printed, and the new illustrations are all excellent; but a few of the old figures taken from the Survey reports, such as Fig. 72, might have been omitted as unworthy of place beside the new figures. Prof. Park's work not only shows what has been done, but directs attention to the problems which are still matters of vigorous controversy in New Zealand, and to various conclusions for which the evidence is still unconvincing.

The author is to be congratulated on many features of the stratigraphical classification adopted. Thus the Maitai series is now referred to the Carboniferous, a conclusion for which the evidence appears adequate, for the supposed Inoceramus, which led to the reference of the series to the Mesozoic, turns out to be an inorganic structure. The famous Cretaceo-Tertiary system of Hector has finally disappeared. It was based upon the commingling of fossils from two distinct horizons; and Prof. Park describes one of the beds to which some of these fossils were attributed as quite unfossiliferous. The volume includes a valuable note by Mr. F. Chapman on the correlation of the Oamaru series, which, with their Australian equivalents, he assigns to the Miocene. One may be excused for suspecting whether a stratigraphical difficulty in regard to the Kaihiku series is not due to another mixture of fossils.

Prof. Park's identification of the Maniototo series, the lowest part of the Manipouri system, as Cambrian appears to be the most doubtful point in his classification. The lithological characters of the Maniototo rocks are characteristically Archean, and though they are overlain by the graptolitic Kakanui series, which is Ordovician, far more convincing evidence than any yet forthcoming will be needed before the underlying gneisses can be safely accepted as Cambrian. The author is disposed to take a perhaps somewhat extreme view as to the range of the Pleistocene glaciation in New Zealand. His discussion and photographs of the well-known Taieri moraine give more satisfactory evidence of its glacial origin than any previously published. Prof. Park admits that the explanation of the Taieri moraine is still incomplete; that moraine is very far south and the evidence that glaciers reached sea-level further to the north is less satisfactory. He gives an interesting account of the glaciers and glacial deposits around the peaks of the North Island, and his account of the Tarawera eruption, with the exception of his recent paper in *The Geographical Journal*, is the best account of it yet written.

Prof. Park gives a very interesting account of the fault system of New Zealand, and admits the great influence faults have played on the existing geography of the country. He thus justifies the conclusions of Mackay, which were once so discredited in New Zealand. The account of the economic geology of New Zealand is of especial importance; but the author appears to be unnecessarily alarmist as to the approaching exhaustion of the world's stores of iron. "In two centuries or less," he says, "the battleships will be beaten into ploughshares and the ploughshare will be treasured by each family as a priceless heirloom." He makes the very sound proposal (p. 292) that some of the coalfields should be reserved for naval purposes; for since much of the power required on land can be derived from water, he holds that factories and domestic consumers should not be allowed to exhaust the fuel, which he thinks will always be indispensable for use at sea. Prof. Park makes no reference to the oilfields of New Zealand, to which prominent attention has recently been directed elsewhere.

J. W. G.

OUR BOOK SHELF.

The British Journal Photographic Almanac and Photographer's Daily Companion, 1912. Edited by G. E. Brown. Pp. 1436. (London: Henry Green and Co., n.d.) Price 1*s.* 6*d.* net.

OUR readers are so familiar with this bulky but indispensable accessory to the photographic studio that the mere announcement of the new issue is enough to make them obtain their copy. With 1436 pages the book is a veritable mine of information, and not only is it now almost a standard book of reference, but it is instructive in a host of ways. This year the editor contributes a very valuable article on lantern-slide making, and as this subject is a very popular one to-day, it should find a great number of readers. No less instructive is the admirable way Mr. C. H. Hewitt tells us how both in- and out-door portraiture may be successfully accomplished without any special appliances, and with the ordinary camera and lens; the article is also well illustrated with eleven examples of specimen work.

The "Epitome of Progress," by the editor, is full of interesting material, hints, and dodges, and the method of obtaining the effect of a portrait having been taken in a high wind is a good illustration of the last mentioned. In the section devoted to the recent novelties in apparatus, the editor occupies about eighty pages, so numerous are the articles to which reference is made. "How to do it" is the title of the section which gives 120 hints in picture form. Each picture is a hint showing how to select a hand or stand camera, use a tripod, carry the camera on tour, copy drawings or pictures, &c. There is little doubt but that this section will be considerably enlarged in the next issue. Mention need only be made of the lists of formulæ, tables, miscellaneous information, &c., and other distinguishing features which go to make us this useful volume.

While the book contains numerous diagrams and other illustrations, we may perhaps direct special attention to the very excellent three-colour print by Willfried Deyhle, of Berlin, from a photograph by F. Leiber, entitled "Kongsbay on Spitzbergen," taken with a Zeiss-Tessar f/4·5, equivalent focus 5¾ inches. The book concludes with full indices of the text, the advertisers, and the goods advertised.

Alpine Plants of Europe, together with Cultural Hints. By H. S. Thompson. Pp. xvi+287. (London: G. Routledge and Sons, Ltd.; New York: E. P. Dutton and Co., n.d.) Price 7*s.* 6*d.* net.

A VALID claim for originality is preferred by the author on the ground that this volume contains descriptions of plants from all ranges of the Alps, and it may be added, that a few species of extra-alpine habitat are included, as *Iberis gibraltaica*. The altitudinal signification of the work "Alpine" is also implied, so that for the most part the species noted find a congenial home at a higher elevation than 5000 feet. Inclusion of all the alpine species growing within the area has