

studying in the *yamuns* and in practice the administrative organisation of Mongolia under both the Chinese rule and the modifying influence of Mongolian common law, and paying attention at the same time to the interests of Russian trade in that immense territory, which begins to be dotted with Russian trade factories. In this work he was much helped by his wife, Mme. Olga Pozdnéeff, who travelled with him all the time, and by M. Fedoroff, who acted as a photographer of the expedition. Many of the photographs, chiefly of landscapes, ancient burial-places, old stone monuments, and monasteries, not to omit a portrait of the present grand-priest and "incarnation" of deity—the Urga *khutukhta*—are most interesting.

It is intended to publish the entire work in seven volumes, two of which will be given to the diaries of the expedition, one to the administrative organisation of the country, and one to Lamaism, which widely differs from the 'Sakia-munism' that has lately been so much studied in Western Europe. The fifth volume will be devoted to various ethnographical materials, chiefly to folk-lore; the sixth, to trade; and the seventh, to a history of the prince families of Mongolia.

It would be utterly impossible to sum up in this place the volume which we now have before us. The routes followed by M. Pozdnéeff being well-known to geographers, only small additional geographical features could be gleaned here and there. On the contrary, the diary is full of small details about the features, the character, and the aspects of the towns of Urga, Ulyasutai, and Khobdo; the monasteries visited by the author; the organisation of the Chinese and Russian post in Mongolia; the relations between the local functionaries and the higher ones at Peking, and so on. Some little scenes of the life of these functionaries, which are scattered through the diary, are worth pages of description, but they could hardly be mentioned without entering into many details. The same must be said of the monasteries, each of which has its own individual importance in the religious and political life of the country; Urga, for instance, which is the residence of the deity of Mongolia—the *khutukhta*—and the seat of a steadily increasing population of Lamas (they numbered 13,850 in 1889), is the political centre of the country—"its St. Petersburg," as the author says; while the monastery of Erdeni-tsu is its "Moscow"—that is, the heart of the country, and a living witness of all the chief events of the history of Khalkha Mongolia, where every temple and chapel, and every one of the ninety-two towers of its outer wall has a significance for the inhabitants.

A special chapter, which has a real historical value, and gives a deep insight into the present conditions of Lamaite Buddhism under Chinese rule, is the chapter devoted to the "incarnations," past and present, of *bodisatva*, in the persons of the subsequent *khutukhtas*, or grand priests and deities of Urga. These "incarnations," as is known, take place in Tibet; that is, plainly speaking, a boy is selected for that purpose by the Tibet Lamas, and brought and enthroned with great pomp at Urga. The history of these "incarnations" for the last three hundred years is very edifying.

The second volume will contain the diary of the expedition during the year 1893.

P. K.

### OUR BOOK SHELF.

*Rough Notes and Memoranda relating to the Natural History of the Bermudas.* By the late J. L. Hurdis. Edited by his daughter, H. J. Hurdis. 8vo, pp. viii + 408. (London: R. H. Porter, 1897.)

THAT a group of islands where the list of resident native land birds comprises only seven species, in addition to which four maritime kinds frequent the coasts in summer, should be visited by no less than one hundred and twenty-eight other species, chiefly migrants, is a wonderful fact in natural history, and one worthy of the best attention of those interested in solving the problem of bird migration. To record the dates of the arrival and departure of these various migratory species, appears to have been the task set himself by the late Mr. Hurdis; and the present volume (portions of which have already appeared in another work issued as far back as 1859) is the result of his labours.

The work is in journal form, and is written somewhat after the style of White's "Selborne"; and if it lacks the charm of that classic, this can hardly be considered a fault on the part of its author. At the end of the notes on the Bermuda birds, a list of the migratory species is given. And here it is to be regretted that the dates of arrival and departure are omitted; while we look in vain for any theories of migration, or hints as to whence the wanderers came and to what lands they departed. But, in justice to the author, it must be remembered that the notes were written at a time when the importance of such observations was not ranked as high as it is at the present day.

It is not, however, by any means, to birds alone that the notes are restricted; and nearly a hundred pages are devoted to the other *feræ naturæ*, as well as to plants, climate and meteorology, geology, and the early settlement of the islands. The editor has, on the whole, discharged her share of the task well, although it would have been better had the repetitions of the names of the regiments to which the author's numerous fellow observers belonged been omitted. A few illustrations of birds and scenery would also have considerably lightened the perusal of a very readable book.

R. L.

*Das Wesen der Electricität und des Magnetismus auf Grund eines einheitlichen Substanzbegriffes.* By J. G. Vogt. Pp. 134. (Leipzig, 1897.)

IN this pamphlet the author proposes a theory of electricity which is based on a new conception of the constitution of ether and matter. This conception of matter supposes that all bodies and the ether are to a certain extent continuous and made of the same material, there being in all cases an initial and final condition both of molecules and ether.

The reason for this new proposal seems to be more sentimental than substantial. The author does not consider that the modern molecule is an interesting body, as it has no object of its own in existence. The following sentences on page 7 of the introduction fairly represent the author's feeling on the subject:—"Es giebt nichts absurderes als der moderne kinetische Substanzbegriff nach welchem die Materie aus Atomen oder diskreten Massenteilchen besteht, die in der monotonsten Weise durch alle Ewigkeiten hin- und herschwingen. Etwas stupideres und sinnloseres ist kaum denkbar, und nur trockenere, vom bücherstaube der Jahrhunderte verschüttete Physiker konnten eine solche trostlose Idee aushechen."

The leading idea which the author introduces is that space is filled with continuous matter, and that there is distributed through it centres of condensation. Surrounding each of these centres is a quantity of matter, which forms a sphere. The material inside these spheres is always tending to become more condensed whether the sphere belongs to the ether or to an atom, which is