mercury by adding solution containing 0.7 to 1 gram potassium sulfide. Add a few particles of granulated zinc, make alkaline and distill ammonia through 2 to 3 ft. of condenser tube of $\frac{5}{16}$ to $\frac{3}{8}$ in. inside diam. into a $\frac{1}{2}$ normal solution of sulfuric acid which has previously been standardized by precipitation with barium chloride. Use methyl red as indicator and titrate excess acid with $\frac{1}{4}$ normal sodium hydroxide."

In submitting the above summary Mr. Butt suggested that it might be of interest to note how closely the average or cross section method which he devised from the replies was followed by the leaders in the ammonia series. Not all of the leaders replied to the questionnaire, but Table No. 5 gives a summary of replies from the ten highest. It is interesting to note that the details used by these ten collaborators are in the main very close to the average method used by all, and it is believed that Table No. 5 will prove interesting in connection with Table No. 2 and the summary to the questionnaires.


---

**DETERGENTS COMMITTEE REPORT FOR 1924-25**

**By Archibald Campbell**

The Detergents Committee of the American Oil Chemists' Society includes in its membership the members of the Soap and Soap Products Committee of the American Chemical Society, representatives of most of the large soap manufacturers, also of the Bureau of Standards, as well as several large soap consumers of the country. It is thus an interlocking committee organized with a view of correlating the work done by the Soap and Soap Products Committee on Methods of Sampling and Analysis with the work done by the Soap Committee of the Soap Section of the American Specialty Manufacturers' Association working in conjunction with the Federal Specifications Board on Soap Specifications. The Soap and Soap Products Committee is likewise an interlocking committee with the Glycerine and F. A. C. Committees of the American Chemical Society. By this interlocking system of committees it is hoped to avoid duplication of efforts and effect correlation of results.

As it was late in the season before the Detergents Committee was organized it confined its efforts this year to the following work:

1. Organization.
2. Discussion and criticism of the Standard Methods for the Sampling and Analysis of Commercial Soaps and Soap Products as adopted by the American Chemical Society.
3. Presentation of these Standard Methods to the Uniform Method
Committee for adoption as standard by the American Oil Chemists' Society.


5. Discussion of Pharmacopoeia Standard for "Sapo."


The organization and personnel of the Committee is as follows:

R. K. Brodie, Procter & Gamble Co., Ivorydale, Ohio.
Robert E. Divine, Armour Soap Works, Babbitt, N. J.
H. P. Vermilya, Jewel Tea Co., Inc., Chicago, Illinois.
E. T. Marceau, Gold Dust Corporation, Guttenberg, N. J.
Martin H. Ittner, Colgate & Co., Jersey City, N. J.
Walter S. Rapelje, Kirkman & Son, Brooklyn, N. Y.
P. W. Smither, Bureau of Standards, Washington, D. C.
L. F. Hoyt, Larkin Co., Inc., Buffalo, N. Y.
H. C. Bennett, Los Angeles Soap Co., Los Angeles, California.

The personnel of the committee is fairly complete and representative as regards soap manufacturers and federal bureaus, but should have additional members representing large consumers as well as the National Laundrymen's Association, Universities, Commercial Laboratories and State, County and City chemists.

The Methods of Sampling and Analysis seem to be fairly satisfactory for the commercial purpose for which they were intended.

The committee urges the adoption of the present specifications by State, County and City departments more generally than at present and drafting of additional specifications as demanded by trade conditions.

The Development and Standardization of Methods of Testing Detergents seemed to be the most important and pressing work of the committee as brought out by almost all the communications received by the Chairman from the members. Almost every member stressed the need of such a standard yet no one offered a constructive suggestion of how to proceed to determine such a standard. In view of the large number of variables, viz., temperature, hardness of water, fatty composition of soap, alkalinity of soap, alkaline builders or fillers in soap, mechanical appliances used, nature of soiling agent, concentration of solutions, nature and composition