

the author confines himself almost entirely to an exposition of Marckwald's views. Apnoea is referred to a hyperoxygenation of the blood, no mention being made of the fact that it may be produced by positive ventilation with any inert gas, and so must be mainly a reflex effect.

Surely, too, in the treatment of the changes in the blood, the researches of Bohr, Blix, and others, on the combination of hæmoglobin with CO₂, were worthy of note.

In the section on the kidney, about 30 pages are devoted to an elaborate description of the normal and abnormal constituents of urine, with their tests and quantitative determination, while the subject of the process of secretion itself is dismissed in the ridiculously small space of three pages.

The final section, on the nervous system, is one of the best parts of the book. Especially good are the pages treating of the special senses. The chapters on the spinal cord and brain are less complete, and present several omissions and errors. Thus no mention is made of the perfectly definite antero-lateral ascending tract, and the knee-jerk is referred to as a true reflex, which is, to say the least, highly dubious. Again, the statement is made that clots in, or lesions of, the corpus striatum cause hemiplegia, whereas this is rarely or never the case unless the internal capsule is also implicated.

Throughout the work the author lies under the disadvantage of having tried to cater for two distinct classes of students, beginners and those who have already a fair general knowledge of the subject. For the former the work is too large and not sufficiently accurate; for the latter, in most parts, too meagre. Still it will be found useful by many of the latter class who have enough critical power to eschew the evil and choose the good, and will serve them as an excellent introduction to the reading of original memoirs.

E. H. S.

OUR BOOK SHELF.

- I. *Historia Naturalis Itinerum N. M. Przewalskii per Asiam Centralem*. Augustissimus auspiciis sumptibusque ab Societate Imperiali Geographica Rossica edita. Pars Botanica elaboravit C. J. Maximowicz. Volumen I. "Flora Tangutica." Fasciculus 1, Thalamifloræ et Discifloræ. 4to, pp. 110, cum tabulis 31. II. Volumen II. "Enumeratio Plantarum hucusque in Mongolia nec non in adjacentente parte Turkestanie Sinensis lectarum." Fasciculus 1, Thalamifloræ et Discifloræ. Pp. 138, cum tabulis 14.
- III. *Plantæ Chineses Potaniniane nec non Piasezkiane (Acta Horti Petropolitani, Vol. XI., pp. 1-112)*. Elaboravit C. J. Maximowicz. (St. Petersburg Botanic Garden, 1889.)

HERE are three separate contributions to the flora of Eastern Central Asia, by the well-known authority on the botany of Central and Eastern Asia. It is now nearly forty years since Mr. Maximowicz, through the force of circumstances, had an opportunity of exploring Mandshuria, the results of which he published under the title of "Primitiæ Floræ Amurensis." He was attached as botanist to the Russian frigate *Diana* on a scientific voyage round the world, but in consequence of war breaking out with England and France he was landed in Mandshuria, where he spent three or four years, returning through Siberia and European Russia to St. Petersburg. Subsequently he has visited Japan two or three times, and made large collections of dried plants,

and his life, apart from official duties, has been devoted to working out the botany of temperate Asia.

It was known to botanists that he was engaged on the collections made by the renowned Russian explorer Przewalski and others, and we now have the first instalments in a connected form. Many of the novelties he had previously published in the *Mélanges Biologiques* and elsewhere. From the titles cited above, it will be seen that the plan of publication is, if not exactly an ambitious one, at least very laborious, involving much repetition. Possibly such conditions were imposed upon the author. Anyhow, it seems a great pity that the materials were not all worked up in one enumeration. This course would have been far preferable from a practical standpoint, and, what is of greater importance, there would have been a reasonable prospect of its being finished within a few years. With all Mr. Maximowicz's capacity for work, it seems unlikely that he can hope to reach the end on the present elaborate scale. The aggregate of the two quarto publications is 250 pages, and contains the Thalamifloræ and Discifloræ of the collections. At the outside, this is only a sixth of the flowering plants. Then there is the octavo enumeration of Chinese plants brought down to the same point, and this is not the whole of Mr. Maximowicz's botanical work in hand. Recently he issued a monograph of the genus *Pedicularis*, comprising about 250 species, nearly 100 of which were new, and these mostly Chinese. When it is added that Mr. Maximowicz is a very critical worker, some idea may be formed of the magnitude of the task he has undertaken.

Glancing over the pages we find that the novelties consist almost entirely of new species of old genera, chiefly of those of a wide range, in the northern hemisphere, at least. In fact, only two new genera are described: *Clematoclethra*, near *Actinidia* (which Maximowicz places in the Dilleniaceæ in preference to the Ternstroemiaceæ), and *Tetraena*, an obscure plant provisionally referred to the Zygophyllaceæ. New genera are more numerous in Dr. Henry's collections from the warm temperate regions of Central and Western China.

W. BOTTING HEMSLEY.

Le Glacier de l'Aletsch et le Lac de Märljelen. By Prince Roland Bonaparte. (Paris: Printed for the Author, 1889.)

IN this ample pamphlet the author gives an account of the well-known glacier of the Aletsch and the neighbouring mountain region, in the course of which it is incidentally mentioned that the glaciers are again showing signs of increase after a period of general retreat which began in 1854. This statement, I think, requires some qualification, for the Gorner glacier certainly was advancing about the year 1859. The most marked diminution occurred in the next decade, and it did not commence till, at any rate, after 1861. The author describes the curious Märljelen See, which has already been noticed in these pages (vol. xxxvi. p. 612), giving some statistics as to its area, depth, &c. He quotes also a list of the occasions, so far as known, since 1813, on which its waters have escaped beneath the Aletsch glacier. In this, however, there is either an omission or a misprint. It states that in 1859 *le lac se vide*. This may be true, though it seems improbable, for the lake was also drained in 1858. In the latter part of August in that year I saw it for the first time. It was then full. The next evening I again visited the lake. The water had almost all vanished, and the great blocks of ice were stranded on the muddy floor. In reference to this floor the author makes a statement which I fail to understand: "Le bassin du lac est une ancienne moraine de fond d'une des branches du glacier de l'Aletsch. Unless this mud be claimed as *moraine profonde*—and this I should dispute—the assertion seems to me without any valid foundation. The lake lies in the upper part of a small valley, worn by the passage of ice