OBITUARY

FRANK COLLINS BAKER

FRANK COLLINS BAKER has been widely recognized as an authority on fresh-water mollusca, on Pleistocene invertebrate paleontology and on museum administration. Born on December 14, 1867, he devoted a long life-time to the services of science. Most of his official positions have involved museum work and research, but through his scientific displays, his genial and kindly personality, and his ambitious program of publication he has had more influence upon the works of others than many who have devoted their whole time to teaching and to the direction of research.

In his concept of a museum were combined the functions of display, teaching and research. For the University of Illinois, where he served as curator of the Museum of Natural History from 1918 until his retirement as curator emeritus in 1939, he built one of the finest teaching museums in this country. At the same time he was amassing study collections in various fields of zoology, archeology and paleontology and carried on a very extensive personal program of research. With his death on May 7, 1942, his broad influence in the several fields of his immediate interests will be felt keenly.

His studies on mollusca were begun in the days when entire attention was focused upon the shells, but he became one of the early investigators to develop the field of malacology. At the time of his death, he had completed the typescript for the first volume of a proposed two-volume monograph on Planorbidae, in which morphology of these snails is treated in exhaustive manner.

Mr. Baker secured his early training at Brown University, in the Philadelphia Academy of Sciences and in the Ward's Natural Science Establishment at Rochester, New York, where so many museum specialists of the earlier generation served an apprenticeship.

In 1894, he became curator of zoology in the Field Columbian Museum of Chicago, but left that post the same year to become curator of the Chicago Academy of Sciences, a position which he held until 1915. From 1915 until 1917 he carried on an intensive quantitative study of relations of bottom fauna in lakes to fish life for the New York State College of Forestry of Syracuse University.

On the invitation of President E. J. James, he came to the University of Illinois as curator in 1918. Here, at the height of his career, he carried forward the development of the university museum at the same time that he was prosecuting a most ambitious research program. Only a few of his major publications can be mentioned here.

In 1911, his "Lymnaeidae of North and Middle America" came off the press and after more than thirty years is still regarded as the most comprehensive treatise on this family. His two volumes on the "Mollusca of the Chicago Area" (1892 and 1902) have been widely used.

After coming to Urbana, he completed "The Life of the Pleistocene," which the university published. This book gained for him very general recognition as a paleontologist. His work in this field was recognized through his election as fellow of the Geological Society of America and by appointment as consultant in Pleistocene invertebrate paleontology on the staff of the Illinois State Geological Survey. The Zoological Society of London honored him by election to corresponding membership in recognition of the soundness of his works.

His two volumes on the "Mollusca of Wisconsin" (1928) are recognized as one of the most comprehensive regional studies of American fresh-water mollusca. The field work for this study was carried on through several summers as a member of the staff of the Wisconsin Geological and Natural History Survey.

In 1939, the Illinois State Natural History Survey published the results of his life-long study of land snails in a "Fieldbook of Illinois Land Snails," to which he had brought two summers of uninterrupted field study on the Survey staff.

In recent years, responsibility for coordination of some programs of field studies in archeology and an interest in the mollusca used by prehistoric races opened up yet another field of activity in which he made several contributions.

He was a regular contributor to the pages of *Nautilus*, where numerous shorter papers on mollusca were published through the years. At the time of his death he was serving as president of the American Malacological Union. It was his fortune to witness the change of museums from "cabinets of curiosity" to educational institutions. He had likewise watched the expansion of the amateur field of conchology to a more mature science. His studies on detailed morphology and on ecological relations of mollusca to their environment have played a part in this transformation.

H. J. VAN CLEAVE

RECENT DEATHS

DR. JOHN M. T. FINNEY, professor of surgery emeritus at the Johns Hopkins University, died on May 30 in his seventy-ninth year.

DR. JAMES D. TRASK, associate professor of pediatrics at the Yale School of Medicine, known for his work on infantile paralysis, died on May 24 in his fifty-second year.

DR. GEORGE P. ENGELHARDT, who retired in 1930

after serving for twenty-eight years as curator of the Department of Natural Sciences of the Brooklyn Museum, died on May 24, at the age of seventy years.

DR. ROY MACKAY, associate professor of mathematics at New Mexico State College, died on May 12, at the age of thirty-eight years.

SCIENTIFIC EVENTS

1941 STALIN PRIZE-WINNERS IN THE U.S.S.R.[1]

OVER two hundred and fifty people—scientists, engineers and inventors—innovators of science and technique—have been honored with the title "Stalin Prize-winners." Through their creative work they have all enriched Soviet science with new achievements.

Among Stalin prize-winners we find names of eminent scientists of the Soviet Union—academicians and professors. The body of academicians and professors are under the guidance of the president of the Academy of Sciences of the U.S.S.R., V. Komarov, and have conducted work in the development of national economy among the Urals under these wartime conditions, for which they have merited and been awarded the First Degree Stalin Prize.

The works of many Soviet physicists are widely known both in the Soviet Union and abroad. Works of the academicians Joffe, Mandelstam and Papalexi are new achievements in the field of physics in the Soviet Union.

The wise investigations of semi-conductors by Joffe have cast light on a very important and complicated question in physics. He has worked out theoretical principles for semi-conductors in industry. On the basis of Joffe's works it has become possible to obtain conductors with many desired properties—new current rectifiers; investigations on photo-conductivity and thermo-electricity have given new powerful thermo-elements ten times superior to those available. For this outstanding work Joffe has been awarded the First Degree Stalin Prize in the department of physico-mathematical sciences.

For many years physicists have been endeavoring to solve the involved problem of ascertaining the nature of distribution of radio waves near the earth's surface. Two Soviet physicists, Mandelstam and Papalexi, have found a successful solution to this problem, for which they have been adjudged Stalin Prizes.

The Stalin prize-winners include the eminent Soviet mathematician, Academician Bernstein, author of numerous works on the theory of probability and the theory of approximated methods of computation. The Soviet mathematician, Khristianovich, has worked out a high theory, near sound-velocity aerodynamics, and has furnished, scientifically, grounded calculations for fast aircraft, thereby meriting the Stalin Prize award.

The numerous investigations in the domain of organic chemistry by Academician N. Zelinsky have played a big part in the technology of motor fuel, synthesis of aromatic carbohydrates, and in the sphere of defense chemistry. His work, published in 1941, contains about four hundred original investigations, for which he has been adjudged the Stalin Prize.

Satpaev, Kazakh geologist, has theoretically worked out the morphology and genesis of Djezkazgan in cuprous sandstone and has supplied valuable conclusions regarding the deposits of copper, iron, manganese and polymetallic ores and coal of Kazakhstan.

In the domain of the science of biology, the First Degree Stalin Prize has been awarded to Professor Y. Parnas, of the Ukrainian Academy of Sciences. In his work, "Gyco-genesis," Parnas crystallizes his numerous investigations on metabolism in muscles; this work, which he conducted at the Lvov University, has now been destroyed.

Biologists adjudged Stalin Prizes include Professor A. Zavarzin. A remarkable work by the author, "Evolutional Histology of the Nervous System," illustrates his theory of evolution of the nerve tissues and of the nervous system, from the simplest organisms up to man. All conclusions are built up on the vast amount of material collected and generalized by the author.

One of the most remarkable scientific works in the domain of medicine is entitled "Particular Pathological Anatomy," by Academicians Abrikosov and Anichkov. The authors have crystallized a tremendous volume of material worked out by them, and have made great contributions to Soviet medical science.

Stalin Prizes likewise have been awarded to the outstanding surgeon, Professor Yudin, for his eminent work on military-field surgery, and also to the famous Leningrad surgeon, Petrov, the outstanding specialist on oncology and cancerous diseases of the stomach.

Under these conditions of the patriotic war, agricultural science acquires particular importance, as it is called upon to help Kolkhoz peasantry ensure provisions for the army and workers of the Soviet Union. The Stalin prize-winners include one of the country's leading zoo-technicians, Dyakov, the author of several

[1] Statement by Vice-chairman Stalin for the Prize-winning Committee, S. Kaftanov, *chairman*.