Stamps and Microscopes

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In an earlier article I wrote about how you can derive more pleasure from a small and modest microscope collection by studying and comparing the individual design features such as the fine focusing mechanisms, the nosepieces, the bases etc.
Another way to enjoy microscopes without even possessing one is through stamps. You will be surprised how many stamps feature a microscope once you start looking. My own theme stamp collection extends even to eyeglasses, magnifiers and various optical instruments, even to some relevant cancellation stamps.

My interest in such theme stamps was aroused by the issue in 1981 of a beautiful set of 8 stamps by the Deutsche Bundespost (Fig. 1) which included an early binocular microscope by Nachet/Paris dated ca. 1880 (compare Billings catalogue, 2nd edition, fig. 265), and an earlier monocular microscope by George Adams/London dated ca. 1770 (compare Billings catalogue, 2nd. edition, fig. 27) with the typical tilting gear wheel. All these stamps had a surcharge for the benefit of the youth.
Soon afterwards I obtained a set of two similar stamps from the former GDR (since 1990 united with the Federal Republic of Germany) showing instruments from the Museum of the Carl Zeiss Foundation in Jena (Fig. 2). One is a Culpeper-type microscope by Huntley/London. dated 1740, the other is a horizontal microscope by Amici dated 1845 .These stamps are dated 1980.
Also in 1981 the Republic of South Africa issued a 5 c stamp in support of the National Cancer Association showing the well-known Carl Zeiss Standard Gfl microscope (Fig. 3). When I learned of this, I quickly dashed off a letter to the Zeiss office in Johannesburg asking them, if possible, to send me a sample. They sent me half a dozen!
A white Carl Zeiss Standard Gfl microscope altered with artistic licence (Fig. 4) appears on a Brazilian 30.00 centavos(?) stamp issued in 1983 in support of Cancer Prevention. The instrument pictured has an unrealistically long objective and lacks the illuminator. Until about the end of the 50s Carl Zeiss, or more correctly Zeiss Winkel, offered the Gfl in white lacquer particularly for private doctors' offices - at a corresponding surcharge, of course.

Not all microscopes on stamps are so easily identifiable. Some are only partially shown such as only the upper tube on the 3c US stamp for Harvey W. Wiley (50th anniversary Pure Food and Drug Laws), on others the artistic or generic rendition by the artist makes them impossible to identify, or they are shown simply too small or indistinct.

An A.O-Spencer (?) microscope is shown on an American 18c stamp "Disabled doesn't mean Unable" (Fig. 5) while Dr. George Papanicolaou (born 1883 in Greece, since 1928 in the US, died in 1962) uses what appears to be a Carl Zeiss F stand from 1934 on another American 13c stamp promoting early cancer detection by the well-known Pap Test (Fig .6) developed by him. Not being a philatelist I have not bothered to check in catalogues as to the issue dates of these - and other - stamps. This may be a project for the future.

The Leitz Ortholux is featured on a Netherland stamp also dedicated to cancer research (Fig. 7) and a Wild M11 portable microscope on a stamp of the Republic of Guinea for National Health (Fig. 8). Dr. Robert Koch (1843 - 1910), the discoverer of the tubercle and cholera bacillus and recipient of the 1905 Nobel prize for Physiology, is honoured by the stamps of six countries: Djibouti, Hungary, Guinea, Zimbabwe, Germany (2x), and Cayman Islands (Fig. 9). Koch first worked on the Anthrax bacillus and later also did reseach on tripanosomiasis in Africa. Zeiss donated the 10,000th objective, a homogeneous oil immersion lens, to Dr. Koch in 1904, while E. Leitz gave him their 100,000th microscope in 1907.I do not know what make of microscope Dr. Koch used, the illustrations on the stamps differ widely. The one on the German 144c (?) stamp of 2005 *100 Years Nobel Prize Robert Koch* shows a pre-1900 stand with a drawing prism, the Zimbabwe stamp of 1982 features what could be a Wild fluorescence microscope.

Dr. Louis Pasteur, in turn, is recognized on a stamp issued by Turkey in 1995 on the occasion of the 100th anniversary of his death, showing him holding a culture bottle, with his microscope in the background (Fig. 10). The Norwegian physician G. Armauer Hansen (1814 - 1912) discovered the bacillus that causes leprosy (also called Hansen's disease) in 1874. We are reminded of his achievement by a stamp from the Republic of Dahomey (Fig. 11). Last but not least we find Dr. Albert Schweitzer (1875 - 1965) on a Hungarian stamp (Fig. 12). Why the Transkei, of all places, would issue a stamp commemorating Antony van Leeuwenhoek, "father of the microscope" (1632 – 1723), with a stamp is a mystery, but the irony is the modern microscope silhouette blended in over his portrait (Fig. 13).

A very nice 17p stamp originating from the Falkland Islands and titled "The Voyages of Darwin" shows a beautiful picture of his microscope, which looks like an Ellis-type aquatic microscope by Jones (Bracegirdle 10/27) or one by Dollond/London (Billings, 2nd edition, fig.384) .A number of small insets show amoebae, worms, plants and an insect. Two stripes left and right show silhouettes of terrestrial and aquatic animals (Fig. 14). The last of these stamps to be mentioned especially is one issued in 2000 by Canada Post titled "*vox non echo"* with a picture of Dr.Armand Frappier (1904 - 1991) "Champion Disease Fighter" holding a cullture bottle with a 1940's monocular microscope in the background, which could be a Bausch & Lomb Model G. *Vox non echo* = "you will be the voice" was Dr. Frappier's motto. He founded the Quebec *Institut national de la recherche scientifique* and specialized in tuberculosis (Fig. 15).

A microscopic theme without a microscope is presented by the German stamp of 1968 "Hundert Years of Scientific Microscope Design" which illustrated the principle of image formation in the microscope. Fig. 16 shows a first-day-cover which I can't explain: by the quality of the paper of the envelope compared with another first-day-cover from Carl Zeiss Oberkochen (Fig. 17) and by the illustration of a microscope of definitely GDR design (the "East German Zeiss) it is an East German envelope with West German stamps and cancellation!

In 1839 the Microscopical Society of London, now the Royal Microscopical Society, was formed. 150 years later a series of stamps issued by the Royal Mail (British Post Office) with microscopic motifs (Fig. 18) commemorates this historic event. Looking at British stamps, a 1999 43p Millennium stamp is covered by an almost life-size picture of a culture of Alexander Fleming's penicillin mold (discovered in 1928), and another Millennium stamp has a rather scary scanning electron microscope picture of the head of a Brazilian ant *Gigantiops destructor* (Fig.19).

Next in line are specialty microscopes such as electron microscopes. A Canadian 37c stamp from 1968 features the first Canadian-made electron microscope (in 1938 by the University of Toronto, now accessible to the public in the Ontario Science Centre) (Fig.20). Sweden honoured the 1982 Nobel Prize winner Dr. Christoper A Klug (University of Alabama, stem cell research) with his electron microscope on a 3.10 Kronor stamp. In 1975 the Academy of Science of the GDR was celebrated with a 25 Pfg. stamp showing a large electron microscope on a background of a chemical refinery (Fig.21). The reproduction of a Japanese stamp with an electron microscope is, unfortunately, rather poor.

Lastly, in 1989, the GDR issued a nice stamp commemorating 100 years of the Carl Zeiss Foundation Jena (although it did no longer exist there legally) with the picture of a modern metroscope, an industrial measuring microscope and one of the first type of instruments Abbe designed for production outside the regular microscope programme (Fig. 22).

As an example of a cancellation stamp I include one from Wellesley Mass. commemorating the second century of microscopes from Carl Zeiss 1868-1968 (Fig. 23).

Outside the scope of this article are my other stamps of slit lamps, magnifiers, eyeglasses, telescopes, binoculars, theodolites, cameras, great discoverers, inventors, scientists etc. totalling almost 100. Where did I find them all? Some came by regular mail or I obtained them from the local post office, others I found in a grab box of a stamp dealer, some I copied from illustrations in books or other publications, such as a beautiful calendar from the National Museum of Health and Medicine, Washington, DC, I was given by a generous friend, and, as I said, the ones with the Zeiss Standard Gfl microscope I scrounged from my helpful colleagues abroad. I must add, though, that of some of the copied stamps I do not know the correct original size. When the illustration was suspiciously large I reduced it to reasonable dimensions. Still, although not a philatelist or purist, I nevertheless enjoy their motifs and designs and the amount of information that can be derived from them and it gives me pleasure to leaf through my stamp collection and marvel at the variety of "microscopic stamps".

In conclusion I should like to mention a totally different area where microscopes can be found: in architecture as sculptures or paintings particularly on scientific buildings, in graphic art e.g. in advertisements or brochures, in programmes of schools and universities. There is ample scope for the microscope-minded to search and discover - often with a smile and chuckle at the artist's distorted impression of our "beloved instrument".

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Fig. 1 Microscope by Nachet / Paris and by Adams / London

Fig. 2 Microscope by Huntley / London and by Amici

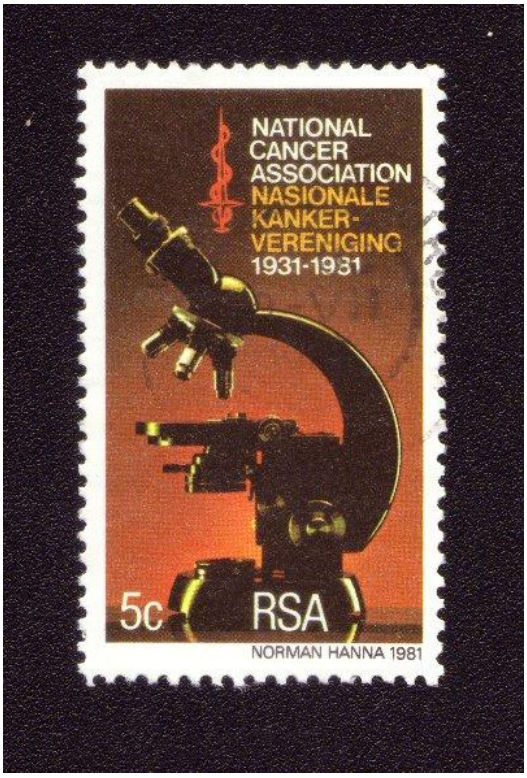

Fig. 3 Carl Zeiss Standard Gfl

Fig. 4 Zeiss Winkel Standard Gfl

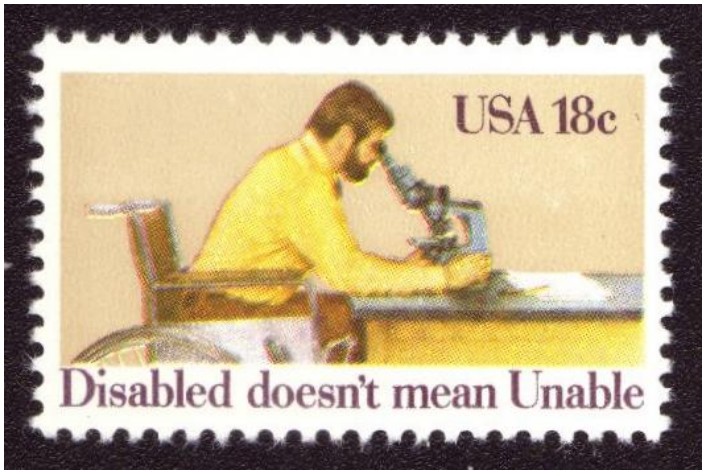

Fig. 5 AO-Spencer Microscope

Fig. 6 Carl Zeiss Jena Stand F

Fig. 7 Leitz Ortholux

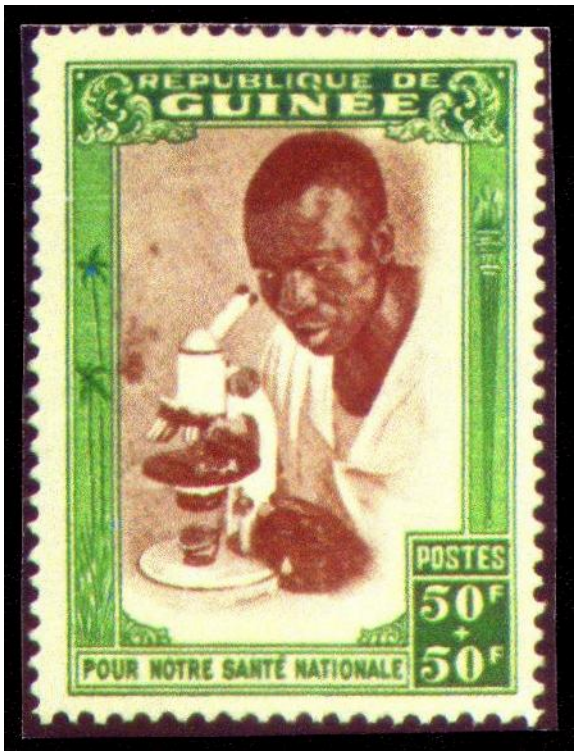

Fig. 8 Wild M 11 (Portable)

Fig. 9a Stamps in honour of Dr. Robert Koch with different microscopes

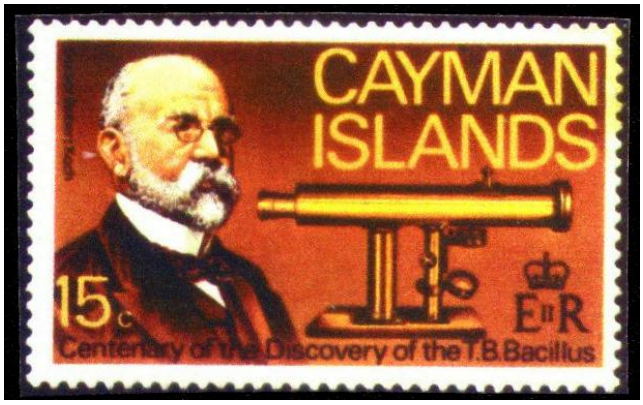

Fig. 9b

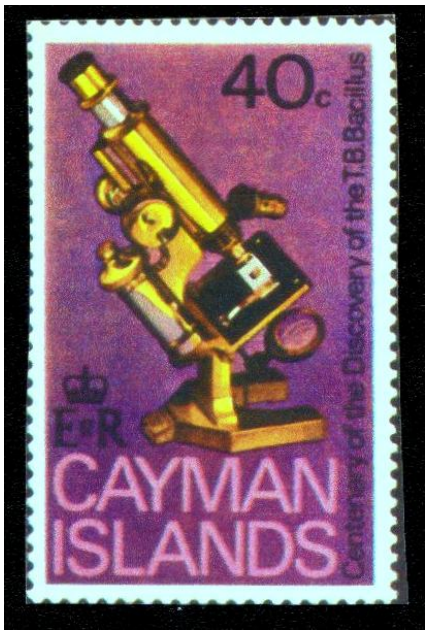

Fig. 9 b and c
Discovery of
TB Bacillus by Robert Koch
The 15 c stamp shows an interesting choice of microscope

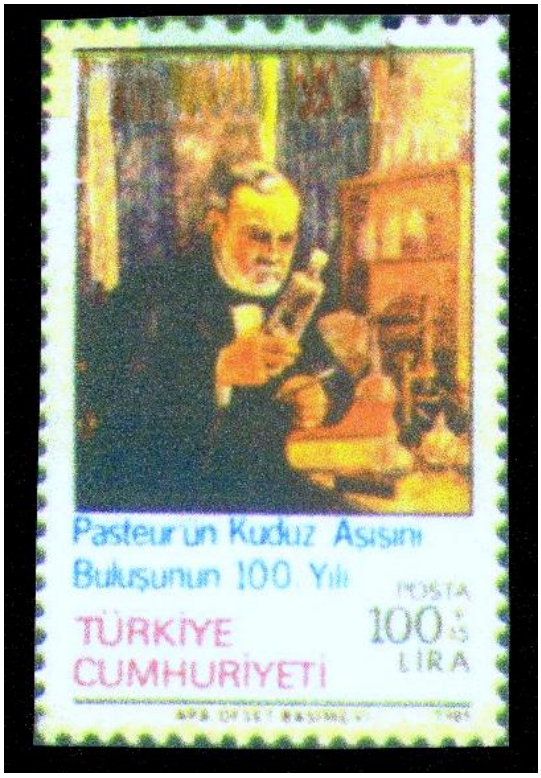

Fig. 10 Dr. Louis Pasteur

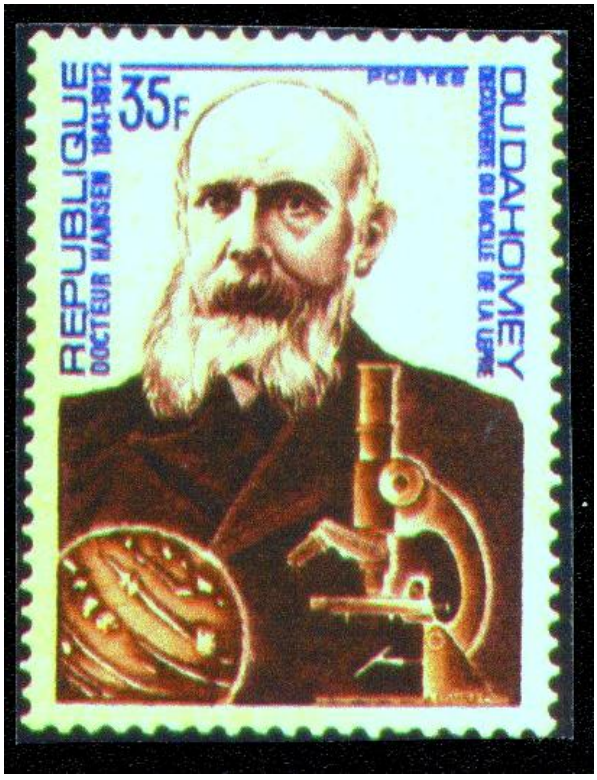

Fig. 11 Dr. Hansen

Fig. 12 Dr. Albert Schweitzer

Fig. 13 Antony von Leeuwenhoek

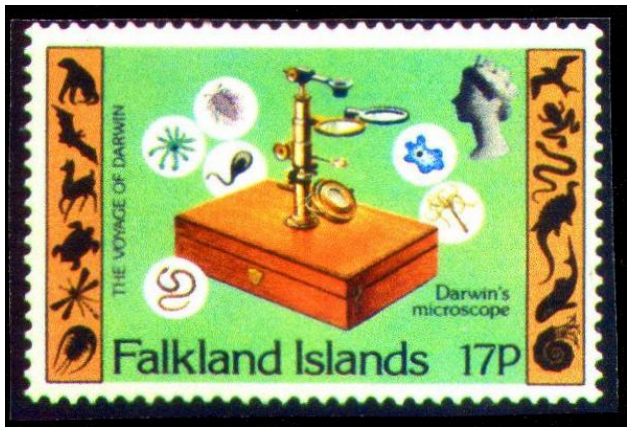

Fig. 14 Darwin's Microscope

Fig. 15 Dr. Armand Frappier

Fig. 16 First Day Cover of special German stamp for 100 years of Scientific Microscope Design.
Above: presumably East German envelope cancelled in Oberkochen/West Germany with complete set of stamps including 1000 years of mining in the Harz Mountains and 150 years of printing presses.

Fig. 17 Below: West German envelope with stamp of imaging path in microscope only. FDC are normally cancelled at the Bonn Post Office, Carl Zeiss obtained special permission for this particular cancellation stamp.

Fig. 18 Set of Stamps issued in 1989 by the Royal Mail commemorating 150 years of the Royal Microscopical Society of London

35p = microschip 600x, 32p = blood cells 500x, 27p = blue fly 5x, 19p = snow flake 10x

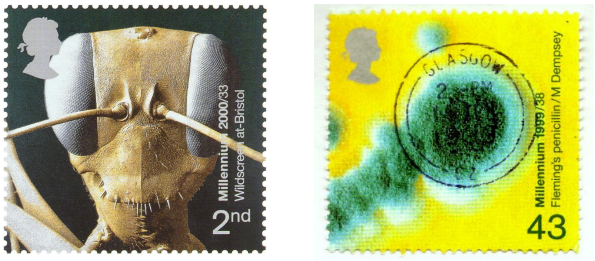

Fig. 19 Two Millennium stamps

The left is from a catalogue, it is missing the denomination

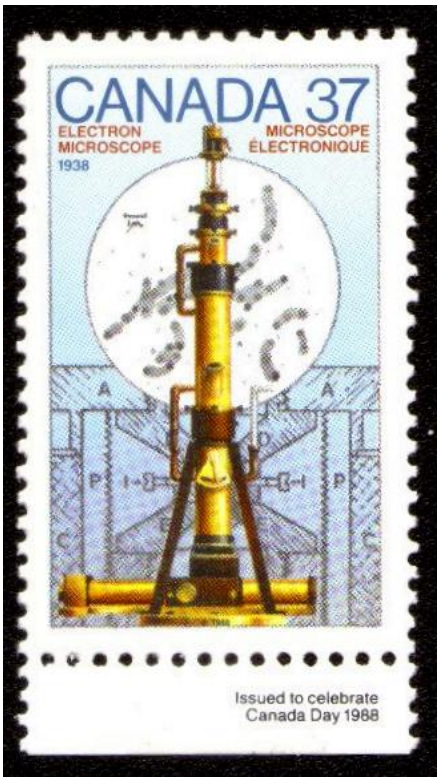

Fig. 20 First Canadian Electron Microscope

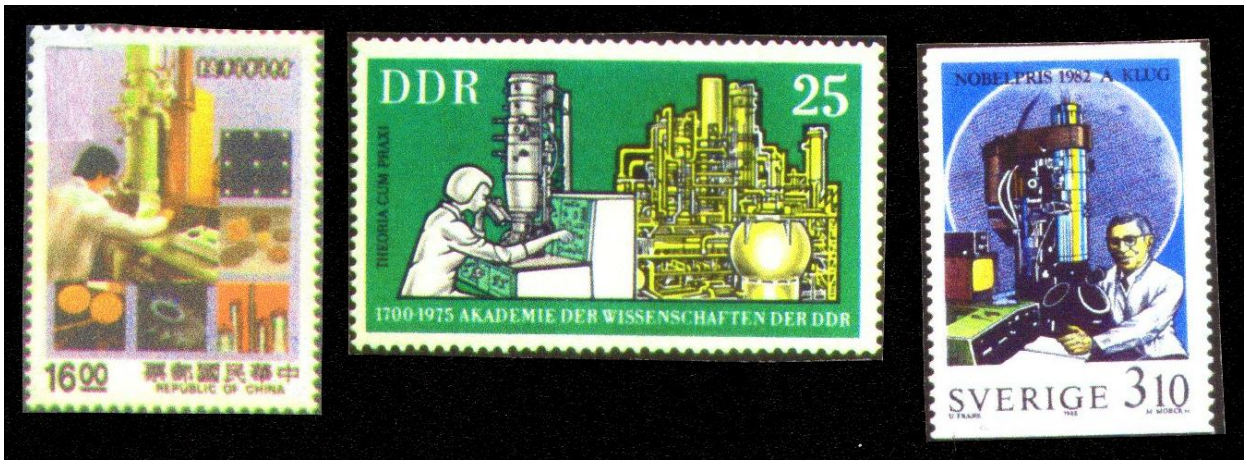

Fig. 21 Three stamps featuring electron microscopes:
Japan (?), the German Democratic Republic, and Sweden

Fig. 22 Metroscope: 100 years Carl Zeiss Foundation (GDR) silve rbackground
Fig. 23 Cancellation stamp with Carl Zeiss logo 1977 (USA)

Fig. 24 A selection af stamps with microscopes

The 5c Canadian stamp (top, second from left) shows a linear drawing of a microscope on the right.
Third stamp from left features Harvey W. Wiley "30th anniversary, Pure food and Drug Laws (USA)
The Cancer and Diabetes stamps are also American ones.

(PS: the alignment of the illustrations is somewhat crooked. This is due to the fact that these little things are not easy to line up on the scanner and often move when the lid is put down.)