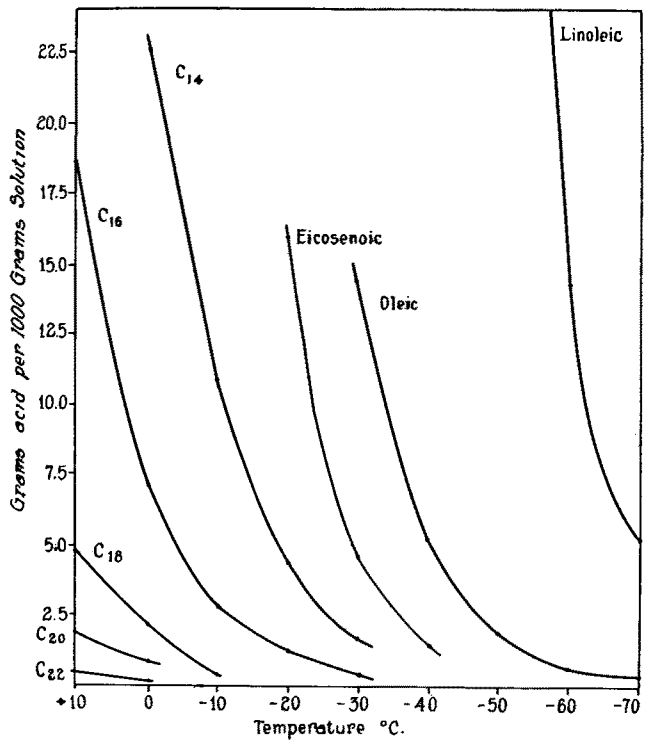

FIG. 4. Solubilities of fatty acids in acetone.

alcohol or ether methods. Again it should be emphasized, however, that in practice mutual solubilities may decrease the efficiency of the procedure.

A great deal of additional work should be done to extend the data presented above. The data, especially on lauric, erucic and linolenic acids, are needed in order that the curves of their solubilities may be extended. This is especially true of linolenic acid which has not yet been prepared pure by crystallization procedures. Maximum purity so far attained was 91 per cent by Guy in unpublished work from this laboratory (20). It would also be of especial interest to extend the series of monoethenoic acids to tetradecenoic and hexadecenoic acids and to study series of acids with one double bond to determine the effect of carbon series, double bond position and geometric isomerism on solubility. Furthermore, certain of the conjugated acids are high melting solids and their solubilities would be of great interest. Also, the data should be extended to include many more solvents. Unfortunately, in the current emergency it is not possible to continue these studies for the present.

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Summary

A considerable series of pure fatty acids has been prepared and their solubilities have been determined at temperatures down to —70° in acetone, methanol and Skellysolve B. Solubility ratios have also been determined for oleic to palmitic acid and linoleic to oleic acid in a number of additional solvents at certain temperatures.

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Report of the Olive Oil Committee

ON account of the fact that the olive oil trade has called for no particular problem for our investigation, the chairman up to a short time ago could find nothing worthwhile for the committee to consider.

However there has appeared in the Journal of the Association of Official Agricultural Chemists a method by Dr. J. Fitelson, who is a member of our committee, on "The Detection of Olive Oil in Edible Oil Mixtures." This method determines the iodine value of that portion of the unsaponifiable matter which is not adsorbed by aluminum oxide. Since olive oil is notable in that it contains a greater iodine value from the higher squalene content than any of the common edible vegetable oils, the test shows promise of value in detecting small quantities of olive oil in the many types of oil blends appearing on the market, which have been the cause of considerable controversy regarding the true content of olive oil ingredient.

M. F. LAURO, *Chairman.*