

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: In Pursuit of Leviathan: Technology, Institutions, Productivity, and Profits in American Whaling, 1816-1906

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

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-13789-9

Volume URL: <http://www.nber.org/books/davi97-1>

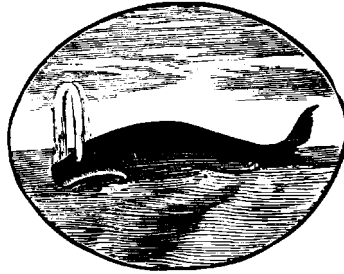
Publication Date: January 1997

Chapter Title: Agents, Captains, and Owners

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

Chapter URL: <http://www.nber.org/chapters/c8285>

Chapter pages in book: (p. 381 - 422)



In a few instances, when a small vessel set out on a short trip, one person served as owner, agent, and captain. Normally, however, the benefits of specialization called for the agent to devote his attention to organizing and financing the voyage, paying the bills, disposing of the product, and distributing the earnings, while the captain saw to the day-to-day running of the vessel. Indeed, as vessels grew larger and voyages longer and more complex, agents gave up some of their duties and delegated them to specialists in the raising of a crew.¹ They also spread their financial risks by selling off pieces of the venture, frequently to the captain, less frequently to other members of the crew, more frequently to friends, relatives, business associates, and even complete outsiders.²

In the chapters on productivity and profits, each voyage is treated as a firm. That is a reasonable procedure, if not precisely correct, since each voyage involved new planning, refitting the vessel, new provisioning, raising a new crew, and, frequently, a turnover of owners, or captain, or agent, or all three. There were, however, elements of continuity. Ownership groups sometimes held together over a number of voyages. When they did, the same person or partnership often (not always) continued to act in the capacity of agent. Some captains sailed more than once for a given agent or ownership group, as did some mates and boatsteerers. Other members of the crew were less likely to repeat.

Tables 10.1 and 10.2 give a suggestion of the longevity of ownership groups. They probably understate the true length of life of the typical group. For purposes of constructing the tables, we redefined *firm* to mean a set of owners and

1. Firms that raised crews were known as shipping offices, and their managers, as shipping agents. They existed in New Bedford, but offices in large cities such as Boston and New York also supplied men to the New Bedford whalers. For a good, if cynical, description of recruitment, see Nordhoff 1895, chaps. 1–3.

2. Captains were probably sometimes given shares, to encourage them to attend to the interests of the owners. See Craig and Knoeber 1992.

Table 10.1 Longevity of New Bedford Whaling Firms, circa 1793–1924

Number of Voyages	Firms		
	Number	%	Cumulative %
1	546	77.4	77.4
2	99	14.0	91.4
3	34	4.8	96.2
4	17	2.4	98.6
5	4	0.6	99.2
6	2	0.3	99.5
7	1	0.1	99.6
8	2	0.3	99.9 ^a
Total	705	99.9 ^a	

Source: Owners Data Set, derived from Work Projects Administration 1940. The data set is a sample comprising all the available records of vessels whose names begin with *A*, *B*, *C*, or *D* (see chapter 3).

Notes: A *firm* is defined as a set of owners and their vessel. Some firms owned more than one vessel, but this was uncommon within the sample from which this table was constructed. For example, of the almost two hundred firms with one, two, three, or four owners, only two—each a one-person firm—owned more than one vessel.

^aThe percentages fail to total one hundred because of rounding.

their vessel. If the vessel constraint were removed—that is, if account were taken of ownership groups that owned more than one vessel—measured longevity would increase, but only very slightly (see table 10.1). Furthermore, the data are a sample, not the entire universe of ownership records. The sample consists of the available records for vessels with names beginning with the first four letters of the alphabet—192 out of a total of 787 New Bedford whalers. The tables miss instances of continuity in which, say, an ownership group holds first the brig *Cortez*, then sells it in order to buy the bark *Keats*. This source of bias is more serious, but it is still unimportant. Ownership groups that endured almost always had a continuing interest in a given vessel. Therefore, the picture given by the tables—one of rather short-lived firms, and the more numerous the partners, the shorter the life—is almost certainly accurate.³

There were some persistent firm characteristics that the tables necessarily ignore. Consider the vessel *Amethyst*. It entered the New Bedford whaling fleet as the property of Joseph Dunbar, Frederick Parker, and John Avery Parker (an important whaling agent). On its second voyage the master, Warren Howland, became an owner. He left the vessel and the ownership group on the third voyage, and the owners were again Dunbar, Parker, and Parker. On the fourth voyage a new master, Joseph Black, came aboard, and he also acquired a share. On the fifth voyage Dunbar left the group, which was now augmented by Pierce

3. Occasionally ownership turned over when a vessel was at sea, but not often. For most intents and purposes the voyage was the shortest unit of time an ownership group could hold together. It is in this sense that we say ownership groups were short-lived.

Table 10.2 Longevity of New Bedford Whaling Firms, by Size of Firm, circa 1793–1924

Number of Members	Number of Voyages								Total	%
	1	2	3	4	5	6	7	8		
1	19	5		2			1	1	28	4.0
2	15	7	2	2	1	1			28	4.0
3	34	11	4	4	1	1			55	7.8
4	37	13	4	1				1	56	7.9
5	50	11	5	3					69	9.8
6	48	10	2	1	1				62	8.8
7	56	10	6	1	1				74	10.5
8	67	8	2	1					78	11.1
9	43	4	2	1					50	7.1
10	36	4	1	1					42	6.0
11	42	6	1						49	7.0
12	24	3	2						29	4.1
13	20	3	1						24	3.4
14	20	1	1						22	3.1
15	20								20	2.8
16	6	1							7	1.0
17	5								5	0.7
18	1	1							2	0.3
19	1	1							2	0.3
20									0	
21			1						1	0.1
22	1								1	0.1
30	1								1	0.1
Total	546	99	34	17	4	2	1	2	705	100.0

Source: Owners Data Set.

Note: A firm is defined as a set of owners and their vessel.

Tompkins and Silas Tompkins. These two dropped out after one voyage, and their places were taken by Tillinghast Tompkins. The partnership remained unchanged for two voyages, after which Black ended his association with it. The two Parkers and Tompkins were the sole owners for the next voyage, the eighth; Benjamin Lincoln joined them for the ninth. Frederick Parker, Lincoln, and Tompkins remained with the vessel for its tenth voyage; for the eleventh the group was suddenly augmented by seven new members. On the vessel's last voyage from New Bedford as a whaler, however, the number of partners fell back to five: Tompkins, Mary Howland, and Ann A. Dow, all of the previous ownership group, and two new members, William Wilcox and Preserved S. Wilcox (Work Projects Administration 1940, 1:12–13, 2:15).

By the reckoning of the tables, nine separate ownership groups held the *Amethyst* in this period of almost twenty-five years, but the nine were by no means completely independent. It would not be surprising if the New Bedford community regarded these ventures—at least up to the tenth—as activities of

John Avery Parker's agency. In a sense the first nine voyages were conducted by a single firm. Nonetheless, given the turnover of owners, the firm had to be liquidated after virtually every voyage. In fact, it was probably liquidated after every voyage, and refinanced before the next. Thus, treating the voyage as the firm is proper enough.

A complex ownership pattern such as that of the *Amethyst* was fairly common, but, although there was a good deal of turnover among owners, a complete change of ownership from one voyage to the next was rare.

Table 10.2 shows the distribution of firms by firm sizes and numbers of voyages. The range is wide: there were firms with one owner, and one firm with thirty. The data are clustered, however, in the range of three through eleven members; three-quarters of the whaling ventures recorded in the sample fall within these fairly wide limits. When firms are measured in this way, it is clear that by the standard of modern experience, and even by the standard of the textile corporations and railroads of that day, whaling firms were small. On the other hand, if we judge size in terms of the capital stock of the firm, rather than the number of partners, they were not small. For example, the typical New Bedford whaling venture of the 1850s called for an investment of \$20,000 to \$30,000. The average American farm was worth \$2,258 in 1850 and \$3,251 in 1860; the capital stock of the average manufacturing firm was valued at \$4,335 in 1850 and \$7,191 in 1860.⁴

Firms of whaling *agents* were substantially more long-lived than were whaling firms. Nonetheless, there was considerable turnover among them as well (see table 10.3). Fully one-quarter of New Bedford agents managed only one whaling voyage; another one-quarter managed between two and four. These firms, comprising half of the New Bedford agents, were involved in sixty voyages—fewer than 1.5 percent of the total—while the handful of agents who each managed more than eighty voyages accounted for a total of 1,619, almost 38 percent of all the New Bedford voyages for which we have been able to establish the identity of the agent. Agents who managed few voyages seem to have been people with other business interests, who may have been closely associated with whaling as, say, provisioning merchants, and who had previously invested in whaling ventures. They managed one or two cruises and then returned to their primary business interests. They were probably not typically firms that were driven out of the business by failure.⁵

4. The whaling figures come from the Profits Data Set. They are expressed in 1880 dollars. The price level in that year was a little higher than the levels of 1850 and 1860, but not enough to affect the comparison seriously (Warren and Pearson "All Commodities" wholesale price index, U.S. Department of Commerce 1975, series E-52). The census data are from U.S. Census Office 1864a, 184, 188, 222; 1865, 729, 730. The census data have their shortcomings, but they are adequate for present purposes. See Gallman 1986; Sokoloff 1986.

5. This statement is based on field reports in the R. G. Dun & Co. Collection, Massachusetts volumes. The topic is developed further below.

Table 10.3 New Bedford Whaling Agents and Agent Chains, by Number of Voyages Managed, 1796–1914

Number of Voyages Managed	Agents		Agent Chains	
	Number	Cumulative %	Number	Cumulative %
1	78	25	64	25
2	40	37	30	35
3	22	44	21	44
4	15	49	7	47
5	15	53	12	52
6	6	55	4	53
7	21	62	18	60
8	7	64	5	62
9	13	68	8	65
10	5	70	3	66
11–20	44	84	34	79
21–30	14	88	13	84
31–40	14	92	11	88
41–50	10	95	11	93
51–60	2	96	3	94
61–70	2	96	1	94
71–80	3	97	1	95
81–90	4	98	2	95
91–100	1	99	4	97
101–40	2	99	3	98
Over 140	2	100	5	100
Total	320		260	

Source: Captains and Agents Data Set.

Notes: The principal members of agent firms sometimes changed. Such a change was frequently accompanied by a name change for the firm. We produced two sets of firm identifications: in one, every change of this sort was treated as the termination of one firm and the creation of a new one; in the other, the old firm and the new were treated as one. The term we used for such a group of firms was *agent chain*. For example, Gideon Allen and Gideon Allen and Son are treated as separate agents, but as one agent chain (with two links). A firm that never changed constitutes an agent chain with one link (for example, Charles W. Morgan). See chapter 3 for a fuller treatment of this matter.

10.1 Captains

The question of firm durability can also be approached from other directions. For example, did captains and agents make enduring connections? The data suggest that some did, but many did not. Table 10.4 shows that there were 68 agent/captain pairs that were each involved in between four and twelve voyages. Given that voyages frequently ran three or four years, these are very long-term connections. Another 675 combinations stayed together for two or three voyages. These numbers are dwarfed, however, by the 2,103 occasions on which a captain and an agent came together for a single voyage, neither pre-

Table 10.4 Durations of the Associations between Specific New Bedford Whaling Agents and Specific Captains, circa 1793–1924

Voyages per Agent/Captain Pair	Number of Agent/Captain Pairs	Total Voyages	Cumulative Total
12	1	12	12
8	3	24	36
7	3	21	57
6	4	24	81
5	10	50	131
4	47	188	319
3	170	510	829
2	505	1,010	1,839
1	2,103	2,103	3,942

Source: Captains and Agents Data Set.

ceded nor followed by any other like association between them. That figure is more than one-half of the voyages for which the calculation can be made (2,103 out of 3,942).

Of the 1,872 whaling captains whom we have identified, 754 directed only a single New Bedford whaling voyage (see table 10.5). At least 50 died on the first voyage. Of the rest, some served as masters of vessels hailing from other ports, but many appear to have made only one cruise as captain, the one recorded for New Bedford.⁶

Bear in mind that these people rose from the ranks, so that a man sailing as captain for the first time had probably already been to sea for twelve to twenty-five years—perhaps one voyage as a cabin boy, another as a seaman, a third as a boatsteerer, and one, two, or more as a mate. That comes to at least four voyages, running typically a dozen years.⁷ A man might make captain by his

6. The issue is not easy to settle. We pursued the records (in *Whaling Masters* [Works Progress Administration of Massachusetts 1938] and other sources) of 100 men who sailed from New Bedford as captain only once (the first 100 of the total of 754, ordered alphabetically). In 41 instances, this was the only voyage the sources record the man's having made as captain; in 16 others he commanded a vessel on at least one voyage from a port other than New Bedford; in the remaining 43 cases the records are inadequate to settle the issue.

7. See Whitecar 1864, 22, 23. Whitecar sailed on the New Bedford bark *Pacific*, John W. Sherman, master.

See also Haley 1948, 9–18. Haley ran away to sea on a whaler at the age of twelve, in 1844. The voyage ended in 1848, and he stayed ashore for a year, when he shipped as a boatsteerer aboard the *Charles W. Morgan*. He returned in 1853, tried his luck in the West (Minnesota), but decided that the sea was for him. He shipped again, this time in 1854, as mate of an Arctic whaler, his first venture in the northwest. In 1857 he again sailed as mate to the North Pacific. He left the vessel in Honolulu and next went to sea as captain of a whaler, probably early in the 1860s, when he was about thirty. This was his fifth voyage; except for two or three years, he had been on whalers almost continuously for eighteen years. He had hunted the Indian Ocean, the South Pacific, the North Pacific, and the Western Arctic. After his voyage as captain, he left the sea and engaged in a variety of business ventures. The last—supplying food to Alaskan gold miners—proved fatal. He caught pneumonia and died in Alaska in 1900.

late twenties, but he was more likely to achieve this rank in his thirties. The life was hard and risky. (See appendix 10A.) Death rates for captains were high, compared with those for men employed ashore.⁸ A successful first voyage might convince a captain to get out while there was still time. If he were the scion of an agent family—many captains were—a place might be made for him in the firm ashore.⁹

At the other extreme there are some captains with remarkable careers. Antone J. Mandley was in command of twenty New Bedford whaling voyages (forty years), George A. Smith, sixteen, and David F. Duvoll, James F. Avery, and Thomas Scullun, fifteen each. There were few men in such positions, however. Almost two-thirds of New Bedford captains sailed as master on no more than two voyages; more than nine-tenths sailed on five or fewer (table 10.5).

Captains who sailed on New Bedford whalers more than once were very likely to serve on more than one vessel. For example, almost two-thirds of the men who went to sea twice as New Bedford masters sailed on two different vessels (table 10.7). There were more repeaters among men who went to sea often, which is not surprising. The men who each served as captain on ten New Bedford voyages repeated once on thirteen occasions, twice on seven occasions, three times on three occasions, and four times on one occasion. But notice that this record nonetheless has these captains frequently shifting from one vessel to another. Indeed, it was more usual for them to shift than not.

See also the passage in Brown (1887, 291) that describes, in his own words, the occupational ladder mounted by “a veteran whaling captain of New Bedford.”

8. Mortality data for whaling voyages are incomplete, but for the years 1843 (the date of first publication of the *WSL*) through 1867 the records of the deaths of captains seem reasonably full. The data suggest that the death rate during this period ran in excess of thirteen per one thousand, which should be taken as a lower-bound estimate.

Table 10.6 gives the death rates (per one thousand) of all white males in the United States in the relevant age ranges in the years 1850–1870. Even allowing for the understatement of whaling captains’ death rates, the whaling captains seem to have had death rates no worse than all white males in the United States in 1850 and 1860, and possibly better. Why should this be, if whaling was so dangerous? There are two likely explanations. First, the weights employed to compute mean death rates reflect survival rates among all white men. Whaling captains, however, left the fleet both by death and by retirement. The death rate computed for whaling captains, therefore, represents a younger group, on average, than does the death rate for all men. *Ceteris paribus*—in the absence of risks associated with whaling—the captains should have had lower death rates.

Second, the death rates of all men and of whaling captains represent the experience of both sickly men and healthy ones. The fraction of whaling captains who were sickly at the outset of the voyage was probably considerably lower than the fraction of all men who were sickly. Again, *ceteris paribus*—in the absence of risks associated with whaling—whaling captains should have had lower death rates. Since, with proper allowance for the underestimation of the captains’ death rates, the measured rates for all men and all whaling captains are reasonably close, it seems likely that the risks of whaling did noticeably raise the death rates of whaling captains.

9. Tracing the relations between captains and agents is not an easy matter. However, of the 177 surnames of agents in the data set, 126 are shared by captains who sailed on New Bedford vessels. (The total number of surnames borne by New Bedford captains is 674.) A shared surname does not necessarily mean a close relationship, but in New Bedford there was an excellent chance that a Howland, a Hathaway, a Parker, or a Rotch had a connection with an agent family. The number of shared surnames strongly suggests that agent families supplied a large number of New Bedford whaling captains.

Table 10.5 Numbers of Whaling Voyages Made by Individual Captains on New Bedford Vessels, circa 1793–1924

	Number of Voyages	Number of Captains	% of Total	Cumulative %
	1	754	40.3	40.3
	2	451	24.1	64.4
	3	273	14.6	79.0
	4	144	7.7	86.7
	5	96	5.1	91.8
	6	62	3.3	95.1
	7	29	1.6	96.7
	8	15	0.8	97.5
	9	17	0.9	98.4
	10	11	0.6	99.0
	11	7	0.4	99.4
	12	2	0.1	99.5
	13	0	0.0	99.5
	14	5	0.3	99.8
	15	3	0.2	100.0
	16	1	0.0 ^a	100.0
	20	1	0.0 ^a	100.0

Source: Captains and Agents Data Set.

^aLess than 0.1 percent.

Table 10.6 Death Rates for White Males in the United States (per thousand)

Ages	1850	1860	1870
30–34	11.6	9.8	9.3
35–39	13.1	11.1	10.5
40–44	14.7	12.5	11.9
45–49	17.4	15.0	14.2
Weighted means	14.0	12.0	11.4

Source: Haines 1995, appendix A, $m(x)$ (“central death rates”), converted to deaths per thousand.

Note: The weights are the relevant $l(x)$ values, the number of a given cohort surviving to the first year of the specified age range.

How can the frequent changes be explained? Presumably there were advantages to knowing a vessel and its agent well that would encourage a captain to sign on again. Perhaps returning captains wanted to spend more time ashore than the two or three months typically required to refit; agents would then have had to send vessels back to sea without them. Captains would have had to find other vessels—perhaps managed by different agents—when they were ready to go whaling again. A captain who went to sea often was more likely to be able to return eventually to a favorite vessel or to an agent with whom he had good relations.

Table 10.7 Captains Who Sailed More than Once on a Given New Bedford Whaling Vessel, circa 1793–1924

Number of Voyages	Number of Captains	Repetitions on a Given Vessel								
		1	2	3	4	5	6	7	8+	
2	451	153								
3	273	116	36							
4	144	86	25	7						
5	95	66	23	3	2					
6	62	54	11	8	7	0				
7	29	27	14	3	1	0	0			
8	15	14	4	6	0	0	0	2		
9	17	19	4	6	1	0	3	0	0	
10	11	13	7	3	1	0	0	0	0	1
11	7	5	8	0	0	0	2	0	0	0
12	2	1	1	0	1	0	0	0	0	1
13	0	0	0	0	0	0	0	0	0	0
14	5	2	3	3	1	0	0	1	1	1
15	3	4	2	3	0	1	0	1	0	0
16	1	2	0	1	1	0	0	0	0	0
20	1	2	0	1	0	0	0	0	0	1

Source: Captains and Agents Data Set.

Notes: Four hundred and fifty-one captains made two New Bedford voyages. One hundred and fifty-three of them made both of these voyages on a single vessel; 298 made one voyage on each of two vessels. One captain made twenty voyages on New Bedford vessels. He made two voyages on one vessel, two voyages on another, four voyages on a third, and at least eight voyages on a fourth.

A captain who sailed on one vessel twice and on another vessel three times appears in this table twice.

A captain had several sources of income from the voyage, in addition to the lay. Frequently there were bonus payments that depended upon the amount of oil or bone (or both) taken. Like the performance bonuses written into the contracts of major-league baseball players, these bonuses were designed to spur employees on to high levels of performance.

A captain sometimes shared with the cook in the slush fund—the proceeds from the sale of used cooking oils and fats. He also typically brought goods along to trade with South Sea islanders, Africans, or Inuit. Most of the crew followed his example.¹⁰ There is no clear basis for judging how much captains made from their mercantile activities. Although they probably supplemented

10. Nordhoff 1895, 42. Sometimes goods acquired in trade were brought back to the account of the vessel. A letter from Charles W. Morgan to S. Bartlett, 24 May 1837 (Morgan Collection), mentions a cargo of coffee. A vessel also usually stocked trade goods for sale to crewmen during the voyage for their trading ventures ashore, and for trading on the vessel's account for supplies. Some of the vessel's equipment was also sometimes traded for supplies. See account books of Captain Robert Foley and of the *Midas* in the Coggeshall Collection.

Table 10.8 Captains as Investors in New Bedford Whaling Voyages

A. Captains Who Invested in the Voyages on Which They Sailed							
	Before						After
	1820	1820–35	1836–45	1846–60	1861–70	1871–80	1880
Voyages	29	138	166	299	121	85	146
Captain-owners	6	46	82	97	51	31	62
%	20.7	33.3	49.4	32.4	42.1	36.5	42.5

B. Captains Holding Various Ownership Shares				
Shares	1846–60	1861–70	1871–80	After 1880
.03125	11	12	3	3
.0625	40	20	17	16
.09375	1	2	1	1
.125	30	12	5	4
.1875–.33	13	2	8	17
.375–.50	2	1	3	10
Above .50	—	2	—	11
Unknown	44	—	—	—
Mean share	.1036	.1223	.1405	.2924

Sources: Owners and Captains and Agents data sets.

their incomes nicely in this way, it is unlikely that trade represented a major part of their total earnings.¹¹

A more important income flow was the captain's ownership of a share of the voyage. From 1820 onward, 39 percent of captains had shares in the voyages in which they participated (table 10.8). These shares were not negligible: in the period after 1845 they averaged from about 10 to almost 30 percent. Bear in mind, the typical captain's lay ran between 5 and 10 percent. Granted, his lay earnings were computed against the value of output gross of the crew's lay, while his ownership share was based on a figure net of that lay. Nonetheless, captains who were owners must, at times, have received more as owners than as masters.

11. Captains' activities were sometimes enough to influence the market drastically, however. Writing of the settlement of Natal by Zulus and Europeans and the activities of the Fynns, a family of traders, Donald R. Morris (1965, 121–22) says: "Settlers continued to trickle in during 1834. Hunters predominated, but the trade was growing difficult. The traders purchased their ivory, hides, cattle and grain with beads, and they were now being undercut both by the Portuguese and by hordes of American whalers, who had recently appeared in the Indian Ocean. These ships landed parties along hundreds of miles of the coast to replenish water and purchase meat and corn. They had no objections to purchasing ivory as well, since it took up remarkably little space, and they paid for their purchases with an inexhaustible supply of trade beads which knocked the bottom out of the market. Before the year was out the Fynns gave up the struggle and left to take up civil posts in the Cape Colony."

The lays of captains varied widely. Presumably, *ceteris paribus*, the shorter lays went to the better captains.¹² Were they worth their hire? The data in table 10.9 give one answer. The comprehensive productivity model developed in chapter 8 was extended by introducing captains' lays—expressed as percentages of the value of output.¹³ If agents gave short lays to good captains, and if agents were successful in identifying good captains, then the coefficient on the independent variable, captain's lay, should be positive, large, and significantly different from zero. All three conditions are met. The range within which most captains' lays fell was about 9 percentage points or, eliminating outliers, about 5 percentage points (see table 10.14). Given the coefficient of 5.095 on the lay variable, the equation implies that the difference in productivity between voyages captained by the best and the worst captains (excluding outliers) was about 0.255. When compared with the dependent mean of 0.689, this value suggests that the captain was very important, indeed.

The captain had a major impact on productivity, but he also cost the owners a short lay. The question remains: was he able to negotiate a lay that preempted the full value of his contribution to the voyage? One way to answer this question is to regress profit rates on captains' lays. If captains obtained their full incremental value, the coefficient on the lay should be zero. The results in table 10.10, for both definitions of profitability, show that the coefficient on the lay is insignificantly different from zero, suggesting that competition for captains was so intense that they were able to absorb all the rents deriving from their special skills.¹⁴

On a different but related issue, it would be interesting to know if crewmen recognized the quality differences among captains. If they did, one would expect a crewman to be willing to accept a longer lay to be on a vessel commanded by a first-rate whaling master. There is, however, another possible relationship between the lays of crew and captain. The captain helped select the

12. The relative qualities of captains were well known. This was a small universe; captains rose from the ranks, serving at one time or another as harpooners and mates. Each therefore had a track record. Agents had been appraising them and recruiting them for years.

13. Notice that the results from the equation in table 10.9 are very similar to those in the third column of table 8.7. The suggestion is that the relationships being explored in the productivity equations are fundamentally stable.

14. Why didn't agents collude to keep captains' lays long? After all, agent families were linked by marriage and religious ties, which would have facilitated collusion. There are probably five reasons why collusive agreements would have been fragile. While most agents were Friends, the New Bedford Meeting suffered a major division in the early 1820s. Agents on different sides of this schism would be unlikely to cooperate. Second, the larger the number involved in any effort at collusion, the more likely it is to fail. The number of agents was typically large enough (see table 10.12) to make collusion so unlikely to last that no sensible group of agents would attempt it. Third, although New Bedford was the largest U.S. whaling port, there were at least half a dozen others within a half day's travel from New Bedford. Even if New Bedford agents had succeeded in colluding, it is unlikely that they could have brought in the agents from the other ports. Fourth, since it would pay the captains to keep their counsel, a collusive agreement would be very difficult to police. Finally, New Bedford agents were an unusually tough, competitive lot, not good material for successful collusive schemes calling for cooperation, loyalty, and trust.

Table 10.9

**Captains and the Productivity of New Bedford Whaling Voyages,
1840–58 and 1866**

	Dependent Variable: Total Factor Productivity
Statistical properties	
<i>F</i>	52.2
Adjusted <i>R</i> ²	.575
Dependent mean	.689
Durbin-Watson <i>D</i>	1.907
Observations	908
Parameter estimates	
Intercept	2.3542*
Hunting pressure	
On baleens	0.0008
On sperms	0.0002
Competition index	0.0001
Competition index squared	-4.854 × 10 ⁻⁸
Real common wage rate ashore	-0.0149*
Ratio, skilled/common wage rate ashore	-0.5643
% of crew illiterate	0.2728***
% of crew greenhands	0.1781
Ships (compared to other rigs)	0.1471*
Vessel tons squared	0.000001*
Ground (compared to Pacific)	
Atlantic	-0.5086*
Indian	0.0534
Western Arctic	0.2542***
Mode of entry to fleet (compared to built before 1850)	
Built as whaler after 1849	-0.0556
Built as merchantman after 1849	-0.1753
Vessel reregged	0.1414**
Vessel age	-0.0047
Vessel age squared	0.00006
Last voyage	-0.0909
Specialization	
In baleens	0.0030
In sperms	-0.6914*
Voyage length (months) squared	-0.0003*
Time (years since 1820)	0.0029
Captain's lay	5.0954*

Sources: See the notes to tables 8.2 and 8.6, chapter 2, and the text of this chapter.

*Significant at the 1 percent level.

**Significant at the 5 percent level.

***Significant at the 10 percent level.

Table 10.10 Captains and Profit Rates in New Bedford Whaling, 1840–58 and 1866

A. Captain's Lay and the Profit Rate		
	Dependent Variables	
	Profit Rate, Variant A	Profit Rate, Variant B
Statistical properties		
<i>F</i>	2.486	1.156
Adjusted <i>R</i> ²	.0015	.0002
Dependent mean	.150	.071
Observations	984	984
Parameter estimates		
Intercept	0.2538*	0.1092*
Captain's lay	-1.5477	-0.5690
B. Captain's Lay and Crew's Lay		
	Dependent Variable: Crew's Lay (excluding captain's lay)	
Statistical properties		
<i>F</i>	144.5	
Adjusted <i>R</i> ²	.1181	
Dependent mean	.265	
Observations	1,072	
Parameter estimates		
Intercept	0.2073*	
Captain's lay	0.8584*	

Sources: Profits and Stations and Lays data sets.

Notes: Profit rates exclude capital gains and losses. Variant A rates assume investment in the vessel amounted to the depreciated new price of the vessel, variant B, undepreciated new price. See chapter 11 for an explanation and justification of these assumptions.

*Significant at the 1 percent level.

crew, and he was more likely to be able to recognize quality in them than they in him. Perhaps good captains insisted on good crews. If they did, the productivity and profits results described above might reflect the crew's quality, as well as the captain's.

The regression exhibited in panel B of table 10.10 suggests that the second interpretation is the correct one. Captains with short lays tended to be associated with crews with short lays; good captains insisted upon good crews. These high-quality captain/crew combinations were unusually productive, and they were able to exploit their productivity to obtain something approximating their incremental value.¹⁵

15. Craig and Fearn (1993, 130–31) also found that better crews shipped with better captains.

10.2 Agents as Organizers of Voyages

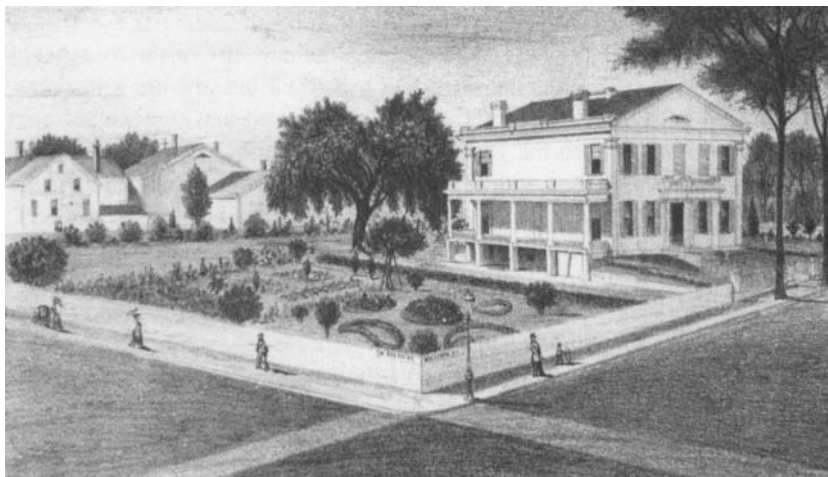
The agent was the moving spirit of the industry. Typically, he bought the vessel and then sold parts of the voyage to obtain whatever additional finance he needed.¹⁶ Together with the captain he chose the types of equipment to be carried, depending somewhat upon the ground the vessel was to hunt and the types of whales to be hunted—other decisions made by the agent. Some equipment carried over from one voyage to the next, but most did not. Harpoons and explosive lances were used up as a matter of course. Whaleboats were smashed by whales or simply wore out. Sails tore, rigging broke, and the canvas and rope that survived were unlikely to be perfectly sound.

Much of the gear and rigging was sold off after a voyage, and the vessel was entirely refitted. (Refitting sometimes included recoppering the bottom and replacing the spars and masts.) Food and drink for the crew had to be replaced, of course, as did the staves and hoops used to make barrels for storing oil. Provisioning a whaling vessel for a three-, four-, or five-year venture was a major task. If the agent was himself a grocer, a shipsmith, a dry goods merchant, a cooper, or a manufacturer of whalecraft or rope—as he often was—he could conduct part of the provisioning with confidence and make a dollar, too. He was unlikely to be able to depend only on himself. The provisioning requirements of a whaling vessel were numerous and disparate, and the agent had to seek advice and supplies from others. He also had to keep his eye on everything, since the men in the industry were reputed to be a rapacious lot.¹⁷ An agent who was not a careful overseer would not be long in business.

The agent chose the captain and the two selected officers, boatsteerers, often the cooper, and perhaps the cook and steward. Early in the history of New Bedford whaling they also typically chose the rest of the crew: neighbors'

16. For example, in August 1846 the bark *Clarice* was sold for \$6,900 to Edward C. Jones of New Bedford; in September of the same year the vessel was registered to the owners: Jones, Henry Gifford and Andrew White of Westport, and Captain Peleg W. Gifford (master of the *Clarice*) of Fairhaven. The bark *Dominga* was sold to Weston Howland of New Bedford for \$12,000 in July 1854, and in September of the same year it was registered to Howland and nine other owners. The owners were drawn from New Bedford, Westport, Dartmouth, and Falmouth, and included the master of the *Dominga*, Rowland C. Phinney, who took a 1/16 share. Jonathan Bourne Jr. bought the ship *Ansel Gibbs* in December 1861 for \$11,100; the vessel was registered to four owners (including Bourne, who took a 10/16 share) in April 1862. The ship *Europa* was sold in November 1871 to Charles Tucker of Dartmouth, and in December it was registered to Tucker (a 2/16 share) and ten other owners. Seven of the owners came from New Bedford, one from Gosnold, one from Acushnet, and one (the master, James H. McKensie, in for 1/16), from Dartmouth. All of the original purchasers listed above were whaling agents (WSL 4 August 1846, 12 July 1854, 10 December 1861, 14 November 1871; Work Projects Administration 1940, 1:55, 2:18, 2:64, 3:56).

17. "They were as tight-fisted, cruel and ruthless a set of exploiters as you can find in American history, these oil kings of New Bedford" (Morison 1961, 315; Nordhoff 1895, chaps. 1, 2). See also the first chapters of *Moby-Dick*. Individual whaling agents had their defenders. See, for example, the treatment accorded the Howlands in Allen 1973. Matthew Howland's letters suggest a kindly man but, as will appear, one who never lost sight of the economic interests of the firm. It is also true that, of the fifteen whaling ships that he, his father, and his brother managed, two were burned at sea by their crews. See Moment 1957, 279.



The residence of whaling agent George O. Crocker, circa 1881. Reproduced from the New Bedford atlas of 1881, by courtesy of the Old Dartmouth Historical Society–New Bedford Whaling Museum.



The residence of whaling agent William J. Rotch, circa 1889. William J. Rotch was the great-great-grandson of Joseph Rotch, who came to New Bedford from Nantucket in 1765 and founded the New Bedford whaling industry. From Pease and Hough 1889.

sons, perhaps their own sons, and those Vineyard boatheaders par excellence, Gay Head Indians. As the fleet expanded and the capacity of the local labor market was exhausted, potential crewmen had to be bid in from a distance. They did not have to be sailors; they could be whipped into shape in the first months at sea en route to the intended hunting ground. It was then that the greenhands learned to cope with seasickness, to climb the rigging and change sails, and, most important, to cooperate in the operation of the whaleboats. Farm boys or city clerks would do. They would be toughened up quickly enough under the tutelage of a fire-breathing mate.

New Bedford agents began to contract out the search for crewmen to firms located in New York and other port cities, where restless young men seeking adventure, older men one jump ahead of their creditors, gamblers down on their luck, and runaway slaves seeking a place to hide were to be found.¹⁸ The agent paid the recruiter a price per head—larger if the agent accepted the recruit and signed him on, smaller if he rejected him.¹⁹

Agent and captain planned the voyage together; the contribution of each depended on experience, prior success, and personal force. The chief decisions rested with the agent, but he might well be guided by an able and experienced captain, especially if the latter had an ownership stake in the voyage. The plan included the length of time the vessel was to be at sea, the grounds to be hunted (sometimes the periods during which the vessel was to be on each ground), and the places and dates at which the vessel would put in to resupply, take on new crew members, and ship oil or bone homeward. A formal statement of the main outlines of the plan was usually given to the captain, vide the following passage from a letter of 1 November 1834 from Charles W. Morgan to Captain Reuben Russell, 2d (Morgan Collection):

The Bark being now ready for sea as agent I have to advise you that she is bound on a whaling voyage to the Pacific Ocean—That she is fitted for thirty months—and that we wish you to cruise for sperm whales for 20 to 24 months and if not then full, fill up with whale Oil—we leave to your judgment the cruising ground on the Pacific though we would recommend the neighborhood of New Zealand, where both right & sperm whales are to be taken, and it would be well especially towards the end of the voyage to be where right whales could be taken.

Special information on hunting grounds was also sometimes communicated. For example, the Aiken and Swift agency kept a set of notes on hunting grounds that eventually ran to four volumes. The notes typically describe whale catches, by type of whale, vessel, longitude and latitude, and date. On

18. "G. W. TICE & CO., SHIPPING AGENTS, 110 WEST STREET, New York. Crews shipped and paid off at short notice. Particular attention paid to furnishing Whalemens crews. Orders promptly attended to" (advertisement in *WSL* 19 March 1867).

19. Nordhoff 1895, chaps. 1–3. According to Nordhoff, the fee was paid by the seaman. These chapters give a good account of the recruitment of a crew, the character of a typical crew late in the period of New Bedford whaling, and the training of greenhands.

the inside of the cover of the fourth volume of one copy is the following message:

Dear Captain Gifford,

This book is given into your charge with the full understanding that all its contents will be kept by you in the strictest confidence and that you will make it a point of honor not to communicate any of its contents to any one whatever directly or indirectly or let any one get them in any way—except the Captains of our ships—

Your friends,
Aiken & Swift

New Bedford
15 December 1879

The agent's activities did not stop when the vessel left port.²⁰ He was responsible for assuring that credit and access to cash were available to the captain when he put in to an overseas port. The agent and the owners had to decide whether to insure the voyage and, if so, for how much. Insurance was expensive; it ran from as little as 2 to as much as 8 percent per year, probably averaging 2.5 percent in peacetime. For a voyage of four years, the average cost ran to about one-tenth of the value of the vessel and outfits, plus whatever premiums were required to cover the catch. Since a good catch exceeded the value of the vessel, if anything was to be insured, the catch would be. Of course, since the premium was part of the cost of the voyage and the crew's lay was calculated on the net value of output, the crew bore the insurance burden.²¹ If the vessel went down, however, the owners alone collected.

The plan of the voyage was made before the vessel sailed, but plans were always subject to change. Unusual success might require a vessel to put in at a transshipment point earlier than expected; ill success might keep a vessel at sea longer than the original plan called for; desertions, illness, and death might oblige the captain to put in to a port to recruit crew members or put a sick man ashore; accidents might require berthing at a place where repairs could be carried out; shifts in prices might call for a change in hunting or marketing strategy. The captain could not wait for word from the agent before reacting to opportunities or disasters. Nonetheless, he maintained contact with the agent,

20. Most of the material of the next seven paragraphs is taken—frequently word for word—from Davis, Gallman, and Hutchins 1991, 217–19.

21. See the Howland Collection, letters of 13, 17, 22, 24, and 25 September 1877, 12 October 1877, and 4, 8, and 27 February 1878, in which the Howlands dickered with an insurance company first over the coverage of two vessels—the insurance company wanted to restrict the cruising range of one of them—and then over the payment of a claim. In one instance it appears that a vessel was insured for one-half of its value plus one-half of the provisions. The 8 percent rate is implied in the correspondence of 1877. In that year insurance companies would not longer insure voyages to the Western Arctic or the Sea of Okhotsk. See also 16 January 1860, Howland Collection; *Emily Morgan* 1842; the accounts of the *Callao* in Moment 1957, 271–73; Hohman 1928, 312. Hohman quotes an 1858 consular report by Fayette M. Ringgold, who says that insurance was deducted before lays were computed.

as best he could, and the agent kept as close a supervision of the voyage as he could manage from a distance of as many as several thousand miles. Before the voyage began, captain and agent agreed on dates and stations where letters could be picked up and dispatched, and letters were also exchanged at rendezvous between whaling vessels or between supply ships and whaling vessels. Whalers returning to New Bedford always carried news of the fleet.²²

A sense of the nature of the exchanges between captain and agent can be obtained from the letter books of whaling agents. On 21 November 1836 Charles W. Morgan wrote to George H. Dexter, a Morgan captain, at Montevideo (Morgan Collection): "I wrote to you 15 Inst advising you that if you could get a price for your oil equal to 40 cts clear of every charge remitted home you might sell it but in consequence of news received of the failure of the Greenland Fishery we think oil will be very high the next season & therefore we now advise that unless the oil will nett 45 cts clear we would wish you to bring it home."

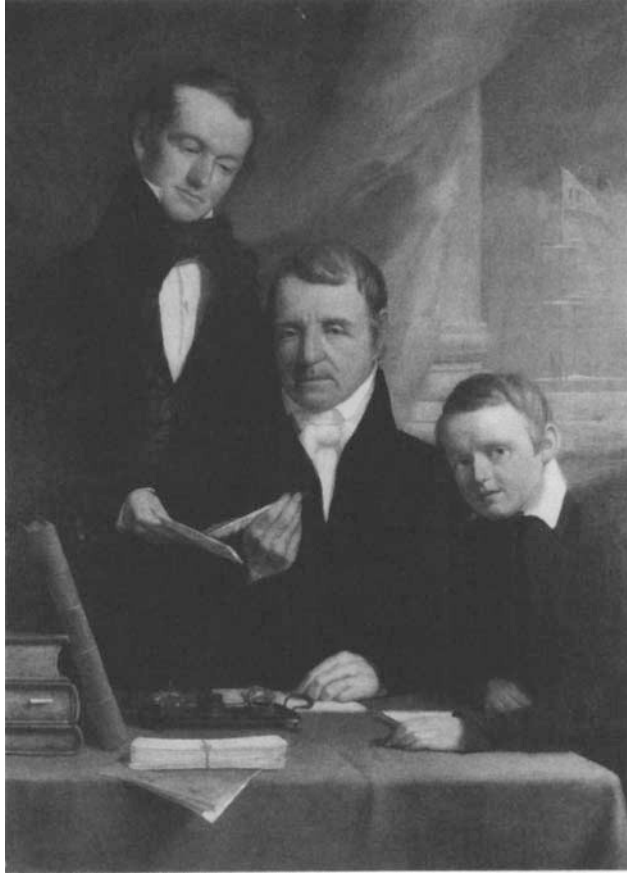
In February 1858 Matthew Howland wrote to one of his captains, Philip Howland, admonishing him over his recent performance: "25 months out with 600 bbl sperm & 130 whale is rather low but *I am in hopes* that you will come up now, and *be equal* to any of them according to time out—I shall expect to hear of you into Talcuahana in March with from 800 to 1000 bbls of sperm oil on board" (Howland Collection).

In December he composed a similar letter to Paul Green, captain of the ship *Rousseau*: he did not wish to second-guess Green, but it was nonetheless true that, having decided to go to the Arctic, Green should have stuck it out through the whole season instead of shifting from ground to ground. Howland also pointed out that the longer it took to fill the vessel, the longer Green and the crew would be away from home and friends, a reminder that appears frequently in these letters. There followed an account of arrangements for the delivery of provisions to the Sandwich Islands for Green's vessel, news of home and of the success of other Howland vessels (Howland tried to keep vessels in competition with each other: "You must not let the Reindeer beat you"), orders to Green to ship home any bone he collected but to keep the oil aboard, and personal regards to the mates.

On the same day (15 December 1858) Howland wrote to Captain G. P. Pomeroy of the ship *George Howland*, telling the captain that he had made a mistake in choosing to hunt in the Kodiak area. He should have gone to the Sea of Okhotsk. He told Pomeroy to keep expenses down (a recurring theme), quoted the price of oil, passed along personal news, sent regards to the first and second mates, asked who was now third mate, and inquired if all the boatsteerers were *good*.

Two days later he wrote Captain Valentine Lewis of the ship *Corinthian*, telling him to go to Kodiak and to move on to the Arctic if hunting off the

22. See Anthony 1922. Anthony was a young merchant who worked for the Rotches, a prominent whaling family. The diary describes the flow of information on the state of the whaling fleet. See also Whitecar 1864, 127, 146.



George Howland and two of his sons (George Jr. and Robert), oil on canvas, by William Allen Wall. George Howland Sr. was the son of a farmer. When he died in 1852 (at seventy-one), he left "a net estate of \$615,000, a fleet of nine whaling vessels, a countinghouse, wharf and candle factory in New Bedford; acreage in Maine, western New York State, Michigan and Illinois; a wholly nominal title to Howland Island in the mid-Pacific, and charitable bequests in the amount of \$70,000" (Allen 1973, 82).

George Howland Jr. was born in 1806 and was the only surviving child of his father's first marriage. Robert, born in 1826, was a child of the second marriage. George Jr. and another half-brother, Matthew Howland, carried on the whaling agency their father had founded. In thirty-three years during the life of George Sr., the agency sent out seventy-six whaling voyages from New Bedford; in twenty-five years after his death, the agency sent out forty-three.

George Howland Jr. was mayor of New Bedford in 1855–56 and again in 1863–65. Matthew Howland devoted his life to the business.

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

southern coast of Alaska proved poor. He gave Lewis the latitude and longitude of the good catches made by other captains that year. In a letter dated 31 December, Howland acknowledged two letters from Captain Robert Jones of the *George and Susan*, which had arrived by steamer from the Sandwich Islands, said he had handled the matter of Jones's insurance, and passed along news of Jones's wife.

In July of the next year the unfortunate Captain Pomeroy was sent a letter expressing concern over the amount of cash he had been drawing. In the same month a letter to Jones commiserated over the death of a mate (killed by a whale's flukes), expressed a hope that the replacement was proving effective, and said, "I am pleased to learn of thy judging it proper to lower for whales [illegible] after the death of Mr. Tripp." Captains in the Howland fleet were to attend always to business.

In letters written to Jones and Lewis in 1860 (18 January, 18 July), he complained that the former was not writing frequently enough and that he, Howland, had been forced to follow the voyage through the newspapers, but he complimented Lewis on the amount and quality of the oil and bone sent home, all of which, he added, had been sold on good terms. In the same year (8 August) Howland also wrote to Grafton Hellman, a friend of Captain Green, whose wife had died. The letter is worth quoting at length.

Now, as thee has kindly offered to do anything for us in regard to this sad affair, we would recommend, if it should appear necessary, to encourage Capt Green as much as possible to look on the bright side of things and endeavor to carry out his wishes in regard to the remains of his wife, advising him to pursue his voyage as far as his feelings will allow him, as though nothing had happened, believing that this severe bereavement which has come upon him, is in the ordering of Divine Providence and might have occurred if he had been at home . . . we hope he will have no idea, and we can hardly imagine he will, of abandoning the voyage or delaying the ship in Port longer than is really necessary . . . as considerable time & money have already been expended (perhaps necessarily) on account of his wife's illness.

He went on to ask Hellman to remind Green that Green had a duty to the owners. Green decided to complete the cruise, per Howland's request.

Once the voyage was over, the agent was responsible for paying off the crew and disposing of the product. The former task has been described in chapter 5 and need not be discussed further. As to the sale of the product, some agents invested in oil and candle manufactories and took part of the product themselves, others sold locally, and still others were in the international market and sold overseas.²³

23. Charles W. Morgan to Jollie Clibborn and Company, Antwerp, 2 November 1833; to Wilkins Blokhuyzen and Company, Rotterdam, 14 August 1834; to Maxwell Wright and Company, Rio de Janeiro, 23 November 1836; all in Morgan Collection.

It will be evident that agents had many opportunities to gain from their agencies: most owned a share of the voyage; many were provision merchants or outfitters or were in some other line of business from which they could profit from the provisioning of the voyage; many were in the business of processing oil.²⁴ Finally, they also received fees for outfitting the vessel and for guaranteeing the sale of the products of the voyage. For example, for the 1871–75 voyage of the *Callao*, the firm of Taber, Gordon, and Company drew a commission of 2.5 percent for outfitting the vessel and 15 percent of the value of oil and bone brought back for guaranteeing the sale of the product. This was a venture on which the owners lost between \$7,000 and \$8,000. Taber, Gordon, however, nearly broke even, the commissions coming within \$700 of offsetting its ownership losses. If the firm also provisioned the vessel—which it may have done—it may actually have made some money on the voyage (Moment 1957, 271–73; see also Decker 1973, 31).

10.3 Who Were the Agents?

The agent was typically—although not always—an owner of the vessel he managed. (Usually he was the principal owner; sometimes he was the only one.) Ownership could be divorced from management, but that was risky. Generally, the agent initiated the project, and it was he who sought out other owners, not the other way around. He wanted to bring others into the venture to help him finance it and to share the risks. The agents of a majority of voyages after 1819 participated as owners; as time passed, the proportion rose until it was close to 100 percent (table 10.11). The share typically owned by the agent increased from almost one-third, in the years 1846–60, to about 46 percent thereafter. Agents were important members of ownership groups.

Few agents used the title “whaling agent” in their listings in the New Bedford City Directory; a few more—but not many—were given this name by the R. G. Dun & Co. field representatives in their credit reports to the home office. (See appendix 10B.) Many firms went by the name “merchant”; others chose “grocer,” “provision merchant,” “tailor,” “dry goods merchant,” or “cooper” (see table 10.12). There were many other designations, as well, but the bulk of the agents fell into the groups just named. Note that a substantial part of the business of New Bedford grocers, tailors, and so forth involved provisioning whalers and their crews. No doubt many agents came to the business of whaling through one of these supplying activities or from an interest in buying and selling oil and bone. Others may have started in whaling and then gradually integrated backward into one of the supplying industries or forward into candle making or oil processing. Certain it is, however, that agents typically partici-

24. In 1841 twenty-one candle houses and oil manufactories were listed in the New Bedford City Directory. Seventeen were owned by members of important whaling families.

Table 10.11 Whaling Agents as Investors in New Bedford Whaling Voyages

A. Agents Who Invested in the Voyages They Managed						
	Before 1820	1820–35	1836–45	1846–60	1861–80	After 1880
Voyages	29	138	166	299	206	146
Agent-owners	5	77	140	264	197	127
%	17.2	55.8	84.3	88.3	95.6	87.0

B. Agents Holding Various Ownership Shares				
Shares	1846–60	1861–70	1871–80	After 1880
1/16–<1/4	63	26	18	15
1/4–1/2	104	49	37	65
>1/2–3/4	13	21	12	33
>3/4	10	17	17	14
Unknown	74	—	—	—
Mean share	.328	.457	.451	.467

Source: Owners Data Set.

Note: The increase across the early periods in the number of voyages in which agents participated as owners, shown in this table, may reflect in part improvements in the quality of the data, rather than changes in the behavior of agents.

Table 10.12 Occupational Designations of New Bedford Whaling Agents, 1836–75

	1836		1845		1856		1867		1875	
	N	%	N	%	N	%	N	%	N	%
Merchant	42	76	51	68	65	72	34	69	18	62
Provision merchant or grocer	5	9	7	9	5	6	2	4	3	10
Dry goods merchant or tailor	0	0	3	4	5	6	4	8	1	3
Cooper	0	0	0	0	1	1	0	0	0	0
Boatbuilder or shipwright	0	0	1	1	1	1	0	0	0	0
Sailmaker	0	0	1	1	2	2	1	2	1	3
All other ^a	8	15	12	16	11	12	8	16	6	21

Sources: Captains and Agents Data Set; New Bedford City Directories, 1836, 1845, 1856, 1867, 1875.

^a“All other” includes the president of the New Bedford Gas Light Company; manufacturers of paint, iron, patent medicines, oil, and candles; dealers in real estate, cement, bricks, whale oil, petroleum, coal oil, and coal; a speculator; and a watchmaker/jeweller/inventor (of an exploding harpoon and a harpoon gun) named Zeno Kelley, who was convicted in November 1863 of having in July 1860, as her agent, fit the ship *Tahmaroo* for the slave trade. Kelley was sentenced to a fine of \$1,000 and four years’ imprisonment, but seems not to have served the full sentence. In November 1866 he was in New Bedford demonstrating “a double padlock, of his invention and manufacture, which . . . will be invaluable to the government, for use in the post office, customs and internal revenue service. It is called a self-sealing lock, and though simple in its construction, allows remarkable ingenuity in the contriver, and will put at fault the most expert rogue” (*WSL* 21 January 1862, 17 November 1863, 4 December 1866).

pated in several related activities. Those who were heavily involved in whaling even acquired wharves of their own.

The degree of commitment varied widely. On the one hand, some agents—Rotches, Howlands, Aikens, Perrys, Swifts, Wings—pursued the trade over many years, in some instances over several generations. They were linked with many ownership groups and often had several vessels at sea simultaneously. On the other hand, there were a good many individuals who managed one or two or three voyages, and then left the trade (see table 10.3).²⁵ In almost all of these cases the agent was primarily and regularly engaged in an ancillary activity. He managed a voyage or two, but never became a fully committed agent. Typically he had been an owner before he became an agent and continued as an owner after he gave up management.

Naomi Lamoreaux (1986) has shown that, in the first half of the nineteenth century, New England banks were often organized to finance insiders' business activities. The largest borrowers were usually officers or members of the board of directors. In New Bedford the banks, and the insurance companies as well, catered to whaling. For example, in 1841 the presidents of three of the four commercial banks and of the one savings bank were whaling agents: William Rodman, George Howland, John Avery Parker, and William Rotch Jr. Almost all of the members of the boards of directors were members of whaling families. Similar statements could be made about the six insurance companies. The presidents of four were whaling agents; a fifth was owned by a prominent whaling family. Thirty-six years later, the banking situation was essentially unchanged. The presidents of three of the six banks were agents, and two of the remaining three presidents were members of agent families. The insurance picture in 1877 was altered to the extent that insurance was now dominated by Boston firms. The one New Bedford agency listed in the directory, Tillinghast and Alden, was run by the scions of whaling families.

Many of the agents made large fortunes, and in the 1840s and 1850s New Bedford was one of the richest towns in the United States. Agents did not, however, sit tight in whaling; they were alert to new opportunities. The Rotches invested in railroads, toll roads, banks, insurance companies, and real estate. In 1841 the New Bedford and Taunton Railroad had whaling officers and a whaling board of directors: James H. Crocker, William W. Swain, Alfred Gibbs, David R. Greene, Thomas Mandell, Pardon G. Seabury, and George Howland. Charles W. Morgan went as far afield as Clark's Ferry, Pennsylvania, to invest in the Duncannon Iron Works. The Howlands diversified into railway investments, including the Old Colony. They were also a part of the entrepreneurial force behind the establishment of the Wamsutta Mill, the first cotton textile mill in New Bedford. (The town eventually became the state's third leading cotton textile manufacturer.) It was a Howland, Weston, who came close to committing industrial treason when he opened the first New Bedford petroleum-refining plant (Pease and Hough 1889, 145, 146, 177).

25. Some of these people left New Bedford but continued whaling from another port.

The leading whaling families made alliances with other whaling families—aliances that were frequently nurtured by religious practices and by marriage. The most important agents were Quakers; and, although the meeting suffered a wrenching schism in the 1820s that divided the whaling families into two camps, within the two divisions connections were maintained.²⁶ Marriage solemnized alliances and often led to the formation of business partnerships. The Rotches and the Rodmans, the first great New Bedford whaling families, intermarried and additionally coopted James Arnold, a promising merchant from Providence, and Charles W. Morgan. The Howlands married Allens, a Bartlett, Bournes, a Durfee, a Delano, a Kempton, a Peirce, a Parker, a Robinson, Russells, Shearmans, a Sherman (probably the same family), Tabers, a Wing, Woods, and various Howlands (the Howlands were a numerous family), but notice that they married no Rotches or Rodmans: the two sets of families were on opposite sides in the Quaker division. The Allens, in addition to matching with Howlands, also took up with six of the families on the Howlands' list, as well as with the Ricketsons, Giffords, Nyes, Luces, Popes, and Ashleys. The Perrys joined with the Almys, Swifts, and Hathaways, as well as with four families linked to the Howlands and the Allens. The Lewises wedded members of seven families already mentioned, plus Kemptons, Bonneys, and Coggeshalls. And so it went. New Bedford was a small place; it is not surprising to find substantial intermarriage among whaling agent families. In addition, given the nature of the business organizations of the day, it is hardly surprising that the basis for partnership would often be marriage (or vice versa?). What is interesting here is that the marriage networks suggest certain discrete family groupings. There seem to be no links between certain groups (the Rotches and the Howlands); in other cases the links, while few and chiefly indirect (the Howlands and the Parkers), do exist (McDevitt 1978, 551–58; *Vital Records of New Bedford*).

10.4 Agents and Productivity

Productivity varied among agents. The range of performance even across specialist firms—those that participated in at least thirty voyages—was wide. The average index of productivity for these firms (agent chains) ranged from 1.486 to 0.082 (see table 10.13). Nonspecialists, on average, operated at a

26. The Joseph Anthony diary (1922) provides insights into the Quaker schism. (Anthony's sister and sister-in-law were involved in the controversy and were to be disciplined, but chose rather to resign from the meeting.) The central place of the meeting houses and churches in the life of the mercantile community in the 1820s comes through clearly. Anthony frequently attended two or three services on a Sunday, apparently chiefly to hear the speeches of visiting preachers. His interests seem to have been stirred as much by intellectual and aesthetic, as by spiritual, considerations. He gives a lively account of the conflicts that led to the division of the Friends—including many whaling families—into two camps. Conflicts centered chiefly on the question of whether the Friends should be actively evangelical, but extended to matters of appropriate dress and behavior.

Table 10.13 Average Voyage Total Factor Productivity Achieved by New Bedford Whaling Agent Chains, 1802–1908

A. Average Productivity of Individual Agent Chains				
Agent Chain	Dates of Operation	Number of Voyages		Productivity Index Number
		Agented	In Sample	
Seth Russell Jr.; Seth Russell & Sons;				
Seth Russell; Coggeshall & Russell	1808–31	39	33	1.486
Abraham Barker	1827–57	43	36	1.106
Abraham H. Howland	1833–58	40	32	1.055
Edward W. Howland	1843–70	50	43	1.039
David R. Greene & Co.	1831–66	46	41	1.024
William Gifford; Gifford &				
Cummings; Charles H. Gifford	1836–78	50	39	1.009
Charles W. Morgan	1826–53	60	54	0.992
Edward C. Jones	1839–70	81	73	0.981
Isaac Howland Jr. & Co.	1817–62	171	152	0.961
Alexander Gibbs	1830–56	49	40	0.941
Benjamin B. Howard	1833–62	46	37	0.813
George Howland; George & Matthew				
Howland	1818–77	119	100	0.809
Henry Taber & Co.	1834–65	47	40	0.805
Lemuel Kollock; Lemuel Kollock &				
Son	1833–59	39	35	0.798
Henry Clay; Henry Clay & Co.	1875–1901	44	27	0.795
James B. Wood & Co.	1841–72	61	52	0.794
Jireh Swift Jr. & Frederick S. Allen	1844–85	88	64	0.788
Jonathan Bourne Jr.; Jonathan Bourne	1833–86	147	115	0.782
William C. N. Swift & Eben Perry;				
William H. Aiken & Frederick				
Swift; Frederick Swift	1851–93	131	69	0.766
Jireh Perry	1829–50	43	34	0.713
Samuel Rodman; Sylvanus Thomas &				
William F. Dow; Sylvanus				
Thomas & Co.	1802–66	59	44	0.693
John & James Howland	1818–53	37	32	0.690
John Avery Parker; John Avery				
Parker & Son	1818–53	97	70	0.669
Gideon Allen; Gideon Allen & Son;				
Gilbert Allen	1830–87	94	72	0.656
Thomas Cook & Loum Snow; Loum				
Snow; Loum Snow & Son	1850–87	59	44	0.645
Charles R. Tucker; Charles R.				
Tucker & Co.	1835–76	112	96	0.633
Thomas & Asa R. Nye; Thomas Nye				
Jr.	1832–64	80	71	0.613
Matthew Luce; William Hathaway				
Jr. & Matthew Luce; William				
Hathaway Jr.	1838–66	45	43	0.600
John R. Thornton	1837–65	30	28	0.598

(continued)

Table 10.13 (continued)

Agent Chain	Dates of Operation	A. Average Productivity of Individual Agent Chains		
		Number of Voyages		Productivity Index Number
		Agented	In Sample	
Barton Ricketson	1840–51	33	28	0.594
Thomas Luce; Thomas Luce & Co.	1886–1903	36	11	0.585
William G. Taber, William Gordon Jr. & Co.	1866–93	39	28	0.565
Ivory H. Bartlett; Ivory H. Bartlett & Son; Ivory H. Bartlett & Sons	1833–93	95	32	0.465
Joseph & William R. Wing	1852–1914	236	90	0.460
William R. Rodman	1830–55	35	27	0.449
Thomas Knowles & Co.; Thomas Knowles	1844–83	95	84	0.438
Edmund Maxfield	1851–72	30	23	0.370
John P. Knowles II	1859–87	47	39	0.351
Charles Hitch; Charles Hitch & Son; Joshua C. Hitch	1843–83	39	29	0.349
William Penn Howland	1843–70	39	33	0.117
William Lewis; William Lewis & Son	1872–1908	153	30	0.082
B. Comparison of More and Less Active Chains				
Agent Chains with				
	≥30 Voyages	<30 Voyages		
Total number of voyages agented	2,922	1,363		
Number of voyages in productivity sample	2,070	974		
Average productivity	0.731	0.594		

Sources: Productivity and Captains and Agents data sets.

Note: For a discussion of agent chains, see table 10.3 notes.

lower level of productivity—0.594, as compared with 0.731 for the specialists. That finding is plausible: presumably the firms that succeeded stayed in the business, and those that did not got out.

Beyond this commonsensical statement, is there anything that can be said about agents and productivity? Is there any characteristic of agents that is a good predictor of success? Is there an indicator, similar in nature to the captain's lay, to distinguish, before the fact, good agents from poor ones? Two possibilities spring to mind. First, the R. G. Dun & Co. field agents rated business firms. Presumably, however, the Dun & Co. agents judged quality in terms of the kinds of criteria that figure in the productivity measurements. To the extent they did, entering the Dun & Co. indexes into an equation designed to

explain productivity differences among agents would involve circular reasoning.

A second approach would be to add an index of agenting experience to the productivity regression. Presumably agents differed in their productivity partly because of differences in skill unrelated to experience. The experience indicator, therefore, cannot be expected to distinguish agent quality perfectly, but it is worth some attention.

The results of the experience regressions appear in table 10.14. Two were run. The first (see panel A) simply adds the experience variable (a count of the voyages managed by the agent before the voyage in question) to the variables appearing in table 10.9. The results from the two equations—that reported in table 10.9 and that reported in panel A of table 10.14—are virtually identical. The experience variable has the right sign, but the coefficient is very small and the significance level very low. Adding the experience variable adds nothing to the explanatory power of the equation (that is, to the adjusted R^2).

These results may be explained by the specification of the original productivity equation; it includes a number of variables that capture many of the agents' managerial decisions. To the extent that this argument is correct, it should not be surprising that the experience variable adds little to the explanation of productivity differences among voyages. The other variables have already captured the effects of the main activities of the agents.

To test this possibility, a second regression was run (see table 10.14, panel B). The variables that encompass the agents' decisions are omitted. The coefficient on the experience variable in the new regression is larger than before—large enough to be important, given the range across which the index varies (1–94)—and it is significantly different from zero. The coefficient on the captain's lay drops, as does its significance level (it is now significant only at the 16 percent level); and the signs, coefficients, and significance levels of a number of the other variables also change. On the one hand, the shorter regression better captures the impact of agents' experience on productivity. On the other hand, the longer regression gives a more comprehensive account of the factors influencing productivity, and makes it possible to distinguish the relative importance of the various decisions made in the process of guiding a whaling venture. Of course, it also takes into account the effects of differences in quality among agents that are unrelated to experience. Each of the two regressions is useful.

The experience variable may introduce an element of selection bias. The regression in panel B compares agents who were successful enough to stay in the business for a long period, with those who were unsuccessful and therefore got out quickly. Since the regression also draws comparisons within the experience of individual agents (the productivity recorded during the first voyage of agent X is compared with the productivity of his vessels on subsequent voyages), the selection bias is mitigated. A firm that lasted many years contributes

Table 10.14 **Agents and the Productivity and Profitability of New Bedford Whaling Voyages, 1840–58 and 1866**

A. Comprehensive Equation, Productivity		
Dependent Variable: Total Factor Productivity		
Statistical properties		
<i>F</i>	50.0	
Adjusted <i>R</i> ²	.575	
Dependent mean	.689	
Durbin-Watson <i>D</i>	1.907	
Observations	908	
	Parameter Estimate	Variable Range
Intercept	2.3441*	
Hunting pressure		
On baleens	0.0008	0–121
On sperms	0.0002	0–200
Competition index	0.0001	40–3,114
Competition index squared	-5.041×10^{-8}	
Real common wage rate ashore	-0.0148*	68–94
Ratio, skilled/common wage rate ashore	-0.5593	0.9–1.1
% of crew illiterate	0.2731***	0.0–0.75
% of crew greenhands	0.1902	0.0–0.68
Ships (compared to other rigs)	0.1448*	
Vessel tons squared	0.000001*	6,593–422,240
Ground (compared to Pacific)		
Atlantic	-0.5068*	
Indian	0.0541	
Western Arctic	0.2416***	
Mode of entry to fleet (compared to built before 1850)		
Built as whaler after 1849	-0.0565	
Built as merchantman after 1849	-0.1722	
Vessel rerigged	0.1429**	
Vessel age	-0.0048	0–65
Vessel age squared	0.00006	
Last voyage	-0.0916	
Specialization		
In baleens	0.0029	
In sperms	-0.6912*	
Voyage length (months) squared	-0.0003*	1–4,761
Time (years since 1820)	0.0026	20–46
Captain's lay	5.1384*	0.05–0.14
Agent's experience (voyages) ^a	0.0003	1–94

Table 10.14 (continued)

B. Summary Equation, Productivity	
	Dependent Variable: Total Factor Productivity
Statistical properties	
<i>F</i>	79.6
Adjusted <i>R</i> ²	.505
Dependent mean	.716
Durbin-Watson <i>D</i>	1.854
Observations	1,003
Parameter estimates	
Intercept	1.9779*
Hunting pressure	
On baleens	-0.0002
On sperms	-0.0014*
Competition index	0.0009*
Competition index squared	-2.451 × 10 ⁻⁷ *
Real common wage rate ashore	-0.0119*
Ratio, skilled/common wage rate ashore	0.0063
Last voyage	-0.0848
Specialization	
In baleens	0.0542
In sperms	-0.7507*
Voyage length (months) squared	-0.0003*
Time (years since 1820)	-0.0110**
Captain's lay	2.7605
Agent's experience (voyages)*	0.0017**

C. Summary Equation, Profit Rate ^b	
	Dependent Variable: Profit Rate, Variant B
Statistical properties	
<i>F</i>	25.4
Adjusted <i>R</i> ²	.244
Dependent mean	.071
Durbin-Watson <i>D</i>	1.972
Observations	983
Parameter estimates	
Intercept	-0.1452
Hunting pressure	
On baleens	0.00008
On sperms	-0.00040*
Competition index	0.0002*
Competition index squared	-5.744 × 10 ⁻⁸ **
Real common wage rate ashore	-0.0008
Ratio, skilled/common wage rate ashore	0.4857*
Last voyage	-0.0331

(continued)

Table 10.14 (continued)

C. Summary Equation, Profit Rate ^b	
	Dependent Variable: Profit Rate, Variant B
Specialization	
In balcons	0.0255**
In sperms	0.0098
Voyage length (months) squared	-0.0001*
Time (years since 1820)	-0.0058*
Captain's lay	0.3576
Agent's experience (voyages) ^a	0.0004***

Sources: See the notes to tables 8.2 and 8.6, the text of this chapter, and chapter 11.

Notes: What we call agents here are actually firms of agents, or agent chains. It seems likely that experience resides in the firm rather than solely in an individual.

The ranges through which the independent variables move are virtually identical for the three equations.

^aExperience is measured as the number of voyages the agent managed before the subject voyage, with the exception that we did not count any voyages that sailed in the same month and year as the subject voyage.

^bProfit rates exclude capital gains and losses. Variant B evaluates the investment in the vessel at the undepreciated new price (see chapter 11).

*Significant at the 1 percent level.

**Significant at the 5 percent level.

***Significant at the 10 percent level.

many observations to the regression, while a firm that had a short whaling life contributes few. Furthermore, since most voyages were managed by specialist agent firms—firms that managed many voyages—most of the comparisons among agents that are treated in the regression are comparisons among successful firms. Selectivity bias, therefore, is probably not a serious problem, making it safe to interpret the results of these runs as describing the effects of the experience of the agent, per se, on productivity.

Finally, panel C of table 10.14 shows the results of rerunning the regression reported in panel B, using an index of profits (see chapter 11) as the dependent variable. The results are very similar throughout.²⁷ The experience variable is significant at just above the 5 percent level. The coefficient at first seems small, but in fact it is not. For example, it implies that an agent with fifty-one voyages—not an extraordinarily large number (see table 10.3)—would achieve a profit rate almost 2 percentage points above that of an agent who had organized only one voyage. Since the dependent mean rate is only 7.1 percent, the impact of agents' experience on profits seems substantial.

27. The R^2 is substantially lower, probably because the numerator of the profit rate is a small residual, whereas the numerator of the productivity rate is not. The relative influence of unexplainable luck should have been greater on the profit rate than on productivity.

10.5 Income and Wealth of Agents

Agents had many sources of income, within the whaling industry and outside it. Consider the gains from whaling alone. The typical pure profit rate on a voyage from which the vessel returned to port ranged between 6.5 and 14 percent, exclusive of capital gains or losses. (Such gains or losses were usually small.) An agent with a piece of the voyage could expect to receive pure profits at these rates on his investment. In addition, he would receive interest of 6 percent, making a total return of between 12.5 and 20 percent per annum (see chapter 11). As previously indicated, the agent could expect a fee for provisioning the vessel and another for guaranteeing the sale of the oil and bone. Assuming that the agency fees were at the level of those earned by Taber, Gordon, and Company on the 1871–75 voyage of the *Callao* (see above), and that the agent owned 46 percent of the voyage (see table 10.11), he would add between 15 and 24 percent per year to his investment returns in this way. His total return from whaling would run from 28 to 44 percent per year.

This return was not completely net, however, nor was it exclusively a return to his investment in the voyage. The agent had to maintain his place of business and pay his clerks. He had to be reimbursed for the opportunity cost of his managerial time. If he owned a wharf—many did—he had to maintain that, as well. The wharf, however, since it could accommodate more vessels than the agent was managing, represented another source of income. Furthermore, the 2.5 percent or so that he received for provisioning the vessel was not all the money he made on provisioning. For example, seamen's outfits were charged to the seamen at retail, but the agent actually paid a discounted price for them. Similar markups may have been charged on stores paid for by the owners. The agent also received interest on advances to seamen, and, as an owner, shared in the profits of the slop chest—profits made from the onboard sale of clothing and trade goods to the crewmen. On the whole, then, an agent could expect to make a substantial income from a successful voyage—that is, a voyage from which the vessel returned to New Bedford.

If the vessel did not return, all was not necessarily lost. If it sank, it was probably insured—vessel, outfits, supplies, and catch—so that, at a minimum, the agent did not lose his investment. If the vessel had shipped output home in advance, there was money to be made from its sale, including the agent's fee for guaranteeing sales, perhaps 15 percent. Even a vessel sold or condemned in a foreign port brought a price, if not the full investment price.²⁸

Overall, then, how well were agents rewarded? A typical voyage in the 1850s

28. Apparently insurance could be collected on condemned vessels. See *WSL* 10 August 1858, which describes the events leading up to the condemnation of the ship *Menkar* at Hobart Town, Van Diemen's Land, and then adds, "The amount of insurance on the ship and cargo in this city is \$31,000." There would be no point in the last sentence unless the owners of the *Menkar* could collect.

called for an investment of \$20,000 to \$30,000. If the agent contributed, on average, 46 percent, with just one vessel afloat (which returned regularly to port and made typical earnings) and the earnings rates computed above, he would receive income of between \$2,600 and \$6,100 per year. If he were agent for more than one vessel—the important agents typically had several at sea at once—his income would be higher, of course. An agent with four vessels might be making as much as \$24,000 per year.²⁹ This was a large sum. In the mid-1850s federal district judges in the east made between \$2,000 and \$3,700 per year, chief justices in the territories, \$2,500, the governor of New Mexico, \$3,000, the secretary of state, the assistant secretary, their clerks and their messengers, all together, \$38,700, and the president of the United States, \$25,000.³⁰

One reason agents' incomes were high is that they were rich enough to make substantial investments in whaling. Just how rich were they? Table 10.15 gives one answer. In 1855 whaling agents were assessed for tax purposes on an average wealth of almost \$65,000; if the wealth they held in partnerships were separated out and added to the average, the latter would probably have been about \$70,000. According to Lee Soltow (1975, 101), in 1860 the richest seven thousand American males (the richest 0.1 percent of free adult males) each owned property valued at \$111,000 or more. If the census figures used by Soltow are congruent with the New Bedford tax data, then, by the standards of the day, New Bedford whaling agents were very rich indeed. The two sets of figures are unlikely to be exactly similar, in concept or in precision of measurement, but the biases, if they exist, probably lead to tax figures that are lower than census figures. If so, the relative affluence of New Bedford whaling agents is understated by the table, and it is possible to conclude with some confidence that these people were among the richest in the United States.³¹

Panel B of table 10.15 represents an effort to distinguish among various types of agents. Those who had engaged in many voyages before 1856 were considerably richer than those who had engaged in few. The range in average wealth is wide, running from \$112,642 for very active agents down to only \$23,858 for those who had not yet begun to manage voyages. Whaling appears to have been a lucrative business. The extent to which this was true, however,

29. Four is not an extraordinarily large number. For example, Gideon Allen, Jireh Perry, Jonathan Bourne Jr., and John Avery Parker and Son had as many as six vessels afloat at once, and rarely had as few as three.

30. An Act to Increase the Salaries of Executive and Judiciary Officers in Oregon, New Mexico, Washington, Utah, and Minnesota, 1854, *Stats. at Large of USA* 10:311–12; An Act Making Appropriations for the Civil and Diplomatic Expenses of Government for the Year Ending the Thirtieth of June, 1855, and for Other Purposes, 1854, *Stats. at Large of USA* 10:548; An Act to Regulate the Salaries of the District Judges of the United States, 1855, *Stats. at Large of USA* 10:608–9. Agent firms, however, often had more than one partner, in which case income flowed to more than one person.

31. The term *whaling agent* is gender neutral. Among the richest of the whaling agents was Sylvia Ann Howland, partner in Isaac Howland Jr. and Company. For an account of the struggle over Howland's estate, see Sparkes and Moore 1935.

Table 10.15 Wealth in New Bedford, 1855

A. New Bedford in General		
Population		
Families		3,940
Males		9,659
Females		10,655
Taxable population ^a		
Males		421
Females		44
Estates, trusts, partnerships, etc.		124
Wealth per capita (\$)		
All taxable males, variant I ^b		33,447
All taxable males, variant II ^c		37,692
All taxable females		33,757
B. Whaling Agents		
Description	<i>N</i>	Per Capita Wealth (\$)
Agent only after 1855	12	23,858
Agent only before 1850, fewer than 10 voyages	10	48,770
Agent only before 1850, 10 or more voyages	9	90,422
Agent in 1850–55, fewer than 10 voyages before 1856	45	41,969
Agent in 1850–55, 10–19 voyages before 1856	14	70,500
Agent in 1850–55, 20 or more voyages before 1856	26	112,642
All whaling agents	116	63,725

Sources: Panel A: population, Massachusetts, Secretary of the Commonwealth, 1856, 138; taxable population and wealth per capita, Tax List Data Set (see chapter 3). Panel B: Tax List Data Set, matched to the Captains and Agents Data Set.

^aThe wealth tax applied only to individuals, businesses, estates, trusts, and so forth with at least \$100 of taxable property.

^bThe variant I estimate of the wealth of males attributes to each only the property he holds alone.

^cThe variant II estimate is the result of an effort to distribute partnership property among partners. We assumed that all partners shared equally in the property of the business. The assumption was surely not typically true, but it does not have to be true to produce an accurate estimate of the average value per taxable male of business property. The data on agents exclude partnership property and therefore understate the true average wealth of agents.

is exaggerated by the table. Life-cycle regressions (not shown here) indicate a common pattern among adult males of New Bedford: wealth rose with age, but at a diminishing rate; ultimately it declined. No doubt the pattern exhibited in table 10.15 is influenced by life-cycle effects. The agents who had not managed voyages before 1856 include a number of young men just starting out in business, while those who had managed many voyages were both experienced and older. Life-cycle effects, however, do not explain all of the differences in wealth among adult males; there is room for the influence of career choice. The very large average wealth of agents who had managed twenty or more voyages suggests strongly that whaling brought large rewards. There is also a

marked contrast between agents who completed their careers before 1850, with few voyages managed, and those who managed many voyages before 1850; the latter group were very much richer than the former. Finally, the data show that New Bedford whaling agents, on average, had substantially higher wealth than did all New Bedford males and all New Bedford females.

10.6 Owners

The agent and the captain often had shares in the voyage they were overseeing. Not infrequently one or two members of the agent firm would also participate independently; sometimes agents invested in voyages managed by other agents. But most of the owners were neither agents nor captains. They were people engaged in other business activities who chose to invest in whaling. Merchants of all types, including those who provisioned whalers, were the most numerous group; they accounted for roughly one-half of investors in New Bedford ventures (see table 10.16). After merchants, seagoing men, ship's carpenters, shipwrights, sailmakers, sparmakers, riggers, shipsmiths, ropewalk owners, caulkers, gaugers, wharfingers, coopers, and other figures associated with marine activities appear prominently on lists of owners, as do manufacturers and other artisans of various kinds.

The itch to participate in whaling affected everyone, not just those whose business interests brought them in contact with the fleet. Consider the variety of people who invested: apothecaries, physicians, funeral directors, attorneys at law, deputy sheriffs, bakers, fish dealers, a truckman, trunk makers, blacksmiths, cabinetmakers, brass founders and coppersmiths, officers of textile mills, watchmakers and jewelers, painters, housewrights, masons, a granite worker, a confectioner, livery-stable owners, the attorney general of the commonwealth, innkeepers, ministers, bank cashiers, magistrates, the mayor (who was generally a whaling agent, however), the postmaster, the assessor, four major generals, officers and agents of insurance companies, a lighthouse keeper, two clerks in the office of the register of deeds, the president of the gas company, the clerk of an ice dealer, junk dealers, daguerreotypists, editors, cordwainers, tinmen, several widows, and many more. It would be fair to say that the fleet captured the imagination of the people of New Bedford.

While the residents of New Bedford constituted almost eight in ten of the owners, the towns around Buzzard's Bay also contributed their share, as did other coastal towns from New York to Maine. Taken together, about one-fifth of the owners of New Bedford voyages came from these places. New Bedford and the northeast coast accounted for most of the investors, but there were owners who lived as far away as New Jersey, Pennsylvania, Baltimore, Richmond, San Francisco, and Alaska.

How did these diverse owners fare? Did they make money or did they lose it? These are questions for chapter 11.

Table 10.16 Owners of New Bedford Whaling Voyages

A. Occupations of Owners, All Years (%)						
Whaling agents	13					
Captains	6					
Others	81					
Total	100					
B. Occupations of Owners, by Time Periods (%)						
	Before 1835	1835-45	1846-60	1861-70	1871-80	After 1880
Merchants of all kinds	41	60	50	54	53	38
Marine professionals (including whaling agents)	43	25	30	27	27	38
Manufacturers and artisans	5	8	13	13	15	17
Construction contractors and workers	3	3	1	1	1	4
Farmers and gardeners	1	— ^a	1	2	— ^a	0
Financiers, service workers, officers of public utilities (including railroads), government workers	7	4	5	3	4	3
Total	100	100	100	100	100	100
C. Residences of Owners (%)						
New Bedford	77					
Dartmouth, Fairhaven, Nantucket, and Westport	10					
Rest of Massachusetts	9					
Rest of New England	2					
Middle Atlantic, plus Maryland and Virginia	2					
Rest of the U.S. (Alaska and California)	— ^a					
Total	100					

Sources: Owners Data Set, matched with the Captains and Agents Data Set and with various volumes of the New Bedford City Directories.

^aLess than 0.5 percent.

Appendix 10A

Deaths of Whaling Captains

The following data (table 10A.1) on the deaths of captains were gathered from a variety of sources. We restricted ourselves to captains because the data indicate clearly that the reports were more complete with respect to them than to crewmen. In all likelihood even the data on captains are incomplete. Nonetheless, they suggest the high rates of mortality experienced by the captains and the wide range of causes of death among them.

Table 10A.1

**Causes of Death of Captains who Died on New Bedford Whaling
Voyages, 1820–1919**

Year ^a	Captain	Vessel	Cause of Death
1820	Peter G. Chase	<i>Phebe Ann</i>	not given
1821	Zephaniah Wood	<i>Triton</i>	not given
1824	John Pinkham	<i>Swift</i>	killed by a whale
1825	Charles Starbuck	<i>Timoleon</i>	not given
1825	Asaph P. Taber	<i>Maria Theresa</i>	not given
1829	Abner P. Norton	<i>Victory</i>	killed by a whale
1832	James C. Swain	<i>Phocion</i>	not given
1833	Edward Swain	<i>Averick</i>	not given
1834	Jonathan Fisher	<i>Amethyst</i>	not given
1835	Thomas Brock Jr.	<i>Dartmouth</i>	not given
1835	Abraham Tucker Eddy	<i>George and Martha</i>	killed by a whale
1836	Caleb Howland	<i>Cherokee</i>	boat lost
1836	Edward W. Howland	<i>Lalla Rookh</i>	killed by a whale
1837	William Cuffe	<i>Rising States</i>	fever
1837	Seth S. Gibbs	<i>Moss</i>	fever
1837	Jared Worth	<i>Courier</i>	consumption
1838	Benjamin Durfee	<i>Parachute</i>	smallpox
1838	Sparrow H. Nickerson	<i>Rajah</i>	not given
1838	James Townsend	<i>General Pike</i>	not given
1839	Barzillai Morselander	<i>Charles</i>	amputation of broken leg
1840	Levi Kendrick	<i>Messenger</i>	sickness
1841	Ray Green Sanford	<i>Sarah Louisa</i>	injury
1841	Prince Shearman	<i>Parker</i>	killed by a whale
1842	Abraham Lake	<i>George</i>	scurvy
1842	Isaac Stockman	<i>John Adams</i>	not given
1842	William L. Taber	<i>Bramin</i>	sickness
1843	Elihu Wood	<i>Emeline</i>	killed by a whale
1844	John Cunningham	<i>Florida</i>	drowned
1844	Frederick A. Mason	<i>John Adams</i>	not given
1844	Caleb Miller	<i>Smyrna</i>	fell overboard
1844	David N. Ripley	<i>Canton</i>	not given
1844	John Sawyer	<i>Newton</i>	not given
1845	Charles Church	<i>Junius</i>	not given
1845	Gilbert H. Jenney	<i>Governor Troup</i>	dropsy on the chest
1845	Isaac John Sanford	<i>Champion</i>	broken leg; "died with mortification"
1846	Luke Baker	<i>Fenelon</i>	not given
1848	Joseph Black	<i>Alexander</i>	fever
1848	Jethro S. Cornell	<i>Lancaster</i>	struck by a man falling from aloft
1848	George B. Long	<i>Mobile</i>	vessel wrecked in a gale
1849	Seth D. Fisher Jr.	<i>Washington</i>	not given
1849	Batholomew West	<i>Emigrant</i>	vessel wrecked
1850	John E. Brayton	<i>Isabella</i>	"died of excitement" (vessel wrecked)
1850	Oliver J. Hazard	<i>Exchange</i>	sickness
1850	Silas Tinkham	<i>Junior</i>	general debility
1851	George W. Stewart	<i>Exchange</i>	vessel lost
1852	Joseph Bailey	<i>Champion</i>	ruptured blood vessel of the intestine
1852	Ansel Churchill	<i>Cicero</i>	sickness
1852	David Evans Hathaway	<i>Fortune</i>	not given

Table 10A.1 (continued)

Year ^a	Captain	Vessel	Cause of Death
1852	William Lamb	<i>Franklin</i>	brain fever
1852	James L. Nye	<i>Andrews</i>	killed by a whale
1852	Frederick Slocum	<i>Ontario</i>	vessel wrecked
1852	Abner F. Tripp	<i>Montezuma</i>	heart complaint
1852	Pardon C. Winslow	<i>Marcella</i>	inflammation of the bowels
1853	Thomas D. Barnes	<i>Inga</i>	killed by South Sea islanders
1853	Jabez B. Howland	<i>Sappho</i>	lung infection
1853	Henry Jernegan	<i>Enterprise</i>	sickness
1853	Thomas Howes Norton	<i>Citizen</i>	vessel lost
1853	George C. Rule	<i>Herald</i>	not given
1853	Edward T. Shearman	<i>Coral</i>	asthma
1854	Humphrey Hathaway	<i>Dunbarton</i>	asthma
1854	Thomas B. Peabody	<i>Morea</i>	suicide (shot himself)
1854	Jason Seabury	<i>Monongahela</i>	vessel lost
1855	William O. Harps	<i>George Washington</i>	not given
1855	Benjamin B. Lamphier	<i>Lagoda</i>	drowned; boat capsized
1855	William Merry	<i>Undine</i>	vessel lost
1855	Otis Tilton	<i>John</i>	killed by South Sea islanders
1856	Silas Cottle	<i>Mary</i>	drowned; boat smashed by a whale
1856	John Curn	<i>Chandler Price</i>	liver complaint
1856	Aaron C. Cushman	<i>Lancer</i>	heart complaint
1856	John Fisher	<i>Bartholomew Gosnold</i>	lost while fast to a whale
1856	Augustus Lawrence	<i>Java</i>	liver complaint
1856	John Munkley	<i>Emerald</i>	apoplexy
1856	Freeman H. Smith	<i>James Edward</i>	malignant fever
1856	Henry Tew	<i>General Pike</i>	liver complaint
1856	William E. Tower	<i>Byron</i>	African coast fever
1857	Archibald Mellen Jr.	<i>Junior</i>	killed in a mutiny
1858	George R. Hines	<i>Cleora</i>	died in a fit
1858	Job Macomber	<i>Majestic</i>	died in a fit
1858	Shubael S. Spooner	<i>Montezuma</i>	vessel disappeared
1858	Ansel N. Stewart	<i>Rajah</i>	vessel lost in ice
1859	William H. Almy	<i>Roscoe</i>	killed by a whale
1859	Hiram Baker	<i>Ocean Wave</i>	vessel wrecked
1859	James W. Morse	<i>Ionia</i>	not given
1859	Martin Palmer	<i>Kingfisher</i>	killed by a whale
1859	Joseph Ricketson Tallman	<i>Midas</i>	not given
1859	William B. Waterman	<i>James D. Thompson</i>	not given
1860	Samuel E. Cook	<i>Benjamin Tucker</i>	killed by a whale
1860	Richard D. Wood	<i>Superior</i>	killed by South Sea islanders
1861	John C. Marble	<i>Awashonks</i>	dysentery
1861	Elijah B. Morgan	<i>Contest</i>	heart complaint
1861	Eben Nickerson	<i>Hecla</i>	heart complaint
1861	Warren Woodward	<i>Mary</i>	inflammation of the bowels
1864	Joseph S. Adams Jr.	<i>Helen Snow</i>	ship fever
1864	Francis J. Allen	<i>Niger</i>	apoplexy
1864	Barnard H. Daily	<i>Martha</i>	not given
1864	S. W. Fisk	<i>Hillman</i>	not given

(continued)

Table 10A.1 (continued)

Year ^a	Captain	Vessel	Cause of Death
1864	Joseph W. Goodrich	<i>Sunbeam</i>	sickness
1864	William J. Taber	<i>Mary Frazier</i>	sickness
1865	Sherman L. Gray	<i>James Maury</i>	inflammation of the bowels
1865	Francis E. Stranburg	<i>Congress</i>	aneurism of the aorta
1865	Shadrach R. Tilton	<i>General Pike</i>	died in a fit
1866	Philip Howland	<i>Mary and Susan</i>	not given
1867	John A. Lapham	<i>Oliver Crocker</i>	not given
1868	Elisha Cannon II	<i>Wave</i>	typhoid
1869	Elihu Russell	<i>Thomas Winslow</i>	vessel lost
1870	Jacob L. Cleaveland	<i>Adeline Gibbs</i>	vessel lost in a gale
1870	James M. Green	<i>Janus</i>	not given
1873	David R. Gifford	<i>Gazelle</i>	fever
1875	James E. Potter	<i>Morning Star</i>	not given
1876	Aaron Dean	<i>John Carver</i>	heart disease
1876	John P. Praro	<i>Lydia</i>	fever
1878	Henry M. Peaks	<i>Sarah</i>	vessel capsized in a hurricane
1880	William H. Murphy	<i>Abby Bradford</i>	consumption
1883	Joseph G. Allen	<i>Attleboro</i>	drowned
1883	Robert Jones	<i>Arnolda</i>	not given
1884	Edward P. Shiverick	<i>John and Winthrop</i>	not given
1885	Lemuel H. Fisher	<i>Frances A. Barstow</i>	injury
1885	Daniel Lake Ricketson	<i>Pedro Varela</i>	fever
1888	George E. Allen	<i>Ohio</i>	ship ran aground; drowned making his way to shore
1888	John H. Holmes	<i>Sea Fox</i>	explosion of powder
1899	Joseph P. Benton	<i>A. R. Tucker</i>	killed by a whale
1899	Martin Van Buren Millard	<i>A. R. Tucker</i>	not given
1911	Charles H. Sanford	<i>Greyhound</i>	not given
1917	Joseph Lewis	<i>Viola</i>	vessel lost
1919	George L. Dunham	<i>Ellen A. Swift</i>	vessel lost
1919	Frank M. Lopes	<i>Pedro Varela</i>	vessel lost
Total who died while on whaling voyages		126	

Sources: The table was compiled primarily from WSL 1843–1914; Dias, “Catalogue of New Bedford Whaling Ships”; Starbuck 1878; Hegarty 1959; Wood 1831–73.

^aUsually the year of death. When the date of death was unknown, the sailing year of the voyage was substituted.

Appendix 10B

R. G. Dun & Co. Field Reports

Figures 10B.1 and 10B.2 are reports made by field agents to R. G. Dun & Co. (See transcripts below.) The letter *m*, when preceded by a number, means *thousand*. Thus, \$500m is \$500,000.

The firm of George Howland and his sons and that of Isaac Howland were

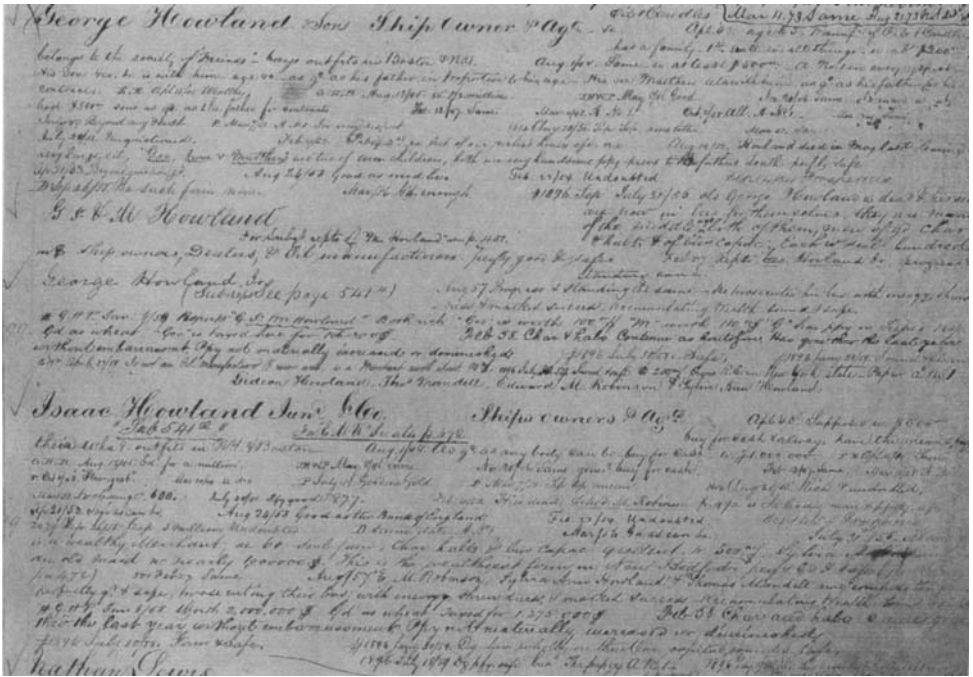


Fig. 10B.1 R. G. Dun & Co. field reports on the George Howland and Isaac Howland agencies

Source: R. G. Dun & Co. Collection, Massachusetts, vol. 17, p. 436 (47). Used with permission of Dun and Bradstreet Company and the Baker Library, Harvard University.

two of the biggest and most successful whaling agent operations. Notice that the field agent says of the latter, “Good as the Bank of England.”

The Johnsons’ firm was at the other end of the spectrum—very small. They were black men, grocers and outfitters who at least twice sent a whaling vessel to sea. As the notes indicate, they had excellent reputations. The agent uses a common phrase to indicate their quality: “Perfectly good for all they will buy.”

George Howland Agency

Matthew & George Jr. Oil & Candles

George Howland & Sons Ship Owner & Agt. &c. Apl. ’43. age 65. Manufr. of Oils & Candles, has a family—1st rate in all things—w. abt. \$200m.—belongs to the society of “Freinds”—buys outfits in Boston & N.Y. Aug 1/44. Same, w. at least \$500m. A. No. 1 in every respect. His son Geo. Jr. is with him—age 40—as gd. as his father in proportion to his age. His son Matthew also with him—as gd. as his father for his contracts. E.R. Apl 15/45 Wealthy G.H.B. Aug. 12/45. w. 1 1/2 millions. JHWP May 8/46 Good. Nov. 20/46.

✓ R. C. & E. R. Johnson, (Col^s) Groct. Miscell^t & Outfitt^s

don't attend to bus. Decided bus stand with time bel^d perf^d safe. Nov 20/96 Same. sons of Rich^d who has handsome prop^t - the
 Es 2/96 Good. Mar 2/96 stand with gr. July 2/96 Same. Mar 7/96 Repub^lic^l act^s men & in ga^r Cr. Feb. 12/97 Same. Mar 1/98 (Cons^t of
 case. Sa 10th 2/97 2/97 gd for all this will buy. Mar 01 2/97 for engagements. July 20/97. Good pay for all they buy. 1898 Aug 20/98. Same
 North Couⁿty. 4/97. E. R. came home a few m^o ago from Calif^a with money. Both as 4/97 by res^ults of d^el. new & safe. 1898 Aug 20/98. Same
 1898 In good stand, has a^ll to pay for what they buy. Sep 26/98. 10/98 part^lly d^el^ute Aug 24/98 Same of Rich^d Johnson
 lately died, from whom they inherited several thousand \$^s. Feb. 22/99. Able to pay for all they buy.
 4/99 on R. C. as well as pers^o & cons^t case. 2/99 Sep 26/99 Same Cap^t dy^d for bus. gd for any engagement they
 heret^o prop^t are Colon^l pers^o. D Same date He to trust w 2000 each. Mar 1/96 Pay promptly
 July 31/96 Mar 2/96 middle-aged man of colony, Char holds and bus cap^t ac^o, w prom^{is}e 40 to 50 net. president
 Do a snug bus & have ppl^y in California. "E. R. J." was out there several times, they inherited a good part
 the p^oty from their Father Rich^d Johnson, they did dissolve some time don't exactly know if they
 in partnership now or not, they are both gd. E. R. is worth the most.
 Just of they stand as well as usual, the out in any particular business now. July 31/96 Same
 worth some little p^oty have been in bus a long time good char & all that's to be. 2/97 1/97 Same
 no more in 10/97. 1896 Aug 20/96 No change. 4/98 1/98 Same. #1896 Jan 24/97. Same
 1896 July 30/97. Out of bus. 1896. July 20/97. Out of bus long ago. 1896 July 20/97. Out of bus long ago.

Fig. 10B.2 R. G. Dun & Co. field reports on the R. C. and E. R. Johnson agency
 Source: R. G. Dun & Co. Collection, Massachusetts, vol. 17, p. 457 (84). Used with permission of Dun and Bradstreet Company and the Baker Library, Harvard University.

Same. old man w. at least \$500m sons as gd. as the father for contracts. Feb. 13/47. Same. Mar. 11/48. A. No. 1. Oct. 2/48. All A No. 1. Mar 24/49. Same. July 49 Beyond any doubt P Mar 7/50 A No 1 In every respect. 1614 Aug 28/50. Tip Top. none better. Mar 51. Same July 28/51. Unquestioned. Feb. 4/52. Prbly 2nd. in list of our richest houses sfe. eno Aug 19/52. Howland died in May last leaving a very large est. "*Geo. Junr & Matthew*" are two of seven children, both wor very handsome ppy purs to the fathers death, perfly safe Ap 21/53. Beyond question gd. Aug 24/53 Good as need be. Feb. 27/54. Undoubted. Sept 4/54 Prosperous. D Sep 26/55. No such firm now. Mar/56 Gd. enough. \$1896 Sep [*sic*]

G Jr & M Howland

For subqt. repts of "M. Howland" see p. 451. July 31/56 Old George Howland is dead & his sons are now in bus for themselves. they are married of the middle age both of them, men of gd char & habts & of bus capac: Each w sevl hundred m \$ Ship owners, Dealers, & Oil manufacturers. Perfly good & safe. Feb '57 Repts "*Geo. Howland Jr*" progress & standing same.

George Howland, Jr.

(Sub repts See page 541 4) Aug 57 Progress & standing the same—He prosecutes his bus: with energy, shrewdness, & marked success—accumulating Wealth—sound & safe. #G.H.P. Jan: 6/58 Reports "*G. Jr. & M Howland*" Both rich "Geo" is worth 100m\$ "M" worth 110m\$ "G" has ppy in Scipio NY. Gd as wheat "Geo" is taxed here for 106.300\$. Feb 58. Char & habs continue as heretofore. Has gone thro the last year without embarrassmt. Ppy not materially increased or diminished. #1896 July 30/58. Safe. #1896 Jany 29/59. Sound & firm. GHP April 27/59 Is not an Oil manufacturer & never was, is a Merchant worth about 90m\$. 1896 July 30.59. Sound & safe w. 200m\$ Owns R.E. in New York state—Paper A No 1

Isaac Howland Agency

Gideon Howland Thos. Mandell Edward M. Robinson & Sylvia Ann Howland Isaac Howland Junr. & Co. Ships owners & Agts
 "*Sub 541 10*" For "*E.M.R.*" See also p. 472 Apl. '43. Supposed w. \$500m. buy for cash & always have the means, buy their whag. [whaling] oufits in N.Y. & Boston Aug. 1/44. As gd. as anybody can be—buy for cash—w. \$1.000.000. E.R. Apl. 15/45. Same G.H.B. Aug. 12/45. Gd. for a million. JHWP May 8/46. Same. Nov. 20/46. Same. genery buy for cash. Feb. 13/47. Same. Mar 11/48. A. No. 1 P. Oct 2/48. "Strongest." Mar 24/49. A No 1 P July 49. Good as Gold P Mar 7/50 Tip top concern 1614 Aug 20/50. Rich & undoubted. Mar 51. No change. 600. July 28/51. Pfy good. 877. Feb. 4/52. "H." is dead. *Edwd. M. Robinson* p. 472 is the leading man & pfctly. sfe Ap 21/53. Safe as can be. Aug 24/53 Good as the Bank of England Feb. 27/54. Undoubted. Sept 4/54 Prosperous 2439 Sep 26/55 Cap 3 millions Undoubted. D same date A No 1

Mar/56 Gd. as can be. July 31/56. Mandell is a wealthy Merchant, ae 60. Sml fam. Char habits & bus capac excellent. w 500m\$. Sylvia A. Howland is an old maid w nearly 1,000,000\$. This is the wealthiest firm in New Bedford. perfy Gd & safe (for Robinson pa 472) 500 Feb '57. Same. Augt/57 "E.M. Robinson," Sylvia Ann Howland" & "Thomas Mandell" now compose the firm perfectly gd. & safe, prosecuting their bus: with energy, shrewdness, & marked success—accumulating Wealth—Sound & safe #G.HP Jan 6/58 Worth 2,000,000\$ Gd as wheat Taxed for 1.275.000\$ Feb 58. Char and habits. same, gone thro the last year without embarrassment. Ppy not materially increased or diminished #1896 July 30/58. Firm & Safe. #1896 Jany. 29/59. Dg. bus. wholly on their Own capital, sound & safe. 1896 July 18/59 Dg pfy. safe bus. Thr paper A No 1—1896 Feby. 1/60 That they have lost for the last mo. They are firm.

Johnsons' Agency

Richd. Ezra

R.C. & E.R. Johnson (Cold.) Grocs. Miscells. & Outfitts. J.H.W.P. Aug 19/46 Ages abt. 30 sons of Richd. who has handsome propy. Smt. & attente. to bus. do consid. bus. Stand well & are beld. [believed] perfy. safe. Nov. 20/46. Same. Feb. 12/47. Same. Mar. 11/48. Consid. gd. Oct 2/48 Good. Mar/49. Stand well. gd. July 49 Same p Mar. 7/50 Respectable cold. men & in gd cr. 1614 Aug 20/50. The — is w. 8 or 10m\$. & pfy gd for all they will buy. Mar 51 Gd for engagements. July 28/51. Good. pay for all they buy. Feby — Worth considble. ppty. E.R. came home a few mos. ago from Califa. with money Both w. ppty. vy respectble cold. men & safe. — 19/52 In good standg, hon & able to pay for what they buy Ap 20/53. Will pay their debts Aug 24/53 Sons of "Richd. Johnson who lately died, from whom they inherited sevr1 Thousand \$. Feb. 27/54. Able to pay for all they buy. Sept 4/54 Own R.E. as well as pers. & are consid. safe. 2439 Sep 26/55 Some Cap. dg gd bus. gd for any engagement they inherited prop are colored persons. D Same date Sfe to trust w 20m\$ each. Mar/56 Pay promptly. July 31/56 Marrd. middle aged men of colour, char habits and bus capac gd, w from 40 to 50m\$: prudent Do a snug bus & have ppty in California. "ERJ" was out there sevl times, they inherited a good p— thr ppty from their Father Richd Johnson, they did dissolve some time dont exactly know if they are in partnership now or not, they are both gd Ezra is worth the most: Feby 57. Same. Augt. 57 They stand as well as usual, tho not in any particular business now. #G.HP. Jan 6/58 Are worth some little ppy Have been in bus here a long time Good char & attent to bus. Think they are gd for bus wants "ER" is taxed for 10m\$. 1896 Jan 29/58 No change. #1896 July 30/58. Same. #1896 Jany 29/59. Same 1896 July 30/59. Out of bus. 1896. July 30/59. Out of bus. long ago. 1896 July 28/60 Out of bus.