

ments with the potato-beetle and Kammerer's with various amphibia Mr. Bateson has rendered valuable service by subjecting the accounts of these and other experiments to critical examination, and he argues strongly against accepting any case of the kind yet brought forward on the evidence at present available.

Taken altogether, this is the freshest and most original book on the problem of species that has appeared for many a year. Whether the reader sees eye to eye with Mr. Bateson or not, there can be no question about its stimulative value. Even if we are further off from the goal than most biologists suppose, there is the consolation that the road to it is more than ever a road of adventure.

TYPICAL GEOGRAPHY BOOKS.

- (1) *A Text-book of Geography*. By A. W. Andrews. Pp. xii+655. (London: Edward Arnold, 1913.) Price 5s.
- (2) *The Upper Thames Country and the Severn-Avon Plain*. By N. E. MacMunn. Pp. 124. (Oxford: Clarendon Press, 1913.) Price 1s. 8d.
- (3) *A Leisurely Tour in England*. By J. J. Hissey. Pp. xviii+400+plates. (London: Macmillan and Co., Ltd., 1913.) Price 10s. net.

(1) **M**R. ANDREWS'S text-book is particularly important from three points of view. He has paid special attention to climate, to maps, and to typical physical conditions. In reference to climate he makes great use of theoretical sun-force, based upon the mid-day altitude of the sun, of actual isotherms, and of the periods in months when temperatures lie between certain limits, e.g. 50°—68° F. From the data which he supplies, the student who works through the exercises provided will have a definite and precise knowledge of the climatic facts of the world, arranged in a systematic way. The presentation is novel, but none the less valuable. The numerous maps are appropriate and useful, and the author emphasises the point that most maps used by students are better called diagrams than maps. It is unfortunate that the methods of shading employed for some of these maps makes it difficult to follow the details closely; and even broad points of resemblance and contrast do not show with sufficient clearness; the maps which appear towards the end of the book are a distinct improvement in this respect.

Countries are described in turn; for example, Russia in Europe is considered in five pages of text; climate, products, and trade are briefly summarised, and the main description is given under the heads of the separate river basins and their drainage regions. This illustration will suffice to

show the main emphasis of the book, and to indicate that the outlook is physical, not human, physiographic, not economic. This is distinctly a book for the teacher's book shelves.

(2) Miss MacMunn's brief study is an excellent example of work on a definite region. Simply written, it provides sufficient evidence of a geographical kind to interest readers of all ages, and the general treatment is so suggestive that older students should be able to obtain an accurate knowledge of the district studied, not only from the text, but from the numerous maps, which are clear and precise in their presentation of the facts which they are intended to indicate. It seems rather a pity that opportunity was not taken to indicate on some of the maps the location and range of view of the camera for some of the more important photographic illustrations. The fact that many readers will find it necessary to consult Ordnance Survey maps of the district is not in itself a blemish, for the older student who can use such maps will find that Miss MacMunn's book suggests ideas which may be profitably followed out in connection with the multifarious detail which these maps contain.

(3) Mr. Hissey's book is a delightful record of a leisurely tour in search of the picturesque. He reaped the reward of loitering by the way, and found the unfamiliar in a familiar land in a pilgrimage by means of a trustworthy little motor-car through parts of rural England, than which he can imagine no more delightful touring ground. So the author speaks of his book in the preface, and his work breathes the calm and peaceful delight which he took in the pastoral scenery, the quiet homesteads, the peaceful villages. The charm of the book is increased by the numerous appropriate illustrations.

B. C. W.

ORGANIC CHEMISTRY, AND ONE OF ITS APPLICATIONS.

- (1) *Organic Chemistry for Advanced Students*. By Prof. J. B. Cohen, F.R.S. Vol. ii. Pp. vii+427. (London: Edward Arnold, 1913.) Price 16s. net.
- (2) *The Volatile Oils*. By E. Gildemeister and Fr. Hoffmann. Second edition by E. Gildemeister. Authorised translation by Edward Kremers. Vol. i. Pp. xiii+677. (London, Bombay, and Calcutta: Longmans, Green and Co., 1913.) Price 20s. net.

(1) **I**N the present writer's student days the favourite text-book of advanced organic chemistry was Prof. von Richter's well-known work, which had just been translated into English. Roughly, one might express the difference between that work and Prof.