we find it stated that (1) the flippers have highly compressed bones with no power of flexure; (2) the tongue is rudimentary; (3) they lay two coarse flavored eggs (4) the young are hatched blind; (5) the parent feeds the young by inserting its bill into that of the nestling. All of these statements Mr. Murphy found to be erroneous: the tongue is in most if not all species well developed; the eggs are from one to three in different species; the eyes of the young are open at hatching and the young inserts its bill into that of the parent when feeding not vice versa.

Mr. Murphy has made an important contribution to our knowledge of the Spheniscidæ which may take its place along with Levick's 'Antarctic Penguins' and other recent publications on the subject. His photographs are excellent but the printing of some of the half tones has been very poorly done.— W. S.

Chapman on New Birds from Central and South America.¹—Dr. Chapman in continuing his studies of the extensive Colombian collections obtained by himself and his collectors, finds additional new forms both in Colombia and in neighboring countries, which he proceeds to name in the present paper. Odontophorus guianensis panamensis (p. 363) is described from Panama and the relationship of the other subspecies discussed. The races of Leptotila rufaxilla are considered, of which two are described as new, L. r. hellmayri (p. 368), Trinidad; and L. r. pallidipectus (p. 369) Buena Vista, Colombia. A partial revision of the South American Sparrow Hawks results in the recognition of seven races of which Cerchneis sparverius caucæ (p. 375) Cauca Valley, Colombia, and C. s. fernandensis (p. 379) Island of Juan Fernandez, off Chile; are new.

The following additional new forms are proposed: Asio flammeus bogotensis (p. 370), Bogota; Rhynchortyx cinctus australis (p. 365), Barbacoas, Col.; Columba subvinacea peninsularis (p. 366), Cristobal Colon, Ven.; Chæmepelia rufipennis caucæ (p. 367), Cauca Valley; Pyrrhura melanura pacifica (p. 382), Buenavista Nariño, Col.; Psittacula conspicillata caucæ (p. 383), Cauca Valley, Curucujus massena australis (p. 384), Barbacoas, Col.; Andigena nigrirostris occidentalis (p. 385), San Antonio above Cali, Col.; Chloronerpes rubiginosus buenavistæ (p. 386), Buena Vista, Col.; Atlapetes gutturalis brunnescens (p. 387), Boquete, Chiriqui. — W. S.

Cory on New South American Birds.² — Mr. Cory's continued study of the South American collections received at the Field Museum results in the description of the following new forms: *Threnetes leucurus rufigastra*

¹ Descriptions of Proposed New Birds from Central and South America. By Frank M. Chapman. Bull. Amer. Mus. Nat. Hist., XXXIV, pp. 363–388. May 27, 1915.

² Notes on South American Birds, with Descriptions of New Subspecies. By Charles B. Cory. Field Museum of Natural History Publication 183. Ornithological Series, I, No. 9, pp. 303–335. August 7, 1915.

(p. 303), Moyobamba, Peru; Leucippus fallax richmondi (p. 303), Margarita Isl.; Piaya cayana cearæ (p. 304) Ceara, Brazil; P. melanogaster ochracea (p. 304) Yurimaguas, Peru; Chrysoptilus punctigula zuliæ (p. 305), Zulia, W. Peru; Veniliornis tanionotus ceara (p. 306), Ceara, Brazil; Scapaneus melanoleucus ceara (p. 306), Ceara, Brazil; and S. pallens peruviana (p. 307), Molinopampa, Peru. Following these is a 'Key to the South American Species and Subspecies Belonging to the Genus Piaya.' This does not seem to be a very happy treatment of the subject, in-as-much-as the statements of several authors are ignored without explanation and several subspecies are omitted without any mention whatever. Thus P. c. cabanisi Allen is ignored although Hellmayr states that it is a valid race (Nov. Zool. XVII, No. 3, p. 401) while we find no reference to P. c. boliviana Stone. We moreover look in vain for remarks "antea" referred to at bottom of p. 310. Mr. Corv's paper concludes with a 'Revision of the Sparrow Hawks of South America and Adjacent Islands,' which includes diagnoses of three new forms, Cerchneis sparveria andina (p. 323), Quito, Ecuador; C. s. intermedia (p. 325), Villavicencio, Colombia; and C. s. perplexa (p. 327), Lower Essequibo River, British Guiana, making fourteen in all which are recognized by the author.— W. S.

Burns on Periods of Incubation. 1 — Mr. Burns has done a good work in compiling a list setting forth the time of incubation for some 225 species and races of North American birds. Comparatively few careful studies of this subject have been made, most oologists being more anxious to secure the egg shells intact than to ascertain how many days will elapse before the young break out of them. The figures given are therefore often estimates or guesses rather then the result of actual observation, and something authoritative has been a great desideratum. The only weak point in Mr. Burns' paper is that he does not quote his authority for the individual figures, and the list of authors and correspondents from whose statements the list is compiled, must necessarily represent a considerable range of accuracy. Even if the figures for which he could personally vouch were so marked it would have added a large measure of strength to his paper, as his care and accuracy are well known. The use of the query as denoting "possible inaccuracy" is not clear, as we note in the case of the Sparrow Hawk the period of incubation is given as "29-30(?) days" whereas in 'The Auk' for July, 1913, Miss Althea R. Sherman, in a most careful study of this species, ascertained the period from deposition to hatching in four eggs of this species to be from earliest to latest 35, 31, 30 and 29 days respectively. At all events Mr. Burns's list is an excellent foundation upon which to build. Let there be more energy devoted to this phase of the subject and less to the amassing of egg shells, and let observers check up their results with Mr. Burns' list.— W. S.

¹ Comparative Periods of Deposition and Incubation of Some North American Birds. By Frank L. Burns. Wilson Bulletin, No. 90. March, 1915. pp. 275–286.