

Brunoniaceæ, members of the sympetalous series Campanulatae. The former is a small but important Australian family with about 300 species; the latter is a monotypic group, restricted to a single species, *Brunonia australis*, a small perennial herb of somewhat daisy-like habit, widely distributed in Australia. It is interesting to note that the wealth of Australian material preserved in the great herbaria at the British Museum and Kew have supplied a large proportion of the material on which Dr. Krause's monographs are based.

A. B. R.

OUR BOOKSHELF.

Le Monde Polaire. By Otto Nordenskjöld. Traduit du Suédois par G. Parmentier and M. Zimmermann. Préface du Dr. J. Charcot. Pp. xi + 324 + xx plates. (Paris: Librairie Armand Colin, 1913.) Price, 5 francs.

HERE is a handbook to the Polar regions, dealing, not with the exploration (of such there are plenty), but with the physical conditions of the regions, for which there was a vacant place. It is well for readers outside Scandinavia that it has been translated from the original Swedish into French: it might well be so into English. In a sense it treats the two polar regions as one, for it is comparative throughout, and for that reason the chapters are not arranged in a topographical sequence. Thus we have successive chapters devoted to Greenland, Iceland, and Spitsbergen; the next chapter deals with the Antarctic lands. The writer ranges widely enough to include among "sub-antarctic" lands Patagonia and Tierra del Fuego, the Falkland and other islands, and New Zealand, so far as that Dominion can be considered to lie under such conditions; correspondingly we find chapters on Arctic America (including Labrador), on Siberia, and on north-western Europe. Numerous photographs and sketch-maps accompany the text, and the French translation, which is prefaced by an introduction by Dr. J. Charcot, appears to have been excellently carried out by MM. G. Parmentier and M. Zimmermann. Dr. Nordenskiöld's chapters deal with the relief of land, ice conditions and effects, plant and animal distribution, climatic conditions and human life, and, where appropriate, with economic products.

Coast Erosion and Protection. By E. R. Matthews. Pp. xiv + 147 + 33 plates. (London: C. Griffin and Co., Ltd., 1913.) Price 10s. 6d. net.

THE author of this book writes with a practical knowledge of the subject with which he deals. He holds the position of Borough Engineer of Bridlington, and has constructed sea walls, promenades, and sea defence works of considerable magnitude, which are good examples of what such work should be.

The book follows much the same lines as that

on the Destruction, Littoral Drift, and Protection of the Sea Coast, published by Messrs. Longman and Co. in 1902, but it does not treat the question of Littoral Drift with the same detail. As that book is now out of print, and the author of the present book has had the advantage of the large body of evidence laid before the Royal Commission on Coast Erosion, this work will be a valuable aid to engineers called upon to take charge of sea defence works.

The text is very fully illustrated with numerous plates showing the effect of waves on sea walls and cliffs in course of erosion, and illustrations of sea walls, groynes, and other sea defence works. As these latter are clearly drawn, and have the dimensions of the several parts marked on, they cannot fail to be of great practical use.

The book is divided into twelve chapters, the subjects dealt with being: wave action; erosion and accretion of the shore; types and designs of sea walls; groynes; reinforced concrete; and the action of sea water on cement and concrete.

In his account of the erosion of the Yorkshire coast, the author repeats the old fallacy of the material eroded from those cliffs being carried southward by the tides and being deposited on the Lincolnshire shore, and also as being carried up the Humber. This subject was fully dealt with in a paper on the source of warp in the Humber, read before the Geological Section of the Glasgow meeting of the British Association in 1901, in which it was shown that it is practically impossible for this eroded material to be carried so far southward; and samples of water taken on several occasions of the water entering the Humber on the flood tide give no indication of alluvial matter being carried into that river.

I Fenomeni Magnetici Nelle Varie Teorie Elettromagnetiche. Note Storico-Critiche. By Silvio Magrini. Pp. 165. (Bologna: Nicola Zanichelli, 1912.)

THE scope of this interesting little volume, by an Italian author, is novel to English readers; at least, the present writer cannot recollect any other book devoted entirely to the history of the theory of magnetism. Oersted's fundamental discovery that an electric current gives rise to a magnetic field in surrounding space was important, not only as the starting point of electromagnetism, but also because, in the hands of Ampère, it became the basis of a theory designed to explain the physical nature of magnetism. Beginning at this point, the author passes in review the work of Poisson; Faraday's conception of lines of force, with its necessary recognition of the part played by the medium; the successful development of this idea in mathematical form by Maxwell; the theories of Weber and Ewing; the experimental work of Curie on diamagnetic and feebly magnetic substances; and finally, the modern electronic theory of magnetism as extended by Langevin, Weiss, Gans, and others. The various stages in the historical development are