## OUR BOOK SHELF.

*Das Radium in der Biologie und Medizin.* By E. S. London. Pp. vi+199. (Leipzig: Akademische Verlagsgesellschaft m. b. H., 1911.) Price 6 marks.

IN the fourteen years since the discovery of radium a large mass of observations has arisen on the effects of radium rays on the various tissues of the living organism. The present work aims at collecting data from the publications of all countries and systematising the results obtained with normal as well as pathological tissues; and the effects on plants and animals as well as on man. The author expresses his keen desire to arrange his material so as to show some definite general principles resulting from the physiological actions of radium rays. Unfortunately he has had to own himself quite unable to achieve this ambition. He has therefore decided to divide the work into a biological and a medical section, and to divide each of these into an experimental and a clinical side. The work does not pretend to be a text-book; it is offered merely as a complete compilation up to date.

The physiological properties of radium rays are fully described, including the decomposition of lecithin, with the separation from it of cholin, a substance which is capable of producing considerable changes in the organism. The author then passes on to the action of radium rays on bacteria and on the lower fungi. The results here are not very striking. In dealing with the ferments, toxins, and antitoxins of the body, some very interesting facts are brought to light, and it is shown that radium, whether inhaled or injected in the form of solutions of emanation, has the power of increasing the activity of certain of the body's ferments. Other ferments appear actually to be reduced in activity by radium rays. This leads us to the recent use of radium and of radium emanation in the treatment of gout, in which perfectly definite results have already been obtained, although far more observations are required before this treatment can be applied extensively. The action of radium on the skin and on cancerous tissues is also fully described.

The book is a careful and conscientious compilation, and must prove of great value to those engaged in practical work with radio-active substances. A. C. J.

*Die Adamellogruppe, ein alpines Zentralmassiv, und seine Bedeutung für die Gebirgsbildung und unsere Kenntnis von dem Mechanismus der Intrusionen.* By W. Salomon. II. Teil, Quartär, Intrusivgesteine. Pp. vi+435–603+Taf. ix–xi. (Wien: R. Lechner (W. Müller), 1910.) Price 12 kronen.

THE first part of Herr Salomon's great monograph on the Adamello group was noticed in our columns on July 22, 1910. In this second one he describes the diluvium (for he retains this term consecrated by ancient error), such as the different types of moraines, the erratics from the central mass (which have been carried far), and the erosive effects of the ice. In regard to the last, considerations of space forbid us to say more than that he has a firm faith in the excavating powers of glaciers, and regards them as agents of no small importance in the sculpture of the Alps. The remaining and larger portion is devoted to a study of the intrusive rock of the *massif* and its enclosures. The former, as might be expected, exhibits several varieties, which are often closely associated, and indicate a differentiation in the original magma, before it arrived at its present position, with an approach to solidification in the more basic portions. Thus sometimes the latter have been carried away as actual fragments (not very happily named *Lacerationssphäroide*) in the more liquid material, while sometimes a kind of mottling or streaking is produced, as may be seen in the Guernsey diorite. Not seldom also the rock is cut by aplitic and pegmatitic veins, representing the most acid residue, as the fragments do the earliest and most basic segregate. Of these we find some excellent photographs, with others of a more general character.

Every detail is so elaborately worked up that the memoir bids fair to rival the mountain in magnitude, and we cannot but think, since the counterparts of many of the facts occur elsewhere in well-known places, that greater brevity would have been an improvement. These monumental memoirs, thought containing much that is really valuable, sometimes tempt the student to doubt, as in the well-known instance, whether it is worth going through so much to get to so little.

*Cassell's Cyclopaedia of Photography.* Edited by B. E. Jones. Part i. (London: Cassell and Co., Ltd., 1911.) Price 7*d.* net.

MESSRS. CASSELL'S "Cyclopædia of Photography," of which the first part is before us, is edited by Mr. Bernard E. Jones, who is assisted by about twenty "chief contributors," well known in the photographic world in connection with that particular branch of the subject that each is associated with. The work is to be completed in twelve parts, to be published at fortnightly intervals. The editor aims at including every accepted photographic term, and at paying particular attention to the requirements of both amateurs and professionals. As an indication of the wide range of subjects included, we give the headings that occur on the first page of the first number:—"Abat-jour," "Abaxial," "Abbe Condenser," "Abbe, Ernst," "Aberration," "Abrading Powder." The articles in this number that exceed one page in length, are titled:—"Acetylene Generator," "Albumen Process," "Aphengescope," and "Autochrome Process."

*New Ideas on Inorganic Chemistry.* By Prof. A. Werner. Translated, with the author's sanction, from the second German edition, by Dr. E. P. Hedley. Pp. xvi+268. (London: Longmans, Green, and Co., 1911.) Price 7*s.* 6*d.* net.

THE first German edition of Prof. Werner's treatise was reviewed in these columns on March 8, 1906 (vol. lxxiii., p. 433). As compared with the first, the second German edition was to a great extent rewritten, and in part extended. The chief object of the revision was the harmonising of the sections discussing the problem of valency. New sections on work done between the dates of the two editions were added. But on the whole the book has preserved its original character. An index would add to the usefulness of the work.

*The Natural History of Selborne.* By Gilbert White. With Notes by Richard Kearton, and 123 illustrations and photographs by Cherry and Richard Kearton. Pp. xvi+294. (London: Cassell and Co., Ltd., 1911.) Price 3*s.* 6*d.*

THE first edition of this very attractive production of a widely known classic was reviewed in the issue of NATURE for March 5, 1903 (vol. lxvii., p. 419). The fact that the book has been reprinted three times since then shows that the notes and illustrations of Messrs. Kearton have been very successful in extending the knowledge of White's letters on natural history.

*How to Build an Aëroplane.* By Robert Petit. Translated from the French by T. O'B. Hubbard and J. H. Ledeboer. With 93 illustrations. Second edition. (London: Williams and Norgate, 1911.) Price 2*s.* 6*d.* net.

THE present differs in no essential respects from the first edition, reviewed in NATURE of August 25 last (vol. lxxxiv., p. 229). The translators have not felt justified in incorporating details of the numerous variations of original types of aëroplanes.