birds waddling down to the water, nearly half a mile distant, and fresh, clean birds coming back from their bathing and feeding to take their turns on the nests. When the young are hatched the parents have the double task of feeding themselves, and carrying back food enough for their rapidly growing chicks, and to quote Dr. Levick "so distended were their stomachs that they had to lean backward as they walked to counterbalance their bulging bellies." The young of course are fed by regurgitation directly from the stomach of the parent. Dr. Levick presents most interesting accounts of the mating, fighting, stealing of building material and other activities of the rookery as well as the actions of the birds in the water, their diving and leaping in and out onto the ice, and their play on the ice cliffs and floes. The birds showed no fear of man and one could walk through the rookery at pleasure.

The student of animal behavior will find much interesting material in Dr. Levick's book and many interesting statements are accompanied by most convincing photographs of the birds going through their performances. Probably no birds offer such opportunities for the study of nesting communities and of the peculiar habits that have arisen from the close association of such multitudes of individuals.

An appendix describes the Skuas (Megalestris maccormicki), and their habits — those robbers of the rookeries who depend largely for food upon the eggs and young which an inadvertent parent Penguin may leave for a moment unguarded. There is also a short account of the Emperor Penguin (Aptenodytes forsteri).

Altogether Dr. Levick's book is unique, and will appeal to all ornithologists,—whether their specialty be, habits, behavior, oölogy or photography—as well as to the public at large for whom these strange, erect, man-like little birds have a strange fascination.—W. S.

Miller on Ptilosis, with Special Reference to the Feathering of the Wing. 1— Mr. Miller is doing excellent work on the structure of birds with regard to their systematic relationship. We shall need much additional data before a satisfactory classification shall be drawn up and any facts on comparative structure are welcome. In the present paper he considers the ptilosis of the wing in various birds which have been received in the flesh from the New York Zoölogical Park. Many points of interest are brought out which contradict current statements, as for instance the presence of an aftershaft in some parts of the plumage of the Osprey, the absence of which was considered a subfamily character, and the absence of the eleventh primary in the Pigeons, a group said by Gadow to possess eleven primaries. In commenting upon relationships Mr. Miller also calls

<sup>&</sup>lt;sup>1</sup> Notes on Ptilosis with Special Reference to the Feathering of the Wing. By W. DeW. Miller, Bull. Amer. Mus. Nat. Hist., XXXIV, Art. VI, pp. 129-140, March 19, 1915.

attention to color combinations the importance of which as a character has been several times emphasized by the reviewer.

In his remarks on the ptilosis of *Podargus* and the *Trochilidæ* we notice no reference to the papers of Dr. Hubert Lyman Clark in 'The Auk,' 1901, p. 167 and 1906, p. 68. Mr. Miller will find some of his statements already recorded there. While it is satisfactory to have previous work verified, reference should be given to it, and we think these two papers must have escaped Mr. Miller's eye.

In a footnote on p. 134 occur some comments on generic names of Parrots. Among other things Mr. Miller fails to see how the names proposed by Kuhl for "sections" of certain genera can be rejected as has been advocated by Mr. Gregory Mathews (Novitates Zool., XVIII, p. 11). We heartily agree with Mr. Miller that no distinction can be made between subgenera and "sections" and that these names must be recognized. In the case of *Conurus*, however, Mr. Miller apparently overlooked the fact that, as Mr. Mathews explains, Lesson fixed as the type of this genus a species of *Palæornis*, which action transfers the name *Conurus* to this old world group necessitating the adoption of *Aratinga* for the South American Conures.—W. S.

Cory on New South American Birds. 1 — Mr. Cory describes twentyone new forms in the present paper, based on material obtained by the various Field Museum South American expeditions. They are as follows: Crypturus tataŭpa peruviana (p. 293), Central Peru; Nothoprocta ambigua (p. 293), Otusco, Peru; Odontophorus plumbeicollis (p. 294), Ceara, Brazil; Columba rufina andersoni (p. 294), Boa Vista, N. Brazil; C. r. tobagensis (p. 295), Tobago; C. plumbea propinqua (p. 295), Moyobamba, Peru; C. subvinacea zulliæ (p. 295), Zulia, Venezuela; Aramides cajanea venezuelensis (p. 296), Encontrados, Venezuela; A. c. peruviana (p. 296), Moyobamba, Peru; Cerchneis sparverius peruviana (p. 296), Chachapoyas, Peru; C. s. distincta (p. 297), Boa Vista, Brazil; C. s. margaritensis (p. 297), Margarita Island; C. s. ochracea (p. 298), Colon, Venezuela; Otus choliba margaritæ (p. 298), Margarita Island; Speotyto cunicularia arubensis (p. 299), Aruba Island; S. c. beckeri (p. 299), Bahia, Brazil; S. c. intermedia (p. 300), Pacasmayo, Peru; Podager nacunda minor (p. 300), Boa Vista, Brazil; Nyctidromus albicollis obscurus (p. 301), Yurimaguas, Peru; Caprimulgus hirundinaceus crissalis (p. 301), Bahia, Brazil; Threnetes longicauda (p. 301), Ceara, Brazil.— W. S.

**Shufeldt on the Tree Ducks.**<sup>2</sup> — This paper consists of an extended description of the skeleton of *Dendrocygna* compared with those of certain

<sup>&</sup>lt;sup>1</sup> Descriptions of New Birds from South America and Adjacent Islands. By Charles B. Cory. Field Mus. Nat. Hist. Publ. 182, Ornith. Series, Vol. 1, No. 8. February 23, 1915, pp. 293–302.

<sup>&</sup>lt;sup>2</sup> Contribution to the Study of the "Tree-Ducks" of the genus Dendrocygna. By R. W. Shufeldt. Zool. Jahrbüch. 1914, pp. 1–70, pll. 1–16.