PERSONAGES OF ENTOMOLOGICAL INTEREST HONORED ON STAMPS

An Update - by Carl H. Spitzer

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 undoub-tedly 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 Biopilately.

<u>Aesculapius</u>, 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.

<u>Agramonte</u>, <u>Aristedes</u>, 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.

<u>Alexander the Great</u>, 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.

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

<u>Aristotle</u>, 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).

<u>Babes, Victor</u>, 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.

<u>Banks, Sir Joseph</u>, 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.

<u>Bartlett</u>, Josiah, 1729 - 1795. A signitory 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.

<u>Bassi, Agostino</u>, 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.

<u>Bello, Carlos</u>, 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.

<u>Bernard, Claude</u>, 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.

<u>Bilharz, Theodor Maximilian</u>, 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.

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

<u>Bretonneau</u>, <u>Pierre Fidele</u>, 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.

<u>Bruce, David</u>, 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.

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

<u>Calderon, Victor Emanuel</u>, 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.

<u>Calmette, Leon Charles Albert</u>, 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.

<u>Carrion Garcia</u>, <u>Daniel Alcides</u>, 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 Bartonia body, *Bartonella bacilliformis* Strong. Carrion died of this disease.

<u>Carroll, James</u>, 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.

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

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

<u>Cicero, Marcus Tullius</u>, 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.

<u>Columbus, Christopher</u>, 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.

<u>Cook, James</u>, 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.

<u>Copernicus, Nicholas</u>, 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.

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

<u>Cruz</u>, <u>Oswaldo</u>, 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.

<u>Daviel</u>, 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.

<u>Defillo, Fernando A.</u>, 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.

<u>Delgardo, Ramon</u> <u>Claudio</u>, 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.

<u>Dodoens, Rembert</u>, 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.

<u>Erlich, Paul</u>, 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.

<u>Fabre, Jean Henri</u>, 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.

<u>Finlay, Carlos J.</u>, 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.

<u>Fracastoro, Girolamo</u>, 1883 - 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.

<u>Gabrichevski</u>, <u>Georgy Norbertovich</u>, 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.

<u>Galileo</u>, <u>Galilei</u>, 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 table. This is probably the kind used by Francesco Stelluti in his anatomy of the bee made with a microscope.

<u>Gamaleya</u>, <u>Nikolai Fedorovich</u>, 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.

<u>Gay, Claudius</u>, 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.

<u>Goethe, Johann Wolfgan von</u>, 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.

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

<u>Golgi, Camillo</u>, 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 sporolation of the parasites and that severity of attack depends on the number of parasites in the blood.

<u>Gorgas, William Crawford</u>, 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.

<u>Grassi, Battista</u>, 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.

<u>Griesinger, Wilhelm</u>, 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.

<u>Gwynn, Arthur Montagu</u>, 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.

<u>Haffkine, Waldemar Mordecal</u>, 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.

<u>Hahnemann, Samuel</u>, 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