not enough to warrant us in pushing the Ruminants between the Carnivora and the lower apes.

The woodcuts and lithographic figures of this paper are not very clear, even with the aid of red ink to distinguish the outline of the section of a skull from its profile, when printed together; and there are several printers' errors, e.g., Hydracherus for Hydrochoerus, and what is more important, hintre is put for mittlere (p. 27).

Prof. Lucae modestly compares his work to that of a hodman, who has plenty to do when kings build their palaces. These royal castle-builders are of course the more or less adventurous theorists who construct their Stammbäume by help of such anatomical details as are here collected. All zoologists, whether, like Lamb's nurse, "wise and wondrous skilled in genealogies," or contented to work out the raw material which is always necessary, will welcome such contributions to osteology as the present, which forms so excellent a continuation of the author's previous labours on Raçenschädel, and will hope that they may be still further extended in the same direction.

P. H. PYE-SMITH

SYMONDS' RECORDS OF THE ROCKS

Records of the Rocks. Notes on the Geology, Natural History, and Antiquities of North and South Wales, Devon, and Cornwall. By Rev. W. S. Symonds, F.G.S. (London: John Murray.)

M. SYMONDS is an enthusiast, and one of the best type. In the intervals of his clerical work he is pretty sure to be found either with his hammer among quarries, ravines, and railway cuttings, or exploring some crumbled ruin or mouldered encampment, or lecturing volubly to a hill-side auditory on the rocks beneath their feet, or showing his well-known features at the sectional meetings of the British Association. Such have been his favourite pursuits for some thirty years. In the present volume he gives us jottings from the note-books which record his doings during that long period. The book is not a formal scientific treatise, nor does it follow any definite geographical sub-division in the districts described. An introductory chapter of a somewhat miscellaneous kind is followed by ten others devoted to the various palæozoic formations of Wales and the Southwest of England. But the writer does not confine himself to the geology of the various districts, he has much to say about antiquities and natural history, and says it pleasantly enough. Nor does he restrict his remarks to those parts of the country mentioned in the title-page, for he has been away up even into the wilds of Sutherlandshire, and tells about the rocks there and the alpine plants, and the minerals, and the old glaciers, and how he broke a trusty rod in fishing for salmon there. He makes his way cheerily wherever he goes, and duly chronicles the kindness shown to him. The perfect honesty and candour of the writer are conspicuous throughout. Now and then, however, the delight with which he has seen a fact for himself leads him to write as if nobody had seen it before him. For instance, on p. 91, he tells that "on an expedition two years ago in company with Captain Price, I ascertained that the quartz-rock of Queenaig with its tubes rests unconformably on Cambrian sandstone." A very good observation, Mr. Symonds, but not unknown before you and the Captain were up thereThe illustrations, which are numerous, have been largely taken from Murchison's "Siluria;" but we can specially commend some new engravings from drawings by Sir William Guise—admirable both for their artistic conception and geological truth.

OUR BOOK SHELF

Yarrell's History of British Birds. Revised by Alfred Newton, F.R.S., Professor of Zoology in the University of Cambridge. Part V.

THE improvement which Prof. Newton's excellent edition of Mr. Yarrell's work is undergoing by passing through the hands of its accomplished and assiduous editor, is evident on every page, and the care with which the large mass of literature on the subject of most of the species has been studied, must be evident to all readers. The chief features of this part are the following. author has entered with considerable detail into the puzzling question of those forms or species of blue-throat, Ruticilla suecica, R. leucocyana and R. wolfi-of which the first only can be said with certainty to have occurred in this country. The so-called "Melodious Willow Wren," of which two examples have been met with in the British Isles, is shown on Mr. Dresser's authority to be the Icterine Warbler (Hypolais icterina), and its distinction from the nearly allied Polyglot Warbler (H. polyglotta) is carefully pointed out, and it may be mentioned that these two birds have only a superficial resemblance to the true Willow-wrens, among which they have been erroneously placed by most British authors. The evidence as to the occurrence of the Marsh Warbler (Acrocephalus palustris) in England is shown to be very defective, and the editor declines admitting it at present to our fauna. The Aquatic Warbler (A. aquaticus) on the other hand, seems to have been obtained some three if not four times. The history of that very interesting species Saddler's Warbler (A. luscinioides) is fully given, more so than is done in any other work with which we are acquainted. It was doubtless in former days a regular, though never a very abundant summer visitant to the eastern counties of England, until the drainage of the meres and fens unfitted wide districts for its habitation. The first example of the species ever brought to the notice of naturalists was obtained early in the present century by a party of Norfolk observers, including the late Sir William Hooker. This specimen was in 1816 shown to Temminck, then on a visit to London, and by him said to be a variety of the Reed Wren, a bird from which it may be fairly separated generically. Some years after, Sair described it from Italian examples, and it has always had the reputation of being a southern species. But it is to Englishmen that we owe nearly all the information we possess concerning it. Its nest and eggs were discovered near Cambridge in 1845, three years before anything was published about them on the Continent, and its peculiar habits have been chiefly described by Englishmen, from their own observation, whether in this country or abroad. The account of this species has been written de novo, and great pains has indeed been taken to bring the history of all the other birds treated in this part (fourteen in number) up to our present state of knowledge of them.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. No notice is taken of anonymous communications.]

Cave-deposits of Borneo

THE following letter from Mr. Everett to myself was accompanied by a plan and section of one of the caves visited by him and partially excavated. The deposits were as follows: