

of coloured sections and two folding maps. Some of the photographic plates, such as that of the "block-structure" in porphyrite, facing p. 106, are of unusual beauty.

G. A. J. C.

OUR BOOK SHELF.

A. Koelliker's Handbuch der Gewebelehre des Menschen. 6te Auflage. Drittes Band. Von Victor v. Ebner. Pp. 1020; 633 illustrations. (Leipzig: W. Engelmann, 1902.) Price 18s. net.

THE conclusion of the sixth edition of Koelliker's "Histology" merits more than a passing remark. The first appearance of this well-known handbook about the middle of the last century formed an epoch in the science of which it treats (which it may almost be said to have created), and ever since it has held the foremost rank in works dealing with the subject. But it is now more than thirty years ago that the fifth edition was published, and progress has been rapid in the interval.

The first two volumes of the present edition were edited by the original author, and no work that he has done has been better done than this. But the weight of years must eventually tell, even if one is Koelliker, and the task of editing the third volume was handed over by him to Prof. v. Ebner. A first part of this volume, dealing with the digestive, respiratory, and urinary organs has appeared, and has already been noticed in NATURE; the last part of the work, embracing the structure of the generative organs, the vascular system and the organs of special sense, and comprising also an index of subjects and authors for the whole book, is now in the hands of histologists. Prof. Koelliker's selection of an editor for his great work is amply justified; a better successor to himself could hardly have been found than the eminent Vienna histologist, who has, moreover, been ably assisted by Dr. Joseph Schaffer and Dr. Hans Rabl. It is to all intents and purposes a new book which has made its appearance. Hardly a page but has been rewritten, and of the 633 illustrations, 533 are entirely new—for the most part from original preparations. Nevertheless, the general style of the preceding volumes is singularly well carried out in this one, so that it is difficult at first to recognise that the work is by another hand. Too much praise cannot be given to the bibliographical notices, which are far more complete than are to be found in any other work on histology.

The whole book is a storehouse of information based on personal observations, and must long remain the standard work of reference on the subject.

The octogenarian master, whose own scientific activity is by no means exhausted, must be well content to know that his work has been brought to so brilliant a completion, and in presenting to him our respectful congratulations, we may be permitted to express the desire that he will still continue for many years to enjoy the satisfaction of witnessing the success of his life-long labours.

E. A. S.

Building Superintendence. New edition, revised and rewritten. By T. M. Clark. Pp. 306. (New York: The Macmillan Company; London: Macmillan and Co., Ltd., 1903.) Price 12s. 6d. net.

THIS is a book which appears to have had an extended circulation in the United States, and, although it contains a good deal of practical information, a large amount would only apply to construction methods on the North American Continent. It is primarily addressed to the young architect, and gives him hints as to the selection of good materials and as to the direction of building operations generally. A knowledge of building construction is therefore assumed,

and the book is intended to supplement that knowledge by the practical application to existing buildings.

The subject is divided into three main heads, namely, stone buildings, wooden buildings, and steel-framed buildings, and in each case a typical building is described from the foundations upwards, showing the successive stages of construction and general direction for the judging of the quality of materials. The term "superintendent," which occurs so often, is presumably the American equivalent for the English clerk of works.

The English student should beware of information which may apply in the States, but is not correct as applied to England; for instance, on p. 5 we are told that five courses of bricks commonly equal one foot in height, whereas, as a matter of fact, four courses in England usually equal one foot. Many of the terms and names will also be quite unfamiliar to him.

Chapter i., dealing with stone buildings, takes up the construction of a stone church intended to be erected on elevated ground. This occupies more than 100 pages, and deals with the preliminary staking out of its various parts—foundations, damp in cellars, the making of concrete and mortar, defects common to various kinds of stone, walling, flooring, roofing beams, and plastering. The information is sometimes effected by means of question and answer between the architect and foreman in the manner made familiar in the treatises of Viollet le Duc.

Chapter ii. deals with wooden dwelling-houses, their location and aspect, drainage of site, employment of contractors, the framing of the timber (uprights and sills), chimneys, electric wiring and fitting, roof shingles, plastering, plumbing fittings, doors, windows, stairs and their arrangement and defects, drainage and water supply, and painting. Chapter iii., dealing with the writing of specifications, can be passed over, as essential differences exist between English and American practice. Chapter iv. deals with contracts, and the author rightly dwells on the importance of these, especially with regard to the necessity for protecting the building owner.

Chapter v. deals with the construction of a steel-frame office building, eleven storeys high, on a corner city site 25 feet by 100 feet, in which economy of space has to be carefully studied. This is probably one of the most interesting chapters in the book, and its construction is dealt with in a progressive way, in the same manner as in the stone and wood buildings.

The plan, question of fire escapes, foundation, steel framework, vaults, floors (fire-resisting), elevators, are dealt with in turn. As will be seen, the book is arranged on a sensible and convenient plan, and if it could be written to be suitable for English readers, it would be of greater benefit. As it is, however, it contains a great deal of excellent advice founded upon practical experience, and no architect could read it through without having his wits sharpened for discovering defects in workmanship at the periodical visits which he pays to buildings in course of erection from his designs.

A Key to the Time Allusions in the Divine Comedy of Dante Alighieri. By Gustave Pradeau. Pp. 32. (London: Methuen and Co., 1902.)

THE author, having found that different editions of the great poem of Dante assigned different durations of time for the action supposed to be occupied by it, set himself to investigate the matter by a comparison of all the time allusions until the poet ascends from over Jerusalem to the *primum mobile*. He ingeniously illustrates his argument by a diagram or "dial" in the circumference of which are the signs of the zodiac, whilst in the centre are four points representing respec-