

*American Geographical Society. Special Publication No. 11: Brief History of Polar Exploration since the Introduction of Flying.* By W. L. G. Joerg. To accompany a Physical Map of the Arctic and a Bathymetric Map of the Antarctic. Pp. v + 50 + 2 maps. (New York: American Geographical Society, 1930.) 5 dollars.

BOTH these are layer coloured bathymetrical maps on a scale of 1 : 20,000,000. The Arctic map is a revised version with insets and names in English of the map in Andree's "Handatlas" (1924). It is an excellent map with much detail. A slight misuse is made of the name Svalbard. It is the name for all the islands, except Jan Mayen, under Norwegian sovereignty in the Arctic Sea and not a synonym for the island of Spitsbergen itself.

The Antarctic map is new and gives a new version of the bathymetry of the Southern Ocean, though Mr. Joerg avoids that name. We note that the soundings of the *Discovery* between Tristan da Cunha and South Georgia do not seem to be included and of course those of the *Discovery* in her present expedition were not available. It was perhaps a pity to bring out a new map of the Antarctic at a time when several expeditions are at work in the south. A delay of a few months would have allowed the addition of the important discoveries of Sir Douglas Mawson in the *Discovery* and Capt. Riiser Larsen in the *Norvegia* in the region of Kemp, Enderby, and Coats Land. The American work in the Ross Sea region is shown.

It is to be hoped that the omnibus name of Antarctic Archipelago for all the islands between Clarence Island and Charcot Island will be abandoned. It is neither explicit nor necessary. The practice of British cartographers of using Coats Land for all the land on the east of the Weddell Sea with differentiation into various 'coasts' has not been adopted. The old tendency on polar maps to multiply 'land' reappears. The notes accompanying the maps are chiefly useful for their account of Admiral Byrd's recent work, accounts of which have not, so far, been readily accessible except in American newspapers. R. N. R. B.

*The Organization of Knowledge and the System of the Sciences.* By Henry Evelyn Bliss. Pp. xx + 433. (New York: Henry Holt and Co., 1929.) 5 dollars.

DR. BLISS'S book makes a twofold appeal. It is written by a librarian as a guide for librarians, and it also has a philosophical purpose. It criticises, in the latter part of the volume, all the better-known systems of classification of knowledge, and Dr. Bliss maintains that it is necessary for a librarian, as for anyone else dealing with the instruments of knowledge, to have a correct idea of its natural articulations in order to serve and co-operate to the best advantage with others working in various parts of the field. We are therefore inclined to turn first to the later chapters, although the earlier contain an impressive account of the increasing complexity of functional organisation of all kinds in practical life. The need of right organisation of thought to secure right organisation

of action is the keynote of the book. It is a serious and very suggestive compendium.

Turning to the later chapters, which will be of most interest to the scientific reader, we notice that Dr. Bliss gives the first place among his 'almosters' to Ostwald, for his classification of the sciences into three main groups, with three or four main subdivisions in each. We are inclined to agree with him, mainly on the ground of clearness and simplicity. The three main groups are: (1) The formal sciences, under the concept of order; (2) the physical sciences, under the concept of energy; (3) the biological, under the concept of life. It proceeds, as all these systems do, from Comte's original, but it corrects and completes it. As knowledge grows, the boundaries will no doubt be again corrected in future. Dr. Bliss deserves our thanks for directing attention to the importance of the subject and spurring everyone to improving it. F. S. M.

*Sleep and the Treatment of its Disorders.* By Dr. R. D. Gillespie. (Minor Monograph Series.) Pp. ix + 267. (London: Baillière, Tindall and Cox, 1929.) 7s. 6d. net.

DR. GILLESPIE, who is a member of the younger school of British psychiatrists, is to be congratulated on producing a most readable and at the same time stimulating book on what is one of the most interesting problems of modern physiology—sleep. The author provides us with a wealth of clinical material and discussion. He wisely points out that the effects of loss of sleep are by no means so serious as are generally presumed; at the same time there is no question that in the mentally disordered, loss of sleep is a serious question. Experience in a mental hospital soon provides confirmation of this. His discussion of the theories of sleep is well balanced and well set out. In discussing the treatment of the psychoses by means of prolonged sleep, we should prefer to see somnifen described as a mixture of the diethylamin salts of diethylbarbituric acid and allylisopropyl barbituric acid and not as a single substance.

*Intermediate Dynamics and Properties of Matter.* By Dr. R. A. Houstoun. Pp. ix + 139. (London, New York and Toronto: Longmans, Green and Co., Ltd., 1929.) 3s. 6d.

THIS book, which is of intermediate examination standard, deals very ably with those branches of physics that border on applied mathematics, and which present considerable difficulty to elementary students. The subject offers little scope for novelty of treatment, but has nevertheless been presented in an interesting manner, whilst the book also includes sections on various important branches such as rotational motion and gravitation, which are often omitted, although with little justification. The chapter on pumps has good accounts of the modern Hyvac pump and the McLeod gauge, and the chapter on the properties of matter a few paragraphs on diffusion, osmosis, and absorption of gases. One wishes that there were more equally good elementary texts in existence.