The descriptive matter too is not unworthy of the pictures. The writing is popular in the best sense of the term, simple, but yet exact in the exposition of the fundamental laws and the progress of observation of the physical facts of the science. The explanations are rendered more intelligible by apposite and original diagrams. After a general and historical introduction by the editor, Dr. Steavenson treats of the "Story of Light and Man's Control of It," with illustrations of telescopes from that of Galileo to the giant 100-inch reflector at Mount Wilson. Spectroscopy is adequately explained, and the chapter concludes with an account of the astronomical applications of the interferometer. Of Chapter II. "The Solar System," it is enough to say that it is in the very capable hands of Dr. Crommelin. It is a model of popular scientific style. "The Sun and Sun-spots" constitute Chapter III., written too in a fascinating manner by Mrs. Maunder, and copiously illustrated by very fine photographs, mainly from Greenwich Observatory. Mr. C. P. Butler writes on the "Prominences," and the stars and nebulæ, meteors and comets, gravitation and tides are among the subjects yet to be discussed.

The title "The Splendour of the Heavens" is well chosen, for it is this aspect of the firmament which excites wonder and appeals most directly to the mind of man. It inevitably leads to the recognition of the Majesty, the Wisdom, the Beauty of the Creator, and is thus an antidote to the naturalism, and to the stark materialism which is the bane of much of modern science. With unstinted praise we can recommend this excellent serial, which promises to be a standard work of popular astronomy. A. L. C.

Guide to the Mollusca exhibited in the Zoological Department, British Museum (Natural History). Pp. 55. (London: British Museum (Natural History), 1923.) 1*s.*

A NEW edition of the Guide to the Mollusca in the British Museum (Natural History) has been certainly long overdue, none having been issued since 1908, when other Invertebrata were associated with the Mollusca in the descriptive account of the "Shell and Starfish Galleries."

This new Guide occupies practically the same number of pages as did the section of 1908, although much of it has been rewritten, and in its "get up" is fully equal to others of its kind for which the Natural History Museum is famous. It cannot be exactly described as a "popular guide"; the subject does not lend itself to that, as the mammals and birds do, but it appeals rather to more advanced students of the particular subject. The casual visitor desirous of more simple explanation can fortunately rely on obtaining the information he may require from the demonstrations of the Official Guide, who alone probably can satisfactorily deal with such. No one who has not attempted a similar production knows how difficult it is to produce a really satisfactory work of the kind, or of the pitfalls that beset the compiler, to whose own lapses may be added those introduced by the "familiar" of the printing press.

Beyond pointing out that the scientific name of the British freshwater pearl mussel has somehow been applied to the marine pearl oyster of commerce (Pinctada), we do not propose to dwell on those errors we have observed, preferring to leave that task to "kind friends." It is a pity, however, that further currency has been given to a text-book statement that a "*Helix* has been known to survive a temperature of −120° C." and even to have strengthened the startling statement by substituting "tolerate" for "survive." We suggest a lost decimal point as explanation.

Physikalische Chemie der Zelle und der Gewebe. Von Prof. Dr. Höber. Fünfte, neubearbeitete Auflage. 1 Hälfte. Pp. xv + 544. (Leipzig: W. Engelmann, 1922.) 575 marks.

THE late Prof. Benjamin Moore reviewed this important book at length in NATURE (November 30, 1911, vol. 88, p. 140) upon the appearance of the third edition. The general character of the book is unaltered in this the fifth edition, and it still remains one of the outstanding texts for the use of students of physiology.

The present edition has evidently been completely revised, the most striking modification being the division of the book into two main sections; the first dealing with the underlying physico-chemical phenomena apart from their manifestation in the living organism, the second part considering the operation of these phenomena in living cells and tissues. The book also now appears in two volumes; this first volume includes the six chapters comprising the first section of the book, while Chapter VII., the first chapter of the second section, discusses the osmotic properties of cells and tissues. The material of this seventh chapter in the third edition appeared scattered throughout three chapters dealing respectively with osmotic pressure, osmotic properties of cells and tissues, and a criticism of the lipoid theory. Judging by the present volume, the rearrangement of the subject-matter has provided a more natural and logical presentation of the subject. It is also certainly natural to find that a discussion of permeability no longer centres around the lipoid theory of the plasma membrane. Throughout the book modifications have been made in accordance with the trend of modern physiological investigation; to cite one example, Chapter III., upon the quantitative estimation of hydrogen ions, has been altered to cover the modern use of a wide series of indicators in conjunction with standard buffer solutions; it also includes a fuller discussion of the regulatory mechanism controlling the reaction of the blood.

English Coastal Evolution. By E. M. Ward. Pp. xii + 262 + 14 plates. (London: Methuen and Co., Ltd., 1922.) 8*s.* 6*d.* net.

MR. WARD has chosen a very interesting subject, and has treated it systematically and well. In his general introduction, he points out that the present features of our coasts are built up or carved out on a land that has been recently submerged. The features of this land are largely due to subaerial erosion, but in places they are becoming modified by the deposits caught on sea-worn flats. In other places features are becoming again revealed by the removal of beach-detritus belonging to an earlier epoch. The glacial deposits that extended the land-area as the ice melted away form here and there protective

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