

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

oldest tenable names and the original spelling of generic, specific and subspecific terms are used, including those formed with the termination *ii* from the names of persons. We note, however, an occasional slip, as, for example, *Phæthornis guyi*, which should be written *Phæthornis guy*, to agree with the author's practise in the case of *Chætocercus heliodor*.

Recent ornithological work concerning the birds of America has been carefully collated, and the present catalogue appears to be brought well up to date. It is doubtless worth while to note that since a number of the families included are peculiar to America, the present catalogue presents a complete list of the genera, species, and subspecies of Steatornithidæ, Todidæ, Momotidæ, Nyctibiidæ, and, most important of all, Trochilidæ.

There is only one illustration, the frontispiece in color, which depicts *Urochroma costaricensis* Cory. There is no index, but this is probably to be supplied at the end of Part II.

This work is unfortunately marred by many typographical errors in both scientific and common names. We are also sorry to see the perpetuation of the vernacular name "nighthawk" for the species of the genera *Nyctiphrynus*, *Antiurus*, *Setopagis*, and *Nyctipolus*, for these do not belong to the same family as the true nighthawks (Chordeilidæ), but to the Caprimulgidæ, and are nearly related to the whip-poor-wills. Furthermore, there does not seem to be a satisfactory reason for continuing the use of *Antrostomus* instead of *Setochoalcis* for the American whip-poor-wills, since there are many excellent characters, external as well as osteological, to separate them from *Antrostomus carolinensis*. Also, the American barn owls are clearly subspecies of the European *Tyto alba*, not of the South American *Tyto perlata*.

This catalogue is the first serious attempt at an enumeration of the birds of all America, and is so well done that it can not fail to have before it a long career of great usefulness.

HARRY C. OBERHOLSER

SPECIAL ARTICLES

PSYCHOLOGICAL RESEARCH IN AVIATION¹

WITH the exception noted below, official research on psychological problems of aviation was conducted under the direction of the Medical Research Board, a branch of the Air Medical Service which (the A. M. S.) took charge of the medical, physiological and psychological problems concerning the behavior of the fliers. I began work at the Bureau of Mines Laboratory in October, 1917, with two assistants, and continued in charge of the Psychological Department until August 30, 1918, on which date I was removed from the Mineola Laboratory. During this period the psychological staff grew to (approximately) twenty-five officers and seventeen men (counting several who were commissioned shortly after my leaving, on my previous recommendations). The response of the members of the psychological profession to my calls for assistance was most liberal, and although we did not have a staff large enough to do effective work it was on account of the difficulty in securing commissions, not on account of lack of competent psychologists willing to make the sacrifice.

Work on tests of flying ability was commenced earlier, outside the Medical Board, by Professor Stratton, at first independently, and later under the Air Personnel. Upon my urgent recommendation, the board succeeded in having Professor (now Major) Stratton transferred to the Mineola Laboratory, bringing all the psychological research under medical control, and on my removal Major Stratton was placed in charge of the department.

The first work required of the board was the construction and standardization of a test for determining, if possible, the individual flier's ability to endure the partial asphyxia-

¹ A paper read before the Baltimore meeting of the American Psychological Association in joint session with Section H, American Association for the Advancement of Science, December 28, 1918. Authority to publish, with deletions, granted by Board of Publication, S. G. O.

Asterisks in the text indicate deletions.