per cent. of zinc. No method of testing is given; that is, no quantitative method of determining the per cent. of zinc is given. There are many such instances.

We know why the present pharmacopoeia fails in many cases to give these most important methods. At the time the book was published it was not a national legal standard, but became so subsequently, with the passage of the Food and Drugs Act. The need of methods was formerly not so great, and when a relatively simple test such as a volumetric or an easy gravimetric method could not be found, none at all was put into the text. The idea was, also to employ tests requiring the minimum of apparatus and general equipment, on the assumption, it is said, that retail druggists are the principal users of the tests.

So much for the *present* pharmacopoeia—the U. S. P. 8th revision. The book has already been printed and distributed, has been revised and corrected by supplementary circulars, and has nearly served out its time. But what of the next revision, the ninth, the convention for which meets in May next? How shall the question of purity requirements in terms of per cent., and methods of assaying be handled? Are we again to fill the pages with tests for chlorides, etc., and omit the really important and more difficult methods of assay? Are we again to confine ourselves to easy volumetric or gravimetric determinations when there are better and more suitable, though less easy ones, at hand? Are we pharmaceutical chemists willing to be denied the privilege of making use of the latest advances in analytical chemistry? Must we forego the pleasure of using the modern oxidizers such as sodium peroxide and the persulphates? Do we not know the remarkable advances that have been made in electro-analysis? Can we close our eyes for another ten years and bring out a new pharmacopoeia, ignoring all these advantages at our service, and all for the sake of keeping things simple? It does not seem possible to me. In our next pharmacopoeia we need modern methods of analysis. Or at least we should accord ourselves the privilege of using such methods.

To incorporate full quantitative methods of determining gold, mercury, zinc, antimony, and all the others, would enlarge the book very materially, and this is possibly objectionable. For the pharmacopoeia to refer the chemist to some standard *text-book* for methods of analysis would hardly be justifiable or desirable. I suggest therefore that the Committee of Revision of the Pharmacopoeia follow the example of the Department of Agriculture in Washington. As all know this department accepts or adopts the methods of analysis of the Association of Official Agricultural Chemists. Let the Committee of Revision adopt as their methods of analysis the methods of the American Chemical Society. And it will be an excellent beginning for this the new Division of Pharmaceutical Chemistry to investigate, and if possible agree upon some or a few of the methods of analysis now entirely omitted from and so much needed in the United States Pharmacopoeia. Possibly the methods thus worked out and approved by the American Chemical Society could be made sufficiently attractive to tempt the Committee of Revision to use or refer to them.

I therefore offer the suggestion that this Division of Pharmaceutical Chemistry take up the investigation of methods of analysis of pharmacopoeial articles with the idea of selecting what may be termed standard methods of analysis.

BOOK REVIEWS AND NOTICES.

Metallography. By DR. W. GUERTLER. Volume I. Constitution. Part 1. Berlin: Gebrüder Borntraeger. Price, 4 Mk, 20 Pf.

This is the first part of what promises to be a comprehensive treatise on the subject of metallography. Necessarily future parts must decide as to the merits of the work as a whole, but the first part gives great promise. The chapters are: I, Introduction; II, Constitution in Relation to Temperature; III, Solid Solutions and Compounds; IV, Condition Diagrams; First Group. Paper, typography, illustrations and general appearance are the best.

OFFICIAL REGULATIONS AND RULINGS.

(T. D. 1524.) *Denatured Alcohol.*—Use of specially denatured alcohol prohibited in the manufacture of butyric and formic ether.

TREASURY DEPARTMENT,
OFFICE OF COMMISSIONER OF INTERNAL REVENUE,
WASHINGTON, D. C., August 5, 1909.

GENTLEMEN: Your letter of the 31st ultimo, addressed to the chief chemist, and making application for the authorization of formula No. 1 for use in the manufacture of butyric and formic ether, has been received, and the matter given careful consideration by this office.

The fact is recognized that the substances in question fulfil the conditions imposed by the amendatory act in being "definite chemical substances" produced from alcohol by molecular decomposition, and their manufacture from denatured alcohol could lawfully be permitted under Section 40, Part VI of Regulations No. 30.

In view of the fact, however, that these ethers are used mainly as flavoring material in beverages, and the further fact, which is apparent from your communication, that they must necessarily carry a considerable percentage of undecomposed alcohol, I do not consider it to be for the best interests of the Government, or in accord with the spirit and intent of the denatured alcohol law, to permit tax-free alcohol to be used in their manufacture. I must, therefore, deny your application.

Respectfully,

ROBT. WILLIAMS, JR.,
Acting Commissioner.

Messrs. ————.

Judgment Nos. 92–99, Food and Drugs Acts.

92. Misbranding of canned peaches, plums, pears and apricots (underweight).

93. Misbranding of canned beans (underweight).

94. Misbranding of water (artificially lithiated water labeled as a natural product).

95. Misbranding of canned corn (underweight).

96. Misbranding of a cereal (as to quality and digestive properties).

97. Misbranding of canned tomatoes (underweight).

98. Adulteration and misbranding of syrup (as to presence of maple sugar).

99. Misbranding of syrup (as to place of manufacture and amount of maple sugar present).