

PERSONAGES OF ENTOMOLOGICAL INTEREST HONORED ON STAMPS

An Update - by Carl H. Spitzer (Biophilately Vol53 #4)

In Topical Time Volume 22 No. 4 (July/August, 1971) and No. 5 (Sept. Oct., 1971), Frank H. Babers published a listing with the above title. The introduction to that listing is repeated below.

“It has been suggested that when man first appeared on earth some millennia ago, he was undoubtedly welcomed as a source of food, warmth and companionship by some of the many species of insects who had preceded him by millions of years. When man generally and often violently rejected the proffered friendship, the insects fought back and the struggle continues to this day.

For many years, because of man’s ignorance, superstition and preoccupation in other areas, the ubiquitous insects had all the best of it. However, a few hardy souls endowed with an inquisitive nature observed that the insects became objects of worship; others were found useful and some were considered to be quite tasty. Other people added bits of knowledge here and there and finally the science of entomology was born as the result of the interaction of many scientific disciplines.”

In 1964 Fisk et al published their excellent “*Checklist of Entomological Stamps*” Compiled by Frank W. Fisk, Elwood Montgomery, Kenneth P. Pruess, Garland T. Riegel and Roy W. Rings. Included were stamps showing insects and related subjects, commemorating entomological personages or events, and references to insect borne diseases or their control. The authors point out that they have omitted (persons) “*who may have contributed to entomology slightly although their primary work was in other fields*”.

The present listing updates their list and also proposes a number they omitted. Since there are no strict rules by which a topical collector must abide, the decision to include or omit from his collection is that of the reader. Persons listed by Fisk are not included in this list for the sake of brevity.

Since that time, many stamps have been issued and a number of additional personages can be added to the Babers list. I have also included some of the people in the Babers list where additional information has become available. Since this listing is quite long, it will be issued over several issues of Biophilately.

Aesculapius, ca 1300 BC was, according to Greek legend, the favorite son of Apollo, God of Medicine, and Coronis, who had conferred upon him the gift of healing. In 93 B.C. Rome was ravaged by the plague. When the disease abated, Aesculapius was accepted as a God and his cult introduced into Rome. Thus as a result of an insect carried disease, medicine was greatly advanced.

Agramonte, Aristedes, 1869-1931, of Cuba, was a member of the United States Army Yellow Fever Board headed by Dr. Walter Reed who proved that yellow fever is transmitted by a mosquito.

Alexander the Great, 356 BC - 323 BC, is included because after his death, according to Clausen, he was embalmed by the use of a mixture of beeswax and honey.

Alfaro, J.M.S. 1860 - 1931. He and E.R. Roman wrote “*La Pesta*” (the Plague). Bubonic & Sylvatic Plague caused by fleas from infected rodents.

Aristotle, 384 BC - 322 BC. Credited with creating the first definite zoological system. Erected the category of Entomes in which he lumped Insects, spiders, scorpions, centipedes and millipedes. He listed about 60 insect species. He used the Order names Coleoptera, Diptera, & Hymenoptera, later adopted by Carolus Linnaeus (Carl Linne).

Babes, Victor, 1854 - 1926. He described the organism that causes Red Water fever - a usually fatal disease in 1888. Later, Smith and Kilborne found the same organism in cattle sick with Texas fever and proved that the disease was carried by ticks.

Banks, Sir Joseph, 1743 - 1820. He was the Naturalist on the Endeavour during Captain James Cook's first voyage to the South Seas. Banks and Daniel Solander (q.v.) collected many specimens including insects. Back in England they turned the insects over to Christian Fabricus who, like Solander was a pupil of Linnaeus. Fabricus in 1775 described 212 of the species from New Holland.

Bartlett, Josiah, 1729 - 1795. A signatory of the Declaration of Independence, he introduced the use of Peruvian bark into the United States for the treatment of "*malignant angina*", most probably malaria.

Bassi, Agostino, 1773 - 1856. Bassi demonstrated that the disease known as mal del segno was infectious and could be transmitted by inoculation, by contact and by infected food. He traced the disease to a parasitic fungus called after him *Botrytis bassiana* which invades tissue of the silkworm during its life and covers its dead body with a peculiar white effervescence containing fungal spores. He worked out methods to prevent its spread through the silkworm industries. He published in 1836 under the title *Del mal del segno ... his theories and practical findings*. He was not a trained scientist but a public servant in Lodi, Italy. He had to stop microscope work due to onset of blindness. His writings on the theory of disease anticipated Pasteur and later biologists.

Bello, Carlos, 1886 - 1933, of Brazil, volunteered to work on the plague in 1908 and yellow fever in 1905. At the time plague was spreading rapidly in the port of La Guara.

Bernard, Claude, 1813 - 1878. French Physiologist, discovered the vasomotor system. Was for a certain time an assistant in a Pharmacy in Vaise, a suburb of Lyons. I do not know why Fisk et al included Bernard on their list of entomological personages. Bernard probably knew Pasteur who spent five years working on pebrine disease of silkworms from 1865-1870.

Berzelius, Joens Jacob, 1779 - 1848. Eminent Swedish chemist of the 19th century who had the hobby of collecting insects.

Bilharz, Theodor Maximilian, 1825 - 1862, of Germany, is best known for his discovery of the parasites that cause the disease we now call "*bilharziasis*". He was a trained zoologist & investigated many tropical diseases carried by insects, spending much time on bubonic plague. He died of typhoid fever while on a hunting trip in 1862.

Boris III, King of Bulgaria, 1894 - 1943. Listed by Howard as being not only an avid collector of insects but one who seriously studied certain groups and contributed greatly to entomology.

Brazil, Vital, 1865 - 1950, of Brazil, demonstrated the toxic nature of scorpion venom. He founded the Butanon Institute at Sao Paolo to manufacture anti plague vaccine.

Bretonneau, Pierre Fidele, 1771 - 1862, of France wrote important monographs on the contagion of "*dothienenteritis*" or typhoid fever and predicted that some day it would be differentiated from typhus. He advocated giving massive doses of quinine after a paroxysm of malaria. He is credited with establishing the branch of medicine now called epidemiology.

Bruce, David, 1855 - 1931, is best known for his work with Thermistocles Zammit on Brucellosis. He later went to Zululand where he worked extensively on trypanosomiasis. In 1895, Bruce discovered the causative agent of tsetse fly disease, nagana, in cattle and demonstrated that the disease could be transmitted by the tsetse fly.

Buffon, Georges Louis Leclerc, 1707 - 1788. He published numerous books by various authors relating to Insects including his "*Histoire Naturelle*" in 44 volumes - Paris 1749-1804.

Calderon, Victor Emanuel, 1889 - 1969, of Guatemala. As a student, he enlisted with the Guatemalan Expeditionary Force to France in W.W. I. Was editor-in-chief of "*La juventud Medica*". Worked on onchocerciasis, described micro-filaria transmitted to blood by blackfly.

Calmette, Leon Charles Albert, 1863 - 1933. French physician, best known for his work developing the B.C.G. anti-tuberculosis vaccine. One of Pasteur's students with Yersin (q.v.) did extensive work on insect venoms & developed a vaccine against plague.

Carrion Garcia, Daniel Alcides, 1857 - 1885. Studied Oroya fever and verruga stage when the fever abates. This is now known as Carrion's Disease and the vector is sand flies of the genus *Phlebotomus*. Causative organism is the so-called X-body or Bartonella body, *Bartonella bacilliformis* Strong. Carrion died of this disease.

Carroll, James, 1854 - 1907, was a member of the Yellow Fever Board headed by Walter Reed. Carroll was the first to submit to the bite of an infected mosquito and came successfully through the resulting attack of yellow fever.

Caventou, Joseph Breniame, 1793 - 1877. French chemist who, with Pelletier (q.v.) in 1819 first isolated quinine from Peruvian Bark.

Chacon, Thomas Romay, 1764 - 1849. Cuban physician, worked extensively on yellow fever or "*black vomit*" as it was then called.

Cicero, Marcus Tullius, 106 BC - 46 BC. Roman statesman & orator. According to Russell et al, Cicero wrote extensively & frequently about tertian & quartan fever and attributed their periodicity to the will of gods.

Columbus, Christopher, 1446? - 1506. According to C.B. Williams, made the first record of a mass flight of butterflies from America. This was in June 1494 on his second voyage.

Cook, James, 1728 - 1779. Commanded the “*Endeavour*” on the voyages of the South Pacific, part of his mission being to collect information on the flora and fauna of the area. Drs. Banks and Solander (q.v.) were the naturalists on board. Many entomological specimens were collected. In the official record of the voyage, many insects seen were described and Sidney Parkinson, an artist on the ship portrayed many species in his book on the voyage.

Copernicus, Nicholas, 1473 - 1543. Polish physician better known as an astronomer, succeeded in the enacting of sanitary regulations that helped to combat the rat/flea carried black death epidemic then raging in Poland.

Costa Lima, Angelo Moreira da, 1895? - 1980? Brazilian entomologist worked at the Instituto Oswaldo Cruz specializing in certain groups of Hymenoptera as well as other insects, including beetles.

Cruz, Oswaldo, 1872 - 1917. Brazilian hygienist waged a successful campaign against yellow fever and founded the public health service of Brazil. Cruz founded the first courses in Brazil for those desiring to complete their knowledge of scientific disciplines in relation to medicine and public health at Oswaldo Cruz Institute. Special courses were on bacteriology, entomology, helminthology, etc.

Darwin, Charles R., 1809 - 1882. In 1842 Darwin wrote the first abstract on the theory of natural selection. In 1859, the “*Origin of Species*” appeared. London 1868 “*Animals and plants under domestication*”. London 1871 “*The Descent of Man*”. London 1875 “*Insectivorous Plants*”. The voyage of the Beagle started in 1832. The ship dropped anchor at desolate St. Paul’s Island 340 miles from the coast of South America. “*Not a single plant,*” Darwin writes “*not even a lichen, grows on this islet, yet it is inhabited by several insects and spiders.*” Most were parasites on the boobies and other sea birds that landed on the barren rocks and one a small brown moth that belongs to a genus which eats feathers. Darwin recognized that red clover requires bumble bees for satisfactory seed production.

Dauiel, Jacques, French physician, was honored by the King of France and the City of Marseilles for his efforts in combatting the plague epidemic of 1719.

Defillo, Fernando A., 1874 - 1949. A physician in the Dominican Republic who contributed to the study of tropical diseases in the Republic. He published extensively on malaria, parasitic infections and schistosomiasis.

Delgado, Ramon Claudio, of Cuba, was a member of the United States Army Yellow Fever Board headed by Dr. Walter Reed who proved that yellow fever is transmitted by a mosquito.

Dodoens, Rembert, 1517 - 1585. Born at Malines, Belgium on June 29, 1517. MD at the University of Louvain in 1535. Gave first account of an epidemic of myiasis in his “*Praxis Medica.*” Myiasis refers to the infestation of humans or other animals by fly larvae or maggots thus he contributed to knowledge of entomology. Best known for botanical writing.

Dzierzon, John, 1811 - 1906. In 1845 propounded the Dzierzon Theory and thus laid the foundation for much of our scientific and practical knowledge of bees. While not original on parthenogenesis he threw great light on the subject. Ardent student of bee culture for over 20 years before 1845. Commercial beekeeper with as many as 400 hives. Invented a movable comb hive of his own. While it lacked the

ease of manipulation as found in the Langstroth hive there are many in Germany who still use it. He knew drones came from unfertilized eggs and was credited with the discovery of parthenogenesis as a factor in bee life history in 1862.

Erlich, Paul, 1854 - 1915. A German Bacteriologist and Chemist. Co-discoverer of Syphilis medicine “*salvarsan*” to treat Venereal Syphilis. For this he received the Nobel Prize in Medicine in 1908.

Fabre, Jean Henri, 1823 - 1915. French Entomologist. His lifework was the study of the life history, habits and instincts of insects, chiefly of Hymenoptera, Coleoptera and Orthoptera as well as spiders. He took little account of literature but devoted his studies to direct observation. His research led him to be against theory of evolution. His classic study was concerning the aerial journey of the wingless larva of the oil beetle to the nest of wild bees from flowers.

Finlay, Carlos J., 1833 - 1915. Cuban Physician and Biologist. Dr. Finlay conceived the mosquito and yellow fever relationship as early as 1881, but his research was discredited until 1900. The U.S. Army Commission consisting of Jesse Lazear, James Carroll, Aristedes Agramonte and Walter Reed tried everything else first and failed so tried Finlays suggestion. As Health Commissioner of Havana he was considered a fanatic in Cuba.

Fracastoro, Girolamo, 1483 - 1553, of Verona, Italy, gave the first authentic description of typhus fever. He vividly wrote of the epidemics of 1505 and 1508. Typhus is flea borne. He also accurately described plague.

Gabrichevski, Georgy Norbertovich, 1860 - 1907. Russian physician, was the first of his countrymen to maintain that malaria was transmitted by a mosquito. He organized three expeditions to study the disease and its treatment.

Galileo, Galilei, 1564 - 1642. He invented the thermometer in 1593. He seems to be the one who thought of turning the telescope on small objects at close range. He, therefore invented our modern microscope, that is, two lenses at opposite ends of a tube. This is probably the kind used by Francesco Stelluti in his anatomy of the bee made with a microscope.

Gamaleya, Nikolai Fedorovich, 1859 - 1949. Russian physician, studied under Metchnikov and Pasteur and established first anti-rabies Institute outside of France. From 1902 to 1904, he studied the plague epidemic in Southern Russia and Transcaucasia. He recommended delousing the general population to control spotted typhus.

Gay, Claudius, 1800 - 1877. French entomologist who in 1844, published the first volume of his “*Historia Fisica y Politica de Chile.*” Volumes 4-7 contain the account of the insects he studied.

Goethe, Johann Wolfgang von, 1749 - 1832. Famous as the author of “*Faust*”, he was also a physician and botanist. He was one of the pioneers of evolution. According to Garrison, before Savigny, Goethe saw that the jaws of insects are modified limbs.

Goethals, George Washington, 1858 - 1928. Famous Sanitarian who with William Gorgas worked on yellow fever control activities that made possible the construction of the Panama Canal.

Golgi, Camillo, 1844 - 1926, of Italy, was awarded the Nobel Prize in physiology in 1906 for his work on nerve cells. In addition, however, he also contributed to the study of malaria. He demonstrated that the parasites of quartan fever differ from those of tertiary and that malarial paroxysms are coincident with sporulation of the parasites and that severity of attack depends on the number of parasites in the blood.

Gorgas, William Crawford, 1854 - 1920. He banished yellow fever and greatly reduced malaria within a year in Havana, Cuba by destroying adult *Aedes aegypti* and Anopheline mosquitoes. A considerable part of this accomplishment was effected by burning pyrethrum and sulfur within homes. This was also done in the Panama Canal Zone.

Grassi, Battista, 1854 - 1925. In 1897 Ronald Ross found a malaria parasite growing within stomach wall of an Anopheles mosquito. This was confirmed by Grassi in 1898 and Robert Koch in 1899. Grassi did research on malaria, ascariasis, ancylostomiasis and on the role of sand flies in the spread of leishmaniasis. He also proved that people screened from evening to morning from mosquitoes did not get malaria as their neighbors did.

Griesinger, Wilhelm, 1817 - 1868, of Germany, between 1857 and 1864, published several monographs on infectious diseases. He discussed typhus, malaria, relapsing fever (louse & tick borne) & hookworm.

Guiteras y Genir, Juan, with Dr. Carlos Finlay, assisted the United States Army Yellow Fever Board headed by Dr. Walter Reed. Later, he was Professor of Tropical Medicine and Hygiene at the University of Havana and was Director of Public Health. NOTE: In their list of entomologists, Fisk et al named Nicolas J. Gutierrez. It is believed Guiteras was intended.

Gwynn, Arthur Montagu, born in Dublin in 1908. Later moved to New South Wales. Before going into medicine, Gwynn graduated in natural science and worked several years as an entomologist in tropical Africa.

Haffkine, Waldemar Mordecai, 1860 - 1930, was born in Odessa, Russia. He worked at the Pasteur Institute 1889-1893 and then went to India as a government bacteriologist. He developed an effective vaccine against cholera. Less known is his work on bubonic plague. In India where widespread religious beliefs prevent killing all forms of life, including insects, the usual health measures cannot be carried out. Zinsser reports that by the use of a plague vaccine developed by Haffkine, fatal cases were reduced from 78.6 per cent to 39.5 per cent of those infected.

Hahnemann, Samuel, 1755 - 1843, of Meissen, Germany, practiced medicine for a time and then gave it up to spend full time translating from English into German Cullen's "*Materia Medica*." During the translation, Hahnemann noticed a similarity between the effects of Peruvian Bark on a healthy person and the results of certain diseases for which the bark was used as a cure. His establishment of that branch of healing known as Homeopathy followed. Thus the establishment of homeopathy resulted from a study of quinine and its effects on healthy persons.

TO BE CONTINUED

PERSONAGES OF ENTOMOLOGICAL INTEREST HONORED ON STAMPS (Part 2)

Harvey, William, 1578 - 1657. The greatest name in 17th century medicine did not shine with equal brilliance in his entomological efforts. Like Aristotle, Harvey believed the pupa to be an insect egg. According to Woodruff, Harvey believed insects and other lower animals are simple masses of organic matter that, as it were, had been molded from a definite form and were without complicated internal organs. These beliefs however, greatly benefited the cause of entomology since they got the Dutchman Swammerdam interested in the subject. Harvey thought there was a direct transformation of pre-existing material as a worm from an egg or a butterfly from a chrysalis rather than epigenesis or development of parts, the true generation observed in higher animals.

Helmholtz, Herman Ludwig Ferninand von, 1821 - 1894. Eminent German chemist, developed the first law of thermodynamics. He also was an experienced physiologist and physician. Listed by Carpenter but except for the statement by Garrison that he used quinine sulfate applied to the nasal membrane for the relief of hay fever, unable to find other relations to subject of entomology.

Hippocrates, 460 BC - 370 BC, gave the first satisfactory description of malaria. He used cantharadin, the product of a vesicating beetle, as an aphrodisiac. He wrote about the beneficial effects of honeybee stings and noted that epilepsy and quartan fever were not compatible, epilepsy disappearing after attacks of malaria. Hydromel, a dilute honey and water solution and oxymel, honey vinegar solution, were among his favorite remedies. He observed that where there was stagnant water, people had protruding bellies and enlarged spleens but where there was no stagnant water, these symptoms were not present.

Hugo, Victor, 1802 - 1885. This famous author, by his pen, was able to convince many people that, contrary to the doctrine of Thomas Malthus, poverty is the natural result of increased population, the real wealth of a nation being its people. As a result, a long line of progressive social legislation was enacted that included many public health measures that did much to reduce deaths from infectious diseases, so many of which are insect carried.

Humboldt, Friedrich Heinrich Alexander von, 1769 - 1859. Great naturalist and traveler. During his travels to South America he collected insects along with other plants and animals.

Jamot, Eugene, 1879 - 1937. He was a French Physician who thought Sleeping Sickness (African Trypanosomiasis) is caused by the bite of a Tsetse Fly. The infectious agents - *Trypanosoma gambiense* and *Trypanosoma rhodesiense* are hemoflagellates. The tsetse flies *Glossina palpalis*, *G. tachinoides*, *G. morsitans*, and *G. swynnertoni* are mainly concerned, though many other species can carry one or both hemoflagellates.

Jungius, Joachim, 1587 - 1657, of Lubeck, after studying mathematics, decided to become a physician and received his MD degree in 1618. He preceded Carl Linne with binomial terminology. It is stated that Linne got his idea from Jungius.

Koch, Robert, 1843 - 1910. In 1881 discovered *Bacillus tuberculosis*. Established etiology of tuberculosis. In 1905, Koch along with J.E. Dutton and J.L. Todd established the relation of ticks to African Relapsing Fever. See B. Grassi on malaria parasite in mosquito stomach as Koch confirmed this in 1899.

Kopke, Aires, 1866 - 1947, entered the Portuguese Navy's tropical disease service after receiving his MD from the University of Lisbon Medical School in 1889. Gambian trypanosomiasis was a serious health and economic problem in the Portuguese mid-African colonies. Kopke was assigned the task of controlling the disease. He used sodium arsenate with outstanding success and afterwards received widespread recognition as an epidemiologist.

Laveran, Alphonse, 1845 - 1922. A French Surgeon noted for extensive study of Malaria in Algeria. He discovered the causative organism of malaria (*Plasmodium malariae*) as an inhabitant of the red blood cells of man in 1880. In 1884 he expressed the view that the malaria parasite was transmitted by mosquitoes. Trypanosomiasis applies to all infections of flagellate protozoan parasites of genus *Trypanosoma* and include African Sleeping Sickness and Kala azar (*Leishmania dodonovani*). Laveran suspected that blood sucking arthropods were responsible but could not find proof. He was awarded the Nobel Prize for medicine and physiology in 1907.

Lazear, Jesse W., 1866? - 1901. This Cuban physician, was a member of the United States Army Yellow Fever Board headed by Walter Reed. During the investigation, he was accidentally bitten by an infected mosquito, came down with yellow fever and died. Thus he, like Nurse Clara Louise Maas, was a martyr in the fight against yellow fever.

Leeuwenhoek, Anthony van, 1632 - 1723. A Dutch Naturalist who was one of the greatest and most expert microscopists. Studied parts of insect anatomy including spinning apparatus of the silkworm, the brain, optic nerve, tips of the feet and sting? of the fly; sting??. sheath & feet of the flea; eyes of dragon-fly & beetle; also measured hairs and eye of the louse. In 1692 worked out the life history of the flea.

Leishman, William Boog, 1865 - 1928. Scottish born member of the British Medical Service. According to Newerla, was a member of a yellow fever commission in West Africa. He also investigated relapsing fever. He is best known for his identification of the parasites causing kala-azar which is transmitted by a sand fly.

Liebig, Justus von, 1803 - 1873. German chemist and so-called father of agricultural chemistry, is listed by Carpenter but other relations to entomology are not known. It is possible that in his books "*Theory and Practices of Farming*" and "*Scientific Letters on Modern Farming*" he discussed insect pests but these books have not been seen.

Linne (Linnaeus), Carl von, 1707 - 1778. He was primarily a botanist but also did a great amount of entomological work. He is chiefly of interest to entomologists for the binomial system of nomenclature which made possible the modern classification of insects. Also because he named and described so many of the commonest and most important species. His book "*Systema Naturae*" (Edition 10, 1758) serves as the starting point in the names of insects. He listed 4,379 kinds of animals of which 1,737 were insects.

Livingstone, David, 1813 - 1873, became a medical missionary and went to South Africa to explore the Equatorial areas. He gave an accurate account of African sleeping sickness as transmitted by the tsetse fly. For a few years he was presumed dead and the New York Herald Tribune sent Stanley to find him. According to Matheson, Stanley brought the disease of sleeping sickness to the heart of the continent in his search for Livingstone.

Lutz, Adolfo, 1855 - 1940. Brazilian Entomologist who published the results of his investigations, almost exclusively on blood sucking insects including Tabanidae and mosquitoes in Sao Paulo and Rio de Janeiro. He became Director of the Sao Paulo Bacteriological Institute from 1893 to 1908 and almost eradicated yellow fever and cholera. He also experimented with the mosquito transmission of yellow fever.

Maass, Clara, 1876 - 1901. A nurse who graduated in the Class of 1895 at Lutheran Memorial Hospital. At age 25 she volunteered to be bitten by the *Stegomyia* mosquito. Ten days after her second infection August 14, 1901 she died. Her death furnished clues that helped wipe out yellow fever.

Mechnikov, Ilija Ilich, 1845 - 1916. He was born in Ivannovka near Charkov, Russia. He discovered the role of the white blood corpuscles, or phagocytes, as the main defenders of the body against infection and inflammation. In 1895 he succeeded Pasteur as Director of the Pasteur Institute of Paris. Believed in Insect control. In 1908 together with Paul Erlich, received the Nobel Prize for Medicine and Physiology.

Maeterlink, Maurice, 1862 - 1949. He wrote two thoughtful nature books, "*The Life of the Bee*" (1901) and "*The Life of the Ant*" (1931). He was a Belgian dramatist, essayist, philosopher and naturalist. He received the Nobel Prize for Literature in 1911.

Maillot, Francois C., 1804 - 1894. French military doctor who achieved notable success as a pioneer in treating malaria stricken soldiers in Africa with sulfate of quinine.

Manson, Sir Patrick, 1842 - 1922. According to Newerla, Manson convinced Ross that malaria was carried by a mosquito. Manson found filaria in cases of elephantiasis and in 1878, reported the transmission of *Filaria bancrofti* by the Culex mosquito. He was the first to maintain that black-water fever is different from malaria. He performed the classical experiment of transmitting tertian malarial fever through an Anopheline mosquito to his own son. In 1895, Manson proposed that the mango fly *Chrysops dimidiata* is a necessary intermediate in the transmission of the eye worm causing Loaiasis.

Marchoux, Emile Francois Gabriel, 1862 - 1943, developed special drugs for the treatment of yellow fever and in 1903, with Salimbeni, proved that a Brazilian spirochaetosis of domestic fowl was transmitted by a tick *Argas persicum*.

Mendel, Gregor Johann, 1822 - 1884. Austrian (Augustinian monastery at Brunn [or Brno]) and botanist. Discovered principles of heredity and published at Brunn in 1866-1867. His work stimulated studies on inheritance in insects. He had worked some with honey bees but had been discouraged from continuing that research.

Minkh (or Minch), Gregory Francois Gabriel, 1836 - 1896. According to Gottfried, is credited by the Russians with proving that typhus is transmitted by a louse; that Nicolle only revived the work of Minkh and Gamelya. Minkh is also reported to have infected himself with blood from a recurrent fever patient to prove that the causative agent for the disease was in the blood of the patient. He also did other work to prove that other infectious diseases were transmitted by insects.

Millon, Eugene, 1812 - 1867. French Surgeon, then Pharmacist and Chemist. French Military Health Service. Became Chief Pharmacist of Algeria.

Mutis, Jose Celestino, 1732 - 1808. Spanish Physician who immigrated to New Granada (Colombia). Besides serving as physician to the Viceroy he collected plants, being interested in pharmacognosy. He is credited with the introduction of the use of Cinchona bark (quinine) to Europe. The alkaloid of quinine was isolated later by Pelletier and Caventou in Paris in 1820.

Nicholas II, Tsar of Russia, 1868 - 1918, was according to Osborn, an ardent collector of Lepidoptera and an amateur entomologist.

Nicolle, Charles Jean Henri, 1866 - 1936. In 1909 Nicolle, H.T. Ricketts, R.M. Wilder and J. Goldberger showed that Typhus fever was transmitted by the body louse. Also in 1909 Nicolle, Comte and Conseil working in Tunis and Ricketts and Wilder in 1910 working independently in Mexico proved experimentally that the body louse (*Pediculus humanus* Linnaeus) was a carrier of Typhus fever. The causative organism (*Rickettsia prowazeki*) was described and named by Da Rocha Lima in 1916.

Nicot, Jean, Siuer de Villemain, 1530 - 1606. French diplomat, while acting as an envoy of Francis II to Lisbon in 1560, procured seeds of the tobacco plant from a Dutchman who had brought them from Florida. Nicot then brought the seeds to France. To this circumstance, the scientific name for tobacco, *Nicotiana* is due.

Noguchi, Hideyo, 1876 - 1928. Japanese bacteriologist and physician specializing in research in syphilis and yellow fever. While in British Western Africa he died after contacting yellow fever.

Nunez, Enrique de Villavicencio, 1872 - 1916. Cuban physician, is listed because of his publication "*Filarial Surgical Techniques*." He served as a surgeon in the Cuban Army of Liberation and became Secretary of Health.

Orta, Garcia da, also known as Garcia ab Horto and Garcia del Gardin, 1490 - 1586. Born in Spain of Hebrew parents, he was persecuted by the Inquisition and went to Portuguese Goa in 1534 where he became personal physician to the Viceroy. He was the first European to write on tropical diseases. His book "*Coloquios des Simples*" was the first medical work in Portuguese and contained an excellent description of the medical plants of the Indies.

Osler, Sir William, 1849 - 1919. Born in Canada, he spent a number of years in the United States. He is included here because in his clinic at Johns Hopkins Hospital in Baltimore, W.S. Thayer and others did much important work on malaria and it was there that W.G. MacCallum and E.L. Opie first demonstrated the sexual conjugation of the malarial parasite.

Pare, Ambroise, 1510 - 1590, is considered one of the great physicians of France. He is credited in "*Parasitology*" with observing that wounds infected with blowfly maggots frequently healed better than uninfected wounds. Garrison credits him with being the first to recognize that houseflies transmit disease. He also described "*larva migrans*" which cause creeping eruption.

Pasteur, Louis, 1822 - 1895. French Bacteriologist and Chemist who discovered the pasteurization process and various vaccines. In 1865 Jean Baptiste Dumas requested he investigate the cause of the

epidemic disease of silkworms. It took four years (1866-1870). Bassi's work exerted no detectable influence on Pasteur's later work. The disease was quite different from that studied by Bassi. It is characterized by small black spots within the worms and especially on their skin resembling grains of black pepper, hence "*pebrine*." Pebrine is caused by a protozoan parasite *Nosema bombycis* which invades all tissues and destroys invaded cells.

Pelletier, Pierre Joseph, with Joseph Caventou (q.v.), first isolated quinine from Peruvian bark.
Pestana, Camara, 1863 - 1899, was Director of the Bacteriological Institute at Lisbon, Portugal. During the plague epidemic of 1899, while performing an autopsy on a plague victim, became mortally infected and hence is another in the long list of medical martyrs to insect carried diseases.

Peters, Wilhelm Karl, 1815 - 1883. As the Director of the Zoological Museum of Berlin, he contributed much to the subject of entomology.

Pirsjo Da Silva, Manuel Augusto, 1873 - 1961, of Brazil, devoted his professional life to the study of tropical diseases endemic to his country, especially those caused by *Schistosomum* and *Leishmania*. He was a pioneer in the identification of intestinal schistosomiasis, amoebic dysentery, cutaneous leishmaniasis, Chagas' disease, and others. He discovered *Schistosoma mansonia*, and named it for Sir Patrick Manson (q.v.).

Poey, Felipe, 1799 - 1891. Professor and Director of the Zoological Museum in Havana, Cuba and "*Father of Cuban Zoology*." Born in Cuba and lived there except for a few years of study in Paris, France. He was one of the founders of the Entomology Society of France. In 1832 he wrote about the Lepidoptera of Cuba. When he returned to Cuba he made a butterfly collection which he took to Paris. In 1836 became a corresponding member of the Zoological Society of London.

Prowazek, Stanislaus Josef Mathias von, 1876 - 1915. Zoologist of Hamburg. While investigating the transmission of typhus by the body louse, contracted the fever and died. See also Ricketts and Da Rocha Loma. The latter discovered a specific organism in lice while studying epidemic typhus and named the organism *Rickettsia prowazekii* for Drs. Ricketts and Prowazek.

Reed, Walter C., 1851 - 1902. Reed was Chairman of the Yellow Fever Commission with members Jesse W. Lazear, James Carrol, and Aristides Agramonte. On October 1, 1900 the Commission was able to report "The mosquito (*Aedes aegypti* Linnaeus) acts as the intermediate host for the parasite of Yellow Fever." By the following year experiments at Camp Lazear confirmed this. The Commission also demonstrated the disease could pass through a filter which stopped the smallest known bacteria - now known as a virus. Reed was appointed Librarian in Charge of the Library of the Surgeon Generals Office on November 1, 1902. He died 23 days later. The library is now the National Library of Medicine, Washington, D. C.

Ricketts, Howard Taylor, 1871 - 1910. Born in the United States, in 1902 was appointed Pathologist at the University of Chicago and began a study of rocky Mountain spotted fever and discovered the causative agent in the blood of patients with the disease and in the body of ticks. Because of the similarity of the disease to typhus, Ricketts began an investigation of the latter disease, contracted it and died.

Rivet, Paul, 1876 - 1958. French Physician, during WW1 directed the Bureau of Hygiene and Epidemiology of the Allied Armies. He worked out a very effective program of malaria control.

Robles, Rodolfo, 1878 - 1939, of Guatemala, according to Newerla, was a Professor of Anatomy at the University of Guatemala. Observing that many people became blind for no apparent reason, he traced the cause to a filaria which he called *Onchocerca robles*. He later called the disease Onchocerciasis. The disease is carried by the black fly *Simulium damnosum* which is also an intermediate host.

Rocha Lima, Henrique da, 1879 - 1956. This Brazilian Bacteriologist was studying tropical diseases in Germany at the outbreak of WW1 and became a member of a group investigating epidemic typhus fever among soldiers and war prisoners. He discovered a specific organism in body lice which he named *Rickettsia prowazekii* in honor of Howard Ricketts (q.v.) and Stanislaus Prowazek (q.v.) both of which died of typhus contacted through accidental laboratory infection. After the war, da Rocha Lima returned to Brazil where he continued his work on typhus and other epidemic diseases.

Roman, Elias Rojas, 1861 - 1930. Born in Cartago, Costa Rica on April 17, 1861. Attended school locally. Graduated University of Paris 1885. Specialized in Medicine and Surgery. Interned in Paris 1876-87. Went back to Costa Rica and served as Director of the Medical Section of the Hospital of San Juan de Dios 1899-1913. Active as a doctor and Professor. Active as a writer. Published on yellow fever and other tropical diseases. Also wrote "*La Peste*" the Plague with J. M. S. Alfaro.

Ross, Sir Ronald, 1857 - 1932, of London, entered the Indian Medical Service in 1881. In 1887, Manson (q.v.) had demonstrated that larval stages of *Filaria bancrofti* underwent development in culicine mosquitoes but it was not until 1900 when Low showed that the parasites were returned to man by the bite of the insect. In 1894, Manson communicated to Ross his theory of the relation of the mosquito to malaria and urged Ross to work along these lines. Ross did so and in 1897 identified malaria parasites in mosquitoes. He finally succeeded in transmitting the disease to healthy birds and the riddle of malaria was solved. Later Ross was transferred to Africa where he continued his work on malaria.

Rush, Benjamin, 1745 - 1813, was a signatory of the Declaration of Independence. He was, after Bylon in Java, the first to describe dengue fever. He wrote an excellent account of the 1793 Philadelphia epidemic of yellow fever and played an important part in fighting that epidemic. He incurred civic and professional hatred by insisting that the disease was not imported from without but arose de novo in the city.

Schiller, Johann Christopher Friederich von, 1759 - 1805, of Germany is widely known for his poetry but he was also a physician. He is listed by Carpenter as a contributor to entomology but additional data has not been seen.

TO BE CONTINUED

PERSONAGES OF ENTOMOLOGICAL INTEREST HONORED ON STAMPS (Part 3)

An Update - by Carl H. Spitzer

Schweitzer, Albert, 1875 - 1965. This medical missionary, was born in Alsace. He studied the organ and wrote a "*Life of Bach*" and later the "*Quest for the historicalness*". At the age of 30, he decided to devote himself to mankind and took up medicine. In 1915, he left Europe for Gabon where he set up a hospital at Lambarene. After WWI in 1918, he moved his hospital two miles up the river. There he carried on an extensive fight against sleeping sickness, malaria and other tropical diseases. In his book "*Verdict on Schweitzer*", McKnight points out that Schweitzer carried his love of life theme to such an extent that he permitted only open privies with their resulting infestation with maggots and flies. Schweitzer was said to have completely avoided any form of insect control.

Selys Longchamps, Michel Edmond de, 1813 - 1900. World authority on Odonata. He described 13 North American Dragonflies and Damselflies.

Shakespeare, William, 1564 - 1616. English author and playwright, showed a considerable knowledge of entomology, far in advance of contemporary scientists. In every play and in two sonnets, Shakespeare makes at least one reference to insects, spiders or mites.

Solander, Daniel, 1736 - 1782, was, with Banks (q.v.) a naturalist on the "*Endeavour*." He was a pupil of Linnaeus.

Soto Alfaro, Jose Marie, 1860 - 1931, of Costa Rica, with Dr. Rojas Roman (q.v.) published an excellent and exhaustive study "*La Peste*" (The Plague).

[continued on page 199]

[continued from page 194]

Triana, J. J., 1826 - 1890. Dr. W.A. Swanker does not believe Dr. Triana was instrumental in stimulating the use of quinine for the treatment of malaria.

Ulloa Giralt, Juan Jose, 1857 - 1913, according to Newerla, with Drs. C. Finlay and J. Guiteras, did the original work on yellow fever.

Vianna, Gaspar Oliveiro, 1885 - 1914, of Brazil, introduced intravenous injections of tartar emetic for the treatment of American leishmaniasis. He identified the causative agent and named it *Leishmania brasiliensis* after Sir William Leishman (q.v.). The disease is transmitted by *Phlebotomus* species. The organism has also been isolated from bedbugs but transmission by them has not been proven.

Vincent, Hyacinthe, 1862 - 1960. Bacteriologist from Bordeaux, France. Until 1907 served as Director of the Anti Typhus Service of the French Army. In 1907 elected to Academie de Medicine. At the outset of the War (1914-1918) Vincent successfully combated a virulent typhus fever epidemic in the French Army. He discovered Bacille de Vincent (causes Angine de Vincent). Also developed successful vaccine against typhoid fever.

Virchow, Rudolf Ludwig Karl, 1821 - 1902, of Germany is considered the father of cellular pathology. In 1848, he was sent by the government to investigate the typhus epidemic then raging among the weavers of Upper Silesia. His recommendations for sanitation and financial aid caused him to lose his job but he was later reinstated. According to Garrison, in debates over the West Indian theory of origin of syphilis, Virchow held that the Caries sicca of prehistoric and pre Columbian skulls was not true syphilis but was either identical with arthritis deformans (Hohlenicht) of old cave bears or else was caused by plants or insects.

Wagner-Jauregg, Julius, 1857 - 1940, who first used the treatment of general paralysis of syphilitic origin by means of artificially induced malaria is now a well recognized practice.

Yersin, Alexandre Jean Emile, 1863 - 1943. Swiss born physician, became a bacteriologist because of his admiration for Pasteur. He went to Hong Kong in 1893 to study first hand the then current epidemic of bubonic plague. He isolated *Bacillus pestis* as the causative agent in 1894 and the same year demonstrated that human and rat plague are identical diseases. It was several years later that Simonds proved that infected fleas were the usual vector for transmitting the disease. In 1895, Yersin went to Indo-China where he founded the Pasteur Institute at Annam. According to Garrison, he died there of plague in 1943 but other details are not given.

Dealing with various materials, Fisk's list included only quinine. However, "*Drugs and Pharmacy on Stamps*" lists the following additional materials:

Combretum, used by natives to combat blackwater fever, a complication of malaria brought on by treatment with quinine. Gabon 1961 154, 159 50c, 10fr.

Holly, leaves and berries have been used in folk medicine in treatment of malaria. Liechtenstein 1959 333 50rp, United States 1964 1254 5c.

Larkspur, tincture long used as popular control of head lice. Switzerland 1960 B301 30c+10c.

Pepper (black), was widely used in 19th century as a treatment for malaria. Malagasy 1960 313 8fr, Montserrat 1965 162 4c, Romania 1963 1544 1.20 l, Sarawak 1950 190 25c.

Peruvian Balsam, (not to be confused with Peruvian bark). The balsam is an oleo resin from *Toluifera pereirae*, a tree of San Salvador. The balsam was compounded and used as an ointment to control certain skin diseases such as scabies. Salvador 1924 501 20c, 1925 566 50c, 1938 580 20c.

Following is a list of the names of personages, countries issuing stamps in their honor or relating to them, year of issue, Scott catalog number and stamp value. Fisk et al left out the Malaria Eradication issues, many of which had been released by the time of the final compilation of their list, but are excluded by the closing date of the list - December 31, 1961. I have included them but only the ones that show a particular *Anopheles* species. Instead of listing them with each person working on Malaria, I will list them once with the names of the workers to save space.

Bartlett, Josiah; Bretonneau, Pierre Fidele; Cicero, Marcus Tullius; Gabrichevski, Georgy Norbertovich; Golgi, Camillo; Gorgas, William Crawford; Grassi, Battista; Griesinger, Wilhelm; Hippocrates; Koch, Robert; Laveran, Alphonse; Maillot, Francois C.; Osler, Sir William; Rivet, Paul; Ross, Sir Ronald; Wagner-Jauregg, Julius.

Afghanistan 1960 B29-30 50+50p & 1.75af+50c; Angola 1962 439 2.50e; Argentina 1962 737 2p; Cape Verde 1962 326 2.50e; Congo Democratic Rep. 1962 414-16 1.50, 2, 6.50fr; Cuba 1962 758 2c, Cuba 1983 20c; Dominican Rep. 1962 558-60 10c/25c, B39-40 10+2c,20+2c, C120-21 33c, CB24-25 33+2c; Dubai 1963 22-27 1np/3np & C13-15 30 & 170np; Ethiopia 1962 383-85 15, 30, 60c; Guinea 1962 C29-31 25, 50, 100fr; Haiti 1949 CB3-8 20+20c/1.75+1.75g; 1962 486-8 5c/50c, C188-90 20c/1g, B25-27 5c+25c/50c+25c, CB42-44 20c+25c/1g+25c, C191-2 50c, 1g; India 1955 261 6a; Indonesia 1960 502-05 25s/3r; Iran 1960 1156, 58 1 & 3r; Israel 1962 21825a; Italy 1955 701 25 l; Macao 1962 400 40a; Malaysia 2000 50c; Mexico 1962 920 40c, 1939-47 RA14, 16, 19 1c; Monaco 1962 504 1fr; Mozambique 1962 430 2.50e; Niger 2000 200fr; Nigeria 1962 128 3p, 1968 217 1sh6p; Paraguay 1962 674-683 30c/36g; Portuguese India 1962 invalid stamp 2.50e; Ryukyu Is. 1962 95 3c; Somalia 1962 263 10c, C85-86 1 & 1.80sh; St. Thomas & Prince Is. 1962 380 2.50e, 1984 764-66 8, 16, 30d; Switzerland 1962 415 50c; Timor 1962 319 2.50e; Tunisia 1962 404-06 20, 30, 40m; Turkey 1961 B85 10+5k, 1962 B88-89 30+5 & 75+5k; Vatican City 1962 326-27 15 & 40 l; Vietnam 1962 185-88 50c, 1, 2, 6pi;

Agramonte, Aristedes Cuba 1965 990, 991 2c, 3c, 1981 2431 13c; Gabon 1983 549 300fr; Indonesia 1977 1013 40rp; Marshall Is. 1997 627d 60c; Panama 1950 C120 5c; Wallis & Futuna 2004 5, 10, 20, 30 fr;

Alfaro, J.M.S. Costa Rica 1961, C330, C331, C333 10 c, 10c, 25c;

Aesculapius Italy 1949 522 20 l, Trieste Zone A 1949 49 20 l;

Alexander the Great Greece 1937 404 6d, 1940 N212 6d, 1949 458 6d, 1992 1743 60d;

Aristotle Belgium 1932 B119, B121 2.50fr, 5fr. Greece 1956 RA91 1d, 1992 1742 20d, Mali 10/16/78 315 200fr;

Babes, Victor Romania 1947 B355 1500+1500 1954, 999 55b; 1957, 1151 55b; 1962, 1498 1.35L;

Banks, Sir Joseph New Zealand 1960 432 6c;

Bartlett, Josiah United States 1869 120 24c 130 24c 1691-94a 13c;

Bassi, Agostino Italy 1953 640 25 l; Trieste Zone A 1953 169 25 l;

Bello, Carlos Venezuela 1963 846 20c; Wallis & Futuna 2004 5, 10, 20, 30 fr;

Bernard, Claude Argentina 1958 683 1p, France B89 1939 2.25fr+25c, 1940 B89A 2.50+25c, 1978 B510 1fr+20c;

Berzelius, Joens Jacob Sweden 1939 293 10ö 295 30ö 297 10ö;

Bilharz, Theodor Maximilian Egypt 1962 553 10m;

Boris III, King of Bulgaria Bulgaria 1921 160 25s, 165 1L, 166 1L, 170 10L, 1925 195 1L, 199 1L, 201 L, 1928 211 1L, 212 2L, 1930 223-226 1L/6 L, 1931 227-236 1L/30L, 1937 313 2L, 1938 341-345 1L/14 L, 1940 356A 1L 357 2L, 362 4L, 363 7L, 368-373 1L/10L, 374-377 1L/10L, 1944 434-438 1L/7L;

Brazil, Vital Brazil 1965 997 120cr;

Bretonneau, Pierre Fidele France 1962 1022 50c;

Bruce, David Burkina Faso 1979 524 55fr; Cameroon 1954 C33 15fr, 1971 C172 25fr, 1979 659 50fr; Central Africa 1968 C53 200fr; Chad 1978 358 60fr; Congo, Peoples Rep. 1981 B6 65+10fr; Gabon 1979 C226 300fr, 1983 547 80fr; Guinea 1999 1557 300fr; Guinea Bissau 1983 537 5p; Kenya 1985 339 5sh, 1995 655 14sh; Malta 1964 298 2p; Poland 1978 2275 6zl; St. Thomas & Prince Is. 1967 394 2.50e; Uganda 2002 1780 4000sh

Buffon, Georges Louis Leclerc France 1949 B241 12fr+4fr, 1988 2123-2126 2fr/5fr;

Calderon, Victor Emanuel Guatemala 1970 C450, C451, C452 1c, 2c, 9c;

Calmette, Leon Charles Albert Belgium 1953 B553 4fr + 2fr; Dominican Rep., 1956 RA24 1c, 1957 RA25; France 1948 B232 6fr+4fr; Poland 1948 B59-62 3z+2z/15z+10z; Russia 1963 2805 12k; St. Pierre & Miquelon 1963 366 30fr; Yugoslavia 1948 B149 1.50d+1d.

Carrion Garcia, Daniel Alcides Peru 1958 C149 1.20s;

Carroll, James Cuba 1965 990, 991 2c, 3c, 1981 2431 13c; Gabon 1983 549 300fr; Indonesia 1977 1013 40rp; Marshall Is. 1997 627d 60c; Panama 1950 C120 5c; Wallis & Futuna 2004 5, 10, 20, 30 fr;

Caventou, Joseph Breniame France 1970 1268 50c Rwanda 1970 367-372 20c/70fr;

Chacon, Thomas Romay Cuba 1958 599 2c, 1965 990, 991 2c, 3c, 1981 2431 13c; Gabon 1983 549 300fr; Indonesia 1977 1013 40rp; Marshall Is. 1997 627d 60e; Marshall Is. 1997 627d 60c; Panama 1950 C120 5c; Wallis & Futuna 2004 5, 10, 20, 30 fr;

Cicero, Marcus Tullius Italy 1957 730 25 ;

Columbus, Christopher Cuba 1944 387-391 1c/13c;

Cook, James Aitutaki 1920 28, 30 1/2p. 1 1/2p; Australia 1966 414 75p 1970 477-482 5c; Cook Islands 1920 61, 63 1/2p; 1 1/2p; 1925-6 72 1/2p; 1931 78, 79 2p on 1 1/2p; 1932 84, 85 1/2p, 1p; 1933-6 91, 92 1/2p, 1p; 1935 98 1p; 1944-6 116, 117 1/2p, 1p; 1949 132, 138 1p, 1/-; 1967 198 10c; 1968 233-236 1/2c/4c, C12-C15 6c/25c; 1969 264-267 5c/30c; 1978 80-82a 15c/75c Great Britain 1968 567 1sh 9p; New Zealand 1898 70, 83 1/2p, 5sh; 1906 124 3p; 1935 189 2 1/2p, 197 2sh; 1936 215 2sh; 1959 327 2p; 1960 432 6c; 1997 1413 40c; Paraguay 1978 C464 25g.

Copernicus, Nicholas Afars & Issas 1973 C83 8fr; Ajman 1973 M1059 (illegal issue), Albania 1481-1486 5q/1.60 l; Brazil 1973 1301 1cr; Bulgaria 1973 2086 28s; Burundi 434 13fr, 434a; C183-C186a 15fr/36fr; Cambodia 1974 324-30 1r/150r; 1974 C32-C33 200r/1200r; Cameroun 1974 C220 250fr; Central African Rep. 1973 C116 100fr; Chad 1972 C109 400fr; China (PR) 1953 205 \$2200; Colombia 1974 C593 2.50p; Comoro Islands 1973 C56 150fr; Congo People Rep. 1973 C160 50fr; Czechoslovakia 1975 2027 2k; Dahomey 1973 C185-6 65fr, 125fr; Equatorial Guinea 1973 7361-64 200p+25p (2), 250p + 50p (2); France 1957 857 8fr; French Polynesia 1973 C95 100fr; Germany 1973 1104 40pf; German Democratic Rep. 1973 1461 70pf; Guinea 1973 653-659 50c/20s; Haiti 1974 680-1 10c, 25c; 1976 695 80c on 10c; 1974 C415-C420 50c/2.50g; 1976 C444 80c on 1.75g; 1977 C460-C463 1g/1.25g; Hungary 1973 2218 3fo; India 1973 587 1r; Liberia 1973 653-658 1c/25c; C200 55c; Libya 1973 489-90 15d, 25d; Malagasy 1974 C121 250fr; Maldive Is. 1974 480-488 1 1/5r; Mali 1973 C178 300fr; Mexico C416 80c; Mongolia 1973 723-726

50m/1t; Morocco 1973 302 70c; Niger 1973 C221 150fr; Pakistan 1973 336 20p; Paraguay 1973 C357-359 25g; Poland 1923 192 1000m; 194 5000m; 1945 360 3z; 1951 515 1.15z; 1953 578-579 20g, 80g; 1955 672 40g; 1959 885 2.50z; 1961 982 60g; 1964 1229 60g; 1969 1659-1661 40g/2.50z; 1970 1745-1747 40g/2.50z; 1971 1818-1821 40g/4z; 1972 1915-1918 40g/3.40z; 1944-1945 1z, 1.50z; B127 10z+5z; 1973 B128 10z+5z; B129 4z+2z; 1956-1960 1z/4.90z; 1979 4.90z; Poland - Govt 1940-41 N60-61 12g; NB1 12g+8g; 1942 NB23 1z+1z; 1943 NB27 1z+1z; Romania 1973 2405 2.75 l; Russia 1955 1752 1r; 1973 4060 10k; Rwanda 1973 565-571 20c/100fr; St. Pierre & Miquelon 1974 C56 4fr; Syria 1973 670-671 15p, 25p; Togo 1973 842-845 10fr/40fr; C200-C201 90fr, 100fr; Tunisia 1973 616 60m; United States 1973 1488 8c; Uruguay 1973 870 50p; Vatican City 1973 538, 540 50 l, 130 l; Venezuela 1973 1013-1015a 5c/15c;

Costa Lima, Angelo Moreira da Brazil 1966 989A 50cr;

Cruz, Oswaldo Brazil 1950 698 60c, 1954 789-791 20c/40c.;

Darwin, Charles R. Ascension 1982 305-308 10p/40p, Czechoslovakia 1959 941 3k, Ecuador 1936 343 20c, O193 20c, German Democratic Rep. 1958 388 10fr, Great Britain 1982 967 965-968 15 1/2p/29p, Poland 1959 880 20g Romania 1959 1266 55b, Russia 1959 2166 40k

Daviel, Jacques France 1963 B369 50c+20c;

Defillo, Fernando A. Dominican Rep. 1950 444, 445 2c, 5c;

Delgado, Ramon Claudio Cuba 1965 990, 991 2c, 3c; Wallis & Futuna 2004 5, 10, 20, 30 fr;

Dodoens, Rembert Belgium 1942 B323 1fr+15c;

Dzierzon, John Poland 1956 745 60g;

Erlich, Paul Germany 1954 722 10pf;

Fabre, Jean Henri France 1956 790 12fr, Monaco 1973 874 45c;

TO BE CONTINUED

PERSONAGES OF ENTOMOLOGICAL INTEREST HONORED ON STAMPS (Part 4)

An Update - by Carl H. Spitzer

- Finlay, Carlos J. Cuba 1934 319-320 2c, 5c, 1951 365b, C43A, 1952 477 5c, 1954 525 13c, 1981 2431 13c, 1983 2628 20c; Gabon 1983 549 300fr; Panama 1950 372 2c, C120 5c; Wallis & Futuna 2004 5, 10, 20, 30 fr;
- Fracastoro, Girolamo Italy 1955 695 25 l;
- Gabrichovski, Georgy Russia 1960 2296 40k;
- Galileo, Galilei Italy 1933 D16 35c, 1942 419-422 10c/1.25 l, 1945 D18 1.40 l;
- Gamaleya, Nikolai Fedorovich Russia 1959 2167 40k;
- Gay, Claudius Chile 1948 254 60c 255 2.60p C124 3p;
- Goethe, Johann Wolfgang von France 1957 863 35fr; Germany 1926 351 3pf 358 25pf; 1945 4N11 1m; 1948 5N24 50pf; 1949 5NB12-14 10+5pf/30+15pf; 6NB7-9 10+5pf 30+15pf; 8NB9-11 10+5pf/30+15pf; 1949 10NB6-11 6+4pf/50pf + 4.50m; Hungary 1948 CB5 4f;
- Goethals, George Washington Canal Zone 1928 106 2c, 1929 C3 25c on 2c, C5 20c on 2c, 1934 117 3c, 1960 153 3c; Wallis & Futuna 2004 5, 10, 20, 30 fr;
- Golgi, Camillo Sweden 1966 711, 713 40ö, 40ö;
- Gorgas, William Crawford Canal Zone 1928 105 1c, C1-C2 15c on 1c, 15c on 1c, 1957 148 3c; Panama 1933 328 15c; Wallis & Futuna 2004 5, 10, 20, 30 fr;
- Grassi, Battista Italy 1955 701 25 l;
- Griesinger, Wilhelm German Democratic Rep. 1960 524 40pf;
- Guiteras y Genir, Juan Cuba 1952 477 5c, 1965 990, 991 2c, 3c, 1981 2431 13c; Gabon 1983 549 300fr; Indonesia 1977 1013 40rp; Marshall Is. 1997 627d 60e; Marshall Is. 1997 627d 60c; Panama 1950 C120 5c; Wallis & Futuna 2004 5, 10, 20, 30 fr;
- Gwynn, Arthur Montagu Australian Antarctic Territory 1957 L2 8p;
- Haffkine, Waldemar Mordecial India 1964 387 15np
- Hahnemann, Samuel Brazil 1954 8102.70cr;
- Harvey, William Argentina 1959 682 50c Russia 1957 1947 40k;
- Helmholtz, Herman Ludwig Ferdinand German Democratic Rep. 1950 62 10pf
- Hippocrates Australia 1968 440-1 5c, 5c; Greece 1947 514 600d; 1959 657 20 l; Iran 1962 1226-7 2r, 6r; Syria 1965 C340 60p; Yemen Arab Rep. 1966 (no merger yet);
- Hugo, Victor German Democratic Rep. 1952 103 12pf;
- Humboldt, Friedrich Heinrich Alexander von Colombia 1960 713-715 5c/20c, C357-C359 35c/145p; Ecuador 1959 C341 2s; Germany 1959 9N155 40pf; German Democratic Rep. 1960 522-523 20pf, 25pf, Mexico 1960 908 40c; Russia 1959 2196 40k; Saar 1959 2 15fr; Venezuela 1959 743-745 5c/40c, C709-711 5c/40c;
- Jamot, Eugene Burkina Faso 1979 524 55fr; Cameroon 1954 C33 15fr, 1971 C172 25fr, 1979 659 50fr; Central Africa 1968 C53 200fr; Chad 1978 358 60fr; Congo, Peoples Rep. 1981 B6 65+10fr; Gabon 1979 C226 300fr, 1983 547 90fr; Guinea 1999 1557 300fr; Guinea Bissau 1983 537 5p; Kenya 1985 339 5sh, 1995 655 14sh; Poland 1978 2275 6zl; St. Thomas & Prince Is. 1967 394 2.50e; Uganda 2002 1780 4000sh
- Jungius, Joachim German Democratic Rep. 1957 352 5pf;

Koch, Robert Belgium 1953 B554 8fr+4fr; Danzig 1939 239 15pf; Germany 1944 B251 12pf+38pf; German Democratic Rep. 1960 521 10pf; 1961 547 25pf; Russia 1961 2455 6k; Sweden 1965 690, 692, 692a 40ö, 40ö;

Kopke, Aires St. Thomas & Prince 1967 394 2.50e;

Laveran, Alphonse Algeria 1954 252 50fr; Burkina Faso 1979 524 55fr; Cameroon 1954 C33 15fr, 1971 C172 25fr, 1979 659 50fr; Central Africa 1968 C53 200fr; Chad 1978 358 60fr; Congo, Peoples Rep. 1981 B6 65+10fr; Gabon 1979 C226 300fr, 1983 547 80fr; Guinea 1999 1557 300fr; Guinea Bissau 1983 537 5p; Kenya 1985 339 5sh, 1995 655 14sh; Poland 1978 2275 6z; St. Thomas & Prince Is. 1967 394 2.50e; Uganda 2002 1780 4000sh

Lazear, Jesse W. Cuba 1965 990 2c, 1965 990, 991 2c, 3c, 1981 2431 13c; Gabon 1983 549 300fr; Indonesia 1977 1013 40rp; Marshall Is. 1997 627d 60e; Marshall Is. 1997 627d 60c; Panama 1950 C120 5c; Wallis & Futuna 2004 5, 10, 20, 30 fr;

Leeuwenhoek, Anthony van Netherlands 1937 B97 12 1/2c+3 1/2c;

Leishman, William Boog Brazil 1962 930 1cr;

Liebig, Justus Germany 1953 695 30pf;

Linne (Linnaeus), Carl von Bulgaria 1938 94 40s, German Democratic Rep. 1958 389 20pf, Romania 1958 1218 10b 1966 954 30c, Russia 1958 40k, Sweden 1939 294, 296, 298, 298a, 298b, 298c 15ö, 50ö, 15ö, 1963 634-636a, 20ö, 50ö, 20ö,

Livingstone, David Burkina Faso 1979 524 55fr; Cameroon 1954 C33 15fr, 1971 C172 25fr, 1979 659 50fr; Central Africa 1968 C53 200fr; Chad 1978 358 60fr; Congo, Peoples Rep. 1981 B6 65+10fr; Gabon 1979 C226 300fr, 1983 547 80fr; Guinea 1999 1557 300fr; Guinea Bissau 1983 537 5p; Kenya 1985 339 5sh, 1995 655 14sh; Poland 1978 2275 6zl; Rhodesia and Nyasaland 1955 157 1sh; St. Thomas & Prince Is. 1967 394 2.50e; Uganda 2002 1780 4000sh

Lutz, Adolfo Brazil 1955 830 60c; Wallis & Futuna 2004 5, 10, 20, 30 fr;

Maass, Clara Cuba 1951 462 2c, 1965 990, 991 2c, 3c, 1981 2431 13c; Gabon 1983 549 300fr; Indonesia 1977 1013 40rp; Marshall Is. 1997 627d 60e; Marshall Is. 1997 627d 60c; Panama 1950 C120 5c; United States 1976 1699 13c; Wallis & Futuna 2004 5, 10, 20, 30 fr;

Mechnikov, Ilija Ilich Russia 1945 1011-1012 30k, 1r; Sweden 1968 804 35ö;

Maeterlink, Maurice Belgium 1952 b518 1.75fr+75c; Sweden 1911 909, 912 55ö, 55ö;

Maillot, Francois C. Algeria 1954 251 40fr

Manson, Sir Patrick Brazil 1959 9032.50cr;

Marchoux, Emile Francois Gabriel Mali 1965 79 25fr;

Mendel, Gregor Johann Czechoslovakia 1965 1329 60h; Danzig 1939 238 10pf;

Minkh (or Minch), Gregory Francois Gabriel Russia 1960 2373 60k;

Millon, Eugene Algeria 1954 250 20fr;

Mutis, Jose Celestino Colombia 1947 555 25c, 1948 567 25c, 1952 610 25c;

Nicholas II, Tsar of Russia Russia 1913 92 7k, 92a 7k, 93 10k, 93a 10k, 1915 104 5r, 105 10k, 105a 10k, 1916 110 10k;

Nicolle, Charles Jean Henri France 1958 867 15fr; Tunisia 229-230 15fr. 30fr;

Nicot, Jean, Siuer de Villemain France 1961 989 30c. (by error stamp shows Jan instead of Jean);

Noguchi, Hideyo Japan 1949 480 8y; Wallis & Futuna 2004 5, 10, 20, 30 fr;

Nunez, Enrique de Villavicencio Cuba 1952 477 5c;

Orta, Garcia da Portugal 1964 922-924 50c/4.30e; Portuguese India 1946 466 6r; 471a

Osler, Sir William Canada 1969 495 6c;

Pare, Ambroise France 1944 B163 1.50fr+3fr;
Pasteur, Louis Alaouites 1925 16-21 50c on 10c / 4p on 75c; Algeria 1924 7, 14, 22, 25 10c / 75c, 1925 10, 21; Central Africa 1961 13 20fr; France 1923-1926 186-196 10c / 150fr, 1926-1927 231 50c on 75c 235 50c on 1.25 fr, 1930 257 1.50fr, 1927 B26 1.50fr+50c, 1928 B30 1.50fr+50c, 1929 B33 1.50fr+50c, 1936 B53 1.50fr+50c, 1938 B59 1.75fr+25c; 1941 B114 1fr+1fr on 70c; 1973 B468 50c+10c; 1987 2056 2.20fr; 1995 2453 3.70fr; Lebanon 1924 15-17 50c on 10c / 2.50p on 50c, 1923-1924 39-44 50c on 10c / 4p on 75c; Middle Congo 1933 74-82 40c / 1.50fr; Poland 1959 883 1.50z; Syria 1924 113-115 50c / 2.50p, 130-132 50c / 2.50p, 1924-1925 160-165 50c on 10c / 4p on 75c;
Pelletier, Pierre Joseph France 1970 1268 50c; Rwanda 1970 367-372; 20c/70fr;
Pestana, Camara Peters, Wilhelm Karl Portugal 1966 983 20c;
Peters, Wilhelm Karl Germany 1934 434 12pf;
Pirsjo Da Silva, Manuel Augusto Brazil 1959 903 2.50cr;
Poey, Felipe Cuba 1958 608-609 2c, 4c, C185-C188 8c / 19c;
Prowazek, Stanislaus Josef Mathias von Brazil 1966 1018 30cr;
Reed, Walter C. United States 1940 877 5c; Wallis & Futuna 2004 5, 10, 20, 30 fr;
Ricketts, Howard Taylor Brazil 1966 1018 30cr;
Rivet, Paul Ecuador 1958 C340 1s;
Robles, Rodolfo Guatemala 1963 C260 4c;
Rocha Lima, Henrique da Brazil 1966 1018 30cr;
Rojas-Roman, Elias Costa Rica 1961 C331 10c; Wallis & Futuna 2004 5, 10, 20, 30 fr;
Ross, Sir Ronald Sweden 1962 617 25ö;
Rush, Benjamin United States 1869 120 24c 130 24c; Wallis & Futuna 2004 5, 10, 20, 30 fr;
Schiller, Johann Christopher Friederich von Germany 1926 353 5pf, 1934 446-447 6pf, 12pf;
Schweitzer, Albert Burkina Faso 1967 C40 250fr, 1979 524 55fr; Cameroon 1954 C33 15fr, 1971 C172 25fr, 1979 659 50fr; Central Africa 1968 C53 200fr; Chad 1966 C25 100fr, 1978 358 60fr; Congo, Peoples Rep. 1966 C43 100fr, 1981 B6 65+10fr; Dahomey 1965 C31 100fr; Dominica 1968 210 60c; Ecuador 1966 753B 1.50s; Gabon 1960 C1 200fr, 1963 C11 100fr on 200fr, 1979 C226 300fr, 1983 547 80fr; German Democratic Rep. 1965 748-750 10pf/25pf; Guinea 1999 1557 300fr; Guinea Bissau 1983 537 5p; Haiti 1978 559-561 5c/20c; C273, C274 50c, 1g; Kenya 1985 339 5sh, 1995 655 14sh; Mali 1965 C32 100fr, C32a s/s; Mauritania 1966 C47 50fr; Monaco 1955 325-327 2fr/15fr, C40 200fr; Niger 1954 C54 50fr; Poland 1978 2275 6zl; Rwanda 1966 144, 146 40c, 45fr; St. Thomas & Prince Is. 1967 394 2.50e; Uruguay 1967 C303 6p; Uganda 2002 1780 4000sh
Selys Longchamps, Michel Edmond de Belgium 1986 1255 13fr
Shakespeare, William Antigua 1964 151 12c; Bahamas 1964 201 6p; Bechuanaland 1964 197 12½c; Cayman Islands 1964 171 6p; Czechoslovakia 1964 1230 60h; Cyprus 1964 237-240 15m/100m; Dominica 1964 184 15c; Falkland Islands 1964 149 6p; Fujeira 1969 non Scott; Gambia 1964 192 6p; German Democratic Rep. 1964 688 20pf; Gibraltar 1964 164 7p; Great Britain 1964 402 -406 3p/1sh6p; Hungary 1948 CB3 1f; 1964 1591 2fo; Montserrat 1964 153 12c; Panama 1966 465 1/2c; Paraguay 1966 954 30c; Romania 1964 1648 1.75 l; Russia 1964 2891 10k; St. Lucia 1964 196 10c; Turks & Caicos 1964 141 8p; United States 1964 1250 5c; Virgin slands 1964 143 10c; Yugoslavia 1955 421 30d;
Solander, Daniel New Zealand 1935 197 2sh, 1936 215 2sh, 1969 433 18c;

Soto Alfaro, Jose Marie Costa Rica 1961 C330 10c;
Triana, J. J. Colombia 1947 555 25c, 1948 567 25c, 1952 610 15c on 25c, 1953
615 23c;
Ulloa Giralt, Juan Jose Costa Rica 1961 C333 25c; Wallis & Futuna 2004 5, 10, 20, 30 fr;
Vianna, Gaspar Oliveira Brazil 1962 930 1c;
Vincent, Hyacinthe France 1962 B364 50c+20c;
Virchow, Rudolf Ludwig Karl Germany 1948 10N35 16pf, 10N38 25pf, 1953 9N89 15pf, German
Democratic Rep. 1953 127 16pf, 129 25pf, 1960 520 5pf;
Wagner-Jauregg, Julius Austria 1957 615 2.40s;
Yersin, Alexandre Jean Emile France 1987 B587 2.20fr+50c; Indo-China 1943-1945 234-236
6c/1pi; Switzerland 1971 535 10c.

REFERENCES:

Babers, Frank H., 1966, The Entomological Shakespeare, Topical time, 17 (1), 26-7.
Boyd, M. F. 1949, Malariology, W. B. Saunders Co., Philadelphia.
Cane, Philip, 1962 Giants of Science, Pyramid Publ. C., New York.
Carpenter, Mathilde M., 1945, Bibliography of Biographies of Entomologists, The American Midland
Naturalist, 33 (1) 1-116.
Clausen, Lucy W., 1954, Insect Fact and Folklore, MacMillian Co., New York.
Cochran, Emory E. 1965, Data on Costa Rican Physicians, Stamps #1730, 133, (6), 6 Nov. 1965.
Encyclopedia Britannica, History of Entomology.
Essig, E. O., 1931, History of Entomology, MacMillian & Co., New York.
Faust, Ernest Carroll, 1965, Animal Agents and Vectors of Human Disease, Lea and Vectors of Human
Disease. Lea & Febiger, Philadelphia.
Fisk, Frank W., Elwood Montgomery, Kenneth P. Pruess, Garland T. Riegel and Roy W. Rings, 1964,
Proceedings North Central Branch - E.S.A. vol. XVII - 1962 pages 160-169.
Garrison, Fielding H., 1929, An Introduction to the History of Medicine, 4th Edn., W. B. Saunders &
Co., Philadelphia.
Gottfried, Oscar, 1954, Doctors Philatelic (with 4 supplements), American Physician, Inc., New York.
Griffenhagen, George B., 1967, Drugs and Pharmacy on Stamps, American topical Association
Handbook #55, Milwaukee, Wisc.
Herms, William B., 1939, Medical Entomology, 3rd Edn., MacMillan & Co., New York.
McKnight, Gerald, 1964, Verdict on Schweitzer, John Day Co., New York.
Newerla, Gerhard J., 1964, Medical History in Philately, American Topical Association Handbook # 39,
Milwaukee, Wisc.
Nordenskiold, Eric., 1928, The History of Biology, Montauk Book Mfg. Co., New York.
Osborn, Herbert, 1937, Fragments of Entomological History, Spahr & Glenn Co., Columbus, Ohio.
Osborn, Herbert, 1952, A Brief History of Entomology, Spahr & Glenn Co., Columbus, Ohio.
Papa, John S., 1963, Medicine and Music on Stamps, Linn=B9s Weekly Stamp News, 1787, pg. 18;
1788, pg. 10; 1789, pg. 24; 1790, pg. 1 & 31; 1791, pg. 16.
Rivers, Thomas M., Viral & Rickettsial Infections of Man, J. P. Lippincott Co., Philadelphia

Russell, Paul F., Luther S. West and Reginald D. Manwell, 1946, Practical Malariology, W. B., Saunders Co., Philadelphia.

Scott, H. H., 1939 History of Tropical Medicine. William & Wilkins, Baltimore.

Steinhaus, e. A., 1946, Insect Microbiology, Comstock Publ. Co., Ithaca.

Webster's Biographical Dictionary, 1960, G. & C. Memmiman Co., Springfield, Mass.

Williams, c. B., Insect Migration, The MacMillan Co., New York.

Wright, Don, Insects on Stamps of the World Handbook No. 123 with additions 1992-2001.

Zinsser, Hans, 1935, Rats, Lice and History, Little Brown & Co., Boston.

Zinsser, Hans, 1952, Textbook of Bacteriology, 10th Edn, Appleton-Century-Crofts, New York.

ADDENDUM

For the convenience of the reader, the following are those named by Fisk et al as “*entomological personages*”.

Bassi, Agostino; Bernard, Claude; Carrion, G. Daniel C.; Cruz, Oswaldo; Darwin, Charles R.; Dodoens, Rembert; Dzierzon, John J.; Erlich, Paul; Fabre, Jean Henri; Finlay, Carlos J.; Galileo, Galilei; Gorgas, William C.; Grassi, Battista; Gutierrez, Nicolas J.; Humboldt, Alexander von; Laveran, Alphonse; Leeuwenhoek, Anthony van; Linne, (Linnaeus), Carl von; Lutz, Adolfo Maass, Clara L.; Maeterlink, Count Maurice; Maillot, Francois C.; Mendel, Gregor; Mechnikov, Ilya; Millon, Eugene; Mutis, Jose Celestino; Nicolle, Charles Jean Henri; Noguchi, Hideyo; Pasteur, Louis; Poey, Felipe; Reed, Walter C.; Triana, Jose Jeronimo; Wagner-Juaregg, Julius von

* * * * *