On the whole the 'Monograph' lives well up to its title and gives us in concise form a summary of the present day knowledge of this noble group of birds, which, until Mr. Swann took up the work, was sadly in need of a revision. We congratulate him upon the high standard which he has set both in the character of text and plates and in typographical appearance.

—W. S.

Abel Chapman's 'The Borders and Beyond.'—In this volume¹ Mr. Chapman returns for the most part to his early interests and to the subject of his first book, 'Bird-Life of the Borders,' which, by the way refers to the borderland between England and Scotland, a fact not perhaps generally understood on this side of the Atlantic. Eight chapters deal with "salmonology" and one is devoted to the otter but the bulk of the volume relates to birds, especially to the Red Grouse and the Shore-birds, with other chapters on Water-fowl, the Raven, the sense of smell in birds, modern zoölogy, nomenclature and trinomialism.

Much space is given to demonstrate that the Red Grouse feeds only in the evening, while in connection with the transient shore-birds our author sets down seven salient points which he considers proven by his observations: (1) that in many species some individuals go far south to winter, while others remain in the British Isles, the latter starting north in March and the former in mid-May; (2) that the Black-bellied Plover, Sanderling, Turnstone, Oystercatcher and Bar-tailed Godwit require two, three, possibly four years to acquire their full adult plumage, and during this prolonged adolescence do not breed; (3) that other species attain maturity and breed the first year—Black-tailed Godwit, Golden Plover, Curlew Sandpiper, Little and Temmink's Stints; (4) that the immature birds accompany the adults only so far and no farther in the spring migration, apparently dropping out somewhere between Great Britain and the Arctic Circle; (5) that the successive plumages of the long adolescence have never hitherto been correctly diagnosed; (6) that the scope and range of migration is wider and more complex than popularly accepted and that the routes vary according to age and season; (7) that the calendar of the arctic differs from that of Great Britain by a quarter of the year and this fact should be considered in framing faunal game legislation.

We look in vain for some account of how the age of the birds discussed and figured was determined but find only such statements as: "obviously the display in *mid-May* of every phase of plumage bespeaks in the Sanderling a prolonged maturity;" while the data upon which the author's remarks upon migration are based are equally unsatisfactory. Mr. Chap-

¹The Borders and Beyond. Arctic—Cheviot—Tropic. "Where'er the billows roll, from the world's girdle to the frozen Pole." By Abel Chapman, M. A., author of Bird Life of the Borders, and of Works on Spain, Norway, British East Africa, and the Soudan. With nineteen coloured plates by W. H. Riddell and 170 sketches by the author, maps, diagrams, etc. Gurney and Jackson, London: 33 Paternoster Row, Edinburgh: Tweeddale Court. 1924. pp. i-xxi, 1-489, large 8vo. Price 25 shillings net.

man's accounts of his experiences with the shore-birds and other wild-fowl and his numerous sketches of them are extremely interesting, while his style is pleasing and attractive, and even though we do not agree with all of his theories, we can glean pleasure and profit from a perusal of his observations.

In considering the sense of smell he cites numerous cases of Vultures in Africa devouring the waste portions of carcasses of game left by hunters, but being absolutely unable to detect the store of meat carefully covered with grass and boughs close at hand.

In the chapters on modern zoölogy "the tendency of professional science to neglect the direct study of life in the field" is scored, and the suggestion is made that the term "zoölogy" might well be changed to "dermatology" or "necrology." While we agree with Mr. Chapman in part, we do not think that he realizes the extent to which the study of wild life is carried on today, and we cannot see the justice in criticising those who devote themselves exclusively to the study of skins and anatomical specimens any more than in censuring those who prefer to be exclusively field naturalists. Had he studied plumage variation from skins, and determined the age of specimens by dissection he would have altered his views, we think, on some of the points on which he speaks so positively, as, for instance, the long adolescence of certain Limicolae.

In considering modern nomenclature and trinomialism we find only destructive criticism with no suggestion as to how to remedy a condition which the author clearly does not understand. The main reason for the chaos and confusion in nomenclature is the carelessness of our predecessors in naming the same species many times, and in preparing inadequate descriptions, and yet we find Mr. Chapman giving a brand new name (Charadrius calceatus, p. 126) to the Black-bellied Plover which has enjoyed the unique distinction of having only two specific names in 150 years, both bestowed by Linnaeus, until our author complicates matters by proposing another, simply because he does not like the old ones—and proposing it without adequate diagnosis at that! If every one of us adopted the same plan, nomenclature would indeed be the "comedy of errors" that he calls it.

Field and closet ornithology are two equally important branches of the subject and it is unfortunate to try to mix them or to criticise one from the standpoint of the other. We therefore recommend Mr. Chapman's book as a *field* study most heartily and would not take too seriously his strictures on the professional zoölogists. The color plates by Mr. Riddell and the author's own sketches are excellent.—W .S.

Heinroths' 'Birds of Middle Europe.'—We have received the first part of a work, in German, on the birds of middle Europe by Dr. Oscar

¹ Die Vögel Mitteleuropas herausgegeben von der Staatl-Stelle für Naturdenkmalpflege in Preuszen von Dr. Oskar u. Frau Magdalena Heinroth. R. Friedlander & Sohn, Berlin N.W. 6, Karlstr. 11. Subscription price 2.50 Goldmarks for each part. Pp. 1–16, col. pll. I, XXXVII, LXXIV, plain pll. 1, 2, 86, 125, 212.