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Volume Author/Editor: Lance E. Davis, Robert E. Gallman, and Karin Gleiter

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Chapter Author: Lance E. Davis, Robert E. Gallman, Karin Gleiter

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3 Data Sets and Sources



The quantitative analyses underlying this study employ several automated data sets, assembled from and verified against a variety of sources. Central is the *Voyages Data Set*, which began as a transcription of a manuscript prepared by Joseph Dias, perhaps a retired New Bedford whaling captain. Dias assembled information on 4,127 New Bedford whaling voyages that took place in the years 1783–1906. His list is organized first in vessel order (more or less alphabetically) and second in voyage order (chronologically).

For each vessel Dias gives name, tonnage, and rigging type (ship, bark, brig, schooner, sloop, steam bark). He often notes when and where the vessel was built, the circumstances in which it joined the New Bedford fleet, and the circumstances in which it ended its New Bedford whaling career. Sometimes he notes that a vessel was renamed, or rebuilt in a way that altered its tonnage, or rerigged.

For each voyage Dias attempts to give (1) the name of the agent who organized the voyage; (2) the name of the captain; (3) the date on which the vessel sailed from New Bedford; (4) the date on which it returned to New Bedford,

1. Dias, "Catalogue of New Bedford Whaling Ships." For a discussion of the manuscript, see "The New Bedford Whaling Fleet" 1931, 9-14.

A Joseph Diaz Jr., then twenty-eight years old, was captain of the whaler *Pocahontas* of Holmes Hole in 1850, when the vessel was rammed and seriously damaged by a sperm whale in the South Atlantic. Diaz managed to get his vessel to Rio de Janeiro—where it was repaired—but only after a hair-raising, two-week voyage. He also made a New Bedford voyage as captain of the *St. George* from 1853 to 1857. We have been unable to settle the question whether this Joseph Diaz was the Joseph Dias of the Baker Library manuscript. See Whipple 1960, 174–85, for an account of the 1850 voyage of the *Pocahontas*.

In 1875 a Joseph Dias had trouble of another kind: "In the United States Commissioners' Court in Boston, on the 11th inst., Joseph Dias, master of bark Addison, was held on a charge of depriving one of the crew of suitable food and nourishment, and was ordered to find sureties in \$500 for his appearance before the District Court on the third Tuesday of March inst." (WSL 16 March 1875). The Addison was wrecked at Fayal, an island in the Azores, on 23 February 1876, and this Joseph Dias was still master. See note 32.

or ended its voyage at another port, or was set on fire by its crew, or whatever; (5) amounts of its catch (sperm oil, whale oil, whalebone)—both the catch carried back to New Bedford, and occasionally a note about catch sold in a foreign port or sent back to New Bedford during the voyage; (6) the hunting ground(s) for which the vessel sailed; and (7) notes on various unusual events such as deaths of officers (and, in exceptional circumstances, crewmen), attacks by South Sea islanders or Inuit, mutinies, and so forth.

To automate this information, we assigned each vessel a unique identification number (SHIPID) and numbered its voyages consecutively (NOVOY-AGE). The sailing and return dates were rendered as month and year (SAILMO, SAILYR, ARRIVEMO, ARRIVEYR); when Dias left a date missing, we used missing values. When a vessel ended her last voyage irregularly most often by sinking, occasionally by being condemned and sold in a foreign port—the return-date variables were left missing and the date of the loss to the fleet recorded instead (LOSTMO, LOSTYR). Dias's hunting-ground designations (At., H. Bay, Pacific, S. At., Brazil, N. W. Coast, C. De Verds, Cst. Africa, etc.) were coded in the variable FISHLOC; we also grouped hunting grounds in six categories in the variable GROUND (see appendix 3A). Three variables (SPOIL, WHOIL, BONES) contain catch amounts. Dias often left a catch amount blank; we chose zeros rather than missing values. When Dias indicated both amounts of catch brought home and amounts of catch sent home, we added the amounts together. The variables TONNAGE and RIGGING are perhaps self-explanatory. Captains' and agents' names, and places and dates of construction were recorded in separate data sets (see below).

As an example of the process, figure 3.1 reproduces the beginning of the Dias manuscript—the entries for the *Abigail*—in the photocopy from which we worked. Table 3.1 shows the corresponding records in the initial version of the Voyages Data Set. Since twenty-five hundred barrels of sperm oil is the *Abigail*'s largest catch among her first few voyages, the notation "Full" for voyages 1 and 2 was entered in the data set as SPOIL = 2500.

Having turned the Dias list into a data set, we checked it against three other chronicles: (1) Alexander Starbuck's *History of the American Whale Fishery* (1878), which contains a list of American voyages in the years 1784–1876 and was most likely, for that period, to have been Dias's major source; (2) Reginald B. Hegarty's *Addendum to "Starbuck"* (1964), which adds data to some of Starbuck's incomplete records for the New Bedford Customs District; and (3) Hegarty's *Returns of Whaling Vessels Sailing from American Ports* (1959), which extends Starbuck's list for all U.S. ports through 1928. (We also consulted A. Howard Clark's list of whaling voyages 1870–80 (2:175–92), printed in the 1887 report of the U.S. Commission of Fish and Fisheries. With the exception of some comments—for example, Clark says the *Astoria* was "condemned at Cape Good Hope March, 1880," whereas Hegarty says merely that she was "Condemned Mar. 1, '80"—it adds nothing to the Starbuck-Hegarty data.)

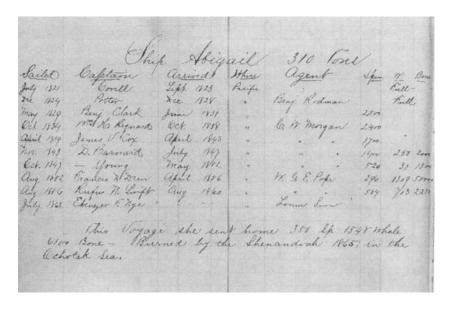


Fig. 3.1 The beginning of the Dias manuscript

Source: These are the voyages of the Abigail as they appear in Joseph Dias, "Catalogue of New Bedford Whaling Ships, 1783-1906." Reproduced courtesy of the Baker Library, Harvard University.

Starbuck's entries contain the same information as Dias's, but his list is organized differently: by sailing year, then by port of registry, then by vessel name. The history of one vessel is thus spread out over many pages. It is particularly difficult to disentangle the activities of two or more vessels with the same name operating during the same years,² or to recognize as linked the voyages of a vessel whose New Bedford registrations are interrupted by registrations at

2. The most popular name for a New Bedford whaling vessel was Franklin. Between 1799 and 1891 there were five Franklins, and three were active simultaneously (1853–57). Four vessel names were used four times at New Bedford (America, Elizabeth, Minerva, President), eighteen were used three times, and sixty-one were used twice. We weren't the first to notice how confusing this sort of thing could be: "The readers of the Shipping List will have noticed that there are three vessels, all from New Bedford, all of the same [rigging] class, all engaged in the Atlantic whale fishery, and all with the same romantic name—OSCEOLA. It is always a matter of regret when two or more vessels bearing the same name are employed in the whaling business, as it frequently leads to mistakes in the reports, and especially is this the case when they belong to the same port and cruise in the same ocean. . . . Exercise your ingenuity when you name a new ship" (WSL 24 August 1852).

The data set distinguishes two or more vessels with the same name somewhat arbitrarily. The five Franklins, for example, are Franklin (1st), a New Bedford whaler from 1830 to 1859; Franklin (2nd), 1853–61; Franklin (3rd), 1839–61; Franklin (4th), 1876–91; and Franklin (5th), 1799–1800; the Franklin (1st) does not precede the Franklin (5th). The distinctions in the data set do not always match the distinctions employed by contemporary chroniclers, who aren't consistent with each other anyway.

1	2	12	1824	12	1828	_	_	3	3	2500	0	0
1	3	5	1829	6	1831	_		3	3	2500	0	0
1	4	10	1834	10	1838	_	_	3	3	2400	0	0
1	5	4	1839	4	1843	_	_	3	3	1700	0	0
1	6	11	1843	7	1847	_		3	3	1400	250	2000
1	7	10	1847	5	1852			3	3	520	31	1300
1	8	8	1852	4	1856	_	_	3	3	296	1309	5000
1	9	8	1856	8	1860	_		3	3	504	703	2230
1	10	7	1862	_		_	1865	3	3	355	1548	6100

SPOIL WHOIL BONES

NOVOYAGE SAILMO SAILYR ARRIVEMO ARRIVEYR LOSTMO LOSTYR FISHLOC GROUND

Note: The data set contains also the variables TONNAGE and RIGGING, which are not shown here.

Voyages Data Set Records for the Abigail from the Dias Manuscript

Table 3.1

other ports. (Dias's decisions in these cases are reflected in his groupings of voyages. Starbuck addresses the problem in an index in which, by port, he brings together page references to the entire string of a vessel's voyages from that port, as he sees it.)

Starbuck ends with voyages that sailed in 1876. None of his forty-three New Bedford voyages for that year had returned by the time his manuscript went to the printer, nor had forty-one New Bedford voyages from 1875, eighteen from 1874, three from 1873, three from 1872, and one from 1871. Hegarty's *Returns of Whaling Vessels* completes the record for these 109 voyages, as well as listing those that sailed after 1876. His data are organized like Starbuck's, and his records contain the same kinds of information. He systematically differs from Starbuck in only one respect: whereas Starbuck treats a lengthy voyage to the Western Arctic like any other (leaving New Bedford in 1871, for example, and returning there in 1876), Hegarty acknowledges an evolving resupply and transshipment pattern by listing such a voyage as a series of voyages—the first sailing from New Bedford to the Western Arctic and returning to San Francisco, the next several sailing from and returning to San Francisco, and the last sailing from San Francisco and returning to New Bedford.³

All lengthy whaling voyages involved stops for resupply; after the early 1840s, many vessels also made regular stops to ship home a portion of their catch.⁴ The fact that voyages to the Western Arctic came to use San Francisco

^{3.} Not all vessels that went off to San Francisco eventually returned to New Bedford, of course—and not just because they were struck by icebergs. The Voyages Data Set contains the San Francisco voyages of New Bedford vessels that were destined never to return only during the initial period when they were still managed by New Bedford agents. When a vessel passed over to a San Francisco agency, it passed out of the data set.

^{4.} One report among hundreds in the WSL (8 June 1852): "Ship Copia, at this port [New Bedford] 2d inst., from Honolulu, has on freight 8,352 lb whalebone from ship Illinois, to Wood & Nye, of New Bedford; 5,893 lb do. from the Coral, to Gideon Allen, do; 15,650 lb do. from the Franklin, to William P. Howland, do; 8.126 lb do. from the Hoogley, to John R. Wheaton, Warren; 6,408 lb do. and 1,110 gallons of Sperm oil from the Levi Starbuck, to Edward W. Howland, New Bedford." Seven additional shipments are described in this report. The recipients are whaling agents.

regularly for these purposes, as Atlantic voyages used Fayal and Pacific voyages used Honolulu, need not distinguish them, so long as the entire absence from New Bedford was seen by captains, agents, and owners as one entity. Starbuck behaved as though it was, Hegarty took the other position, and there is thus a fundamental inconsistency in their records for the Western Arctic. From our point of view Starbuck's procedure is the correct one, but we have not devised a suitable technique for converting Hegarty's records to Starbuck's form.⁵

Although they are included in the Voyages Data Set, the Hegarty voyages to the Western Arctic out of San Francisco by New Bedford whalers are lost to us for most purposes, since we have no data on the size or composition of their crews. (See the descriptions below of the Crew Counts and Stations and Lays data sets.) The number of voyages so lost is probably about 220, if we define voyages as Hegarty does; by Starbuck's definition (and ours) the number is about 50. Compared with the size of the entire data set (4,731 voyages), that isn't many; compared with the number of Western Arctic voyages in the data set (322), it is not inconsequential.

As a result of checking the Dias data set against Starbuck and the two Hegarty volumes, hundreds of corrections were made to the Voyages Data Set, and 438 voyages of which Dias has no record were added (many, of course, postdating his work). For the Abigail only Starbuck is of interest. Hegarty's Addendum contains no entries for the ship in this context, and his Returns of Whaling Vessels begins a decade after she was lost to a Confederate raider. Among his entries for the Abigail, Starbuck disagrees with or supplements Dias as follows: (1) Starbuck starts voyage 2 in December 1825. (2) He has a voyage to the Pacific beginning in November 1831 and ending in June 1835, with a catch of 2,250 barrels of sperm oil. (3) He begins voyage 4 (Dias's number) in October 1835. (4) He has a comment that voyage 5 returned in July 1839 "leaky, having landed 60 sperm at Western Islands," and sailed again in July. The catch brought home from the July 1839 voyage he gives as 1,640 barrels of sperm oil. (5) He says voyage 7 returned 381 barrels of sperm oil, having sent home 140, and returned 39 barrels of whale oil. (6) He says voyage 8 went to the North Pacific. (7) It's possible to read in Starbuck that the catch of bone from

In all, 391 voyages in our data set started and/or ended at a port other than New Bedford (see table 3.2).

^{5.} Hegarty's procedure necessitated our creating a variable in which to record where a voyage began and where it ended. We then took advantage of the variable to distinguish a few voyages, not involving San Francisco, that did not both sail from and return to New Bedford but did not end irregularly. An example is the October 1845 voyage of the *Inez*. Starbuck omits arrival date and comments, "[S]hipped oil to London and went into California trade." Dennis Wood (1831–73) traces the *Inez* around Cape Horn to Maui, Lahaina, Honolulu, Kamchatka, the Sea of Okhotsk, Oahu, Manila, the Sea of Japan, and Honolulu again, where "a letter from Capt. Jackson reports her... Nov. 16.1848... bound to Sydney to sell her Cargo, and refit for San Francisco." Wood continues: "At Sydney Jany 7.1849... At ditto Jany 27 loading for California... At San Francisco Augt 9 from San Pedro & was bound to Oregon for a cargo of Lumber." We ended the voyage in January 1849, and recorded the fact that it ended at Sydney rather than at New Bedford.

	Wilding Fieet, 1007-1715		
Beginning	Ending	Number	Range of Sailing Years
Bremen	Bremen	2	1839–41
New Bedford	Bremen	2	1837–38
New Bedford	Cuba	1	1860
New Bedford	England	1	1807
New Bedford	Honolulu	1	1857
New Bedford	Mauritius	1	1851
New Bedford	New York	1	1848
New Bedford	Newport	2	1817-19
New Bedford	Panama	1	1876
New Bedford	San Francisco	58	1847–92
New Bedford	Sydney	2	1845-47
New Bedford	Talcahuano (Chile)	1	1847
New Bedford	Valparaiso (Chile)	1	1849
Panama	Panama	3	1878-81
San Francisco	New Bedford	9	1865-1906
San Francisco	San Francisco	304	1860-1911
San Francisco	Seattle	1	1913

Table 3.2 Voyages That Were Not Round Trip to New Bedford, New Bedford Whaling Fleet, 1807–1913

Source: Voyages Data Set (see text).

voyage 8 was twenty-one thousand pounds returned and twenty-nine thousand pounds sent home. (8) Starbuck says voyage 9 went to the North Pacific. (9) He says voyage 10 went to the North Pacific.

We accepted all of these changes. In order to fit in the 1831–35 voyage given in Starbuck, his sailing date differences for voyages 2 and 4 must be accepted. His comment that voyage 5 returned in July and then sailed again requires splitting voyage 5 into two voyages. The difference between 520 (Dias) and 521 (Starbuck) barrels of sperm oil for voyage 7 seems to be a matter of precision. The difference between 31 barrels of whale oil for voyage 7 (Dias) and 39 barrels (Starbuck) seems to be a result of a poor photocopy of the Dias manuscript. The more precise whaling-ground notations in Starbuck are valuable. In changing the data set, Starbuck's amounts of catch "sent home" and catch returned were added together; this seems to be what Dias did (see voyage 8). Table 3.3 shows the *Abigail*'s voyage records after making these changes.

We next turned to the Abstracts of Whaling Voyages compiled by Dennis Wood, a New Bedford whaling agent and merchant, which trace voyages from the Atlantic coast ports over the years 1831–73. (A lengthy excerpt is given in appendix 3B.) For us the greatest value of Wood's reports was the detail they provide on catch amounts. First, they record catch sent home in advance of a vessel's return. These returns are a matter to which Dias, Starbuck, and Hegarty all allude, but, in the light of Wood's reporting, one can see that their treatment is sketchy. Second, Wood generally gives precise figures for catch returned

-	-	•		-	1020				_		_	•
1	2	12	1825	12	1828	_	_	3	3	2500	0	0
1	3	5	1829	6	1831	_		3	3	2500	0	0
1	4	11	1831	6	1835	_	_	3	3	2250	0	0
1	5	10	1835	10	1838	_		3	3	2400	0	0
1	6	4	1839	7	1839		_	3	3	60	0	0
1	7	7	1839	4	1843		_	3	3	1640	0	0
1	8	11	1843	7	1847	_	_	3	3	1400	250	2000
1	9	10	1847	5	1852		_	3	3	<i>521</i>	39	1300
1	10	8	1852	4	1856	_	_	4	3	296	1309	50000
1	11	8	1856	8	1860	_		4	3	504	703	2230
1	12	7	1862		_	_	1865	4	3	355	1548	6100

SPOIL

2500

3

3

WHOIL BONES

0

0

Voyages Data Set Records for the Abigail after Corrections Based on Starbuck 1878

9

NOVOYAGE SAILMO SAILYR ARRIVEMO ARRIVEYR LOSTMO LOSTYR FISHLOC GROUND

1823

Note: Italicized data are added to or changed from the data in table 3.1.

7

1821

Table 3.3

SHIPID

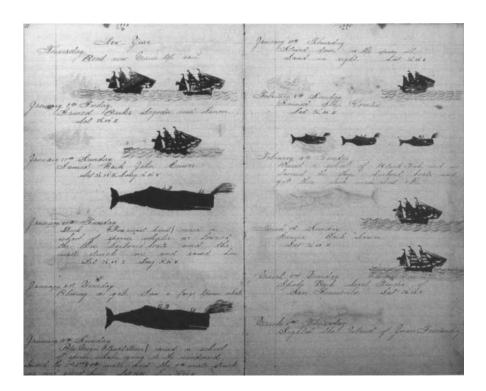
with the vessel. Many catch amounts in other sources are round figures; they seem to be captains' initial estimates. Wood reports these figures, but he also follows up with the amount actually unloaded from the vessel—that is, the amount turned out. An entry that illustrates both of these virtues is that for the 1856 voyage of the *Milton*; it concludes: "Arrived Mch 22 1860 with 20 Bbls Sperm 1800 Bbls Whale Oil & 12000 Lbs Bone on board [captain's estimates]. Sent home 91 Bbls Sperm 847 Bbls Whale Oil & 22000 Lbs Bone in 42 Months & 12 Days. Turned out 22 Bbls Sperm 2043 Bbls Whale Oil & 14200 # Bone [measured amounts]" (3:207).

In addition to innumerable corrections of catch amounts, the Dennis Wood Abstracts contributed 129 otherwise unknown voyages to the data set. To the record for the Abigail, they added the following information: (1) Voyage 4 returned 2,254 barrels of sperm oil. (2) Voyage 5 returned 2,577 barrels of sperm oil and 9 barrels of blackfish oil. (Blackfish oil, walrus oil, elephant [seal] oil, etc., are included in WHOIL in the data set.) (3) Voyage 8 returned 1,564 barrels of sperm oil, 310 barrels of whale oil, and 2,600 pounds of bone. (4) Voyage 9 returned 381 barrels of sperm oil, and sent home 200 barrels. (5) Voyage 10 went to the Indian Ocean. (6) In addition to returning 296 barrels of sperm oil and 1,309 barrels of whale oil, voyage 10 sent home 29 barrels of sperm and 3,900 barrels of whale. (7) The 29,000 pounds of bone that Starbuck says voyage 10 sent home are recorded in Wood as 60,500 pounds. (8) The Abigail was destroyed in June (LOSTMO for voyage 12). All of these changes, except the destination of voyage 10 (Wood also reports that the Abigail was spoke in the Sea of Okhotsk, but that ground is in the North Pacific), were adopted. Table 3.4 shows the result.

The collection of the Old Dartmouth Historical Society contains an anonymous manuscript consisting of twenty-nine lists, in one hand, that relate to whaling voyages in the 1820s: "A List of Vessels Sailed for the Brazil Banks in 1826" (thirteen entries), "Account of Ships & Briggs Sailed for the Pacific Ocean in 1828" (twenty-eight entries), "Account of Ships Arrived from the Brazil Banks in 1828" (twenty-one entries), and so on (Ship Arrivals and Departures). Lists relating to departures give vessels' and captains' names, ton-

6. "Ed Robinson, shrewd, domineering, loud-voiced, awaited the approach of the *Triton* with a mind prepared to estimate a profit so soon as Captain Spencer should out the number of barrels of oil and the amount of bone she carried" (Sparkes and Moore 1935, 27).

The distinction between estimated catch and measured catch seems to have tripped up even some contemporaries. "The Mercury [newspaper] in alluding to the last voyage of the late Capt. Daniel Wood, says: 'His last voyage was master of the Braganza, when after an absence of 39 months, she brought home and landed in December, 4,000 barrels of sperm oil. This has never been beaten, except perhaps by the William Hamilton, which turned out one or two hundred barrels more.' All very well, Mr. Mercury, Capt. Wood was no doubt a very successful shipmaster, but . . . it appears that on his arrival he hailed 4,300 barrels sperm oil; but . . . when the voyage was made up there was but 3,869 barrels; while the William Hamilton, commanded by the late Capt. William Swain, a Nantucketer, which arrived in October, 1838, (not July,) it was found that the quantity landed and sent home on that voyage was 4,181 barrels of sperm oil, or 312 barrels more than the amount turned out by Capt. Wood in the Braganza" (WSL 21 January 1873).



Two pages from the log of the John P. West of New Bedford in 1885. "New Year Thursday. Bent new Main top sail. January 9th Friday. Gamed Barks Lagoda and Lancer. January 11th Sunday. Gamed Bark John Carver. January 20th Tuesday. Dick ———— {Fore mast hand} raised a school of sperm whales. we lowered the three Larboard boats and the mate struck one and saved him. January 21st Wensday. Blowing a gale. Saw a large Sperm whale. January 25th Sunday. Peter Meyer {Boatsteerer} raised a school of sperm whales going to the windward. Lowered the 1st 2nd & 4th mates and the 4th mate struck one and saved him. January 29th Thursday. Stowed down 105 bbls sperm oil. Land in sight. February 8th Sunday. Gamed Ship Horatio. February 24th Tuesday. Raised a school of Black Fish and we lowered the three Larboard boats and got three which made about 3 bbls. March 1st Sunday. Gamed Bark Lancer. March 2nd Monday. Spoke Bark Legal Tender of San Francisco. March 4th Thursday. Sighted the Island of Juan Fernandez." The images of whales and vessels were made with stamps.

Reproduced courtesy of the Old Dartmouth Historical Society-New Bedford Whaling Museum.

nages, riggings, and sailing dates; those relating to arrivals give ships' and captains' names, tonnages, riggings, arrival dates, and catch amounts. Although home ports are not often identified in these lists, the fact that tonnages, riggings, and captains' names are included made it possible to match many of the entries to New Bedford voyages of which we already had evidence.

1	1	7	1821	9	1823	_	_	3	3	2500	0	0
1	2	12	1825	12	1828	_		3	3	2500°	0	0
1	3	5	1829	6	1831	_	_	3	3	2500	0	0
1	4	11	1831	6	1835	_	_	3	3	2254	0	0
1	5	10	1835	10	1838	_	_	3	3	2577	9	0
1	6	4	1839	7	1839		_	3	3	60	0	0
1	7	7	1839	4	1843			3	3	1640	0	0
1	8	11	1843	7	1847	_		3	3	1564	310	2600
1	9	10	1847	5	1852	_	_	3	3	581	39	1300
1	10	8	1852	4	1856			4	3	325	5209	81500

6ª

GROUND

SPOIL WHOIL BONES

Voyages Data Set Records for the Abigail after Corrections Based on Wood 1831-73

NOVOYAGE SAILMO SAILYR ARRIVEMO ARRIVEYR LOSTMO LOSTYR FISHLOC

Table 3.4

SHIPID

the text.

*SPOIL for voyage 2 eventually became 2,350 (Ship Arrivals and Departures) and LOSTMO for voyage 12 became 5 (Work Projects Administration 1940, 2:3). See

Note: Italicized data are added to or changed from table 3.3.

Catch amounts for the 1820s are otherwise reported only by Starbuck and Dias, and their data for the period are not good. Take, for example, the *Ann Alexander*. Starbuck (and Dias, following him) reports the catch of her 1824 voyage to Brazil as 100 barrels of sperm oil and 1,550 barrels of whale oil; he gives no figure for baleen. The Ship Arrivals and Departures manuscript reports the catch of this voyage as 74 barrels of sperm oil, 1,510 barrels of whale oil, and 10,100 pounds of baleen. In Starbuck the catch of the *Ann Alexander*'s 1825 voyage is missing. In the manuscript it is present: 75 barrels of sperm oil, 1,525 barrels of whale oil, and 9,000 pounds of baleen. For her 1826 and 1827 voyages Starbuck has no baleen; the manuscript has 14,700 and 13,000 pounds. (For the *Abigail* the manuscript tells us what Starbuck's and Dias's notation "Full" means for voyage 2: not the 2,500 barrels of sperm oil we took from voyage 3, but 2,350 barrels.)

Another useful source covering a limited period is the collection of abstracts of voyages during the 1830s and 1840s in a manuscript written by the whaling agent Samuel Rodman ("List of Whaling Ships Sailing from New Bedford, 1835–1852"). Rodman's abstracts are sketchier than Wood's, but they allowed us to record catch amounts or ending dates for about sixty voyages that had not been adequately reported elsewhere, and thus to use these voyages in analyses.

The last source that contributed significantly to date and catch information in the data set was the industry's trade journal, the Whalemen's Shipping List and Merchants' Transcript, a newspaper that appeared from 1843 through 1914. In its first number the WSL announced itself as "a weekly report carefully corrected from the latest advices, of every vessel engaged in the Whaling business from ports of the United States." For 3,734 issues it printed—in addition to the prices of whaling products and provisions, news of disasters, letters from captains and their wives, reports of ship sales, and some of the worst humor of the entire nineteenth century?—a continually updated listing, by home port, of the whereabouts and activities of the U.S. fleet. The WSL proved more useful in some other contexts, but in terms of data on individual voyages it did supply information for thirty-seven, of which, without it, we would have had no record, and added to our knowledge of catch amounts for others that ended irregularly. The final Voyages Data Set contains 4,731 records, which are summarized in table 3.5.8

Assembling voyage-length and catch data is one thing. Making sense of them is another. The difficulties of figuring out which of several whaling vessels with the same name is which, have been mentioned above. Was the *America* that sailed for the North Pacific in June 1851 the *America* that had returned from the Northwest Coast in April, the *America* that had returned

^{7.} The following joke is the *best* in the *WSL*'s seventy-two-year history (9 June 1863): "CONUNDRUM.—Why are some of the boats in the New Bedford harbor probably like the head of Victoria's eldest son? Because they contain the prints of whales' teeth (the Prince of Wales' teeth)."

^{8.} Other sources contributed a date here, a hunting ground there to the Voyages Data Set—among them, Whiting and Hough 1953; Sherman 1986; Anthony 1922; Stackpole 1953.

Table 3.5 Numbers of Voyages by Hunting Ground and Sailing Year, New Bedford Whaling Fleet, 1789–1927

	Atlantica	Indian	Pacific	Western Arctic	Mixed	Unknown	Total
			A. Annual	Numbers			
1789	2						2
1790	2					1	3
1791			1				1
1792	8					1	9
1793	4	1				4	9
1794	8					1	9
1795	6		1			3	10
1796							0
1797	7		6			1	14
1798		1	2			,1	4
1799			2				2
1800	2		3			1	6
1801	5	2	1			3	11
1802	6	3	2			1	12
1803	7	3				5	15
1804	5	1	4			8	18
1805						2	2
1806		4	3				7
1807	1		2			2	5
1808	2	3	6			2	13
1809	2	1	2			2	7
1810	1		5			1	7
1811	_		3				3
1812						1	1
1813							0
1814							0
1815	5		5				10
1816	11		2			1	14
1817	8	1	5			-	14
1818	16	•	10				26
1819	14		5				19
1820	19		15			1	35
1821	15		22			3	40
1822	10		21			3	34
1823	20		3			3	26
1824	17		10			ĺ	28
1825	13		22			•	35
1826	17		10			1	28
1827	25		17			1	43
1828	23		28			1	5 0
	23	2	10				35
1829	31	5	30				33 66
1830	33	3 1	30 37			2	
1831		1	22			2 2	73
1832	43		22			2	67

Table 3.5

				Western			
	Atlantica	Indian	Pacific	Arctic	Mixed	Unknown	Total
1833	33	5	33		1	l	73
1834	20	l	23			1	45
1835	34	4	30		3	1	72
1836	42	5	25				72
1837	28	11	24		6		69
1838	17	17	34		4	1	73
1839	12	13	50		l		76
1840	19	19	35		2		75
1841	8	21	44		l	l	75
1842	11	29	35		5		80
1843	3	14	41		19		77
1844	5	18	62		13		98
1845	6	13	44		28		91
1846	4	14	39		14		71
1847		13	45		18		76
1848	1	8	58		6		73
1849	3	14	40	4	4	l	66
1850	3	9	49	21	1	-	83
1851	13	10	70	36	8		137
1852	10	11	47	7	1		76
1853	8	12	63	21	2		106
1854	6	17	56	20	3		102
1855	8	15	51	14	8		96
1856	4	8	55	17	11		95
1857	4	13	5 9	17	4		97
1858	3	10	32	16	4		65
1859	2	17	41	7	5		72
1860	12	14	41	i	1		69
1861	12	3	6	1	6		27
1862	22	3	16	16	l	l	59
1863	12	6	17	11	1	•	47
1864	21	5	12	9	4		51
1865	36	5	24	15	3		83
1866	20	5	21	8	2		56
1867	25	8	14	7	-	l	55
1868	16	10	16	4		l	47
1869	12	8	18	5	1	•	44
1870	9	11	14	4	1		38
1871	8	10	15	8			41
1872	13	3	15	2			33
1873	9	3	3	2			15
1874	16	3	9	l		l	30
1875	25	10	13	3		l	52
1876	23 27	5	13 7	6		1	45
1877	27	2	13	2			45
1878	26 34	۷	13	4			52
1878	34 26		8				39
		1		5			43
1880	26	1	12	4			43

Table 3.5

	Atlantica	Indian	Pacific	Western Arctic	Mixed	Unknown	Total
	Atlantic	Indian	racilic	Aictic	Wilked	Ulikilowii	10(a)
1881	23		17	12	1	1	54
1882	16		20	7	1		44
1883	16		19	3	1		39
1884	14		21	1			36
1885	10		25	2			37
1886	8	2	23				33
1887	9	4	23				36
1888	5		23				28
1889	5		17				22
1890	8		16				24
1891	9		21				30
1892	6		11	1			18
1893	10		13				23
1894	6		7				13
1895	6		4				10
1896	7		6				13
1897	11		8				19
1898	10		5				15
1899	9		5				14
1900	6		5				11
1901	10	1	5				16
1902	5	•	5				10
1903	10		7				17
1904	5		5				10
1905	3	2	4	1			10
1906	11		4				15
1907	6		2				8
1908	9		2				11
1909	6		_				6
1910	14						14
1911	8		1				9
1912	9		-				9
1913	6		1				7
1914	6		•				6
1915	8						8
1916	9	1					10
1917	17	•					17
1918	12						12
1919	15						15
1920	7						7
1921	6	1					7
1921	7	1				1	8
1922	2					1	2
1923 1924	1						1
1924 1925	1						1
	1						
1926 1927	1						0
174/	1						1

Table 3.5	(continued)
Table 212	(Continueu

	Atlantica	Indian	Pacific	Western Arctic	Mixed	Unknown	Total
		I	3. Quinquen	nial Sums			
1789–93	16	1	1	0	0	6	24
1794–98	21	1	9	0	0	6	37
1799-1803	20	8	8	0	0	10	46
1804-8	8	8	15	0	0	14	45
1809-13	3	1	10	0	0	4	18
1814-18	40	1	22	0	0	1	64
1819-23	78	0	66	0	0	10	154
1824-28	94	0	87	0	0	3	184
1829-33	163	13	132	0	l	5	314
1834-38	141	38	136	0	13	3	331
1839-43	53	96	205	0	28	1	383
1844-48	16	66	248	0	79	0	409
1849-53	37	56	269	89	16	1	468
1854-58	25	63	253	84	30	0	455
1859-63	60	43	121	35	14	1	274
1864-68	118	33	87	43	9	2	292
1869-73	51	35	65	19	l	0	171
1874-78	130	20	56	16	0	2	224
1879-83	107	l	76	31	3	1	219
1884-88	46	6	115	3	0	0	170
1889-93	38	0	78	1	0	0	117
1894-98	40	0	30	0	0	0	70
1899-1903	40	1	27	0	0	0	68
1904-8	34	2	17	1	0	0	54
1909-13	43	0	2	0	0	0	45
1914-18	52	1	0	0	0	0	53
1919-23	37	l	0	0	0	l	39
1924-27	3	0	0	0	0	0	3
Total	1,514	495	2,135	322	194	71	4,731

Source: Voyages Data Set.

from the Pacific in May, or some third America entirely? The Frances returned from the South Atlantic in April 1832. Close behind her, the Frances returned from the Pacific in June 1832. No one doubts that, refinanced, reoutfitted, and remanned, the Frances sailed for the Pacific in December, but had she been in port for six months or for eight? And it isn't only a matter of distinguishing among vessels. The South Carolina returned to New Bedford from the Atlantic in 1834. The next we hear of her, the South Carolina sailed from New Bedford for the Atlantic in 1842. Were they the same South Carolina?

There are two reasons to worry with this kind of confusion. One is completely pragmatic. Some of the information we want to use is recorded at the voyage level, but for any particular voyage some of it is just as likely to be

^aIn this table, the Atlantic includes Hudson Bay and Davis Strait.

missing. According to Starbuck, the *Balaena* that sailed in 1828 was three hundred tons, but he doesn't report the tonnage of the *Balaena* that sailed in 1825. If these two *Balaenas* were the same vessel, we know the tonnage of the second. The other reason is that, by associating the voyages of a vessel, we gain access to information beyond the voyage level. For example, we can calculate intervoyage intervals and a vessel's longevity in the New Bedford fleet. We can describe the changing composition of the fleet both in terms of new vessels and in terms of thriftily rerigged vessels, as barks became desirable in order to hunt the Western Arctic. We can separate the increase in crew size over time due to increased vessel size from the increase due to the changing quality of crewmen. We can answer questions of continuity involving owners, agents, and captains. And so on.

The organization of the various sources of voyage records has already been described. Their groupings and indexes were sufficient to trace the histories of many vessels. When questions remained, we consulted the transcriptions of ship registers from the New Bedford Customs District compiled by the Work Projects Administration (1940). A vessel's certificate of registry, which had to be filed before it could clear for a foreign voyage, includes the vessel's name, rigging, tonnage and dimensions, home port, and date and place of construction, and the names of its captain and owners. The published transcriptions are organized chronologically by vessel, a process that seems relatively simple given this quantity of data. Among many others, the *Ship Registers* answer the question about the *South Carolina*(s): the ship that returned in 1834 and the ship that sailed in 1842 were the same ship; she had spent the intervening years registered in Dartmouth.⁹

The Ship Registers contain thirteen entries for the Abigail, beginning in July 1821 and ending in July 1862. The only entry that adds information to the Voyages Data Set is the last, which says: "Vessel was burned by Rebel cruiser Shenandoah, commanded by Waddell, in Ochotsk Sea, Russia, May 27, 1865. All papers were confiscated and the crew, except seventeen who joined the Shenandoah, were landed in different ships at San Francisco, Calif." The detail of the entry convinced us to change the month of the Abigail's demise from June to May. A reregistration in November 1823 implies the existence

^{9.} The New Bedford Customs District, in existence from 1789 to 1913, included New Bedford, Dartmouth, Westport, Rochester, and Wareham—all whaling ports. Registrations of vessels from all of them are thus transcribed in the *Ship Registers* (Work Projects Administration 1940). When a New Bedford whaling vessel was purchased from or sold to a port outside the district, its history in the *Ship Registers* is incomplete; transfers within the district are documented.

^{10.} In July 1866 the flags of twelve whalers captured by the *Shenandoah* were returned to New Bedford, among them that of the *Abigail*. In 1875 her owners were recompensed for her loss: "In the Court of Commissioners of the Alabama Claims, the following cases have been disposed of:—Loum Snow, Jr., et al., executives of the owners of the whale ship Abigail, of New Bedford, destroyed by the Shenandoah in Ochotsk Sea, May 27th, 1865, judgment for plaintiff, \$36,240 with interest; Ebenezer F. Nye, Captain of the same, \$10,093 with interest; James T. Taber, mate of the same, \$1,980 with interest; Aaron C. Bryant, cook of the same, \$409" (WSL 17 July 1866, 16 March 1875).

of a voyage between numbers 1 and 2, but no other mention of such a voyage has been found. (See table 3.17.)

Almost every voyage-data source reports vessels' tonnages, and tonnage (a measure of cubic capacity, more properly called register tonnage because it is computed for the purpose of being reported when a vessel is registered) is important in our thinking about profits and productivity. Unfortunately for consistency, the legal formula for computing tonnage, dating from 1789, was changed in 1864; records of voyages before 1865 give tonnages computed in one way, those of voyages thereafter, for the most part, in another. (It took a few years for all vessels to be remeasured and their new tonnages computed and registered.) The systems were sufficiently different that we could not intermingle the two kinds of tonnage measures. Although pre-1865 tonnages are not particularly good measures of actual capacity (see chapter 6), we chose to use them for two reasons: (1) overall, more old tonnages are reported (more vessels completed their New Bedford whaling careers before 1865 than began them after 1864); (2) from the measures of length and breadth reported in the Ship Registers, it is possible to calculate the old tonnage of a vessel for which only new tonnage is reported, but the calculation of new tonnage relied on many more measurements than were taken or recorded before 1865.11 As a result of this decision, for a voyage after 1864 the value of the variable TON-NAGE in the Voyages Data Set is not the new tonnage figure reported in the voyage-data sources, but its equivalent in old tons, which we computed from the formula and the vessel's dimensions.

In the process of dealing with tonnage we also took advantage of the *Ship Registers* to extend old tonnage measures to one decimal place (other sources give whole numbers). The tonnage of the *Abigail* in the data set, for example,

11. The description of how to calculate a vessel's tonnage according to the law of 1789 occupies seventeen lines of text in the General Statutes and relies on measures of length, breadth, and sometimes depth (for two-deck vessels, depth is assumed to be one-half of breadth) (An Act for Registering and Clearing Vessels, Regulating the Coasting Trade, and for Other Purposes, Stats. at Large of USA 1:55-65). The description according to the law of 1864 occupies 148 lines and requires measures such as the average thickness of the ceiling of the tonnage deck, and the depth at a distance of one-third of the round of the beam below the tonnage deck to the upper side of the floor timber at the inside of the limber strake (An Act to Regulate the Admeasurement of Tonnage of Ships and Vessels of the United States, Stats. at Large of USA 13:69-72).

Because there are many cases in which the same vessel was registered both before and after 1865, we could check our calculation of old tonnage from new measurements. For example: (1) In the *Ship Registers* (Work Projects Administration 1940) the *Addison's* pre-1865 tonnage is recorded as 426 30/95, calculated from a length of 108 feet and a breadth of 30 feet; the post-1864 tonnage is recorded as 348.79, using a length of 105.3 feet, a breadth of 30.1 feet, and a depth of 18.4 feet (remember that vessels were remeasured after 1864). If we had been forced to calculate the old tonnage from the new dimensions, we would have come up with 416 tons. This isn't equal to the 426.3 tons calculated from the actual old dimensions, but it's a lot closer than the new tonnage of 348.8. (2) The *Ship Registers*' first record (Work Projects Administration 1940) for the one-deck bark *Xantho* is dated 1866; her tonnage (new) is 206.26, length 110.5 feet, and breadth 26 feet. Using the pre-1865 one-deck formula, we calculated the old tonnage as 329.9. Later we came across a report in the *WSL* (16 October 1866) of the *Xantho*'s purchase at New Bedford that gives the "old measurement" as 325 tons.

SHIPID	NOVOYAGE	CAPT1*	AGENT
1	1	Covell	
l	2	Potter	Benjamin Rodman
1	3	Benjamin Clark	-
l	4	William H. Reynard	C. W. Morgan
l	5	James V. Cox	C. W. Morgan
1	6	D. Barnard	C. W. Morgan
l	7	Young	C. W. Morgan
1	8	Francis D. Drew	W. G. E. Pope
l	9	Rufus N. Swift	W. G. E. Pope
1	10	Ebenezer F. Nye	Loum Snow

Table 3.6 Captains and Agents Data Set Records for the *Abigail* from the Dias Manuscript

is 309.8 because the *Ship Registers* report it as 309 75/95; in Dias, Starbuck, Wood, the Ship Arrivals and Departures manuscript, and the *WSL*, it is 310.

The other data sets organized by voyage are separated from the Voyages Data Set only for convenience. One that began by drawing on the same sources is the *Captains and Agents Data Set*. Every voyage source provides for reporting the name of the captain or the agent or both, although it may not always have the information. First we gathered the names of captains and agents reported by Dias. (Table 3.6 shows the resulting records for the *Abigail*.) Then, as with the Voyages Data Set, we added information given in Starbuck, Hegarty, et al., and made an attempt to standardize the conglomeration—for example, by spelling Pierce always "Pierce," not "Peirce," by choosing "Thomas H. Wilson" over "Thos. H. Wilson" and "Jonathan Bourne, Jr." over "J. Bourne, Jr." (tables 3.7 and 3.8). Our preference was for the fuller form of a name. Of these familiar sources, the Wood abstracts and the *WSL* are particularly chatty about captains who died, took sick, absconded with the ship's funds, and otherwise did not complete their voyages. When it became clear that such events

12. "A letter reports her [the Cleora] at Bahai Nov. 14 [1858] to land the remains of Capt Hines who died in a fit Octr 31. White Master (late Mate)." "[The Desdemona] Arrived March 15.1865 Dimmick Master, 'Capt. Bates' having left his ship and got married at Norfolk Island." "A letter from Capt. Kelly [of the James Andrews] ... March 20 [1857] ... Capt. K. broke his leg in taking a whale the day previous was bound to S. Islands Jas. A. Bartlett Master. Sailed from Honolulu May 12 for home. (Capt. Kelly would come home via California)" (Wood 1831–73, 3:52, 71, 140). "Caught at Last. Capt. Henry P. Butler of Edgartown, who, while in command of Ship Sarah, of New Bedford, belonging to Benjamin B. Howard and others, sold her catchings at Mauritius in 1863, pocketed the proceeds, and has since kept himself scarce, was arrested at Newport a few days since and is now in jail there" (WSL 16 January 1866). "Telegraphic despatches from San Francisco last week, states ... the death in the Arctic Ocean, of Capt. J. S. Adams, of bark Helen Snow, of this port" (WSL 25 October 1864). "A letter from Capt. Campbell, (late first officer, Capt. Adams having died as before reported) of bark Helen Snow ... Capt. Adams died August 21st, of ship fever" (WSL 22 November 1864). "Bark John Wells, at this port, 13th inst., from Honolulu, brought the remains of Capt. Joseph S. Adams, late of bark Helen Snow" (WSL 14 March 1865).

^aCaptain at the beginning of the voyage.

	Corrections Bas	sed on Starbuck 1878	
SHIPID	NOVOYAGE	CAPT1 ^a	AGENT
1	1	Covell	
1	2	Potter	Benjamin Rodman
1	3	Benjamin Clark	
1	4	Benjamin Clark	C. W. Morgan
1	5	William H. Reynard	C. W. Morgan
1	6	James V. Cox	C. W. Morgan
1	7	James V. Cox	C. W. Morgan
l	8	D. Barnard	C. W. Morgan
1	9	Young	Pope & Morgan
1	10	Francis D. Drew	Wm. G. E. Pope
1	11	Rufus N. Smith	William G. E. Pope
1	12	Ebenezer F. Nye	Loum Snow

Table 3.7 Captains and Agents Data Set Records for the *Abigail* after Corrections Based on Starbuck 1878

Note: Italicized data are added to or changed from table 3.6.

Table 3.8 Captains and Agents Data Set Records for the *Abigail* after Corrections Based on Hegarty 1964 and Wood 1831-73

SHIPID	NOVOYAGE	CAPTI	CM1ª	CY1 ^b	CAPT2°	AGENT
1	1	Dennis Covell				
1	2	Stephen Potter				Benjamin Rodman
1	3	Benjamin Clark				-
1	4	Benjamin Clark				C. W. Morgan
1	5	William H. Reynard				C. W. Morgan
1	6	James V. Cox				C. W. Morgan
1	7	James V. Cox				C. W. Morgan
1	8	D. Barnard				C. W. Morgan
1	9	George E. Young				Pope & Morgan
1	10	Francis D. Drew	3	1855	Noname Taber	William G. E. Pope
l	11	Rufus N. Smith				William G. E. Pope
1	12	Ebenezer F. Nye				Loum Snow

Note: Italicized data are added to or changed from table 3.7.

were not rare, we added variables for the names of a second and eventually a third captain, as well as the dates at which the command changed.

We then turned to other authorities. For captains the first examined was Whaling Masters, a sometimes invaluable, sometimes infuriating directory (Works Progress Administration of Massachusetts 1938). Whaling Masters provides captain's name, sailing year, vessel name, and home port. It is organized by captain and includes all the American ports—a fact that makes it very

^{*}Captain at the beginning of the voyage.

[&]quot;Month of change from CAPT1 to CAPT2.

bYear of change from CAPT1 to CAPT2.

^cSecond captain, replacement for CAPT1.

tiresome to discover the captain of a particular voyage without some preliminary clue as to his name. Given a last name, though, Whaling Masters often supplied the first, listing, for example, the Abigail's captain in 1843 as David, rather than D., Barnard. It also has a good list of replacement captains and the circumstances of their elevation. On the other hand, there are some odd lacunae. The foreword calls it "a list as complete as painstaking search of the local records can make it," but it doesn't know, for instance, that the captain of the Abigail's 1847 voyage was a Mr. Young, although his name is printed in Starbuck's History—which appears in Whaling Masters' list of recommended books.

For agents' names the credit reports of the firm that became R. G. Dun & Co. were particularly helpful.¹³ These are transcriptions, made by clerks in R. G. Dun & Co.'s New York office, of information about the financial circumstances of businesses and businessmen supplied twice yearly (from 1842) by local reporters. The reports not only provide the full names of many whaling agents given in other sources only as last names or with initials, but also include enough information about firms of agents and their histories to allow us to associate them over time. For example, in 1844 Gideon Allen was a whaling agent; in 1857 Gideon Allen and Son was an agent firm; in 1879 Gilbert Allen was a whaling agent. The R. G. Dun & Co. reports tell us that the Son in 1857 was Gilbert Allen, and that he took over the business that had been Gideon Allen and Son after his father's death. The same pattern holds for William Gifford (from 1854), William Gifford and Son (from 1859), and Charles H. Gifford (from 1867). (In 1879 Charles H. Gifford took Benjamin T. Cummings as a partner and soon went bankrupt, although the R. G. Dun & Co. reports say Cummings was "close & econl.") The Richmond in Richmond and Wood (1843), Richmond and Pierce (1858), and Richmond and Richardson (1859) was Joshua B. Richmond, and the three firms formed a chain. (The Swift in Swift and Perry [1872] and the Swift in Swift and Allen [1879], however, were not the same man.)

To keep track of associations of agents, we created a variable (CHAINID) of which the various firms in a chain share a value. The data set contains 320 agents/firms and 259 chains of agents/firms; the longest chain comprises five agencies. Since the whaling business in New Bedford was dominated by a few

13. R. G. Dun & Co. Collection, Bristol County, Massachusetts, vol. 17, pp. 36, 49, 114, 149, 304; vol. 18, pp. 388, 471. For a history of the R. G. Dun & Co. agency and its operations, see Norris 1978.

The reports make odd reading. The reporters are determined to be businesslike; most of the time they write to a formula, and a dry one at that: "Mar 14.72 No improvemt. Sep 2.72 Of no a/c for Cr. Mar 11.73 Same. Aug 21.73 Not favorably regarded cash advised. Mar 17/74 Same. Aug 25.74 Not recommended for any cr." Then, out of nowhere: "Feby 27.75. Wife is smart. Keeps a boarding house which supports him . . . Sep 4/75 Irrespons & worthless." Generally, though, New Bedford agents are not irresponsible and worthless. Generally they are "Good & sound . . . Firm & Safe . . . vy good. Rich . . . Relia & conservative . . . Succl & Sound . . . Good as ever . . . Good as Gold . . . Undoubted . . . Gd. for a million . . . A. No. 1 . . . Safe reliable men."

families, and those families frequently intermarried, there were surely more associations of agencies than we have been able to identify. Having a successful agent for a father-in-law was a plus with the R. G. Dun & Co. reporters—and probably with the son-in-law as well.¹⁴ (See chapter 10 for a discussion of this subject.)

The New Bedford City Directories (1836–87, intermittently) provided names of both captains and agents. All of these directories give the occupations of residents, but those up through 1852 aren't content with saying simply that someone is a master mariner; they say, for example, "Bonney Henry M. master bark Richmond." When we didn't already know the name of the captain of a vessel that was off on a voyage, we accepted a directory's evidence. (By no means all captains of New Bedford whaling vessels lived in New Bedford, of course.) As for agents, the directories list both firms and individuals: "Crocker, George O. (O. & G. O. Crocker) . . . Crocker, Oliver (O. & G. O. Crocker) . . . Crocker, O. (Oliver) & G. O. (George O.) merchants." Such listings don't identify the agent for a particular voyage, but in some cases they gave us his full name.

The other two important sources for this data set, Whaling Logbooks and Journals (Sherman 1986) and the Ship Registers (Work Projects Administration 1940), provided captains' names. Whaling Logbooks and Journals was particularly useful for the names of replacement captains; Dias knows, for example, as do Starbuck and Hegarty, that Alonzo O. Herendeen was the original captain of the Falcon's 1875 voyage, but Whaling Logbooks and Journals knows that he was replaced by James A. Crowell, and Crowell by Pliny B. Handy. The Ship Registers were particularly useful for captains in the early years. Dias knows, for example, that the captain of the Winslow in 1802 was Mr. Paddock; the Ship Registers know that he was Benjamin Paddock.

In the interests of tidiness, the Captains and Agents Data Set has a record for each of the 4,731 voyages in the Voyages Data Set, although for 19 of them we don't know anything about the captain's name, for 446 we don't know the agent's name, and for 9 we don't know either. There are 390 voyages for which we know of a first replacement captain, 39 for which we know of a second. (See table 3.9 for the final record for the *Abigail*.)

In order to calculate the productivity and profits of whaling voyages, we needed to know the sizes of whaling crews. This is a more complicated matter than it may appear. In the early days a vessel might return to the New Bedford

^{14.} The big-time agent Edward Mott Robinson was the son-in-law of the big-time agent Gideon Howland. See Sparkes and Moore 1935, chaps. 4, 5.

^{15.} Whaling Logbooks and Journals (Sherman 1986) doesn't actually specify the order of the captains. It says, on page 130: "Falcon (Bark). New Bedford, Mass. October 26, 1875-April 20, 1879. Masters: Alonzo O. Herendeen, Pliny B. Handy and James A. Crowell." We established the order reported in the text; Crowell was not the captain of a subsequent New Bedford voyage, but Handy was the captain of three, the next three voyages of the Falcon.

^{16.} The data set has more variables than appear in table 3.9, but none of general interest; they are identification numbers for sorting, segments of names for indexing, and so on.

Table 3.9	Captains and Agents Data Set Records for the Abigail after Corrections
	Based on Whaling Masters, the R. G. Dun & Co. Field Reports, and Other
	Sources

SHIPID	NOVOYAGE	CAPT1	CM1ª	CY1b	CAPT2c	AGENT
1	1	Dennis Covell				Benjamin Rodman
1	2	Stephen Nye Potter				Benjamin Rodman
1	3	Benjamin Clark				•
1	4	Benjamin Clark				Charles W. Morgan
1	5	William <i>Hathaway</i> Reynard				Charles W. Morgan
1	6	James V. Cox				Charles W. Morgan
1	7	James V. Cox				Charles W. Morgan
1	8	David C. Barnard				Charles W. Morgan
1	9	George E. Young				William G. E. Pope & S. Griffitts Morgan
1	10	Francis D. Drew	3	1855	Noname Taber	William G. E. Pope
1	11	Rufus N. Smith				William G. E. Pope
1	12	Ebenezer F. Nye				Loum Snow

Sources: Main sources for corrections are Works Progress Administration of Massachusetts 1938; R. G. Dun & Co. Collection, Massachusetts volumes.

Note: Italicized data are added to or changed from table 3.8.

with the crew with which it sailed, but, as soon as voyages became routinely more than a few months long, the size of the crew could vary considerably. Over the course of a voyage, crewmen died, got sick, mutinied, or deserted—and were, or were not, replaced. These fluctuations are now impossible to trace. There are thousands of existing individual references to crew changes (notices in the *WSL*, consular certificates, inbound shipping papers that account for crew members on the outbound lists who are not returning, and so on), but we have seldom found records that purport to trace the complete picture of the changing crew structure even of a single voyage.¹⁷

We have, of necessity, settled for something less—the sizes of the crews that sailed when voyages left New Bedford. These are recorded in the *Crew Counts*

17. An example, albeit extreme, of a complicated personnel history is the 1879–84 voyage of the Sea Ranger. "The log, usually kept by the first mate, contains four different handwritings which is understandable when we learn that of four original mates two were discharged and two deserted. Fourteen others of the crew were discharged, ten deserted, one died at sea and another drowned. Of the original complement of thirty-six, only six finished the voyage. . . . Officers and boatsteerers were signed on, discharged, promoted and demoted at a dizzying rate" (Purrington 1972, 35).

During the 1858-61 voyage of the *Florida*, there were three fourth mates, a boatsteerer was killed, and nine men deserted—the carpenter, the blacksmith, the steward, an ordinary seaman, and five greenhands. "Six men were shipped at Brava, Cape Verde Islands, Oct. 13, 1858. Some Kanakas were shipped at South Pacific Islands and from Hilo. Four men were shipped at Guam, March 6, 1860" (Williams 1964, 205-6).

^aMonth of change from CAPT1 to CAPT2.

bYear of change from CAPT1 to CAPT2.

^cSecond captain, replacement for CAPT1.



From a journal kept by Warren W. Baker on the brig Leonidas of Westport, Massachusetts, in 1850. "Sept the 24,1850 Brig Leonidas on the — ground Captain P Cornel of West Port Tuesday September 25 First part fine weather ship heading ESE at 5 PM Saw Sperm Whales lowered the Boats and struck a large Whale and tuck him to the ship Tuesday October 1 First part strong winds from E ship heading W N W all hands Employed in stowing down at 5 P M finished stowing 80 bbls of sperm oil.' The two whales that Baker depicts as harpooned are labelled "No 5" and "No 6."

Reproduced courtesy of The Kendall Whaling Museum, Sharon, Massachusetts, U.S.A.

Data Set (table 3.10). We used three sources: the collection of crew lists deposited in the National Archives (resulting in the column headed ARCHIVES), the collection of Whalemen's Shipping Papers held by the New Bedford Free Public Library, (the column headed FPL), and the lists of the crews of departing vessels routinely printed in the WSL in the years 1852–89 (the column headed WSHPLIST).

The National Archives lists are documents that were required by law. As well as directing ships' masters to pay three months' wages for the care of seamen discharged in foreign ports, and directing consuls "to provide for the mariners and seamen of the United States, who may be found destitute within

SHIPID	NOVOYAGE	SAILMO	SAILYR	ARCHIVES	WSHPLIST	FPL	CREW		
1	1	7	1821	22	_	_	23		
1	2	12	1825	21	_		22		
1	3	5	1829	21		_	22		
1	4	11	1831	24	_		25		
1	5	10	1835	25			26		
1	6	4	1839	_	_		_		
1	7	7	1839	23	_		24		
1	8	11	1843	27		28	28		
1	9	10	1847	23	_	25	25		
1	10	8	1852	_	30	31	31		
1	11	8	1856	_	30	30	30		
1	12	7	1862	29	29		30		

Table 3.10 Crew Counts Data Set Records for the Abigail

Sources: U.S. Customs Service 1820–1915; Whalemen's Shipping Papers (limited in the main to voyages that sailed in the years 1840–58 and 1866); WSL 1852–89.

their districts respectively, sufficient subsistence and passages to some port in the United States," the law (An Act Supplementary to the "Act concerning . . . the Further Protection of Seamen," 1803, Stats. at Large of USA 2:203) required

[t]hat before a clearance be granted to any vessel bound on a foreign voyage, the master thereof shall deliver to the collector of the customs, a list, containing the names, places of birth and residence, and a description of the persons who compose his ship's company, to which list the oath or affirmation of the captain shall be annexed . . . and the said collector shall deliver him a certified copy thereof . . . [which] he shall exhibit . . . to the first boarding officer, at the first port in the United States, at which he shall arrive on his return thereto, and then and there also produce the persons named therein, to the said boarding officer, whose duty it shall be to examine the men with such list, and to report the same to the collector.

If a crewman was discharged in a foreign country, the action had to be taken "with the consent of the consul, vice-consul, commercial, or vice-commercial agent there residing, signified in writing, under his hand and official seal." If a crewman died or absconded, or was "forcibly impressed into other service," the captain was to produce "satisfactory proof" of the occurrence to the collector of customs when his crew list was examined at the end of the voyage. Figure 3.2 reproduces the crew list for the 1820–21 voyage of the *Commodore Decatur* and examples of other crew-related documents.

From 1817 to 1864 American vessels were required by law to ship crews at least two-thirds of whom were American citizens (see chapter 5). The crew lists mandated by the 1803 law were useful in documenting compliance with this requirement, but they were not instituted in an effort to control the compo-

NAMES.	PLACES OF REPUBL	PLACES OF BEGINESCE.	OF WHAT CHENTAL	建筑是高及	Perci	UPPERS OF TO	KER PERSONS.	
Miam Handy			United States	Agol. ,	· Fret.	luches,	Complexion.	Hair.
ency H Willow	Vineyard	Vineyars	Unite Hates	05	5	10	light	441
Indiew Johnson	Rochester	NewBeston	Unite States	28	5	114%	fair	brown
rogy & Albert	Little Compton	Little Compton	United States	25	5	5134	dack	dark
Tomas Hyde	Burghand Payton			24	5	346	dock	an
Gazer Stokens	Richester	- nonestor	United Hates	29	5	7.0%	light	Sandy
Cham, Mays &	1 1	Minedfor	Trites Rates	22	51	64/4	Fair	Erows
omas Butter	Prongleania	Swafer	Utiles Plates	,22	5	38,14	lepper	the woo
Miam Handy for	Sandwick	Sandwick	White States	19	5	10	Kark	brown
wif Marky -	Sandare	Sandrech	United States	17	5	19	dark	brown
Viam H Page	Printence	Providence	United States	20	5	40%	Sain	brown
actes of Smith	Nuotany Ports	Bhose bland	Unite States	19	5	649/4	Liv	from
downdy Jackson	Phymouth	Newtondford	Unites Haley	28	5	8434	dark	dackfore
reprint Hack In	Subsection	Stuttedford	Monotes Raley	16	5	54%	dail	brown
arrison Mayhew-	Control of the Contro	Chilmany	antes thatey	19	5.	.7	4/1	dechlor
rane deller	bhelmach	Chelmark	Inchi Hates	24	5	10094	light	born
ler doffing	Newsyork Hate	NewBedfell	Inon Huder	28	5	7414	lepper	u
other Handy	Sandwich	Sandwich	United Steads	18	5	6+14	and	boun
Hiver Allen	Mendsor &	Window	Unite Hates	20	5	44/4	dauly	bown
/	driluale	Mafrochundts	tintes Hates	30	5	84/8	light	brown
acob fackson	Long Sland	NewBedford	Hontes Hales	(29	0	7494	blacks	blh wo

Fig. 3.2 The crew list (A) for the 1820 voyage of the Commodore Decatur, with examples of various other official crew-related documents. B, certificate of clearance. C and D, consular certificates. E, statement of returning captain.

Source: U.S. Customs Service 1820–1915.

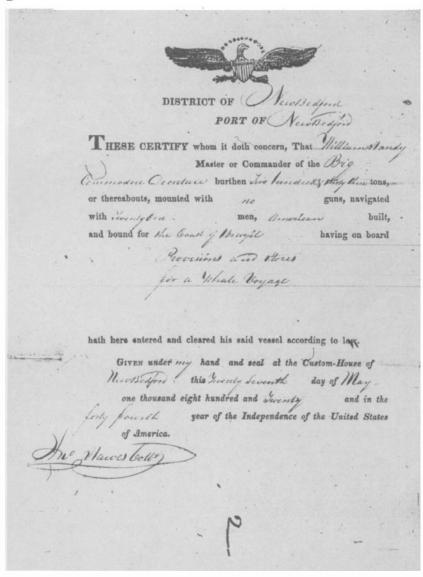


Fig. 3.2 (continued) Certificate of clearance

CONSULATE OF THE UNITED STATES OF AMERICA. Paita-Peru. I, ALBXANDER RUDEN JUNE, Consul of the United States of America for the port of Paita, do hereby certify that led in ally appeared before my Constant 6 deans declared that being at Jumber in the month Waging to said this . The se since that it for him to an lining the rayage a board daid this and requely to be light the spaceaux Ant of Thomber which was day, Forther the said months Constant C Soms lit with said Sheeting Boron sufficient for his suggest and printed thing with a parray; to Tury again, the residing in Tumbe makes this see set having been at any other pot In testimony whereof I have hereunto subscribed my name and affixed the seal of my office at Paita this hat hat day of Septates ____ in the year of our Lord one thousands eight hundred and for Alex Muden Sun

Fig. 3.2 (continued) Consular certificate

D ordilate of the le State of anerica Sienes Jour Tapop & Defor This is to Gertify that Ira Bartlow and Ahn Durham, whose nume, appear in the paper of the This Hends of New Bestond Capin Devot, deducted from said Ship while laying at Simon Bay and accord be fried my him 26h Day of Fel 1839 Two 13 Hew dos U. Martilan Goods Lewis Foren

Fig. 3.2 (continued) Consular certificate

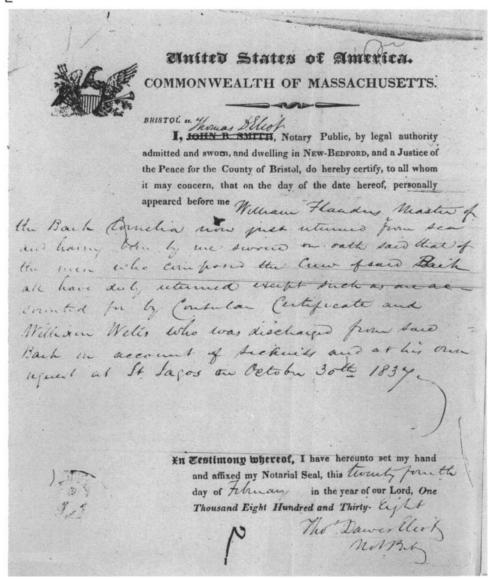


Fig. 3.2 (continued) Statement of returning captain

sition of crews. Rather, the fact that captains had to account for the whereabouts of their crews gave some measure of protection to American seamen who were otherwise subject to the whims and disciplines of their masters.¹⁸

Shipping papers (articles) were also legal documents, instituted in 1790 and filed with the collector of the customs at the start of a foreign voyage. ¹⁹ They constituted the contract between the owners and the crew, and listed "conditions . . . as to their service, pay, voyage, and all other things." ²⁰ The legal requirement was that the shipping articles be available to American consuls who might be asked to rule on disputes between masters and men during voyages, and to judges and justices of the peace who might have to hear lawsuits regarding wages at the ends of voyages. As was the case with the crew list, the shipping articles had to be kept up to date.

Any consul of the United States . . . may, upon the application of both the master and any mariner of the vessel . . . discharge such mariner, if he thinks it expedient When a mariner is so discharged, the officer discharging him shall make an official entry thereof upon the list of the crew and the shipping articles. Whenever any master shall ship a mariner in a foreign port, he shall forthwith take the list of his crew and the duplicate of the shipping articles to the consul . . . who shall make the proper entries thereon, setting forth the contract, and describing the person of the mariner. (Stats. at Large of USA 5:395)²¹

Figure 3.3 reproduces the shipping papers of the 1847 voyage of the *Abigail*. In 1852 the *WSL* began printing crew lists of whaling voyages. (Those for the three subsequent voyages of the *Abigail* are transcribed in appendix 3C.) Since the *WSL* lists were intended to be transcripts from the legal documents,

18. "[T]he master of a vessel at sea wielded such untrammeled authority that he became inevitably a small-scale despot; and in controlling ships, as in governing nations, the men who could exercise supreme authority without abusing it were in the minority" (Hohman 1928, 118). Or, as "The Whaleman's Lament" puts it:

They will rob you they will use you Worse than any slaves
Before you go a-whaling boys
You had best be in your graves
They'll flog you for the least offense
And that is frequent too
And the best that you will get from them
Is plenty more work to do
So do it now or damn your eyes
I will flog you till you're (blue)

(Log book of the Catalpa's 1856 voyage, in Huntington 1964, 16-17).

- 19. An act for the Government and Regulation of Seamen in the Merchants Service, 1790, Stats. at Large of USA 1:131-35.
- 20. An Act in Addition to the Several Acts Regulating the Shipment and Discharge of Seamen, and the Duties of Consuls, 1840, Stats. at Large of USA 5:394-97.
- 21. The consul's notations to the shipping articles were, unfortunately, often made on separate official forms, and thus are not always available today even when the shipping articles themselves have survived.

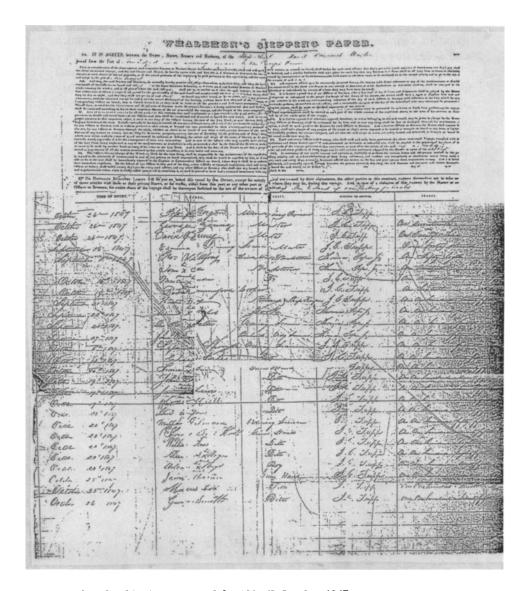


Fig. 3.3 The shipping papers of the Abigail, October 1847

Source: Whalemen's Shipping Papers, used with permission of the Trustees of the New Bedford Free Public Library.

Note: See appendix 3H for a transcription.

it would make sense for counts made from them to equal counts made from the manuscript crew lists themselves—but human frailty ensures that the two counts are sometimes different.

For 576 voyages the Crew Counts Data Set contains a count from each of these three sources, for an additional 1,881 voyages counts from two of the three, for 1,312 a count from only one. When counts are available from more than one source and the counts are not equal, we generally preferred first a count of the shipping papers list, second a count of the manuscript crew list, third a count of the *WSL*'s transcribed crew list (see table 3.11). The resulting variable, CREW, ranges in value from 6 to 41.²² Its mean and median lie between 26 and 27; its mode is 30.

For those voyages whose shipping papers have survived, it is possible to know not only how many men were in the crew when the vessel sailed from New Bedford, but also the occupational structure of that initial crew. We came up with 1,251 such voyages. They make up the *Stations and Lays Data Set*, which contains 36,453 records—one per crew member. Table 3.12 shows abbreviated stations and lays records for the four voyages of the *Abigail* for which shipping papers are available.

In addition to the variables displayed in the table, the data set contains a variable that differentiates between members of the initial crew and later additions. Sometimes the distinction is obvious: a line is drawn across the page of the shipping papers, or following a blank section the recorder's handwriting changes dramatically, or the "time of entry" becomes definitely a postsailing date. When it is not obvious, it can sometimes be deduced from the second appearance on the list of an occupation for which no vessel had need of two—a second cook or a second first mate, for example. In the few cases in which there is no such evidence, we arbitrarily chose the crewmen listed on the front of the page as those who sailed with the vessel. Another variable flags each crewman who signed the shipping paper with an X rather than by writing his name. We assumed these men were illiterate.²³

The occupations recorded on the shipping papers are not as tidy as those analyzed below (chapter 5). We coded the occupational descriptions that were actually recorded, but also grouped equivalent occupations into categories. The table 5.2 notes give lists of occupations that we took to be equivalent ("greenhand" and "green oarsman," for example).

In addition to the official shipping papers and crew lists, the New Bedford Port Society kept lists of crew members for its own purposes. These lists in-

^{22.} The value of CREW includes the captain. The crews of six sailed with the *Elizabeth*, an 83.2-ton brig, in the 1820s. The crews of forty-one sailed with the *Mary and Helen*, a 634.3-ton steam bark, in 1882 and with the *South America*, a 605.6-ton bark, in 1855. The mean number of tons-per-crewman over the entire data set is 11.58.

^{23.} In 195 instances (0.54 percent), the shipping paper adds detail to the bald statement of the lay fraction: "plus bonus," "+ 1/2 slush," "guarantee \$75." We stored these texts in the Stations and Lays Data Set, but seldom found a use for them (except when a boy signed on not for a lay but for "clothing," for example, in which case his lay was figured as 1/1,000).

Table 3.11 Sources of Values for the Variable CREW in the Crew Counts
Data Set

	Number of Occurrences
CREW equals FPL.	1,567
CREW also equals ARC and WSL.	296
CREW also equals ARC; WSL is missing.	660
CREW also equals ARC; WSL is not missing.	155
CREW also equals WSL; ARC is missing.	50
CREW also equals WSL; ARC is not missing.	39
CREW equals neither ARC nor WSL.	367
Neither ARC nor WSL is missing.	81
ARC is missing; WSL is not missing.	28
WSL is missing; ARC is not missing.	169
Both ARC and WSL are missing.	89
CREW equals ARC.	2,023
CREW also equals WSL.	536
FPL is missing.	534
FPL is not missing.	2
CREW does not equal WSL.	1,487
WSL is missing; FPL is not missing.	5
WSL is missing; FPL is missing.	1,114
WSL is not missing; FPL is not missing.	3
WSL is not missing; FPL is missing.	365
CREW equals WSL.	179
FPL is missing; ARC is not missing.	69
ARC is missing; FPL is not missing.	1
Both FPL and ARC are missing.	109
CREW is missing.	962

Notes: FPL = Whalemen's Shipping Papers; ARC = U.S. Customs Service manuscript crew lists in the National Archives; WSL = Whalemen's Shipping List transcriptions of crew lists.

clude crewmen's ages, and enabled us to compile the *Sailors' Ages Data Set*, which contains one record for each of 275 voyages that sailed between 1842 and 1858.

The ages of crewmen ranged from nine to sixty-two. Table 3.13 shows the distribution of ages among voyages. Clearly, whaling crews were largely composed of youngsters; in fact, on 50 percent of the voyages for which we have Port Society lists, the oldest man aboard was thirty-five or younger (see table 3.14).

Where was a vessel before its first New Bedford whaling voyage? Where was it after its last? These facts, when we know them, are recorded in the *Entrances Data Set* and the *Exits Data Set*—each of which has one record per vessel.

Entrances are coded either M (merchant), W (whaler), or U (unknown). Fifty-eight percent of New Bedford whaling vessels came directly from the merchant service; 31 percent had been whalers or were newly built (presum-

Table 3.12 Stations and Lays Data Set Records for the Abigail

		First		Second	
ROSTER ^a	OCC1	Occupation	OCC2	Occupation	LAY ^t
		A. Voyage 8, No	vember 1843		
1	1	captain	_		16
2	2	first mate			29
3	3	second mate	_		50
4	4	third mate	_		72
5	9	boatsteerer	_		95
6	9	boatsteerer			95
7	9	boatsteerer			95
8	9	boatsteerer	_		95
9	21	steward	_		130
10	30	seaman	_		140
11	32	greenhand	_		185
12	32	greenhand			185
13	30	seaman	12	carpenter	140
14	32	greenhand	_		190
15	32	greenhand	_		185
16	31	ordinary seaman			170
17	31	ordinary seaman			150
18	10	cooper	22	shipkeeper	55
19	11	blacksmith	_		185
20	33	boy			200
21	31	ordinary seaman	_		170
22	32	greenhand	_		190
23	32	greenhand			190
24	32	greenhand	_		185
25	20	cook			140
26	32	greenhand	_		190
27	30	seaman	_		140
28	32	greenhand ————————————————————————————————————			190
		B. Voyage 9, O	ctober 1847		
1	1	captain	_		17
2	2	first mate			23
3	3	second mate	_		43
4	4	third mate	9	boatsteerer	58
5	9	boatsteerer			90
6	9	boatsteerer			90
7	10	cooper	_		60
8	21	steward	22	shipkeeper	125
9	20	cook			140
10	31	ordinary seaman	_		140
11	11	blacksmith	31	ordinary seaman	150
12	31	ordinary seaman			140
13	31	ordinary seaman			135

Table 3.12

C. Voyage 10, August 1852			First		Second	
15 32 greenhand	ROSTER	OCC1	Occupation	OCC2	Occupation	LAY ⁶
16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 19 31 ordinary seaman — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 33 boy — 24 32 greenhand — 25 32 greenhand — 26 32 greenhand — 26 32 greenhand — 26 32 greenhand — 26 32 greenhand — 27 9 boatsteer — 3 3 second mate — 4 9 boatsteerer — 5 9 boatsteerer — 7 9 boatsteerer — 8 10	14	32	greenhand			175
17 32 greenhand —	15	32	greenhand			175
18	16	32	greenhand	_		175
19	17	32	greenhand	_		175
20 32 greenhand —	18	32	greenhand	_		175
21 32 greenhand —	19	31	ordinary seaman	_		155
22 32 greenhand — 24 32 greenhand — 25 32 greenhand — 26 32 greenhand — C. Voyage 10, August 1852 C. Voyage 10, August 1852 1 1 1 captain — 2 2 first mate — 3 3 second mate — 4 9 boatsteerer — 6 9 boatsteerer — 7 9 boatsteerer — 8 10 cooper — 9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand	20	32	greenhand	_		175
23 33 boy — 24 32 greenhand — 25 32 greenhand — C. Voyage 10, August 1852 1 1 captain — 2 2 first mate — 3 3 second mate — 4 9 boatsteerer — 5 9 boatsteerer — 6 9 boatsteerer — 7 9 boatsteerer — 8 10 cooper — 9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32	21	32	greenhand	_		180
24 32 greenhand — 25 32 greenhand — C. Voyage 10, August 1852 C. Voyage 10, August 1852 1 1 captain — 2 2 first mate — 3 3 second mate — 4 9 boatsteerer — 5 9 boatsteerer — 6 9 boatsteerer — 7 9 boatsteerer — 8 10 cooper — 9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand	22	32	greenhand	_		185
25 32 greenhand	23	33	boy	_		225
C. Voyage 10, August 1852 C. Voyage 10, August 1852	24	32	greenhand			170
C. Voyage 10, August 1852 C. Voyage 10, August 1852 C	25	32	greenhand			190
1	26	32	greenhand			175
2 2 first mate — 3 3 second mate — 4 9 boatsteerer — 5 9 boatsteerer — 6 9 boatsteerer — 7 9 boatsteerer — 8 10 cooper — 9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand —			C. Voyage 10, A	August 1852		
3 3 second mate — 4 9 boatsteerer — 5 9 boatsteerer — 6 9 boatsteerer — 7 9 boatsteerer — 8 10 cooper — 9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith —	1	l	captain			16
4 9 boatsteerer — 5 9 boatsteerer — 6 9 boatsteerer — 7 9 boatsteerer — 8 10 cooper — 9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand —	2	2	first mate			23
4 9 boatsteerer — 5 9 boatsteerer — 6 9 boatsteerer — 7 9 boatsteerer — 8 10 cooper — 9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand —	3	3	second mate			38
66 9 boatsteerer — 7 9 boatsteerer — 8 10 cooper — 9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —			boatsteerer			65
7 9 boatsteerer — 8 10 cooper — 9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	5	9	boatsteerer	_		90
8 10 cooper — 9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	6	9	boatsteerer	_		90
9 21 steward — 10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	7	9	boatsteerer			90
10 20 cook — 11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	8	10	cooper			50
11 12 carpenter — 12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	9	21	steward			140
12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	10	20	cook	_		150
12 20 cook — 13 32 greenhand — 14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	11	12	carpenter			180
14 32 greenhand — 15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	12	20	-	_		150
15 9 boatsteerer — 16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	13	32	greenhand	_		190
16 32 greenhand — 17 32 greenhand — 18 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	14	32	greenhand	_		190
17 32 greenhand — 18 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	15	9	boatsteerer	_		90
17 32 greenhand — 18 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	16	32	greenhand			190
18 32 greenhand — 19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —		32	•	_		190
19 32 greenhand — 20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	18	32	•	_		190
20 32 greenhand — 21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —		32	-	_		190
21 32 greenhand — 22 32 greenhand — 23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —		32	_	-		190
23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	21	32	_			200
23 32 greenhand — 24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	22	32	greenhand			190
24 11 blacksmith — 25 32 greenhand — 26 32 greenhand — 27 32 greenhand —	23	32	•	_		190
26 32 greenhand — 27 32 greenhand —	24	11	blacksmith	_		185
26 32 greenhand — 27 32 greenhand —	_					190
27 32 greenhand —			•	_		190
			•	_		190
			•	_		190
29 32 greenhand —			-	_		190
30 32 greenhand —			•			185
31 32 greenhand —	_		•	_		190

Table 3.12 (continued)

ROSTER ^a	OCC1	First Occupation	OCC2	Second Occupation	LAY
		D. Voyage 11, A	August 1856		
1	1	captain			c
2	2	first mate			20
3	3	second mate			26
4	4	third mate	_		55
5	9	boatsteerer	_		85
6	9	boatsteerer			90
7	9	boatsteerer			85
8	9	boatsteerer	_		90
9	10	cooper	22	shipkeeper	50
10	21	steward			125
11	20	cook			150
12	12	carpenter			195
13	11	blacksmith			190
14	32	greenhand	_		225
15	32	greenhand			200
16	31	ordinary seaman	_		175
17	32	greenhand			200
18	31	ordinary seaman			180
19	31	ordinary seaman			155
20	32	greenhand			200
21	32	greenhand			200
22	32	greenhand	_		200
23	31	ordinary seaman	_		165
24	20	cook	_		150
25	32	greenhand	_		200
26	32	greenhand	_		200
27	32	greenhand			200
28	32	greenhand			200
29	32	greenhand	_		200
30	32	greenhand	_		200
31	32	greenhand	_		200

Source: The data set was constructed from the Whalemen's Shipping Papers.

aROSTER is simply a count; we added it to the data.

^bThe lay fraction is 1/LAY—1/16, 1/29, and so forth.

Occasionally the captain's lay is not recorded on the shipping papers, presumably because he negotiated a contract involving a more complicated arrangement than a fraction of the net value of the catch. In these cases, believing that the captain was thought to be unusually skilled, we attributed to him, for analysis purposes, a lay 10 percent better than the otherwise best for that sailing year and whaling ground. In this case, the result is 13.4 (a lay of 1/13.4).

Table 3.13 Numbers of New Bedford Whaling Voyages Sailing with Various Numbers of Crewmen of Various Ages, 1842–58

				Nu	mber of	Crewme	n at Age				
Age	1	2	3	4	5	6	7	8	9	10	11
9	1										
10	1										
11	4										
12	5										
13	17										
14	28	2									
15	47	14	_								
16	70	24	8	_		1					
17	85	33	6	3	1						
18	89	51	32	10	4						
19	82	57	40	17	13	4	1				
20 21	74 40	59 48	34	19	4	2		1 9	6	2	4
22	40 72	48 72	51 53	32 35	31	28	11 1	1	О	2	4
23	95	71	30	33 14	8 5	6 2	I	1			
24	93 111	59	15	6	3	2					
25	103	60	18	5	3						
26	100	39	8	1	1						
27	89	26	8	1	1						
28	96	22	4								
29	72	18	1								
30	57	11	-								
31	48	5									
32	49	13									
33	45	3	1								
34	38	3									
35	41	4									
36	28	4									
37	14	1									
38	22	2									
39	16	2									
40	18										
41	10										
42	12	1									
43	11										
44	5										
45	11										
46 47	2 6										
		1									
48 49	5 2 2	1									
50	2	1									
51	4	1									
52	1										
53	1										
54	1	1									
5-7	1	1									

Table 3	.13	(co	ntinued)								
				Nu	mber of	Crewma	n at Age	1			
Age	1	2	3	4	5	6	7	8	9	10	11
55 56	1										
57 58 59	1										
60											
6 1	1										
62	1										

Source: New Bedford Port Society.

ably "for whaling"); the earlier histories of 11 percent are unknown. We drew on several sources of entrance information. Here are some examples.

Abigail. According to the Ship Registers, the Abigail was "[r]egistered [at New Bedford] . . . July 18, 1821—permanent. Built at Amesbury in 1810. . . . Previously registered at Newburyport Mar. 21, 1821" (Work Projects Administration 1:1). The only whaling port other than New Bedford from which an Abigail sailed was Sag Harbor, from which she made voyages in 1802–3 (captain Barnard, destination Brazil), 1803–4, 1809 (captain Bunker, destination Brazil), 1810–11 (captain Bunker, destination Brazil), 1817 (captain Post, destination Brazil), 1819 (destination Brazil), 1820, and 1821–22 (captain Green, destination Brazil) (Starbuck 1878, 200, 202, 210, 224, 230, 234, 240).

Were the Sag Harbor Abigail and the New Bedford Abigail the same vessel? There couldn't have been only one Abigail, if it is true: (1) both that the New Bedford vessel was built in 1810 and that the Sag Harbor vessel sailed for Brazil in 1802; (2) both that an Abigail came to New Bedford fresh from a registration in Newburyport in 1821 and that the Sag Harbor vessel was off on a voyage to Brazil in 1821 and 1822. The voyage records for the Sag Harbor Abigail do not give her tonnage, and both vessels were ships, so we can't prove beyond a doubt that, for example, the 1817, 1819, and 1820 Sag Harbor voyages weren't made by the vessel that was registered at New Bedford in 1821—but it seems unlikely that they were.

In the Entrances Data Set, then, the New Bedford *Abigail* is coded *M*. She wasn't built for whaling; she was built in 1810 and made her first whaling voyage in 1821. The ship didn't transfer to New Bedford from another whaling fleet. The only other thing she could have been doing between 1810 and 1821 was acting as a merchant vessel.

Anaconda. The Anaconda was "[r]egistered Nov. 23, 1852—permanent. Built at Baltimore, Md. in 1852" (Work Projects Administration 1940, 2:15). Her

Table 3.14 Numbers of New Bedford Whaling Voyages with Oldest Crewmen of Various Ages, Sailing Years 1842–58

Age of Oldest			
 Crewman	Number of Voyages	%	
23	1	0.4	
24	1	0.4	
25	3	1.1	
26	3	1.1	
27	4	1.5	
28	13	4.7	
29	10	3.6	
30	7	2.5	
31	11	4.0	
32	24	8.7	
33	15	5.5	
34	21	7.6	
35	24	8.7	
36	11	4.0	
37	11	4.0	
38	19	6.9	
39	13	4.7	
40	15	5.5	
41	8	2.9	
42	8	2.9	
43	11	4.0	
44	4	1.5	
45	10	3.6	
46	1	0.4	
47	6	2.2	
48	6	2.2	
49	2	0.7	
50	2	0.7	
51	4	1.5	
52	1	0.4	
53	0	0	
54	2	0.7	
55	1	0.4	
56	0	0	
57	1	0.4	
58	0	0	
59	0	0	
60	0	0	
61	1	0.4	
62	1	0.4	

Source: Sailors' Ages Data Set (see text).

first New Bedford whaling voyage began also in November 1852. Starbuck lists no voyages for an *Anaconda* other than those from New Bedford. We have coded the *Anaconda W*, in the sense that she was "built for whaling," in the Entrances Data Set.

Arabella. "Registered Oct. 16, 1849—permanent. Built at New York in 1827.... Previously registered at Sag Harbor, N. Y. Sept. 22, 1841" (Work Projects Administration 1940, 1:18). Before her first New Bedford voyage (1849), the Arabella made whaling voyages as a ship of Sag Harbor: in 1827, 1831, and 1833 to the Pacific, in 1837 to the South Atlantic, in 1839 to the South Seas, in 1841 to "Crozette Island," in 1844 to "N. W. Coast," and in 1847 to the Pacific again. At the conclusion of the 1847 voyage, in 1849, the Arabella was sold to New Bedford (Starbuck 1878, 264, 286, 304, 340, 360, 382, 418, 450). She appears in the Entrances Data Set with the code W, both in the sense that she entered the New Bedford whaling fleet directly from another whaling fleet, and in the sense that she entered whaling directly after being built.

In addition to recording how vessels entered the fleet, the Entrances Data Set contains information on where and when they were built. For a list of ship-building towns, see appendix 3D. Table 3.15 shows when vessels were built.

The Exits Data Set provides codes for six ways in which a vessel could leave the New Bedford whaling fleet. A vessel was (1) lost at sea (271 vessels); (2) sunk in the Stone Fleet (16 vessels); (3) lost to a Confederate raider in the Civil War (26 vessels); (4) condemned (83); (5) captured by the Portuguese in 1829 (1); or (6) sold to another port and/or left whaling (366). For twenty-four vessels, mode of exit is unknown. The following are examples of vessels that left by each of these routes.

A. Houghton. All the sources agree that the A. Houghton was lost at sea. "Wrecked in 1877," says the Ship Registers (Work Projects Administration 1940, 3:1). "Lost June 12, '77; crew and 5000 lbs. bone saved," says Hegarty (1959, 3). "Lost in Hudson Bay June 12, 1877; value, \$24,000," says A. Howard Clark (1887a, 184).

Cossack. The Cossack was one of the twenty-four vessels (not all from New Bedford) that the U.S. government purchased for the first wave of the Stone Fleet, an effort of the Union Navy. She now lies at the bottom of the Savannah River. "They were all loaded with stone and filled with valves in their bottoms for sinking. The whole fleet . . . sailed [from New Bedford] on Wednesday last [Thanksgiving Day, 1861] under sealed orders. They are to be used for blockading purposes on the Southern Coast" (WSL 26 November 1861). It took seventy-five hundred tons of stone to fill them, "and many a New Bedford stone wall now lies at the bottom of southern harbors" (Forbes 1955, 27).

The twenty-one vessels in the second wave of the Stone Fleet, which also contained some New Bedford whalers, sailed confidently off to Charleston,

Table 3.15 When New Bedford Whaling Vessels Were Built

	Number Built	
1780–84	3	
1785-89	4	
1790–94	6	
1795-99	10	
1800-1804	25	
1805-9	34	
1810-14	35	
1815-19	74	
1820-24	83	
1825-29	74	
1830-34	75	
1835-39	39	
1840-44	42	
1845-49	53	
1850-54	74	
1855-59	38	
1860-64	8	
1865-69	10	
1870-74	4	
1875-79	19	
1880-84	8	
1885-89	10	
1890-94	1	
1895–99	0	
1900-1904	4	
1905-9	2	

Source: Entrances Data Set (see text).

South Carolina, the next month: "By this time the first fleet of stone ships is quietly deposited in the Savannah river, and the history of the city of Savannah as a commercial emporium is terminated. Charleston harbor, by a similar process will have terminated its career as a Southern port before two weeks elapse" (WSL 10 December 1861).

The average age of the New Bedford whalers that sailed on whaling voyages in 1861 was a little less than twenty-five years. The average age of the former New Bedford whalers that sailed in the Stone Fleet in 1861 was a little more than thirty-six years. "[I. H.] Bartlett [as agent for the government] purchased some of the old whalers for as small a price as thirty-one hundred and fifty dollars," but even so the unsuccessful effort cost about \$250,000 (Forbes 1955, 27).

Benjamin Tucker. In September 1862 the *Benjamin Tucker* was burned by a Confederate raider, perhaps in retaliation for the dispatch of the Stone Fleet.

About half-past eleven [P. M.] a large sailing ship passed to windward.... Both ships were close-hauled on the starboard tack... the stranger set both her royals and flying jib. This suited the Confederate perfectly, as her best sailing was when she was on a wind.... When the range came down to a mile, Semmes had a blank fired to cause the fleer to heave-to. But the latter now bore away a little.... The *Alabama* therefore eased sheets also, and ... before the pursued could get her foretopmast stuns'l set, she was at point-blank range.... Semmes sent his boarding officer to her with instructions that if she were the latter [a prize] he was to hoist a light as soon as he got aboard her.... up went a light to the stranger's peak, and so the two vessels remained near to each other till morning. She was found to be yet another whaler, the *Benjamin Tucker*, eight months out of New Bedford, with 340 barrels of oil. After her crew had been taken off and some of her stores salved such as tobacco, she was set on fire.²⁴

Bogota. The Bogota was condemned: "At Zanzibar April 29.1843 150 Bbls Sperm Oil put in in distress having been on Shore on a Coral Reef and sustaining considerable damage. Was Condemned & Sold at Zanzibar in July 1843."²⁵

Condemnation was the result of a legal proceeding, initiated by "the first officer, or any officer, and a majority of the crew," in which the seaworthiness of a vessel was officially determined by a committee of "two disinterested, competent practical men, acquainted with maritime affairs." If the complaint (that the vessel was "leaky, or insufficiently supplied with sails, rigging, anchors, or any other equipment, or that the crew is insufficient to man her, or that her provisions, stores, and supplies are not, or have not been, during the voyage, sufficient and wholesome") was made in a foreign port, the proceeding took place under the authority of the U.S. consul or commercial agent, if in the United States, under the authority of the judge of the nearest district court or "some justice of the peace." ²⁶

If the vessel was not certified as seaworthy, it could not obtain clearance to

24. Chatterton 1926, 165-66. "The captain of the *Alabama* swore vengeance on New Bedford [for the Stone Fleet] and destroyed or captured every whaler he could find" (Forbes 1955, 28).

25. Wood 1831–73, 1:71. The WSL describes the Bogota's last voyage as "a series of misfortunes and hardships seldom paralleled in a single voyage." Among other things, in the third month of the voyage the first mate was left at the Western Islands on account of ill health, in the fifth month the second mate was left at St. Catharine's on account of ill health and the crew mutinied and were put on shore there, in the tenth month the vessel struck a coral reef, and in the eleventh month twelve of the crew died of "the African fever." After all that, the condemnation of the vessel and necessary abandonment of the voyage may have come as a relief to Captain Nathaniel L. Fuller, whose "continued anxiety and suffering . . . under this complication of disasters of the most painful and harrassing nature, may be better imagined than described" (WSL 28 November 1843).

26. An Act for the Government and Regulation of Seamen in the Merchants Service (1790, Stats. at Large of USA 1:131-35) sets forth the condemnation procedure for vessels in U.S. waters, An Act in Addition to the Several Acts Regulating the Shipment and Discharge of Seamen, and the Duties of Consuls (1840, Stats. at Large of USA 5:394-97) that for U.S. vessels abroad. The quotations in the text are taken from the latter.

leave port until specified repairs had been made. Whether to make them was up to the vessel's agent or, if the vessel was far from home, perhaps the captain. If the agent or captain decided it would be too expensive to make repairs, the vessel was sold, either to be broken up or to be repaired by the new owner.²⁷

Galatea. According to the Ship Registers (Work Projects Administration 1940, 1:116), the Galatea was "[c]aptured by Portuguese in 1832." Actually, she was captured by Portuguese in 1829. See appendix 3E.

Addison. It is a contention of this study that the easy transfer of vessels from the merchant fleet to the whaling fleet and back again contributed to the success of the American industry. The Addison is an example of such transfers.

She was built at Philadelphia in 1816 and served as a merchant ship for seventeen years.²⁸ In 1833 she was sold to Fairhaven, Massachusetts, from which port she made two whaling voyages, April 1833–March 1834 and June 1834–December 1837 (Work Projects Administration 1940, 1:3; Starbuck 1878, 298, 299, 308, 309). In 1838 she was sold to New Bedford, where she continued as a whaler, making seven voyages between 1838 and 1867 (this seems to have been a continuous career; her longest intervoyage interval during this period was four months).²⁹

On 11 May 1867 "Bark Addison, of this port, as discharged from her last voyage, with all her whaling appurtenances, was sold at auction . . . by George A. Bourne [auctioneer, not owner], to Rodolphus Beetle, for \$7,000" (WSL 14 May 1867). Beetle turned right around and sold her off in pieces, before July 3—the largest share (13/32) going to Lorenzo Peirce of New York, who, as a

^{27.} The Ceres (2nd) ran into trouble on her fourth voyage, and the choice was made not to repair her: "At Isle of France April 6.1839 250 Bbls. Oil from Coast of New Holland with loss of Fore & Main Masts Sails Rigging & 2 Boats in a Hurricane. Has been condemned since in consequence of the exorbitant price asked for repairs \$17.500 or more" (Wood 1831–73, 1:85). The Hydaspe stopped at the Cocos Islands in 1862 "leaking 8000 Strokes per hour & leak increasing" (Wood 1831–73, 3:131). The vessel made it as far as Talcahuano, where agents James B. Wood and Company chose not to repair her, but she wasn't broken up: "Condemned at Talcahuano 1863 Name changed to Narcissa and went whaling from there" (Dias, "Catalogue of New Bedford Whaling Ships," 85). "Advices from Talcahuano . . . state that bark Hydaspe, of this port, has been condemned and sold, the ship for \$2,000 and inventory for \$3,500, to Mr. Marks, late of the firm of Crosby & Co. She was to be refitted for the whaling business and Capt. [Charles S.] Pope, her late master, would continue in her" (WSL 22 September 1863). Nor were the Stephania's days over when her repair became too expensive for her agent, Jonathan Bourne Jr.: "[P]ut into Sydney in distress and was condemned April, 1868; refitted, renamed Onward, and sailed under English flag" (Starbuck 1878, 599).

^{28.} The place and date of construction are given in Work Projects Administration 1940, 1:3. That the *Addison* spent her first seventeen years as a merchant ship is deduced from the fact that Starbuck first mentions her when she sailed on a whaling voyage from Fairhaven in 1833 (Starbuck 1878, 298).

^{29.} Work Projects Administration 1940, 1:4. The history of the *Addison*'s whaling voyages from New Bedford comes from the Voyages Data Set.

resident of New Bedford, had owned 11/32 of the bark during her 1860-67 voyage.³⁰

Peirce registered the *Addison* at New York for two more whaling voyages, July 1867-October 1868 and April 1869-April 1870, for which he acted as her agent (Starbuck 1878, 624, 625, 634, 635). At the end of the latter, he returned to New Bedford, where, still as agent but now as three-quarters owner, he sent the *Addison* out on her last whaling voyage (May 1870-April 1874).³¹

Within a month of her return the *Addison* was sold, eventually to owners in Boston who turned her back into a freighter.³² This proved to be unfortunate: the bark was "lost on Fayal, freighting, 1875" (Work Projects Administration 1940, 3:7; Starbuck 1878, 635). In the Exits Data Set, however, the *Addison* is coded not as "lost at sea" but as "sold to another port and/or left whaling," since when she left the New Bedford fleet she left both New Bedford and the whaling business.

In describing sources of the Voyages and Captains and Agents data sets, we mentioned the transcribed New Bedford ship registers. The registers are the fundamental source for the *Owners Data Set*, which consists of 6,387 records—one for each owner during each registration period of each New Bedford vessel whose name begins with an *A*, *B*, *C*, or *D*. Appendix 3F transcribes the *Ship Registers* records for the *Abigail*, and table 3.16 reproduces the *Abigail*'s records in the Owners Data Set. The variables BMONTH and BYR record the beginning date of the registration period, EMONTH and EYR, the ending date (i.e., the beginning date of the succeeding period). By comparing registration records to voyage records (e.g., table 3.4), one can see that registration dates usually correspond to voyage beginning dates or to voyage ending dates. Table 3.17 compares such dates for the *Abigail*. When a registration period corresponds to a voyage period, the variable WHO flags the voyage's captain and agent(s), given that they were also owners.

- 30. Work Projects Administration 1940, 3:7, 2:4. In the New Bedford City Directories of 1859–74, Rudolphus Beetle is listed as a sparmarker, in business through 1868 with William Beetle, who seems to have been his father. William retired ca. 1869 and died ca. 1872.
- 31. Work Projects Administration 1940, 3:7; Voyages Data Set. Although Lorenzo Peirce is identified in the *Ship Registers* as living in New Bedford in 1860, living in New York in 1867, and living in New Bedford again in 1870, he is listed in the New Bedford City Directories continuously during this period: "Peirce Lorenzo, cooper, City Wharf, h. 66 Third" (1859); "Peirce, Lorenzo oil merchant, h. 54 Fifth" (1865); "Peirce Lorenzo (Hadley & Peirce), oil manufacturer, Willis' Point, house 54 Fifth" (1867–68); "Peirce Lorenzo, merchant, house 54 Fifth" (1869–70); "Peirce Lorenzo, merchant, house 54 Fifth" (1871–72). In the directory of 1873–74 there is no listing for Lorenzo Peirce.
- 32. "Bark Addison . . . has been purchased, exclusive of her whaling inventory, by Capt. William Lewis, of this city, for \$8,000. She is to be employed in the merchant service" (WSL 5 May 1874). "ADDISON . . . Bark, of Boston. Re-registered May 8, 1874—temporary. Master: Joseph A. Dias. Owners: John Medina 1/2, Boston; Antonio Medina 1/2, Worcester" (Work Projects Administration 1940, 3:7). "Bark Addison, (formerly whaler of this port,) is to be run as a regular packet to Fayal and the rest of the Azores, by Medina Brothers, of Boston. She has been fitted up in handsome style for cabin passengers, and will sail from Boston August 1st" (WSL 28 July 1874).

Table 3.16 Owners Data Set Records for the Abigail

BMONTH	BYR	EMONTH	EYR	OWNERF	OWNERL	WHO ^a	OCC1 ^b	OCC2 ^b	PCTN	PCTD	RESC	RESS
7	1821	11	1823	David	Coffin		_	_	_	_	New Bedford	MA
7	1821	11	1823	Dennis	Covell	C	21				New Bedford	MA
7	1821	11	1823	Elisha	Dunbar		_	_			New Bedford	MA
7	1821	11	1823	Andrew	Robeson		_	_		_	New Bedford	MA
7	1821	11	1823	Benjamin	Rodman	Α	12	_	_	_	New Bedford	MA
11	1823	12	1825	David	Coffin		_	_	_	_	New Bedford	MA
11	1823	12	1825	Elisha	Dunbar		_	_			New Bedford	MA
11	1823	12	1825	Andrew	Robeson		_	_	_	_	New Bedford	MA
11	1823	12	1825	Benjamin	Rodman		12	_	_	_	New Bedford	MA
12	1825	11	1831	David	Coffin			_			New Bedford	MA
12	1825	11	1831	Elisha	Dunbar		_	_	_	_	New Bedford	MA
12	1825	11	1831	Charles W.	Morgan		10				New Bedford	MA
12	1825	11	1831	Benjamin	Rodman	Α	12		_	_	New Bedford	MA
11	1831	6	1835	Benjamin	Clark	C	21	_	_		New Bedford	MA
11	1831	6	1835	David	Coffin		82	_	_	_	New Bedford	MA
11	1831	6	1835	Elisha	Dunbar		10	_	_	_	New Bedford	MA
11	1831	6	1835	Charles W.	Morgan	Α	10	_	_	_	New Bedford	MA
11	1831	6	1835	Benjamin	Rodman		10	_	_	_	New Bedford	MA
6	1835	10	1835	Benjamin	Clark		21	_	_	_	New Bedford	MA
6	1835	10	1835	David	Coffin		82	_	_	_	New Bedford	MA
6	1835	10	1835	Elisha	Dunbar		10				New Bedford	MA
6	1835	10	1835	Charles W.	Morgan		10				New Bedford	MA
6	1835	10	1835	William R.	Rodman		10				New Bedford	MA
10	1835	4	1839	David	Brayton		43	851	****		New Bedford	MA
10	1835	4	1839	Benjamin	Clark		21	_	_	_	New Bedford	MA
10	1835	4	1839	David	Coffin		82	_	_	_	New Bedford	MA
10	1835	4	1839	Charles W.	Morgan	Α	10	_	_	_	New Bedford	MA

10	1835	4	1839	William Hathaway	Reynard	C	21			_	New Bedford	MA
10	1835	4	1839	William R.	Rodman		10		_	_	New Bedford	MA
10	1835	4	1839	Stephen	Taber		51	966	_	_	New Bedford	MA
10	1835	4	1839	George B.	Worth		10	_	_	_	New Bedford	MA
11	1843	10	1847	David C.	Barnard	С	21	_	_		Nantucket	MA
11	1843	10	1847	David	Brayton		10	851			New Bedford	MA
11	1843	10	1847	Charles W.	Morgan	Α	10	_			New Bedford	MA
11	1843	10	1847	Samuel Griffitts	Morgan		10		_		New Bedford	MA
11	1843	10	1847	John F.	Pope		13				New Bedford	MA
11	1843	10	1847	William G. E.	Pope		10				New Bedford	MA
11	1843	10	1847	William Hathaway	Reynard		21			_	New Bedford	MA
11	1843	10	1847	Stephen	Taber		51	_	_	_	New Bedford	MA
11	1843	10	1847	William	Wister		_	_	_	_	Germantown	PA
11	1843	10	1847	George B., Heirs of	Worth		10				New Bedford	MA
10	1847	5	1852	David C.	Barnard		_			_	Nantucket	MA
10	1847	5	1852	David	Brayton		10	851			New Bedford	MA
10	1847	5	1852	Thomas Dawes	Eliot		7	_	_	_	New Bedford	MA
10	1847	5	1852	Charles W.	Morgan		10	_		_	New Bedford	MA
10	1847	5	1852	Samuel Griffitts	Morgan	A 2	10				New Bedford	MA
10	1847	5	1852	John F.	Pope		13	_	_	_	New Bedford	MA
10	1847	5	1852	Thomas Jr.	Pope		11	_	_	_	New Bedford	MA
10	1847	5	1852	William G. E.	Pope	A 1	10				New Bedford	MA
10	1847	5	1852	William Hathaway	Reynard		21	_	_	_	New Bedford	MA
10	1847	5	1852	Stephen	Taber		51	_	_	_	New Bedford	MA
10	1847	5	1852	George B., Heirs of	Worth		10	_	_		New Bedford	MA
5	1852	8	1852	David, Estate of	Brayton		10	851	2	16	New Bedford	MA
5	1852	8	1852	Thomas Dawes	Eliot		7	_	1	16	New Bedford	MA
5	1852	8	1852	Charles W.	Morgan		10	-	2	16	New Bedford	MA
5	1852	8	1852	Thomas Jr.	Pope		84	_	1	16	New Bedford	MA

Table 3.16		(continued)										
BMONTH	BYR	EMONTH	EYR	OWNERF	OWNERL	WHOª	OCC1 ^b	OCC2 ^b	PCTN	PCTD	RESC	RESS
5	1852		1852	William G. E.	Pope		10	_	3	16	New Bedford	MA
5	1852	8	1852	William Hathaway	Reynard		10	_	1	16	New Bedford	MA
5	1852	8	1852	Alden G.	Snell		42		1	16	New Bedford	MA
5	1852	8	1852	Stephen	Taber		922	_	2	16	New Bedford	MA
5	1852	8	1852	William	Wister			_	2	16	Philadelphia	PA
5	1852	8	1852	George B., Estate of	Worth		10	*****	1	16	New Bedford	MA
8	1852	4	1856	Francis D.	Drew	C	21	_	1	16	New Bedford	MA
8	1852	4	1856	Thomas Dawes	Eliot		7	_	1	16	New Bedford	MA
8	1852	4	1856	Jonathan P.	Lund		461		2	16	New Bedford	MA
8	1852	4	1856	Charles W.	Morgan		10		2	16	New Bedford	MA
8	1852	4	1856	Thomas Jr.	Pope		84	*******	1	16	New Bedford	MA
8	1852	4	1856	William G. E.	Pope	Α	10	_	6	16	New Bedford	MA
8	1852	4	1856	Alden G.	Snell		42	_	1	16	New Bedford	MA
8	1852	4	1856	William	Wister		_	_	2	16	Philadelphia	PA
4	1856	7	1862	Francis D.	Drew		21		1	16	New Bedford	MA
4	1856	7	1862	Thomas Dawes	Eliot		7	_	1	16	New Bedford	MA
4	1856	7	1862	Jonathan P.	Lund		461	_	2	16	New Bedford	MA
4	1856	7	1862	Charles W.	Morgan		10	40	4	16	New Bedford	MA
4	1856	7	1862	Thomas Jr.	Pope		84	_	1	16	New Bedford	MA
4	1856	7	1862	William G. E.	Pope		10	_	7	16	New Bedford	MA
7	1862	5	1865	Oliver & George O.	Crocker & Crocker		10	_	4	12	New Bedford	MA
7	1862	5	1865	Ebenezer F.	Nye	C	21		4	12	Sandwich	MA
7	1862	5	1865	Loum	Snow	Α	10	-	3	12	New Bedford	MA
7	1862	5	1865	Pardon	Tillinghast		10	_	1	12	New Bedford	MA

Source: Work Projects Administration 1940. The registration records underlying the table are transcribed in appendix 3F.

 $^{{}^{}a}C$ = captain; A = agent; AI = first agent (of two); A2 = second agent (of two).

^bSee appendix 3G to interpret the occupational codes.

Table 3.17	Registration and	Voyage	Dates for	the Abigail

	Month	Year	
Registered	7	1821	sailed
	9	1823	returned
Registered	11	1823	
Registered	12	1825	sailed
-	12	1828	returned
	5	1829	sailed
	6	1831	returned
Registered	11	1831	sailed
Registered	6	1835	returned
Registered	10	1835	sailed
•	10	1838	returned
	4	1839	sailed
	7	1839	returned/sailed
	4	1843	returned
Registered	11	1843	sailed
ū	7	1847	returned
Registered	10	1847	sailed
Registered	5	1852	returned
Registered	8	1852	sailed
Registered	4	1856	returned
J	8	1856	sailed
	8	1860	returned
Registered	7	1862	sailed
=8	5	1865	lost

Source: Adapted from table 3.4 and appendix 3F.

Appendix 3G lists our codes for the variables OCC1 and OCC2 (the data set also contains OCC3, but no *Abigail* owner had a third occupation that we've discovered). Occupations were derived largely from individual and corporate entries and advertisements in the New Bedford City Directories.³³ This is why occupation codes are relatively scarce in records before 1836, the year in which the first directory was published. When codes are present in the earlier years,

33. The full title of the directory published in 1841 is The New-Bedford Directory, Containing the Names of the Inhabitants, Their Occupations, Places of Business and Dwelling Houses, and the Town Register, with Lists of the Streets and Wharves, the Town Officers, Public Offices and Banks, Churches and Ministers, Physicians and Surgeons, and Other Useful Information; to Which Is Added a List of Vessels Employed in the Whale Fishery, Belonging to the United States. The "Town Register" begins by informing the reader that "John Tyler, of Virginia" is "President U. States" and makes a salary of \$25,000. The list of town officers includes four fence-viewers (Jonathan Potter, Isaiah Wilcox, William Howland II, and Daniel Ripley) and an inspector of coal baskets (George W. Shearman). Fence-viewer William Howland II was also the health officer and the superintendent for lighting the streets. George W. Shearman was also a field driver. Charles W. Morgan was a member of the board of directors of the Bedford Commercial Bank (incorporated 9 February 1816, capital \$400,000), a trustee of the New-Bedford Institution for Savings, the owner of a candle house (manufacturing), a member of the board of managers of the New-Bedford Temperance Society, and the managing owner of 10 of the 301 whaling vessels listed as registered in New Bedford as of October 1841.

it is either because we extrapolated occupations from later years or because we identified the owner-captain of a voyage as OCC1 = 21 (master mariner) or the owner-agent as OCC1 = 12 (whaling agent).

For example, in the registration record dated December 1825, Charles W. Morgan has an OCC1 value of 10 (merchant; trader; auctioneer and commission merchant). His entry in the 1836 city directory reads, "Morgan Charles W. merchant, counting room Rotch's wharf, house 149 County head of William," which yields the occupation code 10 in subsequent registration records (1843 et. seq.).³⁴ But a Charles W. Morgan was a part owner of the *Abigail* also in records dated 1825, 1831, and 1835. We made two assumptions: (1) that the Charles W. Morgan who first invested in the *Abigail* in 1821 was the same Charles W. Morgan who invested in 1831, 1835, and 1843; (2) that if he wasn't a merchant, a trader, or an auctioneer and commission merchant in 1821, he was at least a proto-merchant, and his OCC1 value might better be coded 10 than left missing.

Some owners in the data set (severely truncated, remember, because it refers only to the first 192 vessels in the alphabet) have one or two ownership registration records. Some have hundreds. Charles W. Morgan has forty-two, beginning in December 1823 and ending in September 1856: Abigail nine, Agate three, Alfred three, Benezet two, Charles one, Charles W. Morgan five, Charleston Packet one, Clarice three, and Condor fifteen.

Entries in the first volume of the *Ship Registers* (covering the years 1796–1850) do not indicate the sizes of owners' holdings. Thereafter, ownership fractions are reported, and we have recorded them as PCTN and PCTD (percent numerator and percent denominator). The most common denominator is 32, the second most common, 16, the third, 64—that is, it was common to divide the ownership of a vessel up into thirty-seconds, sixteenths, or sixty-fourths.

In addition to the Captains and Agents Data Set, described above, which has one record per voyage, information about agents is recorded in the *Agents' Occupations Data Set*, which has one record per occupation recorded in a city directory (1836, 1845, 1856, 1867, 1875). Men who agented whaling vessels are never described as whaling agents in the directories (see appendix 3G). Instead they are described as merchants (in 73.7 percent of the records), dealers in iron (Alfred Gibbs and Company in 1836 and the firm of William G. E. Pope and S. Griffitts Morgan in 1845), merchant tailors (in 4.6 percent of the records), accountants (Caleb G. Gilbert in 1836, Thomas Wilcox in 1845, William R. Rotch and Company in 1836, and William T. Smith in 1867), booksellers (Charles Taber in 1856), provision merchants (in 7.7 percent of the records), sailmakers (Charles Hitch in 1845, Charles Hitch and Son in 1856 and 1867, the firm of John H. Chapman and Josiah S. Bonney in 1856, and Joshua

^{34.} In the 1838, 1839, 1845, 1852, 1856, and 1859 directories also, Charles W. Morgan is a "merchant." The 1865 directory has the entry "Morgan Sarah widow, h. 142 County." By 1867 the directory's compilers had figured out Sarah Morgan's address ("Morgan Sarah, widow of Charles W. house 149 County"). She continues to be listed as Charles's widow through 1887.

C. Hitch in 1875), and so on. The only agenting firm that appears in all five sampled directories is that of Jonathan Bourne Jr. Six firms appear in four directories.

Occupations are coded also in the *Tax List Data Set*, built from the New Bedford property tax list printed in the *Whalemen's Shipping List* on 28 August 1855. (The codes are the same as those used for the Owners Data Set [appendix 3G] and were assigned with the aid of the 1856 city directory, entries in which report residents' occupations.) The Tax List Data Set contains 477 records, one for each taxpayer listed in the newspaper (only those who paid at least \$50 in tax—on property of \$6,849—were supposed to be listed). The property tax assessments of businesses are included in the newspaper's list, but businesses have been omitted from the data set. Instead, business property has been attributed in equal shares to business partners (see chapter 10). Among the individuals are forty-three women and fifteen estates.

In addition to the variables OCC1 and OCC2, the Tax List Data Set contains taxpayers' names, genders, and property amounts. The largest property, \$631,700, was held by the estate of prominent whaling agent John Avery Parker.³⁵ The next largest were James Arnold (agent), \$544,500; Edward Mott Robinson (agent), \$464,600; the estate of William Rodman (agent), \$462,400; Sylvia Ann Howland (daughter and heir of Gideon Howland, agent), \$342,600. The poorest listed taxpayer (even the poorest wasn't poor) was William Maxfield, a housewright, with property worth \$6,200, the second poorest, Benjamin Almy, a cooper, with property worth \$6,500. Charles W. Morgan, the merchant and agent (and our specimen shipowner), was the eighth wealthiest New Bedford taxpayer in 1855.

Two other data sets made for the present effort are described elsewhere: the Hunting Pressure Data Set in appendix 8A and the Competition Data Set in appendix 8B.

Appendix 3A

Destinations of New Bedford Whaling Voyages

A voyage's hunting ground is one of the pieces of information given by every standard source. Joseph Dias ("Catalogue of New Bedford Whaling Ships") heads a column "Where," Alexander Starbuck (1878), "Whaling ground," the

^{35.} Parker had died on 30 December 1853 after a short illness, at the age of eighty-four. He was said to be worth \$1,200,000. As the WSL (3 January 1854) commented, he "was the last of the richest rich men of New Bedford." In 1861 his son, Frederick Parker, the Son of the whaling agency John Avery Parker and Son, died at age fifty-five: "[H]e drank at dinner some cider from a bottle, which it was discovered had at one time contained poison, and from which his death resulted" (WSL 29 October 1861).

Whalemen's Shipping List, "Bound," Reginald Hegarty (1959), "Where Bound"; Dennis Wood's entries (1831–73) begin "Sailed . . . for the Pacific Ocean . . . for the Indian Ocean . . . for the Ind. & Pacific . . . for the I.O. & N.W. Coast." We have generally taken ground from the listing in which we first encountered the voyage; cross-checking among contemporary sources revealed a remarkable consistency.

Where did our sources get the information? Dias seems to have taken it directly from Starbuck for the period Starbuck covers (1791–1876). Starbuck doesn't say where he got it, although he refers moodily to "newspapers, which ... pass from the possession of the very few who, when living, treasured them, and fall into the hands of those who value them at so many cents per pound," and to customs records, destroyed by the British during the Revolutionary War and later by fire, mildew, and decay (1878, 1). Philip F. Purrington, who edited Hegarty's continuation of Starbuck, says in his "Postscript," "[T]he work has relied mainly on files of *The New Bedford Whalemen's Shipping List*" (Hegarty 1959, 52). The WSL (1843–1914) published a weekly report of the disposition of the U.S. fleet and seems to have drawn its information on destinations from the whalemen's shipping paper filed with the collector of the customs of the district when a vessel left on a whaling voyage.

What was a hunting ground, as reported by Dias, Starbuck, et al.? In some cases, for short voyages, it seems to have been the actual, relatively small area in which the vessel intended to hunt for whales—for example, the Crozet Islands, south of Madagascar in the Indian Ocean, or the Bahamas, in the Atlantic. In most cases it was a more general designation: North West Coast, South Atlantic. We have grouped the more specific grounds within the more general, in order to carry out interground analyses, as follows:

Atlantic³⁶: Africa, Atlantic, Bahamas, Brazil, Cape Horn, Cape Verde Islands, Cumberland Inlet, Davis Strait, Grand Banks, Guinea, Hudson Bay, North Indies, Patagonia, South Atlantic, South Coast, St. Helena, Tristan, West Indies, Western Islands, Woolwich Bay.

Indian: Cape of Good Hope, Crozet Islands, Delagoa Bay, Desolation Island, East Coast of Africa, Indian Ocean, Sooloo Island.

Pacific: Chile, Japan, Japan and Okhotsk, Mexico, New Holland (Australia), New Zealand, North Pacific, North West Coast, North West Coast and Pacific, Okhotsk Sea, Pacific, Peru, South Pacific, South Seas.

Western Arctic: Arctic, Bering Strait.

Mixed Grounds (voyages to mixed grounds are omitted from ground-related analyses): Atlantic and Indian, Atlantic and Pacific, Indian and New Zealand, Indian and North West Coast, Indian and Pacific, Pacific and Arctic, South Atlantic and Indian.

^{36.} In some of our comparisons among grounds, Cumberland Inlet, Davis Strait, and Hudson Bay are grouped as Eastern Arctic and distinguished from other Atlantic grounds.

Appendix 3B

The Voyages of the Abigail as Described in the Dennis Wood Manuscript

Each of the four main volumes of the Wood abstracts (1831–73) covers a different span of years. Within a volume, abstracts are organized more or less alphabetically by vessel name. Following are transcriptions of the abstracts for voyages of the *Abigail*.

Ship Abigail of New Bedford Chs. W. Morgan 310 Tons

Clark Master Sailed Novm. 24.1831 for the Pacific Ocean. Arrived June 12.1835 & Turned out 2254 Bbls Sperm Oil in 42 mo 19 days.

Wm H. Reynard Master Sailed Octr 24.1835 for the Pacific Ocean. Reported on Off Shore Grounds Sept. 10.1836 450 Bbls. Spoke on off shore Ground 12 mo. out 600. At Gallipagos Islands Jany 23.1837 850. Spoke Mar. 4 900. At Mowee May 23 1000. Sailed from Oahu Novmr 5 1900 on a Cruise. Reported by a letter from the Captain dated Panama Banks Feby 8.1838 2300. Heard from no date 2500 Wanting 100 to fill. Arrived October 26.1838 with 2400 Bbls Sperm Oil in 36 mo. & 2 days. Turned out 2577 Bbls Sperm & 9 Blackfish Oil.

James V. Cox Master Sailed April 2.1839 for the Pacific Ocean. Returned July 6.1839 Leaky having Landed 60 Bbls Sperm Oil at the Western Islands on her passage out. Absent 3 mo. 4 days.

Cox Master Sailed July 28.1839 for the Pacific Ocean. At Fayal Augst 19 no Oil. Spoke off Cape Horn 93 days out no Oil. Sailed from Payta Jany 30.1840 180 Bbls Sp. Oil. Spoke on Off Shore Ground Feby 25 200. A letter from the Capt. reports her at Maui May 11 300 for Japan in a few days. Sailed from Oahu Octr 30 600. At Maui April 28.1841 750. Sailed from Honolulu May 11 oil not stated. A letter reports her at Oahu Novmr 20 1200 & Sailed 27th on a cruise. Reported at Kings Mill Group Jany 28.1842 1250 Sp. At Oahu Octr 1 leaking bad would have to heave out & Strip her bottom & Cork. At Oahu Octr 31 1600 had hove out calked & Sheathed was loading for home. At ditto Nov. 3 1600 ready for home in good order. Arrived April 6.1843 with 1500 Bbls Sperm Oil in 44 months 8 days. Turned out 1640 Bbls oil.

Barnard Master Sailed November 27.1843 for the Pacific. Spoke March 4 Lat. 57.17 S. Long. 69.56 W. 10 Bbls Sp Oil. Spoke April 6 off Massa [?] clean. Reported at Santa May 24 1844 70 Sp. A letter reports her at Paita Octr 15 450 Sp. Spoke off Shore Decmr 4 400. At Marquesas Islands April 25.1845 750 Sp. Spoke April 26 Long. 128 W. 900 Sp. At Paita Sept 24 850. A letter reports her at Paita Octr 12 850 Sp. Heard from on the Line Long. 80 W. Novmr 21 950 Sp. At Maui April 9.1846 1000 Sp. for N.W. Coast. At San Francisco Augt 10 1100 Sp. 300 Wh. Off Juan Fernandes Feby 19.1847 1400 Wh. 300 Sp.

[sic] At Talcahuana April 8 1400 Sp. 300 Wh. At ditto April 9. At ditto April 19. Spoke May 2 Lat. 40.10 S. Long. 82.10 W. 1500 Sp. 300 Wh. Arrived July 26.1847 with 1400 Bbls Sp. 250 Bbls. Whale Oil 2000 # Bone in 43 months & 29 days. Turned out 1564 Bbls Sp. 310 Bbls Whale Oil 2600 # W. Bone. (1:1)

Ship Abigail of New Bedford C. W. Morgan 310

Young Master Sailed October 27.1847 for the Pacific. A letter reports her off Cape de Verd Islands Decmr 25 clean. Off Juan Fernandes Feby 24.1848 clean. At Maui April 29 60 Bbls Sp. Oil. At Oahu Nov. 7 from Japan 150 Sp. Spoke on Japan June 15.1849 500 Sp. At Maui Novmr 12 500 Sp. At Guam Mch 12 450 Bbls. At Hilo Sept 17 no oil this season. At Lahaina Sept 30. A letter reports her at Honolulu Nov 1 625 Sp. had Shipped 200 Bbls per Canada for N.B. and would fit for Arctic Seas. Cld Nov. 1 to cruise. At Hong Kong Feby 7.1851 400 Bbls. Sp. Spoke Aug 6 40 Wh. At Honolulu Octr 19 400 Sp. Cld at do Dec. 13 for home. Arrived May 29.1852 with 350 Bbls Sperm 40 Bbls Whale Oil & 1000 # Bone in 55 Months & 2 Days. also 1148 Bbls Wh oil and 57.865 # Bone on freight. Turned out 381 Bbls Sperm 39 Bbls Whale & 1300 Lbs Bone.

Drew Master Sailed Augst 24.1852 for the Indian Ocean. At Fayal Sept 18 Clean. Off Porto Brava Octr 11 clean. At Swan River N.H. Jany 15.1853 Clean. At Mongamu Mch 6. Ar at Honolulu Octr 9 full 30 sp 2200 wh 35000 # Bone fm Ochotsk Cld at do Dec. 19 to cruise having shipped Oil & Bone. Ar at Hilo Feby 20. Spoke in Ochotsk Sea prev to July 3 8 Whs. Spoke in do July 26 18 Whs. Ar at Honolulu Octr 27 1950 Wh 5800 Lbs Bone. Cleared from ditto Jany 16.1855 to cruise. Taber Master, At Guam Mch 7 60 Sp this cruise. Hrd fm July 1 in Ochotsk Sea 8 whs this season. Another report says 11 whales same date. Ar at Lahaina Octr 25 1200 Bbls. A letter reports her at ditto Octr 27 1300 Wh 18000 Lbs Bone this season. Cld at do Nov. 13 cruise & home. Sld fm Whytootack [?] Dec 11 no oil this cruise for N.Z. Spoke Mar. 30.1856 on the Line Long. 37 W. 260 Sp this cruise. Arrived April 28.1856 with 300 Bbls Sperm & 1250 Bbls Whale Oil 21.000 # Whale Bone on board. Sent home on the Voyage 29 Bbls Sperm 3900 Bbls Whale Oil & 60.500 # Whale Bone in 44 Months & 4 days. Turned Out 296 Bbls Sperm, 1309 Bbls Whale Oil & 21.000 Lbs Whale Bone. (2:1)

Ship Abagail [sic] of New Bedford Wm. G. E. Pope 310

Rufus F. Smith Master Sailed Augst 25.1856 for the Pacific Ocean. Spoke Augst 28 Lat. 39 N. Long. 69 W. clean. At Fayal Sept. 27 10 Sp. Spoke Nov. 28 Lat. 34 S. Long. 10 E. 10 Sp. Hrd fm off Desolation Feby 5.1857 3 Whs. Spoke Mch 2 no lat &c. 280 Wh. At Tulear [?] Bay Madagascar Apl 13 300 Bbls. Off Port Dauphin May 16 10 Sp. 300 Wh. Spoke July 26 Lat. 30.47 S. Long. 40.03 E. 255 Bbls on brd. At Augustine Bay Sept. 17 100 Sp. 390 Wh. shipped per "Massasoit" 1600 # Bone. Sld fm do Octr 1 to cruise. Spoke Nov. 28 Lat. 37 S. Long. 11.30 E. 300 Wh. Spoke Jany 23.1858 no lat &c. 1 Wh.

Spoke on Desolation no date 320 Wh. Ar at Freemantle [?] prior to Apl 12 400 Bbls & Sld. Reported April 15 nothing this cruise. Spoke Sept. 20 off Rosemary Is. 230 Sp. 670 Wh & cutting. A letter reports her at Anjier Octr 30 230 Sp. 670 Wh. At Freemantle Feby 10.1859 470 Sp. 670 Wh. At do Mch 5. A letter reports her at Anjier Sept. 22 520 Sp. 680 Wh. Sld fm Mauritius Octr 22 520 Sp. 700 Wh. Spoke off Port Dauphin Dec. 14 no oil this cruise. Spoke Feby 25.1860 no oil this season. At St. Helena June 13 500 Sp. 700 Wh. Sld fm do June 23. Arrived Aug. 18 1860 with 500 Bbls Sperm 600 Bbls Whale Oil & 800 # Bone in 47 Months & 23 Days. Turned out 504 Bbls Sperm 703 Bbls Whale Oil & 600 # Bone. Sold to Loum Snow June 28.1862 for \$6500. (3:1)

Ship Abigail of New Bedford Loum Snow 310

Ebenezer F. Nye Master Sailed July 30.1862 for the North Pacific. At Fayal Sept. 15 45 Bbls Sperm Oil Shipped per Acasa. At Falkland Islands Novmr 23rd. A letter from Capt. Nye reports her at Paita Feby 8.1863 50 Sp. 3 Rt. Whales (about 300 Bbls Wh & B. Fish) bound off shore Kings Mill & Ochotsk. A letter reports her at Bakers Island April 28 275 Sp. 258 Whale all told. At San Francisco Octr 2 230 Sp 1300 Wh Bone, had shipped Bbls sperm & Bbls Whale Oil # Whale Bone [sic]. A letter from Capt. Nye reports her off Cape St. Lucas Novm 19 104 Sp. since leaving San Francisco. A letter from Capt. Nye reports her at Sea Jany 24.1864 Lat. 11.50 S. Long. 116 W. 120 Sp. this cruise. A letter from Capt. Nye reports her at Ascencion [sic] Island April 2 550 Sp. 1350 Whale all told. At Yokohama Japan May 3rd. Sailed from ditto May 8 for Arctic. At San Francisco Octr 19 from Arctic 300 Wh. Oil & Bone [sic] the Season. Sailed from ditto Novmr 19 to cruise. At Kanagawa April 26.1865. 20 Sp. since leaving San Francisco. A letter from Capt. Nye reports her at Yokohama April 24. 18 Sp. last cruise. Burnt by the English Rebel Pirate Shenandoah in the Ochotsk Sea in June 1865. (4:1)

Appendix 3C

Crew Lists for the Abigail from the Whalemen's Shipping List

The crew lists printed in the WSL (beginning in 1852) were supposed to be transcriptions of official documents, but modest differences sometimes appeared. The following lists for voyages of the Abigail were printed in 1852, 1856, and 1862. Notice that, while most crewmen were drawn from New England and the Middle Atlantic states, a few came from as far away as Ohio, Wisconsin, and Texas.

Ship *Abigail*, Capt. Francis D. Drew, of New Bedford, sailed from this port Aug 24th, 1852, for the Indian and N Pacific Oceans. The following persons compose her crew:

Milton Fish, of Galveston, Texas, mate; John C. Gifford, of Falmouth, Mass., 2d mate; John R. Smith, of Hempstead, N.Y., 3d mate; Arthur Patterson, of Hollis, Me., Michael Murray, of Dorset, Vt. and John B. Sherman, of Falmouth, Mass., boatsteerers; Albion P. Sutherland, Topsham, Me., cooper; Carlton Blagden, Emden, Me.; James H. Hervey, Canaan, Me.; Amos Delong, Westford, N.Y.; Charles Keyser, Philadelphia, Pa.; Mahlon Erdman, Doylestown, Pa.; John Hacker, Honesdale, Pa.; Kepler Keith, Augusta, Me.; George Palmer, Billerica, Mass.; Elisha B. Bradley, Binghampton, N.Y.; George P. Morgan, Penysburgh, Ohio; Joseph Ball, Canton, Md.; Richard Contant, Eisopus, N.Y.; Francis Harrington, Boston, Mass.; Thomas Brown, Farmington, N.Y.; D. O. Foster, Monson, Mass.; Shaik Jaffir; John H. DeGrace; Merimac Antone; James Hyatt; John Race, James Short and Lawrence Brady, residences unknown, seamen.

Ship *Abigail*, of New Bedford, Capt. Rufus N. Smith, sailed from this port August 25th, 1856, for the North Pacific Ocean. The following persons compose her crew:

Jessie A. Warner, of Chester, Mass., mate; James Stowes, 2nd mate; Robert Bailey, of Albany, N.Y., 3d mate; Manuel Lewis; Saml. F. Care, of Franklin, N.Y.; Frederick Syckle, of Schuylkill Haven; T. W. Dorubrash, boatsteerers; Rufus I. Archer, of Salem, Mass., cooper and ship keeper; Hubert Rock, Brandon, Vt.; Alfred Catee, New York city; Rich'd. C. D. Lacy, Baltimore, Md.; Thomas Dunn, Skaneateles, N.Y.; Job M. Briggs, Wareham; James H. Buck, Fort Edward, N.Y.; Wm. H. Harrington, New York city; James Snuggs, Boston, Mass.; William Albertson, Philadelphia; John Albertson, do; John Gibron, Burlington, Vt.; John Anderson, New York city; William H. Eaton, Springfield, Mass.; William H. Blissard, Danbury, Conn.; Daniel Barton, Abington, Mass.; H. L. Sexton, Cleveland, Ohio; Charles Donly, Madison, N.Y.; Paul Jones, Scruple, N.Y.; John Paty, Sabino Jacinto Matthews and Joseph Thomas, residences unknown, seamen.

Ship Abigail, Capt. Ebenezer F. Nye, sailed from this port July 31st, 1862, for the North Pacific Ocean. The following persons compose her crew:

James T. Taber, of Fairhaven, first mate; Milton Lee, of Southampton, N.Y., second mate; Albert Williams, of New Bedford, third mate; Edward T. Taber, of Fairhaven, James R. Lee, of Southampton, N.Y., James C. Johnson, of Adrian, Wis., and Thomas George, boatsteerers; William Burnett, of New York, cooper; Joseph Francis, steward; James Saunders, of Boston, cook; Samuel C. Hunt, New York, Alfred Rhines, Bath, N.J., Edward M. Davis, Philadelphia, John Hare, Chilmark, William Bennet, Rochester, Rowland Williams, Al-

bany, George M. Staples, New York, James Baxter, Hudson, Charles Penney, Pittsburgh, Joseph Shoren, Steventen Falls, William H. Laire, Savannah, Ga., John C. Knights, Lincoln, Mass., John A. Keys, Swansey, N.H., Aaron C. Bryant, New Bedford, George Stell, Rochester, N.Y., William Watson, Dick Kanaka, and Jose Gracia, seamen.

Appendix 3D Where New Bedford Whalers Were Built

Table 3D.1 lists the towns and cities where New Bedford whaling vessels were built, whether as whalers or as merchantmen, in conjunction with the towns and cities that were home ports for whalers during the nineteenth century.

Table 3D.1 Birthplaces of New Bedford Whaling Vessels, and Home Ports of American Whaling Voyages That Sailed in the Nineteenth Century

	New Bedford Vessels		Nineteenth- Voyag	
	Number	% Number		%
	A: By Sta	te and City		
California				
San Francisco			688	6.0
Connecticut				
Bridgeport			23	
Chatham	4			
Derby	2			
East Haddam	l		3	
East Lyme	l			
Glastonbury	l			
Groton			2	
Guilford	l			
Haddam	5			
Hartford	l			
Killingworth	l			
Madison	l			
Middleton	l			
Middletown	2			
M ystic	l		105	
New Haven	2		4	
New London	1		869	
Norwich	2		3	

	New Bedford Vessels		Nineteenth-Century Voyages	
	Number	%	Number	%
Saybrook	2			
Southport	1			
Stonington	4		171	
Stratford	1			
Wethersfield	1			
Unknown	1			
Total	37	5.1	1,180	10.3
Delaware				
Wilmington			13	0.1
Florida				
Gowes Bluff	1	0.1		
Georgia	•	v		
St. Simons	1	0.1		
Maine	•	٠.٠		
Addison	1			
Bath	31			
Belfast	1			
Blue Hill	1			
Boothbay	3			
Brunswick	1			
Bucksport	1		1	
Calais	1		1	
Camden	1			
Castine	1			
Columbia	1			
Columbia Falls	1			
Cumberland	1			
Damariscotta	1			
East Machias	1			
	3			
Eastport Falmouth	6			
Frankfort	1			
	2			
Franklin	2 2			
Freeport				
Georgetown	1			
Hallowell	1			
Hampden	1			
Hancock	2			
Kennebunk	4			
Lubec	1			
Newcastle	4			
Nobleboro	3			
Orland	1			
Orrington	1			
Phippsburg	1			
Pittston	3			

Table 3D.1

	New Bedford Vessels		Nineteenth-Century Voyages	
	Number	%	Number	%
Portland	4		2	
Richmond	l			
Robbinston	3			
Saco	l			
Scarborough	l			
Searsport	3			
South Berwick	l			
Thomaston	2			
Waldoboro	1			
Wells	i			
Westbrook	i			
Wiscasset	3		2	
Total	105	14.2	5	0.0
Maryland	105	11.2	3	0.0
Baltimore	17			
Cambridge	2			
Worcester County	1			
Total	20	2.7		
Massachusetts	20	2.7		
Amesbury	4			
Barnstable	2		1	
	1		1	
Berkley	1		22	
Beverly	10		33	
Boston	19		133	
Braintree	1			
Charlestown	5 2			
Chelsea	2			
Chilmark	_		1	
Cohasset	3			
Dartmouth	28		67	
Dighton	2			
Dixbury	1			
Dorchester	1		8	
Duxbury	18		1	
Edgartown			182	
Essex	17			
Fairhaven	36		540	
Fall River	l		61	
Falmouth	8		54	
Freetown	2		3	
Gloucester	2		5	
Hanover	4			
Haverhill	6			
Holmes Hole			36	

	New Bedford Vessels		Nineteenth-Centu Voyages	
	Number		Number	%
Kingston	7			
Lynn	1		35	
Marblehead			2	
Marshfield	1			
Mattapoisett	8		126	
Medford	21			
Milton	3			
Nantucket			1,312	
New Bedford	70		4,094	
Newbury	15			
Newburyport	10		16	
North River	1			
Orleans			29	
Pembroke	3			
Plymouth	4		44	
Portsmouth	1			
Provincetown			906	
Quincy	4		1	
Rochester	75		78	
Salem	10		84	
Salisbury	5			
Sandwich	1		13	
Scarborough	1			
Scituate	13			
Sippican	1		99	
Somerset	4		9	
South Scituate	1			
Swansea	6			
Taunton	1			
Tisbury	•		2	
Troy	2			
Truro	-		4	
Wareham	7		28	
Wellfleet	1		2	
Wellington	i İ		_	
Westport	14		281	
Weymouth	2			
Yarmouth	-		2	
Total	457	62.8	8,292	72.
New Hampshire	1 57	02.0	0,272	, 2.
Durham	3			
Exeter	1			
	2			
Newmarket	3		12	
Portsmouth	<i>3</i> 9	1.2	12	0.
Total	9	1,2	12	0.

Table 3D.1

	New Bedford Vessels		Nineteenth-Century Voyages	
	Number	- %	Number	
New Jersey				
Newark			5	
New Brunswick	1			
Perth Amboy	1		1	
Total	2	0.3	6	0.1
New York				
Athens	1			
Brookhaven	2			
Cold Spring			38	
Greenport			93	
Hudson			48	
Newburgh			10	
New Suffolk			9	
New York	48		70	
Port Jefferson	2			
Poughkeepsie			19	
Queens County	1			
Sag Harbor	1		583	
Total	55	7.5	870	7.6
North Carolina				
Beaufort	1			
Craven County	1			
Edenton			1	
Wilmington	1			
Unknown	1			
Total	4	0.5	1	0.0
Pennsylvania				
Kensington	3			
Philadelphia	20		2	
Total	23	3.2	2	0.0
Rhode Island				
Bristol	3		81	
Greenwich			4	
Newport	2		88	
North Kingston	1			
Portsmouth			1	
Providence	2		33	
Tiverton	1		1	
Warren	3		178	
Total	12	1.6	386	3.4
South Carolina				
Charleston	2	0.3		
Virginia				
Mathews County	2	0.3		
Grand total	730	100.0	11,455	100.0

Table 3D.1

	New Bedford Vessels		Nineteenth-Century Voyages	
	Number	%	Number	%
B.]	In Descending Order o	f Numbers of Ve	ssels Built	
Rochester, MA	75	10.3	78	0.7
New Bedford, MA	70	9.6	4,094	35.7
New York, NY	48	6.6	70	0.6
Fairhaven, MA	36	4.9	540	4.7
Bath, ME	31	4.2		
Dartmouth, MA	28	3.8	67	0.6
Medford, MA	21	2.9		
Philadelphia, PA	20	2.7	2	0.0
Boston, MA	19	2.6	133	1.2
Duxbury, MA	18	2.5	1	0.0
Essex, MA	17	2.3		
Baltimore, MD	17	2.3		
Newbury, MA	15	2.1		
Westport, MA	14	1.9	281	2.5
Scituate, MA	13	1.8		
Newburyport, MA	10	1.4	16	0.1
Salem, MA	10	1.4	84	0.7
Total		63.3		46.8
C. In Desce	ending Order of Numb	ers of Nineteenth	-Century Voyages	
New Bedford, MA	70	9.6	4,094	35.7
Nantucket, MA			1,312	11.5
Provincetown, MA			906	7.9
New London, CT	1	0.1	869	7.6
San Francisco, CA			688	6.0
Sag Harbor, NY	1	0.1	583	5.1
Fairhaven, MA	36	4.9	540	4.7
Westport, MA	14	1.9	281	2.5
Edgartown, MA			182	1.€
Warren, RI	3	0.4	178	1.6
Stonington, CT	4	0.5	171	1.5
Boston, MA	19	2.6	133	1.2
Mattapoisett, MA	8	1.1	126	1.1
Mystic, CT	1	0.1	105	0.9
Sippican, MA	1	0.1	99	0.9
Greenport, NY			93	0.8
Newport, RI	2	0.3	88	0.8
Total		21.7		91.4

Sources: Birthplace data are from the When and Where Built Data Set. The nineteenth-century-voyages data are from Starbuck 1878; Hegarty 1959; the Voyages Data Set.

Appendix 3E The Capture of the Galatea

In July 1829 Portugal was engaged in what proved to be a six-year struggle between its king, Dom Miguel—who, depending on one's point of view, had either seized or accepted the crown in 1828—and his ten-year-old niece, Maria da Glória—who in 1834 became Queen Maria II.³⁷ Dom Miguel was the younger brother of Maria's father, Dom Pedro. Dom Pedro was the emperor of Brazil and, for a period of six weeks following the death of his father in 1826, had been King Pedro IV of Portugal.

Dom Pedro apparently decided that ruling Brazil was a full-time job. He handed the crown of Portugal over to his young daughter on the condition that she marry Dom Miguel, her uncle. They were betrothed, Dom Miguel became her regent, and Dom Pedro duly abdicated. Four months later (7 July 1828), Dom Miguel abandoned Maria da Glória and was crowned king of Portugal in his own right.

Naturally enough there were those who thought he had behaved badly, and sided with Maria. She and her supporters, eventually victorious, were head-quartered on the island of Terceira, in the Azores. Dom Miguel began a blockade of Terceira on 27 February 1829.

Three months later, on 1 June, the *Galatea* set off from New Bedford on a whaling voyage in the Atlantic. Captain Elihu Russell later said he hadn't heard of the Portuguese blockade. When the *Galatea* stopped at Terceira for supplies on 4 July, she was captured by Dom Miguel's forces. The ship had sailed with a crew of twenty-one; eleven of them were imprisoned for several months, part of the time confined in irons. Between June 1829 and June 1830, three other American vessels—a whaler of Edgartown and merchantmen of Portland and Boston—were also captured at or near Terceira.

It took two and one-half years from the capture of the Galatea for the U.S. indemnity claims for the four vessels to be negotiated with Dom Miguel's government. Diplomatic relations between the United States and Portugal were for a time disrupted by the Portuguese change of government, and in any case the Portuguese were in financial difficulties. In February 1831 President Andrew Jackson replied to an inquiry from the U.S. House of Representatives that he had given orders to "fit out a ship of war for the more effectual protection of our commerce" in Portuguese waters (Treaties and Other International Acts 3:662), and—perhaps as a result—an agreement was finally reached at Lisbon on 19 January 1832. A quarterly schedule was set up according to which the claims would be paid in full by 19 January 1833, but, after a late first payment on 15 June 1832, the Portuguese government only accumulated interest

^{37.} The main source for this description of the collision of Portuguese politics and New Bedford whaling is *Treaties and Other International Acts* 1933, 3:653-69.

charges until 17 March 1837. Then postdated Treasury notes to settle the claims were given to the U.S. consul at Lisbon, who was acting as agent for the claimants, and duly paid at intervals through 31 June 1839.

The Galatea's owners made an original claim of \$38,063.85, broken down as follows:

Value of the vessel	\$ 8,000.00
Value of her whaling outfits	8,000.00
Value of the oil she would have obtained on the voyage	21,735.00
Value of the bone she would have obtained	6,000.00
Expenses (presumably the expenses of prosecuting the	
claim)	328.85
	\$44,063.85
Less the value of the deterioration of ship and outfits that	
would have occurred on the voyage	6,000.00
	\$38,063.85

In addition, the crewmen of the *Galatea* made a claim for the value of their confiscated clothing and \$750.00 for the indignity of their arrest and detention. All these claims were allowed.

The Portuguese payment of June 1832 was one-quarter of the claims, or \$10,018.51 for the *Galatea*. Interest on the remaining \$30,055.54 accrued at 5 percent per annum until the various payment dates from October 1837 through June 1839.

The Galatea, recall, set out in 1829 on an Atlantic whaling voyage. Twenty-two other New Bedford vessels did the same, and all but the Galatea returned in due course, after intervals ranging from seven to twenty-two months. The oil and bone amounts returned by two vessels are unknown. Among the remaining twenty, the mean values of their catches are

Sperm oil	\$ 2,084
Whale oil	16,509
Whalebone	2,195
	\$20.788

The Galatea's claim for catch foregone was thus \$6,947, or one-third, more than the mean of her peers' returns.

Appendix 3F

Entries in the Ship Registers for the Abigail

By act of Congress, a vessel bound for a foreign port had to be registered with a customs district, and, since whaling vessels typically landed abroad, they had to be registered.

A whaler was normally registered in its home district—the district of residence of at least one owner. A temporary registration could be obtained in another district, if necessary, but had to be replaced with a permanent one when the vessel returned to home port.

The registration document contained a physical description of the vessel, its place and year of construction, its registration history, and the names of its master and owners. Whenever any of these characteristics changed, a new registration had to be taken out. For most whalers this meant a new registration with each voyage.

Following are transcriptions of the registration certificates of the *Abigail*, which sailed from New Bedford from 1821 through 1862 (Work Projects Administration 1940).

Volume 1, 1796-1850

ABIGAIL, ship, of New Bedford. Registered (23) July 18, 1821—permanent. Built at Amesbury in 1810. 309 75/95 tons; length 97 ft., breadth 27 ft., depth 13 ft. 6 in. Master: Dennis Covell. Owners: Benjamin Rodman, merchant, Andrew Robeson, David Coffin, Dennis Covell, Elisha Dunbar, New Bedford. Two decks, three masts, square stern, no galleries, a billethead. Previously registered at Newburyport Mar. 21, 1821.

Ship, of New Bedford. Re-registered (38) Nov. 17, 1823—permanent. Master: Hezekiah B. Gardner. Owners: Benjamin Rodman, Andrew Robeson, David Coffin, Elisha Dunbar, merchants, New Bedford.

Ship, of New Bedford. Re-registered (47) Dec. 22, 1825—permanent. Master: Stephen Potter. Owners: Benjamin Rodman, merchant, Charles W. Morgan, David Coffin, Elisha Dunbar, New Bedford.

Ship, of New Bedford. Re-registered (73) Nov. 19, 1831—permanent. Master: Benjamin Clark. Owners: Benjamin Rodman, Charles W. Morgan, David Coffin, Elisha Dunbar, Benjamin Clark, New Bedford.

Ship, of New Bedford. Re-registered (43) June 13, 1835—permanent. Owners: Charles W. Morgan, William R. Rodman, David Coffin, Benjamin Clark, Elisha Dunbar, New Bedford.

Ship, of New Bedford. Re-registered (92) Oct. 20, 1835—permanent. Master: William H. Reynard. Owners: Benjamin Clark, Stephen Taber, William H. Reynard, George B. Worth, David Brayton, Charles W. Morgan, William R. Rodman, David Coffin, New Bedford.

Ship, of New Bedford. Re-registered (82) Nov. 25, 1843—permanent. Master: David Barnard. Owners: Charles W. Morgan, David Brayton, William R. Rodman, William G. E. Pope, Samuel Griffitts Morgan, Heirs of George B. Worth, William H. Reynard, Stephen Taber, John F. Pope, New Bedford; David Barnard, Nantucket. Previously enrolled at New Bedford Apr. 1, 1839.

Ship, of New Bedford. Re-registered (84) Nov. 25, 1843—permanent. Owners: Charles W. Morgan, David Brayton, William G. E. Pope, Samuel Griffitts Morgan, Heirs of George B. Worth, William H. Reynard, Stephen Taber, John

F. Pope, New Bedford; David Barnard, Nantucket; William Wister, Germantown, Pa.

Ship, of New Bedford. Re-registered (77) Oct. 26, 1847—permanent. Master: George E. Young. Owners: William G. E. Pope, Samuel Griffitts Morgan, Charles W. Morgan, Stephen Taber, David Brayton, Heirs of George B. Worth, William H. Reynard, John F. Pope, Thomas Pope Jr., Thomas Dawes Eliot, New Bedford; David Barnard, Nantucket.

Volume 2, 1851-65

ABIGAIL, ship, of New Bedford. Registered (24) May 31, 1852—permanent. Built at Amesbury in 1810. 309 75/95 tons; length 97 ft., breadth 27 ft., depth 13 ft. 7 in. Master: George E. Young. Owners: William G. E. Pope 3/16, Charles W. Morgan 2/16, Stephen Taber 2/16, Estate of David Brayton 2/16, Estate of George B. Worth 1/16, William H. Reynard 1/16, Thomas D. Elliot 1/16, Thomas Pope Jr. 1/16, Alden G. Snell 1/16, New Bedford; William Wister 2/16, Philadelphia, Pa. Two decks, three masts, square stern, no galleries, a billethead. Previously registered at New Bedford Oct. 26, 1847.

Ship, of New Bedford. Re-registered (66) Aug. 23, 1852—permanent. Master: Francis D. Drew. Owners: William G. E. Pope 6/16, Charles W. Morgan 2/16, Thomas D. Elliot 1/16, Thomas Pope Jr. 1/16, Jonathan P. Lund 2/16, Alden G. Snell 1/16, Francis D. Drew 1/16, New Bedford; William Wister 2/16, Philadelphia, Pa.

Ship, of New Bedford. Re-registered (32) Apr. 29, 1856—permanent. Master: Jacob Taber. Owners: William G. E. Pope 7/16, Charles W. Morgan 4/16, Jonathan P. Lund 2/16, Thomas D. Elliot 1/16, Francis D. Drew 1/16, Thomas Pope Jr. 1/16, New Bedford.

Ship, of New Bedford. Re-registered (9) July 29, 1862—permanent. Master: Ebenezer F. Nye. Owners: Loum Snow 3/12, Oliver Crocker and George O. Crocker 4/12, Pardon Tillinghast 1/12, New Bedford; Ebenezer F. Nye 4/12, Sandwich. Vessel was burned by Rebel cruiser Shenandoah, commanded by Waddell, in Ochotsk Sea, Russia, May 27, 1865. All papers were confiscated and the crew, except seventeen who joined the Shenandoah, were landed in different ships at San Francisco, Calif.

Appendix 3G

Codes for the Variables OCC1, OCC2, and OCC3 in the Owners Data Set, AGENTOCC in the Agents' Occupations Data Set, and OCC1 and OCC2 in the Tax List Data Set

For the analyses reported in chapter 10, information on the occupations of owners, agents, and taxpayers was gathered, chiefly from the New Bedford

City Directories. The following is a list of all the occupations identified, and the codes assigned to them.

Miscellaneous

- 1 No occupation listed (but appears in a New Bedford City Directory)
- Widow (If her deceased husband's occupation is available, it is given in OCC2.)
- 3 "Heirs of" or "estate of" (If the occupation of the deceased person is available, it is given in OCC2.)
- 31 Trustees for the person named

Services (Including Government, Finance, and Publications)

- 4 Apothecary; druggist
- 5 Physician; physician and surgeon; surgeon dentist
- 6 Undertaker; funeral director
- 7 Attorney at law; counselor and notary public
- 8 Jailer and deputy sheriff; deputy sheriff
- 9 Chairman, board of assessors
- 90 Livery stable
- 901 Daguerreotypist; manufacturing photographer
- 902 Editor and publisher of newspaper
- 903 Printer and publisher
 - 91 Attorney general, Commonwealth of Massachusetts
 - 92 Inn holder; "house of refreshment"; "temperance restorateur"
- 922 Eating house
- 923 Barber and hairdresser
- 93 Minister
- 94 Bank cashier; bank treasurer
- 940 Bank
- 941 Bank president
 - 95 Magistrate
- 951 Special justice
 - 96 Town clerk and treasurer
- 960 Collector (customs), Port of New Bedford
- 961 Mayor
- 962 Postmaster
- 963 Tollkeeper
- 964 Judge at probate
- 965 Assessor
- 966 Constable
- 967 Major general
- 968 Selectman
- 969 Coroner
- 97 Officer, insurance company
- 971 Marine and fire insurance agent; insurance agent

98 Overseer of poorhouse 981 Lighthouse keeper 982 Boarding house 983 Undertaker (entrepreneur); speculator 99 Clerk, register of deeds Trade, Transportation, and Public Utilities Merchant; trader; auctioneer and commission merchant Commission merchant and dealer in copper and iron 101 102 Broker 103 Dealers in brick, lime, etc. 104 Dealer in lumber; lumber merchants and planing mill 105 Stoves 106 Dealers in furniture Salesman; agent, union store 107 108 Booksellers, stationers, and dealers in charts and nautical instruments; booksellers 109 Coal dealer and steam paint mill Dry goods; dry goods and clothing; merchant tailors; outfitters; hats, 11 caps, and furs 110 President, gas light company 111 Agent, ice business 112 Dealer in iron 113 Junk dealer 114 Junk store 115 Importer of cigars 116 Copper dealer 117 West India goods and groceries 118 Boots and shoes, retail 119 Proprietor, country store 12 Whaling agent 120 Hay and grain merchant; flour and grain 13 Clerk for merchant; clerk; salesman for merchant Bookkeeper; accountant 131 Ship chandlers; grocers; victuallers; provision merchants 14 15 Baker 16 Warehouse (not whale products) Fish market; fish dealer 17 18 Truckman 19 Dealer in crockery and glass; paper hangings and house furnishings 70 Hardware

Shipping office; shipping merchant; agent, line of packets; express agent

72 President, railroad720 Ticket agent, railroad

71

- 721 Treasurer, railroad
- 722 Master of transportation, railroad
- 723 Teamer; teamster
- 724 Dealer in horses; dealer in cattle
- 725 Butcher
- 726 Fancy goods and millinery
- 727 Railroad
- 728 Gas company
 - 73 Officer, steamboat corporation
 - 74 Confectioner

Seafaring Activities, Activities Associated with Whaling

- 20 Boatbuilder
- 21 Master mariner; master, ship _____
- 211 Tugboat captain
- 212 Wharfinger
- 213 Bonded warehouse
- 214 Wharf
 - 22 Sailmaker
 - 23 Ship carpenter; ship joiner
 - 24 Ropewalk
 - 25 Mate
 - 26 Dealer in oil; sperm oil and candles
 - 27 Sparmaker; mast and sparmaker
 - 28 Rigger
 - 29 Shipsmith
 - 80 Caulker
 - 81 Block and pump maker; block maker
 - 82 At sea
 - 83 Shipwright; shipbuilder
 - 84 Mariner; in ship _____
- 843 Cooper aboard ship
- 85 Inspectors and gaugers of oil
- 851 Gauger
- 852 Inspector and boarding officer
- 853 Officer, cordage company
 - 86 Live oak contractor
 - 87 Nautical instrument maker

Manufacturing, except Whale Products

- 40 Manufacturer
- 401 Foreman
- 402 Looking-glass and picture-frame manufacturer
- 404 Carriage manufacturer

405 Carriage painter Officer, manufacturing company 406 Officer, glassworks 407 Pictures and picture frames; art publishers 408 409 Cap maker Saddle, harness, and trunk maker 41 Gristmill; gristmill and sawmill 410 411 Tanner and currier 42 Blacksmith Machinists and blacksmiths 421 43 Cooper 431 Apprentice cooper Shoes and leather; shoes; boots and shoes; cordwainer 45 Cabinetmaker; "cabinet furniture wareroom" 46 Brass founders and coppersmiths Tinplate and sheetware; tinplate manufacturer; tinman 461 462 President, copper company 463 Foundry and rivet company 47 Officer, textile firm Watchmaker and jeweler; jeweler; chronometer and watch maker; silver-48 Manufacturers of oil; manufacturer of oils and sperm and adamantine 49 candles (includes oil merchants); soap and candle manufacturer 491 Officer, petroleum and coal oil company 492 Manufacturer of bottled soda 493 Turner: wood turner 494 Planer 495 Chemical manufacturer 496 Textile mill Construction Painter; sign painter; house painter; ship painter 51 Housewright 52 Mason 53 Wood measurer 54 Carpenter 55 Granite worker

Agriculture

- 60 Farmer
- 61 Yeoman
- 62 Gardener
- 63 Horticulturalist and nurseryman

56 Civil engineer; architect

Appendix 3H

Whalemen's Shipping Paper

1st. It is agreed between the Owner, Master, Seamen and Mariners of the Ship Abigail Capt Geo E Young now bound from the port of New Bedford on a whaling voyage in the Pacific Ocean & Elsewhere Atlantic and Indian Ocean

That in consideration of the share against each respective Seaman or Mariner's name hereunder set, they severally shall and will perform the above-mentioned voyage; and the said Owner and Master, do hereby agree with, and hire the said Seamen or Mariners for the said voyage, at such shares of the net proceeds, or of the actual products of the voyage, to be paid pursuant to this agreement, and the custom and usage in the port of *New Bedford*.

2nd. And they, the said Seamen and Mariners, do severally hereby promise and oblige themselves to do their duty, and obey the lawful commands of the Officers on board said ship or the boats thereunto belonging, as become good and faithful Seamen or Mariners, while cruising for whales, and at all places where the said ship shall put in, or anchor at, during the said voyage; to use their best endeavors to obtain a cargo of oil;—and for the preservation of the said vessel and cargo;—and not to neglect or refuse doing their duty by day or night; and that they shall not go out of said ship on board any other vessel, or be on shore, under any pretence whatsoever, until the aforesaid voyage be ended, and the vessel discharged of her loading, without leave first obtained of the Captain, or Commanding Officer on board; that in default thereof, he or they shall be liable to all the penalties and forefeitures mentioned in the Marine Law, enacted for the Government and Regulation of Seamen in the Merchants Service; it being understood that said forfeiture shall be estimated according to his or their respective shares of the net proceeds of the voyage, and the length of the same conjointly.

3d. AND IT IS FURTHER AGREED by all the parties to this contract, that such regulations as a just regard to the good order, effectual government, health and moral habits of the Officers and Men shall be established and observed on board the said vessel. And to ensure proper attention to this important object, it shall be the duty of the Officer having the care of the Log Book, to note therein daily all flagrant breaches of the same. It shall especially be his duty to record all instances of drunkenness, all cases of absence from the said *ship* by any Officer or Seamen with or without permission, after sunset, or beyond the time prescribed for their absence,—every instance of absence, by any Officer or Seaman, through the night, whether on shore or on board of any other vessel—every instance of the introduction of any woman or women into the ship for licentious purposes,—every instance of disability for the performance of ship's duty, which may occur, with the cause of it,—if occasioned by sickness or infirmity, the nature and origin of the same, if known, to be particularly stated, especially if it be the consequence of their own misconduct. And in

case of the Officer who may usually have charge of the Log Book being implicated in any of the misdemeanors or disabilities herein mentioned, it shall be the duty of the Master to make, or cause to be made by another hand an entry of the same on the Log Book. And it shall be the duty of the Master to see that a proper record is kept therein of all the matters mentioned in this article according to its true intent and meaning.

4th. The Officer having charge of the Watch on Deck for the time being, shall be responsible for the maintenance of the regulation in regard to the admission of women—and in case of any getting on board unperceived, they shall forthwith be expelled by him, or if not able to do so the case shall be immediately reported to the Captain or Commanding Officer on board, whose duty it shall be to enforce their immediate expulsion. On the failure of any Officer in this part of his duty, either wilfully or through negligence, each and every Officer so failing, shall forfeit twenty days' pay for every such offence, and any other Officer or Seaman who shall abet any breach of said regulation—or refuse when lawfully called upon to aid in sustaining it, or shall be proved to have had a criminal intercourse with any such woman or women on board, shall forfeit for each such offence, five days' pay-for every instance of drunkenness two days' pay shall be forfeited, and a similar forfeiture shall take place for each day that any Seaman or Officer shall be off duty from sickness or disability caused by intemperance or licentiousness—the forfeitures in all these cases to be estimated as in the second article, and to go to the use of the Owners of said ship.

5th. All expenses which may be necessarily incurred during the voyage with direct reference to any of the misdemeanors or disabilities enumerated in the third article—or to any attempt at desertion or other disobedient or mutinous conduct, shall be charged to the individual or individuals by reason of whom they may have been incurred.

6th. It is further agreed that if any Officer or Seaman, after a fair trial, if his abilities and disposition shall be judged by the Master incompetent or indisposed to the proper discharge of the duties of his station, the Master shall have a right to displace him and substitute another in his stead,—a corresponding reduction of the lay of such Officer or Seaman with reference to the duty which he may afterwards perform, thenceforth to take effect; and a reasonable increase of the lay of the individual who may thereupon be promoted to a higher station, shall be made on the final adjustment of the voyage.

7th. It is understood and agreed that if any Officer or Seaman shall be prevented by sickness or death from performing the voyage, his legal representatives shall be entitled to such part of the whole amount of his stipulated share, as the time of his services on board shall be of the whole term of the voyage.

8th. It is further agreed that whatever apparel, furniture, or stores belonging to the said vessel, may be given in charge by the Master to any Officer or Seaman, shall be accounted for by him, and in case any thing shall be lost or

damaged through his carelessness or neglect, it shall be made good to the Owners by such Officer or Seaman. And whatever Officer or Seaman the Master shall appoint for the duty, shall take charge of any portion of the cargo or ship's stores required to be landed or brought on board in any boats or lighter, and faithfully perform the service assigned, and see that the said cargo or stores are safely landed and delivered, or brought on board the said vessel, as the case may be.

9th. Each and every Officer and Seaman, who shall well and truly have performed the above mentioned voyage, complied with the regulations and duties herein specified, and committed no dishonest or unlawful acts, shall be entitled to the payment of his share of the net proceeds of the voyage pursuant to this agreement, as soon after the return of the said *ship* to *New Bedford* as the Oil and other products of the voyage can be sold and the settlement adjusted by the Owner or agent of the said *ship*.

10th. In testimony of our assent, consent and agreement, faithfully to perform the various duties and obligations implied in the preceding articles, and in acknowledgement of their being voluntary, and without any compulsory or clandestine means being used, we have each and every of us, severally, hereunto affixed our names, on the day and year against them respectively written. And it is hereby understood, and mutually agreed, by and between the parties aforesaid, that they, the said Seamen and Mariners, will render themselves on board the said vessel, on or before the day of at o'clock in the noon.

No distilled spiritous liquor will be put on board this vessel by the Owner, except for strictly medicinal use:—and by their signatures the other parties to this Contract, Pledge themselves not to take any of these articles with them as their private stores, or for traffic, either from this port or any other port or place where they may be, during the voyage. And in case of a violation of this Pledge by the Master or any Officer or Seaman, his entire share of the voyage shall be thereupon forfeited to the use of the Owners of the said ship. It is further agreed that the men are to stand up when aloft looking out for whales.

TIME OF ENTRY.	NAMES.	QUALITY.	SHARES.	
October 26 1847	Pope & Morgan	Managing Owners		
October 26 1847	George E. Young	Master	One seventeenth	1/17
October 26 1847	David G. Barney	Mate	One Twenty Third	1/23
September 16 1847	Edmund E. Jennings	Second Mate	One Forty Third	1/43
September 8 1847	Geo. W. Willfong his	Third Mate & Boatsteerer	One Fifty Eighth	1/58
	Tom X Pedro mark his	Boatsteerer	One Ninetieth	1/90
October 16th 1847	Martin X Andrew mark	Do	One Ninetieth	1/90

TIME OF ENTRY.	NAMES.	QUALITY.	SHARES.
October 19th 1847 September 28 1847	Patrick Commerford Horatio Doney	Cooper Steward & Ship Keeper	One Sixtieth 1/60 One One hundred & twenty fifth 1/125
September 22nd 1847	his Manuel X Nichols mark	Cook	One One hundred fortieth
September 23d 1847	Geo. H. X Waters	Ordinary Seaman	One One hundred fortieth
September 27 1847	John Williams	Blacksmith Ordy Seaman	One One hundred fiftieth
October 5 1847	Lysander Spooner	Ordinary Seaman	One One hundred fortieth
October 13 1847	Charles Porter	Ditto	One One hundred thirty fifth 1/135
October 16 1847	his Thomas X Brown mark	Green Hand	One One hundred seventy fifth 1/175
October 19 1847	his John X Sip mark	Ditto	One One hundred seventy fifth 1/175
October 19 1847	his James X Lewis mark	Ditto	One One hundred seventy
October 19 1847	Warner Hill	Ditto	One One hundred seventy
October 23 1847	John Tompson	Ditto	One One hundred seventy
October 23 1847	Miller Gilmore	Ordinary Seaman	One One hundred fifty
October 23 1847	Thomas S. Holt	Green Hand	One One hundred seventy
October 23 1847	William Jones	Ditto	One One hundred eightieth 1/180
October 23 1847	his David B. X Rogue mark his	Ditto	One One hundred eighty fifth 1/185
October 23 1847	Welcome X Hays mark	Boy	One Two hundred twenty fifth 1/225
October 25 1847	James Martin	Green Hand	One One hundred & seventieth 1/170
October 25 1847	Marcus Cox	Ditto	One One hundred & ninetieth 1/190
October 26 1847	George Smith	Ditto	One One hundred & Seventy fifth 1/175