

glad to find we agree with him on one point :—" We want a new motive to rouse up the spirit of the nation and Government ; and what higher and nobler one can be found than the search for truth and the advancement of Science? This is the duty of a Government, to promote the national welfare ; and one of the surest ways in which this can be done is by encouraging scientific efforts. . . . There are few ways in which this spirit can be better fostered than by Polar exploration ; and so popular is such service amongst our sailors, more especially Arctic sailors, that hundreds of them volunteer to go when any project of this kind is afloat. From this point of view, the exploration of the higher latitudes is a matter for Government, and not for private enterprise" (pp. 2, 3).

OUR BOOK SHELF

Perils in the Polar Seas. True Stories of Arctic Adventure and Discovery : A Book for the Young. By Mrs. Chisholm, authoress of "Rana; or, the Story of a Frog," &c. (London : John Murray, 1874.)

THIS is one of the best books of the kind we have met with. It is written for the young, but Mrs. Chisholm has wisely made no attempt to "write down" to the supposed mean capacity of the little folks ; she tells her intensely interesting story in simple, unaffected, clear, forcible English. Indeed, were it not for the occasional interruptive questions and remarks of the group of youngsters to whom the authoress is supposed to be telling her story, one would naturally fancy that the book, like "Gulliver's Travels" and "Robinson Crusoe" had been written for all who can understand plain English. Mrs. Chisholm, in her opening chapter, "Life with the Esquimaux," gives many details concerning the habits of that people, taken mainly from the late unfortunate Captain Hall's account of his residence among them. After another brief chapter on "North-East Voyages," she enters upon the history of Arctic discovery on the American side, and with the greatest care and clearness, tells what the principal explorers, from Frobisher down to Hall, have done to make known to us the outline of the lands and seas of these mysterious northern regions. In doing so the authoress's object is something more than merely to fascinate and thrill her readers by a narrative of strange adventures by flood and field ; while there is no apparent attempt at making the story a vehicle for conveying useful information, yet Mrs. Chisholm manages to convey, in an impressive manner, a great amount of knowledge of the geography, natural history, and meteorology of the Polar Regions. Indeed it would be difficult to devise a better method than is here followed, with the assistance of two excellent maps, of teaching the geography of Arctic America. As might be expected, the greater part of the book is occupied with modern voyages, mainly those of Parry, the Rosses, Franklin, and the Franklin Search parties. "Uncle George" gives a good deal of information concerning the whale-fishery, and also an account of Parry's boat voyage to the north of Spitzbergen. Besides the two maps already referred to, the volume contains many beautiful illustrations. Perhaps it was scarcely necessary to make the children interrupt the story-teller so frequently with their questions ; indeed the story is so attractively told that such diversions are sometimes irritating. But this is a small matter ; the work as a whole is capitably done, thoroughly interesting, healthy, and full of information.

Historische Fragen mit Hilfe der Naturwissenschaften beantwortet, von Dr. Karl Ernst v. Baer.

Studien aus dem Gebiete der Naturwissenschaften, von Dr. K. E. v. Baer, Part II., Sec. 1. (St. Petersburg, 1873.)

THE "Historic Questions," just published by this eminent

naturalist, aim at solving by evidence from natural history certain disputed traditions which have puzzled historical critics. The first subject remarked on is the "swan's song," which seems so fanciful a myth to western nations accustomed only to the songless swan, which the Russians call *shipân*, the "hisser," but not to the other swan, which they name *klikân*, the "caller," whose melancholy notes are so often heard by travellers in North-East Europe and North Asia ; it is stated on no less authority than that of Pallas, that the swans utter these tones when mortally wounded. Next follows an examination of the voyages of Odysseus, made with the view of ascertaining how much of ancient geography is embodied in the Homeric narrative. According to Dr. v. Baer's map, several localities of the ideal voyage are to be traced in the Black Sea, at whose entrance are Skylla and Charybdis and the Symplegades, while the Læstrygonians dwelt in the Crimea, and Kimmerian darkness began at the opening into the Sea of Azof. Lastly, the locality of the Biblical Ophir is discussed ; Dr. v. Baer finds it in the Peninsula of Malacca.

In the collected "Studies" we find a German version of a paper dating from 1848, on the Influence of External Nature on the Social Relations of Races. The next is dated Berlin, 1866, on Purpose in the Processes of Nature, in which he gives the name of *telcophobia* to the fear he observes among some naturalists of recognising an object or purpose in Nature. Dr. v. Baer's doctrine is summed up in a passage reproduced, with slight alteration, from his own writings 33 years ago : "Thus the earth is but the seed-bed in which the spiritual inheritance of man increases, and the history of Nature is but the history of continuous victory of Spirit over Matter. This is the fundamental idea of Creation, for the satisfaction or rather for the attainment of which individuals and series of generations must disappear, that the future may be built on the framework of an immeasurable past." The concluding paper is on Rivers and their Action, a contribution to physical geography in which arguments as to the antiquity of man founded on the presence of human relics in river-beds or deltas are treated as of little account.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. No notice is taken of anonymous communications.]

Prof. Barrett and Sensitive Flames

THOUGH my memory fails to recall the fact, I cannot, with Prof. Barrett's letter before me, refuse to believe that he sent me the paper to which he refers.

Perhaps I ought to have known what Mr. Barrett had been doing before large audiences, but I regret to say that I did not. My excellent assistant, Mr. Cottrell, first heard of Mr. Barrett's experiments from one of my own audience, and steps had been taken to do Mr. Barrett justice before his letter appeared. That act he has anticipated by very ably and very modestly doing justice to himself.

J. TYNDALL

Remarkable Fossils

ONE of the most remarkable collections of Wealden fossils ever seen, was lately on loan for a few days to the exhibition then open at Horsham, and is one that is not to be equalled by any at our public museums in the country. So remarkable is it that I am induced to give you a short description. As you enter the room to the left, the first thing to attract the attention of the palæontologist was the collection contained in a case of about 12 ft. long by 3 ft. wide, filled to repletion with the fossil bones of the "Great Horsham Iguanodon" and the "Tower Hill Iguanodon," and various other bones. There were the fibula, scapula, and caracoid of Iguanodon in juxtaposition with the humerus belonging to the same specimen, the jaw of the young Iguanodon and the caudal vertebrae, all figured and described in the monographs of the Palæontographical Society. Also the