REVIEWS.

FATTY FOODS. By E. RICHARDS BOLTON and CECIL REVIS. London: J. and A. Churchill. 1913. Pp. xii + 371. Price 10s. 6d.

The plan of this book presents several original features, which show considerable boldness on the part of the authors, who appear conscious that their departure from the usual methods invites criticism, and who are somewhat aggressively apologetic.

The book certainly invites criticism, but it must be on the whole a favourable criticism. The novel features are—first, the wholesale rejection of time-honoured methods of examination; secondly, the ignoring of the abnormal results occasionally yielded by rare specimens; thirdly, the employment of the method of ratios between the various constants for diagnostic purposes; and, lastly, the bold advocacy of scientific guesswork founded upon such data as commercial values.

As to the first feature, the authors appear to have been wise in their choice of methods. It goes without saying that it is worse than useless to employ a method which only gives information which either is less valuable or is obtained with greater labour than that yielded by other methods, and though opinions may possibly differ as to whether the very best methods have been chosen, the principle is thoroughly sound.

The second feature will probably render the opinion formed by following the advice given in this work more thoroughly sound than if all the extreme variations were taken into account. This may seem paradoxical, but it is better to form a correct judgment in the majority of instances, and blunder on the very rare occasion, than to be constantly doubtful. The one objection, which the public analyst will perhaps appreciate more than his technical colleague, is that the extreme values are likely to be insisted upon in cross-examination.

Regarding the third, nothing but praise must be given to the method of employing the ratios between the various figures determined for diagnostic purposes, and the charts given should materially assist the solution of the problems for which they are designed.

As to the scientific guesswork, this is, of course, employed by every expert, but it is refreshing to see such a point made of it in a textbook. The numerous examples, if carefully studied, should prove of great value in training the mind of the chemist who has not hitherto fully grasped this deductive process. They, as well as the descriptions of the methods, are models of lucidity, and the whole book, despite occasional literary lapses, is written in language which is a pleasure to read.

The illustrations are fairly good, but do not always give quite a correct idea. For instance, the drawing of the earth-nut appears to show that the pod has black markings on it, which is, of course, not the case; and the photomicrographs, owing to their small size and to their reproduction in half-tone, have lost a great deal of their detail.

The book is well got up, well bound, and singularly free from typographical errors, and is interleaved at intervals with blank pages for the user's own notes; these points, small though they are, add to the value of a most useful laboratory companion.

H. DROOP RICHMOND.

EAUX DOUCES ET EAUX MINÉRALES. By F. DIÉNERT. Paris: Ch. Béranger. 1912. Pp. 354 + Table of Contents. Price 6s.

This volume is one of the series of "Manuels Pratiques d'Analyses Chimiques," published under the direction of MM. Bordas and Roux. Of these nine or ten have already appeared, and the complete series will comprise twenty-four volumes. The series is intended more especially for the use of analysts and experts attached to official laboratories in France, and the volume under review is written by the chief of the "Service de la Surveillance des Eaux d'Alimentation de Paris." About half of the book is devoted to the methods of analysis, chemical, physical, and bacteriological, of "soft" and mineral waters, and tables are given showing the composition of almost all the better-known Continental mineral waters. The analytical methods given are mainly confined to those which have received "official" sanction in France; and in several sections, notably in that dealing with the estimation of nitrates, no mention is made of several well-known methods which are commonly employed by water analysts. Such analytical methods as are given are, for the most part, clearly described, and the book would appear to be admirably suited to the purpose for which it is intended; but from the point of view of the water analyst, who is called upon to express an opinion as to the quality of a water-supply, and to suggest the most efficient means of purification, it is to be regretted that no actual figures are given of the results of analysis of waters of different types, which would illustrate the principles upon which such an opinion should be based. More detailed criticism of and comparisons between the different analytical methods employed, and references to recent work on water purification, such as is to be found in the annual reports of the Metropolitan Water Board, would have materially enhanced the value of what is otherwise a useful book. The chapters on investigation in the "field," sampling, etc., contain some interesting and suggestive details, many of which are apt to be overlooked when collecting samples for analysis. The volume concludes with an appendix, containing information as to the more important legislation enacted in respect of the sale of mineral waters in France.

G. W. MONIER-WILLIAMS.

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FINAL EXAMINATION FOR THE ASSOCIATESHIP IN THE BRANCH OF BIOLOGICAL
CHEMISTRY. OCTOBER 14 TO 18, 1912.

The following candidates passed: Robert Philip Keith, Eric Richards, and Frederic Robinson.