

The American Oil Chemists' Society

Notes and Correspondence

A. O. C. S. Fall Meeting

THE Fall meeting of the American Oil Chemists' Society will be held in the Board of Managers' rooms of the New York Produce Exchange on October 25 and 26. W. L. Beatty, President of the Produce Exchange, will welcome the Society. The Governing Board of the Society determined to hold this meeting after considering the excellent attendance of the first one held in New York last year, and selected New York for the gathering place due to the city's central location for oil chemists. The Board fully expects this year's fall meeting to be as successful as the previous one, and asks each member of the Society to reserve these days in order to assure himself the opportunity to benefit from the combined ideas and experience of the majority of the chemists connected with the Society.

Standardization of Lovibond Glasses

(Investigation by the Bureau of Standards in Cooperation with the American Oil Chemists' Society.)

FINAL REPORT

THE cooperative arrangement whereby the A.O.C.S. supported a Research Associate at the Bureau was terminated July 2nd, when Miss Walker was transferred from status of Research Associate to that of a regular Bureau employee. However, calibration of red glasses already on hand with Mr. Putland was continued and completed during July. Final report on the value of these glasses was made to Mr. Putland and all remaining glasses were returned July 31st. The following table gives a

summary of glasses calibrated under the co-operative arrangement:

Red Glasses

Reported in OIL AND FAT INDUSTRIES, Jan., 1928. 129

Reported to Mr. Putland. 409

Yellow Glasses

Final report now about ready 65

(Abstract included in report

for June)

Total 603

Paper by Judd on "Effect of Temperature Change on the Color of Red and Yellow Lovibond Glasses" is now in course of publication in the Bureau of Standards' Journal of Research.

Report on "Calibration of Sixty-five 35-Yellow Lovibond Glasses" is being prepared for publication in the Bureau of Standards' Journal of Research.

Considerable progress has been made on reducing the data taken at New Orleans in May on tests of color sense and sensibility to differences in Lovibond red.

IRWIN G. PRIEST

Correction

In the August issue of OIL AND FAT INDUSTRIES, the statement was made, in the article entitled "1928-29 A. O. C. S. Committees Announced," to the effect that the Committee on Analysis of Commercial Oils and Fats and the Basic Research Committee had been abolished because of completion of work. These committees, however, are still operating, but under the auspices of the American Chemical Society and the Interstate Cottonseed Crushers' Association, respectively.

New Forbes Laboratory

L. B. Forbes Laboratories, Inc., has opened a new laboratory at Little Rock, Ark., under the direction of Edgar H. Tenent. Mr. Tenent resigned his position with the International Sugar Feed Company at Memphis, with whom he has been connected for the past five years, in order to assume the management of the new Forbes laboratory.

Cotton Distribution

A preliminary report by the Department of Commerce on the distribution of cotton during the year ending July 31, 1928, shows that 16,793,300 bales were available during the year. Exports amounted to 7,530,879 bales, domestic consumption to 6,832,689 bales, and stocks on hand to 2,531,582 bales. During the year 20,000 bales of ginned cotton were destroyed. Aggregate distribution amounted to 16,915,150 bales, or 121,850 bales in excess of supply.

Referee Applicants

Mr. H. M. Shilstone has made application for Referee Chemist certification, according to word received from Mr. J. C. P. Helm, secretary-treasurer of the American Oil Chemists' Society. (First publication.)

Abstracts

DETECTION OF HARDENED FAT IN BEEF FAT FROM THE IODINE VALUE OF THE SOLID FATTY ACIDS SEPARATED BY TWITCHELL'S METHOD. S. C. L. GERRITZEN and M. KAUFFMAN. (*Chem. Weekblad*, 24, 554-556.)—Twitchell's method (*Analyst*, 46, 466) has been found suitable for the separation of solid fatty acids from hardened oils. The iodine values of the acids thus obtained from beef fat are usually less than 5, and a value greater than 6 indicates the presence of a foreign substance. For mutton fat the values vary from 1.7 to 12.5 and this probably indicates the in-

complete separation of the fatty acids, or the presence of solids, unsaturated fatty acids. The percentage of isooleic acid may be calculated from the expression— $95.S.(I-5)/9,000$, where S is the amount of sample taken, and I the iodine value of the solid, saturated fatty acids. For butter-fat, lard and hardened whale oil the values vary from 4.6 to 5.3, 1.1 to 3.1, and 6.2 to 27.3, respectively. By the addition of known amounts of hardened whale oil to beef fat, the proportion present in a given sample may be determined from a comparison of the iodine values of the separated fatty acids (*cf. Analyst*, 49, 460).

PHYTOSTERYL ACETATE TEST AND THE PHYTOSTEROL OF SUNFLOWER SEED OIL. J. ALLAN and C. W. MOORE. (*J. Soc. Chem. Ind.*, 46, 433-434T.)—The value of the phytosteryl acetate test, when applied to the detection of animal fats in fats of vegetable origin, has been diminished by the discovery of phytosterols which form acetyl derivatives having melting points ranging from 115° to 250° C., although values below 125° C. are infrequent. It is, however, now found that a phytosterol, $C_{28}H_{48}OH$, occurring in normal amount in sunflower seed oil and constituting the bulk of the phytosterols present, gives an acetyl compound melting at 119-119.5° C. (corr.). Mixtures of this acetyl derivative with those of certain other phytosterols melt at temperatures ranging from 121° to 123.5° C. (corr.), whilst a mixture with an approximately equal weight of cholesterol acetate shows abnormal behavior and melts at 121-122° C. (corr.). The difficulty which thus arises in using the phytosteryl acetate test for examining sunflower seed oil or its mixtures for animal fats, is also encountered with hydrogenated sunflower seed oil. The sterols obtained from several other important edible vegetable oils examined yield acetyl derivatives with melting points lying between 122° and 131° C.