HISTORY OF OPHTHALMOLOGY
TOLD BY POSTAGE STAMPS

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Théa
let's open our eyes

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EDITION

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Edition 2019.

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TO LILIANA

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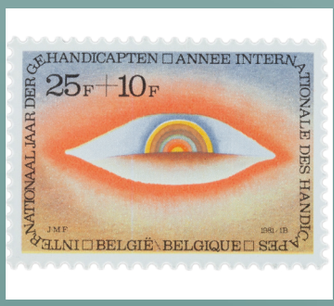




















Collecting stamps is one of the most popular hobbies in the world. Many collectors limit their scope to particular countries or themes. For obvious reasons I chose to collect stamps related to ophthalmology. Searching for them and learning about their back-story has been a pleasant way to discover the history of ophthalmology.

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My collection started 23 years ago when one of my patients offered a book showing the stamp collection of a Romanian ophthalmologist, Dr. L. Berar who lived and worked in Germany. Browsing through that book, I found beautiful stamps that I wished to own. This was the motivation to start my collection of ± 900 stamps, all related to ophthalmology, neatly organized in my album. I would like to share with you a selection of them.

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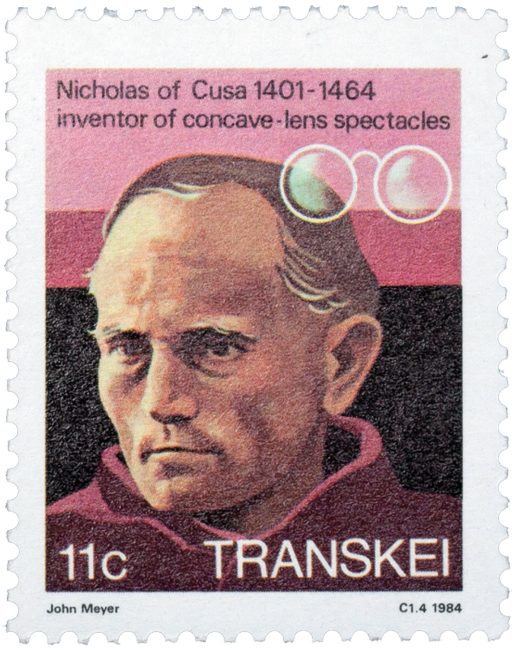
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FORERUNNERS



Nicholas of Cusa

(1401-1464)

The invention of concave lenses to correct myopia is often credited to Nicholas of Cusa, a Cardinal and diplomat of the Roman Catholic Church. This is based on his monograph "De beryllo" (On Eyeglasses), published in Latin in 1458, where he described "transparent beryl stones to which concave and convex forms were given; by looking through them you could perceive what was previously invisible". Up to then spectacles were only equipped with convex lenses to correct for presbyopia.

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Horus is a falcon-headed solar god. The symbol was pictured in Egyptian iconography as the letter "R" with the eye inside the top circle and it became a symbol of "healing". It is also believed to be the origin of "Rx" in our prescriptions.

The falcon headed god is shown on a stamp issued for the 15th International Congress of Ophthalmology held in Egypt in 1937 and another one issued for the Congress of International Geography in 1925 also in Egypt. Note that in that time French was also an official language in Egypt!

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The Ebers Papyrus of about 1550 B.C. is among the most important medical papyri of ancient Egypt. It is one the oldest preserved medical documents anywhere. The Ebers Papyrus was discovered in Luxor in 1873-74 by Georg Ebers, German Egyptologist, and is now stored in the library of the University of Leipzig, Germany.

The scroll is 20 m long and contains 900 recipes in hieroglyphs among them more than 20 related to eye diseases: strabismus, blepharitis, chalazion, ectropion, pterygium, conjunctivitis, trachoma with trichiasis, leukoma, iritis, cataract, night blindness, carcinoma and others.

Note that UAR stands for United Arab Republic: the former union between Egypt and Syria. The union began in 1958 and existed until 1961 when Syria seceded from the union. Egypt (which stayed alone in the union) continued to be known as the "United Arab Republic" until 1971.

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Pope John XXI

(1215-1277)

Also called Pedro Hispáno although he was from Portugal. He was Pope from 1276 until his death about 8 months later. He was the only Portuguese Pope and the only ophthalmologist who made it as a pope. Note how he is practicing couching of the lens with a needle as a surgical cure for cataract.

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Johann Eisenbarth

(1663-1727)

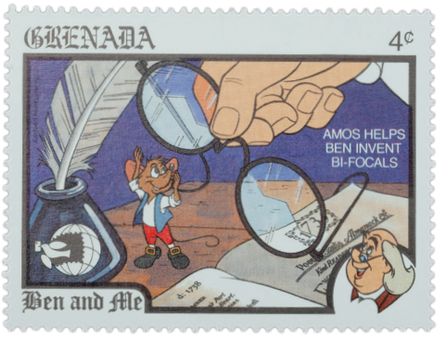
Was a German surgeon specialized in cataract surgery. Although, he was referred to as "Dr. Eisenbarth", he had no medical degree, but he was considered a skilled surgeon and was bestowed with privileges by German royalty.

Eisenbarth was a "travelling surgeon" (like Dr. John Taylor who operated Bach and Händel). He usually travelled with a large entourage of up to 120 persons. This group included entertainers, harlequins and musicians who performed in a carnival-like atmosphere while Eisenbarth was operating. This spectacle attracted large crowds, and the loud music helped drown out the cries of pain from his patients.

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Benjamin Franklin

(1706-1790)

One of the founding fathers of USA, is usually credited with the creation of the first pair of bifocals in the early 1760s. In a political cartoon "Ben and Me", pictured by Walt Disney in 1953, the mouse Amos helps Ben (Benjamin Franklin) to invent bifocals by breaking the glasses into two horizontal pieces.

Norman Rockwell was a 20th century American painter and illustrator. He used "vertical bifocals" instead of horizontal bifocals so he could look from side to side - from his canvas to a distant model, rather then up and down.

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Carl Zeiss

(1816-1888)

As a forerunner we cannot forget Carl Zeiss shown here on a stamp from former East Germany, commemorating the 110th anniversary of his factory in Jena. He laid the foundation for today's multi-national company with its headquarters in Oberkochen, a small town in southern Germany. The Zeiss Group is one of the oldest existing optics manufacturers in the world.

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FAMOUS OPHTHALMOLOGISTS



Visual screening in Trinidad & Tobago. When was the last time you saw an ophthalmologist wearing a stethoscope?

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Jacques Daviel

(1696-1762)

Was a French ophthalmologist, who became famous for having introduced extra-capsular cataract extraction (ECCE) in 1748. Daviel's corneal incision was done with a keratome and scissors until Von Graefe introduced the linear scleral incision with Von Graefe's knife.

Before 1748 the technique of couching was used to treat cataract since 1000 B.C. Couching (from the French word "coucher") consists of dislocating (and "laying down") the opaque lens into the vitreous with a needle. Historical evidence suggests that couching arose on the Indian sub-continent. From India, it appears to have passed to the Greeks and Romans, then to Arabic medicine in the Middle Ages, to emerge finally as a well-established European practice. The persistence of the technique probably lies in its simplicity, the sensational results possible when the operation is successful, and various factors that make couching particularly appealing to "traveling surgeons" like Eisenbarth and Taylor. ECCE replaced the technique of couching although it is still practiced today in parts of Asia and Africa.

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Carl Ferdinand Ritter von Arlt

(1812-1887)

Was an Austrian ophthalmologist. He became professor of ophthalmology in Prague and afterwards in Vienna. Ritter von Arlt published a great number of books and articles concerning diseases of the eye. He was the first physician to prove that myopia is a consequence of excessive axial length of the eye.

The following eponyms are named after him:

- Arlt's syndrome for trachoma ;
- Arlt's operation for treatment of districhiasis (with transplantation of eyelashes) ;
- Arlt's line: scar in the upper palpebral conjunctiva caused by trachoma.

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Franciscus Cornelis Donders

(1818-1889)

Was a Dutch ophthalmologist. He was professor of ophthalmology in Utrecht in 1852 and founded there the "Royal Eye Hospital of Utrecht" where Herman Snellen was his assistant and successor. He wrote the famous book "On the anomalies of accommodation and refraction of the eye". He is primarily known for introducing cylindrical lenses for the treatment of astigmatism.

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Hermann von Helmholtz

(1821-1894)

Was a German physician and physicist (he was not an ophthalmologist). In 1851 Helmholtz became world famous overnight with the invention of the ophthalmoscope. Before his invention, it was not possible to visualize the posterior pole of the eye in a living subject.

The ophthalmoscope became the model for all forms of endoscopy that followed. It is often compared in importance with two earlier inventions, the telescope (17th century) and the stethoscope (early 19th century).

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Albrecht von Graefe

(1828-1870)

Famous German ophthalmologist, is one of the pioneers of modern ophthalmology.

Von Graefe contributed greatly to ophthalmological science, particularly by launching in 1855 his "Archiv für Ophthalmologie", in which von Arlt and Donders collaborated.

He is known for Graefe's sign in Basedow's disease. Perhaps his two most important discoveries were the iridectomy to treat acute angle closure glaucoma (presented at the 1st International Congress of Ophthalmology in Brussels in 1857) and his "von Graefe's knife" to operate cataract. It is interesting to note that von Graefe initially thought that removing part of the iris reduced also partially the production of aqueous humour!

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Jules Gonin

(1870-1935)

Was professor of ophthalmology in Lausanne (Switzerland) and pioneered the first successful surgery for retinal detachments.

Consequently, the Club Jules Gonin was founded in Lausanne in 1959 attracting the most prestigious posterior segment specialists from around the world.

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Allvar Gullstrand

(1862-1930)

Was professor of ophthalmology at the University of Uppsala, Sweden. Gullstrand is the inventor of the slit lamp and improved the ophthalmoscope. He is also known for his research on astigmatism and for corrective lenses after cataract surgery.

He is the only ophthalmologist who received the Nobel Prize in Medicine in 1911 (on the stamp with Wilhelm Wien, German physicist, Nobel price in Physics).

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Wladimir Filatov

(1875-1956)

Russian cornea specialist, attempted his 1st corneal transplantation in 1912 and performed more than 3,500 cornea transplantations using cadaveric corneas. The first cornea transplantation was performed in 1905 by Eduard Zirm, Austrian ophthalmologist.

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Hungarian stamp with

Allvar Gullstrand, Wladimir Filatov, and Jules Gonin

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The most famous Portuguese ophthalmologist, apart from pope John XXI, was

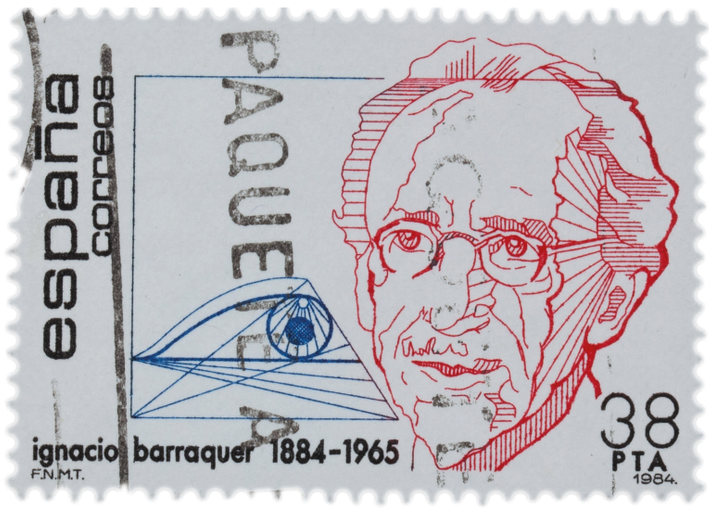
Gama Pinto

(1853-1945)

He trained with Hirschberg in Berlin and was associate professor in Heidelberg under Otto Becker. He was appointed by the Portuguese state as head of the "Instituto Oftalmologico" in Lisbon, an eye hospital with 100 beds.

"Estado da India", also referred as Portuguese state of India, was a state of the Portuguese Overseas Empire founded 6 years after the discovery of India by Vasco Da Gama in 1498. Later it became better known as Goa where Pinto was born.

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Ignacio Barraquer

(1884-1965)

Was a Spanish ophthalmologist known for his contributions to the advancement of cataract surgery. He was the founder of Instituto Barraquer in Barcelona and father of two ophthalmologists: Joachim, who stayed at the Institute, and Jose, who moved to Bogota, where he became known to many as "the father of refractive surgery" after introducing keratomileusis and keratophakia.

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Harold Ridley

(1907-2001)

Was pioneer of intra-ocular lenses (IOL's). He implanted the first intraocular implant made from polymethylmethacrylate (PMMA) in 1949, after observing that World War II Royal Air Force fighters could tolerate fragments of plastic aircraft canopies in their eyes.

His work was initially rejected by most of the ophthalmic community, but after years he was given his rightful place, documented here by this stamp issued in 2010.

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Baron Jules François

(1907-1984)

The best known Belgian ophthalmologist in the world. I had a special stamp created for him by the Belgian post office. Jules François studied medicine and ophthalmology at the University of Louvain. He was head of the department at the University of Ghent for 30 years and put this city on the ophthalmological map.

François published more than 1,500 scientific papers, among them on the pathophysiology of steroid induced glaucoma. He is probably best known for his scientific work on ophthalmo-genetics (among this on primary open-angle glaucoma).

He also designed instruments for tonometry, perimetry, dark adaptation, and electro-oculography. He described a number of syndromes including corneal dystrophies, vascular pseudo-papillitis, and fundus flavi-maculatus.

He was a great diplomat and reunited the ophthalmologists all over the world creating the Academia Ophthalmologica Internationalis in 1975.

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OPHTHALMOLOGISTS CHOOSING A DIFFERENT PATH



Carlos Finlay

(1883-1915)

Was an ophthalmologist in Cuba. Born from a Scottish father and a French mother he became famous for his work in identifying the mosquito (Aedes species) as the vector causing yellow fever.

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Jose Rizal

(1861-1896)

Was born in the Philippines. He finished both medicine and philosophy in 1885 at the University of Madrid and became an ophthalmologist (examining his mother on the stamp at the top left) at the university of Heidelberg under Otto Becker and Gama Pinto. He could speak 10 different languages including Greek and Latin.

He became a leader in activities directed to the independence of his country. Rizal's novel "Noli Me Tangere" exposed the cruelties of the monks in the Philippines, the vices of the clergy, and the defects of the Spanish administration. He was arrested and executed on December 30, 1896. That day is still celebrated as a national holiday in the Philippines.

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Ludwig Zamenhof

(1859-1917)

Was a Polish ophthalmologist who studied in Vienna, polyglot and the inventor of Esperanto, a constructed language designed for international communication. He was not successful in his practice and focused totally on the development and spread of Esperanto.

Zamenhof had another connection with ophthalmology. He became close friend with Emile Javal, famous French ophthalmologist. Javal became blind from glaucoma in 1900 and became an active supporter of Esperanto together with Zamenhof.

As of 1975, Esperanto was taught in 600 schools and there were about 100 journals and 7,500 books written in Esperanto. As of 2000, according to Cambridge Encyclopedia, it had somewhere between 1 and 15 million speakers.

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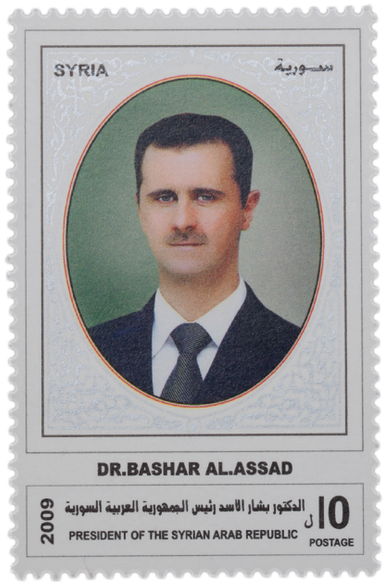
Sir Arthur Conan Doyle

(1859-1930)

Was a Scottish author mostly known for his stories about the detective Sherlock Holmes.

Less known is that he studied medicine and ophthalmology in Vienna; he moved to London in 1891 to set up a practice as an ophthalmologist. He wrote in his autobiography that not a single patient crossed his door, so he could dedicate more time to writing detective stories!

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Bashar Al Assad

(born in 1965)

President of Syria, is also an ophthalmologist. He was trained in the UK at the London Western Eye Hospital. After his older brother was killed in a car accident he was called back to Syria to became the president in 2000.

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EYE DISEASES



Bophuthatswana (a state in South Africa that was independent from 1977 till 1994, not to be confused with Botswana) issued this stamp in 1981 to celebrate the International Year of the Disabled.

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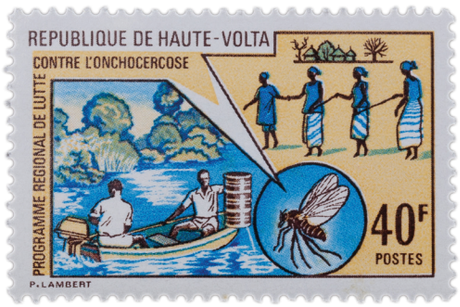
Trachoma (Greek for "rough eye") is the world's leading cause of infectious blindness. Trachoma is caused by the bacterium chlamydia trachomatis and it is spread by direct and indirect contact with eye, nose and throat secretions from affected individuals. The incidence has decreased since the availability of Azithromycin to developing countries.

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Onchocerciasis or river blindness is the world's second leading cause of infectious blindness. It is caused by Onchocerca volvulus, a nematode that can live for up to fifteen years in the human body. It is transmitted to people through the bite of the black fly. Here also the incidence has decreased since the availability of Ivermectine, to developing countries.

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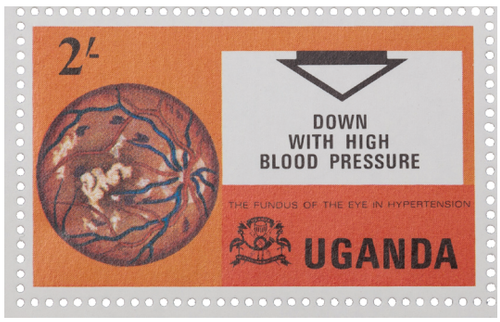
Xerophthalmia (Greek for “dry eyes”) is caused by malnutrition, particularly a deficiency in vitamin A. The incidence of this eye disease also decreased because of improvements in nutrition and water supplies.

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Diabetic retinopathy



Hypertensive retinopathy

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Behcet's disease, described by the Turkish dermatologist

Hulusi Behçet

(1889-1948)

is an auto-immune vasculitis causing the triad:

- oral ulcers ;
- genital aphthous ulcers ;
- uveiti.

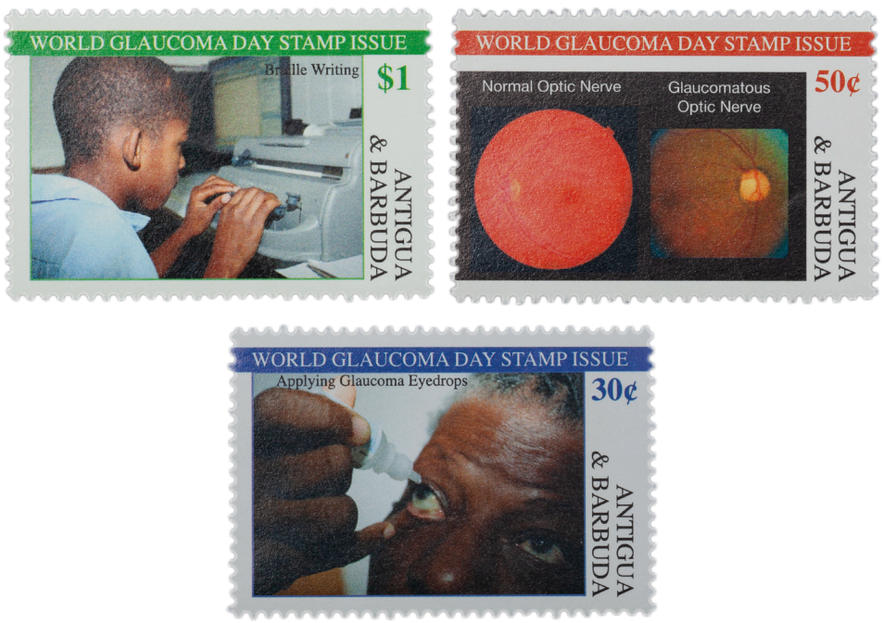
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The impact of cataract surgery.

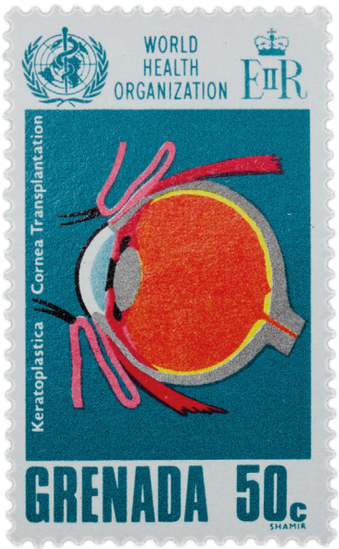
Chinese stamp showing a happy, smiling patient threading a needle after successful cataract surgery. The other patient in the background was just operated from cataract and shows the V sign.

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Glaucoma: three commemorative stamps issued by Antigua & Barbuda for the first World Glaucoma Day on March 6, 2008.

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The first cornea transplantation was performed in 1905 by Eduard Zirm, Austrian ophthalmologist (1863-1944). Wladimir Filatov (1875-1956), Russian cornea specialist, performed more than 3,500 cornea transplantations using cadaveric corneas.

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Vitrectomy in Africa, shown on a stamp issued at the occasion of the 75th Anniversary of Rotary International.

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LIONS CLUB



Several stamps related to vision have been issued to honour Lionism. It was Helen Keller, a famous deaf-blind American author, remembered as an advocate for people with disabilities who, in a speech in 1925, challenged Lions to become “knights of the blinds in the crusade against blindness”.

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BRAILLE LEAGUE



Louis Braille

(1809-1852)

Was born on January 4, 1809 in Coupvray, near Paris. At the age of three he was injured in his right eye when playing with a bodkin in the workshop of his father who was a saddle maker. The wound infected and the inflammation spread to the left eye. It is believed that Louis Braille became blind from sympathetic ophthalmia.

In 1819 he was sent to the Paris Blind School, which was founded by Valentin Haüy. He learned to read by embossed Roman letters, which were exclusively used at the time and which continued to be popular for fifty years in France and the UK, and is still used in several schools in America. He developed in 1829 his system of reading and printing which utilizes raised dots on paper. Each character is represented by a block arranged in 2 columns of 3 points; the number and arrangement of raised dots in each block

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distinguish one character from another. The Belgian stamp in the lower right corner, celebrating Braille's 200 year anniversary, has raised dots that can be read by blind and visually impaired people.

The Brailleliga / Ligue Braille, a Belgian non-profit organisation, was founded in 1920. The association has four fundamental missions:

- support blind and partially sighted people in order to increase their independence and facilitate their integration into society ;
- represent the interests of blind and partially sighted people so that their needs are better taken into account ;
- educate the general public about the difficulties encountered by blind and partially sighted people ;
- in collaboration with a scientific committee, support scientific research in ophthalmology.

The Brailleliga / Ligue Braille is now lending support to over 15,500 blind and partially sighted people all over the country. It offers its members free assistance and support in the areas of social support, learning techniques that increase independence, employment and leisure activities. The Brailleliga / Ligue Braille owes its existence to the generosity of the general public, as grants cover less than 20% of its needs.

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CONGRESSES



Stamp commemorating the 50th Congress of the Greek Ophthalmological Society in 1981.

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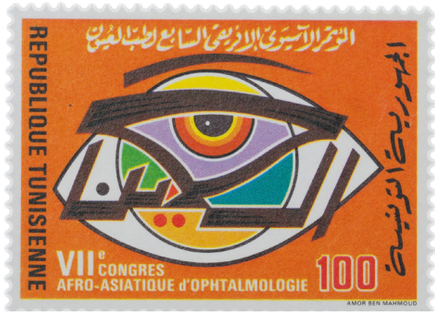




Stamps commemorating the 10th SOE congress in Rome in 1955 and the 11th Pan-American Congress of Ophthalmology in Chile in 1977.

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Stamps commemorating the 1st Afro-Asian Congress of Ophthalmology in Egypt (UAR) in 1958 and the 7th Afro-Asian Congress of Ophthalmology in Tunisia in 1980.

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Stamps commemorating the 19th International Congress of Ophthalmology in India in 1962 and the 21st International Congress of Ophthalmology in Mexico in 1970.

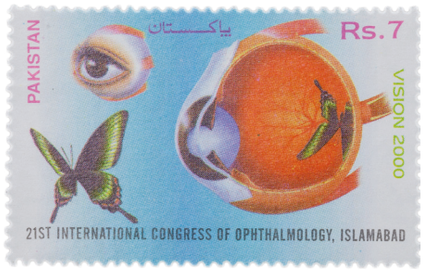
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Stamps commemorating the 23rd International Congress of Ophthalmology in Japan in 1978 and the 25th International Congress of Ophthalmology in Italy in 1986.

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Pakistan issued a stamp for the 21st "International Congress of Ophthalmology" in Islamabad in 1998.

In fact this stamp commemorates the 21st Annual Congress of the Ophthalmological Society of Pakistan, a congress that invited international speakers. The real 21st International Congress of Ophthalmology took place in Mexico in 1970.

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Stamp commemorating the 15th International Congress of Ophthalmology in Egypt in 1937.

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