

This year the volume reaches the grand total of 1516 pages, and is the largest yet issued, exceeding that of last year by about 40 pages. The popularity of such a book can be best judged by its sale, for photographers soon find out which of the numerous books on this subject are suited to their needs. We gather from the *British Journal of Photography* that the 1899 edition of this almanac, an edition which was composed of 20,500 copies, was rapidly disposed of within three months of publication, a fact which speaks for itself. This, the thirty-ninth annual issue, is quite up to, even if it does not exceed in interest, the previous volumes. It will be found an absolute mine of information: we notice a great number of articles dealing with all branches of the art which gives the reader hints for future work, and results of the experience gained by others. Other parts are devoted to a summary of the progress made during the past year, practical notes and suggestions, miscellaneous information, and many other sections of interest. As usual, the advertisements form a great portion of the book.

The almanac is carrying on the crusade of advocating the use of the metric system in all photographic matters, and has great hopes of the practice becoming universal. To further this object the metric equivalents of the British system are given in all tables and formulæ. Much more might be written about the contents of this volume, but it is hoped that sufficient has been said to enable the reader to form the opinion that it ought to find a place in every photographic studio.

The frontispiece is an excellent bromide print by Messrs. Wellington and Ward from a negative by Mr. H. Walter Barnett, and numerous other illustrations will be found intermingled with the text.

*The Elements of Blowpipe Analysis.* By Frederick Hutton Getman. Pp. 77. (New York: The Macmillan Company. London: Macmillan and Co., Ltd., 1899.)

THE contents of this slight book include the orthodox blowpipe tests such as are found in most books on qualitative analysis, together with an account of the behaviour of some of the principal ores before the blowpipe. A meritorious feature is that the general chemical action of the common fluxes is explained. In other respects it is not easy to find points calling for special praise. An incorporation of some at least of the admirable tests described in Bunsen's "Flammenreactionen" would have made an improvement. The following minor errors are perhaps worth noting. On p. 10, decrepitation is described as "the crackling of a substance due to the sudden expansion of combined water on heating," and incandescence as "the white light emitted by a substance that is infusible when subjected to a high temperature." On pp. 11 and 13, silver oxide is printed AgO. On p. 17, the formulæ of borax and microcosmic salt are given without water of crystallisation—an important omission from the assayer's point of view. On p. 40, the only test for phosphates is that of flame colouration, the reduction with sodium or magnesium being omitted.

*The Elements of Euclid.* Books i.-vi. By R. Lachlan. New and revised edition. Pp. ix + 489. (London: Edward Arnold, 1899.)

THE editor of these Elements tells us in the preface that he has endeavoured to make the subject as easy as possible for beginners by the use of simple language, and by presenting the argument in the clearest form. Further, he has attempted to embody in the book, and with great success, the additions and improvements in statement and method which twelve years' experience as an examiner and teacher has shown to be desirable. Throughout the book Euclid's sequence of propositions has been maintained, but in many cases several well-known alternative proofs have been substituted for those of Euclid. In places where the student might experience

difficulties fuller notes are added; and attached occasionally to propositions are others which it is important for the beginner to know. The appendix to the last book contains many interesting problems of theorems for more advanced students, and this is followed by a considerable number of miscellaneous exercises. Students and teachers should find this form of the Elements of Euclid in many respects serviceable.

*Essais du Commerce et de l'Industrie.* By L. Cuniasso and R. Zwilling. Pp. viii + 302. (Paris: Carré and Naud, 1899.)

THE essential features of a book dealing with the subject of commercial analysis, whether intended for student or professional analyst, are careful elaboration and extreme minuteness of detail. As it is impossible for any analyst to have had an experience of more than a limited number of analytical processes, or at least such an experience as would justify him in publishing them, one naturally expects a book on commercial analysis to be devoted to special branches of the subject, unless, of course, a number of writers co-operate in its production. There are many special treatises of the kind relating to assaying, iron and steel analysis, to the analysis of soaps and fats, tanning materials, &c., which supply everything that is needful in this respect. To state that the present volume contains an account of nearly every branch of commercial analysis within the compass of 279 small octavo pages, that the subjects of leather, glue, vinegar, &c., are dismissed in one page, and that the analyses of other products are treated in the same cursory and superficial manner, is a doubtful recommendation.

*Dairy Chemistry: a Practical Handbook for Dairy Chemists and others having control of Dairies.* By H. Droop Richmond. Pp. xix + 384. (Charles Griffin and Co., 1899.)

THIS is a handbook for the chemist's laboratory, and deals especially with the matters on which his opinion will be asked, and with the methods of examination he may employ. Although of considerable size, it by no means includes the whole subject of dairy chemistry. The relations of the cow's diet to milk production, and its influence on the quality of the milk, and also the chemistry of dairy operations, are not discussed, though some parts of these subjects are referred to by the way. The author has had peculiarly favourable opportunities for becoming a master of his subject, and the book is full of information which will be valuable to the dairy chemist. Nevertheless, it is not unfrequently disappointing. The different parts of the subject are treated with very different degrees of fulness, and the expositions are not always clear. The book will be of most use to those who are already acquainted with the subject.

*A Manual of Surgical Treatment.* By Prof. W. Watson Cheyne, F.R.S., and F. F. Burghard, F.R.C.S. In six parts. Part ii. Pp. xix + 382. (London: Longmans, Green and Co., 1899.)

THE second part of this manual of surgical treatment fully justifies the good opinion which was recently expressed in these pages of the first part. It deals with deformities, the surgical affections of the skin, nails, lymphatics, bursæ, muscles, tendons, nerves and blood-vessels. The authors prefix to the volume a very proper statement that it is their endeavour to give only the salient points in the symptoms and pathology of surgical diseases, whilst they enter more fully into the question of treatment. The various topics are treated in a clear and concise manner, the information is accurate and modern, and there is an excellent index. If the future parts fulfil the promise of those already issued, the work will take rank as one of the best amongst the many surgical treatises which have recently issued from the English press.

D'A. P.