

charm to this pleasantly written book. The diagrammatic figures are also well executed; the only one which we notice as not clear is that of a fissure-spring (Fig. 31). A spring issuing from the spot indicated would surely be an overflow from the inclined beds of conglomerate and sandstone. A diagram showing an artesian well might be added in a future edition.

Students and teachers should bear in mind the advice given by the author, to look not too impatiently for definite and final opinions on vexed questions. Evidence must be weighed and judgment often suspended. As he quaintly puts it, "An open-minded hospitality for new facts is essential to intellectual advance."

H. B. W.

AN ANATOMY OF THE HORSE.

Topographische-Anatomie des Pferdes. By Dr. W. Ellenberger and Dr. H. Baum, of the Veterinary School, Dresden. 3 vols. Pp. 951. (Berlin: Parey, 1897.)

THE first volume of this work contains 271 pages, and appeared in 1894; it comprises a description of the anterior and posterior limbs, with some beautifully executed plates, some few in colours. The nomenclature is, for the most part, that used in human and comparative anatomy, so that this book, unlike many other veterinary works on this subject, may be read and appreciated by all who have a knowledge of human anatomy, and who are interested in the anatomy of the horse from a comparative point of view.

The muscles, blood-vessels, and nerves are well described and depicted in the numerous and excellent illustrations. The names used are generally those of their homologues in the human subject; it may be noticed that the triceps in the fore limb is called a coneus. In the hind limb the rudimentary soleus is delineated, as is also the considerably developed plantaris. The strongly developed internal obturator, which in the horse is in two portions, one part arising in the usual place, the other from the internal surface of the ilium—this latter being often wrongly called pyriformis in this country—is here correctly described and named. A prominent feature in this work is the numerous sectional diagrams (several in each segment of the limbs being given), which the student will find most helpful in assisting him to understand the correct relations of the various structures. The contents of the hoof is dismissed in about ten pages, and the subject well, though not too verbosely, treated; the text being illustrated by two transverse sections and one side view.

The second volume, which also appeared in 1894, consists of about 350 pages of well-written text. It treats of the head and neck, and contains sixty-seven diagrams, among which are many transverse and longitudinal sections, as well as some good dissections. The eye, ear, and brain are thoroughly described, the text everywhere suitably illustrated.

The third volume, which only appeared early this year, contains 330 pages and sixty-six illustrations and diagrams; it commences with the chest and its relations to the fixed portions of the fore limbs, and the text is illustrated by a series of transverse sections. The thoracic

viscera are next described, and their relations, both to the surface and to the great vessels and nerves within the cavity, are well described and illustrated by finely-coloured plates. The abdominal and pelvic cavities are treated on similar lines; the arrangement of the peritoneum and its relations to the contained viscera is shown by many transverse and longitudinal sections, and the volume is concluded by eight full-page drawings which illustrate in a diagrammatic manner the right and left aspects of the trunk, showing the viscera in their relations to the bones and soft parts. The other plates illustrate the intestinal relations to the abdominal floor, the internal abdominal rings, and contents, as seen from the front; and, finally, a front and side view of the horse with surface markings of the various muscles and bony prominences as seen through the skin.

We have no hesitation in recommending this work to all requiring a precise and accurate treatise on the anatomy of the horse, and we feel sure that it will be widely read by all veterinary students possessing a knowledge of the German language; and it will be found useful to the English student, particularly for its numerous illustrations and diagrams, which, with some knowledge of the subject, can be easily understood without more than an ordinary acquaintance with the language.

OUR BOOK SHELF.

First Stage Physiography. By A. M. Davies, A.R.C.S., B.Sc., F.G.S. Pp. viii + 238. (London: W. B. Clive 1897.)

As the author of this book points out, the scope of physiography has changed very considerably since the word was first introduced. Always intended as an introductory course of science, it has been modified from time to time with the view of better adapting it to the needs of the system of national examinations controlled by the Department of Science and Art. Last year the changes were very considerable, and new textbooks of the type before us may be regarded as a natural consequence. The first six chapters deal with the subject-matter of Section I. of the revised syllabus, on which a separate examination is now held. While apparently not intended for the use of students taking this section as a distinct subject, this portion of the book may meet the needs of such, providing the detailed syllabus itself is also utilised, and the necessary experiments carefully performed. It is, however, sufficiently comprehensive for students taking the ordinary elementary stage, and has the merit, in a subject where so much ground has to be covered, of conciseness without sacrifice of clearness. The treatment of the other well-known branches of the subject follows closely the lines of the official syllabus. Though showing but few new features, the book appears likely to meet the requirements of both teachers and students.

La Plaque Photographique. Par R. Colson. Pp. 165 + iv. (Paris: Georges Carré et C. Naud, 1897.)

GREAT is the number of photographers, but how few are those who have any conception of the action of the rays of light on the photographic plate? Every one who dabbles in the "black art" should try to make himself or herself acquainted with some of the rudiments of this side of the subject, for a knowledge of principles helps not only to render the results more perfect, but to add an additional interest to the pursuit of this science.

The book which we have before us is suitable for those even not very advanced in the subject, and is well worth