

The half-tone pictures, nearly one hundred in number, add immensely to a clear conception of the breeding haunts and habits of a large number of species the ordinary observer can hardly hope to be able to study in life. — J. A. A.

Witherby on the Migration of Birds.¹—Mr. Witherby sets forth at some length, in a popular way, many well-known facts about bird migration. "None of the many theories" professing to answer the questions of what causes migration, what first led birds to migrate, and how they find their way, are, to him, in any way satisfactory; "the more," he says, "we study the matter, and the more we learn, the more difficult does it become to adopt any of the theories, fascinating and plausible though many of them are." But he believes that the collecting and sifting of information, now going on, "will lead us almost imperceptibly towards the discovery of this mystery of mysteries"! When discovered, what an aching void there will be for those who love mysteries! — J. A. A.

Shufeldt on the Osteology of the Psittaci.²—The views of several leading authorities on the classification of the Psittaci are quoted at some length (pp. 399–405), and then follows an account of the osteological characters of the Carolina Paroquet, this part of the paper being a revision, with some additions, of his paper on the same subject published in 1886, to which is added (pp. 419, 420) 'Observations upon the Osteology of the Owl Parrot (*Stringops habroptilus*). The nine figures forming the four half-tone plates represent the skeleton of *Stringops* and the skulls of *Conurus carolinensis*, *Ara militaris*, and *Cacatua galerita*, and the trunk skeletons and some other bones of *Conurus* and *Cacatua*, the sternum and shoulder girdle of *Calyptorhynchus*, and the humeri of *Cacatua*. — J. A. A.

Strong on the Metallic Colors of the Feathers of the Neck of the Domestic Pigeon.³—The so-called metallic colors and iridescent effects of feathers have been generally explained as diffraction phenomena. Dr. Strong states that the hypothesis based on the supposed presence of striæ and ridges is "inapplicable to this case when one finds that the feather may be rotated through a whole circle with essentially the same color effects for given angles even from individual barbules. Furthermore, a careful microscopic study of the barbule surface shows that irregularities

¹The Migration of Birds. By H. F. Witherby, F. Z. S., Member of the British Ornithologists' Union. Separate, pp. 16, reprinted from 'Chambers Journal.'

²Osteology of the Psittaci. By R. W. Shufeldt. Annals Carnegie Museum, Vol. I, 1902, pp. 399–421, pll. xxi–xxiv.

³The Metallic Colors of Feathers from the Neck of the Domestic Pigeon. By R. M. Strong. Biol. Bull., Vol. III, 1892, pp. 85–87.

such as striæ, ridges, pits, knob-like elevations, etc., are not frequent enough when sufficiently small to produce grating effects, and in fact are not normal occurrences."

The colors of the feathers, he says, when observed without a microscope, are evidently mixed colors. "The greenish effects are produced when light strikes the broad surfaces of the barbules and is reflected with a small angle of reflection. The reds appear only when light falls with a large angle of incidence on the pigment granules of a margin or elevated portion of a barbule. We seem to have a clear case of Newton's rings where each pigment granule comes in contact with the outer transparent layer."

This preliminary statement will be followed by a more detailed account, illustrated with figures.—J. A. A.

Mearns on Three New Birds from the Southern United States.¹—These are a new Grasshopper Sparrow (*Coturniculus savannarum floridanus*) from southern Florida, where it is the resident form; the Florida Purple Martin (*Progne purpurea floridana*), and a new Nuthatch (*Sitta carolinensis nelsoni*) from the southern Rocky Mountains.—J. A. A.

Oberholser on New South American Birds.²—Mr. Oberholser has described in the present paper one new genus and 13 new species and subspecies of South American birds, mainly from specimens in the U. S. National Museum, but in part based on material from the American Museum of Natural History. Mr. Oberholser also expresses his views of the proper arrangement of the *Thryophilus leucotis* group, of which he recognizes ten species and subspecies.—J. A. A.

Oberholser on Birds from Paraguay.³—The collection of birds here reported upon "consists of 78 specimens, representing 65 species and subspecies, several of which," says the author, "appear to be unrecorded from Paraguay." Among these were seven species and subspecies which Mr. Oberholser, in the paper noticed above, introduced to science as new, and here redescribes in greater detail. Mr. Oberholser also discusses at length the nomenclature and relationships of quite a number of the species here under notice.—J. A. A.

¹ Descriptions of Three New Birds from the Southern United States. By Edgar A. Mearns, Major and Surgeon, U. S. Army. Proc. U. S. Nat. Mus., Vol. XXIV, No. 1274, pp. 915-926.

² Some New South American Birds. By Harry C. Oberholser. Proc. U. S. Nat. Mus., Vol. XXV, No. 1276, pp. 59-68.

³ List of Birds collected by William Foster in Paraguay. By Harry C. Oberholser. Proc. U. S. Nat. Mus., Vol. XXV, No. 1281, pp. 127-147, 1902.