

tion. Unquestionably the best of topographical educations is surveying on the ground, which should form part of the instruction of all candidates for commissions in the Regular Army. Unfortunately such instruction has not always been given, and is, perhaps, out of the question for Territorials. Even so, instruction in map reading should be given mainly on the ground. There are, however, examinations to be passed in which questions are based mainly upon certain specified maps and conventional signs. Mr. Dale's book will be found of great assistance in this matter. It is clear and practical, and accompanied by good examples and questions.

The sequence of the book would have been improved by combining parts of chaps. i. and vi. in a separate chapter on finding position. A compass is rarely used for this purpose by an experienced map reader if the map in question shows much detail. This chapter might also have included grids, margins, and co-ordinates both geographical and rectangular. Such information as is given on these points is not very enlightening. For example, the position of the origin of co-ordinates and the direction and order in which they are given may, and doubtless will, vary according to circumstances.

The British soldier may have to accustom himself to many different styles of cartography. He should not be asked to memorise any particular conventional signs, but to study such different maps as he may have to use, and, above all, to educate his eye for country. Artificial and arbitrary differences such as those made in chap. iii. between "hills" and "knolls" would then be unnecessary.

*Faune de France. No. 1. Echinodermes.* By Prof. R. Kœhler. Pp. 210. (Paris: Paul Lechevalier, 1921.)

WITH the aid of a subvention from the Paris Academy of Sciences, a new fauna of France, of which the first part has been issued, has been prepared by the Fédération Française des Sociétés de Sciences Naturelles. Its object is to furnish naturalists with a handy means of identifying their captures. To this end each group is preceded by a key to the species, and the descriptions which follow are just enough to enable the first result to be verified. The fauna comprises land and fresh-water forms from France (including Corsica), Belgium, the Rhine province, and Western Switzerland, and marine forms within the limits of the continental plateau to a depth of about 300 metres and the corresponding pelagic region from the Sound to the Straits of Gibraltar, including the British Isles and the Western Mediterranean. The work, therefore, should be found useful by British naturalists.

For the Echinoderms no better authority could be desired than Prof. Kœhler, of Lyons. His nomenclature is up to date, his descriptions are to the point, and his illustrations, being, as a

rule, from photographs of the actual specimens, are sufficiently indicative for a work within these limits. Some of the half-tone blocks are, it must be confessed, not very clear, and some of the borrowed diagrams are credited to wrong sources; thus Fig. 10, of a starfish, is not from Goodrich, but from the British Museum Guide; Fig. 68, showing the fascioles of a sea-urchin, is one of the numerous figures taken by Delage and Hérouard from the Echinoderm volume in the "Treatise" edited by Lankester. At the special request of the editors, Dr. Kœhler has gallicised the ordinal names. The historical confusion that has arisen from this common French custom is well known, and we have never grasped why such a name as "Les Forcipulosées" is any more intelligible than "Forcipulata"; it is not even French.

*The Place-Names of Northumberland and Durham.* By Prof. Allen Mawer. (Cambridge Archaeological and Ethnological Series.) Pp. xxxviii+271. (Cambridge: At the University Press, 1920.) 20s. net.

PROF. MAWER'S work on the place-names of Northumberland and Durham has an interest which transcends its geographical limitations. Unlike most workers on this subject, he does not confine himself entirely to the linguistic side of the evidence. He is prepared to turn to topography, ethnology, or history for assistance or confirmation. For instance, he has tested, by a careful examination of topographical conditions, the theory that names ending in *ington* occur on high ground where the geological formation favours the finding of springs. As a result, he finds that the theory holds good in East Northumberland only, but that in the west of the county the water supply is dependent upon other factors. The tendency of the lines of investigation followed by Prof. Mawer will inevitably be to bring the study of place-names into closer relation with cognate problems in ethnology and history, and to break down the isolation which has characterised even some of the best work on the subject in this country.

As a result of Prof. Mawer's very careful survey of the evidence for names recorded before the year 1500, and identifiable on the map, it would appear that the vast majority are Anglian. River names are Celtic, but "Cheviot" is the only recorded Celtic hill-name of note. Prof. Mawer concludes that the Anglian conquest was complete. The distribution of names with a Scandinavian element does not afford strong evidence of settlement except in two, or possibly three, cases. It suggests rather a movement from the sea up the great river valleys or from the more distinctively Scandinavian areas which lie to the south. Prof. Mawer's book lends added force to the plea for an organised survey of English place-names as a whole which he has made elsewhere.