

# BITTER PILLS AND STRONG DROPS

The exhibit is a story about drugs, told from a pharmacist's point of view.

The aim with the exhibit is to give you a trace to the humanity's incessant searching for new and better drugs against our illnesses and pain.

It is, of course, impossible to show all drugs and their use. I have chosen my most important and appropriate wide range of philatelic items to illustrate the story and some selected drugs.

Most of the drugs for a very long time were claimed to be used against nearly every disease. But the ingredients were often secret, the effect was usually doubtful and unproved, and some may even be harmful.

The scientific and industrial revolution created a lot of new drugs. Pre-packed drugs sold "over-the-counter", without a doctor's prescription, flourished and were announced without inhibitions. An example is "Chok Marafet" Cure.

But useful "modern" drugs were developed. An example is Aspirin (containing acetylsalicylic acid): one of the most widely used drugs in the world, now mainly used to prevent blood clots.

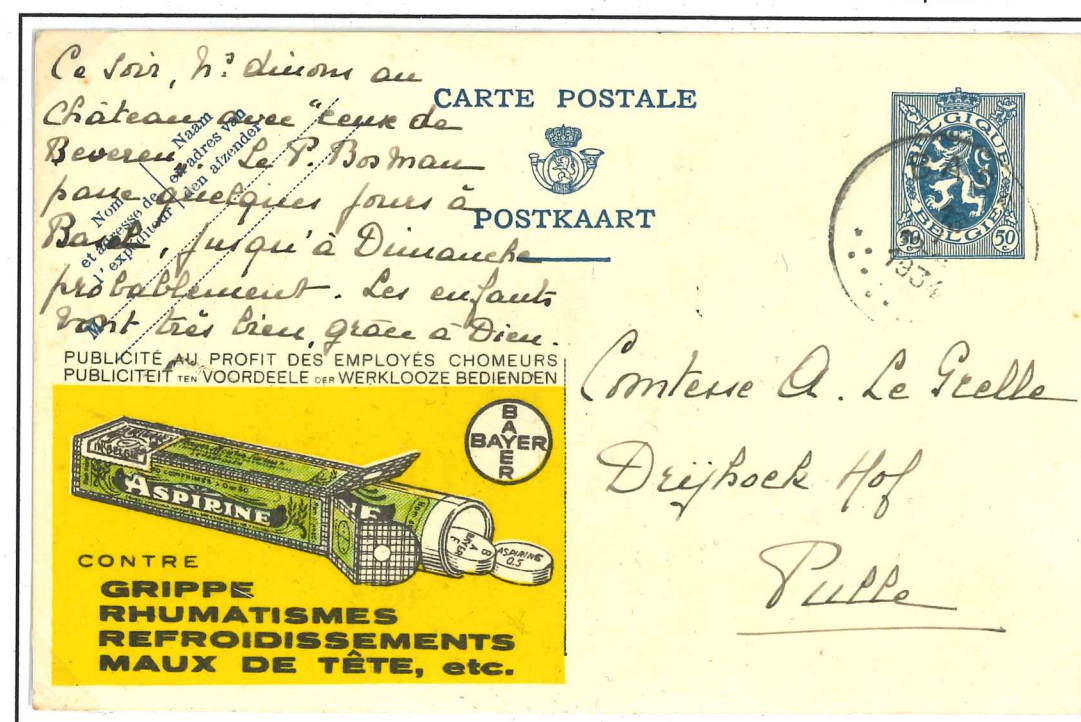
Drugs contribute to the increase of life expectancy. But in spite of innovations the traditional medicine has got a new era, and you will see that the story ends like it started and it will never end!

1d. unused advertising postal stationery envelope (1881-84). Plain envelope with cut-out space for Queen's head and insert with embossed 1d., printed advertisements and space for message.



From doubtful panacea drugs as "Chok Marafet" Cure ...

... to scientifically developed modern drugs as "Aspirin".



## 0. Introduction to the Exhibit, the Plan

1

## 1. Man needed Cures ...

13

- ... since the Beginning of Time Drugs were highly influenced by Magic and Religion ...
- ... to the Birth of Medical Science.
- A Medical-Pharmaceutical Revolution ...
- ... Drugs from the "new" World ...
- ... and Knowledge about Infectious Diseases ...
- ... intensified the Research for Drugs
- And the Study of Effects and Use of Drugs was called Pharmacology

## 2. And together with Drugs based on Empiricism and Tradition ...

9

- ... by the use of Plants ...
- ... but also Animals give valuable Drugs ...
- ... as well as Minerals
- And this Study was called Pharmacognosy

## 3. This resulted in a lot of Drugs, for example ...

16

- ... to be used in the Surgery,
- ... to fight against Infectious Diseases,
- ... to be used against Respiratory Diseases,
- ... to be used at Malnutrition Conditions,
- ... to fight against Digestion Diseases,
- ... Diabetes,
- ... Cancer
- ... and to be Antidote

## 4. Who handles all these Drugs ?

9

- A Pharmaceutical Profession derived ...
- ... by using Textbooks
- ... Tools and Equipment to prepare Drugs
- ... and sell the Drugs in the Pharmacy

## 5. From the Pharmacy to the Pharmaceutical Industry ...

10

- ... by Advances in Technology ...
- ... to the Establishment of Pharmaceutical Companies
- The Creation of new Proprietary Drugs became overwhelming ...
- ... this required Public Regulations
- The modern Scientific Industry became the Main Inventor of new Drugs
- ... together with some Public Companies

## 6. Despite of new Drugs, Man still needs Cures ...

6

- ... because not all Drugs act or are used as planned
- ... increased Knowledge makes new Requirements
- ... by use of Homeopathic Drugs
- ... and Traditional Medicine



In the Primitive Cultures ...

... since the origin of mankind ...

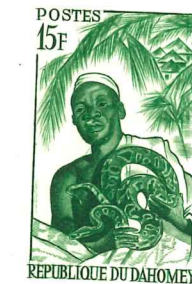


... there was no distinct border between using magic, religion ...



... and more rational methods in the fight against diseases and pain.

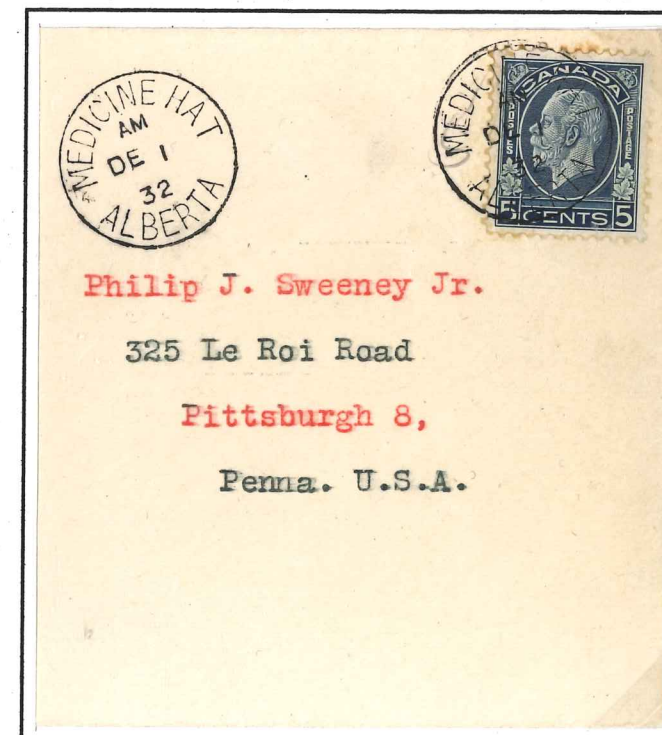
Proof in deep green signed by the engraver Combet. Issued stamp in brown, chest and turquoise.



*pacus Combet*

It was practiced by witch doctors and ...

The cancellation "Medicine hat" was named after an indian medicine man.



... medicine men. The experience led to a form of medical practice.



*pacus Combet*

Proof in black signed by the engraver Combet. Issued stamp in yellow, red and brown.

Drugs, as Thoningia sanguinea, often claims to be able to cure a lot of different diseases.

Accepted artwork for issued stamp. Watercolor on posterboard with acetate overlay for lettering measuring 12 x 16 cm.





# 1. Man needed Cures ...

a) ... since the Beginning of Time Drugs were highly influenced by Magic and Religion

## In Ancient China ...

The Chinese medicine is based on the philosophical system of Yin-Yang (negative-positive, the black-white symbol), and the five elements (fire, earth, metal, water and wood; the pentagon-points):



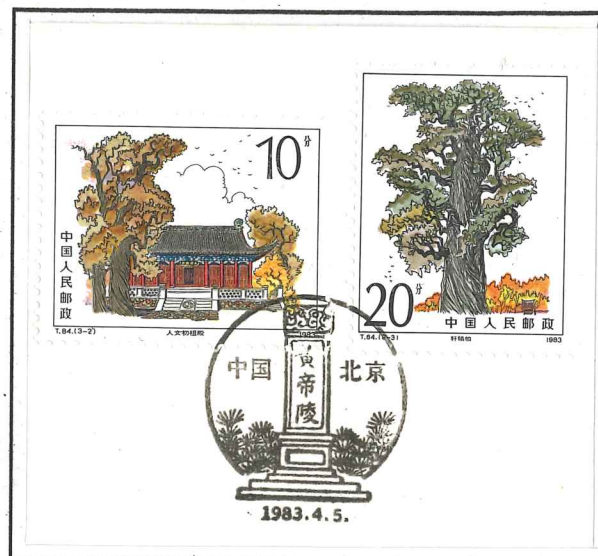
The Mausoleum of Yandi, to commemorate Shennong (Yandi):

He tasted hundreds of plants, so that he could tell what to take and what to avoid. He was poisoned by 70 of them, but found antidote and saved his own life. Regarded as the origin of Chinese medicine !

"The tiger of Shennong":



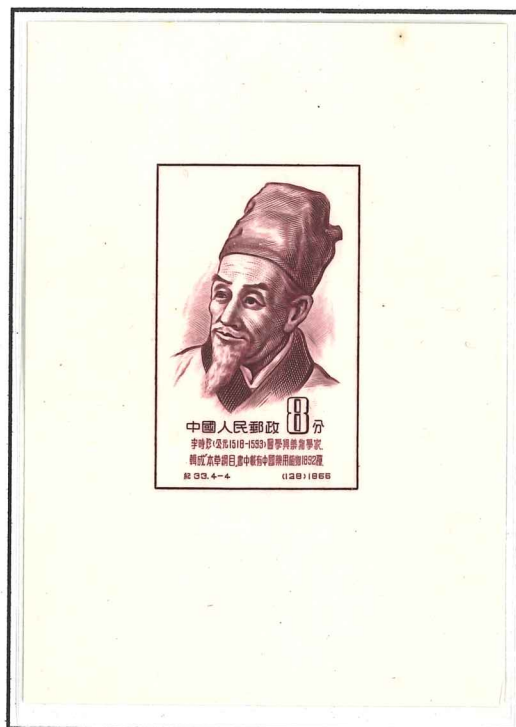
A drug dealer prescribed medicine from the skull of a tiger, used against cholera.



Huang Di's tomb

The emperor Huang Di (2698-2599 B.C.) wrote Chinas oldest medical work ...

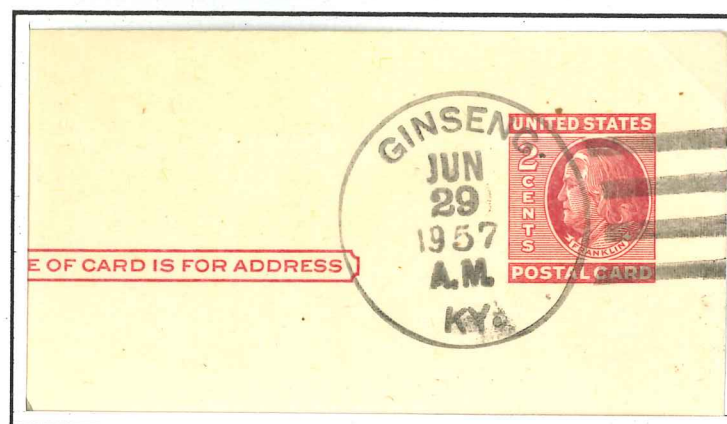
... but Li Shih-zhen's "Pen-Ts'ao Kang-Mu" (Compendium of Materia Medica) raised the Chinese medicine to a new higher level.



The proof to the left and the issued stamp below.



The perforation is totally out of order.



Ginseng claimed to enhance the natural resistance and recuperative power of the body.



The dried skin of the toad have been used for centuries against bleeding gum. Later known that the skin contains adrenaline.

The chinese exported the knowledge to Japan ...



Jian Chen (688-763), chinese buddhist, learned the japan-ese about drugs.

Preliminary artwork, with official remarks on the back. 10,2 x 15,1 cm pen & ink & watercolor on carton. Similar to final design (North Korea 1962).



... and to Korea. The chinese medicine were included verbatim in the encyclopedia "Uibang Yuch'wi" (published in 1477).



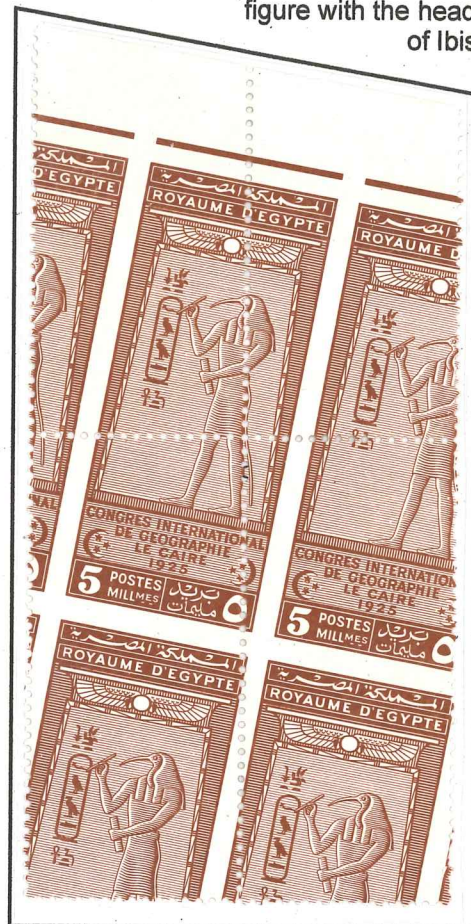
# 1. Man needed Cures ...

a) ... since the Beginning of Time Drugs were highly influenced by Magic and Religion

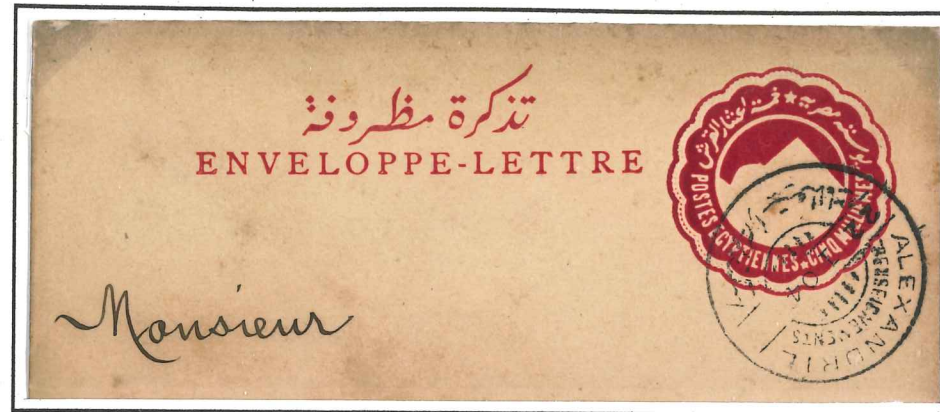
In the Old Egypt ...

... the medical deity was Thoth, a male figure with the head of Ibis.

But the Egyptians developed drugs from the primitive stadium to less magic and a more rational way of thinking, ...



Block of four with oblique perforations.



Egyptian postal stationery, 1904: Pyramid and Sphinx.

... and imported many drugs. Most famous was Queen Hatchepsut's expedition to Punt (Somaliland).



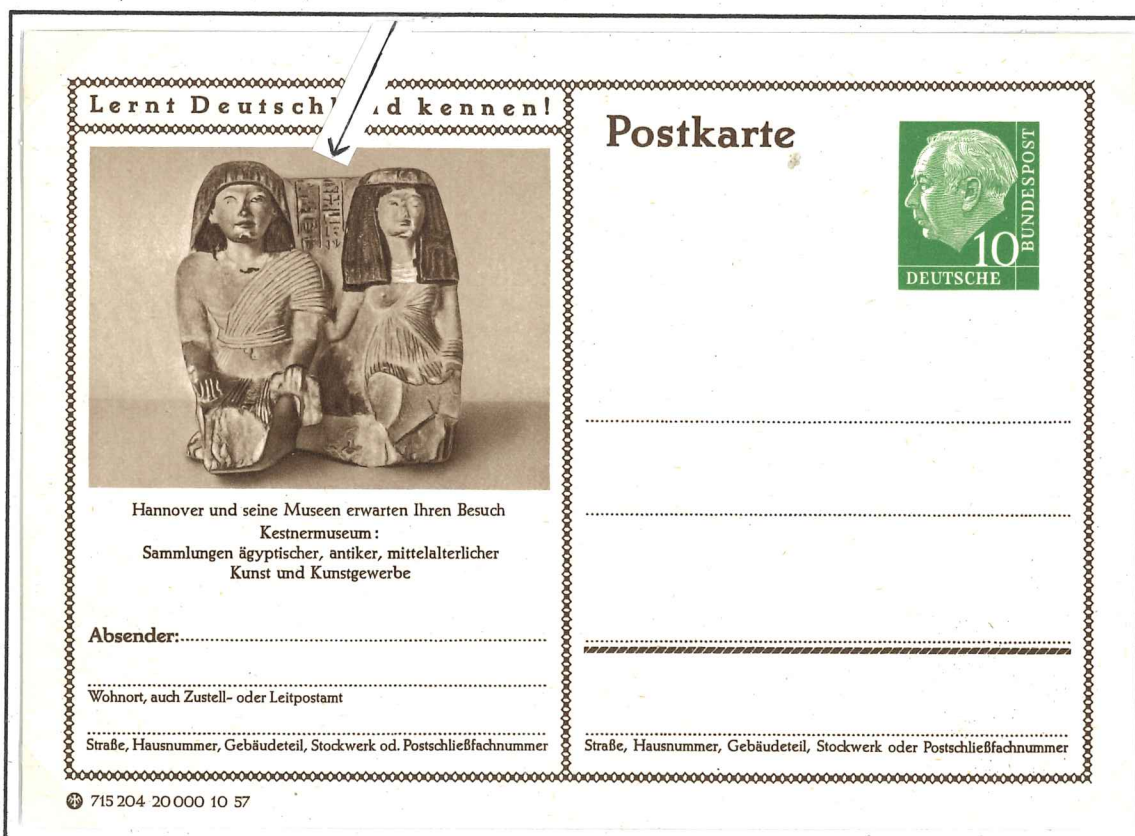
Variant: Extremely wrong perforated.

Imhotep (about 2000 B.C.) was the most famous and skillful doctor.



Variant: Extremely wrong perforated.

The medical secrets and magic formulas were written by hieroglyphs on holy papyrus scrolls.



Postal stationery showing Egyptian sculpture with hieroglyphs.



Imperforated miniature sheet as block of four, unmounted mint.



Papyrus Ebers contains 811 prescriptions and more than 700 drugs: explained use, ingredients and method of preparation, as

Variant: Extremely wrong perforated.



... drugs used for eye diseases.

Artist's proof in dark brown. Issued stamp in red.



The Aesculapius statue. He was ...



... symbolized as a serpent with a staff.

In the Greek pre-Hippocratic period the Egyptian medicine were combined with Greek myth. Aesculapius was the god of medicine. At his sanctuary, the place of healing, the ailing sought healing, alleviation and instructions on a cure.



## The Hippocratic School of Medicine

Hippocrates (460?-377 B.C.): "The father of modern medicine" recommended drugs to recreate the balance of the body's fluids, e.g. ... ox-bile.



Statue of Hippocrates, mint from the corner (1947): Imperforated pair with additional inverted print.



Moldavia, second issue "Bull's Head" (1858), mint, large part original gum, signed A. Diena.

Dioscorides' "Materia medica" described more than 500 drugs.



Variety: Fourfold print of the black colour. Certificate in the back.



Dioscorides (right) with a mandrake plant: used to relieve pain...

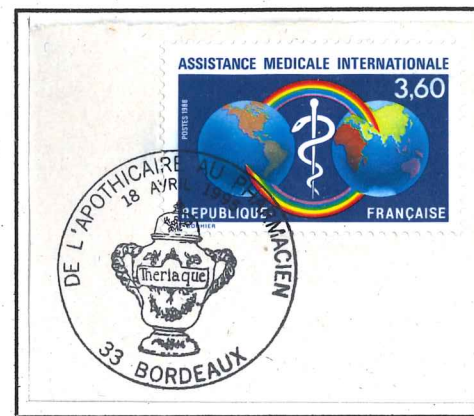
... and recommended milk, one of the useful drugs from animals.



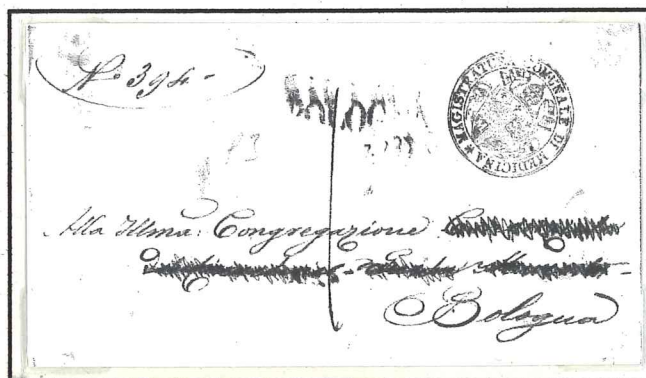
The horn of the unicorn was a highly prized drug against gout and rheumatism.



Galenos used complex compounded drugs as the famous "Theriac": the panacea for curing all diseases. It was used until late into the 18th century! The chief ingredient of "Theriac" was ...



... the serpent, symbol of rejuvenation and ...

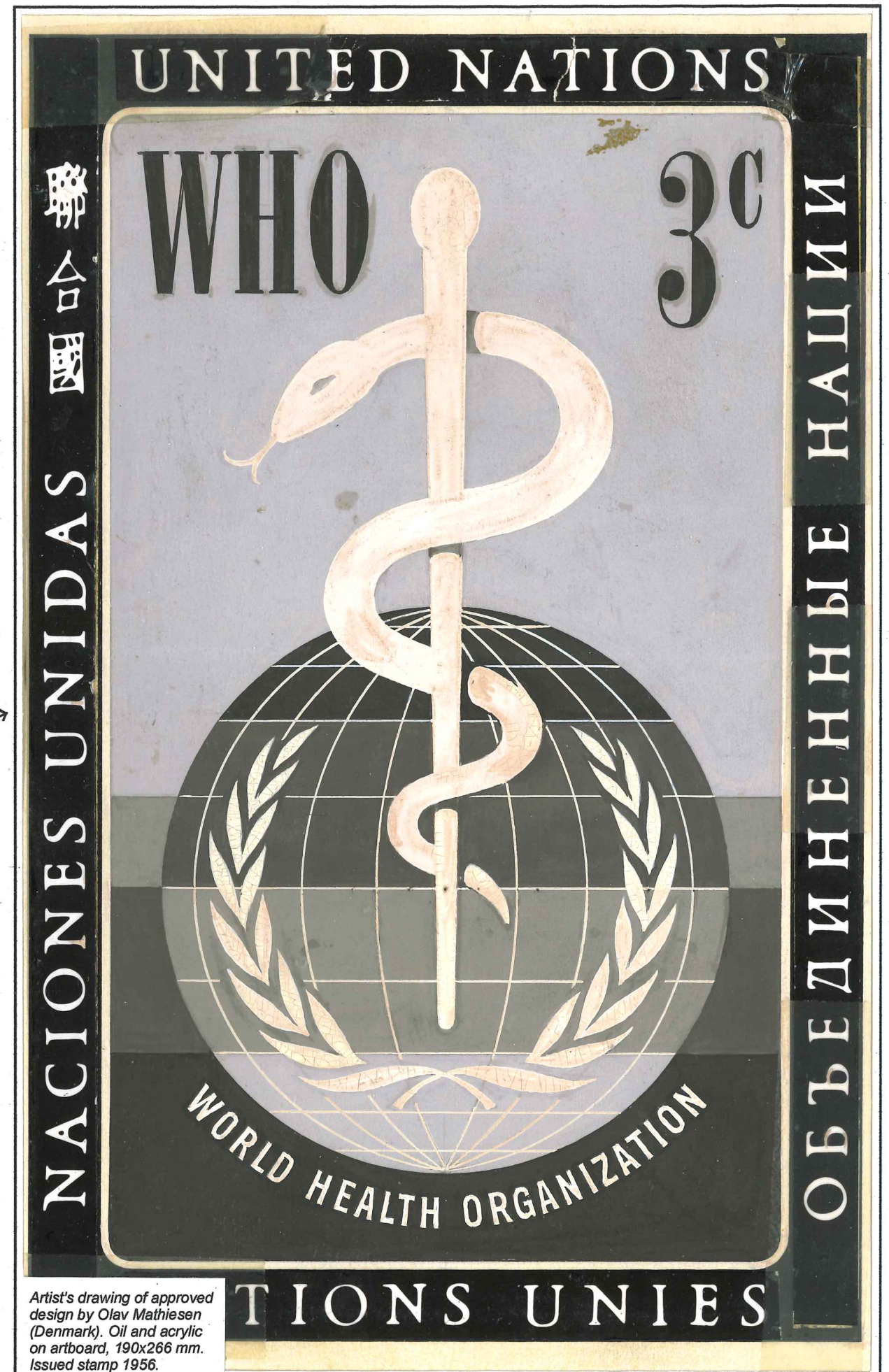


Copy (50%) of the front.

1854, letter from Medicina to Bologna. ½ Baj in horizontal pair. Arrival cancellation in the front.



... a drug: **Medicina**, an Italian town. The origins of its name is uncertain. A legend tells that the holy Emperor Frederick Barbarossa, passing the town fell ill and miraculously recovered because of a serpent accidentally came into the pot of his soup.



Artist's drawing of approved design by Olav Mathiesen (Denmark). Oil and acrylic on artboard, 190x266 mm. Issued stamp 1956.



## The Arabs ...

... developed the ancient  
and antique medicine and  
pharmacy further:



Jabir discovered nitric acid, arsenic and antimony, and invented techniques for drug preparation, ...



... Rhazes wrote drug book "Continens  
medicinae" and used new chemicals as  
mercury ointment,



*Imperforated vertical*  
Al-Biruni to the left and Avicenna to the right.

... and Al-Biruni cataloguing 720 medicinal  
plans. But most important was Avicenna's  
"Canon medicinae", used until the  
middle of 17th century:

*Imperforated*



Avicenna

... describing a lot of simple  
and compounded drugs.

Avicenna - Trial color plate proofs in strip of five



Issued stamp (1982).  
Complex compounded  
syrops became very  
popular, as honey mixture

Progressive plate proofs in horizontal corner strips of four, with color bars, traffic lights and register marks, total 8 items, 32 stamps.

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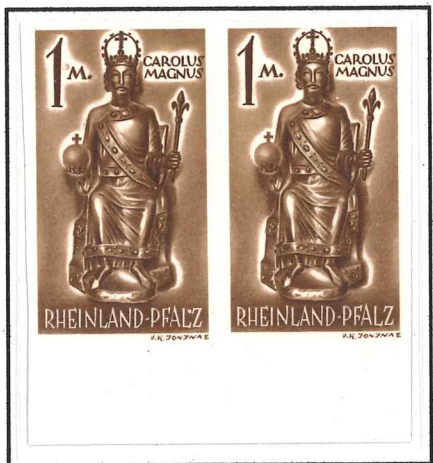
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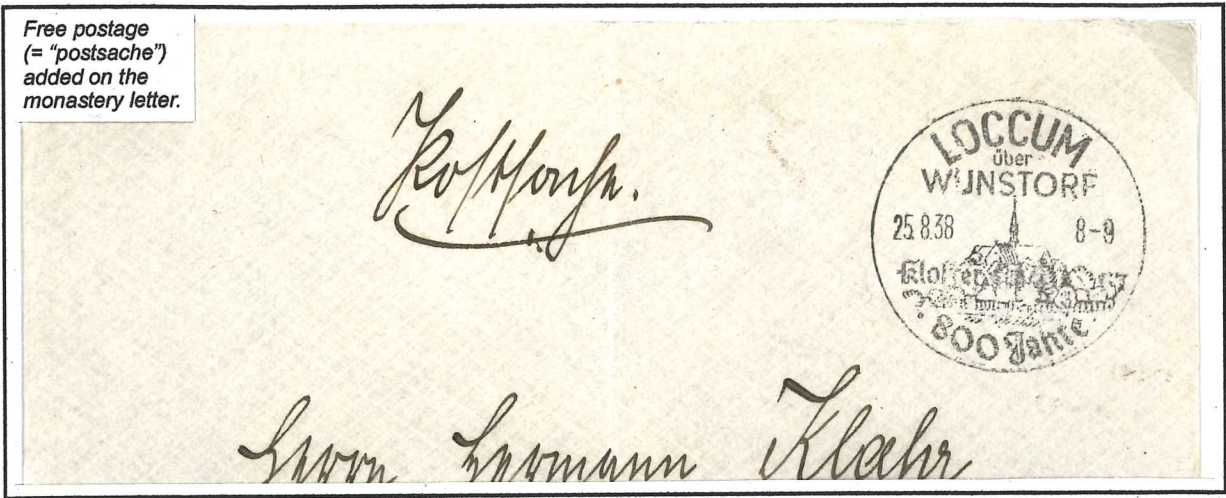
In the Monastery Schools ...

Imperforated lower margin pair, mint with gum.



Charles the Great gave an order...

Free postage  
(= "postsache")  
added on the  
monastery letter.



... that medical science had to be taught and advocated gardens for the cultivation of medicinal plants.

... out to the sick people.



Monks translated Arabian books into Latin, practiced medicine, kept and prepared drugs in specially rooms.

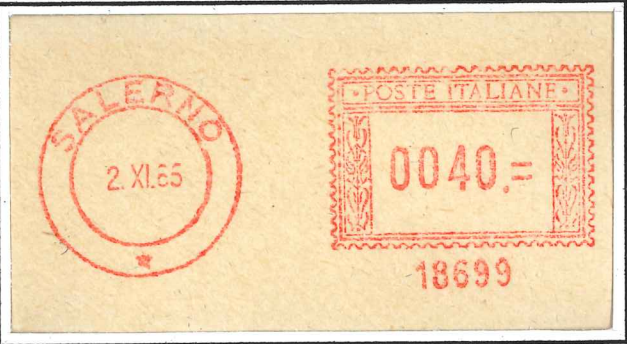


Imperforated stamp with original gum.  
Certificate in the back.

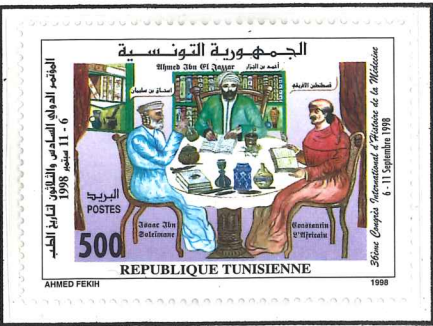


"Doctorissa" Katharina von Bora brought her knowledge about medicine and drugs from the monastery and ....

Gradually the medical science was influenced by the catholic church ...  
But the Medical School in Salerno, founded in the 9th century, had religious Liberty ...



... and Constantin Africanus translated Arabian books into Latin and introduced Arabian medicine and pharmacy.



Africanus on the right

... and with Help by the Alchemists ...

... in their intense struggle  
in the laboratory to produce...



... gold, although it was doomed to failure.  
But the work was not in vain ...



Proof in dark blue, signed by the engraver Jumelet.  
Issued stamp in blue, green and brown (1969).

Proof of frame design, issued 1954.



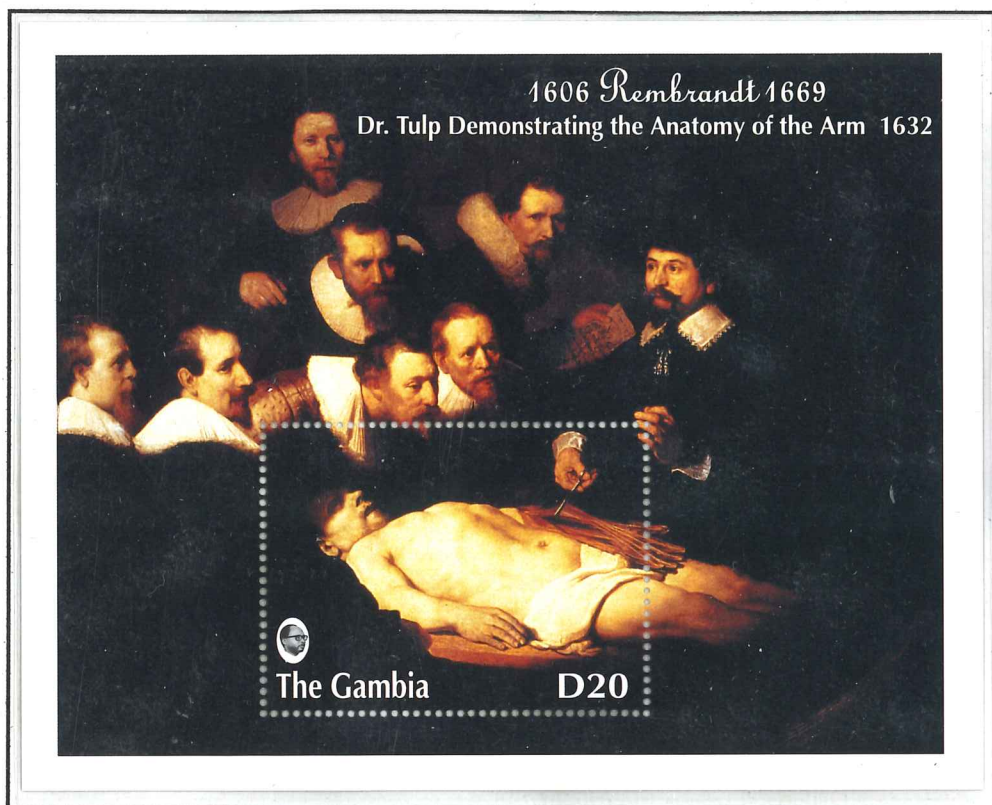
Double printing of the black colour.  
Certificate in the back.



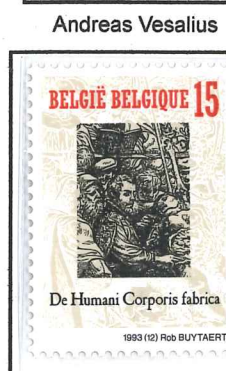
... new methods like distillation retorts, and chemicals were introduced. The german stamp shows alchemic symbols.



New basic research of the body's structure, anatomy, ...

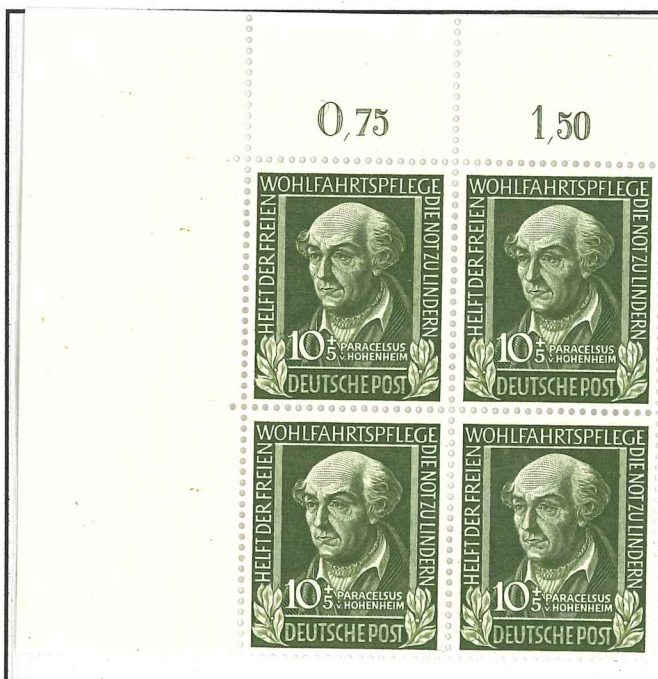


... started by Leonardo da Vinci, ... but Vesalius' famous work "De Humani Corporis Fabrica" was fundamentally in the development of modern medicine.



Variety: Imperforated

Cusanus suggested that diagnosis should be based on heart pulse, research of the urine and the respiration.



Paracelsus: To find the effective substance in its simplest form. He introduced e.g. mercury, lead and antimony for internal use: "Toxic, but not in correct dose!"

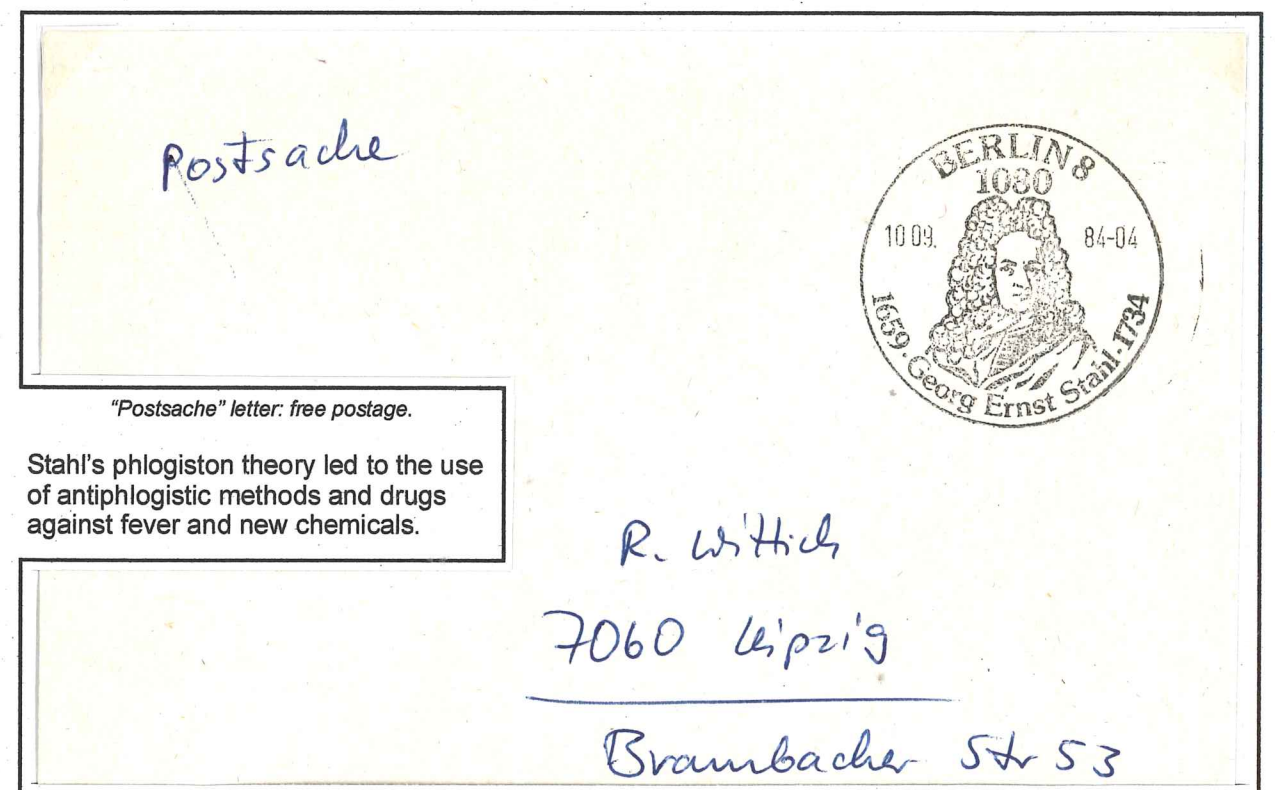


Sylvius



van Helmont

Sylvius used acids and alkali drugs to neutralize the excess in the body. Van Helmont studied effects of drugs, in small dose, and preparation.



"Postsache" letter: free postage.

Stahl's phlogiston theory led to the use of antiphlogistic methods and drugs against fever and new chemicals.



Scheele discovered and produced a lot of chemicals, studied medicinal plants and purified the active principle of a crude drug by crystallization; ...



... and he discovered the important fire gas later called oxygen ("syrgas") and nitrogen ("kvävgas").





... for instance by de Orta's journeys to India ...



... but what he actually found was Sisal (Agave), used by the natives for numerous purposes, incl. medical.



Imperforated in block of four. One copy exist.



One of the most important new drugs were Peruvian bark, a specific for fever.

Variety: The print is on the reverse, the gum side. Certificate in the back.



The new plants from the "new world" formed the basis to establish botanical gardens ...

... and Columbus' discovery of America, were introduced into European medicine.



Postal stationery envelope, 2c, to the Columbus jubilee. Cancellation on the back: New York Dec.21. 1893. Additional postage 2x2c. to Germany. Arrival cancellation on the back: Mergentheim Jan.2. 1894.

Columbus was seeking for Aloe, the chief ingredient of purgative pills,



Imperforated stamp on Harrison and Sons presentation card.

Fugger's trading company imported and sold herbs and drugs for medical use.



Missing perforations.

Important drugs was "big nuts" (cacao) and ...



Imperforated in block of four. One copy exist.

... Guaiacum ("holy-wood"): Its use was the result of ...



Overprints: one normal and one upside down

... a publication by Ulrich von Hutten, who had syphilis. But subsequently learned that it was not effective!



Variety: Double overprint "1382 - 1962 Aeroplane", one row turned upside down. The issued stamp has none of the green overprints.



... and Linné, the great botany reformer also studied medicinal plants, and called the fever-bark tree "Cinchona" which alleviated the symptoms of malaria.





Malpighi's and Leeuwenhoek's use of the microscope ...



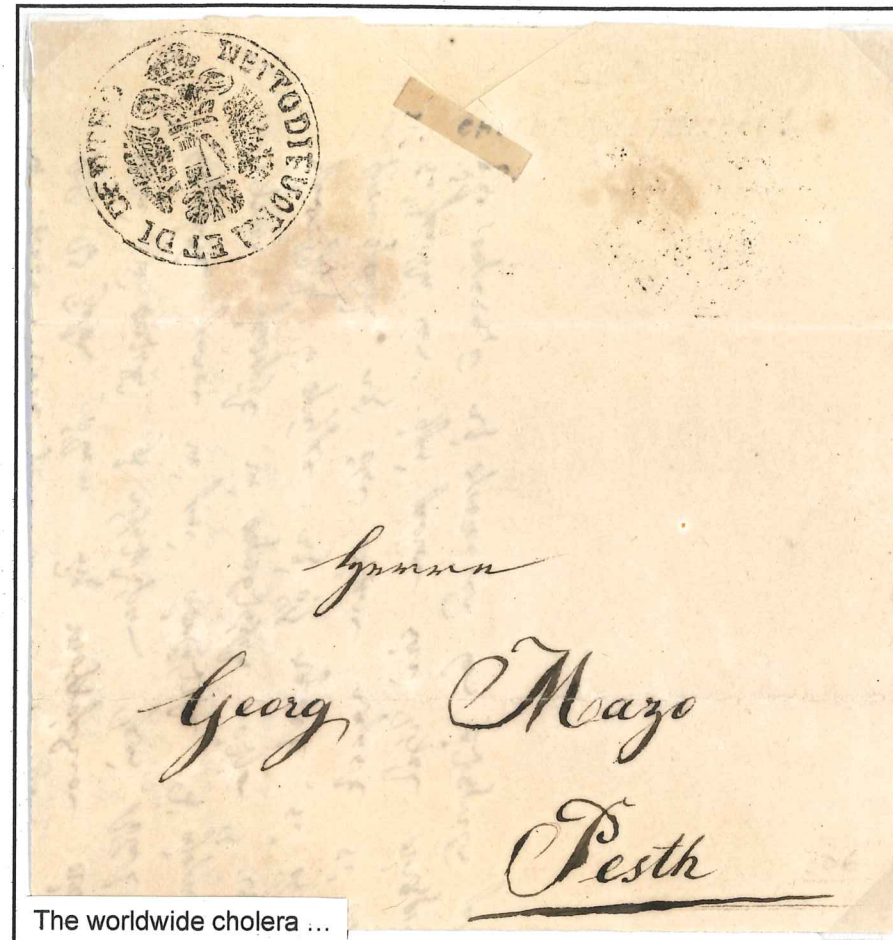
... opened a new world: Bacteria and other microbes could be detected and studied ...



... and by use of microscope Kircher ...



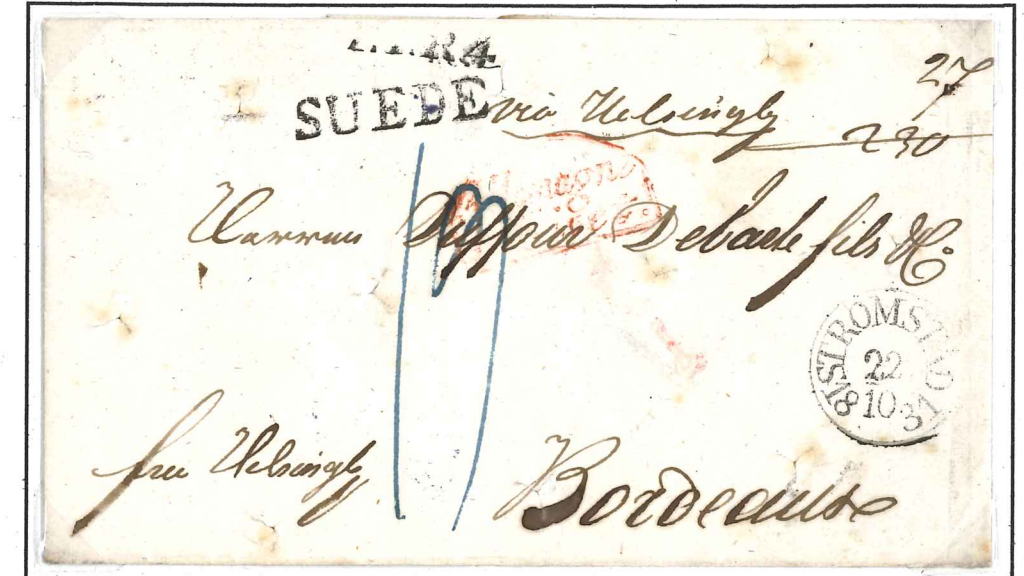
... confirmed Fracastoro's theory: Contagious diseases were caused by microbes. But how to fight down the microbes?



The worldwide cholera ...

Cholera cancellation, 1837

"Cholera letter" from Christiania to Bordeaux in 1831, added on postage "19" and cancellations "Strömstad", "Suede" and "Hamburg" (not seen, on the back). The letter is perforated many times in order to let the cholera disinfection liquid to be penetrated.

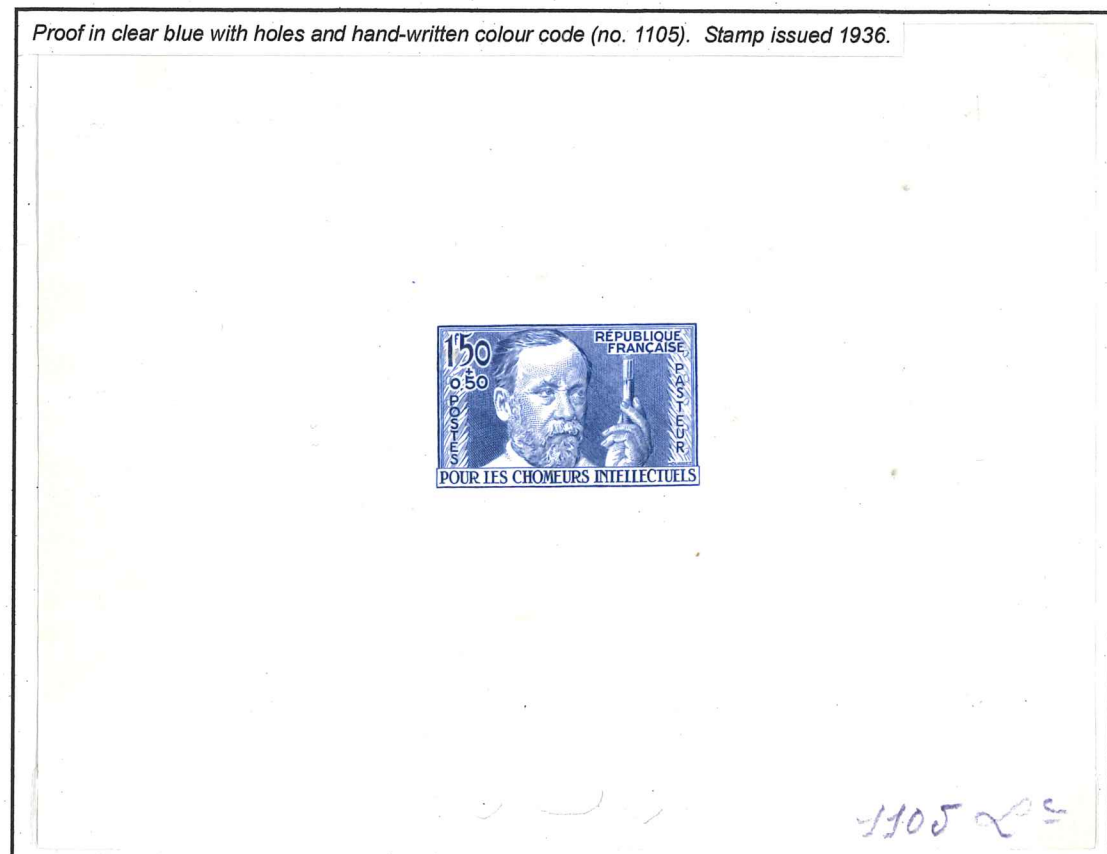


... epidemic in 1831 led to disinfection of mail in the belief to prevent the infection. (Later stated as ineffective).



The founders of modern bacteriology were Koch, ...

Proof in clear blue with holes and hand-written colour code (no. 1105). Stamp issued 1936.

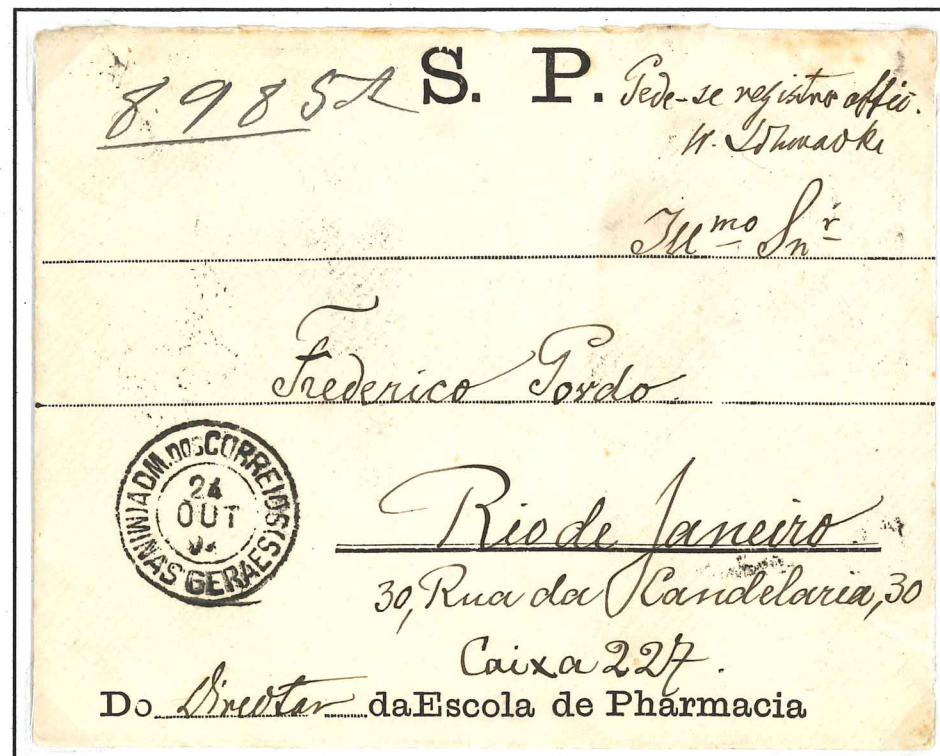


... and Pasteur. Pasteur was convinced that many diseases were caused by microorganisms. He isolated the cholera bacteria, and formed the basis of development of vaccines and drug therapy.





The early medical faculties of the universities also offered lectures in medicinal plants, chemistry and pharmacy ...



Official letter ("S.P." - Public Service) sent in 1894 from the pharmacy school, which had free postage. Arrival cancellation, Rio de Janeiro, in the back.

... and distinctive pharmacy schools were established.

... by improved Education

Copy (70 %) of the front.

Mulready envelope, 1841, 1 d advert letter.

### EDINBURGH ENVELOPE ADVERTISER.

**New Tea Warehouse.**  
34 NORTH BRIDGE, One Stair up.  
(Below the Upper Market Stairs.)

THE issue of the design of this announcement is to meet the eyes of PURCHASERS of TEA, and to lead them to the right quarter to make a profitable "bargain." We are justified in saying, that no other House in Edinburgh holds out such advantages. In our opening circular of 15th June, we stated that our progress would be slow (and difficult; notwithstanding our offering the public a saving far too great to be overlooked, still Houses of old resort would for a time have a preference, even from those most jealous of being overreached. Our predictions on this point have been entirely realized; but as every new buyer became the centre of a new circle of influence, the goodness and cheapness of our Teas have taken such a strong hold of the public mind, that any future attempts of our competitors to decry our system of business may be spared, as they are equally insignificant and impotent. We are not wide of the mark when we say, that all who have patronized us have pocketed a saving of at least 8d. per lb.

**NELSON & CO.**  
NEW TEA WAREHOUSE,  
34 NORTH BRIDGE, One Stair up.  
Below the Upper Market Stairs.

**TODD'S PERTH WRITING INKS** are MOST PLEASANT to write with, and also MOST DURABLE in the Colour. The constantly increasing demand, especially for the OFFICE, COPYING, and RED INKS, is the best proof of their being esteemed by the public, and the best security that the Manufacturers will keep up the quality. To be had of all respectable Stationers. The Trade in Edinburgh supplied by R. F. BELL, 5 UNION PLACE.

**The Pectoral Cough Lozenges,**  
PREPARED BY  
BAXTER, SANDEMAN, AND CO., DUNDEE.

GIVE immediate relief in those cases of Tickling Irritation, generally followed by distressing and exhausting fits of Coughing, to which aged persons are so frequently subject, being a composition of several most valuable Medicines, in such proportions as to render them a pleasant and highly efficacious remedy for the above complaints, operating by dissolving the congealed phlegm, and consequently producing free expectation. In recent Coughs, Colds, difficulty of Breathing, and Asthma, they will be found of the most essential service. They are particularly recommended in Hooping-Cough, and, being perfectly innocent, may be administered to infants in all its stages with every certainty of success. Directions enclosed.

Sold in boxes at 7½d., 1s., and 2s. 6d. each; and in tin canisters, warranted to keep in any climate, at 15s. and 22s.

EDINBURGH—Messrs William Pugh, 33 Prince's Street, and 35 Northumberland Street; James Robertson, 35 George Street; H. C. Baildon, 73 Prince's Street; James Gardner, 58 George Street; W. Moffat & Co., 53 Nicolson Street; T. & H. Smith, 21 Duke Street; R. Lindsay, 11 Elm Row; C. Stringer, 13 Calton Street; J. F. Macfarlane, 17 North Bridge, Drugists; and R. Blair, Italian Warehouse, South Bridge. Also, Wholesale by R. F. Bell, 5 Union Place.

**IRVINE'S MUSTARD.**—All who are particular in the Quality and Flavour of MUSTARD should ask for Irvine's, which is now declared by all who have used it to be remarkable for its strength and flavour, and when once tried, no other gives satisfaction. To be had of all the principal Grocers, in sealed jars, at 1/6 and 3/4 each.

**Mosley's Silver Steel Pens.**  
THE constantly increasing demand for these approved PENS, and the celebrity they have obtained in Public Offices & Banking-Houses, together with the long and successful trial they have sustained among the public generally, pronounce at once the superiority of these useful articles over the numerous imitations now offered to the Public.

The trade only supplied by  
**GEORGE ARMSTRONG & CO.**  
1 HIGH TERRACE, LEITH STREET, EDINBURGH.  
Sole Agents for Scotland, and also for  
STEPHEN'S PATENT WRITING FLUID;  
GREAVE'S PORTABLE LETTER BALANCES; and HYDE & CO'S SEALING WAX AND WAFERS.

**Chemistry and Practical Chemistry.**  
DR REID, FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS, will begin the WINTER COURSE OF LECTURES on the THEORY and PRACTICE OF CHEMISTRY, on WEDNESDAY, 4th November 1840, in the EXPERIMENTAL ROOMS (late Dr D. B. REID'S) 9 ROXBURGH PLACE, EDINBURGH.

This Course of Lectures qualifies for all the Public Boards,—the Army,—the Navy,—Apothecaries' Hall,—University of London, &c. &c. Ticket, L.3, 5s., PERPETUAL, this Season.

Dr REID will, on the same day and at the same place, commence his COURSE OF PRACTICAL CHEMISTRY and PHARMACY; Ticket, L.3, 5s. Ticket to Lectures and Practical, L.5, 7s. Ticket to the Lectures being perpetual.

Dr REID'S Rooms are now open, and continue so for ANALYSIS, during the Session. The Classes for Analysis are specially arranged to suit the views of individuals, whether as Engineers, Agriculturists, or Medical Students.

Dr REID has a Vacancy for a PRIVATE PUPIL in the LABORATORY, who, besides many other advantages, will have every opportunity of acquiring a complete practical and theoretical knowledge of Chemistry.

For further particulars, apply to Dr REID, at his Class-Room, 9 Roxburgh Place, or at his residence, No. 37 Nicolson Street.

**Dr Reid's Elements of the Practice of Medicine.**  
Recently published,  
**ELEMENTS OF THE PRACTICE OF MEDICINE**, designed as a TEXT-BOOK for the use of Students and Junior Practitioners. By WILLIAM REID, M.D., formerly Superintendent of the Fever Hospital, Queensberry House, and Lecturer on Pathology and Practice of Medicine, Fellow of the Royal College of Physicians, &c. &c.

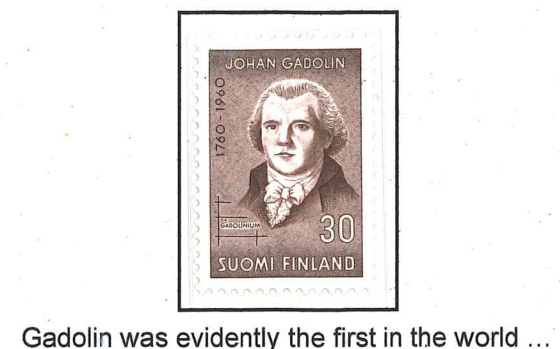
OPINIONS OF THE REVIEWS.  
"This is an excellent work; common sense and a just appreciation of what is actually known in medicine appear in every page. The style is simple, clear, and unpretending; the matter well arranged and practical."—*New York Journal of Medicine*, 1839.  
"Dr Reid's work evinces much pathological and practical knowledge, and contains many sagacious remarks. We have seldom met with a work which condensed so much valuable matter in the same space."—*Forbes's British and Foreign Journal*.

**N.B.—TO LECTURERS, TEACHERS, AND OTHERS.**  
The LARGE LECTURE ROOM in the EXPERIMENTAL ROOMS, ROXBURGH PLACE, may be engaged at any hour after twelve o'clock.

For further particulars, apply at 37 Nicolson Street.

ENT, WATERLOO NEWS-ROOM; and Printed by NEILL & CO., OLD FISHMARKET, who hereby attest the Circulation at 9000, being

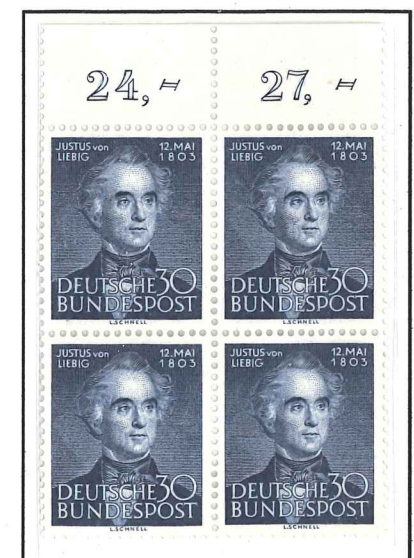
It was giving lectures on the theory and practice of chemistry and pharmacy and it was published textbooks of the practice of chemistry, pharmacy and medicine.



Gadolin was evidently the first in the world ...



... to make all his students do compulsory laboratory work, a new era!



von Liebig wrote a textbook on organic chemistry which became a classic among the students.



# 1. Man needed Cures ...

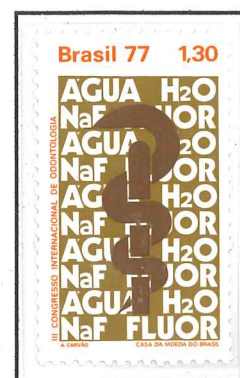
f) ... intensified the Research for Drugs

## ... by Chemical Developments

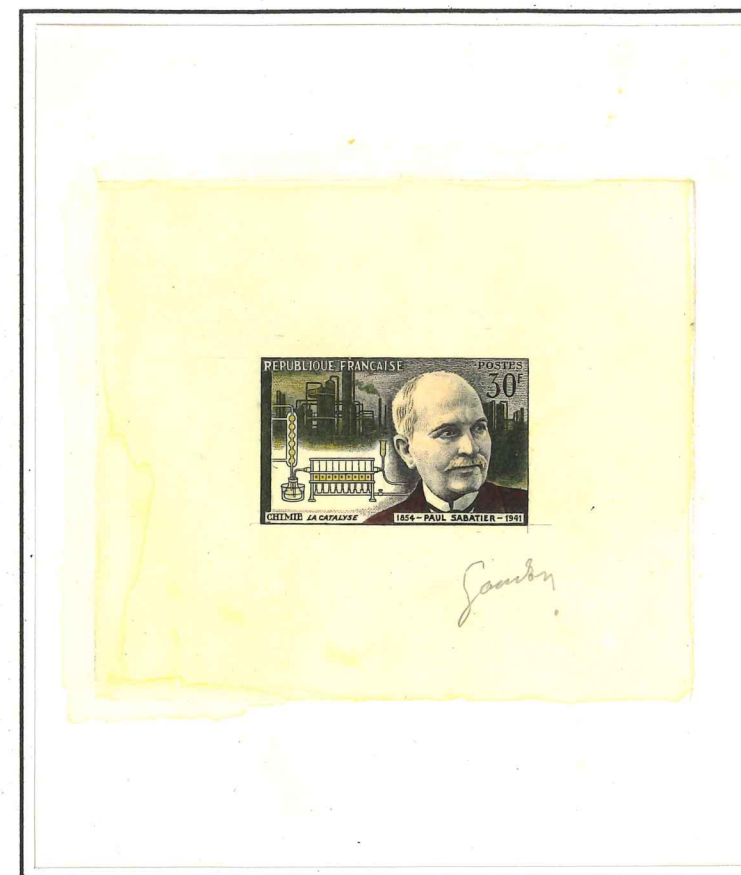
Berzelius developed the chemistry of elements, laboratory instruments, new chemical words as catalysis, isomer, polymer, protein, and ...



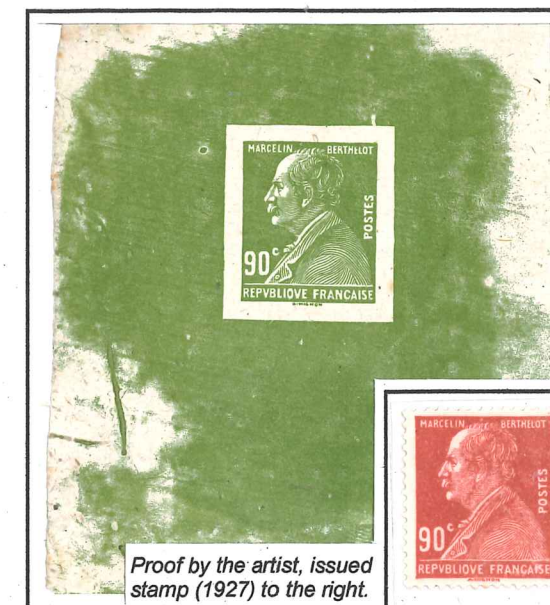
... the writing of formulae as  $H_2O$  (water, aqua).



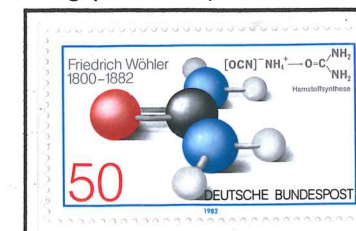
Paul Sabatier, a pioneer of the organic synthetic chemistry. The progress of chemistry had been greatly advanced.



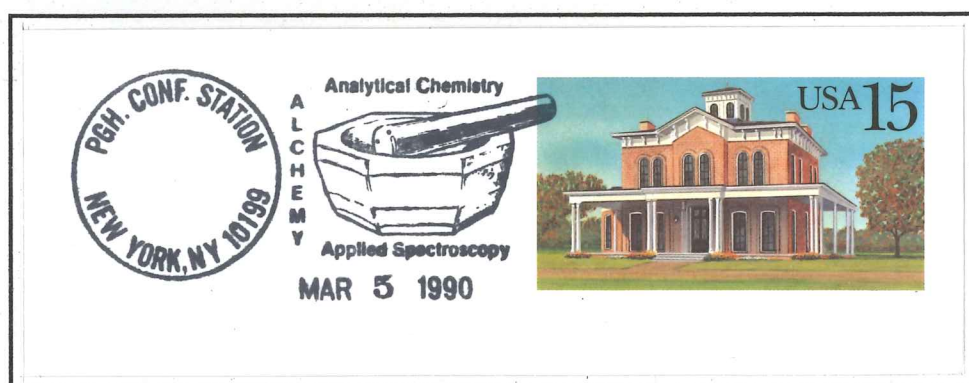
Another pioneer was Marcelin Berthelot. He performed many organic synthesis.



Urea, the first artificially organic compound, and a drug (carbamid) used in creams.



By use of chemical analytical methods ...



... the chemical structure of drugs were determined. (See the stamps background).

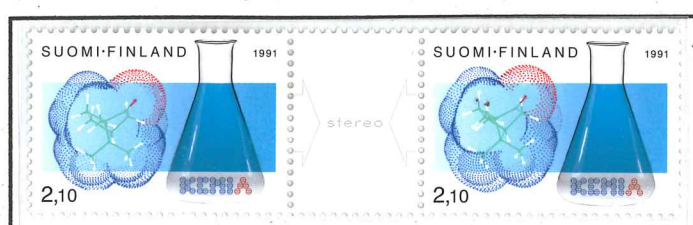


Proof (1956), hand colored, signed by the engraver Gandon.

Imperforated block of four.

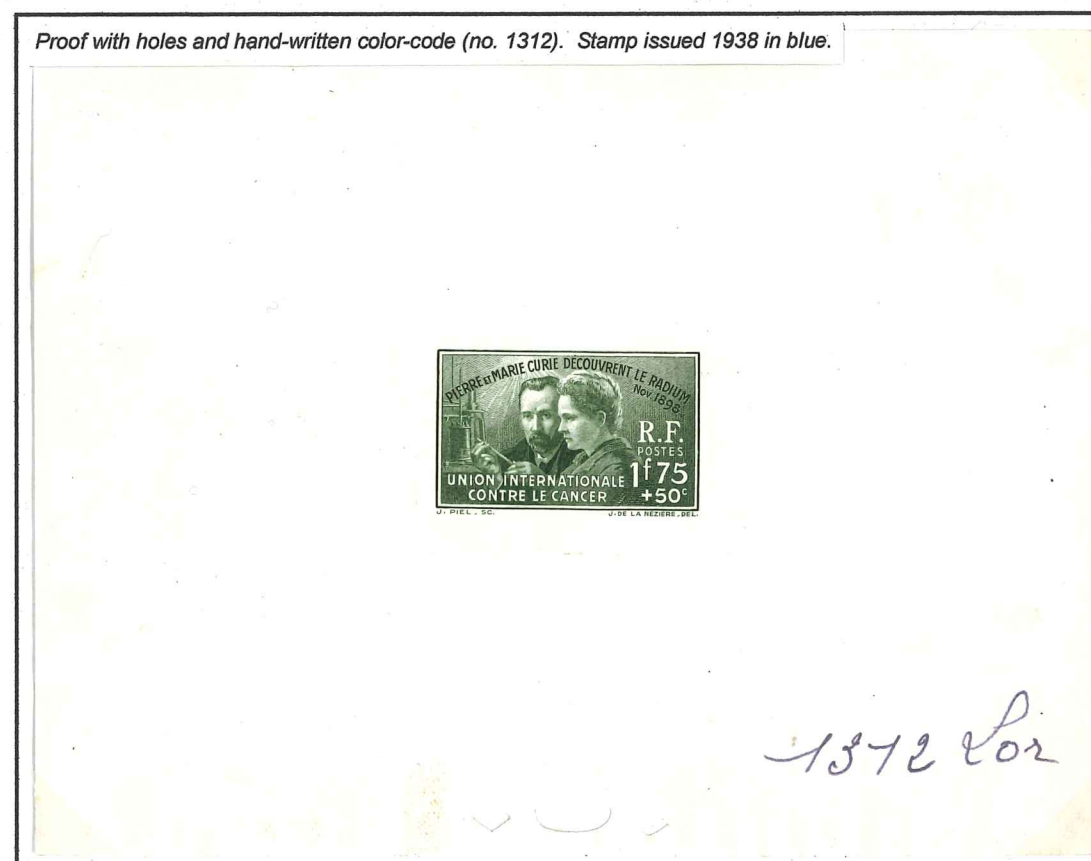


Pasteur in his early career: a pioneer in the discovery ...

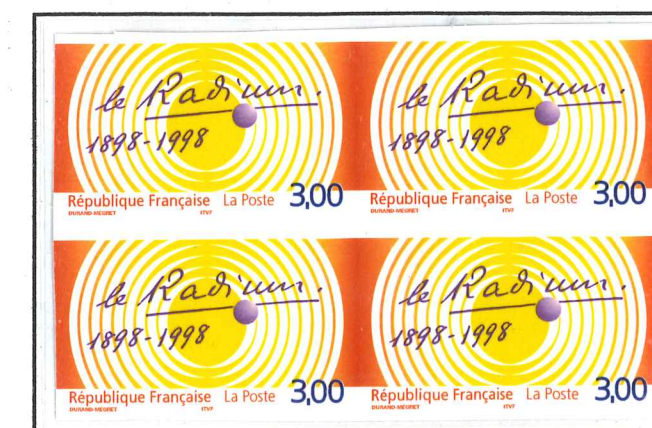


... of the relative location in space of atoms in a molecule, later called "stereochemistry". This may have vital importance if a drug have an effect or not.

Proof with holes and hand-written color-code (no. 1312). Stamp issued 1938 in blue.



In 1898 Pierre and Marie Curie discovered radium, the first radioactive substance of medical importance.



Miniature-sheet of four, only 50 copies known.

Radium have been used in drugs for rejuvenation and against various diseases. (Later stated as very toxic !)



... and by Medicinal-Biological Developments



Increased knowledge about the body's anatomy, functions and processes (physiology).

Proof in black, signed by the engraver Mazelin. Issued stamp in green color (1952).



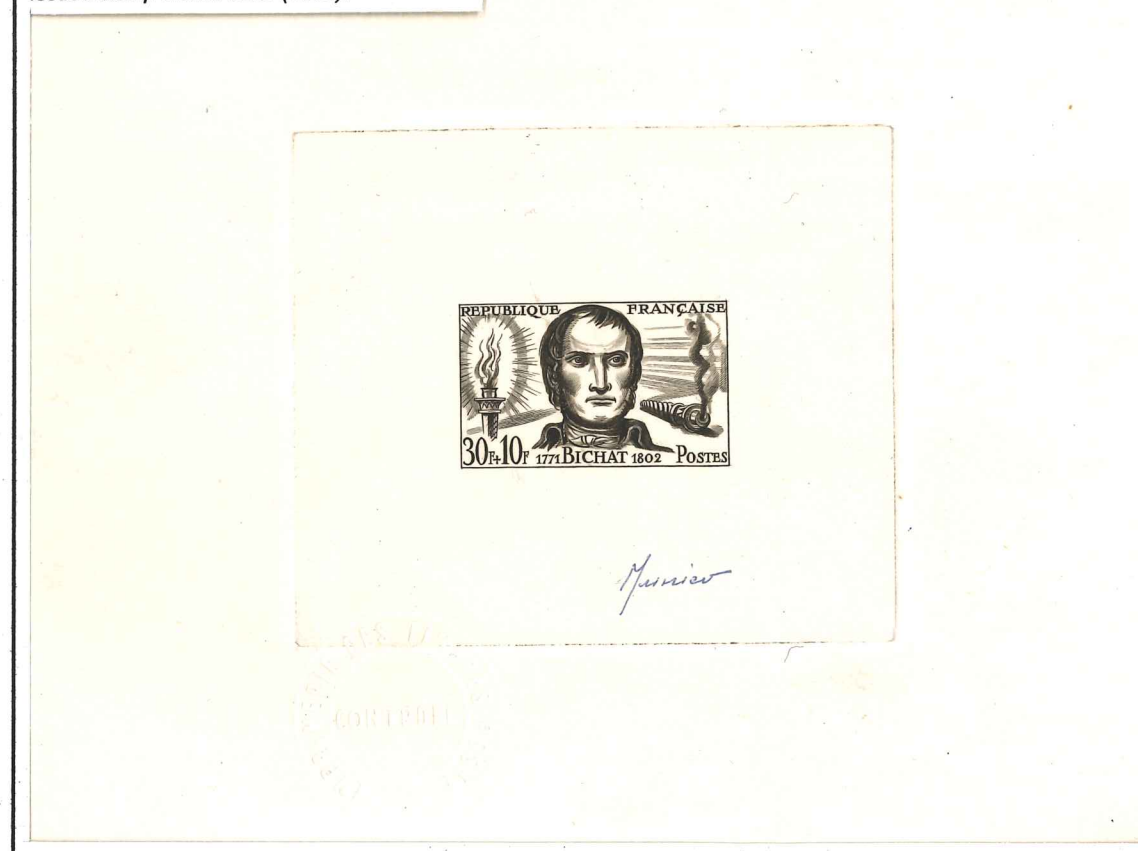
René Laennec invented the stethoscope, a major step to make diagnosis.



Variety: Imperforate pairs.

Another epoch-making development was the blood pressure monitor in 1881.

Proof in black, signed by the engraver Meunier. Issued stamp in lake color (1959).



Bichat: Anatomist and physiologist, regarded as the father of modern histology: The knowledge of cells and tissues. He supposed that diseases attacked tissues rather than whole organs.

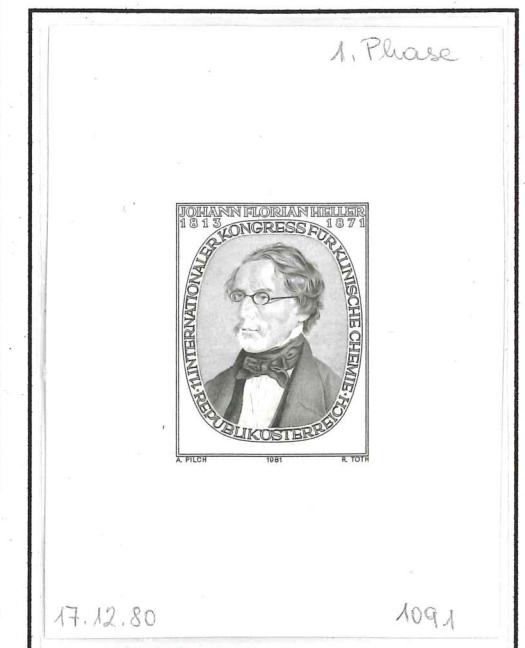


The laboratory had free postage.

The knowledge about the study and diagnosis of diseases was called pathology, and ...



Proof (below) from the line engraving process, probably a unique item. The issued stamp is shown above.



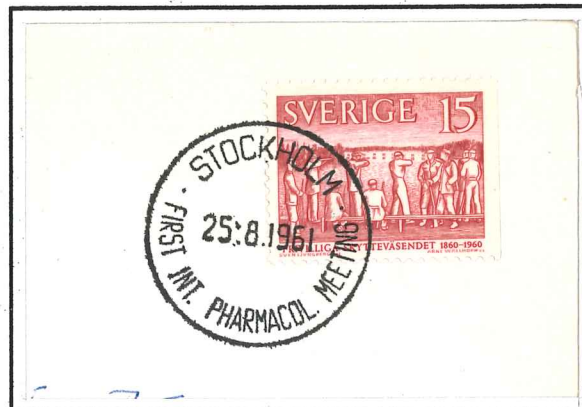
The knowledge and developments in clinical chemistry. Heller was a pioneer within urine analysis.

Variety: Divergent color. Issued stamps in blue (1948).



... Virchow was regarded as the father of modern pathology.





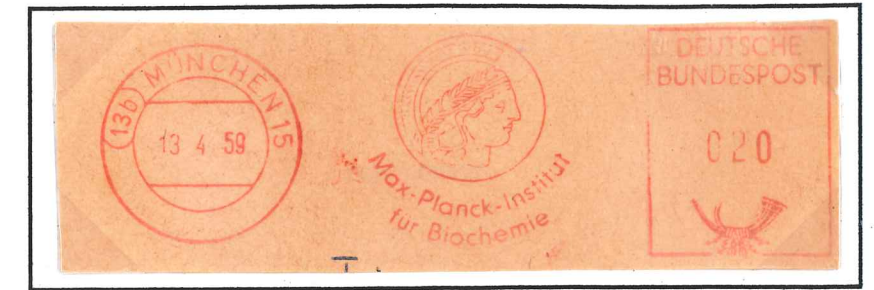
More specifically, pharmacology is the study of the interactions that occur between ...



... drugs and ...



... the body, ...



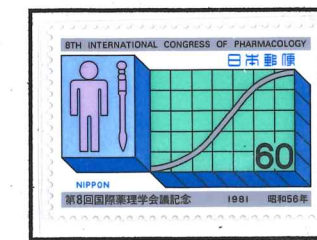
... that affect normal or abnormal biochemical function.



But before testing new drugs on humans, animals have to be used.



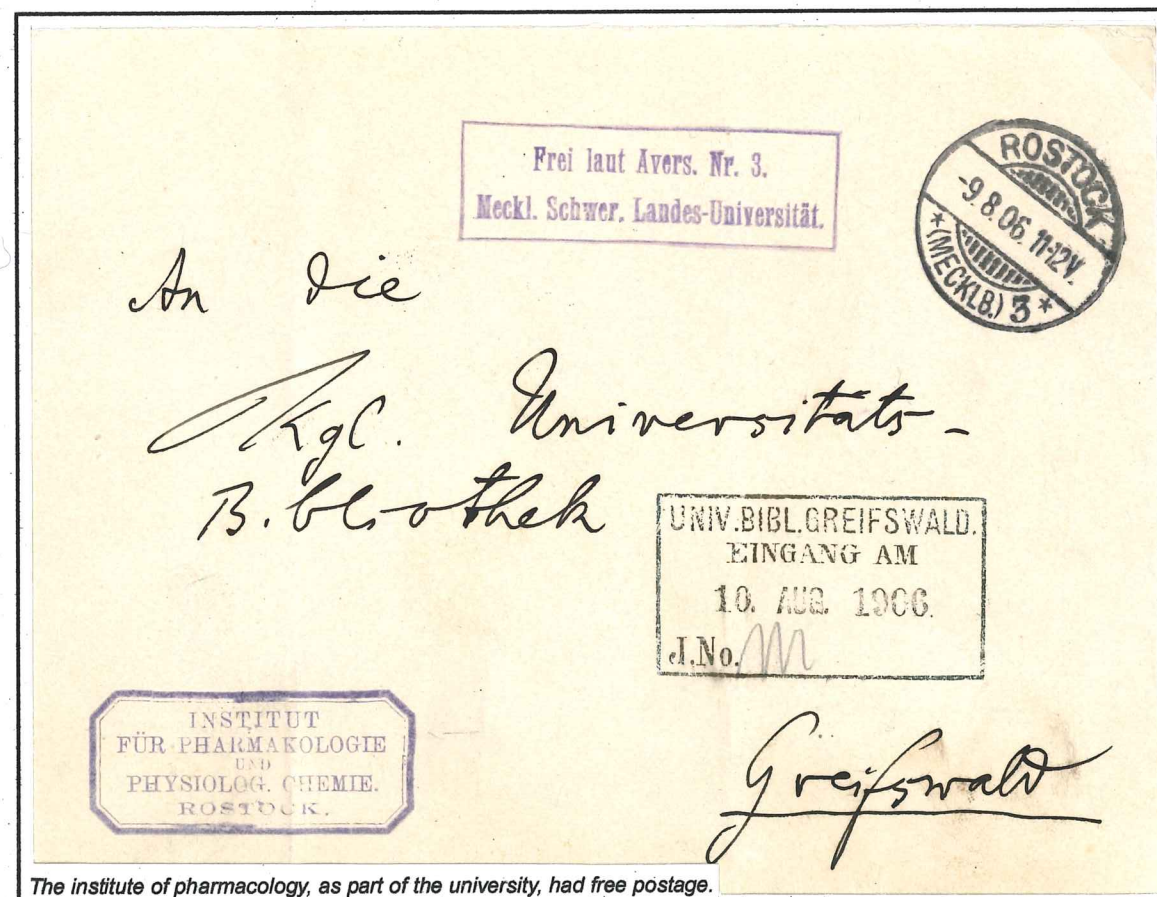
The main areas of pharmacology are pharmacodynamics: the effects on biological systems, receptors ...



... and the dose-effect relation,

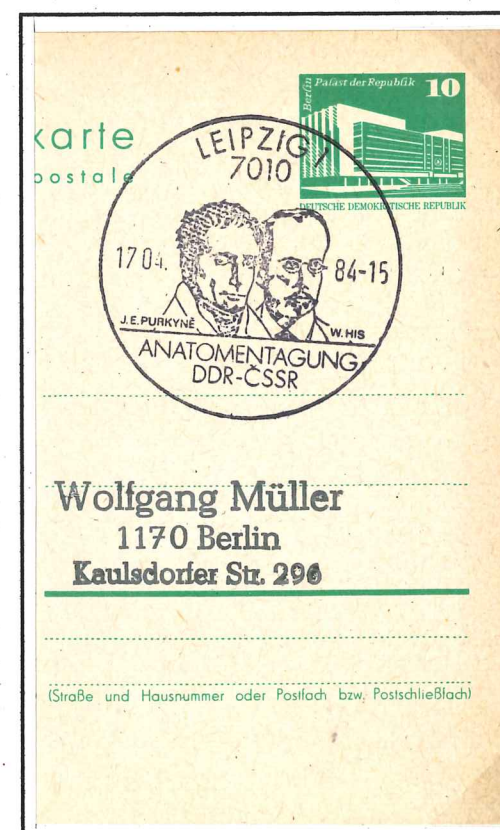


... and pharmacokinetics: the absorption, distribution, metabolism and excretion.

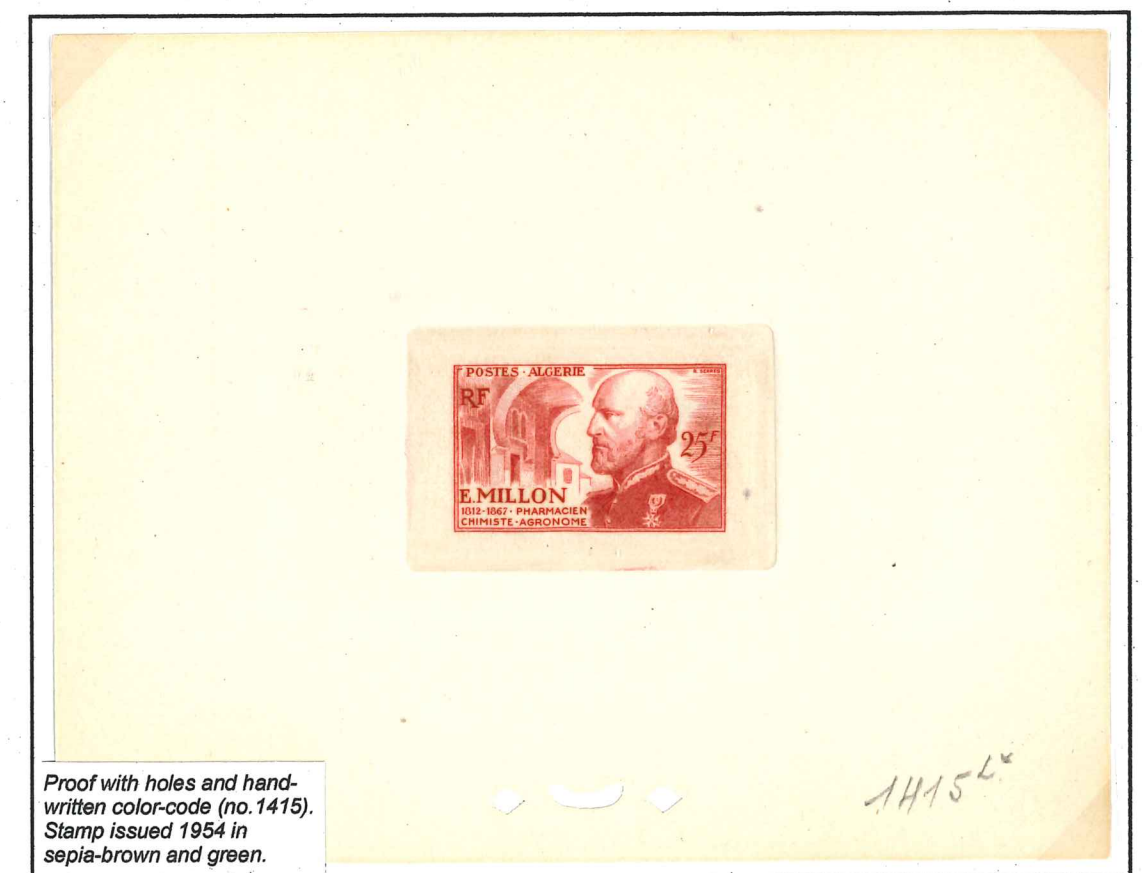


The institute of pharmacology, as part of the university, had free postage.

The study of pharmacology is offered in many universities.



Purkinje as a pharmacologist: studied effect of drugs like belladonna, digitalis, opium and camphor on humans.



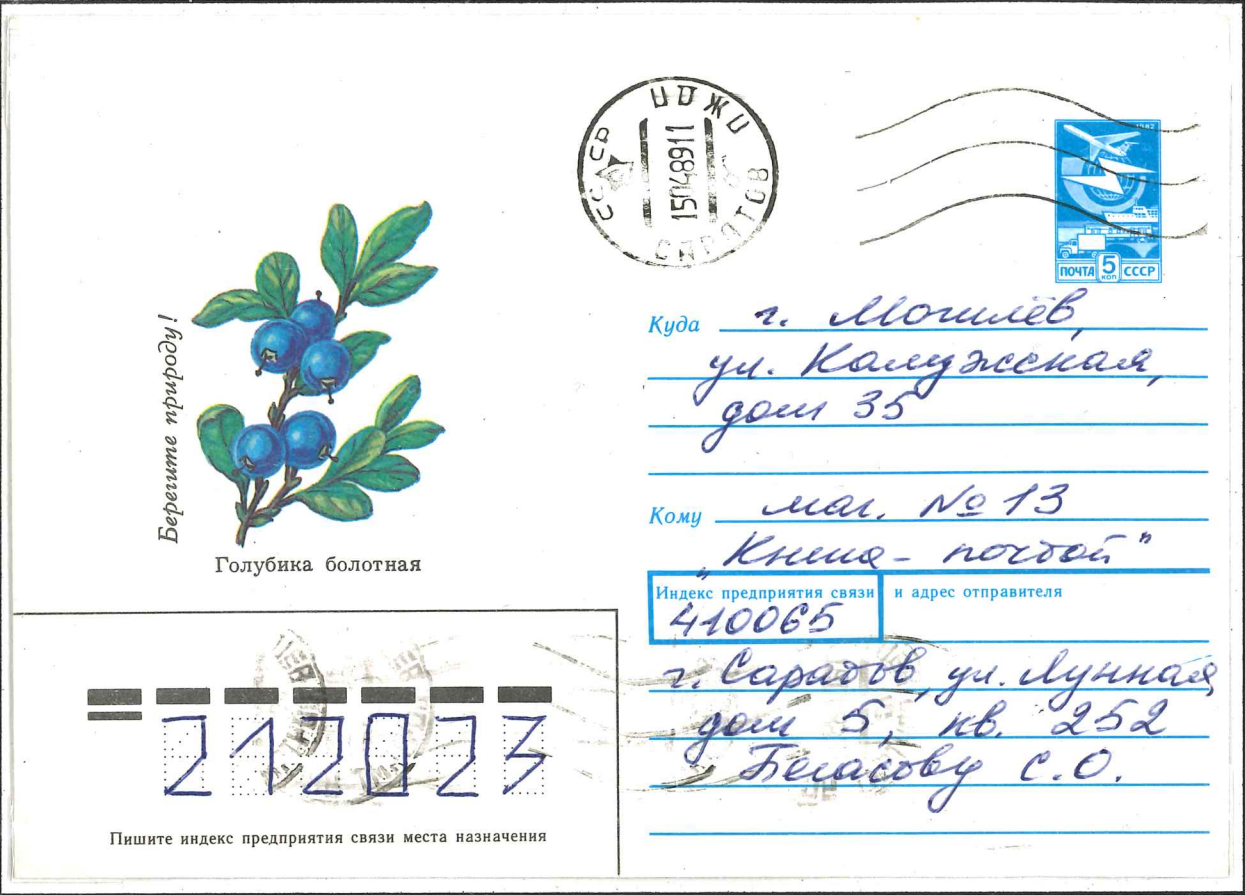
Proof with holes and hand-written color-code (no. 1415). Stamp issued 1954 in sepia-brown and green.

Millon (1812-1867) also studied pharmacology and became director of pharmacology in the army in Algeria.



... to affect the Digestive System

Bilberry, a well-known remedy against diarrhoea.



Mexican stamps, JALAPA overprints, showing different sub offices, incl. Tesiultan, Perote, Misantla and San Juan de los Llanos. Only 200 - 400 sent of each.



Mexican letter (1842)

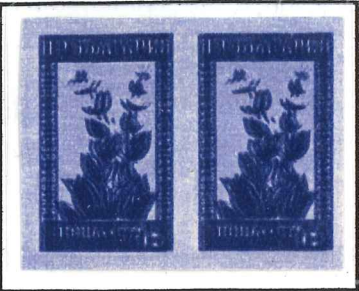


Jalapa is also a medicinal tree: The resins have drastic purgative action, but may be toxic.



Arrowroot is used as a gruel in the treatment of diarrhoea.

Variant: pair imperforated, double printed.



Gentiane: bitters increase the gastric function, used against loss of appetite.

Set of six progressive proofs. The stamp was issued in 1986.



A solution from the flowers of Hagenia abyssinica is used to treat tapeworm.

Special perforated proof mounted on card with official stamp and signature.



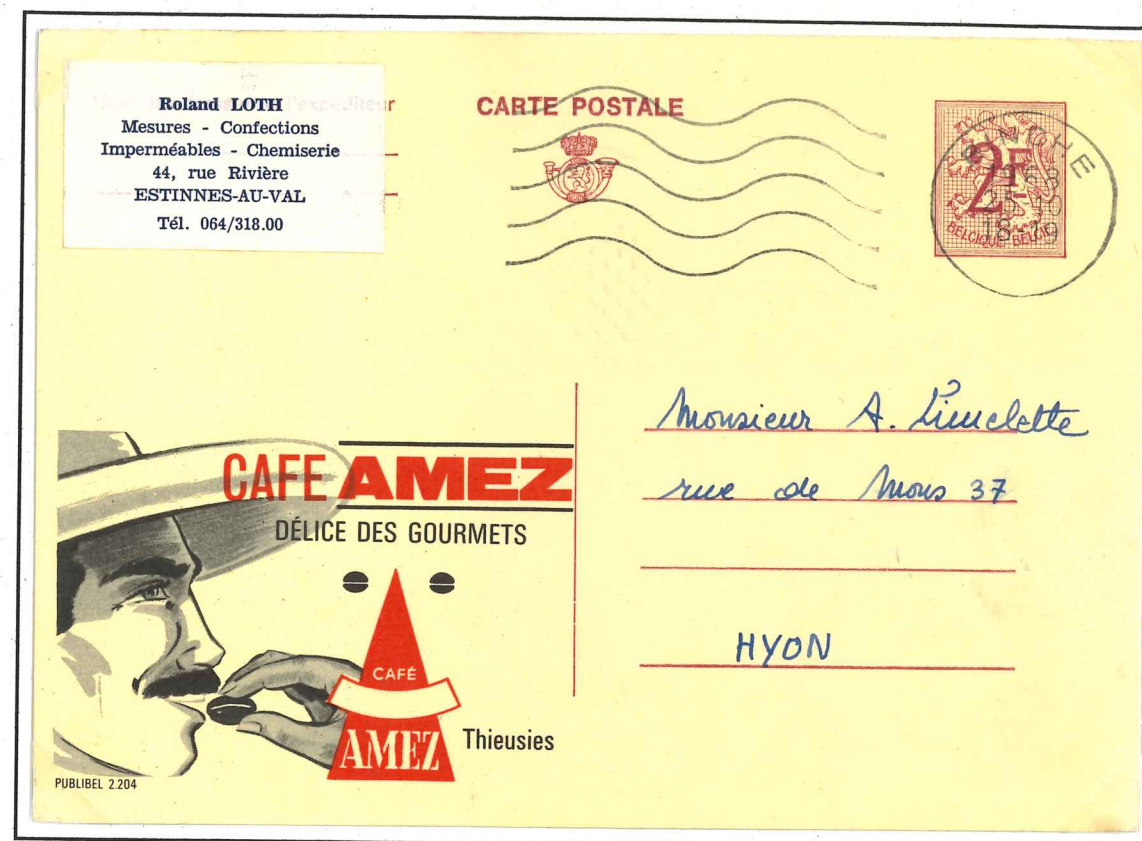
Imperforated corner block of four. Issued 1975.



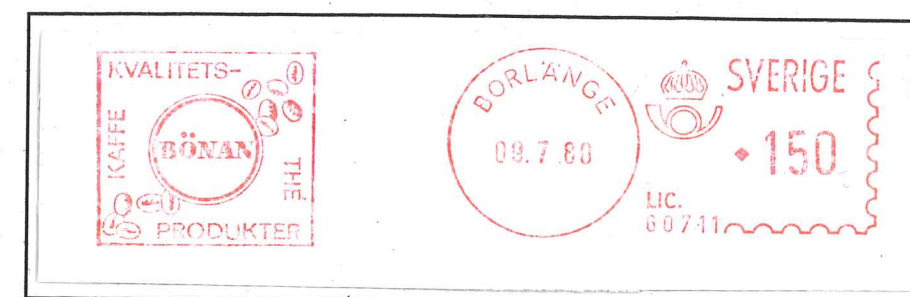
The seeds from the plant, Ricinus communis, gives castor oil, a powerful laxative. The extremely toxic ricin have been destroyed with water vapor.



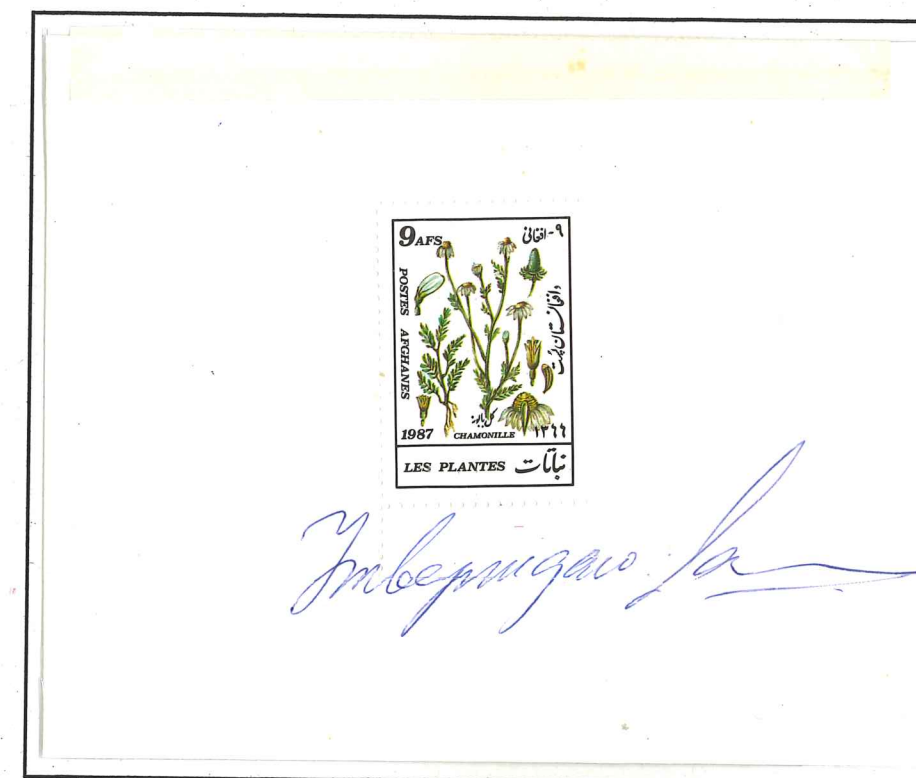
... to relieve Nervous Diseases ...



Imperforated in block of four. One copy exist.



The coffee seeds contains caffeine which stimulate the central nervous system; a tonic.



Special perforated proof mounted on card with official stamp and signature.



The coca leaves of *Erythroxylum coca* acts as a stimulant because of its low amount of cocaine.



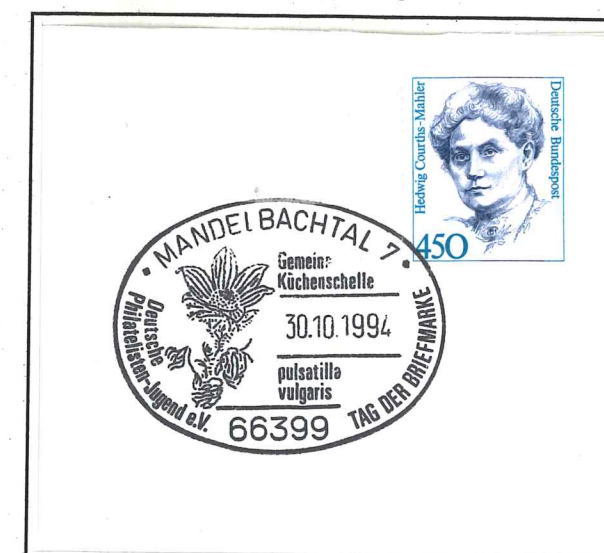
Valerian root contains valepotriates: sedative relieving anxiety and restlessness.



*Hypericum perforatum* (St John's wort) contains hypericin and is used for treating mild forms of depression.



This stamp, with original gum, have fault watermark: missing one D in DDR to the right. Certificate in the back.



Most sedative plants in traditional medicine have not been scientifically examined, e.g. Camomile ... and Pulsatilla species.