larger and deeper colored than Loxia curvirostra minor with a larger and heavier bill. Mr. Bent proposes to separate them as a distinct race under the name of Loxia c. percua.— W. S.

Mearns on a New African Grass Warbler.—To the several new forms of Cistocola recently described by Dr. Mearns he now adds another C. prinoides wambugensis from Wambugu, British East Africa, obtained in 1909 on the Smithsonian Africa Expedition.—W. S.

Ornithology in the Smithsonian Report for 1911.— Among the reprinted articles which form part of the Annual Report of the Smithsonian Institution for 1911 four deal with birds. These are 'A History of Certain Great Horned Owls,' by Charles R. Keyes, from 'The Condor,' 1911; 'The passenger Pigeon,' accounts by Pehr Kalm, from 'The Auk,' 1911 and by J. J. Audubon, (Ornithological Biography, Vol. 1); 'On the Position Assumed by Birds in Flight,' By Bentley Beetham, from 'British Birds,' 1911; and 'Note on the Iridescent Colors of Birds and Insects,' By A. Mallock, 'Proceedings of the Royal Society,' London, 1911.— W. S.

Horsbrugh's Game-Birds and Water-Fowl of South Africa.2—The concluding part of this attractive work is now before us and it fully maintains the high standard of the earlier parts. Fifteen species of Anatidæ and the Hadada Ibis are figured and described. The last Major Horsbrugh tells us is "not really a game bird but is most excellent eating and is always a welcome addition to the bag." The index, preface and title page accompany this installment and it is to be regretted that there is not an abstract of the laws of South Africa defining and protecting gamebirds.—W. S.

Hellmayr on Birds from the Mouth of the Amazon.³— This valuable contribution to Brazilian Ornithology is prepared with the same skill and carefulness that characterizes the work of the author and further illustrates his broad knowledge of the neotropical avifauna.

The paper is divided into six parts.

I. 'A review of the birds collected in the Para district'; a fully annotated list of 179 species, with discussion of ranges and relationship with allied forms.

¹ Description of a New African Grass-Warbler of the Genus Cisticola. By Edgar A. Mearns. Smithson. Misc. Collec., Vol. 60, No. 20, pp. 1–2. February 14, 1913.

² The Game-Birds and Water Fowl of South Africa by Major Boyd Horsbrugh, with Colored Plates by Sergeant C. G. Davies, Part 4. London. Witherby & Co., 326 High Holburn. December 11, 1912.

³ Zoologische Ergebnisse einer Reise in das Mündungsgebiet des Amazonas herausgegeben von Lorens Müller. II. Vogel von C. E. Hellmayr. Abhl. Köngl. Bayern. Akad. Wiss. XXVI, 2. pp. 1–142. November 15, 1912.

- II. 'A revision of the Avifauna of the Para district,' comprising a list of collectors, localities, a bibliography and a systematic list of 379 species with localities from which specimens have been recorded. *Dysithamnus mentalis emilae* is described as new from San Antonio do Prata.
- III. 'Report on the birds collected on the Island of Mexiana' annotated list of 39 species.
 - IV. 'Revision of the birds of Mexiana Island' 157 species listed.
- V. Report on the birds collected on the Island of Marajo'; annotated list of 40 species.
- VI. 'Zoogeographic consideration of the Avifauna of the region about the mouth of the Amazon.'

Such contributions as this are bringing our knowledge of the avifauna of South America nearer and nearer to that state of accuracy which characterizes the ornithology of North America, and this paper of Mr. Hellmayr's will prove of great assistance to investigators of the bird life not only of the Para district but of other more or less contiguous areas.— W. S.

McAtee's 'Index to U. S. Department of Agriculture Publications on the Food of Birds.' — So numerous are the publications of the U. S. Department of Agriculture, dealing with the food habits of birds, that an index such as Mr. McAtee has prepared is a practical necessity if we are to readily find the information that we seek. The index covers 131 documents, referring to the economic status of no less than 401 species of native birds and 59 foreign or introduced species. A bibliography precedes the index proper and the latter is remarkably full, with an abundance of subheadings under each species giving the various items of food and other details, which greatly aid the economist in finding just the information he desires.— W. S.

Craig's Studies of Bird Behavior.2—Mr. Craig describes in detail the hatching of two young doves (*Turtur risorius*). The birds made a series of strong movements with several seconds rest between; each movement seemed to consist of (1) a pushing lengthwise, (2) a thrusting of the bill through the shell, or sometimes only bulging it, (3) a turning round a few degrees which brought each bill thrust a little beyond the last. Mr. Craig finds only two recorded instances of the observation of the hatching of wild birds *i. e.* by W. H. Hudson, 'The Naturalist in La Plata' and R. T. Moore, 'The Auk' 1912, p. 218, dealing with the Jacana and Least Sandpiper respectively. It would seem therefore that there was opportunity

¹ Index to Papers Relating to the Food of Birds by Members of the Biological Survey in Publications of the United States Department of Agriculture, 1885–1911. By W. L. McAtee. U. S. Dept. Agr., Biological Survey, Bull. No. 4. Washington, 1913. pp. 1–69.

² Behavior of the Young Bird in Breaking out of the Egg. By Wallace Craig, Jour. Animal Behavior, July-August, 1912, pp. 296–298.

Observations on Doves Learning to Drink, do., pp. 273-279.