

# Getting from here to there

## Modes of Transport

Modes of transport is a term used to distinguish substantially different modes of conveyance. Transportation is used for the movement of people, animals, and other things. The means of transport can refer to the vehicles necessary for transport according to the chosen mode (cars, rail, airplane or ship).

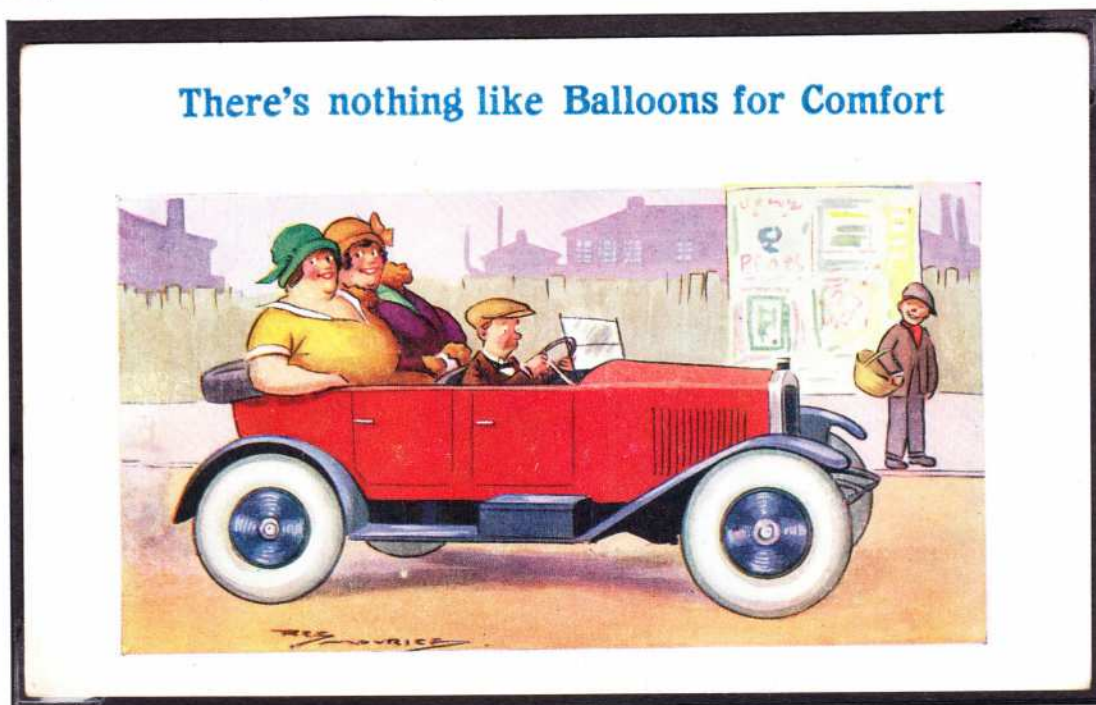


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If you prefer to travel by foot or with the aid of an animal, technology has advanced in such a manner that you can expand your *wanderlust* to horizons on sea, in the air or "*to boldly go where no man has gone before!*". Always make certain you do it in style.



# 1. Slip-Sliding

People living in the Arctic region have used skiing and sledges for the past 4000 years as a mode of transport.

Sledges are still used for transport in the colder Northern countries.



Today skiing is employed less for transport and more for recreational purposes.



Both are also extremely popular as a competitive sport (the Winter Olympics) with various styles and types of skiing and sledging disciplines.



1980 WINTER OLYMPICS AT LAKE PLACID

## 2. Human-powered Two-Wheelers

A bicycle is a human-powered or motor-powered, pedal-driven, single-track vehicle, having two wheels attached to a frame, one behind the other.

Bicycles were introduced in the late 19th century in Europe.

They are the principal means of transportation in many regions.



The "Dandy horse" was the first human means of transport to use only two wheels in tandem and was invented by the German Baron Karl von Drais in 1817. It is regarded as the modern bicycle's forerunner. Its rider sat astride a wooden frame supported by two in-line wheels and pushed the vehicle along with his or her feet while steering the front wheel.



The penny-farthing was the first machine to be called a "bicycle". It was popular in the 1870s and 1880s, with its large front wheel providing high speeds.

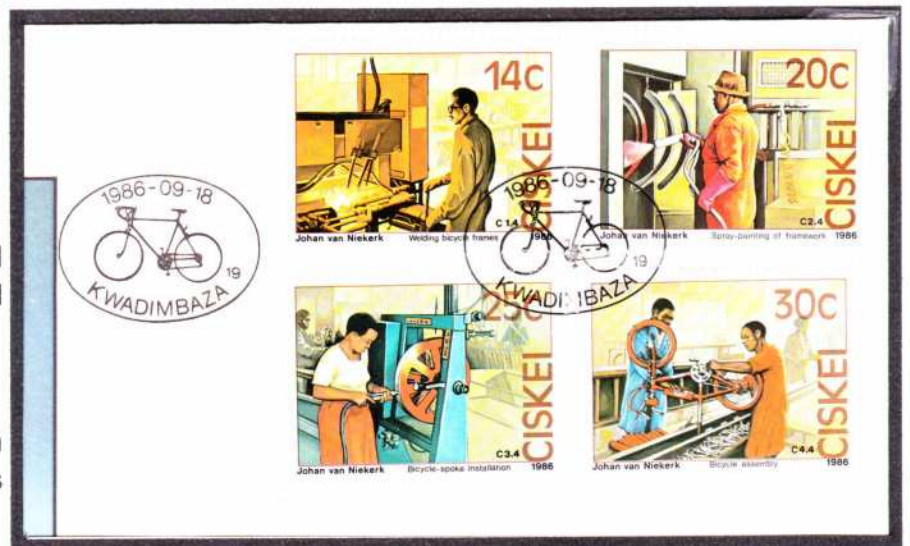


The bicycle gave women unprecedented mobility, contributing to their emancipation in Western nations. More women had access to the personal freedom that bicycles embodied, and so the bicycle came to symbolize the *New Woman* of the late 19th century, especially in Britain and the United States.



The bicycle is used for recreational purposes such as physical fitness, and play.

It is also used in competitions which includes racing in professional events and also on Olympic level.



The bicycle has undergone continual adaptation and improvement since its inception. These innovations have continued with the advent of modern materials and computer-aided design. A number of formal and industry standards exist for bicycle components to maintain a minimum product safety.

### 3. Equestrians

It is established that donkeys and horses were domesticated between 4000 and 3000 BC. While cattle were used to do the manual labour that farms required, domesticated horses were able to do the same work faster.



Horse-drawn carriage



Horses used in combat with the Cavalry

Horses were also used for transportation because they were capable of moving much further than humans at a much faster pace. Horses have been used to power different forms of transport.



Horses transporting Huntsmen on a hunt



Z.A.R Mail coach pulled by horses



Horse-drawn carriage



Permit Mail postal stamp used by the Overstrand Municipality

The Pony Express is one of the first and most well-known commercial transportation of mail by horses. It was a mail service delivering messages, newspapers and mail between the Atlantic and Pacific coasts of North America and was vital in tinging the new state of California with the rest of the United States and reduced the time for messages to be delivered to 10 days.



The first overland mail route across continental United States commenced on 6 September 1858.



Stamp issued in 1960 to commemorate centenary of the Pony Express.

The Pony Express operated for only 18 months from April 1860 to October 1861 and was the most direct means of East-West communication before the transcontinental telegraph was established.

## 4. Animal Drawn Transport

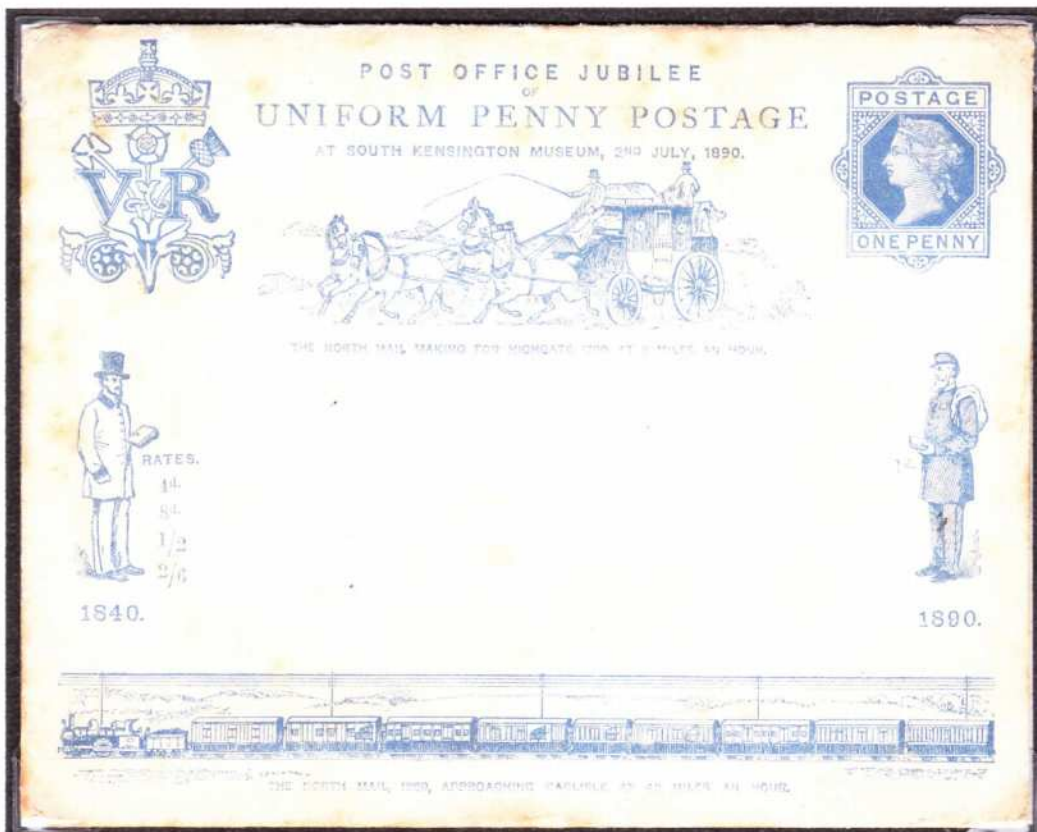
Animal drawn carts and wagons have been used since biblical times and many types of carts and wagons have been seen on stamps and covers all over the world. Examples below are of carriages that carried poor to rich people, including royalty.



Specialised transport was also very popular as can be seen by the fact that horses drew fire engines, trams, trains and also mail coaches.



The ox wagon was a very popular mode of transport across the world and the wheel was used as a postal canceller.



Example to left of pre-printed cover adorned with a mail coach of 1790.

## 5. Motorized Bicycles



The first internal combustion, petroleum fuelled motorcycle was built by Daimler & Maybach in 1885 in Germany. It became an inexpensive mode of transport when England and America introduced new models in the 1930's. Currently, India and China are the biggest manufacturers.



It usually transports two people safely but motorcycle races and motocross became a very big spectator sport when Japan introduced smaller but faster motorcycles in the 1970's.



The motorcycle with sidecar played a big role during WWII but are since being used for general transport and also for sport.



## 6. Horseless Carriage



The year 1886 is regarded as the birth year of the modern car when German inventor Karl Benz patented his Benz Patent-Motorwagen.

Gottlieb Daimler and Wilhelm Maybach sold their first car in 1892 under the brand name Daimler. It was a horse-drawn stagecoach built by another manufacturer, which they retrofitted with an engine of their design.



The first stamp on which an automobile was pictured was issued for the Pan-American World Exposition, held in Buffalo, New York in 1901. The automobile pictured is a so-called Electric Service Vehicle, something we would nowadays call a taxi.



One of the first cars accessible to the masses was the 1908 *Model T*, an American car manufactured by the Ford Motor Company.

The Bugatti Type 41, better known as the *Royale*, is a large luxury car built from 1927 to 1933 and, at 6.4 m overall length, is one of the largest cars in the world. Only three of the seven made were sold and six still exist, the prototype destroyed in an accident in 1931.



Monaco 1953 Stamp Tax depicting General Motors' 1951 *Le Sabre* concept car. It introduced aircraft-inspired design elements such as the wrap-around windshield and tail fins, which became common on automotive designs during the second half of the decade.

*Sunbeam Tiger* is a high-performance V8 version of the British Rootes Group's Sunbeam Alpine roadster, designed in part by American car designer and racing driver Carroll Shelby and produced from 1964 until 1967.



Vintage car enthusiasts can partake in classic rallying events where aim is to travel from a point to another within a certain time, not too fast or too slow, trying to match a speed average set by the organizers.



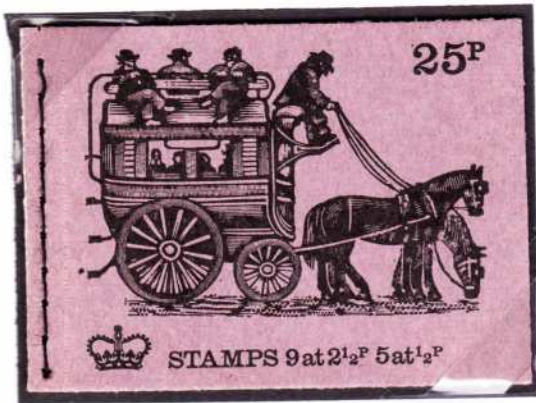
Races of various sorts are organised, with the first recorded as early as 1867. Formula One is an European-based series that runs only street circuit and race tracks.



Inaugurated in 1950, some of the most prominent races are the Monaco Grand Prix, the Italian Grand Prix, and the British Grand Prix.

## 7. Vehicle for All

A bus (contracted from omnibus) is a road vehicle designed to carry many passengers. Buses can have a capacity as high as 300 passengers.



A London "Knife Board" omnibus (1850) - re shape of the top-mounted back rest.



Horse-drawn buses were used from the 1820.



Open cab



Chinese early petrol vehicle

The most common type of bus is the single-deck rigid bus.

Larger loads are carried by double-decker buses.



Coaches are used for longer-distance services.



Mail also carried by bus - a Dutch "horse and trailer" articulated vehicle.

## 8. On the Rails

A train is a form of transport consisting of a series of connected vehicles that generally runs along a railroad track to transport cargo or passengers.



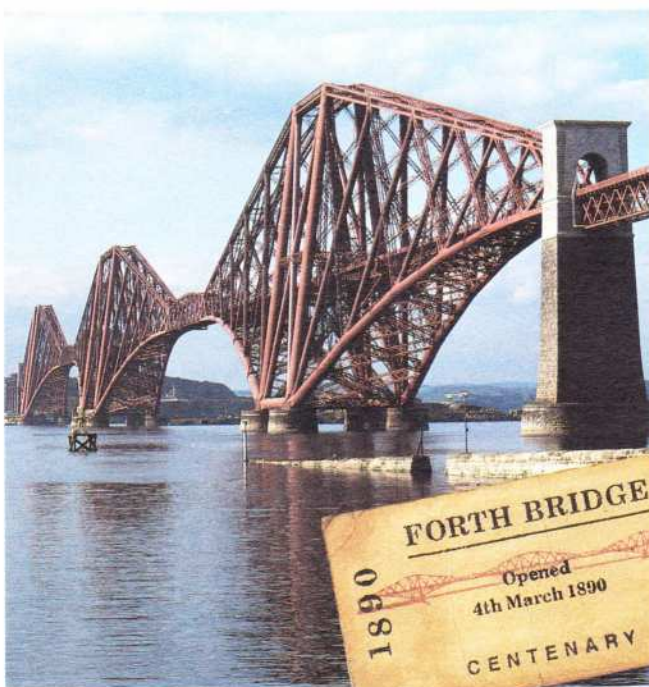
George Stephenson played a pivotal role in the development and widespread adoption of the steam locomotive. In 1825 he built the locomotive *Locomotion* for the Stockton and Darlington Railway in the north east of England, which became the first public steam railway in the world.

Motive power for a train is provided by a separate locomotive or individual motors in a self-propelled multiple unit. Although historically steam propulsion dominated, the most common types of locomotive are diesel and electric.



The track usually consists of two running rails with a fixed spacing.

Sir Sandford Fleming KCMG (January 7, 1827 – July 22, 1915) was a Scottish Canadian engineer and inventor. He engineered much of the Intercolonial Railway and the Canadian Pacific Railway.



By air mail  
Par avion  
Aerogramme  
Troimh'n phost-adhair/Litir-adhair



1 Great Britain  
Postage Paid

The development of trains and train services resulted in other building advances.

The Forth bridge is a cantilever railway bridge across the Firth of Forth in the East of Scotland. It is sometimes referred to as the Forth rail bridge to distinguish it from the Forth road bridge, though this has never been its official name.

## 9. Lighter than Air

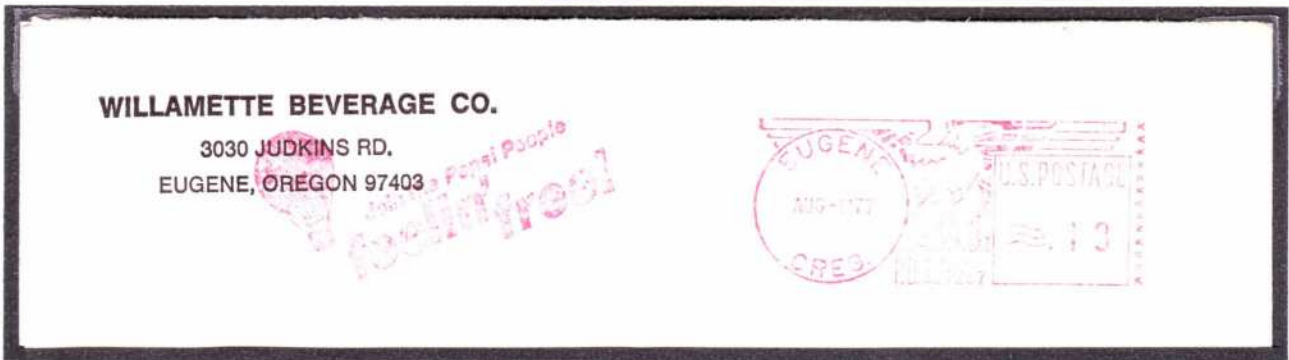
The first ever to be able to fly was the French, Montgolfier brother who achieved this major feat in Annanoy in September 1783 by flying a balloon.



The basic balloon was soon improved and it became a vehicle for sightseeing and especially photography.



They were extensively used during war to follow troop movements and it played a major role during the Siege of Paris in 1870 to move people and especially letters from the besieged city.



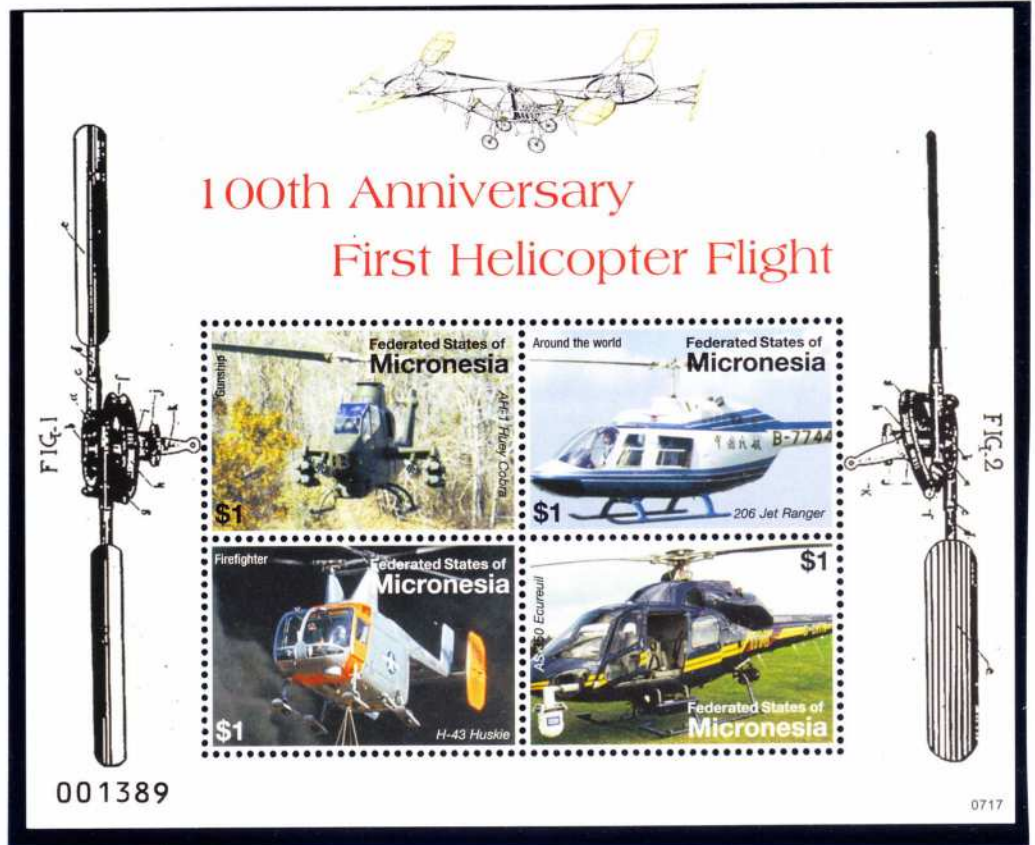
Its size and the height it could reach made it a natural advertising and sports commentary platform.

## 10. Rotary Winged Aircraft

In 1907, the Cornu helicopter (indicated on the top of the mini sheet) was an experimental helicopter build in France by Paul Cornu. This was the world's first successfully manned rotary wing aircraft. The two rotors, indicated in Fig. 1 and 2, rotated in opposite directions to cancel torque.

Today, helicopter uses include transportation of people and cargo, military uses, firefighting, tourism, construction, search and rescue, medical transport, law enforcement, news and media, agriculture, and aerial observation.

The first experimental helicopter airmail flights took place in Los Angeles in July 1946. Although an expensive option, it has since been regularly used in areas where other more convenient modes of transport are not a practical option.



Commercial Courier "Consignment Helicopter Mail"

The 1932 TsAGI 1-EA is an open-framework machine which had a 4-blade lifting rotor and small steering rotors on the nose and tail. Control was poor but its performance was good and it flew to a record height of 605 m.



The Burby helicopter is a small utility helicopter used in mountainous terrain and for sea rescue.



## 11. Soaring on the Wind

With their beginnings in the 9th century and built on by the designs of Leonardo da Vinci, the aeroplane began as a viable form of transport with the Wright brother's first flights from 1903.



East African Airways, was an airline jointly run by Kenya, Tanzania, and Uganda. Set up on 1 January 1946, their fleet included six Dragon Rapides.

Ski planes are adapted to be used where where ground transportation infrastructure is inadequate or does not exist.



The inspiration ?

The first powered, controlled aeroplane to fly, the Wright brothers' "Flyer", used a biplane wing arrangement, as did many aircraft in the early years of aviation. The monoplane, with a single main wing plane, has the highest efficiency and lowest drag and is the most common form for a fixed-wing aircraft.

The Blériot XI monoplane is a French aircraft of the pioneer era of aviation. The first example was used by Louis Blériot to make the first flight across the English Channel in a heavier-than-air aircraft, on 25 July 1909.



The Curtiss "Jenny" (JN-4) on a non-inverted copy of the famous 1918 24 cent US postage stamp. This biplane was especially modified for shuttling the mail between Washington and New York City.

Bruno Büchner, was the first pilot to fly in German Africa and took part in various air shows in Africa with an Otto / AGO pusher biplane made by Pfalz. He first stopped off in German South West Africa in May 1914 to fly several displays.



Features typical of the Junkers line include corrugated alloy skin, fixed undercarriage and slotted ailerons.



In commercial aviation the jet age was introduced to Britain in 1952 with the first scheduled flight of the de Havilland Comet airliner.

## 12. Maritime Transport

Maritime transport is one of the oldest forms of transporting goods and people. Through all the ages, it remains the cheapest form of transporting goods and people.

River sampan



River passenger steamer



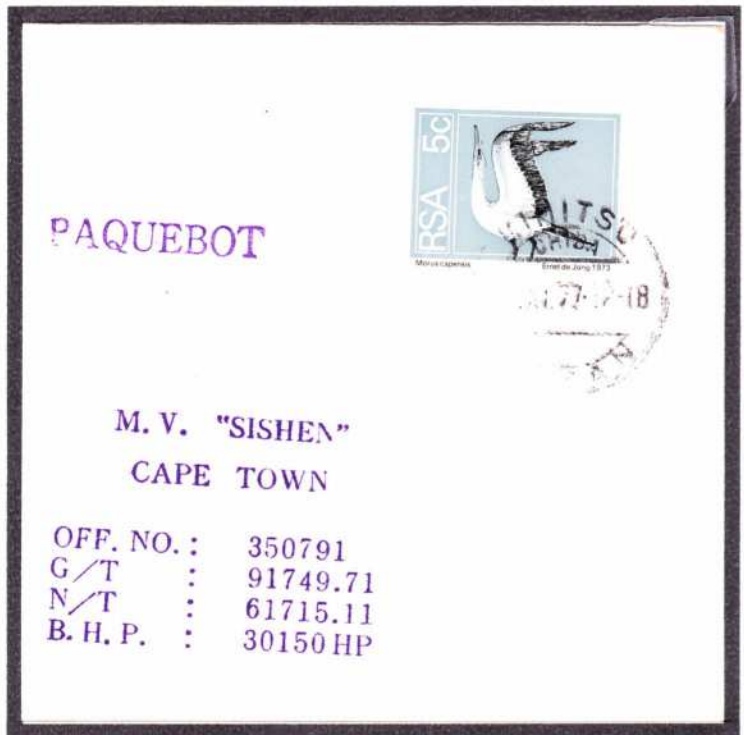
In South Africa, coal has been transported between Durban and other ports using the coastal ore carrier *MV Sishen*. The cover shown posted aboard during her maiden voyage in 1977.



Freighter *Federal Palm*

Over long distance cargo ships were used to transport goods in loose form, while also making berths available for paying passengers.

Older cargo vessels were remodelled to carry the higher tonnage containers in their holds.



Specialist vessels were built (Safmarine) able to carry up to 23000 tons only at fast speeds (in excess of 25 knots).



Container ship *SA Winterberg*

Transporting vehicles required another means to get them aboard ships than hoisting them inboard, resulting in the development of the roll-on / roll-off vessel, which allowed vehicles to be driven onboard ships under their own power.

The increase in world-wide tourism required more passenger vessels to move the tourists to the tourist spots around the world. These modern vessels can carry between 500 to 5000 passengers at prices low enough to require more ships to be build.

RMS *Queen Elizabeth II*



### 13. Under Sail

A sailing ship uses sails, mounted on two or more masts, to harness the power of wind and propel the vessel.



Caravel fleet  
Columbus 1492



Built 1774 as collier Brig.  
"Discovery" converted to  
full-rig for Cook's third  
Pacific expedition



Dutch Fluyt ("Flute") Tasman 1642 and Van  
Riebeeck 1652. Cross-section shows narrow  
deck and broad hull, built thus to reduce deck  
area - used to calculate Dutch port tax



Sailing ships with predominantly square rigs became prevalent during the Age of Discovery (beginning of the 15th century until the middle of the 17th century), when they crossed oceans between continents and around the world.



"Foul Anchor"  
watermark



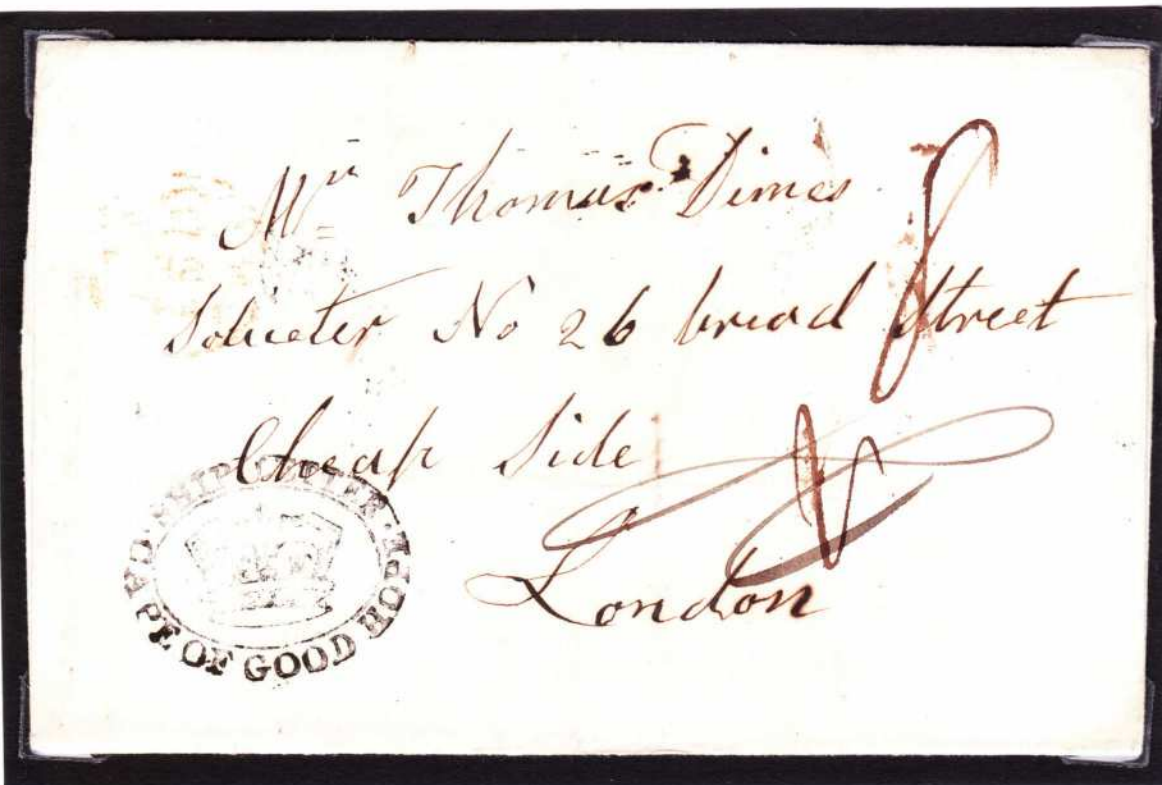
1825 Frigate-style cargo (sugar) ship (Stationary)

A carrack was a three- or four-  
masted ocean-going sailing ship that  
was developed in the 14th to 15th  
centuries in Europe.

Carrack-style ship from wood  
engraving (perf x imperf coil stamp)



The Age of Sail was a period roughly corresponding to the early modern period in which international trade and naval warfare were dominated by sailing ships, lasting from the mid-16th to the mid-19th century.



1848 Cape Ship Letter - handstamp marking identifies mail for overseas.  
Local "4" pence rate plus "8" for UK delivery



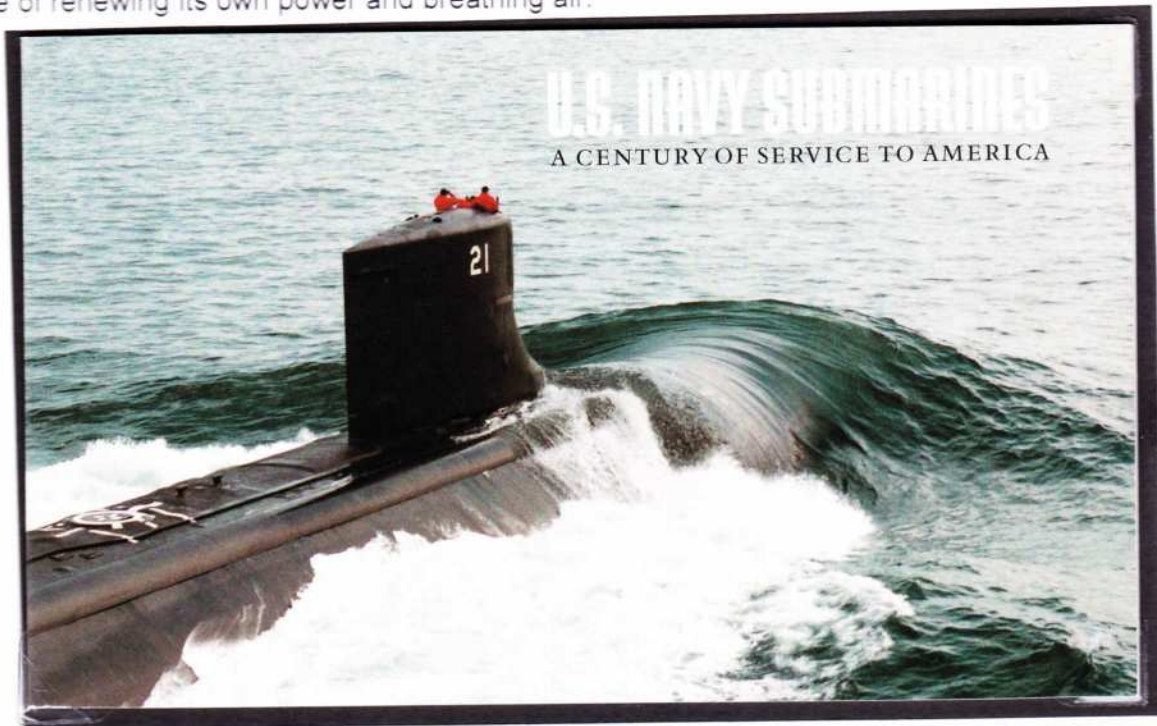
Mails routed via ports  
(Booklet)

1879 3-masted,  
iron-hulled barque.



## 14. Twenty Thousand Leagues under the Sea

A submarine is a watercraft capable of independent operation underwater and is a fully autonomous craft, capable of renewing its own power and breathing air.



The Daphné class was a type of diesel-electric patrol submarines built in France between 1958 and 1970 for the French Navy and for export. Three were sold to the South African Navy. SAS Assegai has been converted into a museum ship and is stationed in Simon's Town and is a part of the South African Naval Museum.



Three person research deep-submergence Pisces class submersible



A submersible has limited underwater capability and include both manned and unmanned craft, otherwise known as remotely operated vehicles or ROVs. Submersibles have many uses such as oceanography, underwater archaeology, ocean exploration, equipment maintenance, and underwater videography.

The wreck of the *Titanic* was found on 1 September 1985 using a remotely controlled deep-sea vehicle called Argo, equipped with sonar and cameras and towed behind a ship, with a robot called Jason tethered to it that could roam the sea floor, take close-up images and gather specimens.

Jules Verne's classic, *Twenty Thousand Leagues under the Sea*, follows the adventures of Captain Nemo. He has built a submarine, the *Nautilus*, in secrecy and roams the seas free from any land-based government.

Verne took the name "*Nautilus*" from one of the earliest successful submarines, built in 1800 by Robert Fulton, which was named after the paper nautilus because it had a sail.



# 15. The Final Frontier

Space exploration is the discovery and exploration of celestial structures in outer space.



It has captured mankind's imagination, taking us from childhood fantasies to launching the first man into space.

The early era of space exploration was driven by a "Space Race" between the Soviet Union and the United States.

The Soviet space program achieved many of the first milestones.



Valentina Tereshkova, depicted on the right, is the first and youngest woman to have flown in space with a solo mission on the Vostok 6 on 16 June 1963. She orbited the Earth 48 times and spent almost three days in space.



The United States' Apollo 11 was the first manned mission to land on the Moon, on 20 July 1969.



The demand for exploration, information, resources and just plain curiosity will fuel us ever forward, even farther, transporting the human race into ever further reaches of outer space!

