

in the main a true rock basin, though its bed no doubt is concealed beneath glacial deposits and the finer mud brought down by rivers. This alluvium has been studied by Prof. Forel, but into the matter we are unable to enter.

Both the origin of lake basins in general and of that of Léman in particular are carefully discussed by Prof. Forel. He examines, only to reject as attended by insuperable difficulties, the hypothesis that it was excavated by the old glacier of the Rhone. He shows that the subaqueous portion corresponds in its general features with a river valley, and is only a prolongation of that of the Rhone. This valley was first defined at a very early period in the uprising of the Alps; its excavation progressed with their growth; it was practically completed at a time when they were higher, perhaps by some 1000 m., than at present. Then the lake was formed by a general subsidence of the mountain region, the lowland remaining comparatively unaffected. The movements of the parts depressed may have been to some extent differential; but this, in Prof. Forel's opinion, is not a necessary assumption. To us, however, it appears that it would be very difficult to explain the rock barrier at St. Maurice between the upper and lower plains without some amount of differential movement. Prof. Forel's view, of course, is not novel; for it has been long maintained in England as a general explanation of the greater Alpine lakes by a few geologists, who never bowed the knee to the glacial Baal. With their writings, however, Prof. Forel does not appear to be acquainted, though they appeared in publications generally accessible.

The remainder of the present volume is occupied by a discussion of the temperature, rainfall, and general hydrology of the Lake Léman region. It is full of interesting facts and discussions, which we would gladly notice did space permit. The book is well printed, and contains many illustrations, together with a large map of the lake on which the subaqueous contours are depicted. If the book were less diffuse its scientific value would have been greater, but Prof. Forel pleads in excuse that he aimed at writing a volume which would be also acceptable to the general public, or in other words, would combine meat for men with milk for babes. As a comprehensive history of a lake is a great desideratum, it would be ungracious to find fault with Prof. Forel's very natural desire to secure a large number of readers and of purchasers.

T. G. BONNEY.

OUR BOOK SHELF.

Horn Measurements and Weights of the Great Game of the World, being a Record for the use of Sportsmen and Naturalists. By Rowland Ward, F.Z.S. (London: Published by the Author, 1892.)

IN these days, when every one is striving to "beat the record," it is only right that sportsmen should have clearly put before them the results already arrived at as regards the size of the trophies and the weight of game-animals already obtained by their brother Nimrods. No one is in so good a position to do this as Mr. Rowland Ward, to whose well-known "jungle" in Piccadilly all the leading shooters of the present day send their "heads" to be mounted and their "skins" to be stuffed. It is, however, much to be regretted that Mr. Ward did not take into his councils some brother "F.Z.S." more

versed in scientific knowledge than himself when he prepared this volume, or at any rate did not have the proofs revised by some zoologist with a good knowledge of the Mammalia. The consequence of this want of foresight is that the nomenclature and localities upon which the importance of the records entirely depends are in a very confused state, and in many cases quite erroneous.

Take the Deer (Cervidæ), for instance. Of this family a very correct and accessible list, drawn up by the late Sir Victor Brooke, has been published in the "Proceedings" of the Zoological Society for 1878, which Mr. Ward would have done well to follow. But we find under the Sambur (*Cervus aristotelis*) a head from "Java," where this species certainly does not occur, recorded in the list. Next to this (p. 10) comes the "Central and South Indian Sambur, *Rusa hippelaphus*" (whatever this may be), but three out of the four specimens assigned to it are from Nepal! On the other hand, several heads from Java are attributed (p. 22) to *Cervus rusa*, which is merely a synonym of *Cervus hippelaphus*.

The heads of the large Deer of the Caucasus obtained by Mr. St. George Littledale are assigned (p. 28) to the Ked Deer (*Cervus elaphus*). But we have good reason to know that they really belong to the Persian Deer (*C. maral*), quite a different species.

Looking over the list of Antelopes, we find similar errors prevalent, though perhaps not quite to so great an extent. The specimens of the Chiru (*Panthalops hodgsoni*) are assigned to "India," whereas this Antelope is only met with in the snow-fields of Ladakh and Tibet. Nor can the "Takin" (*Budorcas taxicolor*) be properly stated to be from "India." It occurs only in the Mishmi Hills on the frontiers of Assam.

These and many like mistakes are the more serious as Mr. Ward's volume is well got up, nicely illustrated, and likely to be frequently used by the sporting naturalist. But the statements contained in it cannot be relied upon for scientific accuracy.

Der Peloponnes. Versuch einer Landeskunde auf geologischer Grundlage. Von Dr. Alfred Philippson. (Berlin: R. Friedländer and Son, 1891-1892.)

GREECE has hitherto been interesting mainly to scholars, archaeologists, and lovers of art; and no doubt it is from their various points of view that the country will always be most eagerly studied. The subject, however, has also elements of attraction for students of natural science, and it is to these elements, so far as the Peloponnese is concerned, that Dr. Philippson has sought to do justice in the present work. His results have been obtained by direct personal observation, and are set forth with admirable clearness. The book is divided into two parts, the first of which is called "special," the second "general." In the "special" part the author deals with particular regions of the Peloponnese; in the "general" part he presents an account of the peninsula as a whole. Dr. Philippson is a careful and accomplished geologist, and has been remarkably successful not only in throwing fresh light on the geological phenomena of the country, but in showing their relation to the various orders of facts which come more especially within the province of the geographer. He has also excellent chapters on the forms and phenomena of the surface, on climate, on vegetation, on the animal world, and on the population. In dealing with the last of these subjects he has much that is valuable to say about productive industry, means of communication, density of population, and towns, villages, and other settlements. The interest of the work is greatly increased by maps and profile-sketches.

Traité Encyclopédique de Photographie. By Charles Fabre. (Paris: Gautier-Villars and Sons, 1892.)

IN a previous number of NATURE (vol. xlv. p. 464) we noticed the first part of the supplement which M. Fabre