

No account is given of the most recent change in marine engineering, namely, the adoption of the steam turbine in place of reciprocating engines. The success of the steam turbine in this field is already so well assured that a revolution in marine engineering is promised. But there are, no doubt, good reasons for the omission. Experience in the use of steam turbines in ships is almost confined to this country, and naturally at present full information as to the results, mechanical and economic, of the use of turbines is only possessed by a few engineers, and is not generally available.

In this country we still rightly pride ourselves on retaining the highest position in shipbuilding and marine engineering. But, if we still do more work of this kind than any other nation, and if our best work is as good as any in the world, yet Dr. Bauer's book should remind us that in science, experience and skill, other nations now run us very close.

#### THE BIRDS OF ICELAND.

*Beitrag zur Kenntnis der Vogelwelt Islands.* By B. Hantzsch. Pp. vi + 341; illustrated. (Berlin: Friedländer and Son, 1905.) Price 12 marks.

SINCE Iceland lies on one of the main migration routes, namely, that which starts from Greenland and Iceland itself, and passes by the Færøes to the British Islands, its bird-fauna is naturally of special interest and importance. This is testified by the appearance within a comparatively short period of two works on the subject, namely, Mr. H. N. Slater's "Manual of the Birds of Iceland," published at Edinburgh in 1901, and the present larger and more pretentious volume. In addition to the general fauna, there is special interest attaching to Iceland as the chief European resort in former days of the gare-fowl, or great auk. The history of this lost bird and the literature relating to it the author reserves for a supplemental volume. Despite all that has been done by travellers and collectors, Mr. Hantzsch is of opinion that our knowledge of the bird-fauna of Iceland is still far from complete, much of the interior of the country being difficult of access and still imperfectly explored by collectors. Accordingly he is fain to admit that the last word on the subject still remains to be said.

The volume commences with an historical survey of the growth of our knowledge of Icelandic ornithology, with notices of the chief explorers and workers in this field of research, and a list of the more important memoirs and books treating of the subject. Then comes a detailed account of the author's own journeys in the island for the purpose of collecting specimens and personally observing the birds. This is followed by an interesting description of the main physical features of Iceland and the neighbouring islets, such as Grimsey in the north and the Westman group in the south, this being illustrated with a number of reproductions of photographs of the scenery taken by the author himself.

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Special lists are given of the birds of Grimsey and the Westman Islands. Changes in the bird-fauna of the whole group of islands, and the general relationships of the fauna form the subjects of two succeeding chapters, a brief note being appended on domesticated species.

This completes the introductory portion of the subject, which occupies ninety-two pages, and the remainder of the text is devoted to the detailed synopsis of the birds. The total number of species, exclusive of the great auk, recorded in the preliminary list as definitely known to occur in Iceland is 120, in addition to which are a few of which the right to a place among the fauna is somewhat uncertain. Perhaps the most striking feature of the descriptive part of the work is the almost painful severity with which new fashions in ornithological nomenclature are followed, such appalling alliterations as *Merula merula merula* and *Gallinago gallinago gallinago* occurring with wearisome frequency. Without reiterating his own private opinion on nomenclature of this nature, which is now pretty well known, the reviewer may point out that when the typical form of a species is alone recorded, it is perfectly superfluous to add the terminal trinomial, *Merula merula* and *Gallinago gallinago* being in such cases apparently all that can possibly be required.

Excellent photographs of the eggs, nests, or breeding-haunts of some of the rarer species serve to enliven the text, and ornithologists will be greatly interested in the two pictures of the eggs and callow young of the great skua in their natural surroundings. The work will doubtless long remain the standard authority on Icelandic birds, at all events for German readers.

R. L.

#### OUR BOOK SHELF.

*Neue Fische und Reptilien aus der böhmischen Kreideformation.* By Prof. Dr. Anton Fritsch and Dr. Fr. Bayer. Pp. 34; plates ix. (Prague: Fr. Rivnac, 1905.)

VERTEBRATE fossils are not only rare, but also badly preserved, in the Cretaceous rocks of Bohemia. Palæontologists must therefore admire the enthusiasm of Dr. Anton Fritsch, who continues to devote to the interpretation of difficult fragments so much study as is evidenced by his numerous writings on these remains. In 1878 he published a complete synopsis of the subject as then understood. Now, with the aid of Dr. Franz Bayer in the determination of fishes, he again publishes an up-to-date treatise, including the discoveries of the last quarter of a century. The work is illustrated in Dr. Fritsch's usual style, and a few of the figures are revised drawings of specimens previously described.

Dr. Bayer's chapter on the Cretaceous fishes was originally published in the Bohemian language in 1902, but is now made more readily accessible in German. He describes evidence of several new genera and species, and concludes that in the Bohemian Chalk there are more varied representatives of the higher fishes than have hitherto been found below the Tertiary formations. In view of the fragmentary nature of most of the fossils, it must be