

may be possible that in these cases approximately similar climatic conditions have, as Mr. Chapman states, resulted in the development of similar characters, but is it not more probable that the likeness is due, at least in part, to a recent genetic connection with the true Eastern forms which in their northwestern extension across the continent exist not so very far to the northward of British Columbia. There are no impassible physical barriers to prevent such an origin of the birds in question, and may not a connection be to some extent still kept up by the occasional infusion of fresh blood of the Eastern form by means of an annual migration from the northward?

The author also mentions one or two instances where, among series fairly characteristic of the interior or of the coast forms, individuals occur showing strongly marked characters of an Eastern race. Why might not this too be the result of interbreeding with a stray migrant from the northward? It is generally believed that the bulk of the 'Eastern' birds inhabiting the Mackenzie Basin and the interior of Alaska migrate southeasterly, keeping to the eastward of the Rocky Mountains. The occurrence of stragglers of various species southward along the Pacific coast makes it seem not unreasonable that there should be a similar, though very limited, migration through the valleys of the interior, trifling, perhaps, in numbers, yet amply sufficient to account for such facts as these.

Following the introduction comes a formal list in which 160 species are considered in detail. "In every instance specimens have been received unless a statement is made to the contrary." Mr. Streater's field notes are usually brief, but of course are of much interest, coming from regions of which we have so little definite knowledge. Mr. Chapman adds in many cases important, and sometimes extended, technical notes bearing chiefly upon questions of geographical variation.

The paper ends with a table "giving the number of specimens of each species contained in Mr. Streater's collection, and also the localities at which they were obtained," thus showing exactly upon what material every conclusion of the author's is based. It would be a most desirable thing if other writers would follow this example of Mr. Chapman's. The table is a fitting conclusion to an excellent piece of work, one that on more grounds than one takes rank as an important contribution to ornithology.—C. F. B.

Hagerup and Chamberlain's Birds of Greenland.*—This book, prepared by Mr. Chamberlain from material furnished by Mr. Hagerup, consists of two parts. The first, an annotated list of the 'Birds of Ivigtut,' is based upon a former paper by Mr. Hagerup published in the 'The Auk' two years ago (Vol. VI, pp. 211-218, 291-297). This has been revised and corrected, and includes the results of experience gained by Mr. Hagerup

*The | Birds of Greenland. | By Andreas T. Hagerup. | Translated from the Danish | by | Frimann B. Arngriinson. | Edited by Montague Chamberlain. | Boston: | Little, Brown, and Company. | 1891.—8². pp. 62.

during a second stay of fifteen months at Ivigtut. The accounts of the breeding and habits of the birds contain much that is interesting, and some remarkable facts are brought out in regard to the migratory movements of certain species; considerable attention too is given to the changes of plumage of several of the species. There are unfortunately a few cases in which Mr. Hagerup seems to have neglected his opportunity of settling the status of some doubtful forms by the reference of large series to some high authority for determination.

The second part, a 'Catalogue of the birds of Greenland,' "comprises all the birds discovered up to date in that part of western Greenland which is settled by the Danes; namely, the country lying south of 73° N. lat." It "is based on the works of Holboll, Reinhardt, Alfred Newton, Ludwig Kumlien, and others; use has also been made of the late Alfred Benzon's collection of bird-skins and eggs," which has supplied much material especially in regard to times of breeding; and Mr. Hagerup's own experience has furnished its quota. The annotations are as a rule quite brief. "Of the 139 species here enumerated one [*Plautus impennis*] is extinct and 53 are merely accidental stragglers, while 24 others are so rare that they might be classed with the accidentals, leaving but 61 species that should be recognized as regular inhabitants of Greenland; and of these several are of quite uncommon occurrence. (M. C.)." Of the smaller land birds a majority are North American species entered as "chance visitors." The Catalogue is greatly benefitted by Mr. Chamberlain's critical notes though he has used his editorial privilege almost too sparingly. Explorers of Greenland, and indeed all who are interested in the fauna of this or other boreal regions, will find this work a most useful hand-book.—C. F. B.

Nicholson's Translation of Sundevall's 'Tentamen.'*—Mr. Nicholson has done good service in placing within the reach of English speaking ornithologists Sundevall's celebrated essay on the classification of birds, originally published in Latin in 1872. For a time, and in certain quarters, Sundevall's system met with much favor, though in many respects arbitrary and artificial; yet at many points it was an advance upon what had been done before. The essay opens with a preface, in which he explains the basis of his work as regards material examined, and makes several pertinent strictures upon the practices of some of his predecessors in respect to imperfect citation of names and references to localities whence specimens are derived. This is followed by the 'Introduction,' giving 'Remarks on the Development of the Ornithological System' (pp. 1-11); 'On the Notion of Affinity as a Principle of Natural Systems' (pp. 12-20); 'Concerning the Object of Systems in Natural History and the Properties involved in them' (pp. 21-25); 'Remarks on the Ornithological

*Sundevall's | *Tentamen*. | [*Methodi Naturalis Avium Disponendarum* | *Tentamen*.] | Translated into English, | with Notes, | By Francis Nicholson, F. Z. S., | Member of the British Ornithologists' Union, | Corresponding Member of the American Ornithologists' Union. | London: | R. H. Porter, | 18 Princes Street, Cavendish Square, W. | 1889.—8vo. pp. xiii, 316, with frontispiece (portrait of Sundevall).