

Fiscal History of U.S. Whaling, 1862–1872

Exhibit Plan

- 1. New Bedford, Massachusetts
- 2. Investing in a Ship
- 3. Master’s Contract
- 4. Insuring Vessels, Outfits, Catchings
- 5. Clearing Customs
- 6. Mid-Voyage Financing/Remittance
- 7. Burned by the Shenandoah!
- 8. “The Disaster of 1871”
- 9. San Francisco as a Secondary Base
- 10. Selling the Oil
- 11. Insuring the Oil for Shipment Abroad
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The purpose of this exhibit is to trace the paper trail of the U.S. whaling industry via revenue-stamped documents from 1862–72, the period of comprehensive Civil War era stamp taxes. Its storyline, as detailed at left, is the time course of this unlikely enterprise— turning whales into money—from preparation through departure and the chase, and finally selling and shipping the oil.

Whaling was still vibrant in the early 1860s, despite the fact that whalers were forced to venture further and further afield in search of their prey, notably far into the western Arctic Ocean. By the early 1870s, though, whaling’s scope and importance had been drastically reduced. Two calamities occurred on the seas:

- destruction of 21 ships by the Confederate raider Shenandoah in 1865
- “the Disaster of 1871,” loss of 32 ships trapped by ice in Alaska.

Documents from ships lost in both disasters are included here.

Featured are items of high philatelic importance: the only documents of the Civil War tax era with stamps of three countries are here; and the Manifest \$3 rate and incoming bills of exchange from Chile, New Zealand and Hawaii are known only for whaling documents! The storytelling elements are remarkable not only for the fiscal history rarities included, but for the historical significance of five key items:

- 1864 outbound manifest of the William Thompson, burned by the Shenandoah June 22, 1865
- 1864 bill of exchange of the Jireh Swift, fired on by the Shenandoah June 22, 1865, the final shot of the Civil War, and burned.
- 1868 presidential passport of the Elizabeth Swift and 1869 bills of exchange of the Elizabeth Swift and Massachusetts, crushed by ice in the “Disaster of 1871”

Red: Read me!

1. New Bedford, Massachusetts, Heart of the U.S. Whaling Industry

By 1850 profits from its whaling fleet had made New Bedford, at the mouth of the Acushnet River on the southern coast of Massachusetts, the richest city in America on a per capita basis.



1.1 Whaling Vignettes on Everyday Documents

Whaling so permeated life in New Bedford that documents like checks and promissory notes generated there, having nothing directly to do with whaling, sometimes bore illustrations depicting it.



Check of Marine Bank, New Bedford, with Bank Check 2¢ tax paid by matching 2¢ Bank Check orange, October 18, 1862, a very early use of a Civil War revenue (the taxes took effect October 1)

New Bedford was a Quaker town!

Stamp cancel with Quaker date “10th mo(nth) 18th”; numbering of months replaced the usual names based on pagan gods and festivals that Quakers found objectionable. Simplicity, thrift and hard work were primary values.



1863 generic New Bedford promissory notes, whaling vignette with imprint “Charles Taber & Co. No. 45 Union & No. 47 Purchase St. New Bedford,,” taxable at short-lived Inland Exchange 1863 rates:

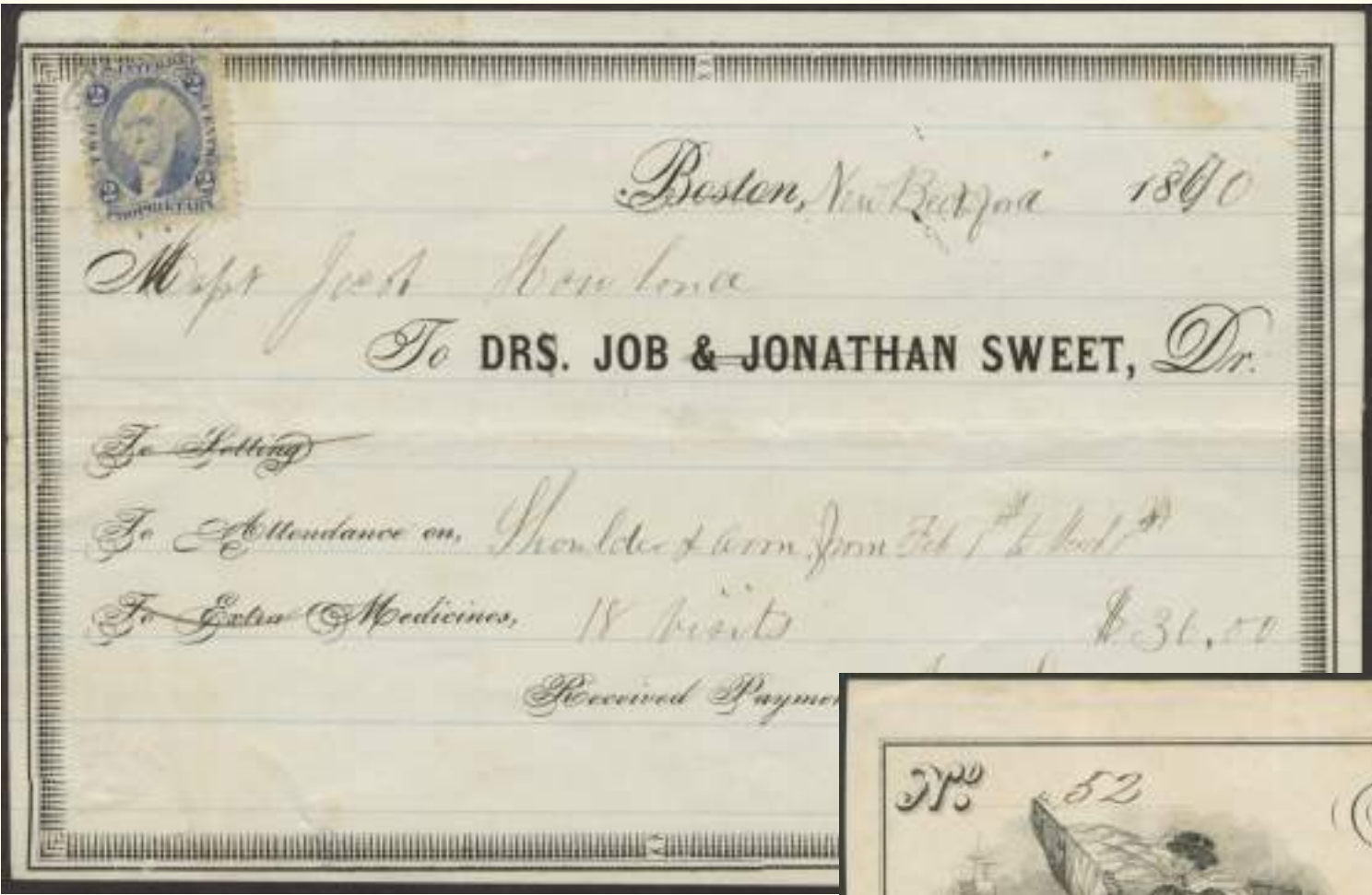
- March 1863, \$100 in one month, tax 1¢ per \$200 overpaid by 2¢ Bank Check blue
- September 1863, \$1,140 in five months, tax 6¢ per \$200 underpaid by 25¢ Certificate part perforate

1.2 Whaling Nobility: the Howlands

The Howland name became prominent in whaling primarily through Isaac Howland Jr. (1755–1852), who amassed a fortune via his fleet of thirty-five whaleships, the world’s largest.



Bark Jacob A. Howland of New Bedford in the ice off Cape Navarin, Russia, processing a whale (New Bedford Whaling Museum)



1864 New Bedford bank draft to Edward Howland  
The 2¢ Certificate blue is one of the few First Issues that is appreciably scarcer perforated than imperforate. It is seldom seen on document.

Whaling Captain Jacob Howland Seeks Treatment  
2¢ Proprietary Ultramarine  
Two examples recorded on document

Left, 1870 New Bedford doctor’s receipt bearing 2¢ Proprietary ultramarine

This stamp is rare in its own right as the ultramarines were printed for only a few months beginning in 1869, and doubly rare on document, as it was nominally illegal to pay U.S. documentary taxes with Proprietary stamps; they were intended for use on proprietary medicines, perfumes, matches, and the like.

The patient, Jacob Howland, made his name not in the counting house, but in forty years on the seas, rising to become master of several ships, and eventually namesake of the whaleship Jacob A. Howland (far left).

Perhaps not surprisingly his ailments were “Shoulder and arm” (eighteen visits at \$2).



1.3 Outfitting Sailors Was Scandalously Profitable  
Sole recorded example

September 1865 New Bedford draft by one Otto Miller for \$49.09 payable to P. & F. Slocum in six months, charged to his account with the Agent and Owners of the bark M. Frazier, “with Interest and Insurance on the same,” witnessed by Leander Brightman.

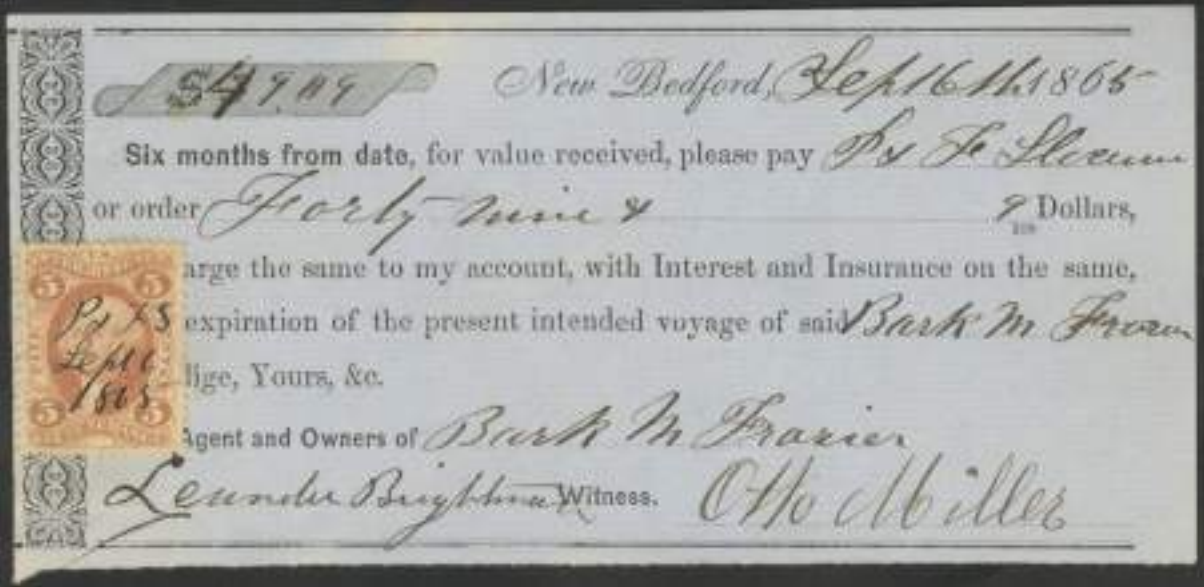
Internet searches shed light on this transaction. The M(ary) Frazier was a whaleship. P(eleg) & F(rederick) Slocum were clothiers. The founding Records of The Outfitters Association Of New Bedford, March 7, 1859, identify Frederick Slocum as its treasurer [with William R. Wing (see 2.1, facing page) on the Standing Committee list]. Witness Leander Brightman was the Association’s secretary in its last years before dissolution in 1873. Miller is unidentified but was presumably a sailor.

This Association was essentially a small-time trust, its members banding together to lessen competition among themselves and share opportunities and profits. From a 1916 account,

[upon] the arrival of whaling vessels, runners of various clothing firms were always first to board a whaling vessel, and each strove to outdo another in getting down to an incoming whaler first, hug the whaleman and tell how glad they were to see him back safe and sound, give him the news of his family and friends, and incidentally [and most importantly] to get his promise of trade for the firm he represented.”

Prospective sailors newly arriving to the city were similarly pursued. Runners and their activity were commonly referred to as “sharks” and “sharking,” but as of 1860, in an attempt to enforce dignity, use of those terms at an Association meeting brought a 25¢ fine!

The motivation for all this was the high prices and interest, and long terms, of advances made to sailors for their clothing and sea chest (for example, the Mary Frazier departed September 7, 1865, the day after this draft was made, and did not return until August 1, 1867).

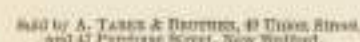




## 2.1 Investing in a Ship

For **whaleships** they were **unrecorded** until the **recent dispersal** of a **long-hidden cache** of **some twenty-five bills** from the holdings of **Joseph and William R. Wing & Co. of New Bedford**, who by 1870 controlled the **largest whaling fleet** in the U.S., albeit in a rapidly declining market.

As exemplified by the **registry of the *Stafford*** shown below, a **ship was typically owned by a consortium, as an investment** rather than as property per se. One factor in this was the cost. The ***Stafford*, as of 1860, had eight owners:** Thomas Nye, Jr., 7/16, two with 2/16; and five with 1/16.



[Bill of Sale of Registered Vessel.]



Know ve. That

Know ye, That I Thomas Nye & of New  
Bedford, County of Bristol State of  
Massachusetts, sole owner of one  
Eighth part,

of the *Barth* or vessel called the *Stafford*  
now lying at *Port of New Bedford* of the burden of *Two hundred  
thirty five* <sup>75</sup>/<sub>100</sub> tons <sup>or</sup> thereabouts, for and in  
consideration of the sum of *Two hundred fifty*  
*Dollars*

lawful money of the United States of America, to *Mr. C.* in hand paid before the sealing  
and delivery of these Presents, by *J. B. P. H.*

Miss L. W. & King



The Wings' **first and primary involvement** with whaling was in **outfitting seamen**. Typically they would **indebt a recruited sailor for the cost of clothing and supplies**, and for holding them before departure, then **charge substantial interest** on these loans.

They acquired their first whaleship in 1852, then bought aggressively after the mid-1860s, and by 1870 had acquired the largest fleet in the U.S.

In pursuance of an Act of the Congress of the United States of America entitled "AN ACT CONCERNING THE REGISTERING AND RECORDING OF SHIPS OR VESSELS," approved December 31, 1792, and of "AN ACT TO REGULATE THE ADMEASUREMENT OF TONNAGE OF SHIPS AND VESSELS OF THE UNITED STATES," approved May 6, 1864.

approved May 6, 1864.

Thomas Hyde 7/6 of New Bedford  
having taken or subscribed the 10th required by the said  
Act, and having sworn that he together with New  
Benj<sup>y</sup> H. W. C. W. B. 7/6 Thomas Cook 7/6  
W<sup>m</sup> L. Norton 7/6 Francis Ellinghaus 7/6  
of New Bedford, Peter W. Fitch 7/6  
and Christopher D. Hunt 7/6 of North

only owner of the Ship or Vessel called the *Stafford*  
of *New Bedford* whereof *Wm. Price*  
is at present Master, and is a citizen of the United States.

and that the said Ship or Vessel was built at Kingston in the year Eighteen hundred & forty eight as per Register No 78 granted at this Court Oct. 2. 1857 Surrendered, properly changed in Port

And Solid Register having certified that the said Ship or Vessel has one deck and three masts and that

	Feet.	Tenths.		Tons.	Hundred's.
her length is	98	ft 4	Under Tonnage Deck		
her breadth	25	ft 6	Between Decks above ditto		
her depth	10	ft 8	Enclosures on upper deck		
her height					
and that she measures	Two hundred & five			75	tons
	that she is			Bacon	has
a	Squad	in galley	stern, and a	biller	head.

And the said Thomas Hyde having  
agreed to the description and admeasurement above specified and sufficient  
security having been given according to the said Act, the said Thomas  
has been duly registered at the Port of New Bedford

GIVEN under my hand and seal at the Port of New Bedford  
this 15th day of October  
in the year one thousand eight hundred and 84

To have and to hold the said one eighth part of 20 Baid  
and appurtenances thereunto belonging, unto them, the said 1 4 20

King and their  
executors, administrators, and assigns, to the sole and only proper use, benefit and behoof  
of them, the said 1st & 2d

their *L. V. W. & Ming and*  
executors, administrators, and assigns, forever, And *I*, the said

have and by these Presents do promise, covenant, and agree, for myself  
and my heirs, executors, and administrators, to and with the said

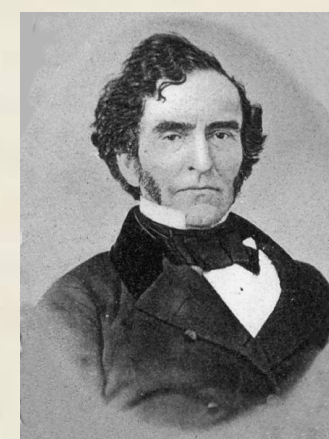
To W. R. Wing and their  
heirs, executors, administrators, and assigns, to warrant  
and defend the said one right front of said back  
lot and all the other before-mentioned appurtenances, against all and every  
person and persons whomsoever.

In testimony whereof, 2, the said Thomas Byrd  
of New Bedford aforesaid  
has hereunto set my hand and seal this Twenty Eighth day of  
August, in the year of our Lord one thousand eight hundred and sixty five

Signal, sent and delivered  
in the presence of

Herbert P. Byrnes

The Supper.



Thomas Nye, Jr.

1865 sale to the Wings of **one-eighth of the whaling bark *Stafford*** for \$1,250, tax \$1.50 at the 1864 rate of 50¢ per \$500 or fraction

Stamps tied by **two different style datestamps** of seller **Thomas Nye, Jr.**, remarkable thus




## 2.2 Buying a Ship

Of the recorded bills of sale for whaleships, only this one is for an undivided interest, hence the large stamp tax.

Sold by A. Tamm & Broome, 41 Union Street and 41 Franklin Street, New Bedford.

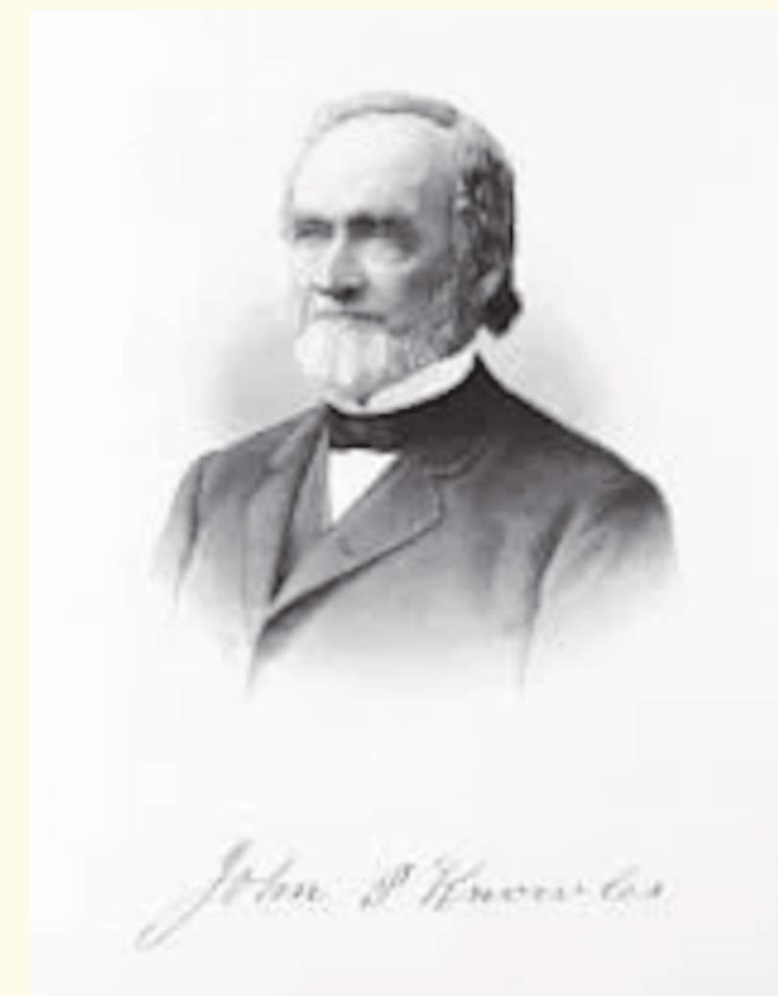
[Bill of Sale of Registered Vessel.]



To all to whom these Presents shall come, Greeting:

Know ye, That *J. John P. Sturges 2d of New Bedford* in the State of *Massachusetts*, owner

of the *Dark* or vessel called the *Atlantic* now lying in the port of *New Bedford* of the burden of *Three hundred and sixty six and 1/2* tons or thereabouts, for and in consideration of the sum of *Twenty thousand two hundred thirty and 1/2* Dollars. *\$20,230 1/2* lawful money of the United States of America, to *me*, in hand paid before the sealing and delivery of these Presents, by *Joseph Wing and William P. Wing* of *New Bedford*, appeared



*Permanent*

In pursuance of an Act of the Congress of the United States of America, entitled "AN ACT CONCERNING THE REGISTERING AND RECORDING OF SHIPS OR VESSELS," *William Nathaniel J. P. of New Bedford*, in the State of *Massachusetts*, having taken or subscribed the oath required by the said Act, and having *sworn* that he is the owner of the ship or vessel called the *Atlantic* of *New Bedford*, whereof *William Nathaniel J. P.* is at present Master, and is a citizen of the United States, as he hath sworn, and that the said ship or vessel was built at *New Bedford* appeared in the year *Eighteen hundred fifty one* as per Register No. *88* printed at this Port Office. *Do* *the* *Surrendered*, properly changed in *hand* and said *Register* having certified that the said ship or vessel has *two* decks and *three* masts, and that her length is *One hundred and ten* feet *ten* inch *11* her breadth *Twenty six* feet *four* inch *11* her depth *Thirteen* feet *one* inch *11* and that she measures *Three hundred sixty six and 1/2* tons *1/2* that she is a *Dark*, has a square stern, no galleries, and a *low* head: and the said *William Nathaniel J. P.* having agreed to the description and admeasurement above specified, and sufficient security having been given according to the said Act, the said *Dark* has been duly registered at the Port of *New Bedford*.

GIVEN under *my* hand and seal at the Port of *New Bedford* this *4th* day of *May*, in the year one thousand eight hundred and *sixty four*

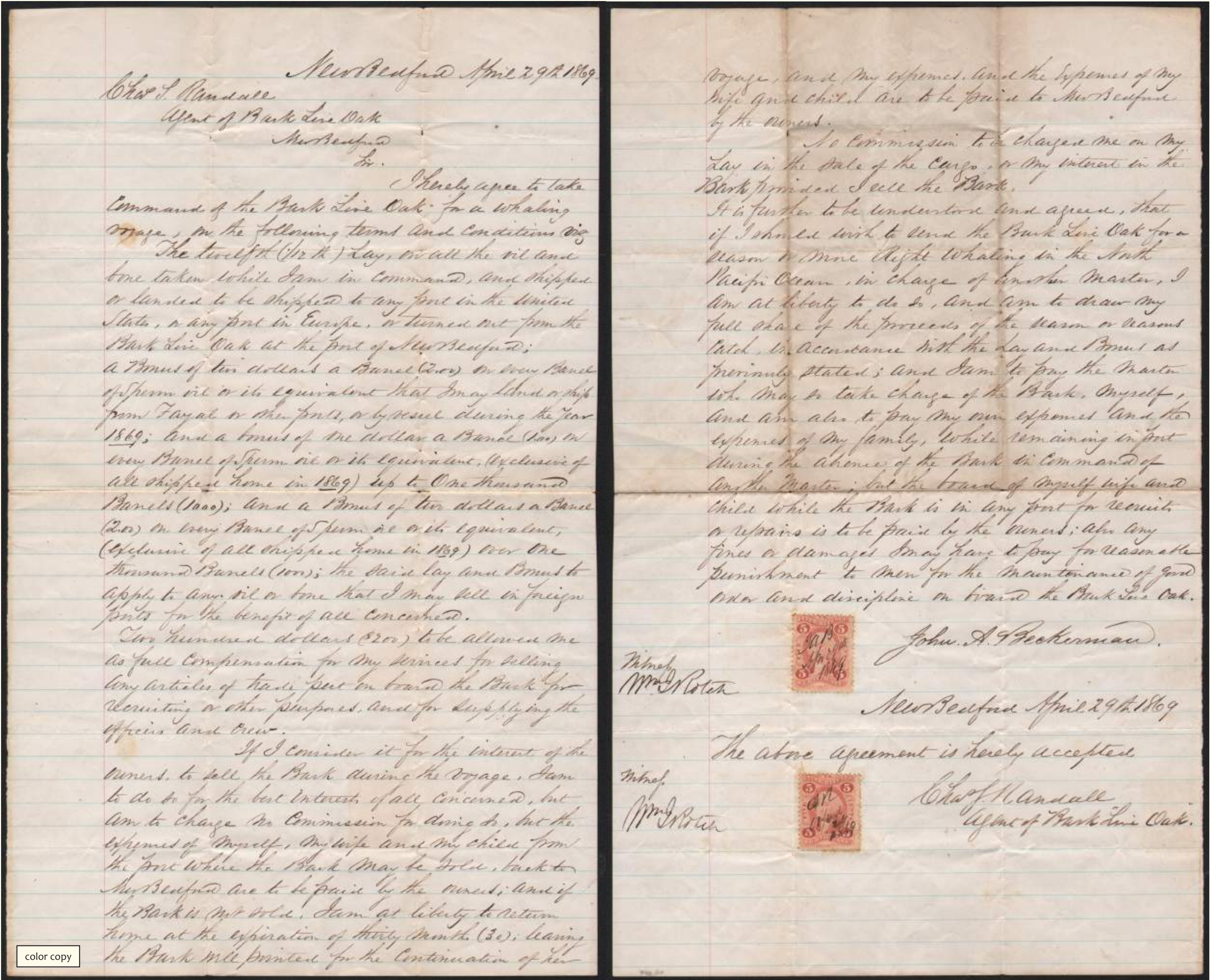
To have and to hold the said *Dark Atlantic* and appurtenances thereunto belonging, unto *them*, the said *Joseph Wing and William P. Wing* executors, administrators, and assigns, to the sole and only proper use, benefit and behoof of *them*, the said *J. P. Sturges 2d* their executors, administrators, and assigns, forever. And *J. P. Sturges 2d* the said *ha* *me*, and by these Presents do promise, covenant, and agree, for *myself* and *my* heirs, executors, and administrators, to and with the said *J. P. Sturges 2d* their heirs, executors, administrators, and assigns, to warrant and defend the said *Dark Atlantic* and all the other before-mentioned appurtenances, against all and every person and persons whomsoever.

In testimony whereof, *J. P. Sturges 2d*, the said *James Taylor* hereunto set *my* hand and seal this *fifth* day of *July*, in the year of our Lord one thousand eight hundred and sixty *five*

James Taylor John P. Sturges 2d

1865 sale to the Wings of the whaling bark *Atlantic* for \$20,230.68 (to the penny!), tax \$20.50 at the 1864 rate of 50¢ per \$500 or fraction





1869 contract between agent and master of whaleship Live Oak

- Master to receive a 1/12 “lay” (i.e. share) of oil and bone taken
- Also a bonus of \$2 per barrel (about 3%, based on 35 gal/barrel at \$1.75/gal) on sperm oil landed at Fayal (Azores) or other European ports during 1869
- A bonus of \$1/barrel on additional sperm oil up to 1,000 barrels, and \$2/barrel above that
- \$200 allowance “selling articles of trade . . . for recruiting and other purposes” (natives were often recruited as replacements at Hawaii and other stopping places)
- Power to sell the Bark for the interest of the owners, otherwise to return in 30 months
- Power to send the Live Oak for a season or more of Right Whaling in the North Pacific under another master

Signed by the parties with Agreement 5¢ tax paid by two 5¢ Certificate (one would have sufficed).

This seems a remarkably modest compensation. The master’s skill and judgement were the primary determinants of the success of the “adventure”!

The Live Oak (448 tons) sailed on June 22, 1869, from New Bedford bound for the Indian Ocean, and later the Northwest Pacific Coast, and returned after a highly successful five-year voyage on June 6, 1874 (Starbuck, History of the American Whale Fishery).

New Bedford Nobility (2): the Rotches

The Rotch family has been described as being to the whaling industry what Andrew Carnegie and John D. Rockefeller would later be to steel and oil industries.

vb Signed as witness by William J. Rotch, former mayor of New Bedford, co-founder of the New Bedford Cordage Co., the leading supplier of whaling line (see x.x below).

Like Howland, the name Rotch was revered in New Bedford. The single event most responsible for the city’s rise to prominence had been the transfer by Joseph Rotch in 1765 of his fledgling whaling fleet from Nantucket Island to New Bedford (then known as Dartmouth).

The Rotches and the “Tea Party”

Two of the three ships targeted during the “Boston Tea Party” of December 16, 1773, were Rotch whaleships! Joseph’s Dartmouth and Beaver, having delivered their cargoes of oil and spermaceti in London, were required on return to transport British East India Co. tea. Joseph’s twenty-three-year-old son Francis engaged in frantic negotiations with the Sons of Liberty and Governor Thomas Hutchinson before the inevitable result.

Flying the Flag in 1783

The first vessel to carry the stars-and-stripes into Britain was another Rotch whaleship, the Bedford of William Rotch, Joseph’s son, delivering a cargo of oil in February 1783, just weeks after the terms of peace with the new United States had been made public, but before its sovereignty had been formally recognized. After again frantic consultations, her cargo was allowed to be offloaded.

William’s son William Rotch, Jr. (1759–1850) was instrumental in establishing New Bedford as the 19th century’s whaling capital of the world, becoming in the process the wealthiest of the city’s many very wealthy men. W. J. Rotch, who signs here, was his grandson.



William Rotch, Jr.  
(Rembrandt Peale)



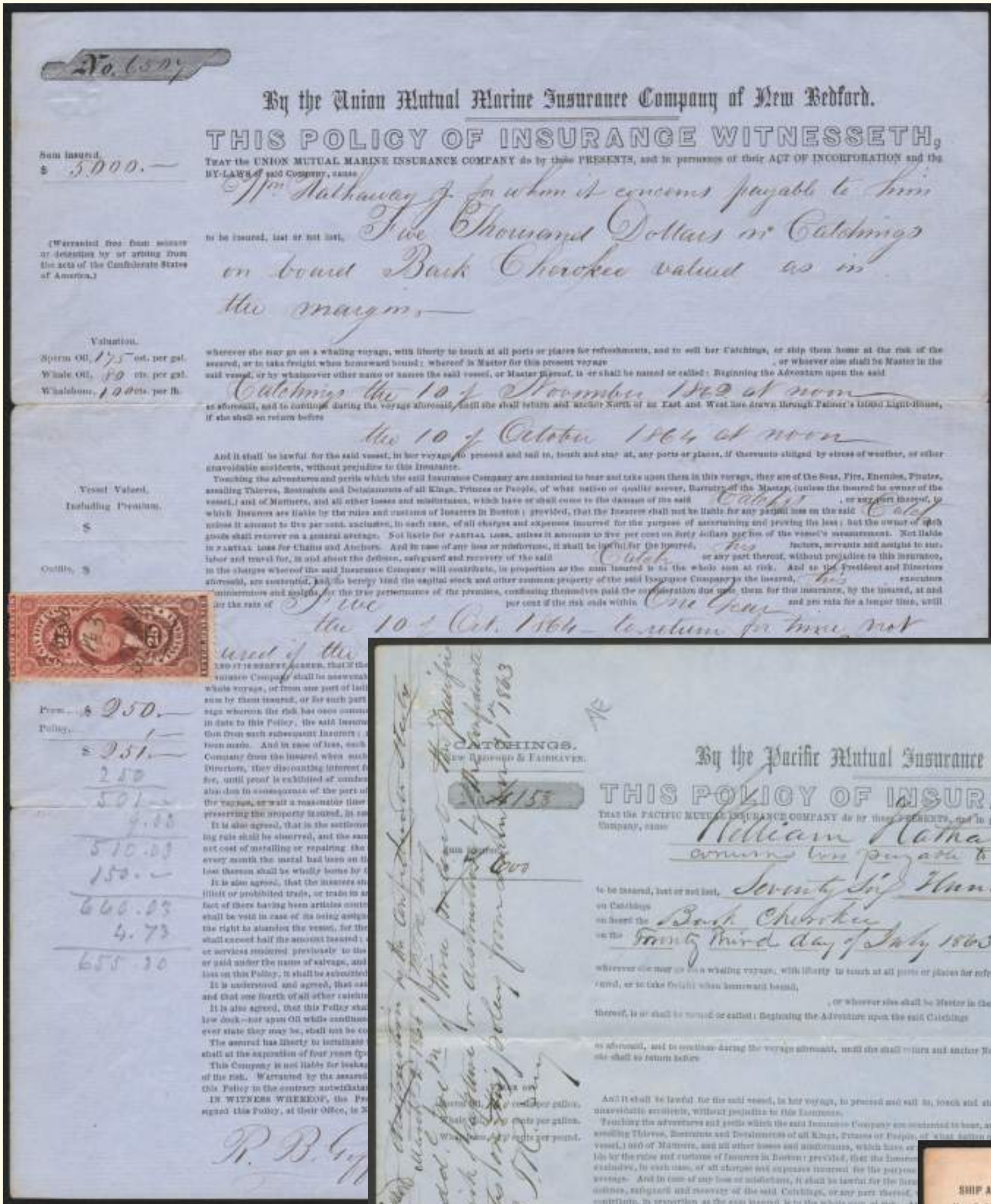
W. J. Rotch



#### 4. Insuring Vessels, Outfits and Catchings

##### Fewer than fifteen policies recorded

Fire insurance accounts for some 95% of surviving policies; marine insurance comprises nearly all of the rest, but of these only a few are on whaling vessels, with wording tailored to the enterprise (e.g., see the fine print here).



#### Early Matching Use of 25¢ Insurance

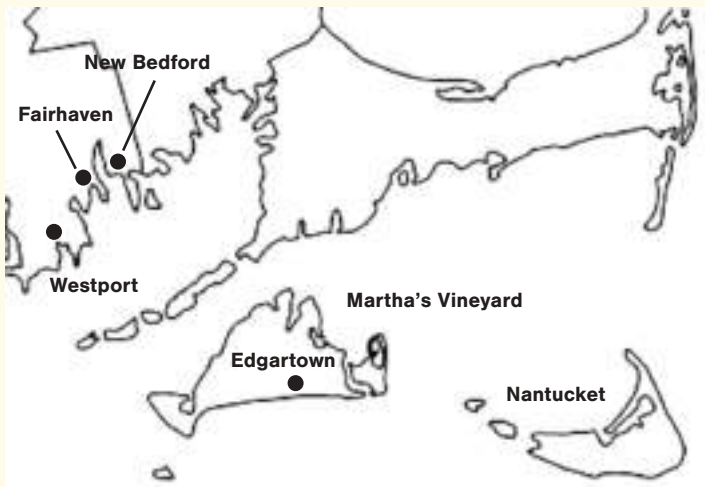
Insurance 1862 25¢ tax, effective October 1, 1862, paid here by:

- 25¢ Insurance perforated in March 1863 (above)
- 25¢ Insurance part perforate in November 1863 (right).

Obligatory matching use of the 25¢ Insurance stamp had been rescinded December 25, 1862, but use of matching stamps continued for some months as stocks ordered to comply with the requirement were gradually depleted. Examples are scarce and desirable.

This was one of the first stamps delivered by the printers, and one of very few first issued fully perforated, before the order to deliver “with utmost despatch without perforating.”

This pair of policies nicely illustrates that in general the perforated stamps preceded the “unfinished” ones, not vice versa!



#### 4.2 Insuring the Catchings (2)

##### “at the vineyard”

May 1863 “Ship and Outfits” policy converted by hand to one on catchings of Bark Rose Pool during a twenty-month voyage, Insurance 1862 25¢ rate paid by 25¢ Entry of goods imperforate.

A mere \$300 insurance was provided for an \$18 premium (6%), on:

- Sperm Oil, \$1.75/gal.
- Whale Oil, \$1.00/gal.
- Whalebone, \$1.50/gal.

##### War Risk (2)

Per the attached slip, for an additional 6% premium (doubling the cost of the policy) the company assumed “the risk of loss or capture by Confederate cruisers, privateers, and their vessels of war.”

Note the change in anchorage to “at the vineyard”; Rose Pool was one of relatively few whaleships with home port Edgartown, Martha's Vineyard island, some 20 sea miles southeast of New Bedford.

#### 4.1 Insuring the Catchings (1)

Spreading the Risk: catchings of Bark Cherokee of New Bedford insured by two companies:

Left, Union Mutual Marine Insurance Co., November 1863, for \$5,000 with \$250 premium (5%), from Nov. 10, 1862, to Oct. 12, 1864, on: Sperm Oil, \$1.75/gal.; Whale Oil, 80¢/gal.; Whalebone, \$1.00/gal.

Coverage for loss by “acts of the Confederate States of America” initially waived, later added per notation on reverse.

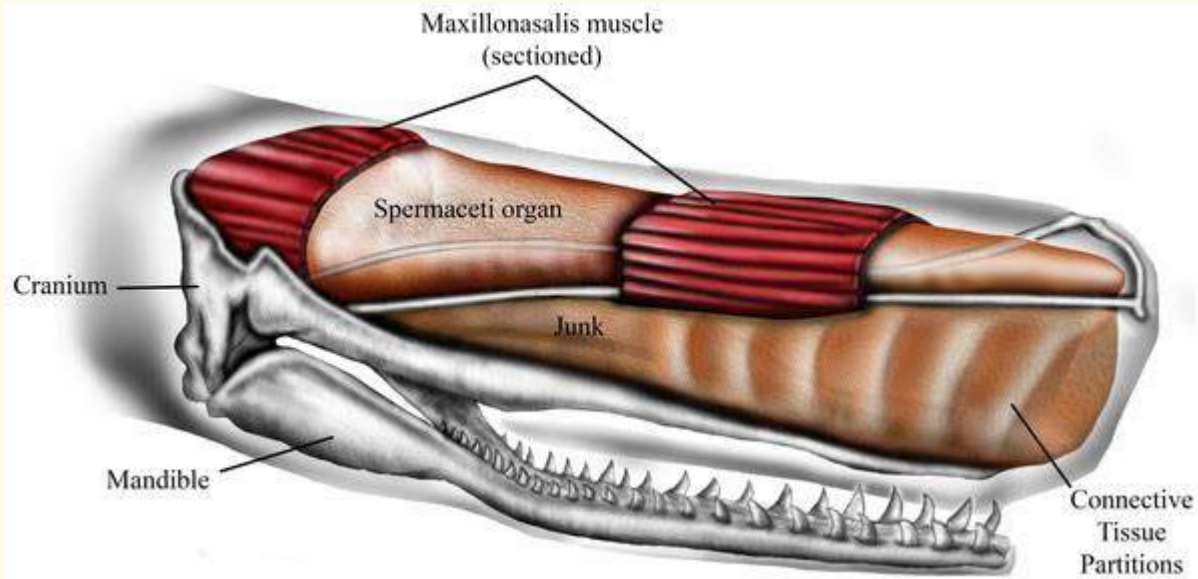
Middle, “Catchings Policy” of Pacific Mutual Marine Insurance Co., March 1863, for \$7,600 with \$380 premium (5%), from July 23, 1863, until return, on: Sperm Oil, \$1.60/gal.; Whale Oil, \$1.00/gal.; Whalebone, \$1.50/gal.

##### War Risk (1)

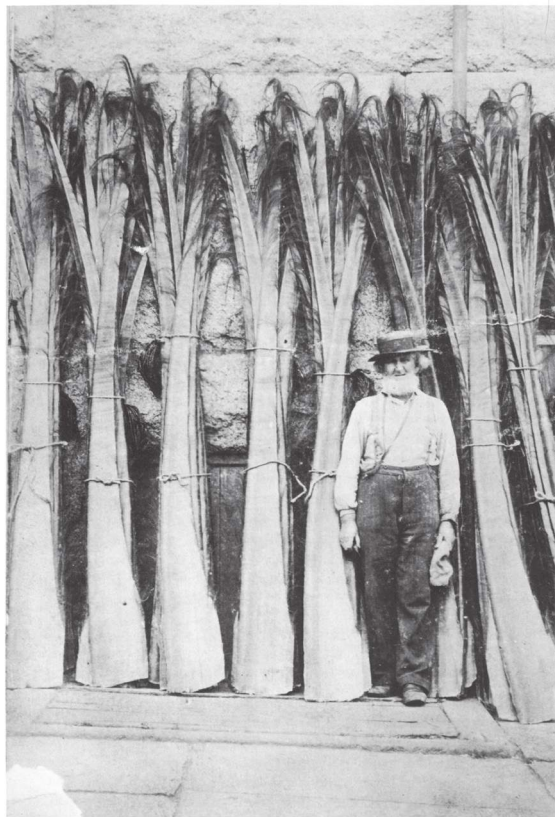
Per notation, on March 2, 1864, “risk of capture or destruction by the Confederate States of the United States [?]” was assumed for an additional 3% premium. (For a surprising postscript to this coverage, see 4.3 below.)

##### What Were Sperm Oil, Whale Oil and Whalebone?

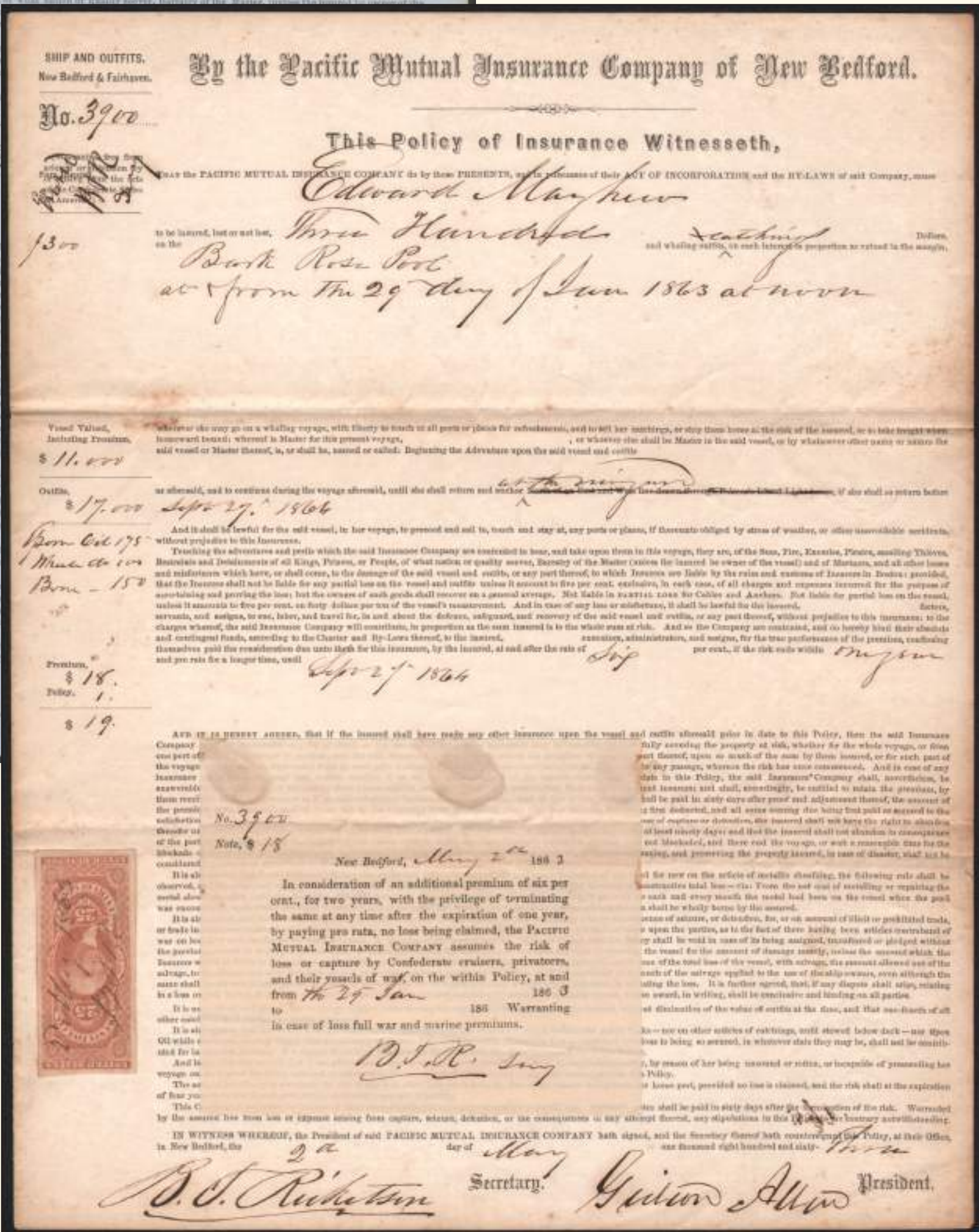
- The highly valued “sperm oil,” was refined from the “spermaceti,” a clear, yellowish fluid obtained from the spermaceti organ in the head of the sperm whale. It is technically not an oil, but a liquid wax.
- Normal whale oil was obtained from its hugely voluminous blubber.
- Whalebone referred not to the skeleton, but to baleen from the mouth of the northern bowhead whale, with which it filtered plankton. These flexible plates were valued for many uses served today by plastics.



Location of the spermaceti organ in the head of the sperm whale (believed to be used in echolocation and click-signaling), the source of sperm oil



Baleen (“whalebone”)





[illegible]

### Whaling Nobility (3): Jonathan Bourne, Jr.

Bourne had married into the Nye-Howland whaling family in 1834, and during fifty-three years had a controlling interest in twenty-four vessels, and interests in twenty-two others. The sales from the former totalled a staggering \$7,986,103.08.

## Bourne and the *Lagoda*

Bourne owned the *Lagoda* from 1843 until 1886, during which time it became justly famous (see 5.3). It was his favorite ship, for good reason; the net profits of its twelve voyages during his tenure totalled \$651,958.99, making it arguably the single most profitable whaleship.

In his honor his daughter Emily funded creation of the **Bourne Building** at the **New Bedford Whaling Museum** in 1916, and within it a meticulously accurate **half-scale model of the Lagoda**,

[illegible]

#### 4.5 Insuring the Vessel and Outfits (2)

**June 1872** policy insuring New Bedford whaler *Eliza Adams* and outfits, for \$2,875 on a four year “adventure,”  
1864 50¢ tax for premiums above \$50

The *Eliza Adams* sailed to the **North Pacific and Arctic**, where in 1865 she had narrowly escaped capture by the *Shenandoah*.

The 9% premium (\$258.75 on \$2,875) illustrates again why most whaleships had sailed uninsured for decades prior to 1871; it far exceeded the historic probability that a vessel would be lost. The *Shenandoah* had drastically increased that average, but those losses had been amply compensated via the Alabama Claims.

**Not so for the “Disaster of 1871,”** in which an astonishing **82.5% of the Arctic fleet was lost**, most uninsured. Indeed the wonder here is that the 9% premium was not higher on this 1872 policy. It nicely illustrates that a **die-hard remnant viewed the events of 1871 as a “one-off” and hoped for business as usual**. Instead it would become apparent that as whales moved further and further north, pursuing them would become increasingly dangerous. In **1876, ten more ships would be lost** to the ice near Point Barrow, and of **fifty men** forced to winter there, **all but three would perish**.

### 4.3 Insuring the Outfits

**Obligatory Matching Use of 25¢ Insurance**

Left, "Ship and Outfits" policy on outfits of Bark *Camilla* during a four-year voyage, made December 23, 1862, Insurance 1862 blanket 25¢ rate paid by matching 25¢ Insurance. The *Camilla* sailed to the North Pacific.

**Fewer than ten policies recorded** showing obligatory use of the **Insurance stamp** before the requirement for matching use was rescinded December 25, 1862; this the **sole example on a whaling policy**.

The outfits were valued at \$28,000, on which **\$3,125 was insured** for a **premium of \$250 (8%)**.

## Vessels Typically Uninsured

The vessel itself was not insured; this was the usual practice because of the high cost. Experience over decades showed that only about 1.5% of vessels were lost, and with premiums about 10% (see 4.4 and 4.5 below), thrifty Quaker owners usually assumed the risk themselves. This frugality would prove expensive after the “Disaster of 1871.”

### War Risk (3)

Per the attached slip, for an additional 6% premium the company assumed “the risk of loss or capture by Confederate cruisers, privateers, and their vessels of war.” This was canceled after two years.

## War Risk Reimbursed!

There is a little-known postscript to the payment of war risk premiums. **Confederate commerce raiders *Alabama*, *Shenandoah*, *Florida*, *Georgia* and others had been built in England and sold to Confederate agents for conversion to warships,** with the knowledge and complicity of British officials. In the **1871 Treaty of Washington**, Britain agreed to **compensate the U.S. for damages**, and an **arbitration commission** valued the “***Alabama Claims***” at **\$15.5 million**. (I cannot resist noting that **Sen. Charles Sumner** had suggested **\$2.125 billion**, and that others proposed the **transfer of Canada to the U.S.**)

Compensation for the **cost of war risk coverage** on **maritime insurance** was included, awarded to the U.S. as a lump sum and **dispensed in a secondary wave of small claims** over many years. Especially pertinent here is **#4495, Caleb Dexter vs. the United States**, filed March 17, 1884, at New Bedford, for **\$31.85** paid as **war risk premium** on the **catchings of the whaler Cherokee** (see 4.1 above, albeit paid on yet a third policy, of the Commercial Mutual Insurance Co.)! His payment was reimbursed, twenty years after it had been made; the wheels of justice had turned surely, if slowly!

#### 4.4 Insuring the Vessel and Outfits (1)

October 1871 policy insuring New Bedford bark *Northern Light* and outfits, for \$25,000 on a four year "adventure,"  
50¢ tax at 1864 50¢ rate for premiums above \$50

The ***Northern Light*** sailed to the North Pacific and Arctic.

The substantial and **seemingly exorbitant 9% premium (\$2,250 on \$25,000)** was precisely the **barrier to widespread insurance of vessels** by the notoriously thrifty New Bedford shipowners.

One is tempted to speculate that **this exception** was **motivated by the “Disaster of 1871,”** in which thirty-three ships were lost, most uninsured. **Not so,** as awareness of it did not reach New Bedford until early November, about a month after this policy was issued. Presumably it simply reflects the **conservative approach of Jonathan Bourne, Jr.,** in whose name 90% of the insurance (**\$22,500**) was taken, evidently his share of ownership.



## 5. Clearing Customs: The New Bedford Manifests

**Ship manifests** have long been one of the rarest types of Civil War era stamped documents. In 2005 a small cache of 1864 New Bedford custom house manifests surfaced, doubly rare not only because of the usage—including the **discovery examples of the \$3 rate**—but because they are **all for whaleships!** Even better, several are for ships lost in the disasters of 1865 and 1871.


They are of **three types**, ordered by chronology.

5.1 Right, **Type 1** manifest for the **Oxford of Fairhaven**, bound for **"The Atlantic Ocean and Hudsons Bay,"** with **Manifest \$1 tax** paid for **vessels of up to 300 tons.**


**Fairhaven** (across the Achushnet River from New Bedford) an **uncommon origin**, and **Hudson's Bay** an **uncommon destination**.

5.2 Below, **Type 2** manifest for the **Governor Carver of Westport**, bound for **"the Atlantic and Indian Oceans"** with Manifest \$1 tax paid.

**Westport** (eleven miles southwest of New Bedford) another **uncommon origin.**

MARKS.	NUMBERS.	PACKAGES AND ARTICLES IN BULK, To be arranged alphabetically, and each kind to be separately inserted and described.	CONTENTS OR QUANTITIES, In gallons, pounds, yards, pieces, &c., To be inserted in figures.	VALUE AT THE PORT OF EXPORTATION.						
				Value of Foreign Produce or Manufactures.		Value of Domestic Produce or Manufactures.		TOTAL AMOUNT.		
				DOLLARS.	CENTS.	DOLLARS.	CENTS.	DOLLARS.	CENTS.	
		Sotichy and relatives for a Whaling Voyage								\$1000.00
										

Sold at Kelley's Navigation Store, 12 North Water Street

MARKS.		NUMBERS.	PACKAGES, OR ARTICLES IN BULK. To be arranged alphabetically, and each kind to be separately inserted, and distinctly described.	CONTENTS OR QUANTITIES. In gallons, pounds, yards, pieces, &c., to be inserted in figures.	VALUE AT THE PORT OF EXPORTATION.					
					Value of Domestic Produce or Merchandise.		Value of Foreign Produce or Merchandise.		TOTAL AMOUNT.	
					DOLLARS.	CENTS.	DOLLARS.	CENTS.	DOLLARS.	CENTS.
			<i>Casks Provisions and Ship's Stores for a Whaling Voyage</i>							<i>\$15000</i>
									<i>Thomas H. Mearns</i>	

District of New England.

I, Thomas H. Macy, Master or Commander of the said Barth Gertner Carver bound from the Port of Hartford on a Whaling Voyage to Atlantic India Ocean do solemnly, sincerely, and truly swear, that the Manifest of the Cargo on board the said Barth Gertner Carver now delivered by me to the Collector of this District, and subscribed with my name, contains, according to the best of my knowledge and belief, a full, just, and true account of all the Goods, Wares, or Merchandise, now actually laden on board the said vessel, and of the value thereof; and if any other Goods, Wares, or Merchandise, shall be laden, or put on board the said Barth Gertner Carver previous to her sailing from this Port, I will immediately report the same to the Collector. I do also swear, that I verily believe the Duties on all Foreign Merchandise, therein specified, have been paid or secured, according to law, and that no part thereof is intended to be re-laden within the United States; and that if, by distress, or other unavoidable accident, it shall become necessary to re-land the same, I will forthwith make a just and true report thereof to the Collector of the Customs of the District wherein such distress or accident may happen. And I further swear, that, according to the best of my knowledge and belief, the Certificate hereto annexed, contains the whole quantity of Beef and Pork on board the said vessel, and that no salted Beef or Pork is shipped on board said vessel for the Ship's company, on freight or on cargo, but what is inspected and branded according to a law of the Commonwealth. And I further swear, that the said Merchandise is truly intended to be exported to

Sworn this 20th day of May 1864 Before me, James H. Munn Collector. Thomas H. Macy



OUTWARD FOREIGN MANIFEST... WHOLE CARGO.

Sold at Baker's Navigation Store, 61 North Water Street.

Report and Manifest of the Cargo laden at the Port of *New Bedford* on board the *Barzun Lagoda* *Charles M. Fisher* Master, bound for a *Whaling Voyage*

MARKS.	NUMBERS.	PACKAGES, OR ARTICLES IN BULK. To be arranged alphabetically, and each kind to be separately inserted, and distinctly described.	CONTENTS OR QUANTITIES. In gallons, pounds, yards, pieces, &c., to be inserted in figures.	VALUE AT THE PORT OF EXPORTATION.			
				Value of Domestic Produce or Merchandise.	Value of Foreign Produce or Merchandise.	TOTAL AMOUNT.	
DOLLARS.	CENTS.	DOLLARS.	CENTS.	DOLLARS.	CENTS.	DOLLARS.	CENTS.
<i>None</i>	<i>None</i>	<i>Outfits for a Whaling Voyage</i>	<i>\$ 35.00</i>				
<i>(B)</i>		<i>Shutlin Cases, Manufactured Tobacco Two thousand Eighty pounds (2080)</i>		<i>\$ 12.48</i>			



I, *Charles M. Fisher*  
to *Barzun Lagoda*  
my name, contains, according to the best of my  
on board the said *Barzun Lagoda*  
or secured, according to law, and that no part  
of the District wherein such distress or accident  
shipped on board said vessel for the Ship's use  
this

OUTWARD FOREIGN MANIFEST—WHOLE CARGO.

Report and Manifest of the Cargo laden at the Port of *New Bedford* on board the *Ship Sea Gull*  
*Joshiah Webber Jr* Master, bound for *ports on West Coast of Africa via Boston*

MARKS.	NUMBERS.	PACKAGES AND ARTICLES IN BULK. To be arranged alphabetically, and each kind to be separately inserted and described.	CONTENTS OR QUANTITIES. In gallons, pounds, yards, pieces, &c. To be inserted in figures.	Value at the Port of Exportation.			
				Value of Domestic Produce or Merchandise.	Value of Foreign Produce or Merchandise.	TOTAL AMOUNT.	
DOLLARS.	CENTS.	DOLLARS.	CENTS.	DOLLARS.	CENTS.	DOLLARS.	CENTS.
		<i>18000 gals Oil Cask Shooks</i>			<i>900 00</i>		



*Joshiah Webber Jr*

District of *New Bedford*

I, *Joshiah Webber Jr* Master or Commander of the said *Ship Sea Gull* bound from the port of *New Bedford*  
to *ports on West Coast of Africa via Boston* do solemnly, sincerely and truly *swear* that the manifest of the Cargo on board the said *Ship*  
now delivered by me to the Collector of this District, and subscribed with my name, contains according to the best of my knowledge and belief, a full, just and true account  
of all the Goods, Wares and Merchandise, now actually laden on board the said vessel, and the value thereof; and if any other Goods, Wares or Merchandise shall be laden or put on board the said  
*Ship* previous to her sailing from this port, I will immediately report the same to the Collector. I do also *mean* that I do verily believe  
the duties on all foreign Merchandise, therein specified, have been paid or secured, according to law, and that no part thereof is intended to be re-landed within the United States; and that if by distress  
or other unavoidable accident, it shall become necessary to re-land the same, I will forthwith make a just and true report thereof to the Collector of the District wherein such distress or  
accident may happen. And I further *mean* that the said Merchandise is truly intended to be exported to *ports on West Coast of Africa via Boston*

Given this *19<sup>th</sup>* day of *November* 18*64*  
Before *James S. Fisher* Collector.

*Joshiah Webber Jr*

5.3 The Lagoda  
Ten examples of Manifest \$3 rate recorded  
Above, Type 2 manifest for the *Lagoda* of New Bedford, bound for "a Whaling Voyage," with Manifest \$3 tax paid for vessels of above 300 to 600 tons by matching \$3 Manifest stamp.  
The proceeds of this 46-month voyage were a staggering \$200,755.68.  
*Lagoda* and the Opening of Japan  
In 1848 ill treatment of *Lagoda* deserters in Japan had played an incidental but important role in the opening of Japan to foreign commerce by Commodore Perry in 1853.  
*Lagoda* and the "Disaster of 1871"  
In 1871 it would be one of seven rescue ships receiving evacuees from ships abandoned in the "Disaster of 1871." These seven were all that remained of the Pacific whaling fleet of forty that had proudly departed Honolulu mere months earlier.  
A half-scale model of this historic vessel is a showpiece of the New Bedford Whaling Museum.

5.4 Type 3 manifest for the *Sea Gull* of New Bedford, bound for "Ports of West Africa via Boston," with Manifest \$3 tax paid.  
Carrying "18000 gals Oil cask shooks." Shooks were "barrels of barrels," staves ready to be assembled when needed at sea.





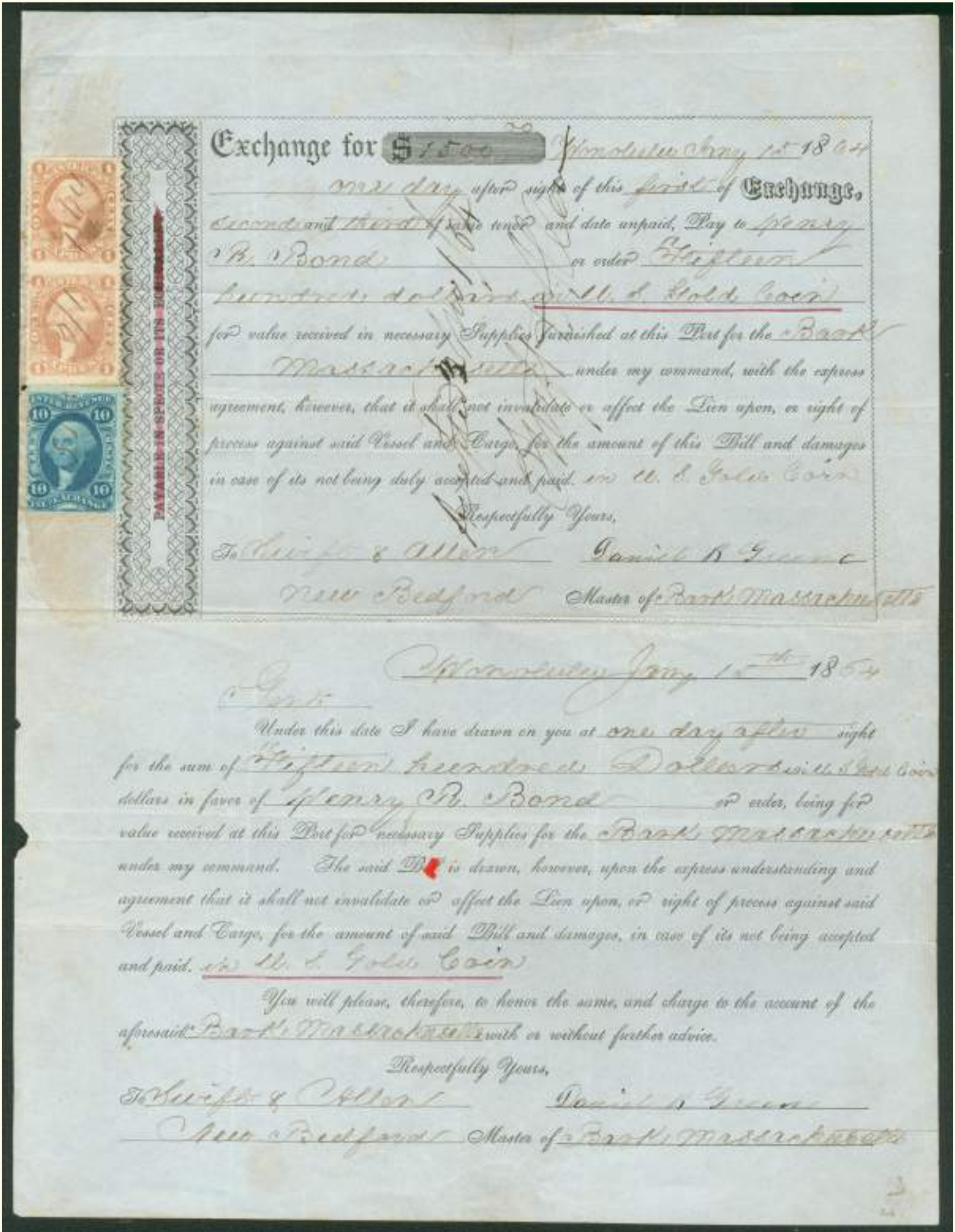
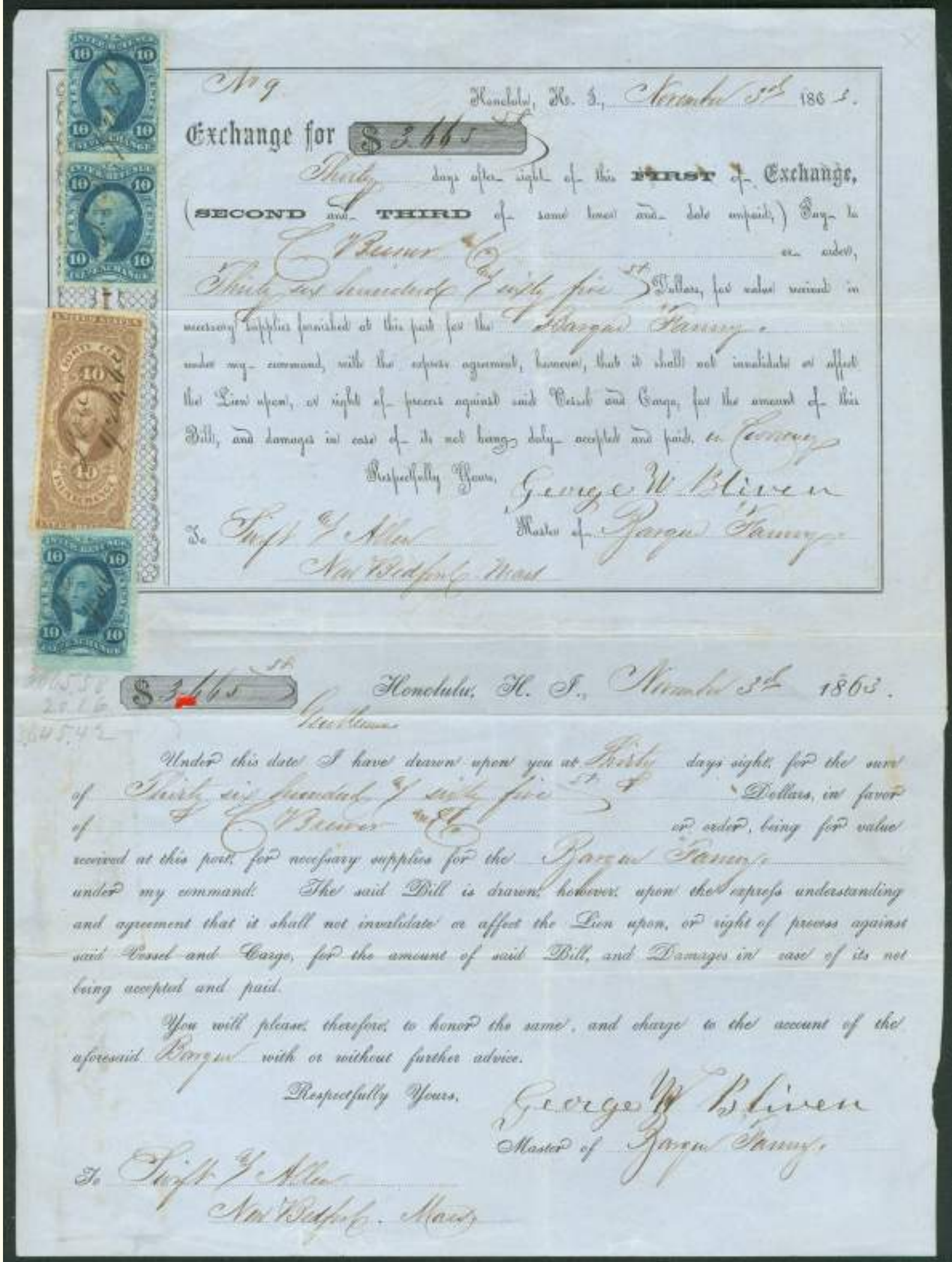
6. Mid-Voyage Financing: Bills of Exchange Drawn in Distant Ports

- 6.1 Hawaii
- 6.2 Chile
- 6.3 New Zealand

Here and on the following two panels are **bills of exchange** executed in **distant ports** by **masters of vessels**, paying for **resupply and repairs**, drawn on **whaling factors Swift and Allen** of New Bedford, the ships' owners and outfitters. Their acceptance depended on confidence in Swift and Allen, established over the years; usually they changed hands several times as a form of **commercial currency**.

Upon acceptance in the U.S. they were subject to **stamp tax** at the same rates as **Inland Exchange**.

6.1 Hawaii  
Twelve examples recorded



6.1.1 Honolulu, Foreign Exchange Tax Paid in Error

Sole recorded example on an incoming foreign bill

**Bark Fanny, November 1863**, \$3,665 payable in 30 days, tax 19¢ by **Inland Exchange 1863 rate** of 1¢ per \$200, stamped instead at **Foreign Exchange 1862 70¢ rate** for amounts above \$3,500 to \$5,000, paid by Inland Exchange 40¢ & 10¢ (x3), **all part perforate**

The **Foreign Exchange rates** were intended for **outgoing foreign bills**. Swift and Allen were evidently initially unclear as to the procedure for stamping incoming bills, with delightful philatelic consequences here. Ex-Lipson

On its **next voyage** the **Fanny** would be **lost in the “Disaster of 1871.”** Its master here, **George Bliven**, would then command the **Elizabeth Swift**, which met the same fate (see 8.2).

6.1.2 Honolulu, Inland Exchange 1863 Rates

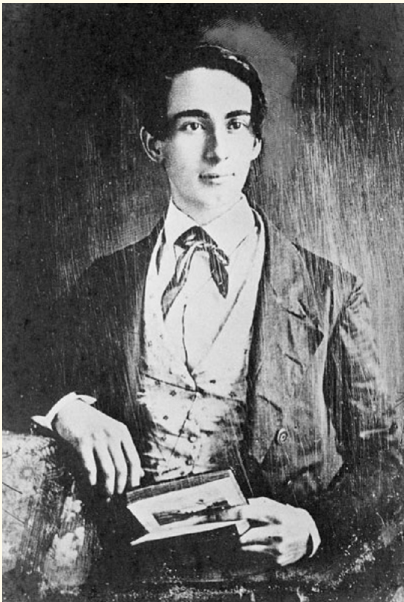
**Bark Massachusetts, January 1864**, \$1,500 **gold** payable one day after sight, tax 8¢, by **Inland Exchange 1863 rate** of 1¢ per \$200 for durations to 30 days, curiously **12¢ paid** by Inland Exchange 10¢ & Express 1¢ pair, again **all part perforate**

The **1863 rates** were in effect just **seventeen months**, and payment on incoming bills has been recorded for just **three users**. this incoming whaling bill is one of the premier examples.

Why Was 12¢ Paid?

The bill was paid, not by \$1,500 in gold, but only \$11.50 in gold and the remainder by \$2,389.04 in **currency** at a **whopping 60% premium!** The 12¢ tax was based on payment of \$2,400, but only 8¢, based on the stated amount of the bill, was necessary. By now Swift and Allen had learned the law, but not its fine points! Ex-Lipson

Like the **Fanny**, on its next voyage the **Massachusetts** would be **lost in the “Disaster of 1871.”**



Henry M. Whitney circa 1850



6.1.3 Honolulu, Inland Exchange 1864 Rate: “Remittance Bill” (1)

Two remittance bills recorded

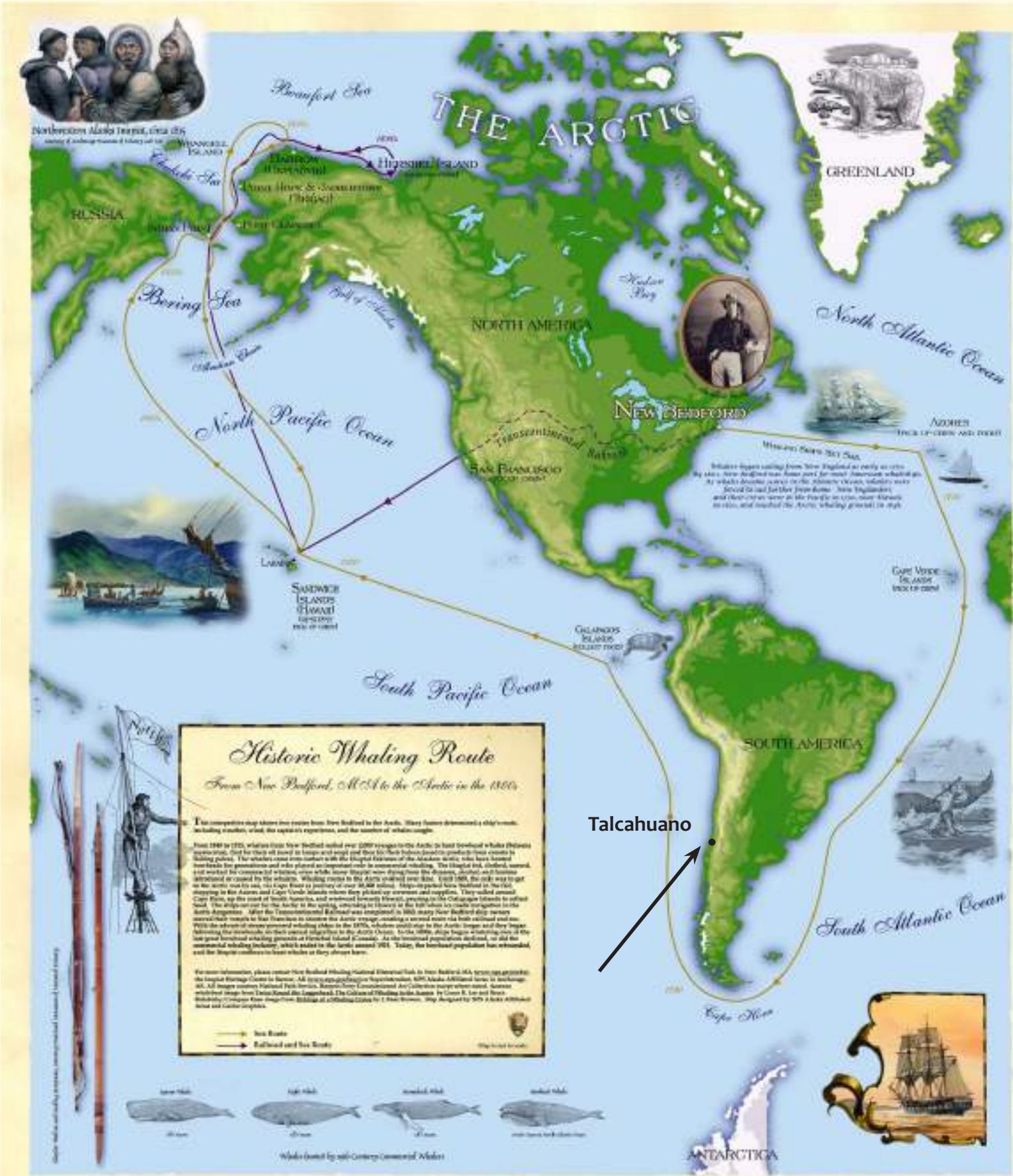
December 1866, drawn not by a ship's master, but by **ship chandlers Bolles & Co.**; payable not locally, but to **Mary S. Huddy** in **New Bedford** (as shown by endorsements on reverse), and for the **small amount \$62.50**.

Just as **Wells Fargo** and other California banks pioneered the **selling of exchange** to miners wishing to **send money home** (for a fee of course, typically about 3%), **Bolles & Co.** were evidently providing the **same service** to **whalemen**. Ex-Buford.

The eye-catching **bicolored, multi-vignetted form** bears the imprint **“Henry M. Whitney, Stationer, Honolulu,”** earlier the printer of the Hawaii Missionary stamps.



6.2 Chile  
Sole recorded example



Talcahuano was a convenient port for ships needing resupply or repair on the epic journey between New Bedford and the Arctic

Bark Martha, Talcahuano, Chile, March 1871,  
amount \$2,328 American coin, to ship chandler Enrique Schuyler  
tax \$1.20, “MERCHANTS NATIONAL BANK New Bedford” cancels

6.3 New Zealand  
Four examples recorded  
Each extraordinary in its own right, all by master of Bark Louisa, all ex-Cunliffe

Tax rates on these bills:

- N.Z., 4s per £50 or fraction
- G.B., 1s on £75-100; on larger amounts, 1s per £100 or fraction
- U.S., 5¢ per \$100 or fraction



“ONE  
SHILLING  
AND EIGHT  
PENCE”

6.3:1 U.S. Second Issue 60¢  
Recorded on only nine documents  
Auckland, November 1871, amount £250 for supplies,  

- New Zealand 1s 8d tax paid on execution at 4d per £50, by “NEW ZEALAND STAMP DUTY” is 8d embossed stamp at right side
- U.S. 65¢ tax upon acceptance; Swift & Allen figured the dollar equivalent at \$1,222.22 (\$4.89/£), and paid with Second Issue 60¢ & 5¢.

Second Issue 60¢ recorded on only nine documents, of which this incoming bill of exchange from a whaleship master in New Zealand is certainly the most exotic.



“The Three Triples”



“EIGHT  
PENCE”



6.3.2 Stamps of New Zealand, Great Britain, U.S. (1)

Two Civil War era triple-nation combinations recorded

Manganui, March 1870, amount £80

- New Zealand embossed Stamp Duty 8d upon execution
  - Great Britain Foreign Bill 1857 1s upon endorsement
  - U.S. 20¢ Inland Exchange upon acceptance (“Five dollars reckoned as one pound sterling”)
- (On foreign exchange, Britain and colonies used embossed stamps on outgoing bills, and adhesives on incoming bills.)

6.3.3 “The Double Triple”!  
New Zealand, Great Britain, U.S. (2)

Auckland, November 1871, amount £250

- New Zealand embossed 1s 8d on execution
- Great Britain Foreign Bill 1871 3s upon endorsement and payment there
- U.S. 65¢ tax upon acceptance, paid with:
  - First Issue 25¢ Certificate
  - Second Issue 25¢
  - Third Issue 15¢

U.S. 1st-2nd-3rd Issue combinations were possible for only a matter of months, with only about twenty recorded. That one occurs as part of a triple-nation combination is a statistical miracle.

The British Foreign Bill 1871 small format issues replaced the beautiful large format issues in use since 1854.



“ONE  
SHILLING  
AND EIGHT  
PENCE”



“ONE  
SHILLING”



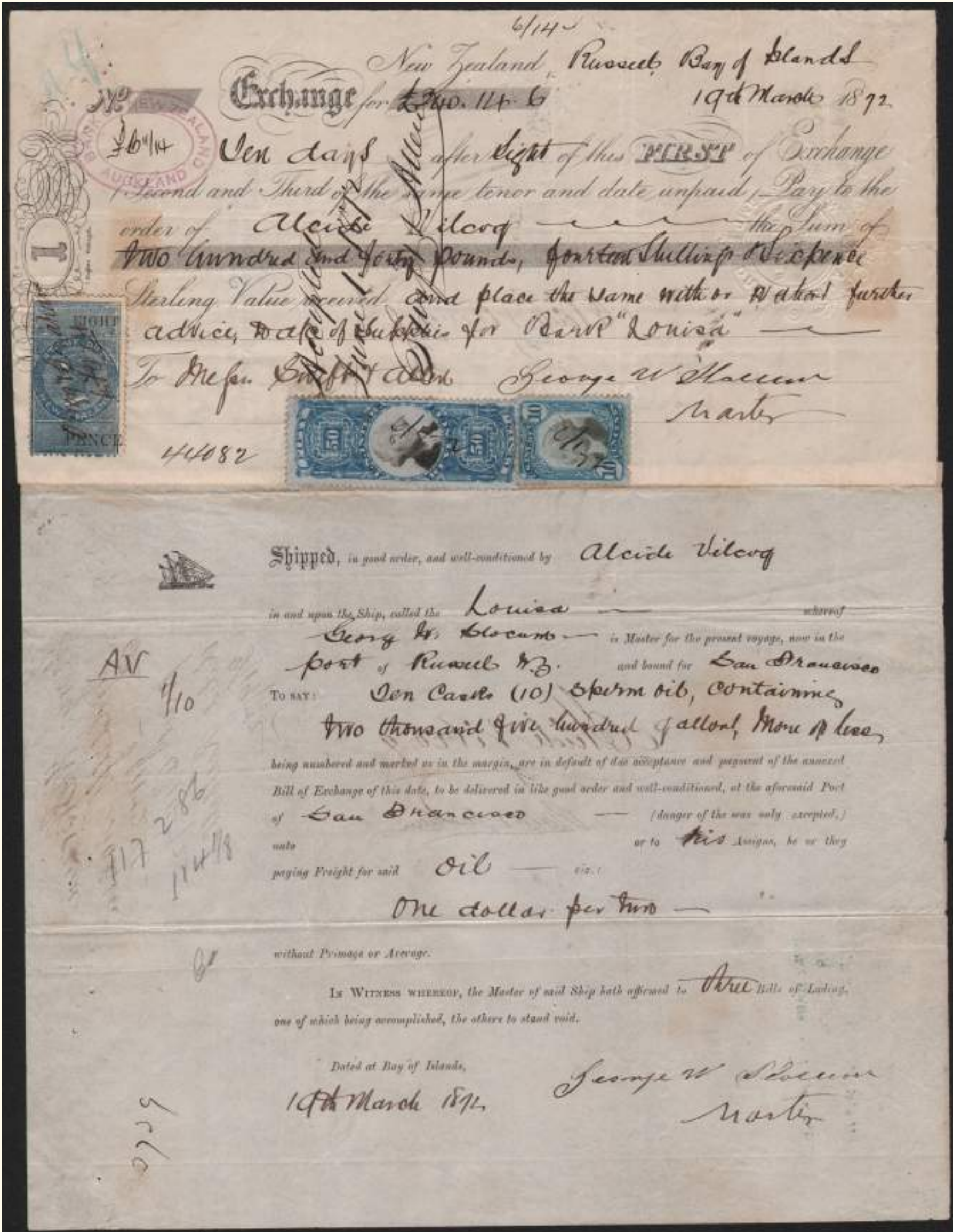
6.3.4 New Zealand Embossed Plus Adhesive

Russell, Bay of Islands, March 1872, £240.14.6 (about \$1,200)

Appended a bill of lading for 2,500 gallons of sperm oil

- New Zealand Stamp Duty embossed 1s on execution, underpaying 1s 8d tax (4d per £50)
- New Zealand 8d adhesive upon endorsement to make up the deficiency!
- U.S. Second Issue 50¢ & 10¢ upon acceptance

Extraordinary combination of New Zealand embossed and adhesive stamps





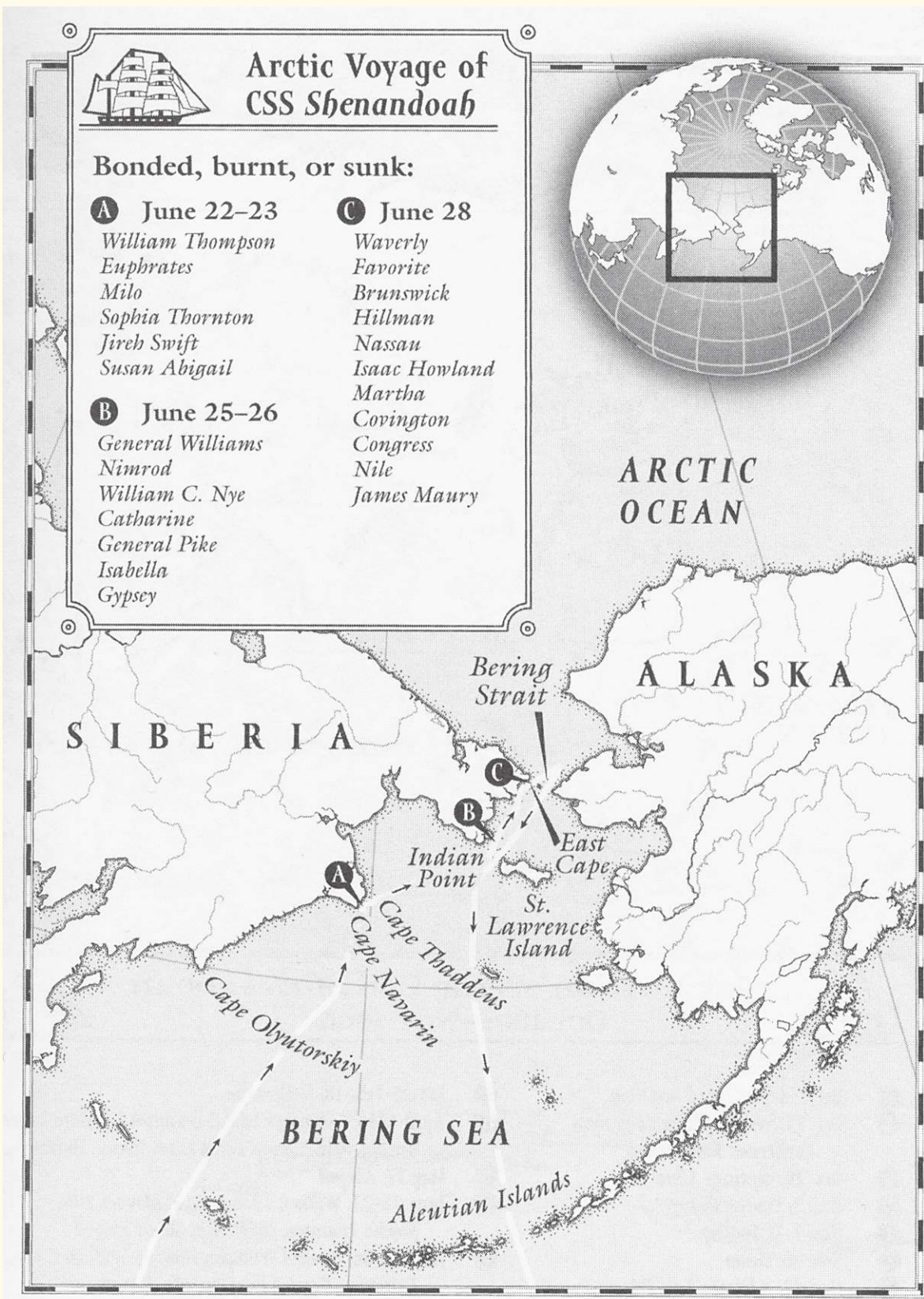
Between May 27 and June 28, 1865, the Confederate commerce raider *Shenandoah* wreaked havoc on the Yankee whaling fleet off the coast of Siberia. Heedless of protests that the war was over, it burned 21 ships and paroled four more to carry prisoners from the burnt vessels back to San Francisco.

A detailed black and white illustration of a three-masted sailing ship, possibly a schooner, navigating through a field of ice floes. The ship is shown from a side-on perspective, highlighting its complex rigging and sails. The sea is choppy, and the sky is overcast. The ship's hull is dark, and the masts are tall and slender. The ice floes are scattered across the water, adding to the sense of a challenging voyage.

Shenandoah navigating Arctic ice  
(U.S. Naval Historical Center)

**The rarity of this Manifest rate and matching stamp, coupled with the historic and catastrophic fate of the ship, make this one of the premier items not only among Whaling and Polar collectibles, but in all of Civil War era philately.**





### 7.2 The Jireh Swift (1); “Final Shot of the Civil War” U.S.-California Combination Stamping

October 1864 **Second** bill of exchange drawn by Thomas Williams, master of whaling bark *Jireh Swift* (in San Francisco to unload \$100,000 in whale oil), drawn on shipowners Swift & Allen in New Bedford, taxed by U.S. at 2¢ Bank Check rate, by California at 1861–6 Exchange \$2 rate. Note that this is a **paid Second**, unusual thus; normally the First was paid.

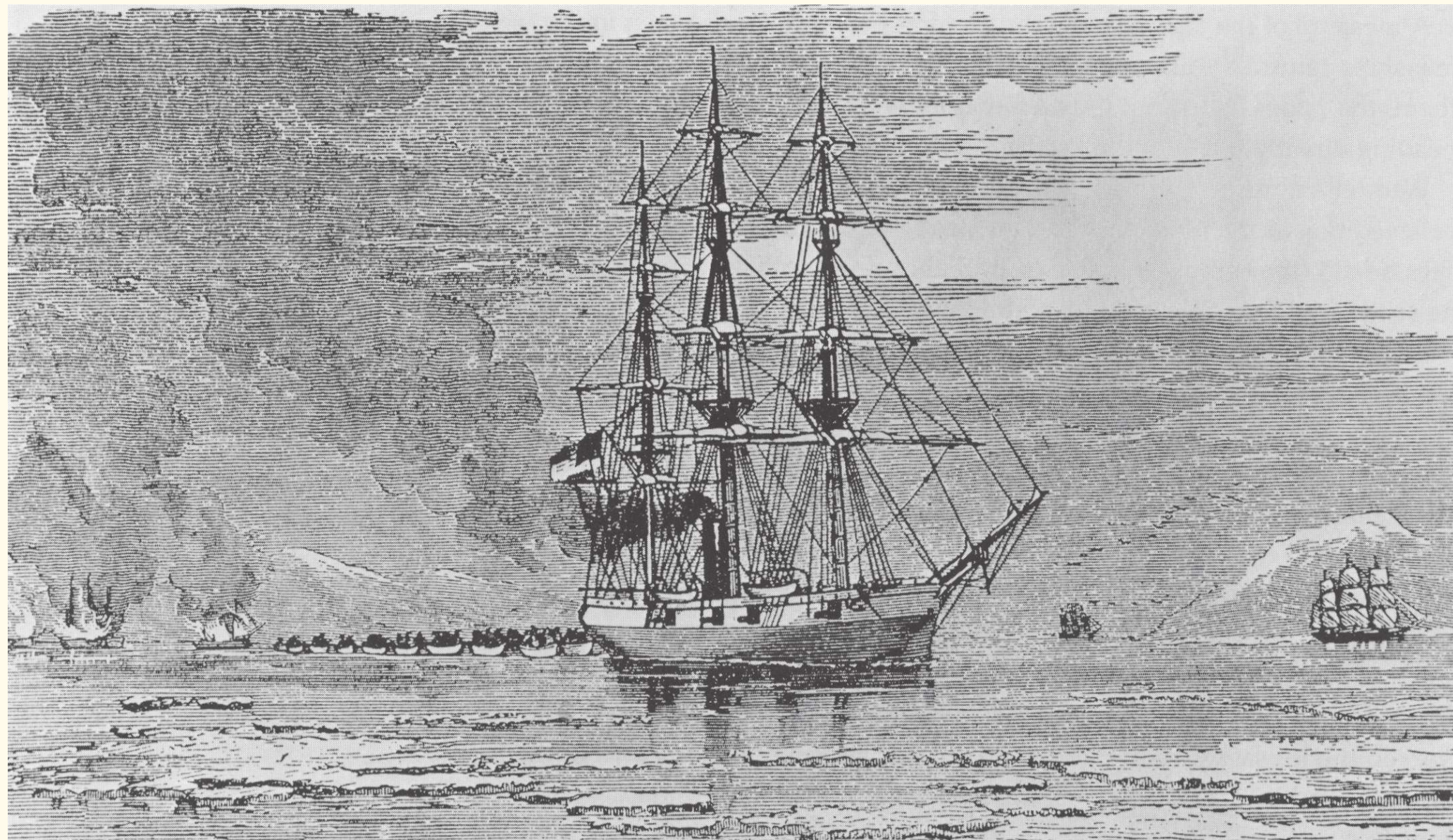
On **June 22, 1865**, the *Jireh Swift* would be **captured and burned in the Bering Sea** by the infamous Confederate raider *Shenandoah*. The Civil War was over, but convincing proof did not reach the *Shenandoah* until August 2. The *Jireh Swift* had made a run for the Siberian coast, until a **shot whistling past her stern** brought her to. **This is widely considered the final shot of the Civil War**. Twenty minutes later the *Jireh Swift*, with another 400 barrels of whale oil aboard, was in flames.

#### Name Game

On bills of ship chandler Chas. Hare, the woodblock vignette of hounds chasing a hare adds a **quaint, delightful touch**. A custom-made illustration would have been prohibitively expensive, so the printers provided the next best thing, a **cut chosen from stock** that made a **visual word play on the customer's name**. A similar tactic was often employed on Western stock certificates of this era, but this is the only example I am aware of on a bill of exchange.

**Another of the premier items of Civil War philately, ex-Joyce**

*Shenandoah* towing whaleboats filled with prisoners, in pursuit of still more prizes. The captives would soon be loaded onto bonded and paroled ships to be taken to San Francisco.



### 7.3 The Jireh Swift (2); Post-Shenandoah U.S.-California Combination Stamping

**August 2, 1865**, generic First bill of exchange drawn by Thomas W. Williams, on whaling factors Swift & Allen in New Bedford for \$500 in gold, taxed by U.S. at 2¢ Bank Check rate, by California at 1861–6 Exchange \$1 rate.

Williams was the **former master of the Jireh Swift**, burned by the *Shenandoah* on June 22, newly arrived in San Francisco aboard the **captured but paroled Milo** on July 20. The bill was payable to ship chandler Charles Hare, on whom Williams' bill for \$1,000 in happier times (6.2 above) had also been made. Hare now advanced Williams the \$500 to pay his way home. On July 21 a defiant Williams had written to his wife,

I am very sorry such a fine ship should be Burned by an English Pirate and I hope our Government will make them pay every Dollar or sweep her Commerce from the Ocean ... tell the Copper Heads if you have any around you that I do not care one cent about loosing my ship and my seasons work which is worth ten Thousand Dollars to me so long as we lick the Rebels and their English Friends with them which I consider we have all ready done all I want now is to hang Jeff Davis and I will call President Jonston the man to wind up the war.

**A wonderful complement to the October 1864 bill, ex-Joyce, Bleckwenn**



While in San Francisco, **Williams (far right)** sat for this photograph together with the **captains of the William Thompson (F. C. Smith, far left, see 7.1 above), Sophia Thornton, Milo and Euphrates**, identified as “**Captains of the Whaleships Captured and Burned in the North Pacific on the 21st and 22nd of June, 1865, by the Rebel Cruiser Shenandoah: the last act of expiring insolence.**” (In fact the *Milo* had not been sunk, but bonded, and had carried the men from the other four ships to San Francisco; moreover, the *Shenandoah*’s “insolence” had continued for another week; but close enough, the news was still fresh!





#### 7.4 The William C. Nye U.S.-California Combination Stamping

October 1865 San Francisco bill for \$250 at three days' sight, drawn on a party in New Bedford, with California First Exchange 60¢, nicely die-cut, correctly paying on an amount above \$200 to \$300. The federal tax paid, though, was doubly erroneous; Cancels of British and Californian Banking Agency, which presumably made the mistakes:

- only 6¢ paid, at Foreign Exchange rate of 2¢ per \$100; 15¢ due at Inland Exchange 1864 rate of 5¢ per \$100
- 4¢ Proprietary stamp, nominally illegal on document, intended for use on medicines, matches, etc.

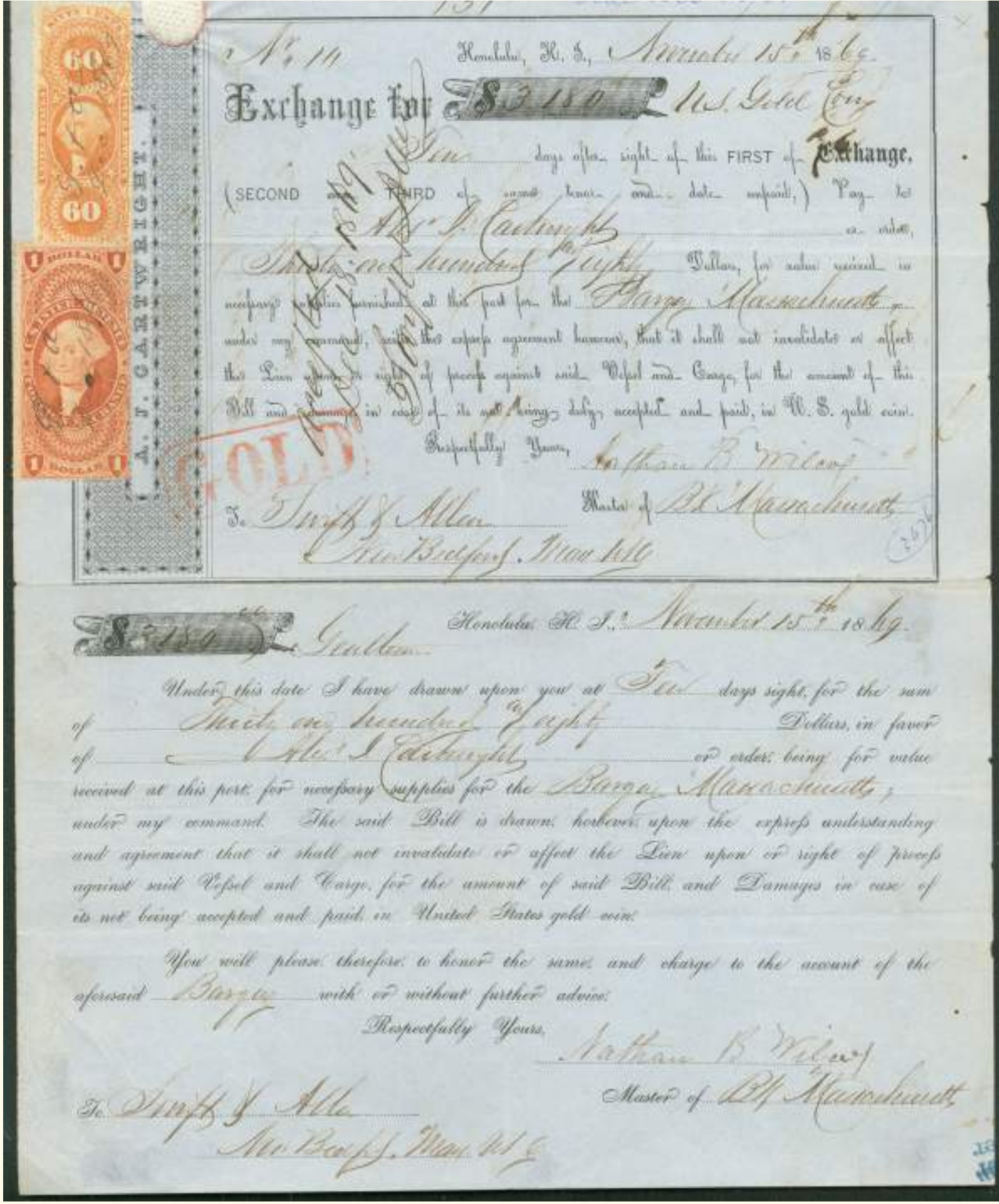
##### The Shenandoah Connection

Payees J. C. Merrill & Co. of San Francisco were agent and 7/16 owners of the whaling bark William C. Nye, originally of New Bedford, late of San Francisco, burned by the Shenandoah July 26, 1865, her crew carried to San Francisco by the bonded General Pike. This prompts a closer look at the other parties to this bill. A plausible working hypothesis is that Thomas Nickerson Parker had been a crewman on the Nye, and with this bill his father, Francis L. Parker, was reimbursing Merrill & Co. for emergency funds advanced to him, drawn on Thomas's guardian, William W. Crapo of New Bedford.

Francis L. Parker (b. 1823, New Bedford) appears in the 1860 and 1870 Censuses as a resident of San Francisco. By the 1850s San Francisco was increasingly serving as a refitting site for whaleships, which may explain his relocation. Thomas Nickerson Parker (b. 1846, New Bedford) appears in the 1860 Census as residing in San Francisco, but was drowned at sea "about 1868," most likely on a whaling voyage. William W. Crapo (1830–1926), lawyer and businessman, revered as "First Citizen" of New Bedford, was not directly involved in whaling, but instrumental in formulating the Alabama Claims (see 4.3), and creation of the famed New Bedford Whaling Museum.

#### 8. The "Disaster of 1871"

In September 1871, in a disaster even more damaging than the depredations of the Shenandoah, thirty-two whaleships toiling off the coast of Alaska, surprised by an early winter, were trapped in ice and abandoned (see map on following page).



Abandoning the George, Gayhead and Concordia off Point Belcher, September 14, 1871. From Harper's Weekly

#### 8.1 The Massachusetts

Matched pair of bills by master of New Bedford Bark Massachusetts for resupply at Honolulu:

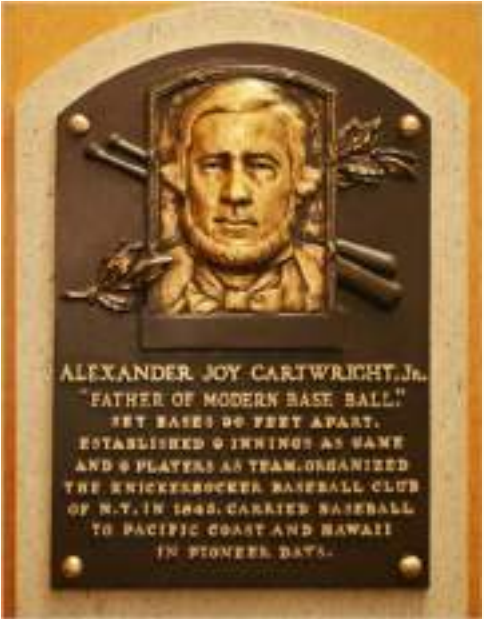
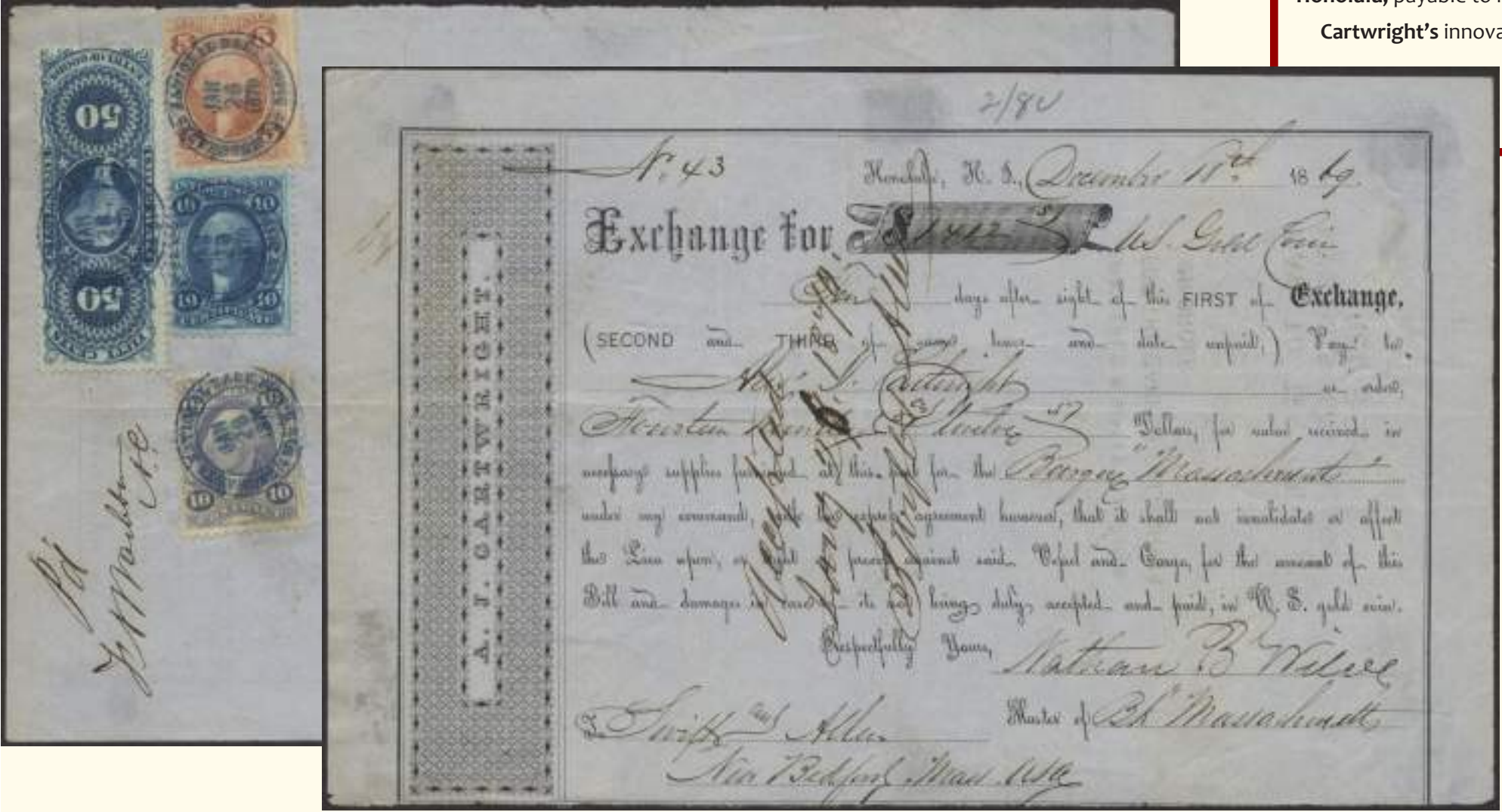
- Left, November 1869, amount \$3,180 in gold, tax \$1.60 at Inland Exchange 1864 rate of 5¢ per \$100, an exotic use of the beautiful 60¢ Inland Exchange. Ex-Lipson
- Below, December 1869, amount \$1,412.57, tax 75¢ including 10¢ Contract ultramarine blue, nicely juxtaposed with 50¢ and 10¢ in normal blue. The ultramarines were a short-lived experiment to combat washing and reuse of blue stamps.

The Massachusetts would never return from this multi-year voyage; it would be lost in the "Disaster of 1871."

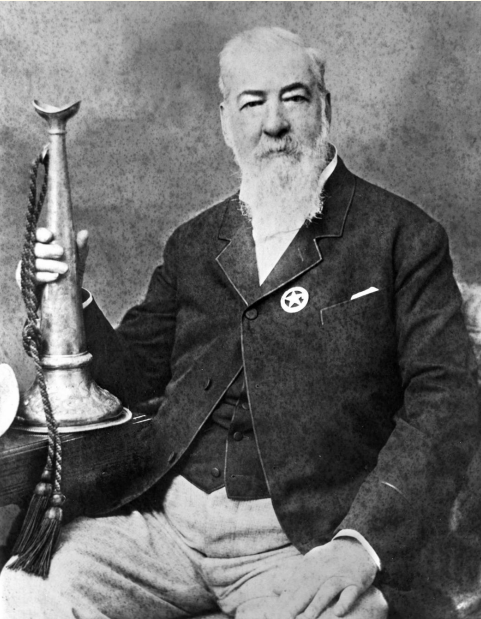
##### "The Man Who Invented Baseball"

Already premier Whaling and Polar items, these two enjoy even more exalted status as Baseball thematics; they are bills of Alexander J. Cartwright, the "Father of Modern Baseball," who had emigrated from New York to become a ship chandler in Honolulu, payable to him and signed by him multiple times.

Cartwright's innovative rules for "New York baseball" included: nine men to a side; three outs to an inning; basepaths of 90 feet; and elimination of "soaking" (putting a runner out by hitting him with a thrown ball). On the basis of these fundamental contributions, Cartwright, not Abner Doubleday, is considered by cognoscenti to be "The Man Who Invented Baseball."

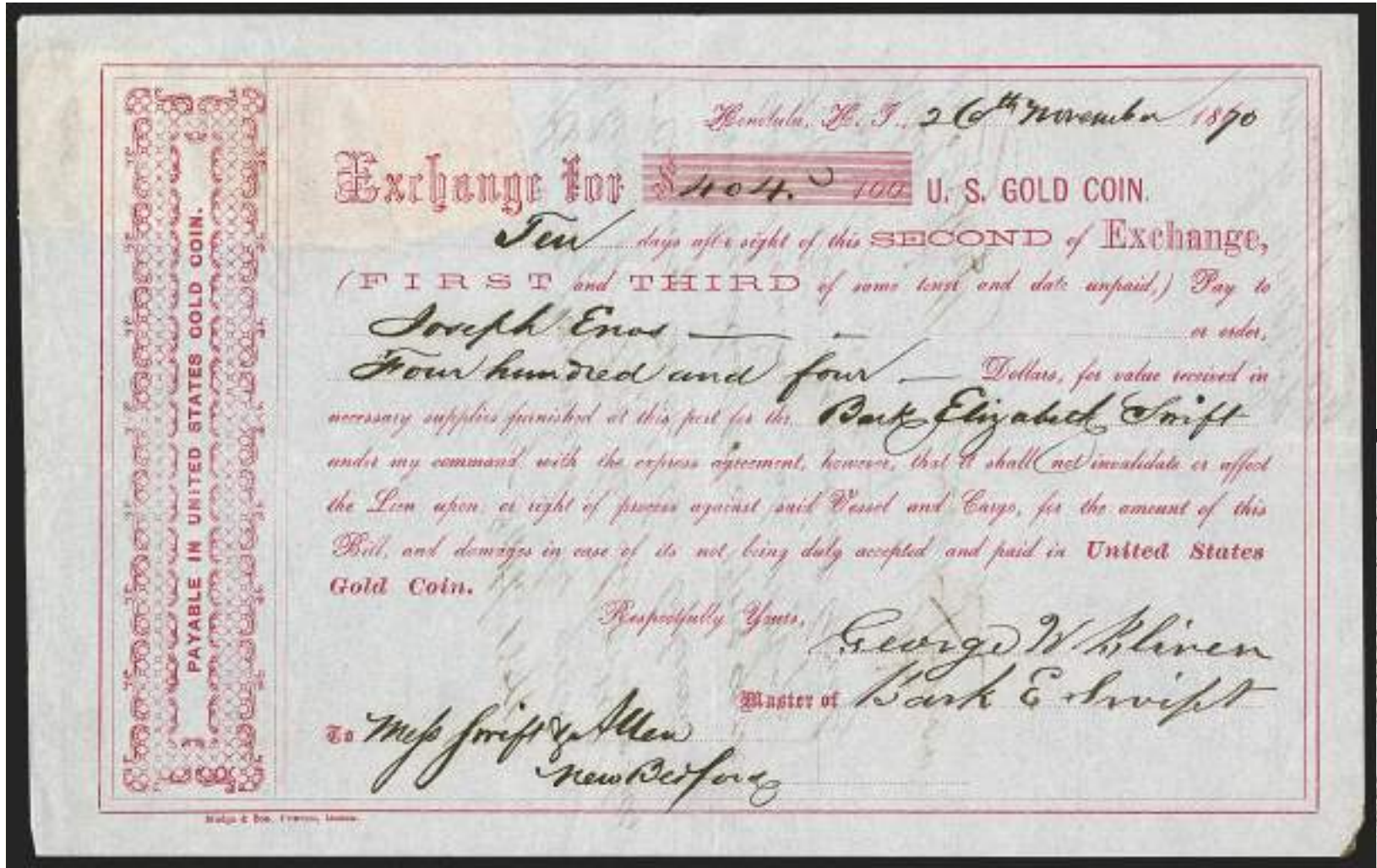


Cartwright's plaque in the  
Baseball Hall of Fame



Cartwright in later life as chief of the  
Honolulu Fire Department





Apart from its primary attractions—**origin from a doomed ship** and **four color stamping**—this bill has more remarkable aspects:

- **Nominally illegal** use of 3¢ Proprietary stamp
- **Paid Second bill**; in nearly all cases the First was paid
- **Paid in New Bedford**, not locally for supplies and services as usual, evidently a “**remittance bill**” to one Joseph Enos, who acknowledges payment on January 30, 1871, with his “X.”



#### Evacuation and Rescue

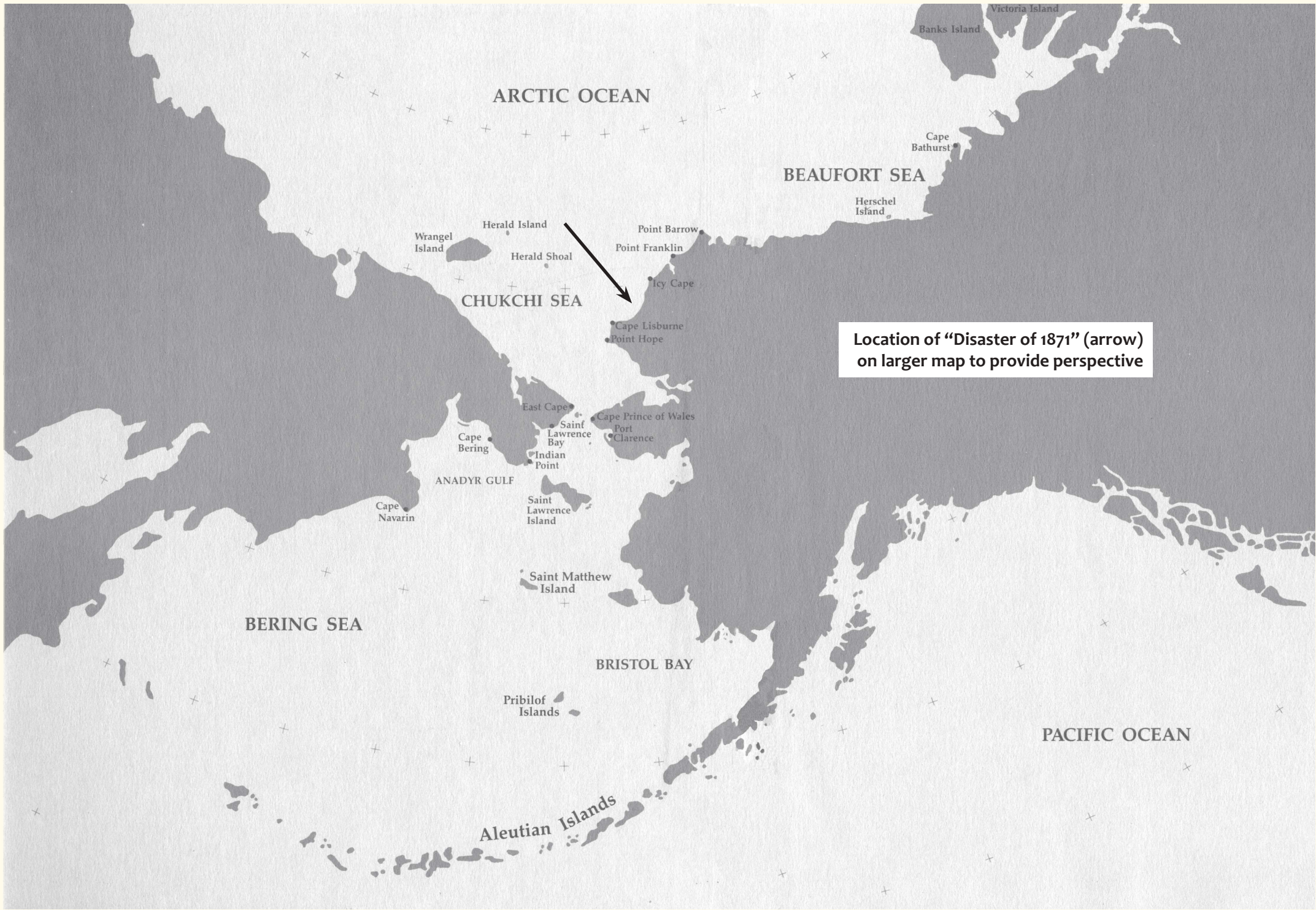
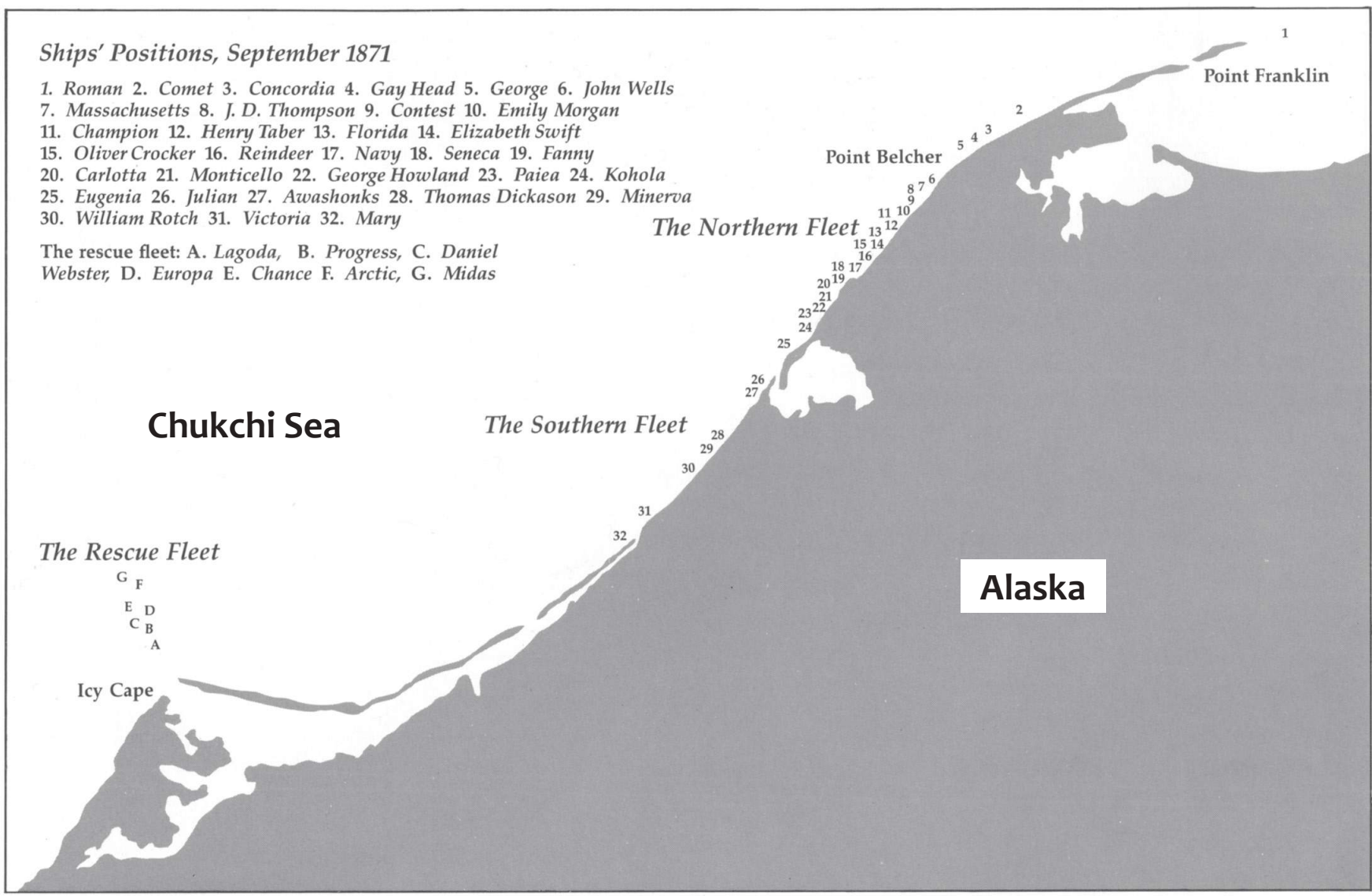
Miraculously of the **1,220 souls** aboard the thirty-two abandoned ships, including women and children, **all but one traversed the narrow sliver of open water in the ships’ whaleboats**, portaging when even this sliver was closed, to **reach seven ships** waiting some **seventy miles from the northernmost wreck**.

##### The Stay-Behind

The lone exception, unable to leave the abandoned fortune in oil, bone, vessels and furnishings, chose to **stay behind on the wrecked Massachusetts**. In the spring he was found “about used up,” his life spared by intercession of the native women, vowing that **“A hundred and fifty thousand dollars would not tempt me to try another winter in the Arctic.”**

##### Included in this exhibit:

- **7. Massachusetts** (6.1.2, 8.1)
- **14. Elizabeth Swift** (8.2.1–2)
- **19. Fanny** (6.1.1)
- **A. Lagoda** (4.4, 5-3)





ANDREW JOHNSON,

PRESIDENT DES ÉTATS-UNIS D'AMÉRIQUE,

A TOUS CEUX QUI LES PRÉSENTES VERRONT:

QU'IL SOIT NOTOIRE que faculté et permission ont été accordées à

George W. Bliven, maître ou commandant  
du navire appelé *Elizabeth Swift*  
de la ville de *New Bedford*  
de la capacité de *326 ton* tonneaux  
ou environ, se trouvant présentement dans le port et havre de  
pour *Pacific Ocean* et destiné  
chargé de

qu'après que son navire aura été visité, et ayant son départ, il prêtera serment entre les mains des officiers, autorisés à cet effet, que le dit navire appartient à un ou à plusieurs citoyens des États-Unis d'Amérique dont l'acte sera mis à la fin des présentes; de même qu'il observera et fera observer par son équipage les ordonnances et les règlements maritimes, et remettra une liste signée et confirmée par témoins, contenant les noms et surnoms, les lieux de naissance et la demeure des personnes composant l'équipage de son navire, et de tous ceux qui s'y embarqueront, qu'il ne recevra pas à bord sans la connaissance et la permission des officiers autorisés à ce; et dans chaque port ou havre où il entrera avec son navire, il montrera la présente permission aux officiers à ce autorisés, et leur fera un rapport fidèle de ce qui s'est passé durant son voyage, et il portera les couleurs, les armes et les enseignes des États-Unis, durant son dit voyage.

En témoignage de quoi, nous avons signé les présentes et y avons fait apposer le sceau des États-Unis, et les avons fait contre-signer

James Seward, Secrétaire d'État  
le jour de  
du mois de  
de l'année de Grâce le 1868

Countersigned by  
James Seward

SÉRÉNISIMES, Puissants, Hauts, Illustres, Nobles, Honorables, Vénérables, Sages, et Prudents Seigneurs, Empereurs, Rois, Républiques, Princes, Ducs, Comtes, Barons, Seigneurs, Bourgmestres, Echevins, Conseillers, comme aussi Juges, Officiers, Maires, Municipaux, Justices, et Régents de toutes les bonnes villes et endroits, soit ecclésiastiques ou séculiers, qui verront ou entendront lire ces lettres patentes. Nous

James Seward, Secrétaire d'État  
savoir faisons, que le capitaine du

(ayant comparu devant nous) a déclaré sous serment, que le navire

nommé le *Elizabeth Swift* du port

d'environ *326 ton* tonneaux, qu'il

commande actuellement, est un bâtiment des États-Unis d'Amérique,

et qu'aucun citoyen ou sujet des puissances présentement en guerre

n'y a aucune part ou intérêt, soit directement ou indirectement, et

ainsi que Dieu lui soit en aide; et, comme nous désirerions voir prospérer le dit capitaine dans ses affaires légitimes, nous vous prions et

requérons tous, et chacun de vous séparément, dans les lieux où le

dit capitaine pourra arriver avec son bâtiment et sa cargaison, de

vouloir bien le recevoir avec bonté et de le traiter de la manière qu'il

convient, lui permettant, en payant les droits et d'usage, de

passer, repasser, naviguer et fréquenter les ports, passages et terri-

toires, à l'effet de vaquer à ses affaires, en tout endroit et de la

manière qu'il jugera convenable: De quoi nous serons volontiers

redevables.

En témoignage de quoi, nous apposons aux présentes le sceau de

Office in the city of New Bedford this

day of July 1868



ANDREW JOHNSON,

PRESIDENTE DE LOS ESTADOS UNIDOS DE AMÉRICA.

A TODOS LOS QUE LA PRESENTE VIEREN:

SEA NOTORIO que hemos concedido facultad y permiso á

George W. Bliven, capitán ó co-  
mandante del navio llamado *Elizabeth Swift*, de la  
ciudad de *New Bedford*, y de la  
capacidad de *326 ton* toneladas sobre  
poco mas ó menos, hallándose actualmente en el puerto de *New Bedford*  
y destinado para *Pacific Ocean* cargado de

que despues que su navio haya sido visitado, y antes de su salida, prestará juramento entre las manos de los oficiales autorizados para el efecto, de que el dicho navio pertenece á uno ó mas ciudadanos de los Estados Unidos de América, cuyo acto se pondrá al fin de la presente; que igualmente guardará y hará guardar por su tripulación las ordenanzas y reglamentos maritimos, entregará una lista firmada y confirmada por testigos, que contenga los nombres y apellidos, lugares de nacimiento y residencia de las personas que compongan la tripulación de su navio, y de todos los que se embarcaren en él, los cuales no serán recibidos abordo sin el conocimiento y permiso de los oficiales autorizados para ello; y en cada puerto adonde entrare con su navio, mostrará el presente permiso á los oficiales autorizados, y les hará una relacion fiel de lo ocurrido durante su viaje, llevando la bandera, armas é insignias de los Estados Unidos durante su navegacion.

En testimonio de lo cual, hemos firmado las presentes, poniendo el sello de los Estados Unidos, y las hemos hecho refrendar por

James Seward, Secrétaire d'État  
de  
del año del Señor 1868

Countersigned by  
James Seward

SÉRÉNISIMOS, Poderosos, Altos, Ilustres, Nobles, Honorables, Venerables, Sabios, y Prudentes Señores, Emperadores, Reyes, Repúblicas, Príncipes, Duques, Condes, Barones, Señores, Burgomestres, Regidores, Consejeros, como igualmente Jueces, Oficiales, Correjidores, Municipales y Regentes de todas las buenas ciudades y lugares, así eclesiásticos como seculares, que oieren ó oyeren leer las presentes. Nos

James Seward, Secrétaire d'État  
hacemos saber que el capitán de

habiendo comparecido delante de nosotros, ha declarado,

bajo de juramento, que el navio llamado *Elizabeth Swift*

del puerto de *New Bedford*

de cerca de *326 ton* toneladas,

que manda actualmente, es un buque de los Estados Unidos

de América, y que ningún ciudadano ó vasallo de las potencias actual-

mente en guerra tiene directamente ó indirectamente en él la menor

parte, y que así Dios lo ayude; y como deseamos ver prosperar al ci-

tadado capitán en sus negocios legitimos, os pedimos y requerimos á

todos en general, y á cada uno en particular, en el parage adonde el

dicho capitán pueda arribar con su buque y carga, tengais á bien

recibirle con benevolencia, y tratarle del modo que conviene, per-

mitiéndole pagando los derechos y gastos de costumbre, pasar, y

repasar, navegar y frecuentar los puertos, parages y territorios, á fin

de evacuar sus negocios donde y como le parezca conveniente. De lo

que os quedaremos reconocidos.

En testimonio de lo cual firmamos aquí el sello de

Office in the city of New Bedford this

day of July 1868

James Seward

Mayor Publico

ANDREW JOHNSON,

PRESIDENT OF THE UNITED STATES OF AMERICA.

TO ALL WHO SHALL SEE THESE PRESENTS, GREETING:

BE IT KNOWN, That leave and permission are hereby given to

George W. Bliven, master or commander of the

ship of the burden of *326 tons*

tons, or thereabouts, lying at present in the port of *New Bedford*

bound for *Pacific Ocean* and laden with

to depart and proceed with the said *Pacific Ocean* having been visited, on his said voyage, such *Pacific Ocean* having made oath before the proper officer that the said *Pacific Ocean* belongs to one or more of the citizens of the United States of America, and to him or them only.

IN WITNESS WHEREOF, I have subscribed my name to these presents, and affixed the seal of the United States of America, at

Office in the city of New Bedford this

day of July 1868

in the year of our Lord 1868

Andrew Johnson

BY THE PRESIDENT:

Most Serene, Serene, most Puissant, Puissant, High, Illustrions, Noble, Honorable, Venerable, Wise, and Prudent Lords, Emperors, Kings, Republics, Princes, Dukes, Earls, Barons, Lords, Burgomasters, Regents, of all the good cities and places, whether Ecclesiastical and Secular, who shall see these presents or hear them read: We

James Seward, Secrétaire d'État  
make known, that the master

of the *Elizabeth Swift* having made oath before us

has declared, upon oath, that the vessel called *Elizabeth Swift*

of the burden of about *326 tons*

tons, which he at present navigates, is of the United

States of America, and that no subjects of the present belligerent

Powers have any part or portion therein, directly or indirectly, so

may God Almighty help him. And, as we wish to see the said master

shall arrive with his vessel and cargo, that they may please to receive

the said master with goodness, and to treat him in a becoming man-

ner, permitting him, on paying the usual tolls and expenses in passing

and repassing, to pass, navigate, and frequent the ports, passes, and

territories, to the end to transact his business, where and in what

manner he shall judge proper. Whereof we shall be willingly

indebted.

In witness whereof, we have hereunto set the seal of our

Office in the city of New Bedford this

day of July 1868

Andrew Johnson

ANDREW JOHNSON,

PRESIDENT VAN DE VEREENIGDE STAATEN VAN AMERICA.

AAN ALLE DE GEENEN, DIE DEEZE TEGEN WOORDIGE ZULLEN, SALUT-

DOEN TE WEETEN, dat by deesen vryheden en permissie

gegeeven

word aan *George W. Bliven* Schipper en

Bevelhebber van het Schip (of vaartuij) genaamt *Elizabeth Swift*

van de *New Bedford* van

groot *326 ton* Tonnens of daar optrent, leggende tegenswoordig

in de Haven van *New Bedford* godestineert naar

*Pacific Ocean* en beladen met

om te vertreekken, en met zyn voornoemd Schip of vaartuij des zelfs gemelde reize voort te zetten, zodanig Schip of vaartuij gevisiteert zynde, en de voornoemde Schipper of Bevelhebber onder Eede, voor den daar toe gestelden officier verklaart hebbende dat het gemelde Schip of vaartuij aan een of meerder onderdanen, volk, of Ingezetenen van de Vereenigde Staaten Van America, to behoort, en aan hem (of hunalleen.)

IN GETUIGENS WAAR VAN ik deze tegenswoordige met myne naam hebbe onderteekend, en het Zegel van deze Vereenigde Staaten Van America daer aan geheft, en het Zegel daer tegenovergevoerd

door *James Seward* Secrétaire d'État

de

dag van

onzes Heeren Christi,

in het jaer van

1868

Andrew Johnson

Secretary of State,

James Seward

Countersigned by

James Seward

SÉRÉNISIMOS, Puissants, Hauts, Illustres, Nobles, Honorables, Vénérables, Sages, et Prudents Seigneurs, Empereurs, Rois, Républiques, Princes, Ducs, Comtes, Barons, Seigneurs, Bourgmestres, Echevins, Conseillers, comme aussi Juges, Officiers, Maires, Municipaux, Justices, et Régents de toutes les bonnes villes et endroits, soit ecclésiastiques ou séculiers, qui verront ou entendront lire ces lettres patentes. Nous

James Seward, Secrétaire d'État

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(ayant comparu devant nous) a déclaré sous serment, que le navire

nommé le *Elizabeth Swift* du port

d'environ *326 ton* tonneaux, qu'il

commande actuellement, est un bâtiment des États-Unis d'Amérique,

et qu'aucun citoyen ou sujet des puissances présentement en guerre

n'y a aucune part ou intérêt, soit directement ou indirectement, et

ainsi que Dieu lui soit en aide; et, comme nous désirerions voir prospérer le dit capitaine dans ses affaires légitimes, nous vous prions et

requérons tous, et chacun de vous séparément, dans les lieux où le

dit capitaine pourra arriver avec son bâtiment et sa cargaison, de

vouloir bien le recevoir avec bonté et de le traiter de la manière qu'il

convient, lui permettant, en payant les droits et d'usage, de

passer, repasser, naviguer et fréquenter les ports, passages et terri-

toires, à l'effet de vaquer à ses affaires, en tout endroit et de la

manière qu'il jugera convenable: De quoi nous serons volontiers

redevables.

En témoignage de quoi, nous apposons aux présentes le sceau de

Office in the city of New Bedford this

day of July 1868

Andrew Johnson

Secretary of State,

James Seward

Countersigned by

James Seward

SÉRÉNISIMOS, Poderosos, Altos, Ilustres, Nobles, Honorables, Venerables, Sabios, y Prudentes Señores, Emperadores, Reyes, Repúblicas, Príncipes, Duques, Condes, Barones, Señores, Burgomestres, Regidores, Consejeros, como igualmente Jueces, Oficiales, Correjidores, Municipales y Regentes de todas las buenas ciudades y lugares, así eclesiásticos como seculares, que oieren ó oyeren leer las presentes. Nos

James Seward, Secrétaire d'État

hacemos saber que el capitán de

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mente en guerra tiene directamente ó indirectamente en él la menor

parte, y que así Dios lo ayude; y como deseamos ver prosperar al ci-

tadado capitán en sus negocios legitimos, os pedimos y requerimos á

todos en general, y á cada uno en particular, en el parage adonde el

dicho capitán pueda arribar con su buque y carga, tengais á bien

recibirle con benevolencia, y tratarle del modo que conviene, per-

mitiéndole pagando los derechos y gastos de costumbre, pasar, y

repasar, navegar y frecuentar los puertos, parages y territorios, á fin

de evacuar sus negocios donde y como le parezca conveniente. De lo

que os quedaremos reconocidos.

En testimonio de lo cual firmamos aquí el sello de

Office in the city of New Bedford this

day of July 1868

Andrew Johnson

Secretary of State,

James Seward

Countersigned by

James Seward

8.2.2 The Elizabeth Swift (2): "Sea Letter" Signed By President Johnson and Secretary of State Seward

Two revenue-stamped Sea Letters recorded

Carried From "Disaster of 1871!"

July 1868 "Sea Letter" in French, Spanish, English and Dutch, to "Most Serene . . . Lords, Emperors, Kings, Republics, Princes, etc., etc.," stating bona fides of the Elizabeth Swift, "bound for Pacific Ocean," issued at

Handstamped signature of President Andrew Johnson, signed by Secretary of State William Seward,

with Great Seal of the United States, certification by notary public, stamp tax at 5¢ general Certificate rate

Sea Letters date from the 1790s, the earliest signed by George Washington. By the 1850s they were required only for vessels rounding Cape Horn or the Cape of Good Hope, most often issued for whaleships. The letter was an important part of a ship's papers, kept on board. They were issued in the hundreds, to the extent that signing them was considered a nuisance by some presidents. Nevertheless, few have survived, and are highly prized by collectors.

The backstory of this one takes it to another level. As described above, the Elizabeth Swift was abandoned in the "Disaster of 1871," its company evacuated on a perilous journey of some sixty miles to the rescue ships.

This Sea Letter must have been carried on that journey by Master George Bliven.

The rarity of the document, coupled with the fate of the ship, make this another of the premier Whaling and Polar collectibles extant, and one of the top items of Civil War era fiscal history.



Evacuees aboard whaleboats of abandoned ships arriving at Blossom Shoals, rendezvous point for transfer to the rescue ships (background). (Benjamin Russell lithograph)



## 9. San Francisco as a Refitting/Resupply Port

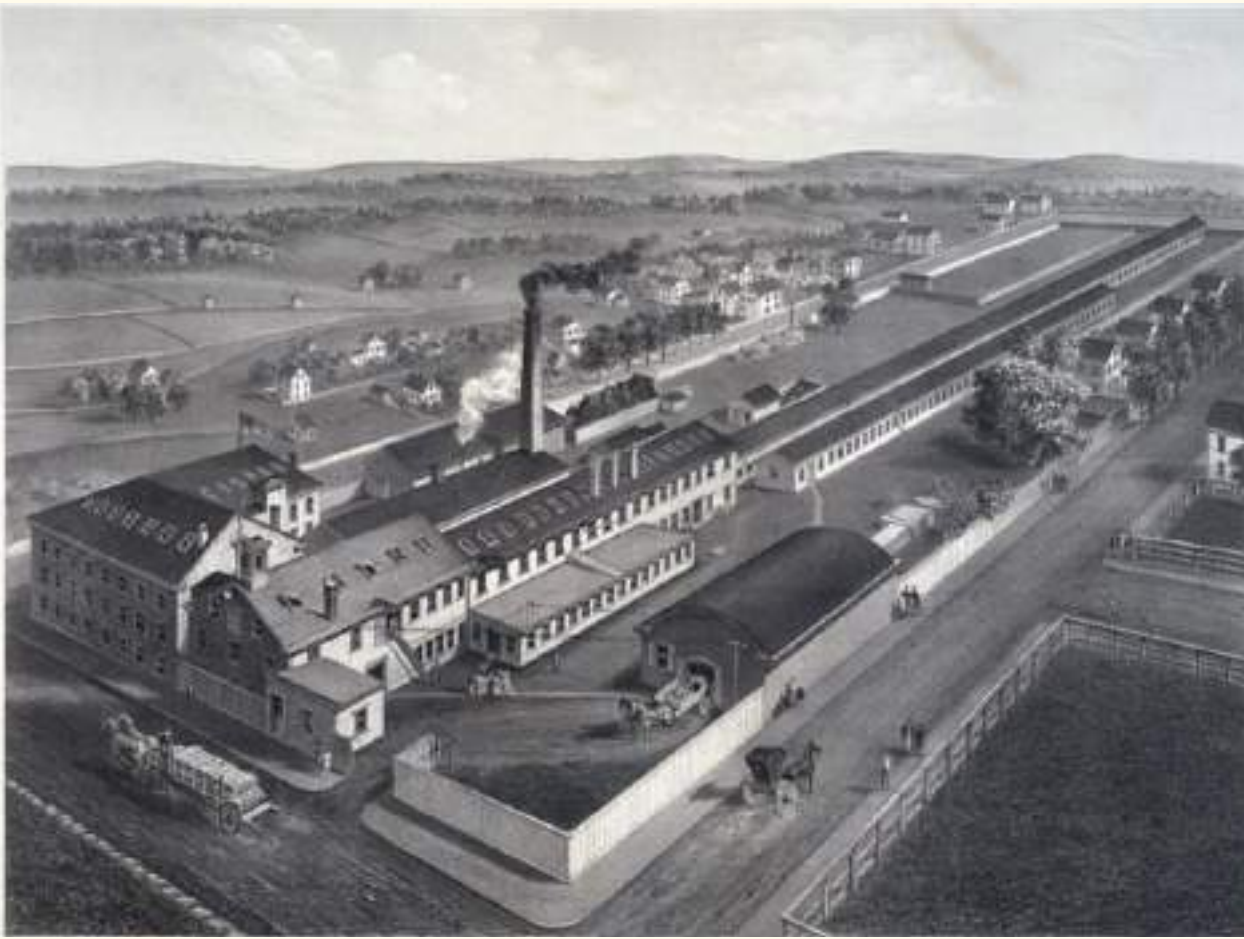
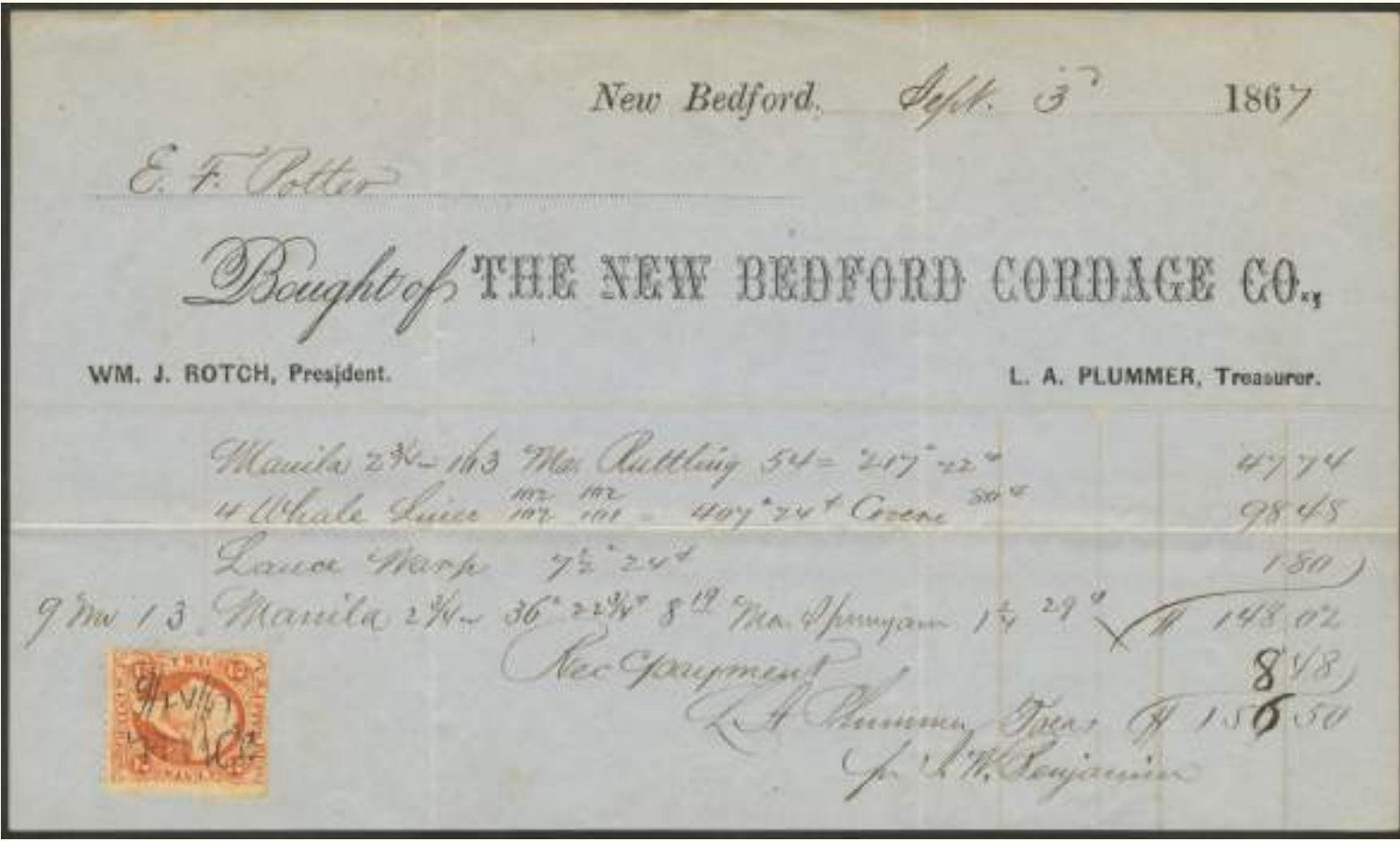
By the 1860s San Francisco was competing with Honolulu as a primary refitting port for the Yankee whaling fleet.

### 9.1 New Bedford Cordage Co. (1); L. A. Plummer, Treasurer

1867 receipt, **New Bedford Cordage Co.**, for products including **Whale Line** and **Lance Warp** (cord attached to the whale-killing lance).

Thanks to the **fanatically conservative nature** of the Yankee whaling establishment, this company enjoyed a **near-monopoly** on the manufacture of **all types of cordage** used on their ships. From a 1916 retrospective,

No whaleman would ever use a tub line that was made anywhere outside the New Bedford Cordage Works. Possibly other cordage manufacturers could make a piece of rope just as strong and fine. But a bowhead whale worth \$10,000 might be held by that rope. The whalemen knew the New Bedford company's rope could be trusted, they didn't know anything about the other manufacturer and they never took the chance.



Even as Yankee whaling was foundering, the New Bedford Cordage Co. prospered, as it had a broad customer base. In the process, **president Wm. J. Rotch** (see Section 3 above) and **treasurer Leander A. Plummer** became **millionaires**. The lithograph above shows its plant circa 1875.

Identification of Plummer as treasurer of the New Bedford Cordage Co. elucidates the connection to whaling of the San Francisco bills of exchange shown below.



#### Sheet Layout Clue

Seven examples of \$1.40 rate recorded

Above, amount \$713.76, **California \$1.40 Second Exchange stamp** pays 1861–6 \$1.40 rate (above \$700 to \$1,000), portion of adjoining control handstamp at bottom

Almost nothing is known about the sheet layout of the 1861–6 Exchange stamps; this one suggests they were printed in vertical strips.



#### Early Use of U.S. Stamp in the West

Six examples of \$10 rate recorded

Above, **April 2, 1863**, amount \$4,462.95, **taxed by U.S. at Bank Check 2¢ rate**, but by **California at \$10** for amounts above \$4,000 to \$5,000, paid by **10 Second Exchange**, die cut

Earliest recorded use in private hands of U.S. stamp on California bill [U.S. stamps arrived San Francisco February 28, 1863 (exhibitor's research).]

### 9.2 New Bedford Cordage Co. (2); Payment for Whaling Line in San Francisco

These three bills, already illustrating rare aspects of the California Exchange tax, are the more remarkable for their **whaling connection**: all are payable to “**L. A. Plummer, Treasurer,**” one even adding “**New Bedford.**”

Yankee whalemen refitting in San Francisco insisting on New Bedford Cordage Co. whale line, were paying for it with these bills!

Of some 600 recorded California revenue-stamped bills of exchange, only these three involve Plummer (exhibitor's research).



#### Telegraphic Transmission of Funds

Three stamped examples of telegraphic transmission recorded

Two examples of Exchange 1866–72 \$3 rate recorded

May 1866, Duplicate receipt for **telegraphic transmission** of \$2,210, **Second Exchange \$6** (die cut) pays new 1866–72 tax of **\$3 per bill** on amounts above \$2,000 to \$3,000

[The original 1857 Exchange tax targeted movement of funds out of the state; after the transcontinental telegraph was completed in 1862, the Exchange tax was modified to include receipts for telegraphic transmission of funds from the state.]

[The Exchange taxes of 1861–6 applied to sets of bills. In 1866, to accommodate the new Rectangular stamps, the rates were halved, but now applied to each bill of a set. Until the Rectangulares became available, the old Exchange stamps were used just as before.]

## 10. Selling the Oil

### 10.1 Sperm “Machining Oil”

1866 bill of dealer in “Sperm Oil and Sperm Candles, also Whale, Lard and Coal Oils,” vignette of death throes of harpooned whale,

sale of “machining oil” at \$1.73/gal. to Albany & Susquehanna Rail Road Co., appended receipt for payment with Receipt 2¢ stamp tax paid

There are two indications that the sale was of sperm oil: it was the most suitable “machining oil,” as it best withstood the high temperatures involved; and only sperm oil could command a \$1.73 per gallon price.







10. Selling the Oil (cont.)

10.2 “Polar Whale Oil”

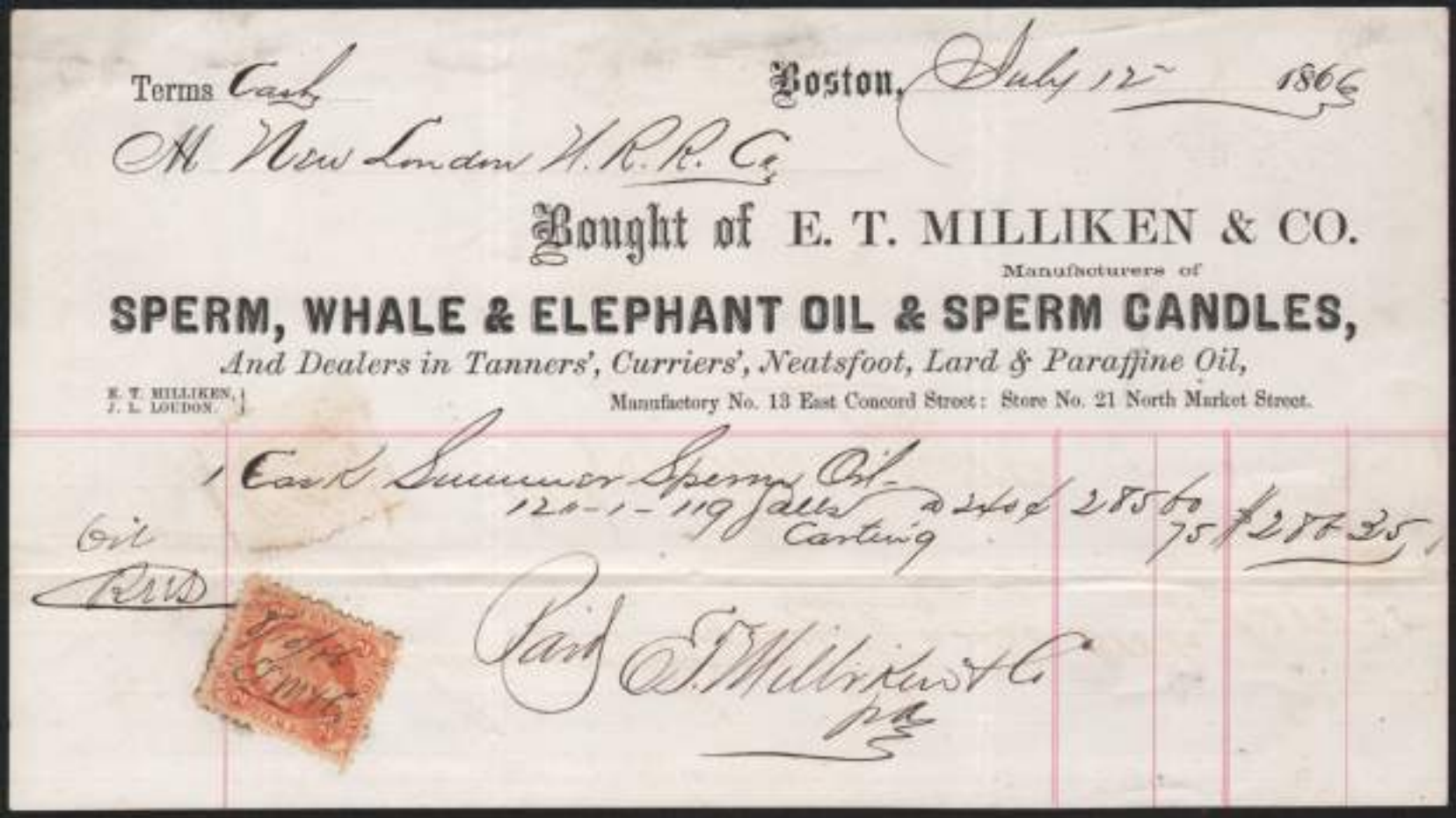
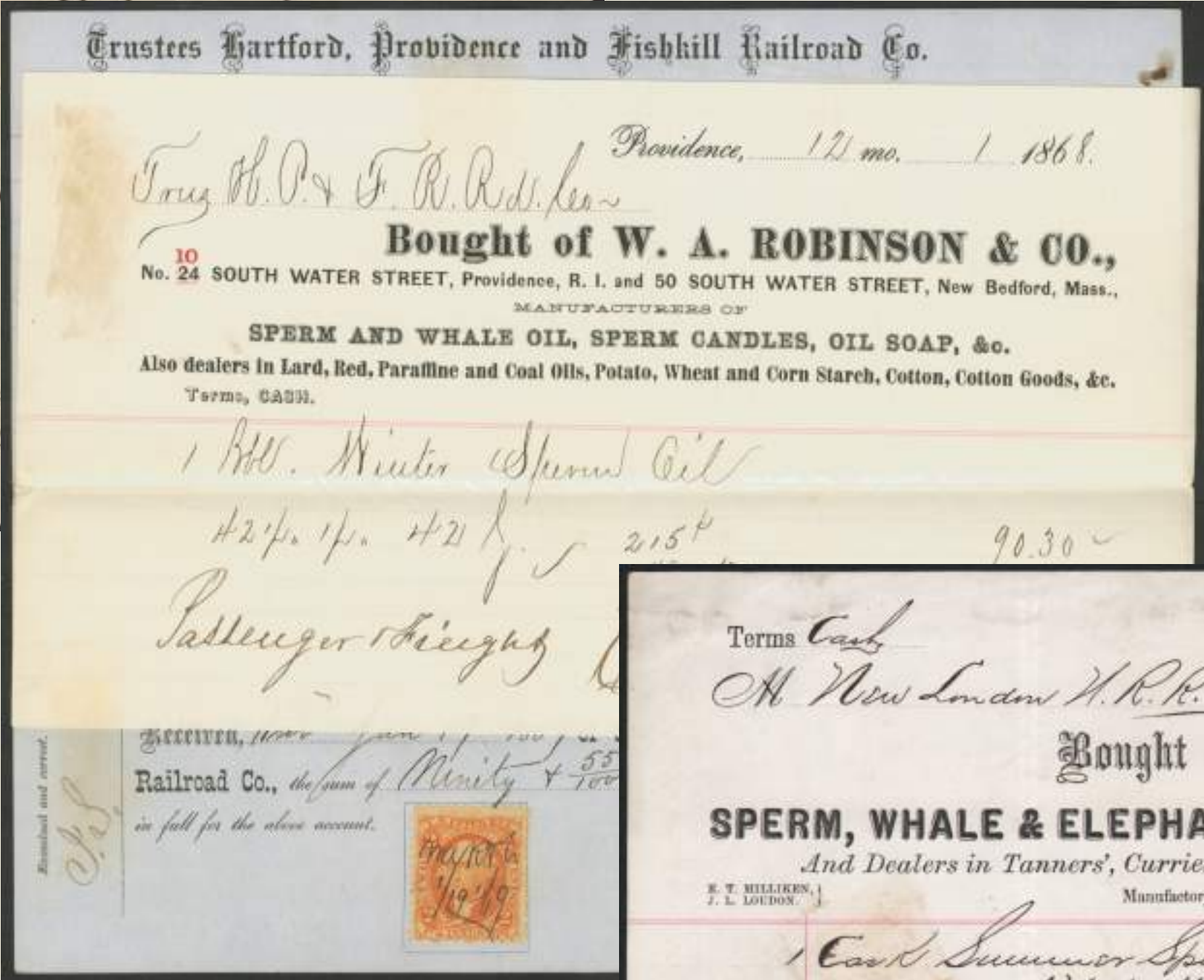
July 1865, “Polar Whale Oil Refined” at \$1.25/gal., presumably normal blubber oil

10.3 “Winter Sperm Oil”

Quaker-dated December 1868, from dealer in “Sperm and Whale Oil, Sperm Candles, Oil Soap, &c.” to Hartford, Providence and Fishkill Railroad, “Winter Sperm Oil” at \$2.15/gal.

To produce this premium grade, oil was heated to allow sediments to precipitate, then frozen with ice, put into cloth bags and strained in a hydraulic press.

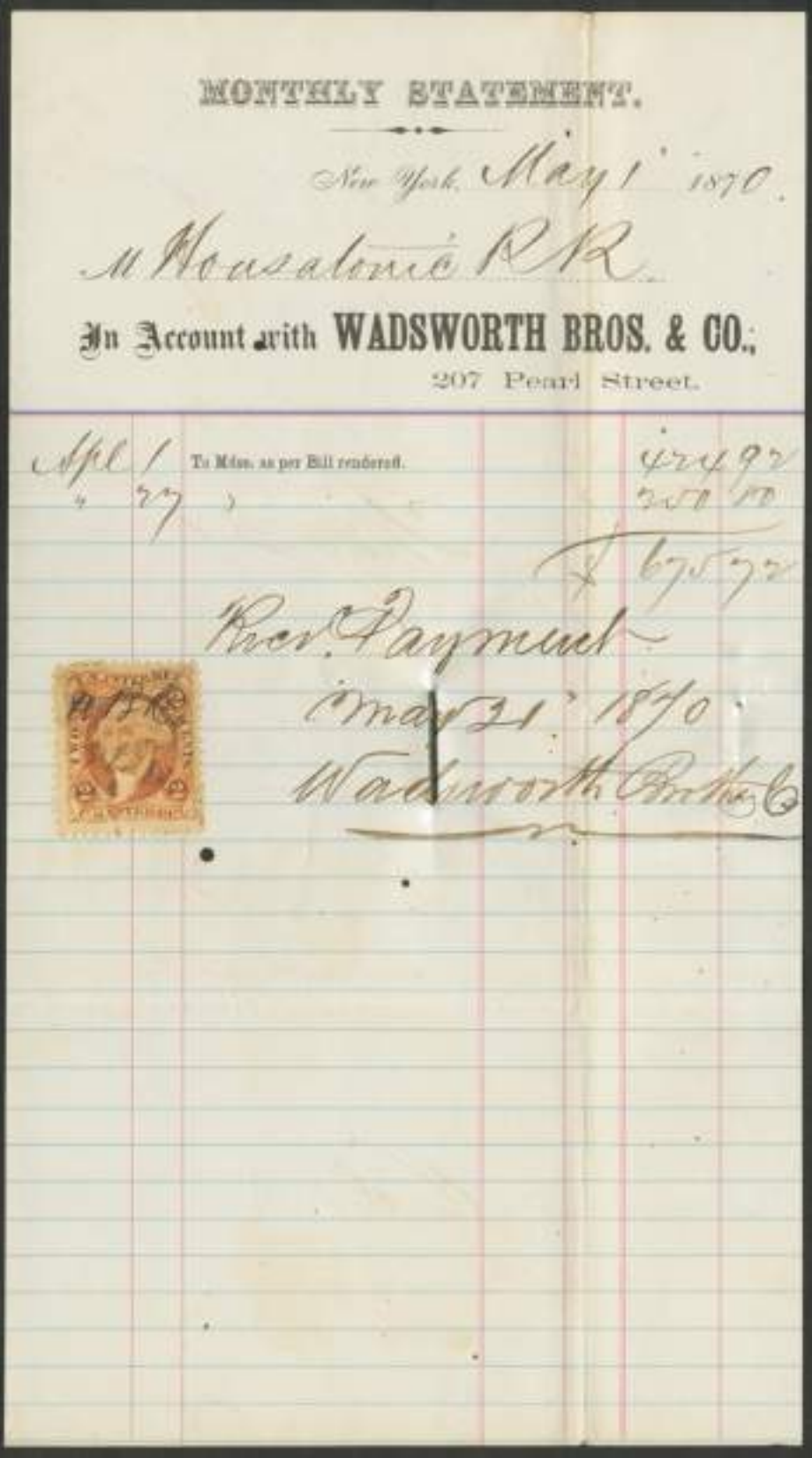
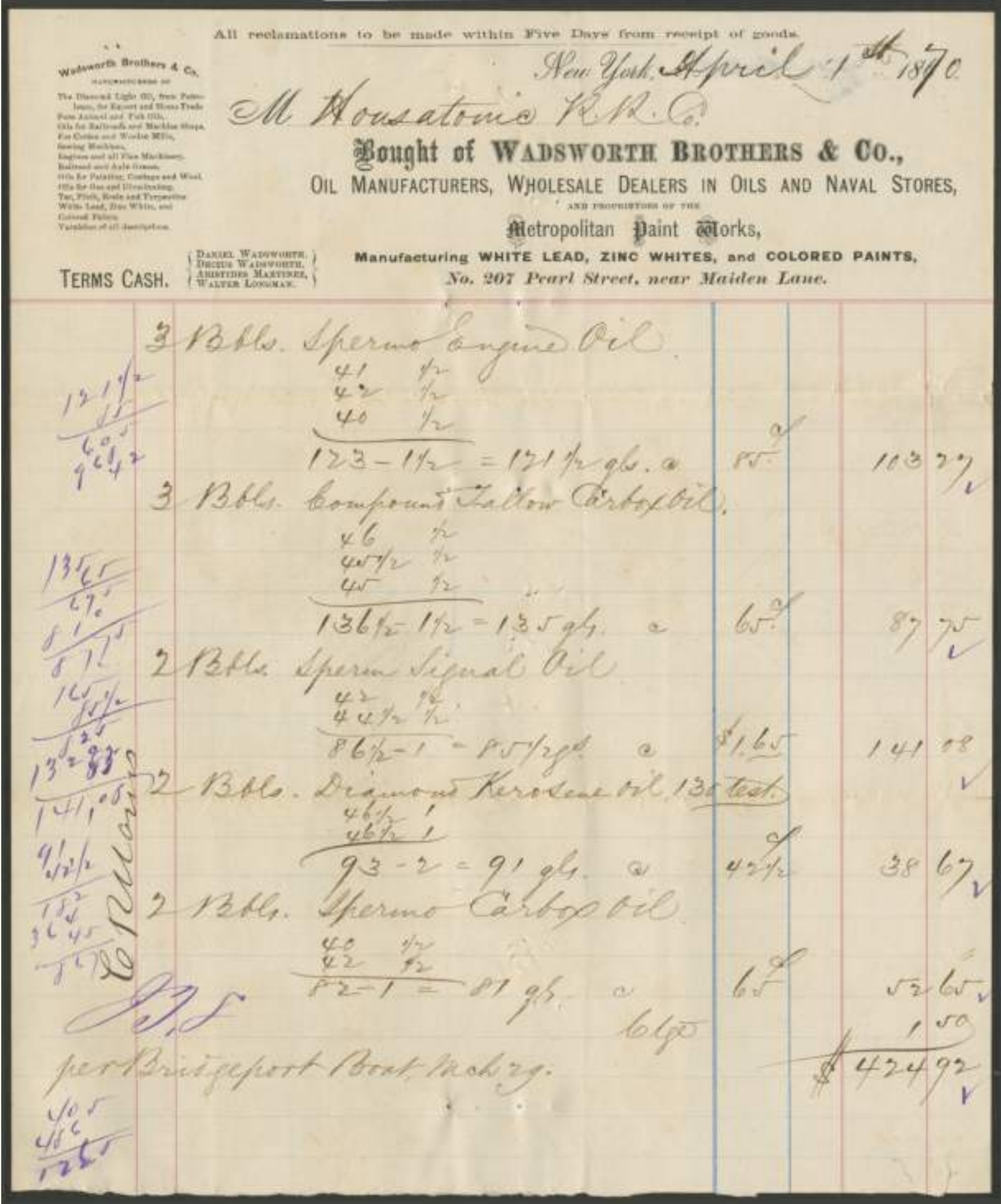
This was the highest grade sperm oil, remaining liquid even at freezing temperatures.



10.4 “Summer Sperm Oil”

July 1866, dealer in “Sperm, Whale & Elephant [Seal] Oil & Sperm Candles,” to New London Northern Railroad Co., “Summer Sperm Oil” at \$2.40/gal.

The residue from pressing “winter sperm oil” underwent two more pressings, yielding “spring sperm oil” and “summer sperm oil,” each successively slightly inferior. Even the “summer oil” brought a very high price at this time.



10.5 “Sperm Signal Oil” “Spermo” Mixtures

1870, to Housatonic Railroad Co. “Per Bridgeport Boat”:

“Sperm Signal Oil” at \$1.65/gal.  
“Spermo Engine Oil” at 65¢/gal.  
“Spermo Carbox Oil” at 65¢/gal.

Sperm oil was prized for signal lamps because it burned so brightly.

The “Spermo” oils must have been mixtures with cheaper oils that retained some of the superior qualities of sperm oil, but at a far lower price.

What Were Sperm Candles and Oil Soap?

“Sperm candles” were made from “spermaceti wax,” a residue after extracting sperm oil from spermaceti. Their light served as a standard—literally—by which other illuminants were measured: the official unit of illumination, the candlepower, was formerly defined as the light from a candle of pure spermaceti wax burning at a rate of 7.776 grams (120 grains) per hour.

“Oil Soap” was a final residue of refining, used on citrus trees to combat insects.





10. Selling the Oil (cont.)



10.6 Whaling Connection Illustrated (2)

Above, July 29, 1864, dealers in “Sperm, Whale . . . and other Oils, Sole Manufacturers of Mason’s Extra Sperm Oil for Machinery and Burning,” to Housatonic Railroad Co.,

“Manhattan Car Oil” at \$1.50/gal.

Judging from the price, this may not have been pure sperm oil, but a blend. The Receipt 2¢ stamp tax took effect three days later, August 1, 1864; but as payment was made September 14, it was due.

Above right, this penultimate section ends as the exhibit began, with whaling scenes even on documents not directly whaling-related: the Manhattan Oil Co. included a dramatic whaling vignette on its generic receipt form.

“Received On Demand” Scam

This one was taxed at 2¢ as a receipt despite functioning as a promissory note for \$2,500 at 7% interest, correct tax \$1.25!

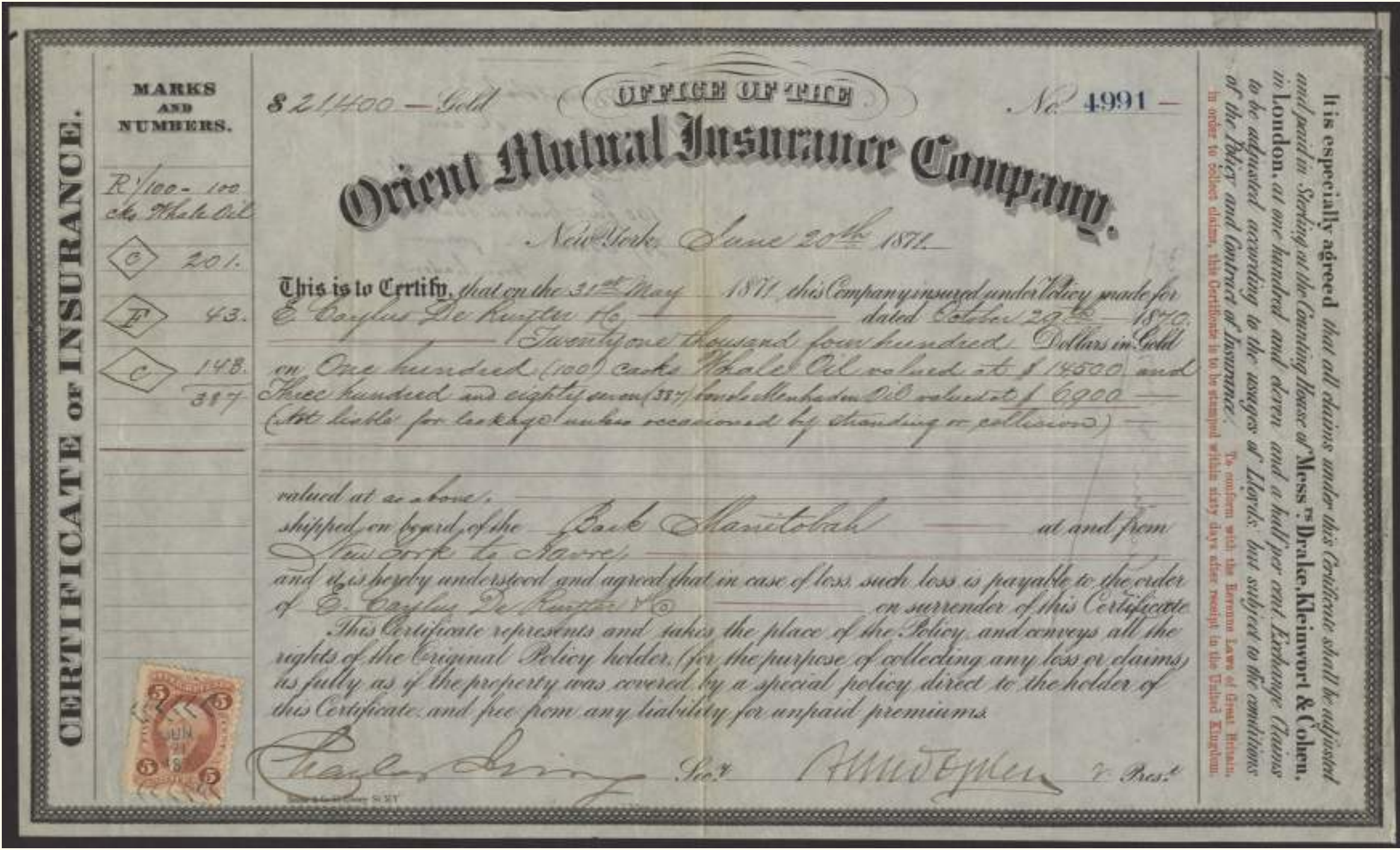
11. Insuring the Oil for Shipment Abroad  
Sole recorded example

Whale and Menhaden Oil Shipped to France

1871 certificate of insurance for shipment New York to Havre, for:  
100 casks Whale Oil, value \$14,500  
387 barrels Menhaden Oil, value \$6,900,  
Certificate 5¢ stamp tax.

The tiny, oily menhaden, averaging just a few ounces, is roughly 1/500,000 the size of a fifty-foot, fifty-ton whale. Yet its schools are so immense that the yield of a single purse seine could outweigh a whale.

As whaling declined, production of menhaden oil rapidly increased, so that by the mid-1870s it was 50% greater than that of whale oil. Assuming 42 gal./barrel, the oil insured here was valued at 42.5¢/gal.



Epilog (1): Overview, 1840–1876

Alexander Starbuck’s 1876 epic *History of the American Whale Fishery* includes as Section J, “Recorded summary of importation of oil and bone, and total value computed for each year” for 1804–1876, reproduced at right for 1840–1876. It provides an eminently informative summary.

Appended to the Table is the sobering note, “Scammon estimates that sperm whales will average 25 and right whales 60 barrels of oil, and of the former 10 and of the latter 20 per cent of those killed are lost. Upon that basis the above amounts of oil [for 1804–1876] would represent the slaughter of 225,521 sperm, and 193,522 right whales.”

Summaries

- Sperm oil catchings peaked in the 1830s and 1840s, then began a steady decline:
  - 1830s (4.0 million gal/yr.)
  - 1840s (4.1 million)
  - 1850s (2.7 million)
  - 1860s (1.7 million)
  - 1870s (1.3 million)
- “Shenandoah effect”: abrupt drop:
  - 1860–1864 (2.1 million)
  - 1865–1866 (1.1 million)
- “Disaster of 1871” effect: smaller drop:
  - 1867–1870 (1.5 million)
  - 1871–1876 (1.3 million)

Year.	Gallons sperm-oil.	Average price per gallon.	Gallons whale-oil.	Average price per gallon.	Pounds whalebone.	Average price per pound.	Total value.
1840 ..	4,938,017	1 00	6,408,391	30	2,000,000	19	7,230,534 30
1841 ..	4,956,304	94	6,459,516	32	2,000,000	20	7,125,970 88
1842 ..	3,236,155	73	4,876,232	34	1,500,000	23	4,379,812 03
1843 ..	5,200,027	63	6,511,900	34	2,127,270	36	6,293,680 21
1844 ..	4,219,711	90½	8,254,481	36 7-12	2,532,445	40	7,875,970 38
1845 ..	4,667,550	88	11,593,483	33	3,195,054	34	9,283,611 75
1846 ..	3,155,481	87½	6,589,737	33½	3,252,939	34	6,203,115 43
1847 ..	3,833,719	1 00½	2,864,225	36	3,341,680	31	8,419,288 49
1848 ..	3,491,274	1 00	8,840,663	33	2,003,000	25	6,819,442 78
1849 ..	3,119,736	1 08½	7,827,498	39 11-12	2,281,100	21½	7,069,953 74
1850 ..	2,916,098	1 20 7-10	6,319,152	49 1-10	2,860,200	32 2-5	7,564,124 72
1851 ..	3,137,116	1 27½	10,347,214	45 5-16	3,916,500	34½	10,031,744 05
1852 ..	2,484,468	1 20½	2,652,647	68½	1,259,900	50 5-6	5,565,409 89
1853 ..	3,246,925	1 24½	8,193,591	58 1-6	3,442,360	34½	10,766,521 20
1854 ..	2,313,924	1 48½	10,074,866	59½	3,445,200	39 1-5	10,802,594 20
1855 ..	2,238,443	1 77 2-10	5,796,472	71 3-10	2,707,500	45½	9,413,148 93
1856 ..	2,549,642	1 62	6,233,535	79½	2,592,700	58	9,589,846 36
1857 ..	2,470,860	1 28½	7,274,641	73½	2,058,850	90½	10,491,548 90
1858 ..	2,511,142	1 21	5,740,025	54	1,571,200	92½	7,672,227 31
1859 ..	2,879,352	1 36½	5,997,946	48½	1,923,850	88	8,525,108 91
1860 ..	2,306,934	1 41½	4,410,158	49½	1,317,650	80 1-5	6,520,135 12
1861 ..	2,171,358	1 31½	4,212,085	44½	1,038,450	66	5,415,090 59
1862 ..	1,752,692	1 42½	3,165,057	59½	763,500	88	5,051,781 64
1863 ..	2,049,232	1 61	1,983,681	95½	488,750	1 53	5,936,507 17
1864 ..	2,027,718	1 89½	2,263,685	1 28	760,450	1 80½	8,113,922 07
1865 ..	1,047,123	2 25½	2,401,497	1 45	619,350	1 71½	6,906,650 51
1866 ..	1,154,885	2 55	2,340,513	1 21	920,375	1 37	7,037,891 23
1867 ..	1,368,139	2 27	2,812,603	73½	1,001,397	1 17½	6,356,772 51
1868 ..	1,485,981	1 92	2,065,613	82	900,850	1 02½	5,470,157 43
1869 ..	1,509,984	1 81½	2,677,846	1 01½	603,603	1 23	6,205,244 32
1870 ..	1,738,265	1 36½	2,289,767	67½	708,365	85	4,529,126 02
1871 ..	1,308,321	1 31	2,367,288	64	600,655	77	3,691,469 18
1872 ..	1,423,832	1 45½	973,684	65½	193,793	1 28½	2,954,783 00
1873 ..	1,324,669	1 47½	1,260,441	62½	206,396	1 08½	2,962,106 96
1874 ..	1,014,395	1 59	1,190,133	60½	345,560	1 10	2,713,034 51
1875 ..	1,342,435	1 60½	1,089,711	65½	372,303	1 20 3-5	3,314,800 24
1876 ..	1,254,047	1 40½	1,039,815	56	150,628	1 96	2,639,463 31

Summaries (cont.)

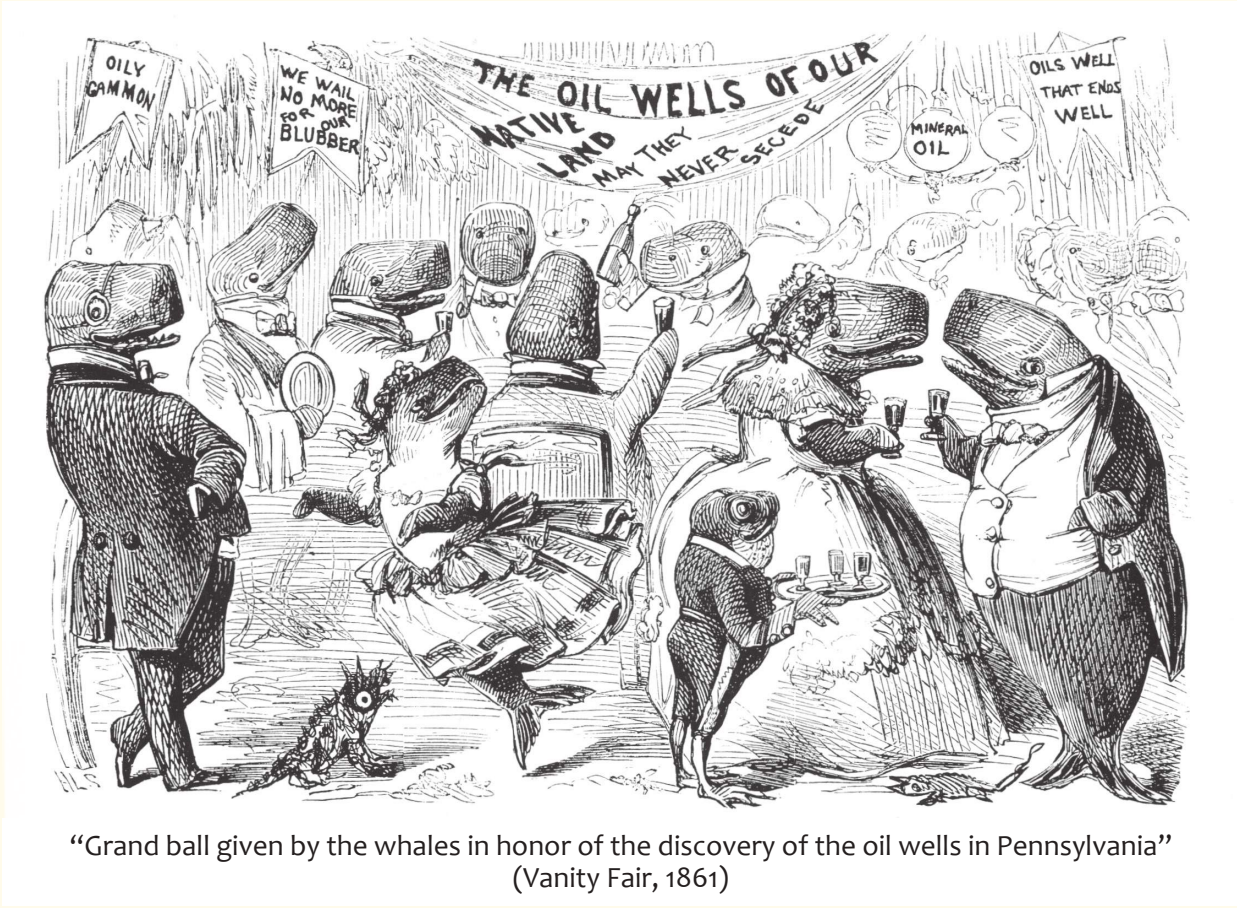
- Whale oil catchings peaked a bit later in 1840s and 1850s, then fell rapidly:
  - 1830s (5.0 million gal/yr.)
  - 1840s (7.7 million)
  - 1850s (6.9 million)
  - 1860s (2.8 million)
  - 1870s (1.5 million)
- “Shenandoah effect” negligible, but “1871 effect” large:
  - 1871 (2.4 million)
  - 1872–1876 (1.1 million)

- Whalebone catchings approximated the pattern for sperm oil:
  - 1830s (0.6 million lb./yr.)
  - 1840s (2.4 million)
  - 1850s (2.7 million)
  - 1860s (0.8 million)
  - 1870s (0.4 million)
- “Shenandoah effect” negligible, but “1871 effect” large:
  - 1871 (0.60 million))
  - 1872–1876 (0.25 million)

Total value hovered around \$10 million/yr during the “glory years” of the 1850s then declined steadily to roughly \$3 million in the 1870s.

(The underlying prices showed some interesting variations, notably the huge increase in the price for whalebone, driven mainly by the demand for corsets!)





“Grand ball given by the whales in honor of the discovery of the oil wells in Pennsylvania” (Vanity Fair, 1861)

### Epilog (2): Rise of the Petroleum Industry

Edwin Drake’s first U.S. oil well at Titusville, Pennsylvania, in 1859 spurred rapid expansion of the fledgling industry. Most ventures were not profitable, but enough were that petroleum production rose steadily, to about **two million barrels in 1864** and **ten million by 1873**. (Current world production is 78 million barrels per day.) This drastically **reduced the need for whale oil as an illuminant**. Over the same span, whale oil production fell by 50%.

Nevertheless **whale oil** remained in demand as a **lubricant**. Moreover demand for **whalebone** (for **flexible products** like corsets or buggywhips remained high until the advent of plastics decades later. **Whaling** would continue, but on a **drastically reduced basis**.



#### 1864–6 “Oil Fever”

Beginning in 1864 a **wave of speculation in oil stocks** enveloped much of the East and Midwest, and **thousands of companies** offered their stock to an eager populace. In 1866 **the boom ended abruptly**, leaving surviving stock certificates as the most visible reminders of this riotous period.

Nearly all of these certificates have a rather similar appearance, with **stock vignettes depicting oil field scenes**, including derricks, barrels, storage tanks, and the like. Here are a **select few exceptions**, including:

- **color printing** (the “Stroud’s Run”)
- matching vignette of a **glowering Bonaparte** (the “Napoleon”)
- vignette meticulously **reproducing an 1864 photograph** (the “Oil City”)

The **Devon Oil Co.** certificate embodies the hypothesis that the **rapid spread of plants and animals during the Devonian period** was a primary source of the raw material of petroleum. As a bonus, the main vignette appears to show an evolutionary highlight: a **primitive air breather emerging from the primordial sea**.

An astonishingly early depiction of these hypotheses, barely five years after Drake and Darwin



### Epilog (3): The Rest of the Story

The rise of the petroleum industry was **not the only**, and perhaps **not even the primary reason** for the **precipitous decline of whaling in New Bedford** and elsewhere in New England in the **late 1870s**. Operations from **Norway** and **San Francisco** continued successfully by adopting **new technologies**, notably **steam-powered vessels** and tryworks, and **improved bomb lances**. The venerable **New Bedford** operators, crippled by their losses in 1865, 1871 and 1876, **could not, or would not, adapt**. Some turned to other industries, notably textiles, others simply withered away.