little technical as possible. The biology and some elementary points of structure of each group are briefly considered, and useful keys are provided to aid the reader in finding at least the generic name of the more common organisms which the author has collected from a single pond in New Special attention has been devoted to certain groups—e.g. Gastrotricha, Rotifera, Polyzoa. Here and there the desire to be nontechnical in terminology has been carried a little too far-e.g. the egg-masses of Cyclops should not be called "external ovaries," and the term "contractile vesicle" is not a good substitute for "contractile vacuole"—the latter term could have been quite easily defined. Helpful illustrations (198) as aids in diagnosis of the genera are given, but we would suggest that when the book reaches a fifth edition figures should be added of some of the commoner transparent animals, e.g. a rotifer, a polyzoon, Daphnia, in which the chief internal organs are clearly shown and labelled.

OUR BOOKSHELF.

The Elements of Astronomy for Surveyors. By Prof. R. W. Chapman. Pp. x + 248. (London: C. Griffin and Co., Ltd., 1919.) Price 5s. net.

Sir John Herschel's dictum in his well-known panegyric on star-catalogues, that "every welldetermined star from the moment its place is registered is as effective for mapping down the intricacies of a petty barony as for adjusting the boundaries of transatlantic empires," may be taken as the raison d'être of this book. The author is professor of mathematics and mechanics in the University of Adelaide, and doubtless the southern continent gives scope for surveying on a large scale in which astronomical observation is a neces-

The book is on conventional lines, the first six chapters dealing with the elements of geometrical astronomy, including one which explains at some length with examples the conversion of sidereal into mean time and similar arithmetical processes. The latter half of the book consists of chapters on the determination of true meridian, on azimuth of a mark, of latitude, time, and longitude. Most of the recognised methods are concisely explained, and illustrated in some cases by examples taken from actual experience. Use is made of the observation of circumpolar stars at elongation for determination of azimuth, and for time the observation of altitude of the sun or a star near the prime vertical is recommended and discussed in full detail. The inclusion of a few pages on the almucantar is a useful addition to the book, which will fulfil its intended purpose of providing an elementary exposition of the principles of the formulæ used by the surveyor.

Organic Chemistry for Students of Medicine. By Prof. James Walker. Second edition. Pp. xi+ 332. (London: Gurney and Jackson; Edinburgh: Oliver and Boyd, 1919.) Price 10s. 6d.

This second edition of Prof. Walker's book for medical students does not differ substantially from the first edition as issued in 1913. It may, however, be useful to direct the attention of medical students and their teachers to a volume which has been written specially to suit their requirements, and the value of which is shown by the publication of a further issue.

LETTERS TO THE EDITOR.

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Promotion of a Plumage Bill.

ALL lovers of animals must sympathise with any efforts to prevent the ruthless destruction of bird-life for trade purposes, referred to by Mr. H. J. Massingham in his letter in NATURE of December 25. It is open to grave doubt, however, whether the measures announced are the best that can be devised or will meet with a sympathetic following. They are the formation of a "Plumage Bill group," designed to fight the plumage trade and to bring pressure upon the Government to introduce a Bill forbidding the importation of all birds' skins for millinery purposes, with a few exceptions.

From time immemorial plumage has been employed to satisfy the decorative and æsthetic instincts of mankind, though to-day public opinion is rightly determined that it must be procured under conditions conforming with our humane sentiments. We may well inquire, therefore, whether the æsthetic demands for plumage can be met without outraging these. The ostrich in South Africa supplies a forcible case in point. In times past the wild bird was hunted for its precious plumes, and would have become almost extinct ere this had not its domestication been undertaken. As it is, the wild bird is now preserved and is increasing in numbers, and hundreds of thousands of domesticated birds lead a pampered existence on the ostrich farms. A big industry has arisen of the highest importance to agricultural South Africa, representing in pre-war days an annual export value of about 3,000,000*l*.

It is submitted that what has been accomplished with the ostrich may be possible with other birds supplying ornamental plumage; that, like it, others may give rise to industries and yield their plumage in conformity with the highest humane demands. One ventures to suggest that, instead of pursuing a repressive policy, the efforts of Mr. Massingham and his associates would be better directed in instituting studies and investigations as to conditions under which plumage-birds could be reared on an industrial

Mr. Massingham appears to have an unworthy view of the issues involved in his announcement, for in the plumage trade he sees "no other purpose than to feed the profits of a small band of East End traders and to satisfy the frivolity of some women." Though ostrich plumes are exempted from the operations of the proposed Bill, vet so sensitive is the inter-relationship

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