

INDOOR GAMES.

The Hand-book of Games. Vol. I. Table Games. (London : Bell and Sons, 1890.)

THIS work was originally published in the year 1850. In spite of the antiquity of the information, there is a steady demand for the old edition, and the publishers, having resolved to reissue the book, decided that it should be thoroughly revised, and many of the articles entirely rewritten. In consequence of the recent development of old games and the invention of new ones, the present edition will fill two volumes of about 500 pages each, while the first edition consisted of only one volume of 600 pages.

The games included in the first volume are known as table games. The first one treated of is billiards, and is written by the noted amateur Major-General A. W. Drayson ; the well-known professional Mr. W. J. Peall has read through the proof-sheets, and, in his own words, "endorsed, in nearly every case, the author's advice, both theoretical and practical." Billiards is one of the many games that have made remarkable progress in the last fifty years. Of its origin very little is known : some consider that the French invented it ; others that the Germans originated the idea, the French only improving on them. Bouillet gives the English as the originators of it. "Billiards," he says in his first work, "appears to be derived from the game of bowls. It was anciently known in England, where perhaps it was invented. It was brought into France by Louis XIV., whose physician recommended this exercise." In his other work we read, "It would seem that the game was invented in England." Whatever may have been the origin of the game, it was originally played on the floor or on a table, and consisted in trying to send a ball through a ring which revolved on a pin or stick fixed firmly on the floor or table. A few years before 1674, billiards must have been well known, especially in England, for in a work published in that year, where it is described as a "most gentle, cleanly, and ingenious game," the author says that in England there were few towns of note "which had not a public billiard table, neither are they wanting in many noble and private families in the country." From those days up to the present time the game has gradually been raised from the "disreputable to the highly respectable," and it is now ranked among the first-class ones.

The game as described in this article is for amateur players only, and, as stated by Mr. Peall, "there are few amateurs who may not gain some useful hints from a study of this book." Although the author gives some very good explanations of the various strokes, describing the best ways of making them and the effects produced on the impact of balls, yet in some cases it would be advantageous to the reader to know the reasonings from which the results are drawn. On pp. 34 and 35, in discussing the effect produced by "side" on the striker's ball, the example he gives serves to illustrate our point.

Following these explanations, the games of pool, black pool (commonly known as "shell out"), pyramids, and snooker are described, the last of which is an extension of the game of pyramids, but not as yet generally known.

We now come to the game of chess, by Mr. R. F. Green, who gives a condensed but capital account of it as it is played to-day. Of all games chess is the most difficult,

and in consequence of the riddance of the element of chance, great skill is required to play it well. In the study of this game a great expenditure of time is necessary—in fact, "no knowledge or proficiency, easily acquired, could be held in such high and general esteem ; and the time involved may, especially in the case of young students, be looked upon as well spent. It constitutes a mental training of the greatest possible value, and promotes a taste which can only be elevating." Lovers of this game will find much in this article that will interest them, and the hints, technical terms, rules, moves, &c., should form a good foundation for beginners.

The remaining games include draughts, backgammon, dominoes, solitaire, reversi, go-bang, rouge et noir, roulette, E. O., hazard, and faro, all of which are thoroughly explained and illustrated by "Berkeley."

In conclusion, a work of this sort becomes a necessity to those who wish to understand the scientific principles which form the bases of many of our games, while for those who play occasionally it will serve as a most handy book for reference. It is thoroughly to be recommended.

W.

OUR BOOK SHELF.

Elementary Algebra. With numerous Examples. By W. A. Potts, B.A., and W. L. Sargant, B.A. (London : Longmans, Green, and Co., 1890.)

IN this book the principles of algebra as far as quadratic equations only are dealt with. The authors have explained them in plain and simple language, and have worked out numerous examples in order to illustrate the methods adopted. In an elementary treatise like this, intended for those who are preparing for public school entrance examinations, great importance must be attached to the working out, briefly and neatly, of examples, and here we have a good and copious collection, together with some papers set at former entrance examinations.

Heat and Light Problems. By R. Wallace Stewart. University Correspondence College Tutorial Series. (London : W. B. Clive and Co., 1890.)

THIS work forms a supplement to the author's "Elementary Text-book of Heat and Light," and is an expansion of the chapters on calculations in that book. The mathematical sides of both these subjects only being dealt with, the fundamental formulæ in each case are clearly worked out and illustrated by many examples. At the heading of each chapter a short summary is given, for convenience of reference, of the many formulæ that may have been proved in previous chapters, but which are used in the one under consideration. This method causes a saving of time and patience, and facilitates the solving of the problems. Students who find special difficulties with regard to the questions on the quantitative relations of either of these two branches of physical science, cannot do better than study this work. By so doing, they will find themselves very much enlightened, and their difficulties considerably diminished.

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THE above-named (445 pp. in all) contain six original contributions and notices. Of the former, one, by Dr. Karl Fritsch, is botanical, and deals with the flora of Madagascar ; another, by Ludwig Hans Fischer, is devoted to personal adornments among the native Indians