most primitive being represented by the living okapi of the Belgian Congo, the second by the typical giraffes, the third by such massive giants as *Sivatherium*, whose skull bore huge branching bony "horns."

In the closing analysis on the migration of certain mammals to and from the Siwaliks we see India as at the crossroads, exchanging mammals with Europe and Africa on the one hand and with Asia and North America on the other.

In view of the merits of this work mentioned above, as well as others, the committee has unanimously recommended the award of the Daniel Giraud Elliot medal and honorarium for 1935 to Edwin H. Colbert.

WILLIAM K. GREGORY

PRESENTATION OF THE DANIEL GIRAUD ELLIOT MEDAL FOR 1936, WITH AC-COMPANYING HONORARIUM OF \$200, TO ROBERT CUSHMAN MURPHY⁴

FEW writers have had a more prolonged and varied preparation for their task than Dr. Robert Cushman Murphy as author of the "Oceanic Birds of South America." Soon after graduating from Brown, Dr. Murphy shipped aboard the whaling brig Daisy on a voyage of nearly a year's duration in the South Atlantic. For the longer part of this period he was associated with birds of the high seas, pulling an oar with the best of the shearwaters and other pelagic species; but for four months he lived on the island of South Georgia. There he obtained the rudiments of a course in South American littoral ornithology. Penguins, albatrosses and other species little known on their breeding grounds were his teachers, but the day was to follow when he would become their monographer.

Several years later, Dr. Murphy passed six months among the bird islands of the Humboldt Current off the coast of Peru. Here, in the world's greatest demonstration of certain phases of bird-life, his education in the ways of marine birds and the factors governing their distribution were still further advanced. In 1924 he returned to this region and extended his studies to the coast of Ecuador.

In these three productive expeditions, Murphy found the field in ornithology in which he has distinguished himself, and when opportunity offered for the formal pursuit of his researches he was equipped to embrace it. Meanwhile, the American Museum of Natural History, under the patronage of Messrs. Brewster and Sanford, commissioned R. H. Beck to collect the marine and littoral birds of South America from Peru to Pará, including Cape Horn and the Falkland Islands. This master of his profession was in the field for four-and-a-half years securing 7,853

⁴ Read by Dr. Ross G. Harrison, in the absence of Dr. Chapman.

specimens, each one a potential source of original information. Murphy was the one man qualified by experience, training, and desire to interpret this collection. Fortunately, he was now on the American Museum's staff. With most of the species represented, he was familiar in life; and he had visited a large part of the area whence they came. Thus his field-studies, added to Beck's collections, made the ideal laboratory combination. With it was included a thorough review of all pertinent literature. Several years were required to digest the whole and present the resulting facts and conclusions in two eminently readable volumes of objective and subjective ornithology.

To the systematic treatment of all the forms concerned, there was added an exposition of Murphy's discovery that oceanic birds are subject to the same kind of environmental control as seals, sea-turtles and even fish. The part played in distribution by the temperature of water as well as air, the influence of wind and of currents and the effects of insular isolation are also considered. Full biographies, when available, are given with each species, and long-standing biologic problems like that presented by the confusing relations of the steamer ducks are satisfactorily treated. All this, and more, is set forth in the 1,245 quarto pages entitled "Oceanic Birds of South America," forming a work of such high merit that, Mr. President: The committee has recommended the award by the Academy of the Elliot Medal for 1936 to Robert Cushman Murphy as its author.

FRANK M. CHAPMAN

PRESENTATION OF THE JOHN J. CARTY MEDAL AND AWARD (MONETARY AWARD \$4,000) TO EDWIN GRANT CONKLIN

THE Committee for the Award of the John J. Carty Medal has had an easy and a pleasant task to perform, for once the name of Conklin was suggested as recipient, so appropriate was his selection that there scarce could be a competitor.

In the citation which has been read are indicated many ways in which Edwin Grant Conklin merits this medal and award, but there is another and unique way in which Conklin qualifies. I refer to Carty's friendship and admiration for Conklin which all Carty's close associates attest, and to the influence of Conklin's philosophy on Carty's thinking as indicated by his writings.

Conklin had pointed out that man's future development lay not in the evolution of man as an individual but in the evolution of society—the building of an harmonious body out of cooperating human elements, with man adding to his own power the forces of nature. Carty saw in the telephone system of his creation the nerve system of that society—his telephone wires and radio channels were the nerves to provide communication among the specialized human elements of the peaceful and efficient social organization yet to be evolved.

In this connection and because of its timeliness, I think you will be interested in hearing a quotation from an unpublished address of John J. Carty in 1923. After referring to Conklin, Carty said:

We are rapidly constructing a wire and radio system of world communications which is destined to become the nervous system of that vast organism or pseudo-organism known as human society. Whether this organism shall be a sane and peaceful one, or whether we are providing it with a nervous system in preparation for a universal brain storm, requires our most serious consideration.

The progress of science is now so rapid that in less than another hundred years man will be endowed with powers of destruction transcending anything heretofore known. Even half a century hence, communications and transportation may be so far advanced that all of the nations of the earth could be drawn into a war at the end of which the whole world might be in chaos.

That such a catastrophe is possible I firmly believe, but that it can be averted I also firmly believe. This can not be done by slowing down our progress in the application of science to material things; but on the contrary we must accelerate our progress in all the physical sciences, for all of the knowledge thus gained will be required in solving the problem presented by man himself as the fundamental unit of that gregarious organism, human society.

Mr. President: The committee for which I speak is happy to have had the opportunity of making a report so enthusiastically accepted by this academy.

O. E. BUCKLEY

OBITUARY

MARY JANE RATHBUN

Dr. Mary Jane Rathbun, honorary associate in zoology at the U. S. National Museum since November, 1915, died at her home in Washington, D. C., on April 4. Funeral services were held in Washington at the home of her nephew, and burial was at her birthplace, Buffalo, N. Y.

Born in Buffalo on June 11, 1860, Miss Rathbun was educated in the schools of that city, and thereafter devoted a long life of service to the Smithsonian Institution and the U. S. National Museum.

Her brother, Richard Rathbun, later to become assistant secretary of the Smithsonian Institution and director of the National Museum, was, in the early 1870's, already launched on a scientific career which had grown out of his interest in fossil animals found in his father's stone quarries in Buffalo. In the summer of 1881, when he was scientific assistant in the U. S. Fish Commission, his sister accompanied him on one of his annual trips to the commission's summer laboratory at Woods Hole, Massachusetts. There her own interest in biological research was stimulated, and she continued to visit Woods Hole for the next three summers. So great was her interest that she worked for the Fish Commission from 1881 to 1884 without compensation. In 1884 she obtained a position as clerk in the Fish Commission, which she held until 1887, when she was appointed by Secretary Spencer F. Baird, of the Smithsonian Institution, to a position as copyist in the Division of Marine Invertebrates of the National Museum. Later she became aid, then assistant curator of this division. After her resignation in 1914, she was appointed honorary associate in zoology, which title she held until her death.

Miss Rathbun worked for many years alone and

unaided to build up the Division of Marine Invertebrates to its present high standard of excellence. She instituted a record system upon which others have never been able to improve. It not only is in use in the division to this day, but has been studied and adopted by other divisions of the museum. She also established a systematic catalogue of the thousands of specimens of marine invertebrates handled by the division, whose files contain hundreds of catalogue eards made out by her in longhand during the many years before a typist was available for this work. The division, as it is constituted and operated to-day, continues to rest upon the solid foundation that she built for it.

Because of her enterprise, the collections and correspondence of the division grew to such proportions that it became imperative for her to have assistance in handling them. When she asked for such an assistant, however, she was told that the museum funds would not permit the appointment of another person. It was then that she made the decision which forever after endeared her to her colleagues, and particularly to the man who benefited by her action. Without hesitation, on December 31, 1914, she resigned her position, in order that her salary could be used for paying an assistant. The assistant for whom she thus made place was Dr. Waldo L. Schmitt, who later became curator of the division. He declares that but for this act of sacrifice he might never have embarked upon the career to which he has devoted his life and which has only recently led to his designation as head curator of the Department of Biology at the museum. He deeply regrets that his absence from the country

¹ Address on "World Communications," at The University Club, New York, February 10, 1923.