INTRODUCTION

THE OCEANS

THE OCEAN, CONTINUOUS BODY OF SALT WATER, COVERS NEARLY 71 PER CENT OF THE TERRESTRIAL SURFACE. THIS WORLD OCEAN IS COMMONLY DIVIDED IN FIVE MAJOR OCEANS: ARCTIC, ATLANTIC, INDIAN, PACIFIC AND ANTARCTIC.

1. The spherical world projection



The ARCTIC OCEAN, centring appro- . The ATLANTIC OCEAN separates the ximately on the North Pole, is almost completely surrounded by the landmass of Eurasia, North America and Greenland.





continents of Europe and Africa to the east from the Americas to the west.



Firma Chr. Beck & Söhne K.G.

KASSEL Wilhelmshöher Allee 40

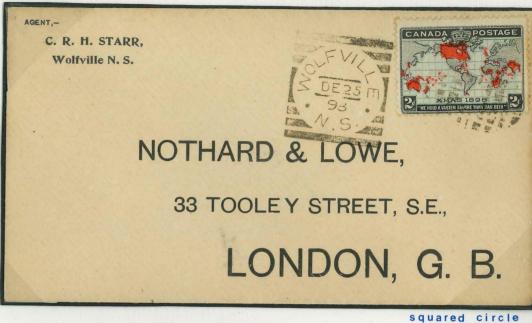
G. KOPPERMANN & CO. HAMBURG 1 Postfach 926

THE OCEANS

6. The cylindrical or Mercator's world projection

In the cylindrical or Mercator projection is used a system based in a flat figure of the Earth, the projection surface of which is a cylinder tangent to the spherical equator.

The PACIFIC OCEAN occupied about one--third of the surface of the earth and is by far the largest of the world's ocean.





blue - green



The ATLANTIC OCEAN with its marginal seas constitutes the world's second largest ocean.



The ARCTIC OCEAN is the smallest of the world's ocean.



The INDIAN OCEAN with its marginal seas constitutes the world's third largest ocean.

postmark



PART 1

NATURAL LINKS BETWEEN THE OCEANS

BESIDES THE DIRECT CONNECTIONS THERE ARE STRAITS AND CHANNELS LINKING OCEANS; BUT SOMETIMES THESE LINKS DON'T EXIST IN LATITUDES WHERE THE MARITIME TRAFFIC IS MORE INTENSE. THAT IS TO SAY BETWEEN THE ATLANTIC AND THE INDIAN AND BETWEEN THE ATLANTIC AND THE PACIFIC OCEANS.

1. The Atlantic and the Arctic

1.1 The direct connection



Between the Atlantic and the Arctic Oceans, besides the connections allowed by the Hudson and the Davis Straits (at the west of the Greenland) and by the Denmark Strait(at the east of Greenland) forward mentioned, it exists a direct connection from the Iceland to the Norwegian coast.





6. The Atlantic and the Pacific

6.2 MAGELLAN STRAIT

The Strait of Magellan is a channel linking the Atlantic and Pacific Oceans between the mainland tip of South America and Tierra del Fuego Island. It is 350 miles long and 2-20 miles wide.





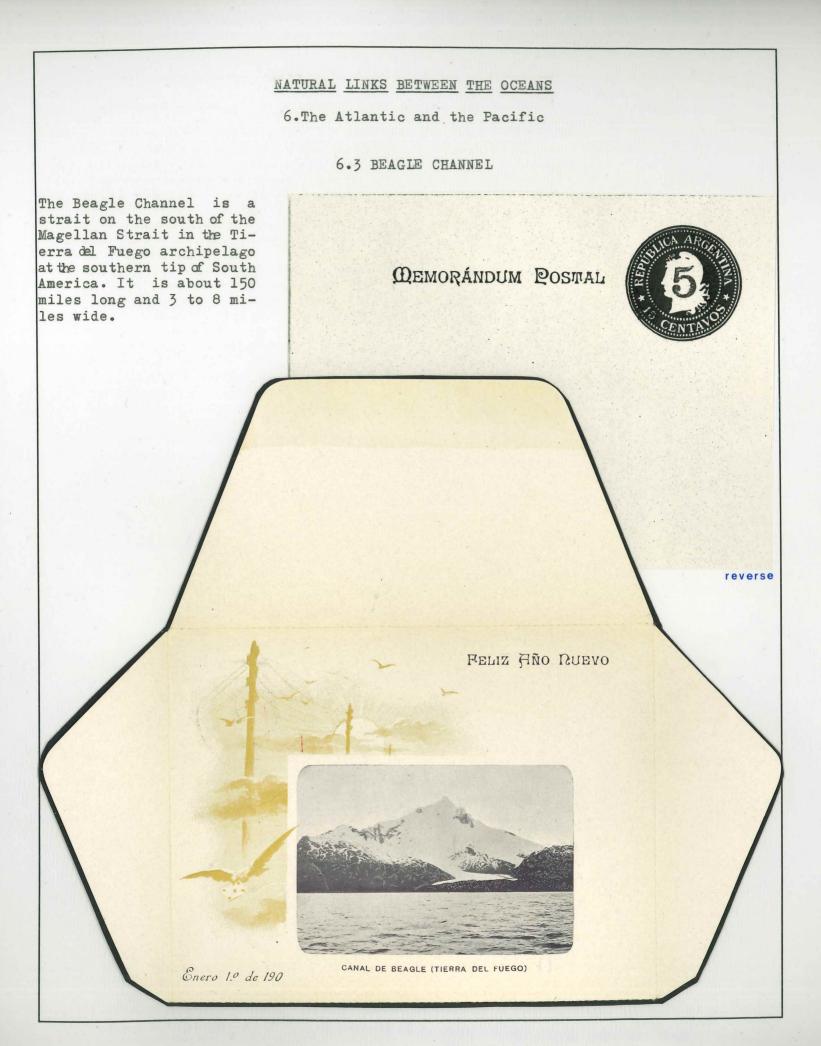
Postmark "Correos Magallames"



two ships Dolphin Swallow, commanded the English naviga—Wallis and Carte—wassed through the rational transformation of the Pacific Ocean.

Postmark "Magallanes"





6. The Atlantic and the Pacific

6.3 BEAGLE CHANNEL



The Beagle Channel was named for the famous British ship "Beagle" in which Charles Darwin explored the area between 1831 and 1836.

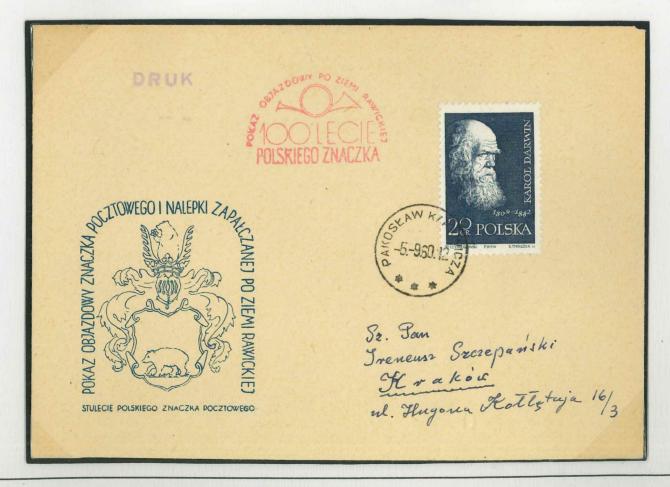






Charles Darwin (1809-1882), English naturalist renowned for the theory of the origin of species.





PART 2

SUEZ CANAL

THE LACK OF A NATURAL CONNECTION BETWEEN THE ATLANTIC AND THE INDI-AN OCEANS SITUATED IN A FAVOURABLE LATITUDE TO THE MARITIME TRAFFIC, GAVE RISE TO THE BUILDING OF A CANAL THROUGH THE ISTHMUS OF SUEZ.

1. Localisation of the Isthmus of Suez



As seen in Part 1, the natural connection between the Atlantic and the Indian Oceans, only discovery in 1488 (forward mentioned), is to be found in the south extremity of the African continent, in a no favourable latitude to the maritime traffic.









The Isthmus of Suez is situated in the north-east of the Egypt and links the African continent with the Asia.



2.Maritime access to the Isthmus of Suez
2.2 On the Atlantic Ocean side
GIBRALTAR STRAIT



The Strait of Gibraltar is a channel connecting the Mediter-ranean Sea with the Atlantic Ocean, lying between southern-most Spain (Rock of Gibraltar) and northwestmost Africa (Mount Macho, near Ceuta). It is 36 miles long and narrows to 8 miles.







Post card circulated on the Strait between Tangier and Gibraltar.







2.Maritime access to the Isthmus of Suez 2.2 On the Atlantic Ocean side

TURKISH STRAITS

The Turkish Straits (the Bosporus and the Dardanelles) allow the connection between the Black Sea and the Mediterranean.

BOSPORUS STRAIT



The Bosporus Strait unites the Black Sea and the Sea of Marmara. It is 19 miles long with a maximum width of 2-3 miles.





Cover circulated in the Bosporus





Constantinople, now Istanbul, is situated on the Bosporus shores.



6. Ferdinand de Lesseps



postmark «PARIS/R.DES ÉCLUSES ST.MARTIN/5418 MAI 69»

The French Emperor Napoleon III was the great support of Lesseps when the British tried to block the building of the Canal.





The stamps of the Suez Canal Company were valid between 8th of July and 16th of August 1868.







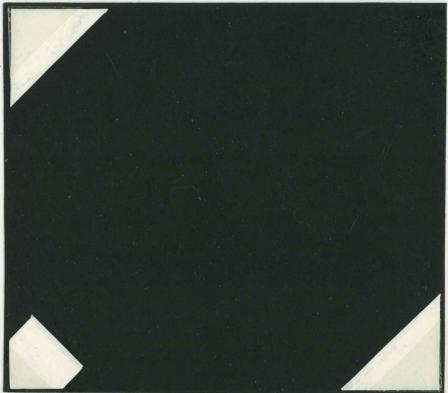




7. The Overland Route

Before the building of the Suez Canal, the only alternative to cut out the interminable voyage via the Cape of Good Hope was to disembark at Alexandria or Suez, proceed overland ("The Overland Route", like Thomas Waghorn with is "Overland Mail" since 1835) and join another ship at the Red Sea end or the Mediterranean respectively.

Covers circulated in the Overland Route



From Portuguese India with boxed transit cachet "POR ALEXANDRIA"



From French India with postmark in red "COL.FRA./13 DEC. 59/V.SUEZ AMB.A"

8. The Canal opening in 1869



The Canal has 105 miles. From its northern terminal at Port Said, the Canal passes through the salt marsh area of Lake Manzala. At about the halfway point it enters Lake Timsah and passes Ismailia. Thence the waterway proceeds through the Bitter Lakes and on to Port Tawfiq, the southern terminal on the Red Sea, a few miles from the town of Suez.



With the progression of the works, the waters of the Mediterranean and of the Red Sea joined in the middle of August (1869).



The Canal was opened officially on 17th of Nov. 1869.

From Hong-Kong with postmark in red "POS.AN. V.SUEZ/13 NOV.69/P.AN. A.MARS."

In 1869 the Viceroy or Khédive of Egypt was Ismail Pasha by death of Said Pasha in 1863.







interpostal seal

The great festivities concerning the inauguration assumed an special importance in Ismailia, where a thousand tents were installed in order to bring about the official banquet followed by fire--works and a ball.

8. The Canal opening in 1869

Individualities that were present at the inauguration festivities



Ferdinand de Lesseps



Postmark slogan "150 ANIVERSARIO/ /NACIMIENTO DE/FERDINAND DE LESSEPS"

From Paris to Cap Haïtien via St. Nazaire, with postmark of 16 DEC.68/LIGNE B * Nº3 (Boat "Impératrice Eugénie")

Empress Eugénie



The Empress Eugénie was in representation of his husband Napoleon III, who was absent due to an illness. SUEZ CANAL
9.After 1869



AINS DE FER DE L'ETAT CHINOIS.

LIGNE DU LUNG HAI.

Hollande,

REGISTERED



Compagnie Générale de Chemins de For et de Prumvays en Chine Go Monsieur légret Wiener Post box, 14

Tcheveninger

From PEKING, registered, via "SHA NGHAI/10 FEB/17",
"VIA SUEZ" in violet, with postmark "MARSEILLE/
20-4/17" and censor cancel in
brown more strip
censor, to "SCHEVENINGEN/20.5.
17" (Netherland).

9.After 1869

Covers circulated in the Canal



From "BOMBAY/24 FEB/73", with postmarks "SUEZ/MR 11/73" in black and "CAIRO/MR 12/73" in blue.



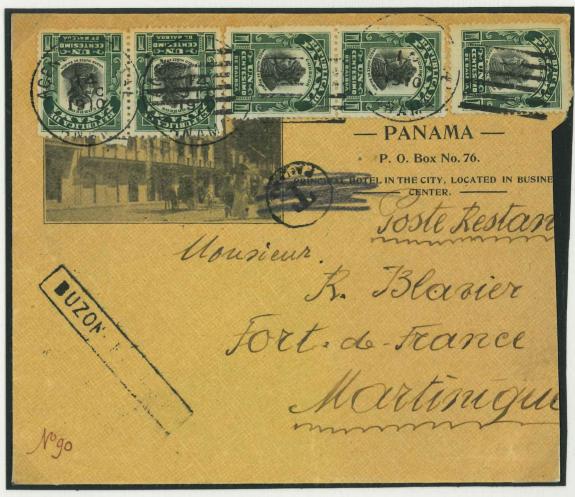
From "ISMAILIA/POSTE EGIZIANE/16/APR/77", with postmark "ALESSANDRIA//POSTE EGIZIANE/16/APR/77" (reverse), via MARSIELLE (reverse) and boxed red cancel "PAQUEBOTS DE LA MEDITERRANEE", to "PARIS/24//AVRIL/77" (reverse).

1. Discovery of the Isthmus of Panama



Vasco Nuñez de Balboa, a Spanish conquistador and explorer, in September 1513 marched south across the Isthmus and ascended the cordillera; on Sep. 25(or 27) he sighted the Pacific.











Some days later, he reached the shore of the Gulf of Panama and took possession of the Pacific Ocean for the King of Castile.









5. The Overland Route

Covers circulated in the Isthmus

Before the building of the Panama Canal, the only alternative to cut out the long voyage via Magellan Strait was to disembarkat Colon(Caribbean Sea) or Panama(Pacific Ocean), proceed overland and join another ship at the Panama or Colon, respectively. The Isthmus was crossed by the Cruces Mule Trail during colonial times. The Transisthmian Railway, between Panama and Colon, was open in 1855.



From "VALPARAISO/SP 30/1849" (Chile), with manuscript tax and British cancel "PANAMA TRANSIT" in red, to HAVRE.

5. The Overland Route

Covers circulated in the Isthmus



From "VALPARAISO/MY 6/1856" (reverse), with manuscript tax and British cancel "PANAMA TRANSIT" in red, to PARIS (reverse).



From "PARIS/15/SEPT/60", with postmark "PANAMA/OC 6/1860"in black, to AREQUIPA(Peru).

7. Ferdinand de Lesseps's project and first works



First, Lesseps proposed a sea--level route via Lake Nicaragua, but construction difficulties forced him to abandon this project in favour of a high-level lock canal between Panama and Colon, proposed in 1879.





pelure



These maps show the route of the proposed Panama Canal.





Bonaparte Wise was the main person in charge of the studies in loco, during four years, used by Lesseps.



Lesseps obtained from Colombia the right to built the canal and formed the "Compagnie Universelle du Canal Interocéanique", that began work in 1881.





The Company failed in 1889 partly on account of poor planning and corruption, but mainly on account of the terrible toll axacted by the yellow-fever carrying mosquitos.



8.United States interest for the construction of the Canal





A Nicaragua stamp of 1900 with the Mo-motombo volcano, resulted in the U.S. Congress selecting Panama (instead of Nicaragua) for building the Canal.

cated by political difficulties and questions of sovereignty. A Treaty between British and the U.S.(1901) recognized the exclusive U.S.right to construct, regulate and manage a canal across the Isthmus; but Panama was Colombian territory and the Colombia Senate refused ratification of a treaty with the U.S.



After a revolt(3 November 1903) and with independent Panama Republic recognized by U.S.6November, in 18 the Hay-Brunau-Varilla Treaty granted the U.S. canal-building rights and the control of the Canal Zone.







"REPUBLICA DE

PANAMA"









Theodore Roosevelt, through his efforts while President of the United States, made possible the construction of the Panama Canal.





10. The Canal

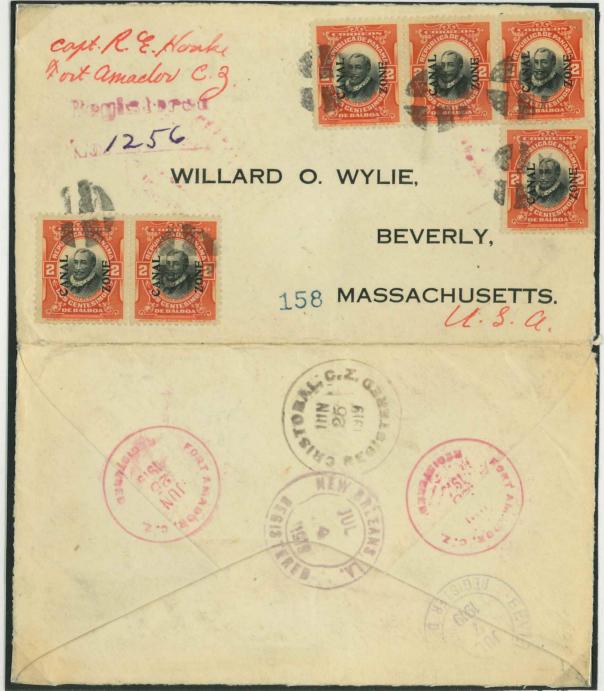
10.1 General view



Canal allegory

The Canal was inaugurated in the 15th of August,1914, but the I World War delayed its full exploitation to 1919/ /1920.

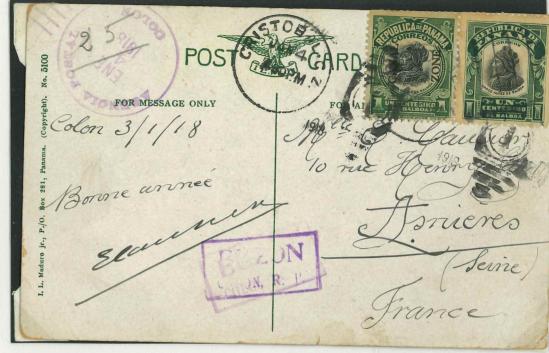




Cover circulated in 25 June, 1919, from Fort Amador(side of Pacific Ocean) until Cristobal (side of Atlantic Ocean), to United States.

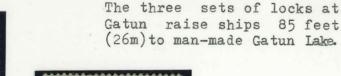
10. The Canal 10.2 Description

The Canal has 11,5 miles from the Atlantic coast, near Cristobal and Colon, to the Gatun Locks.



Cristobal

Postmarks "Cristobal" "Colon"





Gatun Locks







(Chagres).

The engineers created the

Gatun Lake, long and na-

vigable, damming a river

Gatun Spillway

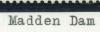




Gatun Lake







2. The Atlantic and the Indian



The only natural connection between the Atlantic and the Indian Oceans exists at the south extremity of the African continent.







LIBERIA POSTAGE

3. The Indian and the Pacific

3.1 The direct connections



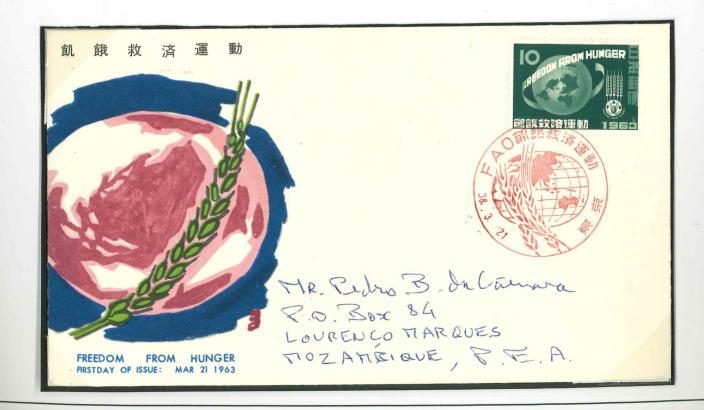
Between the Indian and the Pacific Oceans, besides the connections allowed by the Malacca, Torres and Bass Straits forward mentioned, exist connections between Tasmania Island and Antarctica and through the Philippines and the Indonesia Islands.











3. The Indian and the Pacific

3.2 MALACCA STRAIT





The Strait of Malacca is a waterway connecting the Indian Ocean and the South Chine Sea(Pacific Ocean). It is 500 miles long and 40-155 miles wide.





3. The Indian and the Pacific

3.2 MALACCA STRAIT

The town of Malacca is in the middle of the Strait.



From Singapore to Penang

Covers circulated in the Strait

From Malacca to India



Singapore and Penang are in the extremities of the Strait.

reverse



3. The Indian and the Pacific

3.3 TORRES STRAIT

The Strait of Torres is a passage between the Côral Sea(Pacific Ocean) and the Arafura Sea(Indian Ocean); to the north lies New Guinea and to the south Cape York Peninsula (Queensland, Australia). It is about 80 miles wide and has many reefs and shoals dangerous to navigation.



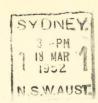
Torres map

The Strait was discovered in 1606 by the Spanish mariner Luis Vaez de Torres and its existence was kept secret until 1764.











Jacques Colin Barrand Esq.,
Attache Commerciale,
Societe Generale,
29, Boulevarde Haussman,
PARIS. FRANCE.

IF UNCLAIMED PLEASE RETURN TO BOX 2670, G.P.O., SYDNEY, N.S.W., AUSTRALIA

3. The Indian and the Pacific

3.3 TORRES STRAIT

The second European to sail the Strait, in 1774, was Capt. James Cook.

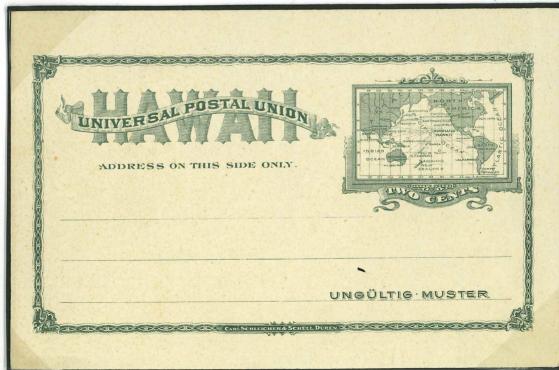








specimen



3. The Indian and the Pacific

3.4 BASS STRAIT

The Strait of Bass is a channel separating Victoria (Australia) from the island of Tasmania on the south. Its maximum wide is 150 miles.













Hooknohlyte
Herrie

Ti Seilerstatte 28. Ich.

Chiefrica

3. The Indian and the Pacific

3.4 BASS STRAIT

The Strait of Bass is named after Bass (a surgeon-explorer) by the English navigator Flinders.



Bass



watermark

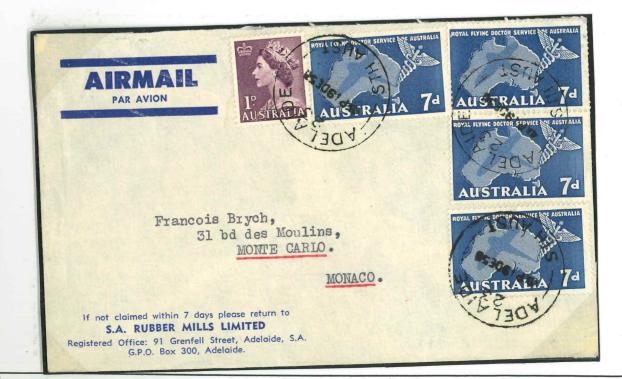




Flinders



watermark



4. The Pacific and the Arctic

BERING STRAIT

The only connection between the Pacific and Arctic Oceans is the Bering Strait that links the Arctic Ocean with the Bering Sea and separates the continents of Asia and North America. It is about 125 miles long and its narrowest is about 53 miles wide.











Saint-Ilja mountain



4. The Pacific and the Arctic

BERING STRAIT

The Strait was named after Vitor Bering (1680-1741), a Danish captain at the service of the tsar Peter the Great, who sailed into the Strait in 1728.



Bering



Saint-Peter (Bering's boat)



Tsar Peter the Great

essay



5. The Atlantic, the Indian and the Pacific and the Antarctic



It is direct the connection between the Antarctic and the others Oceans.

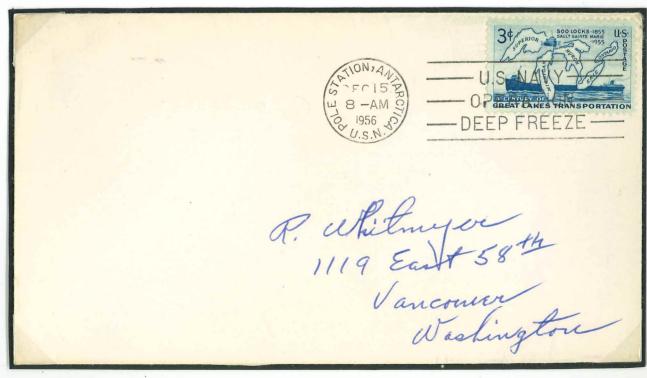








Postmark slogan "U.S.Navy/Operation/Deep Freeze"



6. The Atlantic and the Pacific

6.1 The direct connection





Between the Atlantic and the Pacific Oceans, besides the connections allowed by the Magellan Strait and the Beagle Channel forward mentioned, it exists a direct connection through the Drake Passage, at the south of the Horn Cape (extremity of the South America).





6. The Atlantic and the Pacific

6.2 MAGELLAN STRAIT



Ferdinand Magellan (1480-1521), a Portuguese sailing for Spain (King Charles I, later Emperor Charles V), left Sanlúcar de Barrameda on Sept. 20,1519. After reaching Santa Cruz, Magellan started south again and on October 21,1520, entered the passage that proved to be the strait of his seeking, later to bear his name.



King Charles I





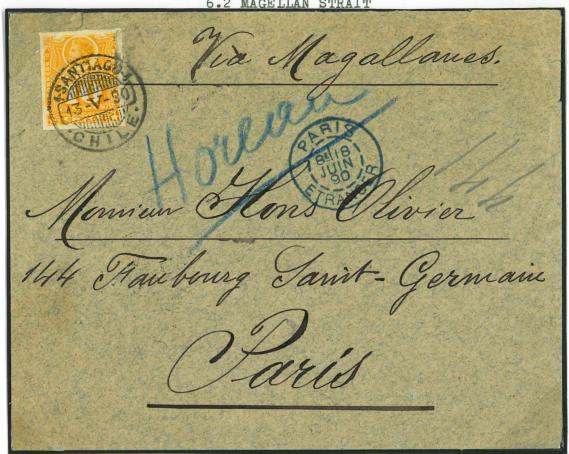
Magellan was killed in a fight with natives on Philippines Islands.





6. The Atlantic and the Pacific

6.2 MAGELLAN STRAIT



Covers circulated in the Strait



1. The spherical world projection



The INDIAN OCEAN extends from the Antarctic region on the south to the continent of Asia in the north and Australia on the east and Africa to the west.



glossy paper







The ANTARCTIC OCEAN also called southern ocean, includes the southern portions of the Pacific, Indian and Atlantic Oceans and their tributary seas surrounding Antarctica.



1. The spherical world projection

The PACIFIC OCEAN extends from the Antarctic region in the south to the Arctic in the north and between the continents of Asia and Australia on the west and North and South America on the east.













4. The open world projection

The open world projection is a variation of the idea of depicting the earth in a single circle.













5. The eliptical world projection

In the eliptical or equal-area projection the surfaces are in the correct proportions but shapes, distances and directions are distorted especially near the edges.













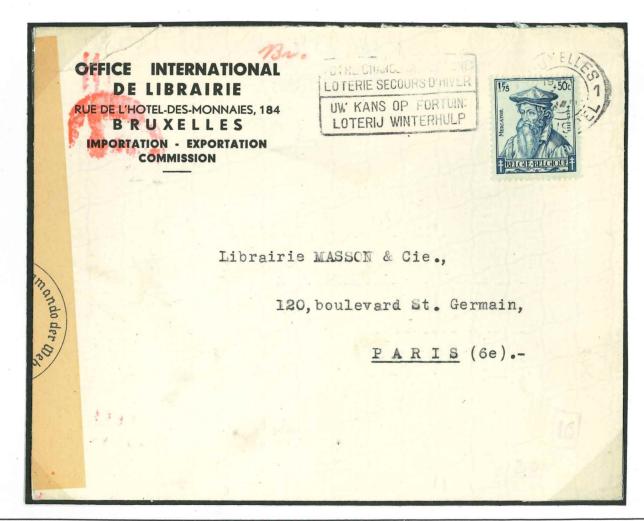
6. The cylindrical or Mercator's world projection







Mercator is a Flemish mathematician and geographer (Rupelmonde 1512-Duisburg 1549) who conceived the cylindrical projection, that was widely known and used.



NATURAL LINKS BETWEEN THE OCEANS

1. The Atlantic and the Arctic

1.2 HUDSON STRAIT



The Hudson Strait, arm of Atlantic Ocean between Baffin Island and northern Quebec, links Hudson Bay and Foxe Basin with the Labrador Sea. It is about 500 miles long and 40-150 miles wide.







Henry Hudson (1515-1611), English navigator and explorer sailed over the Hudson Strait in 1610, that was named after him.

Martin Frobisher, English navigator that explored partly of the Hudson Strait in 1578.



NATURAL LINKS BETWEEN THE OCEANS

1. The Atlantic and the Arctic

1.3 DAVIS STRAIT



watermark C





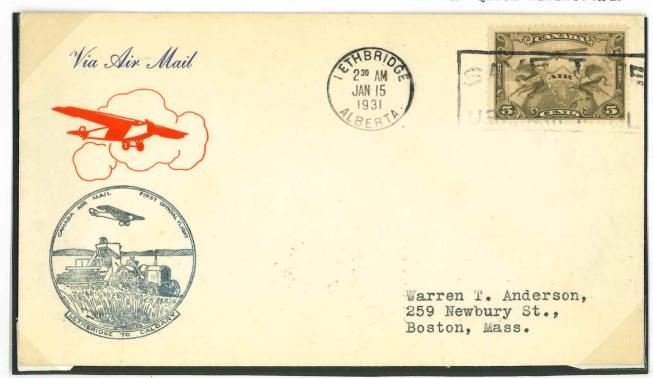
The Davis Strait is situated between southeastern Baffin Island and southwestern Greenland. It is approximately 400 miles long and 200 to 400 miles wide.



The Strait was named for John Davis (1550-1605), an English navigator, who attempted to find the Northwest Passage (between the Atlantic and the Pacific Oceans



Davis proposed his plan to find the Northwest Passage during the reign of the Queen Elizabeth I.



NATURAL LINKS BETWEEN THE OCEANS

1. The Atlantic and the Arctic

1.4 DENMARK STRAIT



watermark C



The Denmark Strait is situated between the Greenland and the Iceland.





Iceland



2.Maritime access to the Isthmus of Suez

2.1 General view



The access to the Isthmus of Suez is possible, on the A-tlantic Ocean side, through the Gibraltar Strait and the Mediterranean Sea (annexed to that Ocean); also annexed sea is the Black Sea which is connected with the Mediterranean through the Turkish Straits.

One can accede to the Isthmus of Suez on the Indian Ocean side, through the Bab--el-Mandeb Strait and Red Sea (annexed to that Ocean).





dark green









2. Maritime access to the Isthmus of Suez
2.2 On the Atlantic Ocean side

TURKISH STRAITS

DARDANELLES STRAIT



The Dardanelles is a narrow strait linking the Sea of Marmara with the Mediterranean. It is 38 miles long and 3/4 to 4 miles wide.





Cover circulated in the Dardanelles







2.Maritime access to the Isthmus of Suez 2.3 On the Indian Ocean side

BAB-EL-MANDEB STRAIT

The Bab-el-Mandeb Strait links the Red Sea with the Gulf of Aden and the Indian Ocean







Aden Harbour

Aden and Djibouti are the harbours more importants in the area of the Strait.



Djibouti Harbour



2.Maritime access to the Isthmus of Suez
2.3 On the Indian Ocean side

BAB-EL-MANDEB STRAIT



Postal cards circulated in the Strait



3. First works



The first attempts to connect the Nile river with the Red Sea date from the pharaohnic period.







Around 1760 B.C. the Pharaoh Sesostris made an attempt to dig a canal connecting the Wile river (Pelusiac branch) with the Red Sea, that functioned with intervals during nearly one thousand years.



Nile river

In 617 B.C. the Pharaoh Necos started the operation to cut a canal which began in Mit Abou Ali (the Pelusiac branch) and ended in the Red Sea(via Timsah Lake, the Bitter Lakes and the Gulf of Suez).



About 523 B.C. Darius I, the King of ancient Persia, finished the construction of the canal.







center



Palace of Darius the Great



Trajan, the Roman emperor, a-round 98 A.C. reconditioning the canal, brought its head to Babylon(near the present city of Cairo) and baptized the canal after his name.



The canal functioned till after the reign of the Caliph Omar Ibn Abdel Aziz (723 A.C.) and afterwards it sanded up due the negligence of the governors.

4. Discovery of the Cape Route



Bartolomeu Dias

The discovery of the natural connection with the Orient using the Cape Route was begun by Bartolomeu Dias - who discovered the Cape of Good Hope in 1488 - and was completed by Vasco da Gama who arrived until Calicut in 1498.



Centenario da India CONCURSO NACIONAL DE TIRO



MAIO DE 1898

Cem Reis DONATIVO PARA OS PREMIOS

CIDADE DE LISBOA

ILL. mo E Ex. mo SR.



Vasco

Gama.

RETRATO E RUBRICA DE VASCO DA GAMA

Pela Commissão

Anselmo de Souza, PRESIDENTE. 7. Pinheiro de Mello, THESOUREIRO.

J. Fraga Pery de Linde, SECRETARIO





Vasco da Gama route





Fleet arriving at Calicut



The Zamorin of Calicut receiving Vasco da Gama







5.Dreams and projects





Q^e

j. & Estantori alle Acque insta la deliberatione per sue Sig-Illustris. presa sotto li 12. No Cancelliero delle Cancellarie del Stato nostro, che per l'auuenire non dia risposta, nè cio, & Magistrato di questa Città, eccettuati però li Eccellentiss. Consegli, e Colleggi, & & li Conservatori delle Leggi, se non saranno ogn'una di esse Lettere incluse, ouero ser uno incluse più di una sollettera debbano le sudette Cancellarie inviarse all'Officio nost livisa consorme alla deliberatione sudettra, & ancora siano tenuti a maggior pene, dove ti Officij, & Magistrati di questa Città, sotto le pene in essa dechiarite, eccettuati li so e, adi primo Febraro prossimo venturo 1608.

Gabriel Coradin D

Lottatibus, lapeis, Rectoribus, Vicaris, et s Ime unicens mettano, ese & Imnocent en lati in nota nelloffe no molestato ne:

"Acque venitien" of the Venitian Republic with the winged Lion, symbol of Venice

TWPERIO COLONIAL
PORTUGUES

WATER TOTAL

WAT

Around 1512, also Afonso de Albuquerque the Great will have possibly thought in connecting the Red Sea with the Mediterranean through the removal of alluvion from the canal of Pharaoh Necos, in order to shorten the way to Europe and reduce the Moslem great power.





In spite of Napoleon had thought in re-establish the connection through the Nile, opened by the pharaohs, one of Napoleon's chief-engineers, J.-M. Le Père, proposed to the Emperor, around 1798, to open a canal on the Isthmus of Suez.





Venitian standard

With the discovery of Cape Route, which reduced the commerce with the Orient through the Venitian Republic, came about since 1504, among the merchants of Venice, the idea of opening a canal to connect the Nile and the Red Sea.



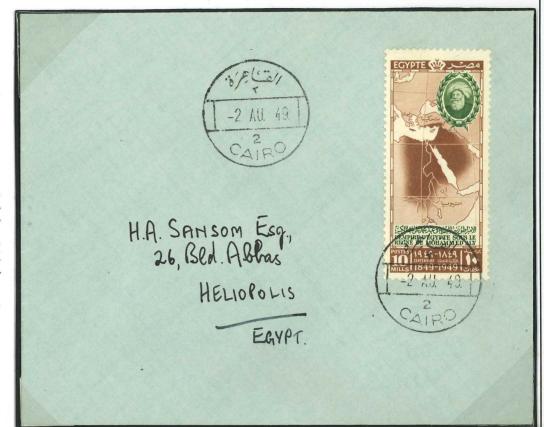
Saint-Simon's door

The projects come one after another; one emphasize the saint-simonians Talabot and d'Enfantin project which in 1846 gave rise to a study society, that sent engineers to the place.

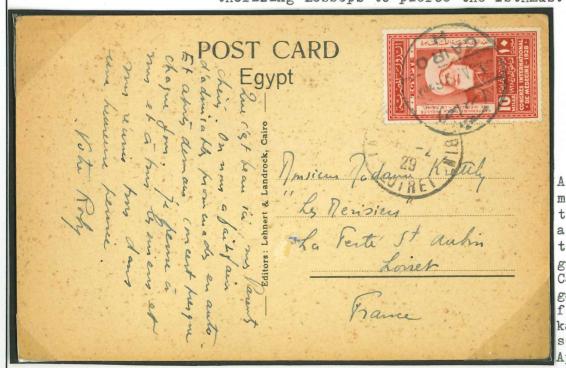
6.Ferdinand de Lesseps



F.Lesseps(1805-1894), a French diplomat, studied(1832) the proposal of J.-M. Le Père to open a canalon the Isthmus and his friendship with Mohammed Aly Pasha and his son Said led Lesseps to hope one day to build the Suez Canal.



Mohammed Aly Pasha and, after, his son Said Pasha support Lesseps. On Nov. 30, 1854, Said Pasha signed the first act of concession authorizing Lesseps to pierce the Isthmus.





A first scheme was immediately drawn up without using locks and adopted by an international comission of engineers (1856). The Suez Canal Company was organized in 1858. The first blow of the pickax was given by Lesseps at Port-Said on April 25, 1859.

7. The Overland Route

Covers circulated in the Overland Route



From Netherlands Indies with postmark in red "PAYS ETR./24 MAI 61/V.SUEZ AMB."



From China with postmark in red "PAQ.AN. V.SUEZ/26 AOUT 63/AMB.MARS.2"

7. The Overland Route

Covers circulated in the Overland Route



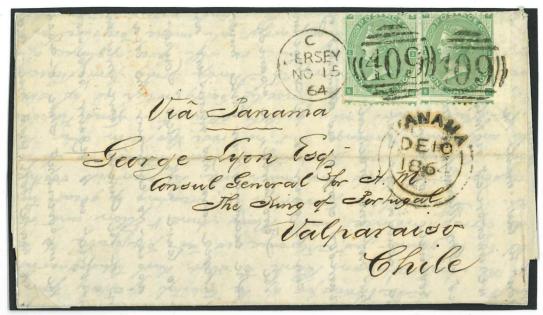
From Réunion Island with postmark in red "COL.F. V.SUEZ PAQ.F./15 JANV.66/MARS."



From Mauritius Island with postmark in red "POS.AN. V.SUEZ/15 JUN.68/P.F. AMB.MARS."

5. The Overland Route

Covers circulated in the Isthmus

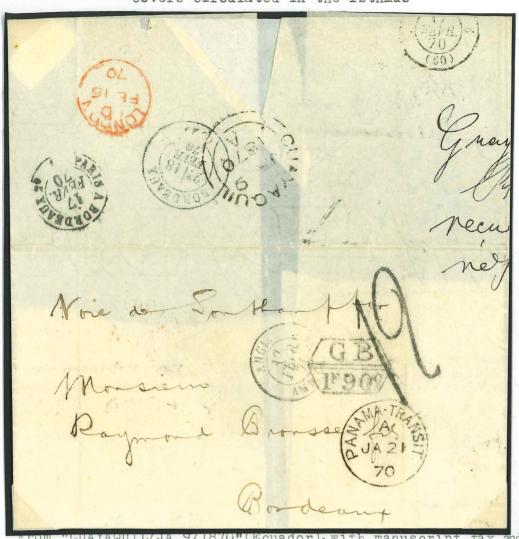


From "JERSEY/NO 15/64, with postmark "PANAMA/DE 10/1864" in black, to VALPARAISO.



From PANAMA, with cancel "GB/1F90C" in black, to AMIENS.

PANAMA CANAL 5. The Overland Route Covers circulated in the Isthmus



From "GUAYAQUIL/JA 9/18/0" (Ecuador), with manuscript tax and postmark "PANAMA-TRANSIT/JA 21/70", to BORDEAUX.



From "GUAYAQUIL/MR 9/1871" (reverse), with manuscript tax and postmark "PANAMA-TRANSIT/MR 20/71", to LONDON.

6. Project of canal by Nicaragua

A great number of projects came out between 1845 and 1870. Some of them used the Isthmus of Panama and others the Nicaragua depression. In 1870, a comittee of american scientists appointed by the United States Congress, pronounced itself in favour of the Nicaragua depression planning.







The proposed route, which was to follow the San Juan river for part of its distance, then through Lake Managua, is delineated on a map of the country showed in the stamps and postal cards.









9.Occupation of the Canal Zone and building of the Canal





Occupation of what later came to be known as the "Canal Zone" (about 5 miles of land on each side of the future canal) by the Americans began in May 1904 and it started by controlling the insect pests.





overprint "CANAL ZONE"

The construction of the Canal under U.S. supervision, which had begun in 1904, was accelerated after the U.S. Congress adopted John F. Stevens'plan (with high-level locks).



John F.Stevens





George Washington Goethals was the engineer who directed the building of the Canal.



9.Occupation of the Canal Zone and building of the Canal



Construction of the Canal





white paper light blue











10. The Canal

10.1 General view











center misplaced

overprint
"CANAL ZONE"



10. The Canal 10.1 General view



Postmark slogan "THE PANAMA CANAL/SPEEDS WORLD COMMERCE"





Postmark slogan "THE PANAMA CANAL/GATEWAY OF WORLD TRADE"



Postmark slogan "THE PANAMA CANAL/SHORT ROUTE TO WORLD MARKETS"

10.The Canal
10.2 Description



Gamboa

The Canal continues south and southwest through a channel in the Lake for about 23 miles to Gamboa, where the Culebra Cut begins.







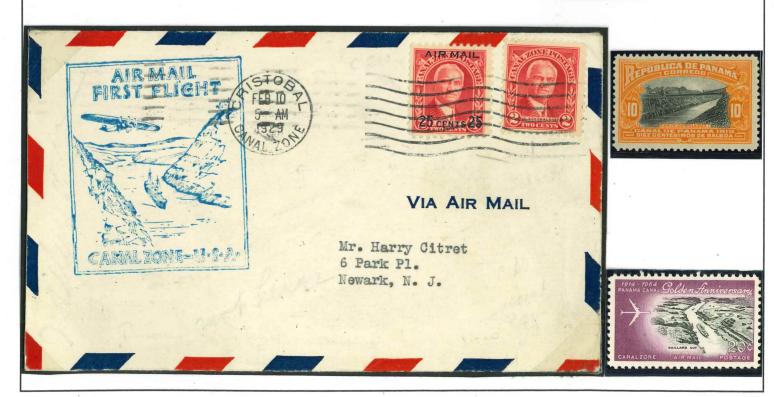
Gaillard

The Gaillard or Culebra Cut (Culebra being the native name and Gaillard the name of the U.S. engineer responsible for its cutting) is 8 miles long and 500 feet wide.

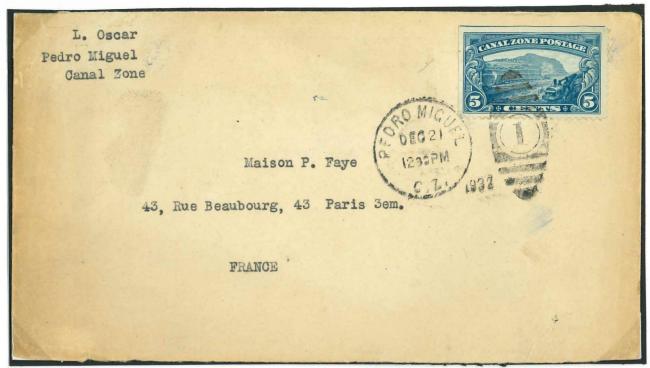


Gaillard or Culebra Cut





10.The Canal
10.2 Description



Postmark from "PEDRO MIGUEL"



After the Culebra Cut appears the Pedro Miguel Locks, a single lock lowers ships 31 feet (9,4m) to a small lake.





Pedro Miguel Locks





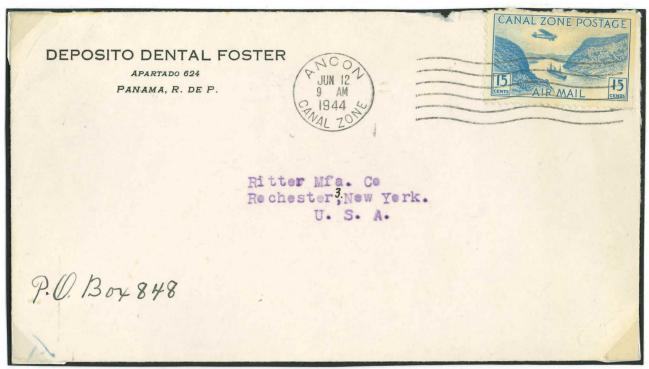


10.The Canal 10.2 Description



Miraflores Locks

The vessels pass one mile through the small lake and are lowered another 54 feet(16m) by the two sets of locks at Miraflores.



Postmark from "ANCON"



Balboa



After, the Canal pass to the sea--level dredged channel 7 miles long, near Ancon and Balboa, and arrived to the Pacific.





center misplaced



3. Maritime access to the Isthmus of Panama



The Pacific Ocean is in direct contact with the Panama Isthmus in the gulf that carries the same name; in what concerns the Atlantic Ocean, the access is possible through the Caribbean Sea.







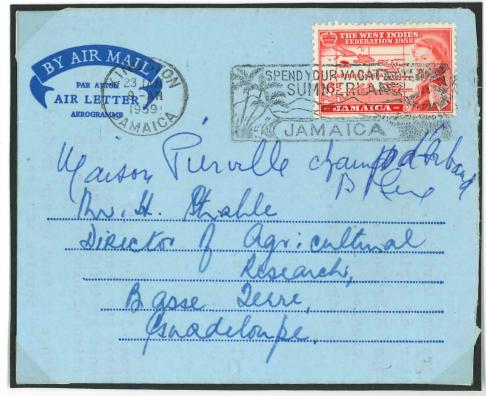
The Caribbean Sea, suboceanic basin of the western Atlantic Ocean, is situated north of Equator in the Western Hemisphere and washing the northern coasts of South America and the eastern coasts of Central America and part of Mexico.





The Atlantic Ocean connects with the Caribbean Sea through Channels: YUCATAN; WINDWARD; JAMAICA; MONA; and other Channels or Straits between the islands of the Lesser Antillean Chain.





3. Maritime access to the Isthmus of Panama



The Yucatan Channel is a strait connecting the Gulf of Mexico and the Caribbean Sea.









The Hispaniola Island is separated: from Cuba by the Windward Channel; from Jamaica by the Jamaica Channel; and from Puerto Rico by the Mona Channel; Other straits separate the islands of the Lesser Antillean Chain.



4. Dreams and projects



In 1528, the Emperor Charles V demanded a research study about the possibility of opening a maritime passage in Central America.











In 1780, Nelson stood up for the opening of a canal through the Nicaragua.





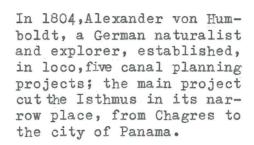


4. Dreams and projects



















Simon Bolivar, the Liberator (1783 - 1830), thought also in a project to open a canal in Panama.







4. Dreams and projects

In 1845, the Nicaragua Government wanted the success of the canal project that crossed the country and also wished to attract the european capital funds. So, asked for the support of Louis Bonaparte, imprisonned in Ham (Somme/France).











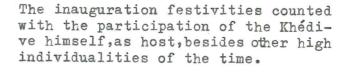




8. The Canal opening in 1869



Khédive Ismail Pasha





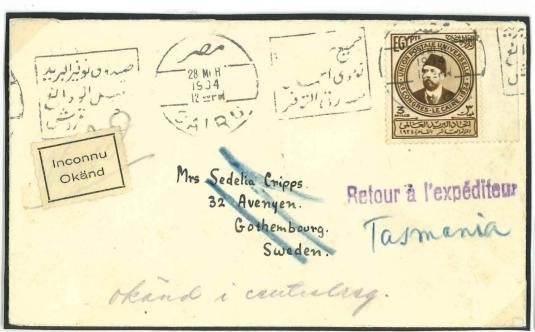


















8. The Canal opening in 1869
Individualities that were present at the inauguration festivities



Emperor Franz Josef







Edward, Prince of Wales



8. The Canal opening in 1869
Individualities that were present at the inauguration festivities

Prince Henry of the Netherland



Coat of arms of the Netherland













Emir Abd-el-Kader (of Damas)







8. The Canal opening in 1869

Individualities that were present at the inauguration festivities

Kronprinz Frederick of the Prussia



Coat of arms of the Prussia





Duke of Aosta (Italy)







Inglaterra. 28

Mrs de la Juintant

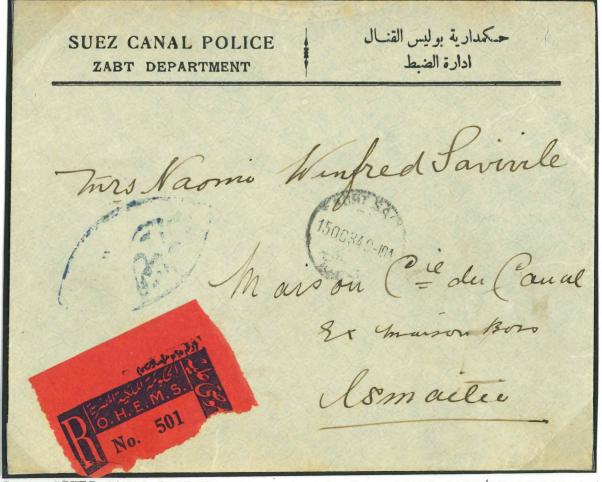
4. Ambridge Ogre, 2

Mayswater.

London.



From "BRISBANE/6 JU 81/QL", with postmark "AIEXANDRIE/2 AOÛT 81//ECYPTE", via LYON (reverse), to "ORLEANS/9 AOÛT 81" (reverse).



Cover "SUEZ CANAL POLICE", registered, from "PORT-SAID/15 OC 34" to "ISMAILIA/15 OC 34" (reverse).

2. Localisation of the Isthmus of Panama







The Isthmus of Panama is situated in the middle of the American continent.



As seen in Part 1, the natural connections between the Atlantic and the Pacific Oceans are to be found in the south extremity of the American continent, in a no favourable latitude to the maritime traffic: Magellan Strait, Beagle Channel and Drake Passage.



watermark





K. BLUMENSAADT 6221 Addison Street Chicago, U. S. A.









10570753

Mr. Henri Paris,
Libraine Haiphonaise
33 Bd. Amirat-Courbet

Haiphong, Indo-China Française

via Hongkong,

