half barrels,	50	boxes,	2
boxes,	18,217	casks,	5

* Ash, gum, hickory, maple, oak, pine, poplar, walnut, whitewood.

APPENDIX E

CONTRACT BETWEEN THE FITCHBURG RAILROAD AND THE DOMINION
STEAMSHIP LINE FOR THE USE OF THE HOOSAC DOCKS, 1899

THIS AGREEMENT made and entered into on this twenty-second day of May, A.D. 1899, by and between David Richards and James Mills, both of Liverpool, England, copartners under the name and style of Richards, Mills and Company, of the first part, and the Fitchburg Railroad Company, a corporation established by the laws of the Commonwealth of Massachusetts, in the United States of America, of the second part, WITNESSETH:-

That whereas the party of the first part is in the management of the British North Atlantic Steam Navigation Company, trading under the name and title of the Dominion Steamship Line, and the party of the second part is the owner and manager of the Hoosac Tunnel Docks in Boston, in said Commonwealth, it is hereby agreed by and between the parties hereto as follows:-

FIRST. The party of the first part agrees to send steamers to the Hoosac Tunnel Docks to ply between said Docks and Liverpool, sufficient to run regularly not less often than once each week until such time as the proposed dock on the Navy Yard side of the Hoosac Tunnel Dock premises is completed, after which time the sailings shall be regularly not less than two each week. And while there is but one sailing per week, party of the first part will undertake to so arrange as to alternate with other steamers to Liverpool from the same docks or Pier 5.

SECOND. The party of the first part further agrees to be responsible to the party of the second part for all wharfage charges, as per agreed schedule, upon all import and export freight carried upon said steamers, except such as may be exempt from the same, and to pay all charges so collected to the party of the second part within ten days after the sailing of each steamer, less twenty-five percent (25%) which is to be allowed to the party of the first part as a commission for collecting said charges.

THIRD. The party of the first part agrees in soliciting and engaging cargo for the several boats so sailing from said Hoosac Tunnel Docks to give the preference as far as practicable to cargo to be furnished for shipment through the party of the second part, the intention being to give the party of the second part a preference in this respect.

FOURTH. The party of the second part agrees to furnish proper accommodation for said steamers at said Docks, to dredge sufficiently alongside and adjacent to the piers enumerated below, and to maintain sufficient depth up to thirty-two (32) feet below mean low water, to bring safely alongside and berth fully laden and always afloat such steamers of the Dominion Steamship Line as may be at said Dock; to provide necessary wharfage room and cars for cargo that may be received for shipment outward or received inward by said steamers, and to render the usual facilities for the proper conduct of such traffic. The wharves and piers allotted to the party of the first part for the accommodation of such traffic are known and recognized as numbers six (6) and seven (7) Hoosac Tunnel Docks, and whenever the proposed changes on the Navy Yard side of said Docks shall be completed the new wharf so constructed shall be known as number seven (7) and shall be included in this contract, and the party of the first part is to have the exclusive right to the use of said wharves and piers whenever required for the transaction of its business subject to the terms for wharfage as at present existing or may hereafter be changed and established as the wharfage charges of the Port.

FIFTH. The party of the second part hereby agrees that it will solicit and canvass for such traffic for the Dominion Steamship Line through its respective agents wherever the same may be

stationed at the principal cities of the United States and Canada, as is desirable and profitable to the parties hereto in the same manner as it now solicits and canvasses for other steamers docking at said Docks; and to furnish to the party of the first part as low inland rates as it furnishes to any other line of steamships plying from said Docks; and party of the first part hereby agrees to solicit and canvass for traffic for and over the Fitchburg Railroad at points where the party of the first part has established agencies. The intention and meaning of this agreement being that the joint service shall be thoroughly performed so as to promote and encourage such joint business to the mutual profit and interest of the parties hereto. The party of the second part also agrees to use its best endeavors to cause the freight agents of its various connections to solicit traffic and engage freight at equal ocean rates for the Dominion Steamship Line steamers.

SIXTH. The party of the first part agrees that during the continuance of this agreement all steamers, if any, managed or controlled by it from time to time and regularly employed in the trade between the ports of Boston and Liverpool, shall dock at the piers and berths above provided for, and not elsewhere within the port of Boston, provided, however, that ~~if~~ navigation to the said piers or berths or the use thereof shall ^{not} be or become dangerous by the erection of a bridge across Boston Harbor, or by any other reason whatsoever, ~~or if it shall be found that the vessels lying at the piers or berths shall not always be at the piers~~ In case said piers or their appliances shall at any time during the currency of this agreement be wholly or partially destroyed or rendered unfit for the purposes ~~hereof~~, the agreement shall be suspended and of no effect until they are again reinstated in proper working

order and condition, and it is understood and agreed that the Fitchburg Railroad Company shall complete all necessary repairs with all possible dispatch.

SEVENTH. This agreement is not to prevent the use by the party of the first part of other inland carriers for any freight between Boston and points not reached by the party of the second part, or its connections, nor for export freight from any points whatever in case of failure of the party of the second part to secure the amount required by the party of the first part.

EIGHTH. The boats covered by this agreement shall be regular in this service and no steamer unless another steamer of equal suitability is substituted shall be withdrawn from the Hoosac Tunnel Docks or from the port of Boston to ply from any other port. If it shall appear that the business is not sufficiently remunerative to render it profitable to run the boats the party of the first part is to have the privilege of withdrawing the boats entirely from the American service.

NINTH. If at any time it shall be necessary for the party of the second part to work overtime to complete the loading of a vessel at the request of the party of the first part, and the cause for such overtime is any fault of the party of the second part, or its connections, such overtime shall be rendered free of charge; otherwise it shall be paid for by the party of the first part. The question whether the overtime is the fault of the Railroad Company shall be fairly adjusted between the agents of the parties to this agreement.

TENTH. This agreement shall go into operation on the first day of October, 1900, and shall remain in force during the term of five (5) years from and after the said last named date

unless sooner terminated by twelve months' notice in writing by one party to the other.

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed on the day and year first above written.

Executed and delivered

in presence of

Geo. H. Long

Dominion Steamship Line by

Richard Mills

Fitchburg Railroad Company by

Edmund D. Goodman
President

APPENDIX F

DOCUMENTS PERTAINING TO THE ACQUISITION OF HOOSAC STORES 3
FOR WOOL STORAGE, 1897

FITCHBURG RAILROAD COMPANY,

HOOSAC TUNNEL ROUTE.
MAINTENANCE OF WAY DEPARTMENT.
CHIEF ENGINEER'S OFFICE.

A. S. CHEEVER,
Chief Engineer.

FITCHBURG, MASS. Feb. 17th. 1897.

Mr. A. S. Crane,

General Freight Agent.

Dear Sir:-

Referring to your inquiry of Feb. 11th. as to the strength of the Cunningham buildings, I find that the wooden building is not safe to use as a storehouse. The brick building as it is now, needs the addition of posts to divide the span of the present floor girders, and if that is done and some of the burned timber replaced by new, the building will carry a load of 190 lbs. per square foot of floor, which would allow the wool you spoke of, which I understand weighs about 20 lbs. per cubic foot, to be piled 9 1/2 feet high.

There is a clear space of 11 feet between floors. The area of each floor deducting posts, elevator, chimney and stairway is 3050 sq. ft. It would probably take about three weeks to do the work necessary.

I send you herewith a blue print which shows plan and cross-section of the building with additional posts shown in red.

Yours truly,

A. S. Cheever
Chief Engineer.

FITCHBURG RAILROAD COMPANY.

OFFICE OF GENERAL FREIGHT AGENT.

A. S. CRANE,
General Freight Agent.

Boston, Mass., Feb. 19, 1897.

USE OF CUNNINGHAM PROPERTY, CHARLESTOWN, FOR STORAGE OF WOOL.

Mr. H. S. Marcy,

President, Boston, Mass.

Dear Sir:-

Herewith blue print which shows plan and cross sections of the Cunningham buildings.

Mr. Cheever explains how this can be arranged as storage to take care of wool expected by the Furness Steamers, but he does not state the cost, neither can I get positive assurance from the receivers, or from the Steamship Company, that they would occupy the space, though they say they think they shall need it.

If there is no special object in view for the occupancy of this property and the expense of putting it in shape to take care of property that will not load to exceed 190 pounds per square foot of floor, is not excessive, I have no doubt we shall be able to secure paying freight or storage.

I will have closer canvass of the question made at once, as I see the Furness people have recently explained the necessity of accommodations at the dock for the next three ships, ascertain what the prospects are and advise you.

Yours truly,



G. F. A.

T. M.

Boston, March 12 1897

Edmund S. Goodman Esq
Dear Sir

I have examined the building
25 Water St Charlestown with Mr Hubbard, Engineer
of the Fitchburg R. R. and have pointed out to
him my suggestions for improving the building as
follows.

- * 482- 1st Enclose stairway in partition of expanded metal
on iron stud plastered $1\frac{1}{4}$ " thick with fire
doors on openings.
Will be done
any way. 2nd Remove elevator well and floor over the openings
in the floors through which it went.
do 3rd Shutters to be placed on all windows. On sides
not on Water St to be standard ten clad shutters.
do 4th Brick up opening if any exists in west side
to same thickness as balance of wall.
do 5th Whitewash all woodwork

With these improvements rate on wool will
be the same as in Hoosac Stores 1 & 2 viz 45¢
less 10% for automatic alarm if this is put in.

Very truly

W. H. Bates
Asst Secy

note
3.15.97.

Fred Hartley
 J. Koshland & Co.
 Weston, Whitman & Co.
 Luce & Manning
 J. S. Wright & Co.
 Jenno Bros. & Childs
 F. A. Wyman
 Geo. F. Willett & Co.,

All Boston
 Wool Merchants
 Hold
 For Mr. Charles *W.B.*

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A NOTE ON SOURCES

Data on port activity, except for grain exports, was assembled and published for the whole port and not keyed to specific docks. Contemporary sources clearly indicate the importance of the Hoosac docks, but they do not provide any specific figures to support this statement directly.

The most useful sources are the annual reports of the Boston Chamber of Commerce, with its export and import statistics, and the manuscript records of the Boston & Maine Railroad, parent company of the Fitchburg Railroad. The Boston & Maine records were made accessible to the researcher through the good offices of Dennis Coffey, Assistant to the Vice President for the railroad. The records used for this study fall into two major groups: Hoosac Tunnel Dock and Elevator Company files and the largely uncatalogued Fitchburg Railroad contracts and documents.

The agencies and libraries that were considered possible sources of information but which did not have any relevant holdings include: The Boston Shipping Association; the Corporation Division of the Commonwealth of Massachusetts's Secretary of State's Office; the Massachusetts Historical Society; and the University of Lowell (which houses the Boston & Maine Historical Society Collection). A notice published in the Boston & Maine Historical Society Newsletter requesting information on Hoosac Stores 1 and 2 did not yield any replies. The National Archives inventory for Record Group 36 is incorrect for entry 503 (Record of Manifests, 1874-99) in that the Archives does not have the cargo manifests listed (letter, Steven D. Tilley, Acting Assistant Chief for Reference, Judicial and Fiscal Branch, November 18, 1981, Historian's Files, Boston National Historical Park). The only extant manifests for the Port of Boston are for the 1911 to 1918 period.

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Copies of all documents used for this report are kept on file at Boston National Historical Park in the Historian's office; or, in the case of plans, where noted, in the office of the Park's Professional Services branch.

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ACKNOWLEDGEMENTS

Figure 1. Reprinted, by permission, from Massachusetts Port Authority, Hoosac Pier: Final Environmental Impact Report (Boston, 1982), figure 2.

Figure 2. Photograph courtesy Peabody Museum, Salem, Massachusetts.

Figures 3, 7, and 8. Photographs courtesy of The Society for the Preservation of New England Antiquities.

Figure 4. Courtesy Boston and Maine Corporation.

Figure 5. Data from Boston Chamber of Commerce, Annual Reports, 1887-1899.

Figure 6. Adapted from William H. Coolidge, Argument . . . before the Railroad Committee of the Massachusetts Legislature in Favor of an Act to Authorize a Lease of the Fitchburg Railroad Company to the Boston and Maine Railroad. May 18, 1900 (Boston, 1900).

Figure 9. Drawn from U.S. Corps of Engineers and U.S. Shipping Board, Port of Boston, facing p. 152.

Figure 10. Reprinted from Boston Chamber of Commerce, Annual Report, 1906, p. 51.

Figure 11. Reprinted from Boston Chamber of Commerce, Annual Report, 1899, p. 151.

Figure 12. Reprinted from Boston Board of Trade, Annual Report, 1883, p. 119.

Figure 13. Photograph courtesy Library of Congress.

Figure 14. Photograph courtesy of the Boston Public Library, Print Department.

Appendixes C, E, and F are printed courtesy of the Boston and Maine Corporation.

Appendix B is reprinted courtesy of the State Library, Massachusetts. Massachusetts, State Board on Docks and Terminal Facilities, Report, January 1897, is the source for appendix D.

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