

with sea power and some economic and international problems should be read. Attention is directed to the necessity for the revision of international law and to its enforcement in regard to matters affecting the mercantile marine. International law as developed from previous war experience must of necessity be inapplicable to wars such as that just concluded, in which, instead of small navies and armies, we had nations in arms when every import is almost certain to be contraband.

The title given to the book brings disappointment, for the author does not give a general treatment of the effect of the submarine upon sea power in the future. He pictures many trees, some of the soil, much undergrowth, but one never seems to see the forest.

A. B. T.

OUR BOOKSHELF.

Studies in the Construction of Dams: Earthen and Masonry. Arranged on the Principle of Question and Answer for Engineering Students and Others. By Prof. E. R. Matthews. Pp. v+43. (London: Charles Griffin and Co., Ltd., 1919.) Price 4s. 6d. net.

WE gather from the preface that this little book is intended to be of assistance to students preparing for the examinations of the Institution of Civil Engineers, the B.Sc. (Engineering) of our universities, or other similar examinations. The text is arranged in the form of "question and answer," and includes references to some of the more important dams constructed in different parts of the world. Students who are pursuing systematic courses in the principles of engineering will find a good many statements open to criticism. Thus, at the foot of p. 1, we read: "In a low dam BC may be taken as being equal to AB." ABC is the pressure diagram, and surely this statement regarding BC is not independent of the scale of pressure employed. Again, on p. 1: "The centre of pressure passes through the centre of gravity of this triangle"; and on p. 9: "The centre of pressure acting at a point $H/3$ above base." On p. 3, r^bH^2 should read rbH^2 , and there are several other misprints. On p. 4 the reader is told that the weight of the wall will act through the centre of gravity of the section, but receives no directions as to how to find this point, although space is wasted on p. 25 in answering the questions how to find the centre of gravity of a triangle and parallelogram. We hope that questions such as No. 7, p. 15, do not occur often in professional or university examinations: "What are the suggestions made by Molesworth relative to the thickness of high and low masonry dams?" On p. 16 we read some curious statements, and quote a typical one: " g =specific gravity of the masonry=for light masonry 130 lbs. per square foot= $2\cdot08$." It is

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not possible in the limits of a short notice to deal with every point which might be criticised, but probably enough has been said to justify the conclusion that it would be well to give the book a thorough revision.

Immune Sera: A Concise Exposition of our Present Knowledge of Infection and Immunity. By Dr. C. F. Bolduan and J. Koopman. Fifth edition, thoroughly revised. Pp. viii+206. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1917.) Price 7s. net.

THE present edition of this book has been revised throughout, and fresh details have been inserted where necessary. It gives an excellent and, on the whole, a simple account of the salient facts connected with infection and immunity, antitoxins and other sera, cytotoxins, opsonins, vaccines, and other reactions of immunity, and the practitioner will find it a trustworthy guide to modern views on these subjects. We suggest that the details of the partial saturation method and of "toxin spectra" in connection with antitoxins are somewhat beyond the general scope of the work, and that the space devoted to them might be better employed in extending the more directly practical subject of agglutination. The technique of the Wassermann test for syphilis has been included in this edition in response to many requests for information concerning it. Here, again, we think that the description is too technical for the average reader, and might be simplified with advantage. These, however, are minor faults, if faults they be, and do not in any way detract from the general excellence of the book. Several figures serve to visualise the descriptions given in the text, and the book is very readable.

R. T. H.

Handbook of Mineralogy, Blowpipe Analysis, and Geometrical Crystallography. By Prof. G. Montague Butler. Pp. ix+311+v+80+viii+155. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1918.) Price 16s. 6d. net.

THIS book is in three parts, which are separately paged. They are also on sale separately. The first part consists of concise, clearly printed descriptions of the different mineral species, and should prove useful for their recognition by the student or prospector. This will be facilitated by the use of the folding tables of the physical characters of the different minerals, which are a special feature of the work. The second part deals with the blowpipe analysis of minerals. Here also the results are set out in a convenient tabular form. The third part, which is devoted to crystallography, is not so satisfactory. The author has a system peculiar to himself of describing crystal symmetry which is by no means clear. He is also exceptional at the present time in retaining the Weiss system of notation of crystal faces.

J. W. E.