TABLE I
Determination of Oil

TABLE II
Determination of Nitrogen

Analyst No.	Points Off	Per Cent Efficiency
56	3	99.984
41	10	99.947
51	11	99.941
25	23	99.877
19	24	99.872
44, 45, 53	26	99.861
7	32	99.829
70	33	99.824
1	38	99.797
50	41	99.781
24	42	99.776
60	47	99.749
43	49	99.740
10	58	99.692
26	60	99,681
63	62	99.669
68	71	99,622
17	77	99.590
6	90	99.521
62	91	99.516
42	101	99,462
15, 55	105	99.441
52	108	99.425
59	111	99.409
72	141	99,249
23, 67	142	99.245
69	150	99.202
47	162	99.128
54	170	99.095
21	265	98.590
27	492	97.381

TABLE III
Determination of Oil and Nitrogen

Analyst No.	Per Cent Efficiency
41	99.974
51	99.969
56	99.948
25	99.915
44	99.884
7	99.878
50	99.869
24	99,868
19	99.858
45	99.857
43	99.836
26	99.819
1	99.811
60	99.799
70	99.787
58	99.764
63	99.759
10	99.756
42	99.697
17	99.687
62	99.685
55	99.635
52	99.619
6 15	99.579
15	99.566
67	99.549
47	99.491
59	99. 477
<u>6</u> 8, 69	99.434
72	99,279
54	99,212
21	99.097
23	99.094
27	98.619

Analyst No.	Points Off	Per Cent Efficiency
41	0	100,000
51	$egin{array}{c} 0 \ 1 \ 8 \end{array}$	99,996
24	8	99,960
12, 26, 50	ğ	99.956
25	10	99.952
42, 43	14	99.931
7,	15	99,927
56	18	99.912
44	19	99.907
35	27	99.868
27	29	99.857
45, 47, 62, 67	30	99.853
63	31	99.849
19	32	99.843
60	33	99.838
55	35	99.828
1	36	99.824
10	37	99,819
52	38	99.813
17	44	99.784
70	51	99.750
15	63	99.691
53, 69	68	99.666
6	74	99.637
21	81	99.603
59	93	99.545
28	103	99.496
37	106	99.481
54	137	99.329
72	141	99.309
68	154	99.246
61	172	99.158
33	175	99.143
23	216	98.942
76	239	98.829

TABLE IV

Analyst No.	Points Off	Per Cent Efficiency
/	Determination of Oil	
13	27	99.856
16	34	99.820
38	48	99.744
5	50	99.733
18	51	99,729
40	142	99.245
74	$\overline{144}$	99.233
	Determination of Nitrog	en
13	7	99,966
38	22	99.893
5	24	99.882
40	48	99.765
36	52	99.746
48	53	99.740
16	62	99.696
18	66	99.677
74	111	99.456
Dete	ermination of Oil and N	itrogen
13		99,911
38		99.819
5		99.808
16		99.758
18		99.703
40		99.505
74		99.345

Report of the Journal Committee 1942-1943

Your official journal Oil & Soap has been published at regular monthly intervals during the current year. There have been no changes of serious consequence in the format, style, size or other general attributes of the journal.

The Editorial Advisory Board has continued critical examination of all manuscripts and we feel that this practice has resulted in a noticeable raising of the standard of papers appearing in our Journal.

The amount of material available for publication has been sufficient to maintain the journal at about

a 30-page average level throughout the year. This material has come for the most part from papers presented at the two meetings of the Society. During the current year, however, we have been fortunate in securing a considerable number of unsolicited contributions. The number of such contributions this year has been the largest in the memory of your Journal Committee. This situation should, however, not cause the Society to rest on its laurels, since we are sure that the fat, oil, or soap chemist requires a larger volume of literature to meet his needs. Our journal is still

small and our finances are developing sufficiently favorably to warrant consideration of some expansion in size if the material were available.

In November of 1941, we set up an Oil & Soap office and made independent arrangements for printing our Journal. An associate editor was employed to handle the editorial work and business details. Our report of last year covered about half a year's operation under this new arrangement and half a year's operation under the prior arrangement in which Gillette Publishing Co. had handled all business details.

The present report covers for the first time a full year's operation of the Journal under our own management. John Haney, the associate editor employed when we took over management, was called into the service of his country during the year (Sept. 1942). His place has been taken by Mrs. Isabel Cumming Seimer who has now been in Oil & Soap work about seven months.

Financial results show, we believe, that the action taken by the Society in assuming management of the Journal was justified. During the first full fiscal year we have been able to record a net profit somewhat in excess of \$2,000, after having assumed considerable salary and office expense not incurred under the old publishing arrangement. It should be noted, however, that our office rent has been low, through the courtesy of Mr. J. P. Harris, a member of this committee, in

sharing his office space at 35 E. Wacker Drive, Chicago, with us at a very nominal figure. It is noteworthy also that this gain includes the customary amounts allotted to the journal from members' dues. The gain, therefore, is not wholly the result of income coming from outside the Society.

Advertising accounts have been expanded during the year, several new accounts being added. This aspect of the Journal's work will no doubt be discussed by Dr. Kishlar in his report of the Advertising Committee. Further discussion of it is, therefore, omitted from this report.

We have recently received information indicating that a substantial volume of editorial material will be available during the next six months. It appears likely that it will be possible to make at least a temporary expansion of the Journal's size. We believe that the financial results outlined in this report justify such expansion and it is the plan of the Journal Committee to make each issue in the immediate future 36 pages in size. The spring convention issue (May) was expanded to 40 pages because of considerable extra advertising scheduled for that issue.

H. L. Roschen, Chairman	T. C. LAW
E. R. Barrow	L. M. TOLMAN
N. C. HAMNER	H. P. TREVITHICK
J P HARRIS	J J VOLLEPTSEN

Abstracts

Oils and Fats

Edited by
M. M. PISKUR and SARAH HICKS

THE EFFECT OF LECITHIN AS A SHORTENING EXTENDING AGENT IN SUGAR COOKIE MIXTURES. Charles A. Glabau. *Bakers Wkly.* 118, No. 9, 47-8 (1943).

Bakers' cake—what's ahead of it in 1943? The effect of lecithin as a shortening extending agent in oatmeal cookie mixtures. Charles A. Glabau. Bakers Wkby. 118, No. 10, 43-4 (1943).

CURRENT METHODS OF MEASURING FOAM. Sydney Ross. Ind. Eng. Chem. Anal. Ed. 15, 329-34 (1943).

Colored chromatograms with higher fatty acids. Morris M. Graff and Evald L. Skau. Ind. Eng. Chem. Anal. Ed. 15, 340-1 (1943). A method has been described for separating mixtures of higher fatty acids by Tswett adsorption analysis, whereby separation into zones was observed on a column of heavy magnesium oxide impregnated with a suitable indicator. The fatty acids were recovered by dissolving the magnesium oxide in particular sections of the column in acid and extracting with ether. By this procedure it was possible to demonstrate a separation of an unsaturated fatty acid from a saturated fatty acid of the same number of carbon atoms and of two saturated fatty acids differing in chain length by four carbon atoms.

DETERMINATION OF THE SAPONIFICATION NUMBER OF FATS AND OILS. William Rieman, III. Ind. Eng. Chem. Anal. Ed. 15, 325-6 (1943). A "Double-indicator method" has been developed for determining the saponification number of fats and oils. For almost all oils this method gives excellent checks with standard method and requires less time, reagents, and apparatus. Titration is potentiometrically.

a-Tocopherol, a natural antioxidant in a fish liver oil. Charles D. Robeson and James G. Baxter. J. Am. Chem. Soc. 65, 940-3 (1943). A natural antioxidant has been isolated from Mangona shark liver oil and identified as natural a-tocopherol. Evidence was obtained indicating that a-tocopherol is the major antioxidant present in this fish liver oil. This finding is of interest since it indicates that the tocopherols may act as natural antioxidants in fish liver oils as well as in vegetable oils.

Storing lard in an atmosphere containing carbon dioxide. N. S. Nakonechnyi. Miasn. Ind. U.S.S.R. 10, No. 11-12, 43-4 (1939). The presence of 20-23% $\rm CO_2$ in the atm. enables lard to be stored for considerably longer periods at 18°, 6°, 2°, and —2°. When the temp. is of the order of —8°, the efficiency of preservation in a $\rm CO_2$ -contg. atm. is appreciably less. The organoleptic characteristics of lard are not affected by storage in $\rm CO_2$. (Chem. Abs.)

Relation of degree of saturation of milk fat to development of oxidized flavor. W. J. Corbett and P. H. Tracy. J. Dairy Science 26, 419-27 (1943). A marked variation in the I. no. of the milk fat produced by 6 individual cows fed a control ration of alfalfa hay, corn silage, and grain mixture was observed. Differences in the susceptibility of the milk to become oxidized were noted, yet there was very little correlation between the I no. of the fat and the tendency of the milk to develop an oxidized flavor. When the degree of saturation of the milk fat was varied by the addition of either corn oil or coconut oil to the ration the I. no. of the milk fat