

the batrachians of the Mascarene Islands are distinguished by the absence of many characteristic African families, and the presence of peculiar types, in so far conforming to the distinguishing features of the vertebrate fauna in general; whilst a few reptiles and batrachians exhibit remarkable relations to Indian genera on the one hand, and to South American on the other. The ophidians of Madagascar alone, including the Colubrine snakes, have been believed to belong almost wholly to South American genera. Mr. Boulenger, however, has ascertained that the Madagascar Colubrine species possess hæmal processes (hypapophyses) to the vertebrae, and are consequently generically distinct from their neotropical analogues, whilst some of the Madagascar Boidæ, belonging to what is very probably a family of more ancient origin than the Colubridæ, are of South American genera. Thus the Madagascar snakes agree with the lizards, tortoises, and frogs in their foreign relationships.

Nor has the thoroughness of the scientific work prevented due attention being paid to the details that are important as aids in the identification of species. The number of ventral and subcaudal shields is given for every specimen in the collection. Now as the ventral scutes alone are usually about 150 to 250 in different kinds of snakes, the mechanical work of counting them in nearly 3000 individuals (a few snakes have no ventral shields) catalogued in the volume before us may easily be conceived.

At a time when systematic zoology is not greatly studied by many biologists, and is even, it may be feared, despised by some of them, it is some satisfaction to point to the monographs that are issued from the British Museum as evidence of the work that is being done with the unrivalled collections there available for study. There is scarcely any branch of biological research in which the systematic relations to each other of different organised beings is not of importance, and if systematic biology does not represent the knowledge of the day, all biological studies are likely to suffer. It may fairly be doubted whether any branch of biological work demands greater scientific capacity, higher powers of generalisation or harder work than that of which Mr. Boulenger has afforded a good example in his Catalogue of Snakes.

W. T. BLANFORD.

#### AN ALPINE GUIDE.

*A Handbook for Travellers in Switzerland.* Eighteenth edition. (London: John Murray, 1892.)

IN the early days of mountaineering, when the Alpine climber wished to scoff at guide-books, he referred sarcastically to Murray's Handbook to Switzerland. It was so emphatically a *vade mecum* for middle-aged prosperity, and was more successful in limiting its information than in restricting its words. But times and editors have changed. The book for several years past has been up to the high standard attained by the other members of the series; and the edition of 1891, of which the present issue is a revision, even improves upon its predecessors. In the initials "W. A. B. C.," appended to the preface, it would be affectation not to recognise the name of one who unites a knowledge of

the Alps, unique, perhaps, in its completeness, to an infinite capacity for taking pains.

We are told, and the book fully justifies the statement, that in preparing this edition, "every line of the text has been very carefully revised and corrected, the historical information having been considerably increased; the notices of the towns have been practically rewritten, particular attention having been devoted to their architectural monuments." The historical notices, indeed, are admirable models of terseness and clearness. That this is so, and that the information concerning the mountain districts has been brought quite up to date, while many places at present little known have been introduced to the notice of English travellers, is only what was to be anticipated in a book edited by Mr. Coolidge.

Six new maps of districts much frequented by English travellers form a special feature of this revised edition. One, of Zermatt, is on a scale of 1 : 50,000, while those of the environs of Lucerne, of Grindelwald, of the Upper Engadine, the Saasthal, and the district round Evolena, Arolla, and Zinal, are on half that scale. They are contoured at distances of 200 metres; the mountains are tinted brown, darkened as the height rises; the snows and glaciers are a pale blue. The maps themselves are excellent, but the tints do not produce a very satisfactory stereographic effect; indeed, we think that actually they have a contrary tendency. It may be that as the higher ground bears the darkened colour, and the snow region is almost white, the contrast is too violent. Be the cause what it may, the result is not quite a success. Still, notwithstanding this, the maps will be a boon to travellers. The introductory matter in this handbook is excellent, and we have observed only one omission. Avalanches, glaciers, structural geography are duly noticed, even natural history is not wholly forgotten, but geology is excluded. But in the course of two or three pages a general outline of the structure and geology of the Alps might have been given, and the attention of travellers called to the significance of the wonderful sections which are so often exhibited in Alpine regions.

We have dipped here and there into the two volumes, which include not only Switzerland, but also the Alps of Savoy and Piedmont, the Italian Lakes, and part of the Dauphiné, reading the accounts of the districts with which we are personally more familiar. Needless to say that we find them clear, accurate, and terse, yet full of information. The book, good before, is even better now, and cannot fail to be most useful to the British tourist.

T. G. B.

#### OUR BOOK SHELF.

*A Handbook on the Steam Engine.* By Herman Haeder, Civil Engineer. English Edition. Translated, with considerable additions and alterations, by H. H. F. Fowles, Assoc. M. Inst. C. E. (London: Crosby Lockwood and Sons, 1893.)

THIS is an excellent book, and should be in the hands of all who are interested in the construction and design of medium-sized stationary engines.

It is a real pleasure to find so much information gathered together, particularly when it is from the practical side of the subject. The number of text-books