of fabric, as well as the limited knowledge which we have of just what the real chemical and mechanical actions of soaps are; it would appear to the Chairman that the best that could be hoped for would be a comparison of the cleansing action of soaps operating under a given set of conditions rather than a standard that would apply to all conditions. It also appears rather doubtful whether such work could be carried on, by a committee, successfully but rather should be handled by some Government Bureau, or better still, if the soap manufacturers could be persuaded to establish an institute similar to those established by the National Canners and the American Meat Packers and have the problem of detergents taken up by the research department of such an American Soap Manufacturers' Institute and worked out with the coöperation of all the interested parties.

In conclusion, the Chairman wishes to thank the members of the committee for the hearty coöperation shown in perfecting the organization and suggesting fields of endeavor for our committee. He feels that the committee by extending its organization can be of inestimable value in perfecting and extending the use of the present standard methods and specifications, as well as adopting new methods and specifications as occasion demands. He feels that the committee should continue to coöperate closely with the Bureau of Standards as well as all other Government Bureaus to accomplish these results. He feels that the committee should continue to attack the problem of detergents and endeavor to promote research work on this important subject in every way possible, both in private laboratories and by Federal Bureaus and if possible in a research laboratory supported by a Soap Manufacturers' Association.

GLOBE SOAP CO., CINCINNATI, OHIO

FULLER'S EARTH AND BLEACH TEST COMMITTEE REPORT FOR 1924-25

BY A. W. PUTLAND

In planning our work for this year your Committee studied the reports of previous committees and found that a few recommendations made to our membership had not been completed to a definite end.

We endeavored to complete the recommendation of the former committee on the use of more than 6% earth in the bleach test and the filtering of the oil before bleaching. Along with this work we endeavored to find the cause of bleached oil reverting in color, as was suggested to us by the Planning Committee. Since none of the oil bleached with standard earth reverted in color and on account of our time being limited this suggestion was not carried to a successful end.

Editor's Note.—Accompanying this report as distributed in mimeograph form at the convention were a large number of results which the

Committee requested be studied and some action taken on the use of more than 6% earth in the bleach test and the filtering of the oil before bleaching. These tables were too long to be printed in this the last number of our journal.

PORTSMOUTH COTTON OIL CO.,
PORTSMOUTH, VIRGINIA

REFINING TEST COMMITTEE REPORT FOR 1924-25

BY C. B. CLUFF

A consideration of the situation regarding refining tests showed that little improvement has been made for many years. Enormous differences are still commonly reported, by different chemists, on duplicate samples, to the great annoyance of buyers of crude oil. It appeared necessary, as was indicated by the chairman of a previous committee, to either find such modifications in our method as would give reasonably concordant results, or discard it altogether and find some other way of evaluating crude oil. It was, therefore, determined to make an intensive study of details of the present method, limiting the tests to a very few members who have had wide refining experience, in the endeavor to run down and eliminate possible causes of discrepancies.

A list was first prepared, showing no less than twenty-three points of manipulation which could account for differences in the results obtained by different chemists. Certain modifications of the present rule were then written up in the endeavor to limit, or eliminate altogether, any chances for the use of personal discretion in making the refinings. Each member of the committee was asked to test three samples by adhering strictly to these specifications without any modification whatever.

The procedure specified on the three samples varied from the usual rule principally in four particulars, as follows:

1. The exact amount of NaOH to be used was specified and determined by analysis of the lye, and not by a hydrometer. The exact Baumé of the lye was considered relatively unimportant. A limit was placed on Na_2CO_3 at 5% of the NaOH.
2. The rates of heating and cooling during the refining were standardized by using two separate water baths and transferring the sample from the cool bath directly to the hot bath. This served to definitely fix the rate of heating and time of heating. The same applies to the subsequent cooling of the refining, by transferring directly from the hot to the cold bath.
3. Only two different speeds were permitted.
4. Soap stock in all cases was remelted and recooled under standardized condition.