

The physiological side of the game is not lost sight of, and is dealt with by the author in three short chapters, while Part iv. is devoted to "lawn tennis encyclopædia," containing much miscellaneous information useful to players, including a bibliography of the literature on the subject, which, by the way, is very considerable.

The volume concludes with an account of the history and growth of the game of lacrosse, by William Harvey Maddren.

The very complete index adds considerably to the utility of this publication, which should form a welcome addition to any sportsman's library.

In the second of these volumes, which is the combined work of Messrs. G. Beldam and P. A. Vaile, we have another valuable contribution to the literature of lawn tennis. Mr. Beldam presents us with 229 of his action photographs, all of which are here beautifully reproduced. In his book on "Great Golfers" he showed how much could be learnt by closely studying action-photographs, and in the present volume on great lawn tennis players a similar attempt is rewarded with equal success in spite of the greater difficulties involved, since both player and ball are in rapid motion. The photographs here given are not casual snapshots, but taken specially to illustrate the positions occupied by players for particular strokes. Mr. Vaile, writes, so to speak, round these pictures, and in his breezy and straightforward style points out which in his estimation are the good or bad points. This author is of the opinion that the true science of the game is but dimly appreciated in this country, and it is his main endeavour throughout these pages to indicate in which direction progress can be made. The lawn tennis reader will find, therefore, much to think over in these pages, and particular attention is drawn to the first chapter, in which the racket, *per se*, and the methods of holding it are discussed. Mr. E. G. Meers contributes an interesting chapter on "Advanced Tactics of the Single Game," while "The Half-Volley" is treated by Mr. G. A. Caridia.

OUR BOOK SHELF.

New Streets: Laying Out and Making Up. By A. Tayler Allen. Pp. 175. (London: The Sanitary Publishing Company, Ltd.) 3s. net.

This is not the sort of book that anyone but a proof-reader could read straight through, not even a reviewer or a surveyor or architect, for whom especially it is written. This statement is not made by way of disparagement, quite the reverse, and the author would be the first to agree to it.

In these days, with a multiplicity of petty and of local bye-laws and regulations, all put together primarily and ostensibly to prevent scamping of different kinds, but often, and the more so the more petty the authority, used as weapons to compel public spirited parties to go to unnecessary and extravagant expense so that the members of the petty body or their friends may be the more prosperous, it is above all essential that the surveyor or architect or engineer or even private individual, who has occasion to make a new street or a cottage or a side-walk or a retrospective drain should act warily, and have before him

the several acts and bye-laws that regulate or hamper, as the case may be, the particular work he has in hand. The author, judging by this, and by the titles of his previous works, seems to be a good Samaritan and to take pleasure in pointing out the numerous pitfalls that must be avoided by the man who would, if possible, live at peace. The present book is largely filled with a recitation of laws and of district council requirements which no one would wish to read unless under compulsion. The latter part contains examples of work in very full detail and with illustrations.

However, the author has not, as might have been expected, lost all interest in the progress of his subject in wrestling with these dismal details. For instance, on p. 2 he says:—

"The author is one of a few surveyors who believe that all wide carriageways (where traffic is considerable), should have the channel in the centre instead of at the sides, thus obviating the tendency of vehicles to slide down the haunches of the road towards the kerb. The gradient to the centre channel from the kerb need not exceed 1 in 40."

Whatever advantages or the reverse there may be in this plan, spectators on the pavement would no doubt prefer to see this sliding in the direction desired by the author, especially if the vehicles happened to be quick motor-cars going in opposite directions.

The author is to be complimented on performing a tedious and uninteresting task for the general good.

C. V. B.

A Popular Guide to the Heavens. By Sir Robert S. Ball, LL.D., F.R.S. Pp. xii+96; 83 plates. (London: George Philip and Son, Ltd., 1905.) Price 15s. net.

This is a new edition of the "Atlas of Astronomy," by the same author, which appeared in 1892, the revision having extended even to the title of the book. As before, star maps and pictures of the heavenly bodies are the chief feature, but in many cases drawings have been replaced by admirable reproductions of some of the finest celestial photographs at present available. The star charts, comprising twelve maps indicating the aspect of the heavens in the different months, and twenty others showing much greater detail, are excellent in every respect, and will meet the needs of those making a first acquaintance with the stars as well as of those who may wish to observe interesting objects with telescopes of moderate aperture. A valuable feature in connection with the maps is an index to the planets, whereby the positions of these bodies in each month during the next fifty years may be approximately ascertained. A very complete guide to observations of the moon is also provided by the maps and catalogues of lunar formations. So far, the book justifies its title, but the remaining parts give the impression of a scrap-book with pages still remaining to be filled, and pages which would have been filled differently by different owners. The sun, for example, is inadequately represented; the only photograph of a sun-spot which is given conveys no indication of the dimensions of the spot, and there are no illustrations of faculæ or photographs in monochromatic light. A more serious omission, in a book which is styled a "guide," is the absence of all reference to the modes of observing the sun, although careful drawings of the paths of spots at different times of the year are included. Again, there is an elaborate chart of the planet Mars, but nothing to show what the planet looks like in an ordinary telescope.