

Der Nahrungsmittelchemiker als Sachverständiger, Anleitung zur Begutachtung der Nahrungsmittel, Genussmittel und Gebrauchsgegenstände nach den gesetzlichen Bestimmungen mit praktischen Beispielen von PROFESSOR DR. C. A. NEUFELD, Oberinspektor der Kgl. Untersuchungsanstalt für Nahrungs- und Genussmittel zu München. Berlin: Verlag von Julius Springer. 1907. xix+477 pp. Price, unbound, Mark 10; bound, Mark 11.50.

The primary object of this book is to guide the food chemist in interpreting his analyses and in making suitable recommendations to the court. It is also designed to aid physicians, court officers and other officials who may be called upon to deal with food problems in a legal way. Descriptions of methods are not included.

The book contains a vast store of information touching the source and preparation of foods—their composition, adulteration, imitation and deterioration—and also contains numerous examples illustrating the practical application of this knowledge.

The General Part of the work consists of an introduction with remarks on the purposes of food control, methods of analysis, and standards, chapters on official reports and decisions, and one chapter on the general composition of foods.

The Special Part is divided into twenty-one chapters on the different classes of vegetable and animal foods and a final chapter on toys, cooking utensils, paints, cosmetics and petroleum products.

As a rule each food or class of foods is considered under the following heads: 1. Definition, Origin, Methods of Preparation and Preservation, Composition, and Standards, including the United States Standards. 2. Forms of Adulteration. 3. Imitations. 4. Forms of Damage. 5. Characters Injurious to Health due to Damage, Adulteration, etc. 6. Practical Examples with Analytical Data; Interpretation of Results; Decisions under German Law.

Although the data is in the larger part German, the book will prove a valuable addition to the library of the American food chemist and should also be within the reach of others interested in the manufacture and inspection of foods.

A. L. WINTON.

Chapters on Paper Making. By CLAYTON BEADLE. Vol. I., 1904, Vol. II., 1906., H. H. G. Grattan, London; Vol. III., Vol. IV., 1907, Crosby Lockwood & Son, London. Price, \$2.00 per vol.

These four small volumes constitute an important contribution to the chemical technology of paper-making. As a necessary consequence of the method by which the subject matter is developed, the treatment is fragmentary and disjointed, but in spite of this regrettable lack of sequence the student of paper-making will find in these "chapters" a great amount of useful information and suggestive discussion which is not to be found elsewhere.

Vol. I comprises ten lectures delivered before the Battersea Polytech-

nic Institute and dealing with various special phases of the chemistry of paper-making and the chemical and physical properties of paper.

Vol. II opens with a thoughtful discussion of Technical Education as Applied to Paper-making, while the body of the volume is made up of the carefully considered answers made by the author to the questions propounded by the City and Guilds of London Institute to candidates who had taken its Course in Paper Manufacture. As to the questions themselves it may be said that very few American paper mills superintendents could hope to pass them with credit. Mr. Beadle's answers cover in what is usually an eminently practical way many subjects of which paper-makers generally have only the most empirical knowledge and as to which it is only fair to say they have few sources of information.

Volumes III and IV are the outcome of the publication by *Paper and Pulp* of a series of test questions on paper-making technology addressed to workers in English mills. These questions developed an astonishingly frank and intelligent discussion of the subjects propounded, and in these last two volumes Mr. Beadle has brought together abstracts of the best answers to each question and has extended and unified the whole by critical discussion and comments of his own.

In spite of the serious handicap which the method of treatment has imposed on the author, these volumes will well repay careful study by all who have to do with the art of paper-making. A. D. LITTLE.

The Principles of Copper Smelting. By EDWARD DYER PETERS, Professor of Metallurgy, Harvard University. Hill Publishing Co., New York and London. Price, \$5.00.

Whoever will carefully read through every page of this book of 569 pages will undoubtedly have become acquainted with the principles upon which the modern practice of copper smelting is based. He would hardly, however, agree with the statement that it represents a boiling down of principles; rather would he be likely to consider that the explanation of these principles could have been made considerably more concise. This extended style is no doubt admirable in a lecture room, but makes continuous reading rather wearisome. It is, nevertheless, a most instructive book. The facts are clearly stated, and the reasons gone into thoroughly, examples and problems being continually given to elucidate the various points, and the influence of business considerations is kept constantly in view. The work is divided into fifteen chapters, embracing: Methods and Collectors; First Principles of Smelting; Principles of Roasting; Chemistry of Smelting; Practice of Roasting; Blast Furnace Smelting; Reverberatory Smelting; Pyrite Smelting; Practical Study of Slags; Matte; Production of Metallic Copper from Matte; Refining of Copper; Principles of Furnace Building; Applica-