

The History of the Square-rigged Sailing Vessels

Ex: The Frederick R. Mayer Collection of Costa Rica

1. Let me introduce the story ...

- a) ... of the legend about the sail and the Argonauts.
- b) ... by letting you know what a square-sail and a square-rig is.

2. The most simple form of marine constructions ...

- a) ... was initially a craft with a paddle of a flattened piece of wood.
- b) ... immediately demanded the presence of a further factor, the effect of the wind upon the floating mass.
- c) ... soon also demanded the invention of a means for directing the un-widely craft; a similar paddle used as a rudder.

3. The width of the crafts provided the means of employing the principles of constructions ...

- a) ... during the transition period of designing the hull.
- b) ... at the time when the stern-rudder was invented.
- c) ... at the time when the new rigging principles were applied.

4. At the time when the world was explored ...

- a) ... the vessels should be able to sail to windward and across the oceans.
- b) ... the explorers used vessels built in different techniques.
- c) ... the emigrant-vessels carried emigrants who colonized the new continents.

5. When the Europeans had discovered the new world, cannon fire and gun power were new principles of how ...

- a) ... warships were constructed and rated.
- b) ... new battle tactics were developed.
- c) ... the hull and rig were designed on Frigates.

6. Trade and shipping demanded specific principles regarding the hull, rig and size of vessels, when ...

- a) ... the East-Indiamen and Packet ships sailed during the 18th century.
- b) ... the Clipper ships sailed during the 19th Century.
- c) ... the great oceans and small seas demanded vessels of specific design.
- d) ... the Ironbarks were the last sailing vessels in commercial traffic during the 20th Century.

A square-sail is hanging athwart the vessel and is rectangular. A square-rigger is a vessel combining square-sails in its rig.

A sailing vessel was the first illustration to be used as topic on postage stamps in the early classical stamp period.



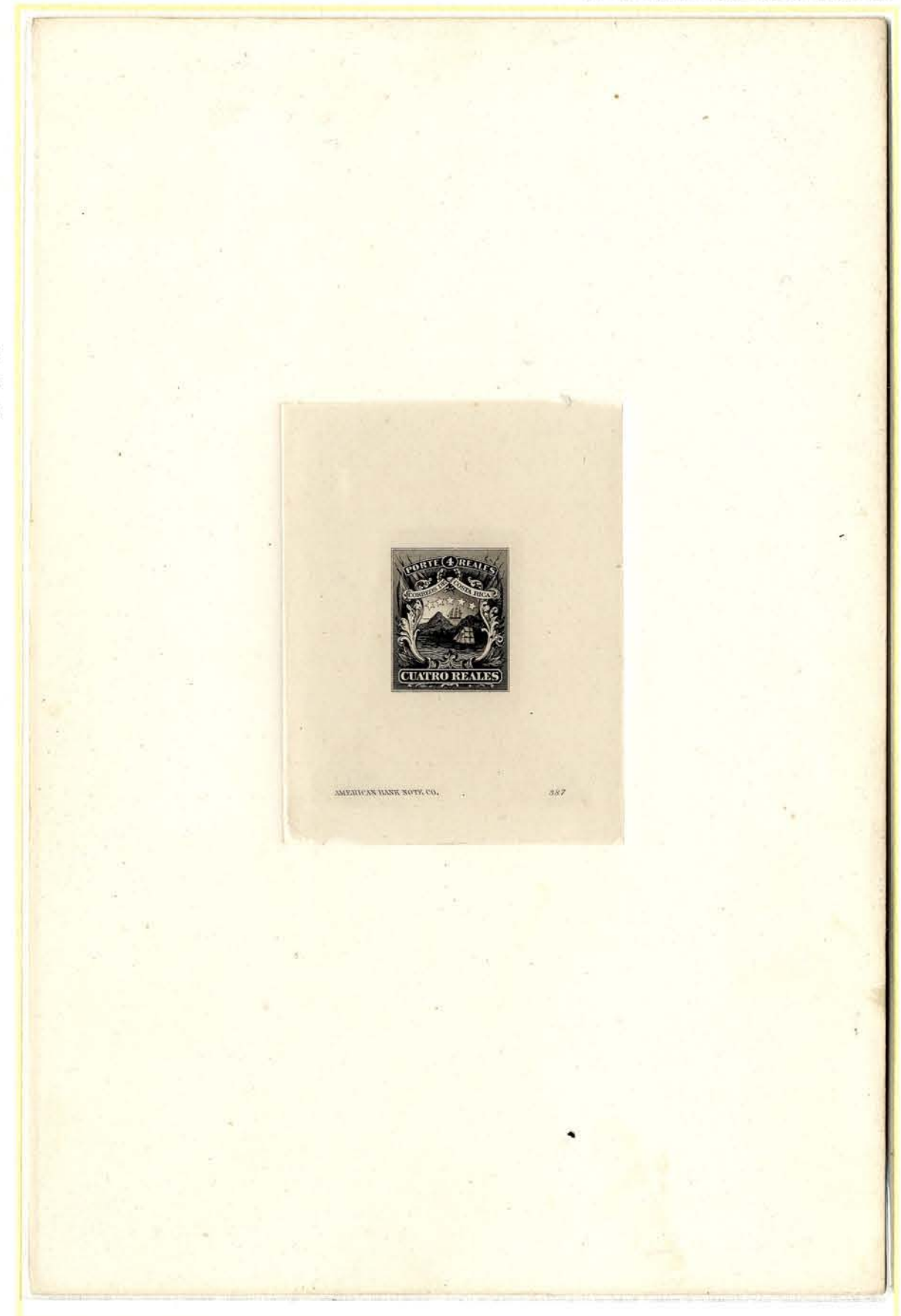
✓ 1863 4 reales plate proof in original green colour.

Philatelic treatment

Items are marked referring to their philatelic status and importance, based on records alternatively on own experience or knowledge, with ...

- ✓✓ ... "world status", regarded as a top rarity.
- ✓✓ ... "high importance", regarded as a rarity.
- ✓ ... "important", regarded as a rarity.

The purpose is to make it easy within the exhibit, to "identify" the most significant items from a philatelic/postal history point of view.



✓✓ 1863, 4 reales large die proof on India paper, one of four stamps belonging to Costa Rica's first issue.



1. Let's introduce the story ...

a) ... of the legend about the sail and the Argonauts.

The legend says ...



... that the idea with a sail on a boat came from a shell:

- "The Papershell" (lat. Argonaute Argo).

... in Greek mythology, that the Argonauts sailed ...



The United States submarine U.S.S. Argonaut was commissioned in 1928. At the time, she was the largest submarine in the U.S. Navy. She was sunk by Japanese destroyers with the loss of all hands. She carried a crew of 105 "Argonauts" at the time of her loss.

... with the ship "Argo" ...



At right: Original unique drawing by H Lindhardt (winner in a competition) depicting the statue by Thorwaldsen showing Jason, leader of the Argonauts, with the golden fleece in his hand.

Above: Denmark (1938), issued postage stamp.

... from Iolcus. The "Argo" (Ἀργώ) was the ship on which Jason and the Argonauts sailed to retrieve the golden fleece.

Folded letter on 27 January 1804 from Liverpool to New York, where it arrived on 19 March as a ship letter and received a superb strike of the New York "clamshell" postmark, type II in red. The red variety of this "clamshell" is much more rare than the same in black. The letter was carried on the route over the Atlantic by the 158 ton Brig "Argo" (see notation), which was built in 1801 and named after the ancient "Argo". According to the letter-rate act of 2.3.1799, the zone rate for a single letter going 90 to 150 miles, New York-Hartford, was 12½c plus 2c ship letter charge = 14½c due, as shown in manuscript.

DANMARK



20



2. The most simple form of marine constructions ...

The main power came from the wind, caught in a big square-sail

It was hard work using hands to push a boat through the water



Simple paddles and a square-sail were invented and disposed on boats.

✓ Letter free of postage for Polish U.N. troops, UNEF II, in Egypt (up to 20g) for letter-mail to Poland during the period November 1973 to December 1979. The free mail was carried by the Polish airline LOT twice a week from Cairo to Warsaw and had to be marked "Wojkowa bezplatna" (=free of postage). The rubber cancellation depicting an early primitive ship was used during a short period from June to December 1976, and shows the origin of the letter and the postal privilege mentioned.



✓ Free franking mark from the City of Riva (Italy) on official letter sent to the "Deputazione Comunale" (Municipal Administration) of Villanuova during the period with the Austrian governance of Lombardo Veneto. The mark was necessary to ratify the right of exemption from postal charges, as confirmed also by the writing "D'uff. in affari di stato" meaning "Official letter for state affairs". The number 2692 in the upper left is a registration number for free rate letters; such registration numbers were recorded in the books kept both by the institution having the free franking right (in this case the Riva city administration) and the post office.



Booklet from Israel with advertisement (copy from the booklet's content at left).

Seamen realized how to use the wind ...

... to get the speed, which decreased the need of manpower.

b) ... immediately demanded the presence of a further factor, the effect of the wind upon the floating mass.

The early sails were made of ...



✓ Un-printed corner due to folded paper before printing.

... skins, leaves or matting, but soon thick cloth was used.

An early ship intended to carry cargo and had a wide, rounded hull

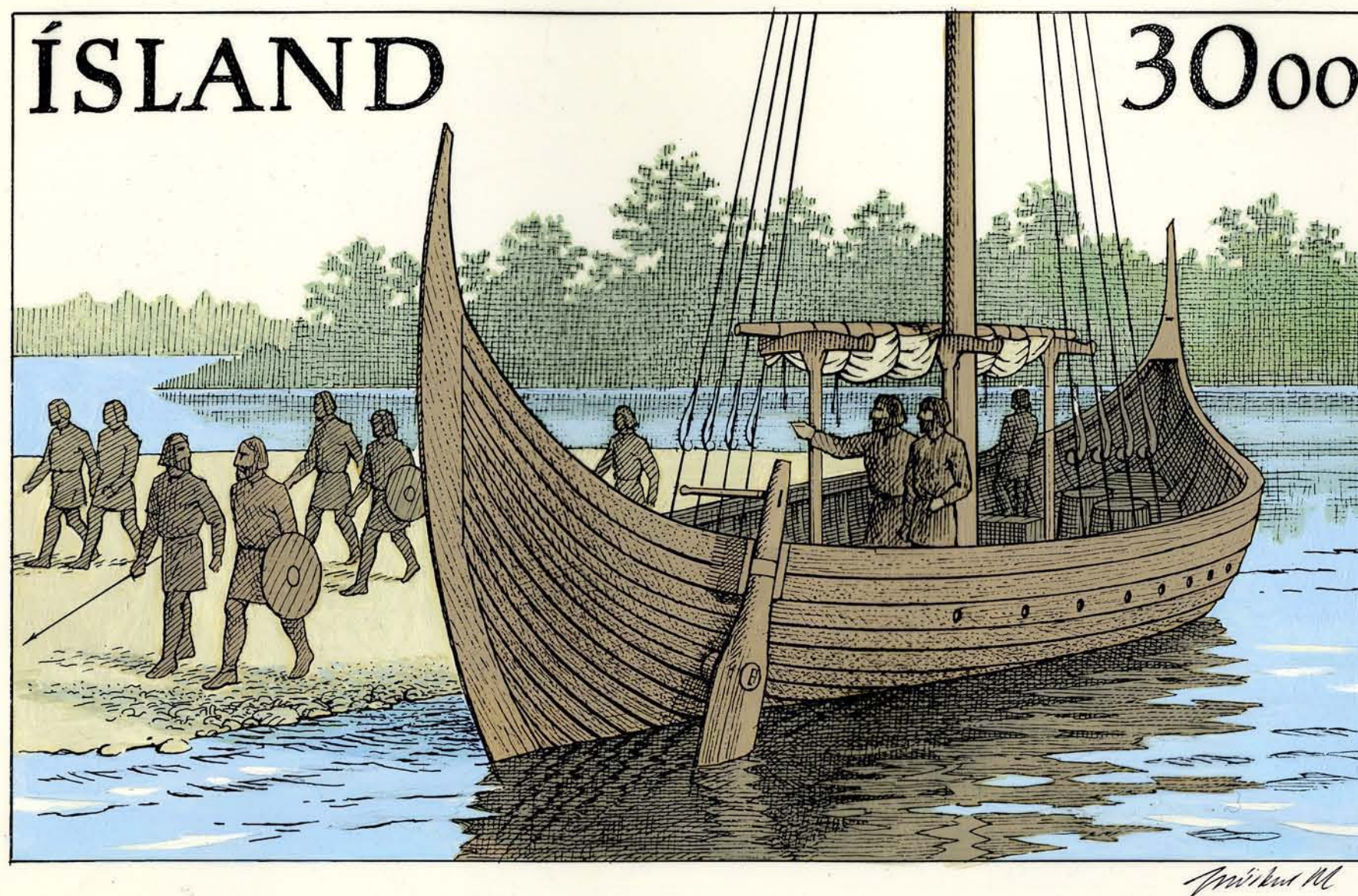




2. The most simple form of marine constructions ...

c) ... soon also demanded the invention of a means for directing the un-widely craft; a similar paddle used as rudder.

The method used to build and steer ships was first introduced by people in the Nordic countries



Original essay in accepted design of stamp issued by Iceland 2000, signed by the artist Magnusson.

The ships were made of overlapping planks of wood to give strenght and flexibility to withstand rough seas, the method was called klinque-building and was first introduced in the Nordic countries. The ship was steered by a long oar on the starboard side.



2000, issued stamp from Iceland.



4. At the time when the world was explored ...

b) ... the explorers used vessels built in different techniques.

The unexpected news of a new sea

Columbus called Santa Maria a "Nao" = Ship

After two months of sailing, on the 12th of October 1492, they saw land, presumably Watling Islands ...



✓ According to the 1878 U.P.U. convention of Paris, effective 1.4.1879-30.11.1925, a registered cover from the United States to U.P.U. countries cost 10 cents. This registered postal stationery envelope from NEW YORK 17.6.1893 to Germany is franked with 10 cents, indicating correct rate.



✓ 1945, proof of unissued stamp.

... in San Salvador. Vasco Nunez de Balboa is known for having crossed the Pacific Ocean in 1513, becoming the first European to lead an expedition to have seen or reached the Pacific from the new world.



Firma
E. Loewy & Sohn
Lebensmittel-Grosshandel
G m b H
Nd. Oesterreich **Austria**

Columbus and his ships were greeted by the inhabitants as the first Europeans to the new world



Vasco Nunez de Balboa

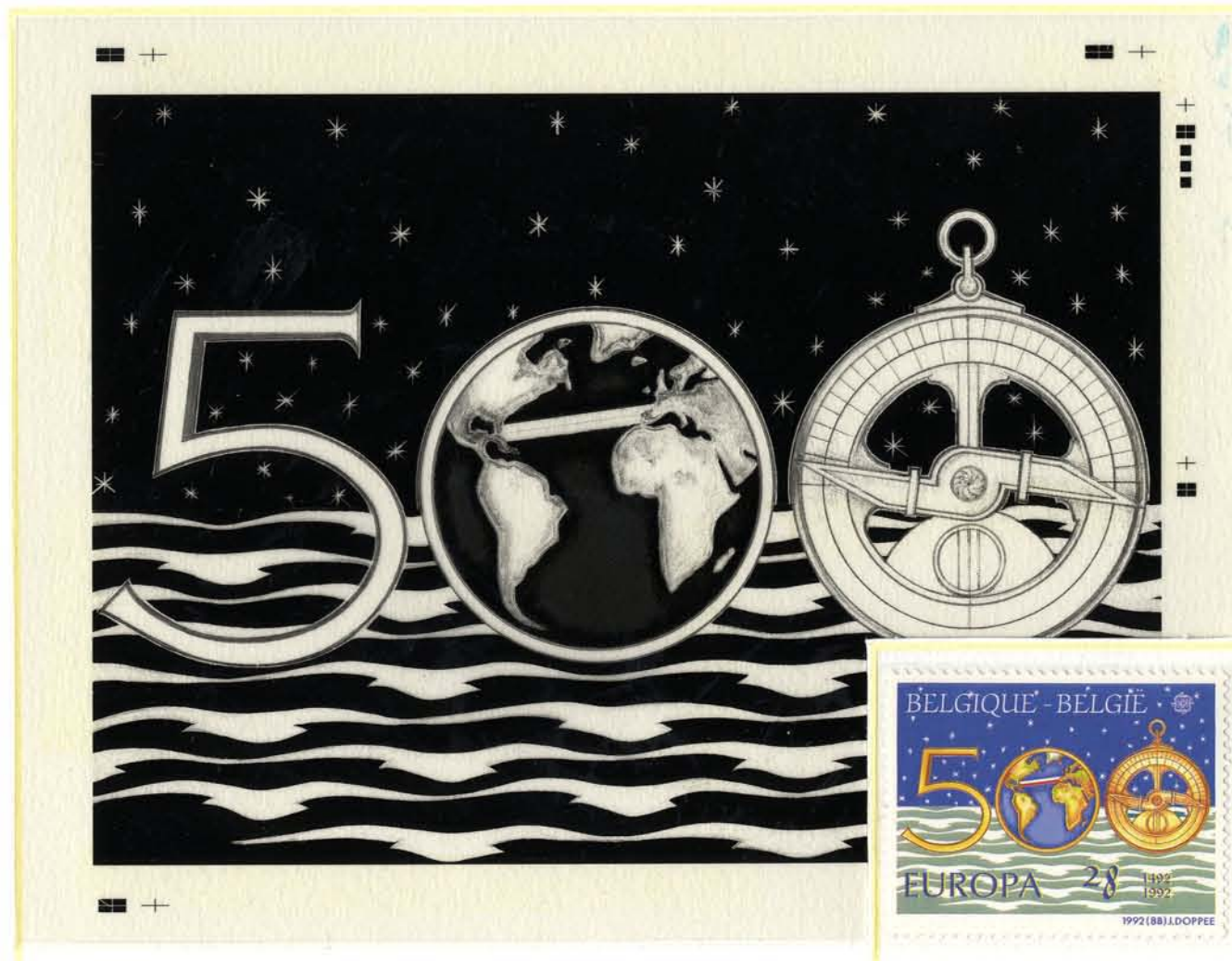


✓ 1909, American Bank Note Co plate proofs on thick card.

✓ 1992 Belgium, photo-essay on transparent film and issued stamp.



In German language the traditional way of greeting a ship is "ahoi". The term derives from the Dutch word HOY, used also for a cargo ship (the Hulk). The term came to England as well and was also used for greeting sailors.





5. When the Europeans had discovered the new world, cannon fire and gun power were new principles of how ...

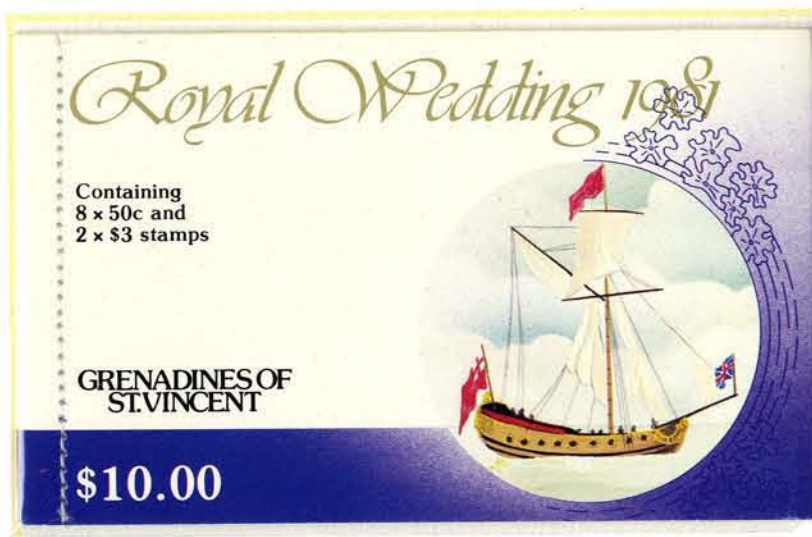
a) ... warships were constructed and rated.

The vessels had rows of cannons bristling from their open ports

The vessels had rows of cannons bristling from their open ports



✓✓ 1975 Pitcairn Islands artist's accepted design of issued stamp (essentially the same as the adopted design), original artwork in water colour and gold leaf on tracing paper, signed by the artist Jennifer Toombs.



The invention of guns and gunpower revolutionized warfare at sea

Smaller war-vessels were used to engage in primitive "hand-to-hand" fighting.

The cannon's range made it possible to deploy and to manoeuvre



✓✓ Variety, black print heavily misplaced upwards.

It was through the strenght of its Navy ...

... that a country showed its force - its "sea power" - here by a "fleet in being".



✓✓ Plate proof of the 6d vignette in blue on thin card.



✓✓ The U.S. NAVAL LYCEUM illustrated handstamp (in use 1835-1852) is a forwarding mark signifying that the letter was sent to its destination in the care of a United States naval officer.



5. When the Europeans had discovered the new world, cannon fire and gun power were new principles of how ...

b) ... new battle tactics were developed.

Fighting in the line

The British introduced this new tactic of fighting at sea - (see behind Britannia). It was brutally simple:



Each fleet intended to smash a hole in the opposing navy's line, ...



✓ **Variety:** Cannonball missing its target.

Released for sale on 1 May and authorised for postage from 6 May 1840, Mulready letter sheets and envelopes for One Penny (and Two Penny) were a new revolutionary concept devised for the prepayment of cheap postage and central to the introduction of uniform penny postage by Rowland Hill, following his earlier recommendation in 1837 that postage rates be reduced to one penny and design concepts resulting from the Treasury Competition held in 1839.

... scatter their vessels, surround them, then attack them individually

Sailing close together ...

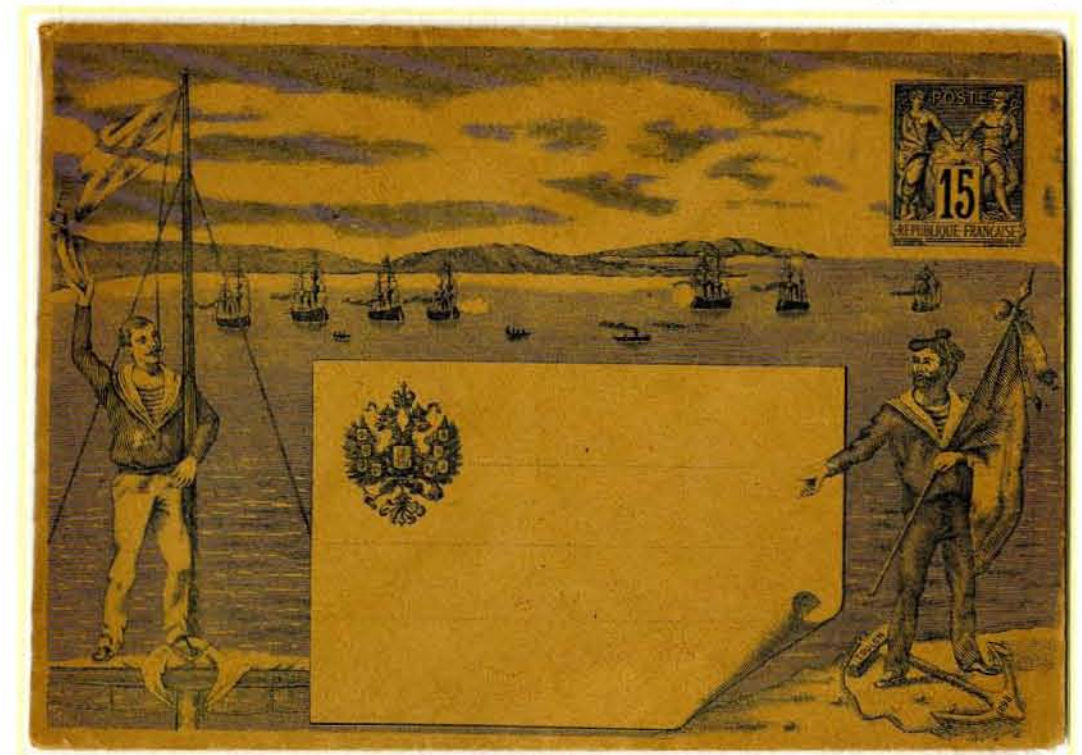
✓ 1893 France, postal stationery.



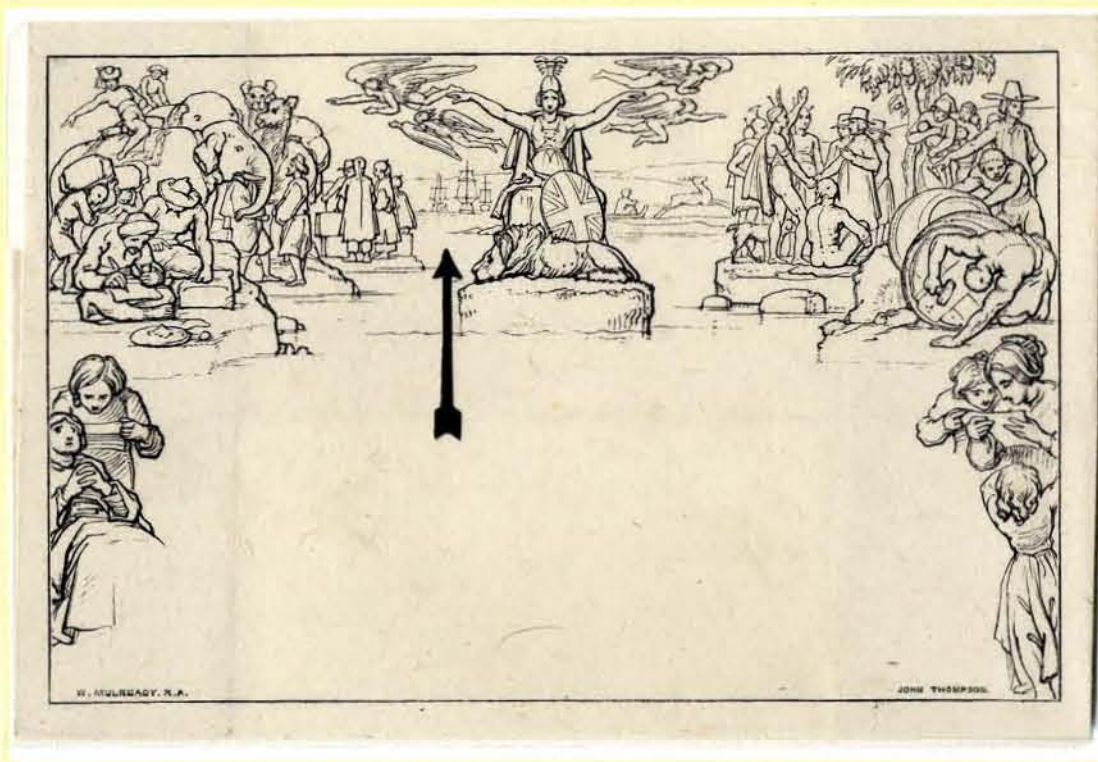
✓ **Variety:** Broken mast on left stamp



The fighting in line tactic was perfect for reaching the opponent in the attempt to hit and destroy the opponents rig and make his ship un-maneuverable.



... these great vessels advanced in a line towards the enemy.



Rowland Hill's brief to his assistant Henry Cole was for a pictorial composition "depicting the benefits to all countrymen from the introduction of the reformed post office by which British industry and commerce were to be extended all over the world and ensure the education of the masses and reading". Cole commissioned William Mulready on 13th December 1839 to produce a design, this was accepted on 4 January 1840 as a "slightly poetic design" and was then engraved by John Thompson. This is a progressive die proof of the stereotype without value inscription. According to a handwritten note together with this proof, this particular proof was gifted by Sir Rowland Hill to a lady of the Montgomery clan in 1840, and this lady gave it to Baroness K. at Leamington in 1854. (See note on reverse page). Ex. M-A Owens.

Ships of the line fought in the line of battles



Vessels of less than 50 guns were not generally supposed to be placed in the fighting line.



5. When the Europeans had discovered the new world, cannon fire and gun power were new principles of how ...

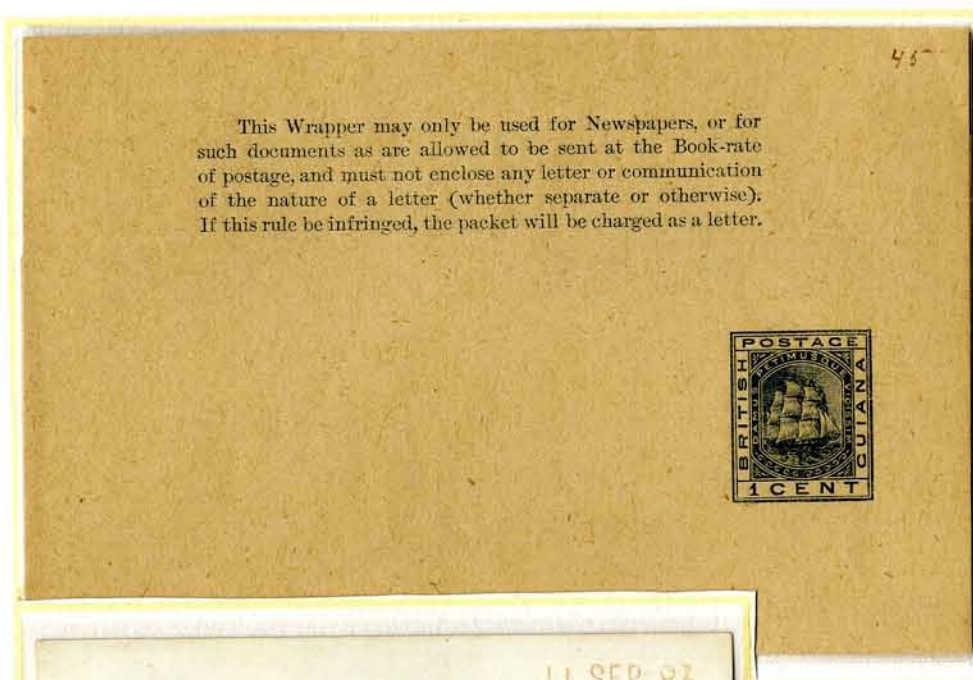
c) ... the hull and rig were designed on Frigates.

The name Frigate is given to those vessels having royal masts

At the end of the 18th century, the rig was fully square-rigged



✓ 1860 Liberia plate proof in black.



This Wrapper may only be used for Newspapers, or for such documents as are allowed to be sent at the Book-rate of postage, and must not enclose any letter or communication of the nature of a letter (whether separate or otherwise). If this rule be infringed, the packet will be charged as a letter.



REPLY.
THE ADDRESS ONLY TO BE WRITTEN ON THIS SIDE.

POST CARD
TASMANIA
UNION POSTALE UNIVERSELLE



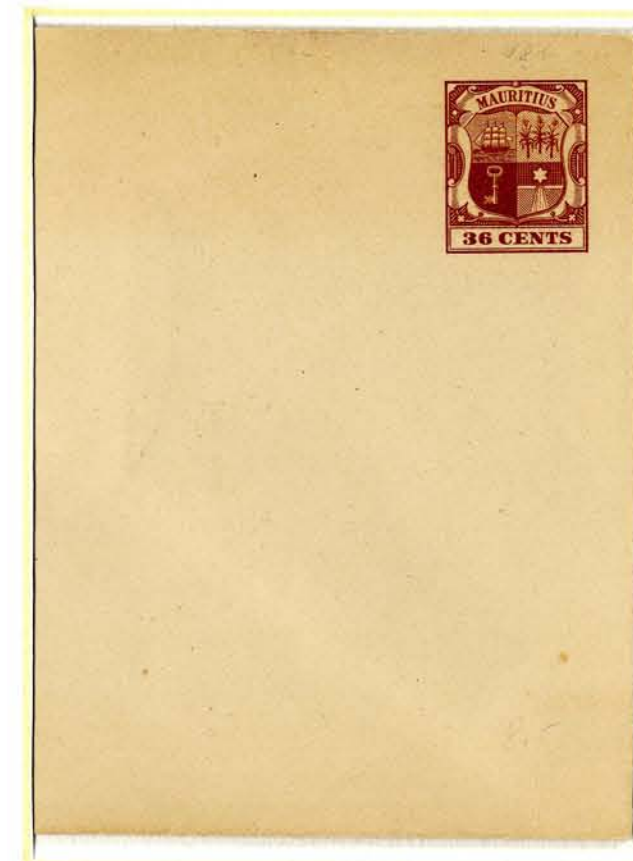
✓✓ Die proof of the Ship's design on glazed card dated 11 SEP 83. This design was used to produce the 1c and 2c values of printed matter bands.

The name Frigate was given to a ship having three masts with their full complement of sails, in other words having "royal masts".



Hern Dr. SZALAY,

Hermannstadt, Ungarn,
HUNGARY.



The jib-booms could be extremely long, sometimes extended with a flying jib-boom.

The open space found between the bulwarks of the fore- and afterdecks ...



... was called the waist and was built up as a permanent structure.

✓✓ Registered cover from Turks and Caicos Islands 15-7-1901 to Hungary. The letter-rate to U.P.U. countries was 2½ pence per ½ ounce (in force from 25.12.1898—30.6.1907) and the registration fee was 2 pence per article. This cover is franked with totally 4½ pence postage indicating correct rate.

Vessels from now on also had a bowsprit supported by a most elaborate martingale. The bowsprit was later called jib-boom supporting the jib sails.



5. When the Europeans had discovered the new world, cannon fire and gun power were new principles of how ...

c) ... the hull and rig were designed on Frigates.

The "royal" design made the Frigates fast

Changes took place in the design of the hull and the rig



✓✓ 1893 British Guiana die proofs in orange of the ship's design marked "A" and "B", each mounted on card and dated NOV 27 93. "A" is a view of the ship, "B" is a central vignette with uncleaned surrounds. Slight adjustments were made to the dies.

The Frigates were of great service as commerce destroyers, running down the normally timid merchant vessels, if not strongly convoyed.

✓✓ 1893 British Guiana die proof in orange on buff card of the central vignette with uncleaned surround dated 13 MAR 94 endorsed before hardening and with red manuscript "Original Brit. Guiana Embg Die".



On Frigates the only permanent structure above deck was a coboose or galley



✓✓ Registered 5 cents postal stationery envelope from British Guiana 14.2.1914 to Switzerland. The letter-rate to U.P.U. countries was 5 cents per ½ ounce (in force from 1.1.1891—31.12.1921) and the registration fee was 4 pence per article (in force 1.5.1884—31.12.1953). This postal stationery envelope is franked with 9 cents postage indicating correct rate.

Laterly on Frigates, it was fashion to paint the hull black above the waterline



✓ Variety: Inverted overprint.

Frigates had "royals"; the highest ordinary mast on a ship which carried the royal and sky sails.

The Frigates were ranging from 300 to 500 tons register and were fast sailers.

Registered cover from Turks & Caicos Islands 18.7.1953 to Canada. The letter-rate within the British Empire was 2½ pence per ounce (in force from 1.5.1951—28.4.1956) and the registration fee was 4 pence per article. This cover is franked with 6½ pence postage indicating correct rate. The stamps illustrate a Frigate in merchant service.



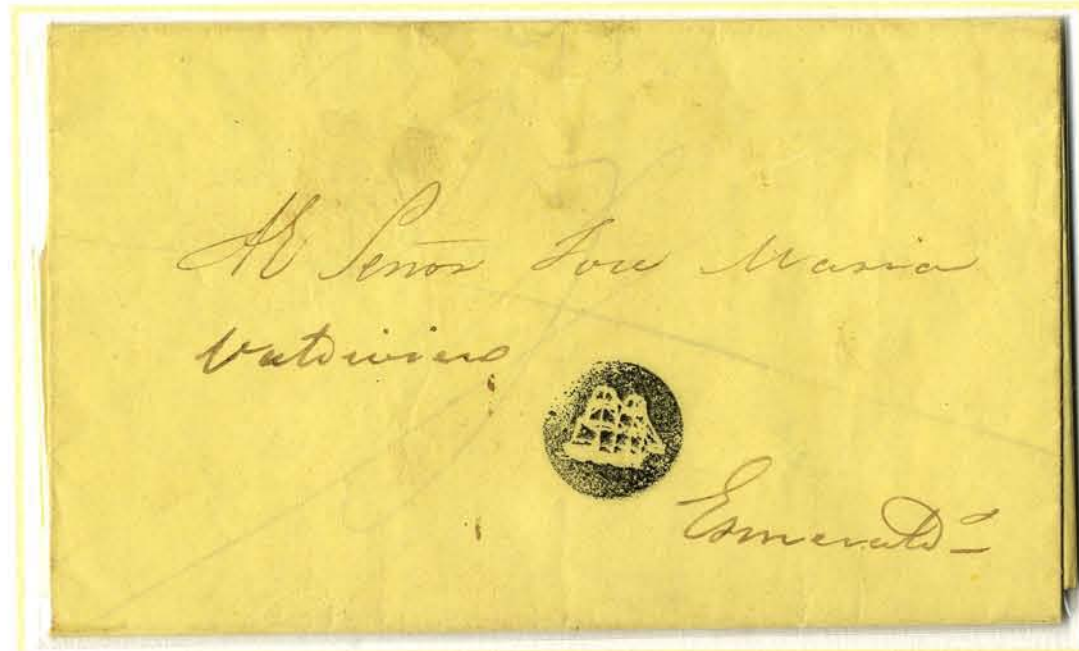
6. Trade and shipping demanded specific principles regarding the hull, rig and size of vessels, when ...

a) ... the East-Indiamen and Packet ships sailed during the 18th Century.

In hull and rigging, the Packet ships were designed from the Frigates

The renewal of commercial relations demanded increased shipping facilities

Packet ships carried studding sails on all yardarms up to the top-gallants



✓✓ Private ship-letter dated "17.7.1845 Rio Verde" in Ecuador, inland to Esmeraldas (the major seaport of northwest Ecuador), showing the negative "Frigate" handstamp. This is the only recorded copy of this handstamp.



1973 Isle of Man stamp booklet.

To supply this demand, again vessels were changed in the design.



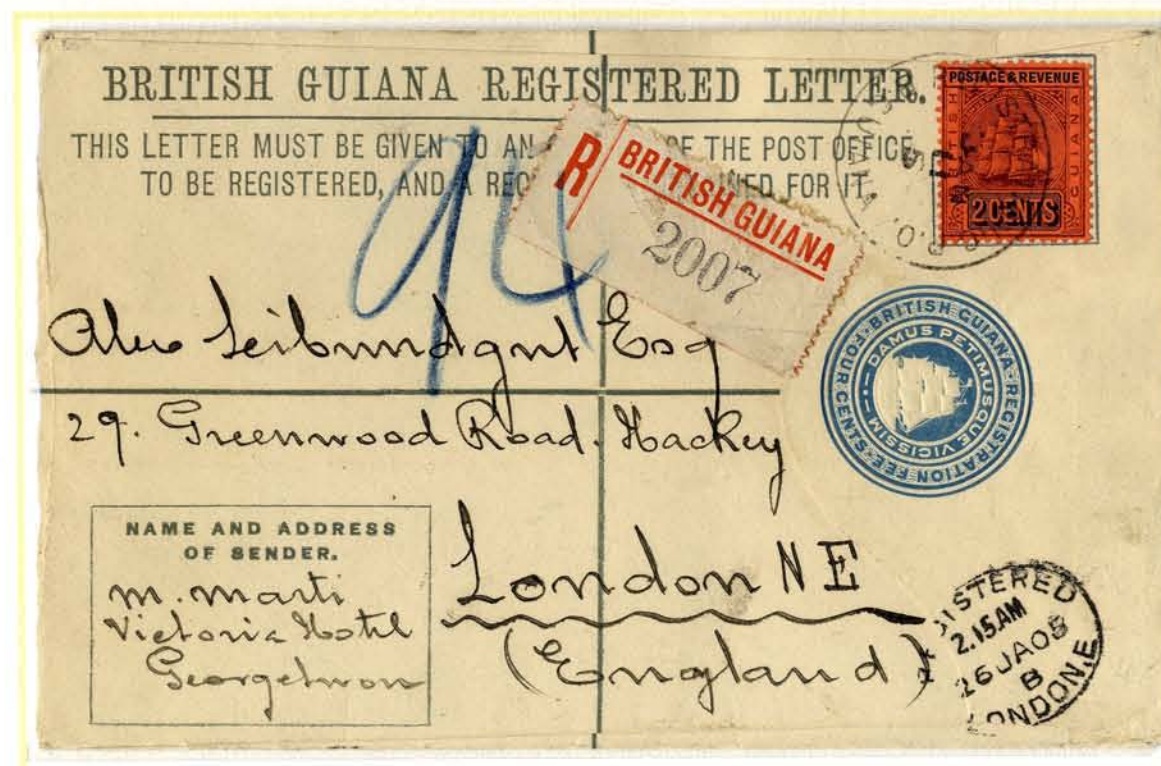
✓✓ Folded letter from New York to Paris 1809. Inverted forwarding agent cancellation illustrating a Packet ship. This particular forwarding agent cancellation was used by I. Brydens Tontine Coffee House in New York, during three months only 1809. This forwarding agent cancellation is among the rarest ever used.

Smaller vessels called Packet ships were built with flush decks and full-bodied



✓✓ 1856 Essex private mail stamp (U.S.)

After the war between the United States and England ended in 1812, the renewal of commercial relations demanded new ships.



A Packet ship is a small passenger- or mail-vessel.

✓ Registered cover from REGISTRATION POST OFFICE in British Guiana 11.1.1905 to England. The letter-rate within the British Empire was 2 cents per 1/2 ounce (in force from 25.12.1898—30.9.1907) and the registration fee was 4 cents per article. This cover is franked with 6 cents postage indicating correct rate.



6. Trade and shipping demanded specific principles regarding the hull, rig and size of vessels, when ...

c) ... the great oceans and small seas demanded vessels of specific design.

The "varieties" of the Brig - the Brigantine and the Schooner

By the first half of the 18th Century the word Brigantine evolved to refer to a particular type of rig

In sailing of the 19th Century a Brigantine is a vessel with two masts, ...

A schooner is a type of sailing vessel characterized by combining square-sails with fore-and-aft sails ...



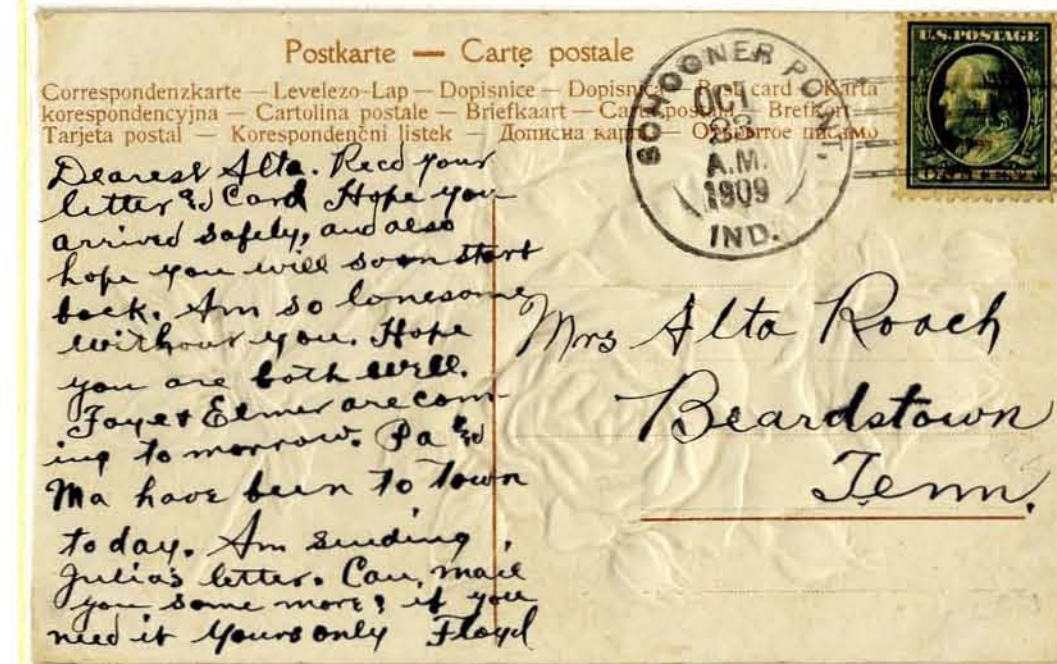
Ex: The Frederick R. Mayer Collection of Costa Rica

✓✓ The spectacular illustrated handstamp from Costa Rica "PUNTARENAS SHIP" showing a full sail Brigantine on the ocean, on folded letter dated 18 November 1848, by ship from Puntarenas to San Jose. This is one of only two recorded copies of this handstamp.



✓ Variety:
Yellow colour omitted.

... only the forward being square-rigged.



✓✓ The extremely rare postmark SCHOONER POINT, Indiana, a tiny post office being open 1879-1910.

If compared with the fully square-rigged vessels, Schooners required a smaller number of crew, when sailing close-hauled

✓ Large Die Proof, die sunk on card, signed by artist. Two-masted Brigantine (Schooner brig).

... on two ...



1910 Germany postal stationery



✓✓ Variety: Brown colour
very weak on the right stamp. (e)

... or more masts





6. Trade and shipping demanded specific principles regarding the hull, rig and size of vessels, when ...

d) ... the Iron-barks were the last sailing vessels in commercial traffic during the 20th century.

The opening of the Suez canal was the turning point for the era of sailing vessels

Steam tonnage in Lloyd's Register exceeded sailing ships by 1865



The STEAMSHIP/10 postage due marking for incoming mail to New York. This stampless folded letter is dated 8.12.1863 and carried by steamship "Tubal Cain" to New York, where it was struck by a 10 cent steamship rate postage due marking for carriage less than 2,500 miles.

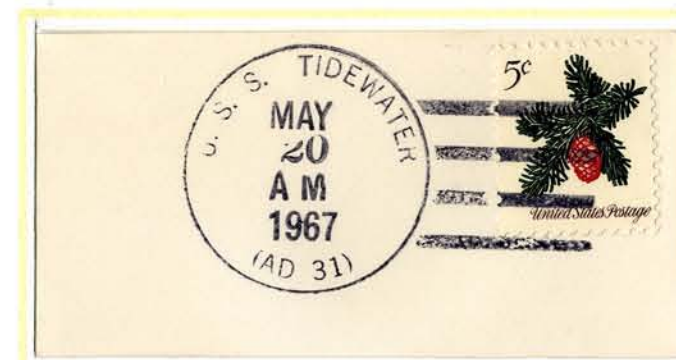
A steamer is a ship in which the primary method of propulsion is steam power, typically driving propellers or paddlewheels

Steamships were ocean-going as well,
but not dependent on weather conditions ...

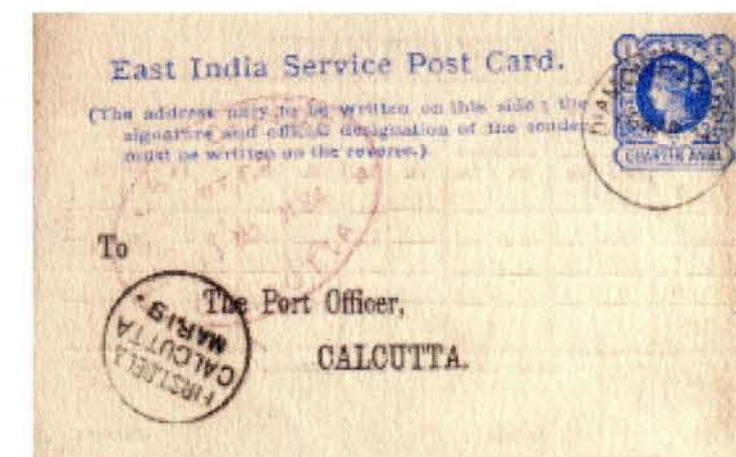


Partly paid folded letter, dated 4.12.1845 from Providence in France to London (paid to Calais by 5 centimes). Forwarded to Naples by Hamden & Co forwarding agents, struck with illustrated forwarding agent marking with ocean-going steamship.

... or tidewater



The USS Tidewater (AD-31) was a Shenandoah-class destroyer tender named for the Tidewater region of Virginia. Tidewater was laid down on 27 November 1944 at the Charleston Navy Yard; launched on 30 June 1945.



Official mail (scan of front) from DIAMOND HARBOUR to the port officer in Calcutta with information about the tide water.

The French inventor Denis Papin ...



✓✓✓ "Par Ballon Monté" cover cancelled 7/12-1870 forwarded by balloon "Denis Papin". The Denis Papin landed near Ferté-Bernard in the Sarthe. Arrival cancel Toulouse 21.12.1870 on reverse.

... after inventing the steam digester, a type of pressure cooker, he built a model of a piston steam engine, the first of its kind in 1690. He continued to work on steam engines for the next fifteen years. During a stay in Kassel, Germany, in 1704, he also constructed a ship powered by his steam engine. The engine was mechanically linked to paddles. This would then make him the first to construct a steam boat.



✓✓✓ In the late 1870s, letters carried by ship from Chimba (Bolivan port situated a few miles north of Antofagasta) to overseas destinations were struck with an oval mark with the outline of a steamship in the centre inscribed CORREOS DE LA CHIMBA-BOLIVIA. The handstamp was employed by the postmaster at Chimba together with the FRANCA marks indicating that the postage has been paid. This cover is sent to VALPARAISO in Chile, with arrival marking on reverse 22.9.1877.

JAMES' AND MARY'S.											
No.		EASTERN GUT.		WESTERN GUT.		ANCHORING CREEK RIDGE.		NYSAN.		THE BACK OF THE HOOCHLY.	
		Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
1		11	6	1	9	16	0	22	0	2	9
2		11	6	1	9	18	0	19	9	3	33
3		10	9	2	0	19	5	11	6	14	9
4		8	3	1	3	22	0			10	33
Fy.		9	3							1	5

NOTE.—The tides are for the day preceding.

The 18/3/1884. *and Mary's* Serang.