

It will be gathered that the author takes a point of view which is not that of the majority of physicists who have investigated these subjects. Revolutionary opinions may prove a valuable tonic to the orthodox in physics as in other matters. It is not because he is heterodox that we are not satisfied by Dr. Le Bon's book. It is because he seems to us to fail in grasp of the subject, to confuse phenomena which are essentially different, and to be blind to evidence which does not support his hypotheses.

A belief in the evolution of matter is fast becoming not only possible but inevitable. Dr. Le Bon has written readable speculations about that evolution, and here and there has thrown out an interesting idea; but the evidence on which that belief must be founded is not that put forward by him. His book calls to mind the advice offered by a famous Lord Chief Justice to a brother judge, that it was sometimes safer to give one's conclusions without the reasons which had led to them.

W. C. D. W.

#### THE FÆRÖES AND ICELAND.

*The Færøes and Iceland; Studies in Island Life.* By N. Annandale. With an appendix on the Celtic Pony by F. H. Marshall. Pp. vi+238; illustrated. (Oxford: Clarendon Press, 1905.) Price 4s. 6d. net.

THE name of Mr. Nelson Annandale has been of late years so intimately associated with the Malay Peninsula and its zoology and ethnology that it comes somewhat as a surprise to find it on the title-page of a work dealing with such totally different surroundings as those of the Færøes and Iceland. It appears, however, that between the years 1896 and 1903 the author spent several summer holidays in these remote islands, and contributed a series of articles on his experiences to *Blackwood's Magazine* and the *Scotsman*, and that it is these delightful articles, in a more expanded and elaborated form, with the omission of certain purely technical details, which form the basis of the work before us.

As Mr. Annandale suggests in his opening chapter, most persons probably regard the Færøes as little more than mere Arctic rocks, teeming with sea-birds, in the ocean; and they will accordingly be surprised to learn that, as a matter of fact, although lying nearly a couple of hundred miles to the north-west of Shetland, they enjoy a climate warmer than that of many parts of Scotland, while their vegetation, if rarely more than a few inches high, is as luxuriant as the shallowness of the soil and the winter storms will allow. The buttercups, too, seem larger, and the bushes of a brighter green, than on the mainland. These islands have also to be regarded as desirable spots, for it appears that although a few years ago they possessed a couple of dozen policemen, the *moral* of the population has been so excellent that the services of these guardians of the peace were found no longer necessary, and the force has consequently been disbanded. A truly remarkable record!

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The first two chapters deal with the people of the Færøes and their mode of life, and will be found to contain a number of interesting observations on their ethnography and the implements of the islanders. The invasion of Iceland by the Moors in the seventeenth century forms the subject of a third chapter, but perhaps the most interesting part of the whole book is that dealing with the wonderful bird-cliffs of the Westman Islands, and the clever manner in which the natives capture puffins and other birds in nets. The fulmar appears, indeed, to be very valuable to the Westmaners, supplying them with both food and light. Other chapters deal with Iceland and its products, and the insects and domesticated animals of both that island and the Færøes.

Mr. Annandale deserves, indeed, our most hearty congratulations, and has succeeded in producing a most admirable little work which may be perused with interest alike by the general reader and by those who have enjoyed, or expect to enjoy, the opportunity of visiting the islands he so happily describes. Whether similar congratulations should be extended to Dr. Marshall for his share of the work we are not fully assured. That gentleman seems, indeed, to be under the impression that no one save Profs. Ewart and Ridgeway has written in this country on the origin of the horse. Otherwise he would have scarcely credited the former with being the first to regard Przewalsky's horse as a variety of *Equus caballus*. Neither would he have omitted to notice that an earlier name than *przewalskyi* has been suggested as referable to this animal, and also that Prof. Ewart's *E. celticus* is probably inseparable from the earlier *E. hibernicus*. Moreover, he might have pointed out that it is difficult to understand how Prof. Ridgeway's new name of *E. c. libicus* can stand for the barb, when the Arab horse has long since received a technical name of its own.

R. L.

#### OUR BOOK SHELF.

*Le Système des Poids, Mesures et Monnaies des Israélites d'après la Bible.* By B. P. Moors. Pp. 62+1 plate of figures and 6 tables. (Paris: A. Hermann, 1904.)

THE first part of this work consists of an inquiry respecting the numerical value adopted by the Israelites at the time of Solomon for the constant  $\pi$ , the ratio of the circumference of a circle to its diameter. M. Moors obtains the greater part of his material for this investigation from the dimensions of the "molten sea" in Solomon's temple, as stated in I. Kings, vii., 23-26, and II. Chronicles, iv., 2-5. These dimensions have led some writers—notably Spinoza and Hoefer—to the opinion that the Israelites knew of no nearer approximation to  $\pi$  than the whole number 3. The specification of the molten sea is not, however, sufficiently complete to determine its shape with any degree of certainty. Some commentators have considered it as cylindrical, others have followed Josephus in ascribing to it a hemispherical form, whilst Zuckermann suggests a combination of cylinder and parallelepiped. The author of this work, who is firmly of opinion that the Israelites accepted a value for  $\pi$  very close to 3.142, has found it necessary in support of his argument to assume that the molten