

“Hidden Beauties” and Other Microscopical Trade Cards

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Introduction

Everybody is familiar with, or at least aware of, modern trading cards. A trading card is a small card made out of thick paper or paperboard that contains the image of a person, place, thing, or event, with a short description on the reverse side. Today's trading cards traditionally depict sports figures, with baseball cards being especially well known. In 2007, a single trading card bearing the likeness of Honus Wagner, a turn-of-the-twentieth-century U.S. baseball player, was sold for \$2,350,000, and later that same year, it was sold again for a record \$2,800,000! The reason for the card's rarity is that it was to be issued by America's biggest tobacco corporation, and Wagner was a non-smoker who objected to the issuing of the card. Legal action followed that prevented release of the card, but somehow four cards are said to have slipped out—it was one of these that was auctioned for such a large sum.

Trading cards actually have, as their ancestor, trade cards. The earliest form of trade cards, which preceded business cards, are found at the beginning of the seventeenth century in London. They were used as advertising, or maps, directing the public to merchants' stores, there being no well-developed newspapers or street numbering system at the time. These trade cards were printed in monotone until the introduction of color lithography around 1830. Eventually, these trade cards were inserted in the product itself, with some of the earliest examples inserted into paper packs of cigarettes to act as stiffeners to protect the product. Allan and Ginter in the U.S. in 1886, and W.D. & H.O. Wills in Britain in 1888 were the first tobacco companies to insert color lithographed cards in their cigarette packages. Once the cards started to depict sports figures, animals, inventions, transport, cars and motor racing, war and military, etc., the collecting of these trade cards became so popular that by 1900 there were thousands of tobacco card sets manufactured by over 300 companies. Following the success of cigarette cards, manufacturers of other products started including trade cards inside their products, such as candy, tea, biscuits/cookies, cocoa, chewing gum, coffee, etc.

Microscopical Trade Cards

It should not be surprising that eventually, after series of cards from two to 25 or 50, or even 100 related subjects depicting famous actresses, sports figures, heraldry, city views, military heroes, inventions, etc. etc. were issued, there would be a series issued depicting microscopic plants and animals. In fact, scores of series of microscopical trade cards have been issued over many decades, and it is proposed here to describe a selection of these.

“Hidden Beauties” (1929)

One of the most beautiful of the microscopical series of trade cards was one called “Hidden Beauties,” issued by John Player & Sons. In 1877, John Player bought a small tobacco factory that William Wright had started in 1828. Player's innovation was to offer pre-packaged tobacco, prior to which smokers bought tobacco by weight from loose supplies, and cigarette papers to roll it in. Player was one of the first to include trade cards in the cigarette packs as a stiffener, and the first set of cards, produced in 1893, was “Castles and Abbeys”; other well-known sets included “Footballers” (1926), “Civil Aircraft” (1935), and “Motor Cars” (1936). More than 200 different sets of their trade cards were reprinted in the 1990s.

“Hidden Beauties,” issued in 1929, is a series of 25 cards (2½” x 1¾”) depicting, first, a light microscope, along with a quotation from Shakespeare (“In Nature's infinite book of secrecy a little can I read”), followed by 24 beautiful color lithographed images of microscopic specimens. Figures 1 through 4 illustrate the front sides of these cards, with their descriptions directly below or to the immediate right. Interestingly enough, when England issued postage stamps in 1989 marking the 150th anniversary of the Royal Microscopical Society, a set of four of these commemorative stamps appeared on a First Day Cover which also depicted Card No. 1 from Player's “Hidden Beauties” series (Figure 5).



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4



Hidden Beauties · John Player & Sons

MICROSCOPES

First Day Cover · No. 16 Cigarette Card Series
PRESENTATION PHILATELIC SERVICES

FIGURE 5

"Famous Inventions" No. 13, Microscope

The W.D. & H.O. Wills Tobacco Company, which like John Player & Sons, became part of the Imperial Tobacco Company (of Great Britain and Ireland) Ltd., issued a series of cigarette cards devoted to "Famous Inventions." Amongst this series, which included Steel-Frame Building, Modern Submarine, Lavassor's Motor Car, and Transporter Bridge, was Microscope. The front and reverse sides of this 2 $\frac{5}{8}$ " x 1 $\frac{3}{8}$ " card are illustrated in Figure 6.

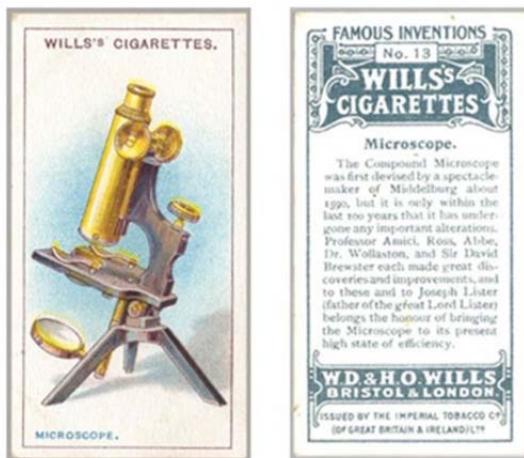


FIGURE 6

"Small Wonders" Microscopic Life

In 1981, Brooke Bond Oxo Ltd, London, issued a tea trade card set consisting of 40 (2-11/16" x 1-3/8") cards depicting "Small Wonders." The company offered a FREE album to encourage the collecting of all 40 cards (i.e., buy more of their tea!). Figures 7 through 13 illustrate the front and reverse sides of the cards in this set.



FIGURE 7



FIGURE 8

FIGURE 9

**No. 13
EARTHWORM**
Bodies

The earthworm body is divided into many segments, on each one there are four pairs of hooked bristles or chaetae. If the front end of a worm is held firmly, the bristles will try to point towards the head. This gives the worm a better grip in its burrow and so it can pull itself along and move the soil out. The bristles also help the earthworm to burrow, by anchoring part of the worm to the rest of the body can contract down.

FREE album or poster just send 10p + 10p and 1st class stamp for postage with your name and address to: Broads Bond Picture Card Department 308 Parkway House, Sheen Lane, London SW14 8LU.

**No. 14
SPIDER**
Silk production

All spiders' webs are made of silk secreted by silk glands as a viscous liquid which then hardens when exposed to air. They pollute out silken threads from the six spinnerets at the end of the abdomen. Each gossamer thread is a mere 1/200 mm in diameter yet it is stronger than steel wire of similar thickness. A spider spun a thread all the way round the world. It would use only 6 oz of silk.

FREE album or poster just send 10p + 10p and 1st class stamp for postage with your name and address to: Broads Bond Picture Card Department 308 Parkway House, Sheen Lane, London SW14 8LU.

**No. 15
MOTH**
Antennae

The male emperor moth has elaborate feathery feelers or antennae. It uses these to find its mate. When she hatches out of her cocoon she secretes a scent which the male moth detects with his antennae. He flies towards the scent and mates with her. The scent of the female is so strong that one moth placed in a meshed cage has attracted over twenty males to the outside.

FREE album or poster just send 10p + 10p and 1st class stamp for postage with your name and address to: Broads Bond Picture Card Department 308 Parkway House, Sheen Lane, London SW14 8LU.

**No. 16
DADDY-LONG-LEGS**
Balancing organs

Like all true flies, daddy-long-legs have just one pair of membranous wings for flight. Only the hind wings are visible, as the tiny pair of club-shaped hind wings can't be seen. These modified wings - known as halteres - give the fly its balance and orientation, and are used for balance. They vibrate during flight at the same frequency as the wings, but out of phase with them. If the halteres are removed, the fly becomes uncoordinated and uncoordinated.

FREE album or poster just send 10p + 10p and 1st class stamp for postage with your name and address to: Broads Bond Picture Card Department 308 Parkway House, Sheen Lane, London SW14 8LU.

**No. 17
HONEYCOMB**
Symmetry

Honeycombs is made of wax secreted by worker bees. The hexagonal shape of the hexagonal shape of each cell is very given a beautiful symmetrical pattern, but it also gives the strongest construction, with the minimum amount of wax used. This is ideal and the maximum volume for storing honey and pollen. Note in the closer up photo how the cells on the outside side of the comb are completely closed, to prevent moisture getting in. The cells are inclined at an angle so that the liquid honey will not run out before the cells are capped.

FREE album or poster just send 10p + 10p and 1st class stamp for postage with your name and address to: Broads Bond Picture Card Department 308 Parkway House, Sheen Lane, London SW14 8LU.

**No. 18
TREE HOPPER**
Thorn mimic

Tree hoppers are bugs which feed by sucking sap from plants. The front part of the body projects forwards and upwards into a point which resembles a rose thorn. Notice how the body is curved downwards and the two 'thorns' pointing in the same direction as the real thorns. The thorn bug is one of many insects which imitate natural objects and help to deceive would-be predators.

FREE album or poster just send 10p + 10p and 1st class stamp for postage with your name and address to: Broads Bond Picture Card Department 308 Parkway House, Sheen Lane, London SW14 8LU.



No. 25 APHIDS

Aphids are well known garden pests which vary in colour. What there are such widespread and abundant insects is that a single female can produce up to 50 live young a day, without finding a mate. After only 8-10 days the young are mature and reproducing themselves. When a female produces young from unfertilised eggs, it is known as virgin birth or parthenogenesis.

No. 26 STARFISH Tube Feet

In grooves on the underside of the starfish are many tube feet called podia. These tube feet are part of a system of water-filled canals. When more water is pushed into a suckered foot, it extends and when the water is withdrawn it contracts. In this way the starfish can move not only over flat rocks, but also up vertical ones by extending the tube feet on the leading edge and then sucking them to the rock. As the attached feet are contracted, the body is pulled upwards.

No. 27 MUSSELS Siphons

When exposed to the air, mussels close up their shells, only opening them again when covered by the incoming tide. The close-up photograph shows two mussels feeding underwater with a pair of siphons protruding between their shells. One siphon is for drawing microscopic hairs beat together to draw sea water with plankton, in through the fully siphoned out. The other siphon expels the gills air food, and the waste is ejected with sea water out through the plain siphon.

No. 28 FROG SPAWN Developing embryos

Frog spawn is laid as a tight mass which first sinks. As the developing frog embryo takes up water and swells, it floats to the surface. The jelly protects the developing embryo from the action of the water currents. At first, the egg can be seen as a tiny black sphere, but as the cells divide, it elongates. The beginnings of a head and a tail can be seen in the close-up photograph.

No. 29 WATER FLEA Movement

Water fleas are tiny crustaceans which breed rapidly when there is plenty of planktonic food available. In clear pond or canal water they can be seen as tiny yellowish dots swimming rapidly up and down through the water. They swim upwards by a vigorous downward movement of their long legs and then sink back again. Gradually they sink back to their original positions, only to repeat the performance.

FIGURE 11



FIGURE 12



FIGURE 13

"Marvels of the World," Insect Heads under the Microscope

This rare complete set of 12 cards dating back to 1950 was presented in Swiss chocolate bars and products from Nestlé, Peter, Cailler, Kohler chocolates. The cards, which are paper-thin and measure 2-1/4" x 1-9/16", comprise Set 31 from the Marvels of the World series, and feature magnified insect heads (Figures 14 and 15).

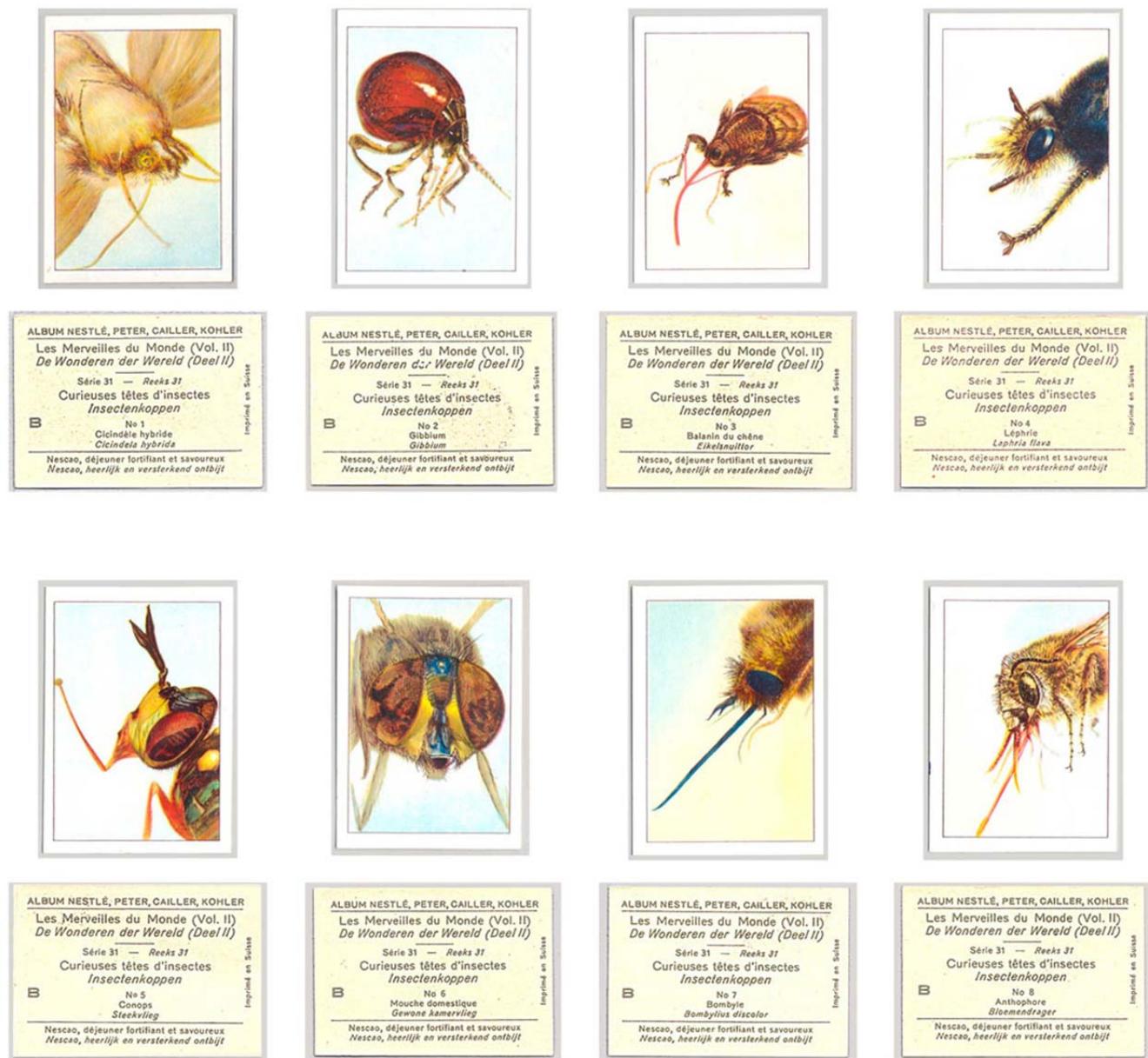


FIGURE 14



FIGURE 15

"Marvels of the World," Microscopic Sea Water Life

This is another rare complete set of 12 cards dating back to 1932, as issued by Nestlé, Peter, Cailler, Kohler in Swiss chocolate bars and chocolate products. The 2-1/4" x 1-9/16" paper-thin cards comprise Set 39 in the Marvels of the World series, and feature marine plankton (Figures 16 and 17).



FIGURE 16



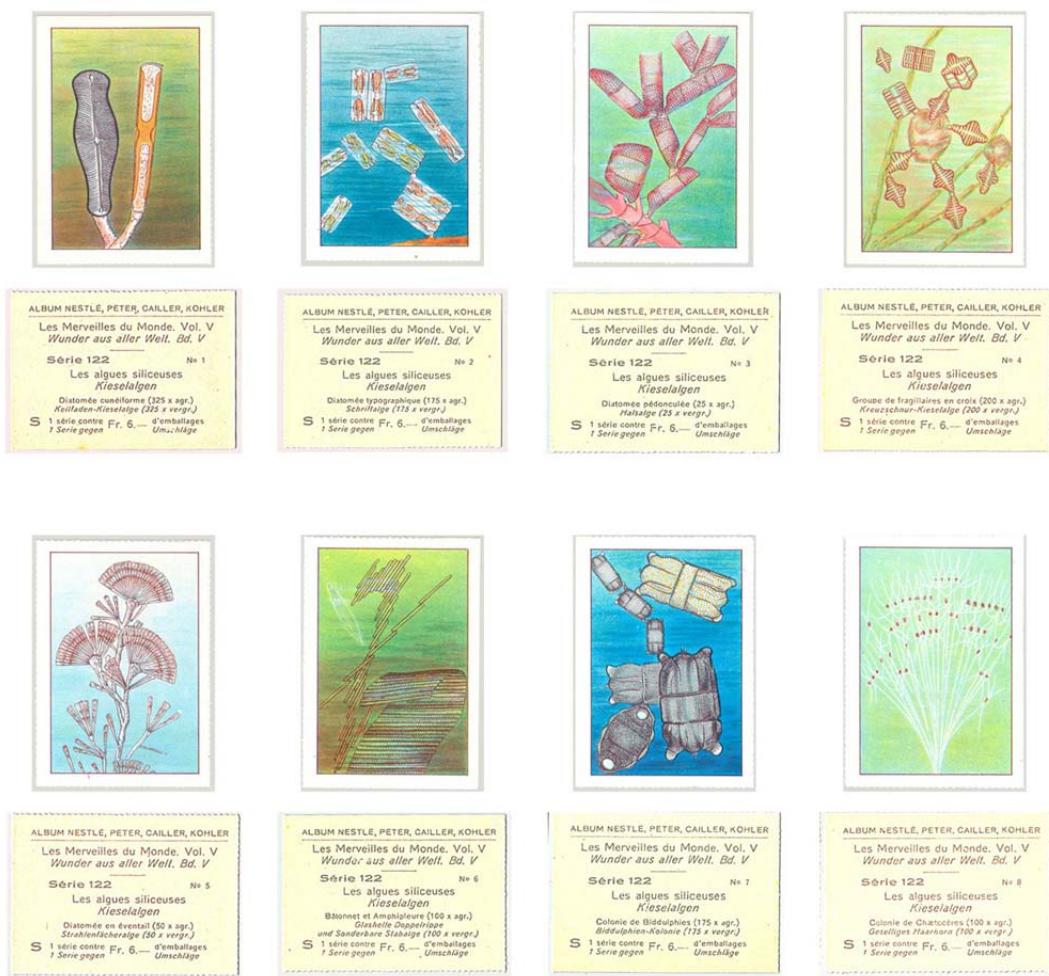
FIGURE 17

"Marvels of the World" Hidden Beauties

This complete set of 12 cards dates back to 1950 and was issued by Nestlé, Peter, Cailler, Kohler in Swiss chocolate bars and chocolate products. The The 2-1/4" x 1-9/16" cards comprise Set 60 in the Marvels of the World series; they feature a number of Hidden Beauties, including radiolaria, snowflakes, and insects (Figures 18 and 19).



FIGURE 18



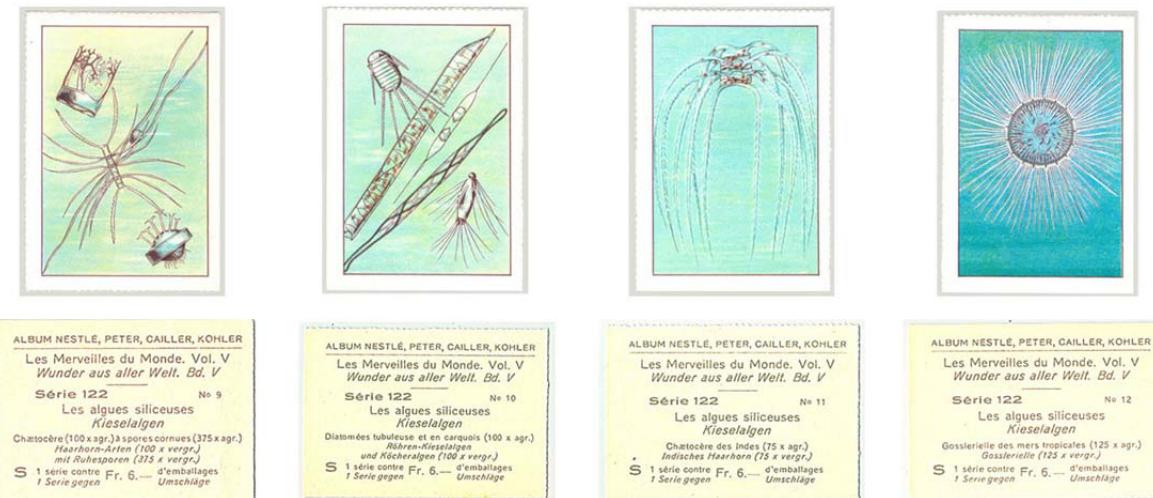


FIGURE 21

“A Drop of Water under the Microscope”

This rare and original set of six cards was issued in 1931 by Liebig, Libox, Oxo in packages of bouillon. The 4 1/4" x 2 3/4" stiff cardboard cards bear beautiful images of microscopic plant and animal life in the series titled "Gouttes d'eau sous le microscope" (A drop of water under the microscope) (Figure 22).

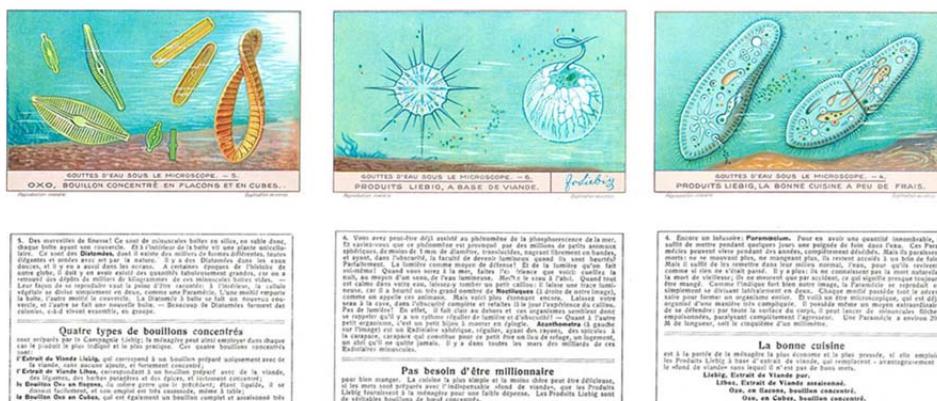


FIGURE 22

Parasitic Disease – Bilharziasis (Schistosomiasis)

This interesting set of six cards, not for the squeamish, was issued by Liebig in 1961. The $4\frac{1}{4}'' \times 2\frac{3}{4}''$ stiff cards depict the microscopic life cycle of the parasitic disease Bilharziasis (Schistosomiasis) from egg and "miracidium" stage, through the intermediate host (snail), to the penetration of the skin of the human being, and the transformation into the male and female schistosome that are responsible for the parasitic disease Schistosomiasis (Bilharziasis) in man (Figure 23).

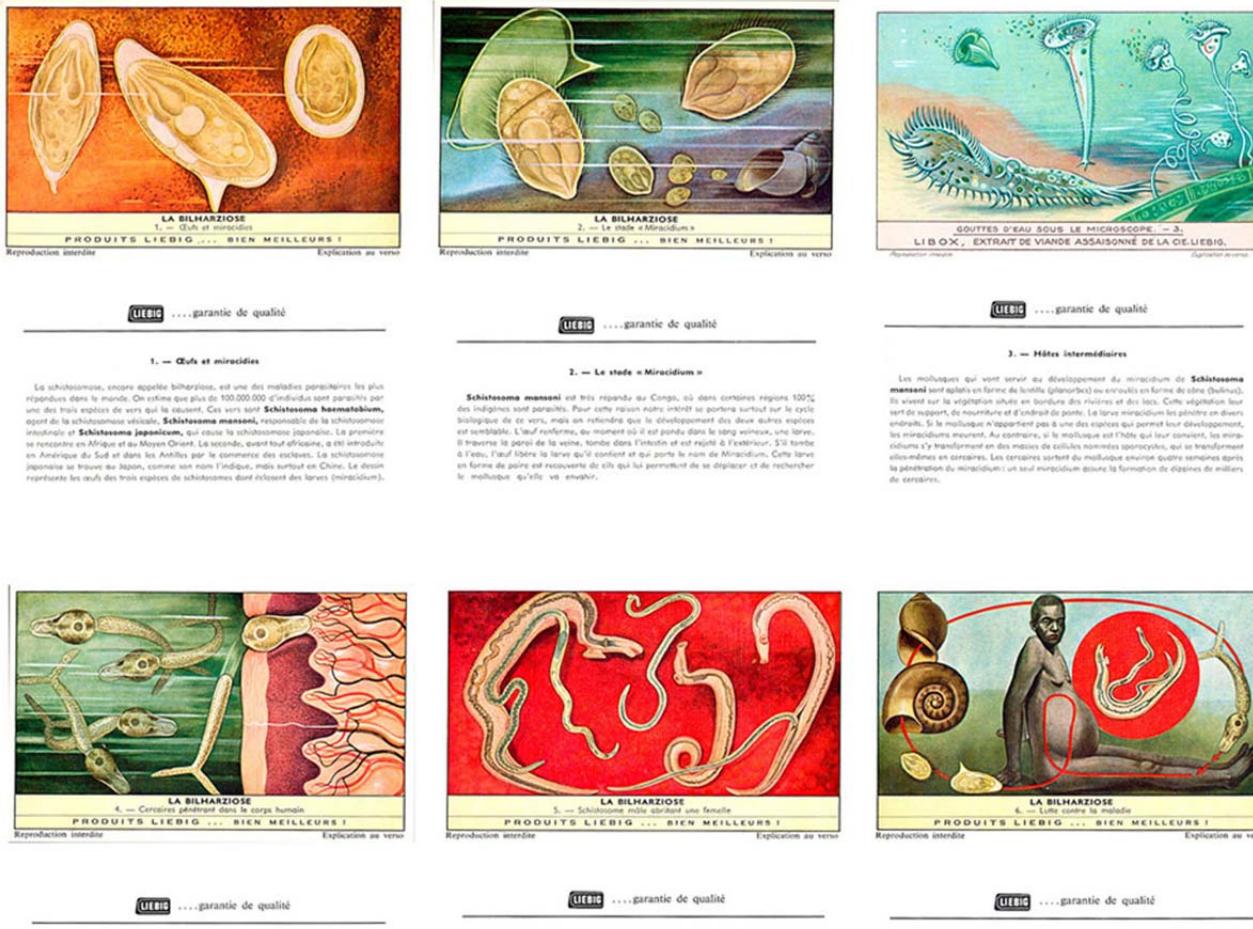


FIGURE 23

"Our Universe" – Microscopes

This rare subset of eight cards, dating back to about 1960, was presented in chocolate bars and chocolate products from Coop & Bègles (Gironde) in France. The $2\frac{3}{4}'' \times 2''$ thin cards constitute a subset featuring microscopes as part of a larger album collection called Our Universe. The instruments depicted include a nineteenth century monocular light microscope, a binocular microscope, a photomicrographic apparatus, and an electron microscope. There is also a Crookes X-ray tube, and microscopical images of algal volvocales, hepatic cells, and butterfly scales (Figures 24 and 25).

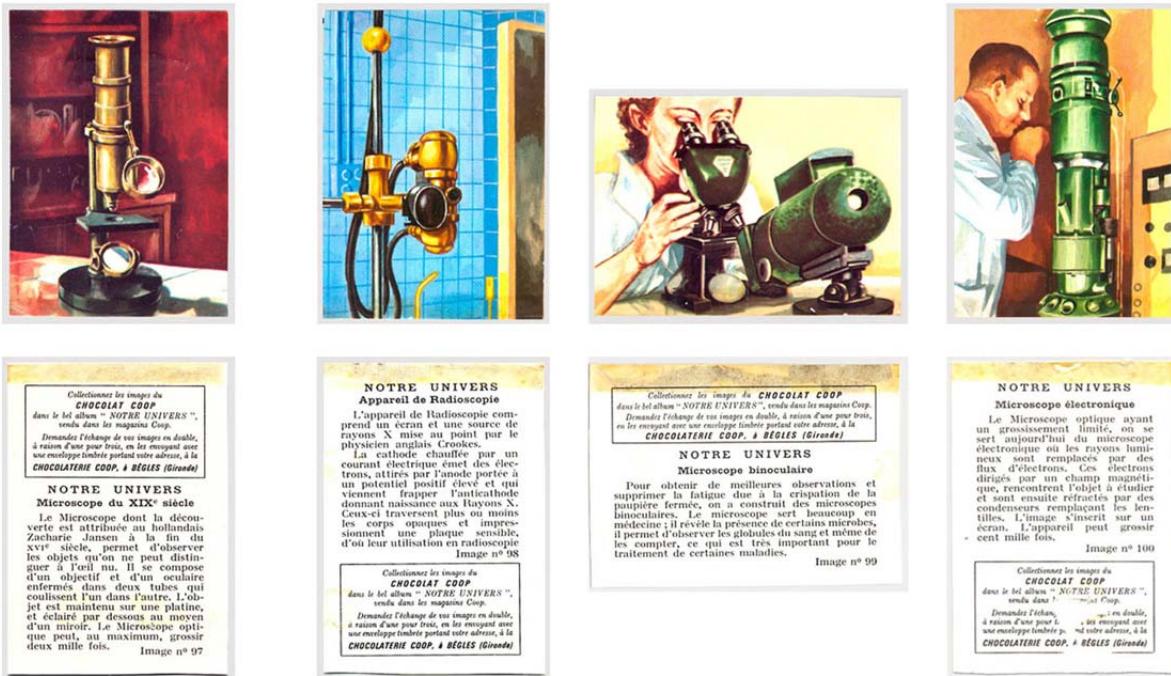


FIGURE 24



FIGURE 25

"Plant Diseases" – Microscopical Views

This interesting set of six rare cards from the early 1950s was issued by Lavazza Coffee (Italy) in complete sets after collecting tokens issued with the company's products. The 4-1/4" x 2-11/16" cards, with descriptive text in Italian, constitute Set 156 depicting various cultivated plant diseases. The cards show the entire plant, with inset illustration of the microscopic causative agent of the plant diseases (Figure 26).

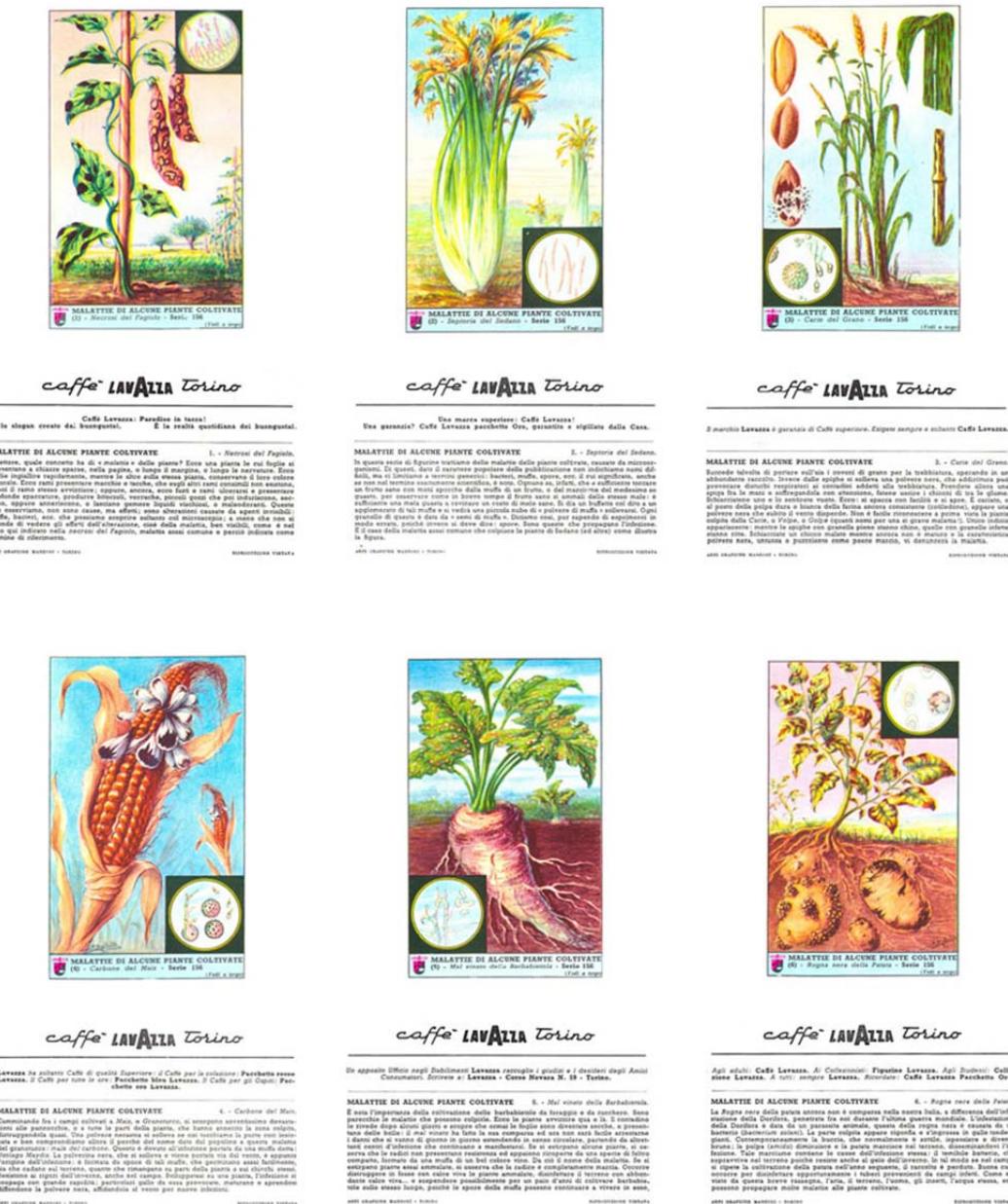


FIGURE 26

Conclusion

These few examples of microscopical trade cards give some idea of the extent and variety of cards that have been issued that might appeal to the microscopist. But a warning! The collecting of microscopical trade cards is addictive, even without buying the products....sigh.