

nor is the humorous side of his travelling experiences forgotten, though no doubt at the time the humour was not always evident. We feel sure that when the good plants introduced by Capt. Kingdon Ward become better known, his name will rank high in the list of distinguished plant collectors to whom British horticulture owes so much.

*Light and Sound : a Text-book for Colleges and Technical Schools.* By Prof. William S. Franklin and Prof. Barry MacNutt. Pp. vi+310. (Lancaster, Pa.: Franklin and Charles; London: Constable and Co., Ltd., 1924.) 5s. net.

*Electricity and Magnetism : a Text-book for Colleges and Technical Schools.* By Prof. William S. Franklin and Prof. Barry MacNutt. Pp. xvi+294. (Lancaster, Pa.: Franklin and Charles; London: Constable and Co., Ltd., 1924.) 5s. net.

THE two volumes under notice are revised versions of previous editions, and are said to be suitable "for colleges and technical schools." As regards scope it is somewhat difficult to place them, for according to English standards it is curiously uneven. There are many excursions into topics of a more advanced character than is usual in books of this size (and price), but the treatment is mainly non-mathematical, and has a strong practical or engineering flavour. Nevertheless, it is usually so lucid as to repay perusal by the average "pure science" student. The sections dealing with lens imperfections and alternating current are particularly good. On the other hand, the methods given for simple lens calculations might be expected to drive even the engineering student, for whose benefit they have presumably been "simplified," to graphical methods for safety. On the whole, however, if the general viewpoint is acceptable, there will be little to criticise in matters of detail, which are usually accurate and up-to-date. An exception, albeit a trifling one, is the statement that "the most accurate wave-length measurements are made by means of the Michelson interferometer." To the English reader the frequent occurrence of such units as "abohms," "stathenries," and the like will at first be a little disquieting, but he may eventually find in their obvious convenience some compensation for their exotic appearance.

*Le Volvox.* Par Charles Janet. Troisième mémoire : *Ontogénèse de la blastéa volvocéeenne.* Première partie. Pp. 179+planches 5-21. (Macon: Protat frères, 1923.) n.p.

IN this third memoir M. Janet approaches the problem of the ontogenesis of the *Volvox blastéa* (cœnobium). He confines himself to the methods of cell bipartition, but in later works he proposes to discuss variations in the process and special cases. The memoir is an able attack on an exceedingly intricate and difficult problem and contains a wealth of minute detail. The author starts by pointing out the primitiveness of the *Volvox* cell and how, in his opinion, these blastéas are in large measure representative of the primitive animal cell groups. He then goes on to describe the apparatus by means of which he separates out the minute organisms, and having pointed out the fundamental units of the cell he considers the homologies between the blastéas of plants and animals. Thereafter he examines

the divisions of the cells of *Janetosphaera aurea* (Ehrbg.) Shaw, in greater detail. It can be well understood that in such an involved study a comprehensive scheme of terms is required; these the author has supplied as well as formulæ for expressing symbolically the type of generation and the mode of reproduction of the organism under study. Assisted by 21 excellent plates containing many figures and diagrams, he traces the various divisions and shows that after bipartitions resulting in 1024 cells, the cells of *J. aurea*, having reached their minimum limits and used up all available reserves, cease to divide and enter into a new phase—the flagellate stage. Throughout, the work is one where questions regarding evolution in the plant world are always kept to the front, for the author's knowledge of plant and animal life permits him to make useful comparisons.

*A Text-Book of Inorganic Chemistry.* Edited by Dr. J. Newton Friend. (Griffin's Scientific Text-Books.) Vol. 2: *The Alkali-Metals and their Congeners.* By Dr. A. Jamieson Walker. Pp. xxvi+379. 20s. net. Vol. 7, Part 1: *Oxygen.* By Dr. J. Newton Friend and Dr. Douglas F. Twiss. Pp. xxvi+370. 18s. net. (London: C. Griffin and Co., Ltd., 1924.)

THE two new sections of Dr. Friend's "Inorganic Chemistry" deal with (1) hydrogen, the alkali metals, the ammonium-compounds, and the coinage-group of metals, and (2) oxygen, water, and hydrogen peroxide. The style of the book is now so well established, and so well known, that it is difficult to comment usefully on the individual sections as they appear. The parts now issued appear to be very complete in the information supplied; and the expansion of the section on oxygen to a volume of 350 pages has made it possible to include a much larger number of analytical data than it is now fashionable to quote in a text-book, as well as to deal in unusual fulness with modern work on combustion. By contrast, the volume on the metals of Group I. appears to be somewhat abbreviated, since the three metals of the coinage-group are disposed of in little more than 100 pages. Illustrations are also used less freely, being limited to a few solubility diagrams, etc., and two line-drawings, thirteen in all. The section on oxygen, on the other hand, is illustrated with some fifty diagrams, and a full-page plate showing the photographs by Burgess and Wheeler of flames near the lower limit of inflammation of methane in air. The homologues of oxygen (sulphur, selenium, and tellurium) are postponed to a later section of Vol. VII., whilst the remaining elements of Group VI. will form a separate Part III.

*Venereal Disease: its Prevention, Symptoms and Treatment.* By Hugh Wansey Bayly. Second edition. Pp. xvii+176. (London: J. and A. Churchill, 1924.) 7s. 6d. net.

VENEREAL disease, like all infectious maladies, is to be considered from two aspects, those of prevention and treatment. The importance of the former certainly has full recognition in Dr. Wansey Bayly's book, the preface of which is devoted mainly to a defence of the policy of the Society for the Prevention of Venereal Disease. In the first section of the book the author