

America as the center of radiation for the family and regarded the subfamily Myrtoideæ as the most ancient. The subfamily Leptospermoideæ was regarded as derived from the former; and the Australian types, which are the peculiar ones of the family, were regarded as having originated in that region in response to local environmental conditions subsequent to the Cretaceous radiation of the family stock. Genera such as *Eugenia* and *Myrcia* were regarded as representing this ancestral stock more nearly than any other of the existing genera.

This theory considered *Eucalyptus* as one of the more specialized genera and is this conclusion I agreed entirely with Andrews and other Australian friends who have repeatedly expressed doubt regarding the presence of *Eucalyptus* in the fossil floras of the northern hemisphere. Without wishing to be dogmatic about European fossil forms referred to *Eucalyptus* and known to me only from figures, I may say that I do not regard the genus as ever having been present in North American, although in conformity with long-established custom and with due consideration for the stratigraphic applications, I have frequently referred fossil forms to this genus.

A question of considerable importance is the real botanical affinity of the numerous North American Cretaceous forms which have been referred to *Eucalyptus*. These are undoubtedly ancestral to the American Eocene forms referred to *Eugenia* and *Myrcia*, and it would probably not be far from the truth if they were referred to the genus *Myrcia*. I have collected and studied a great many of these Cretaceous types and some of them are certainly closely allied to, if not identical with that genus. Others are somewhat remote and pending a solution of their botanical affinity, which may never be satisfactorily attained, I would advocate the dropping altogether of the use of *Eucalyptus* for those North American fossil forms. This usage is seriously misleading from the standpoint of evolution and distribution, and moreover is not supported by any valid botanical arguments, as I pointed out in the paper already alluded to at the beginning of

this note. The alternative that I suggest is the taking up of the genus *Myrtophyllum* proposed by Heer in 1869² and using it for leaves of Myrtaceæ whose generic relations can not be determined with certainty, and more especially for the leaves commonly referred to the genus *Eucalyptus*. EDWARD W. BERRY

JOHNS HOPKINS UNIVERSITY,
BALTIMORE, MD.

THE RICHARDTON METEORITE

On July 21, about 10 P.M., many people saw a meteorite fall in the district lying between Mott and Richardton, N. D. From the descriptions of many eye witnesses it appears that the meteorite fell at a low angle, about 75° from vertical, and that its direction of flight was about due north. It seems to have burst a few thousand feet above the ground, and to have broken into many pieces, over a hundred of which have been found. The weight of the material discovered is about 200 pounds. The meteorite is stony, poor in metallic parts, composed of little spheroids in a gray brittle matrix, classified tentatively by the writer as a veined kugelchen chondrite.

Nearly all the witnesses agree that the meteorite made a very bright light and a rushing sound, followed by a noise like thunder, and that it made the windows rattle and the houses shake; two men heard the whistle of stones like the flight of bullets, and one heard the stones rattle upon the roof of his barn, near which specimens were later found. The most intelligent witness says it looked first like a very bright falling star, and that it burst like a Roman candle, after which he heard the stones falling. Every one admits that he was very much frightened, most of them emphasize the terrifying noise and the brilliant light.

The meteorite did not fall at a very high velocity, for few pieces have been found buried in the ground, most pieces were found in pastures or wheat fields. Two pieces at

² Heer, O., *Neue Denks. Schw. Gesell. Naturw.*, Bd. 23, mem. 2, p. 22, 1869. Type being the widespread mid-Cretaceous species *Eucalyptus Geinitzi*.

least were found partly buried in loose soil. One, weighing 6½ pounds, was found about six inches in sandy soil where it had fallen and broken into several pieces as it struck. Some pieces show secondary fusion surfaces, and some appear to show tertiary fusion surfaces. The stone is brittle and most of the pieces are broken; however, one fine boloid of twenty pounds has been found and several of about ten pounds weight.

The writer is preparing a detailed description of the meteorite and the phenomena of its fall and would appreciate any data that may have been gathered by other observers or collectors.

TERENCE T. QUIRKE

DEPARTMENT OF GEOLOGY AND MINERALOGY,
UNIVERSITY OF MINNESOTA,
MINNEAPOLIS, MINN.

SCIENTIFIC BOOKS

Catalogue of Birds of the Americas. By CHARLES B. CORY. Part II. No. 1. Publication 197, Field Museum of Natural History; Zoological Series, Vol. XIII. March, 1918. Pp. 1-315; pl. I.

This catalogue intends to treat all the species and subspecies of birds known to occur in North America, Middle America, West Indies, and South America, including all the adjacent islands of the Atlantic and Pacific oceans. Although the present installment is first in the order of publication, it is called Part II, No. 1, since it begins with the owls instead of with the lowest forms. This seems rather unfortunate, but the author explains it on the ground that Mr. Robert Ridgway's great work on the birds of North and Middle America is not yet finished as far as the lower groups; and that more time than is now available will be necessary in order to work out the status of many of the water birds of South America.

The classification adopted for this catalogue is practically that of Dr. R. B. Sharpe, as used in his "Hand-List of the Genera and Species of Birds." The outline of this classification down to families, in so far as it affects

the birds of the Americas, is included in the introductory matter. The present part comprises 1,265 species and subspecies, representing 232 genera of the following families: Bubonidæ, Tytonidæ, Psittacidæ, Steatornithidæ, Alcedinidæ, Todidæ, Momotidæ, Nyctibiidæ, Caprimulgidæ, "Cypselidæ" (*lege* Micropodidæ) and Trochilidæ.

Of the higher groups nothing but the names is given, but for each genus there are added the authority, the original reference, and a citation of the type. For each species and subspecies there appear the full technical combination; the common name; reference to the original description; the type locality; such essential synonymy as references (usually not over half a dozen) to Mr. Ridgway's "Birds of North and Middle America," "The Catalogue of Birds of the British Museum," original descriptions, revisions of groups, and other important papers; a brief statement of geographic range; and a list of specimens (with state or country localities) contained in the Field Museum of Natural History. An asterisk (*) indicates species represented in this collection, and a dagger (†) those of which there are specimens for exchange.

For all species and subspecies not included in Ridgway's "Birds of North and Middle America" or "The Catalogue of the Birds in the British Museum," brief descriptions are added in footnotes, along with various comments on nomenclature and the status of forms. The following subspecies are described as new: *Speotyto cunicularia minor*, from Boa Vista, Rio Branco, Brazil; *Aratinga cactorum perpallida*, from Jua, near Iguatu, Brazil; *Eupsittula pertinax margaritensis*, from Margarita Island, Venezuela; *Amazona amazonica tobagensis*, from Tobago Island, West Indies; *Urospatha martii olivacea*, from Moyobamba, Peru; *Nephæcetes niger guadeloupensis*, from Guadeloupe Island, West Indies; *Lepidopyga goudoti zuliae*, from Rio Aurare, Venezuela; and *Colibri iolatus brevipennis*, from Caracas, Venezuela.

We are glad to see that in headings the full technical name of each species and subspecies is written without abbreviation; also that the