

## OIL &amp; FAT INDUSTRIES

Sir:

In the November, 1927, issue of OIL & FAT INDUSTRIES, there is an article by Miss Rosalind U. Norris on The Standardization of Oil for Mayonnaise, containing "Standards and Specifications for a Refined, Deodorized Mayonnaise Oil," Article 5 of which "Standards and Specifications" is practically a winter test which specifies a temperature of 32°F. for cottonseed oil, 22°-27°F. for corn oil, and 21°-25°F. for sesame oil.

I would greatly appreciate information through the columns of OIL & FAT INDUSTRIES or otherwise, as to the effect a winter test has on the making of mayonnaise, and incidentally why the temperatures specified for corn oil and sesame oil are so much lower than that given for cottonseed oil.

This is the only point in the spe-

cifications not clear, and I heartily agree with all the other articles.

Very truly yours,

G. A. MOORE.

The Editor

OIL & FAT INDUSTRIES

Sir:

The reason that corn and sesame oils may be substituted for cottonseed oil in the production of mayonnaise during the winter months, is that the naturally lower "freezing" points of these oils lowers the freezing point of the finished product.

Our experience in the past has proved to us the necessity of specifying these "freezing points," as some refined oils have occasionally shown the presence of a flocculent precipitate at these temperatures.

Very truly yours,

ROSALIND U. NORRIS.

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## Book Reviews

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STANDARDS YEARBOOK 1927 FIRST ISSUE. Prepared by the National Bureau of Standards of The Department of Commerce. Pp. 398 6 by 9 inches, 39 illustrations. Washington, Government Printing Office.

The Standard Yearbook represents an effort to present an adequate picture of the diversification and ramification of the standardization movement which has spread throughout the world with astonishing vitality during the 25 years that has elapsed since the establishment of the National Bureau of Standards. It contains outlines of the activities and accomplishments of not only this bureau and other

agencies of the Federal Government and the States and municipalities, but also of the American societies and associations of which standardization is a major or very important activity. Descriptions and illustrations are presented of all the fundamental national standards of the United States. Moreover, outlines are given of the various foreign national and the several international standardizing agencies.

In a general review of the standardization movement in America attention is directed to the remarkable growth in the activities of the trade associations, the development of "mass-production," method of factory production, and to the vital

interest now being shown in standardization by industrial executives. Noteworthy in the trend of the development of standards is the process based on the elimination of excess varieties and sizes which is supplementary to the slower process involving technical consideration. A development of no little importance is the substitution of performance, or service, requirements for composition specifications in certain lines of manufacture.

To manufacturers, industrial experts, engineers, and purchasing agents, both governmental and general; to all officers and agencies concerned with standardization, the Standards Yearbook will be most valuable. It will inform the manufacturer of the current standardization movements affecting his industry. It will inform purchasing agents of new standard specifications and will inform the scientist engaged in research as to current research projects which may lead to standardization. To the average reader it will prove a mine of information on the present status and trend of standardization in all fields of industry, commerce, science, and Government, with references to sources of further information.

This valuable publication may be obtained by sending \$1.00 cash or money order to the Superintendent of Documents, Government Printing Office, Washington, D. C.

CHEMISTRY OF THE OIL INDUSTRIES. By J. E. SOUTHCOMBE. 2nd Edition Revised and Enlarged. Pp. 224. New York: D. Van Nostrand Co.

Like many other books of this character, it is more or less of a compilation, and appears to contain a comparatively small amount of original material.

The following criticism from

"The Analyst" of May, 1927, seems to be well merited:

The scope of the book, which deals with both the mineral oil and the fatty oil industries, remains the same as in the previous edition; the general arrangement of the subject matter and a large proportion of the text have not been altered. Whilst most of the chapters in the new edition contain but little new matter, that dealing with mineral oils has been largely rewritten. A chapter dealing with the "Theory of the Colloidal State" (an addition suggested in the previous review in this journal) has been added, together with a somewhat incomplete bibliography.

The new edition contains many statements and opinions which, while sound in 1913, have now become out of date and have not been removed or replaced. Many of the developments of the last thirteen years either are not mentioned or are dealt with, inadequately. Thus, the author has devoted to the catalytic hydrogenation of oils two short passages occupying about ten lines in all, and, of these, one is misleading. He makes no mention of the chemistry of the process or of the very extensive use of hydrogenated oils in lard substitutes and margarine, although sections on the composition of such substitutes are included.

The chapter on "Analytical Methods" has been reprinted, word for word, from the first edition; as was remarked in the review of that edition, "the methods savour more of the lecture room than of the technical laboratory"; the value of this chapter would have been greatly enhanced by revision. Of the methods included, one, described as the Reichert-Meissl process for the determination of soluble volatile fatty acids, is actually the Reichert-

Wollny process; and a second, attributed by the author to Holde, for the detection of mineral oils in vegetable oils, is a test based by the author on the surprising and erroneous statement that "mineral oils are insoluble in 96 per cent alcohol, but all fats dissolve fairly readily." Holde's test, which is not described, is based on the principle that when vegetable oils are boiled with alcoholic potash, an alcohol-soluble soap is formed, whereas mineral oils remain unchanged and insoluble under the same treatment.

The book contains an example of the manner in which misleading statements are copied from one book to another. A table on p. 77 has been abstracted from a similar table in Ubbelohde. The figures for the proportions of fat in copra and in palm fruit are reversed in Ubbelohde and remain reversed in both editions of Southcombe.

DAVID WESSON.

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THE ANALYSIS OF PIGMENTS, PAINTS AND VARNISHES. By J. J. FOX and T. H. BOWLES. Pp. 179. New York: D. Van Nostrand Co.

This book is well written and is a fairly complete compendium of the analysis of the principal dry pigments used in the manufacture of paints.

The chapter on The Analysis of Mixed Paints is not quite as complete as it might be, although for England where dry colors and paste oil colors are more largely sold, the book is of undoubted value.

In America where millions of gallons of flat wall paints are used every year, there are many types which contain appreciable quantities of water, most of them contain flattening materials of the stearate type, and others are made from cold cut Pale East India Gums. It is essential to know how to analyze these materials, although perhaps not as essential in Europe as it is in America. It is regrettable that the book is incomplete.

All in all, this is quite a useful book, particularly for beginners.

MAXIMILIAN TOCH.