

In conclusion, it is recommended that collaborative work be done on (1) the influence of moisture on the yield of oil extracted, (2) the fineness of grinding which is nec-

essary to obtain complete extraction without regrinding, and (3) the nature of the constituents removed with the oil when extractions are carried out with soybeans

having a high moisture content.

T. L. Rettger  
S. O. Sorenson  
M. M. Durkee  
R. T. Milner, Chairman

## SAMPLING COMMITTEE REPORT

**T**HE Sampling Committee presents the following report covering the work done in the past year. While the committee has been very busy during the year, no work has been finished to the point where we can make definite recommendations, and this will be definitely a progress report only.

The Sampling Committee has been organized with the following members: Messrs. Victor Serbell, Procter Thomson, A. D. Rich, G. A. Crapple, V. C. Mehlenbacher, H. H. Mueller, P. W. Tompkins, and H. P. Trevithick, Chairman.

Most of the New York members had a meeting at Mr. Serbell's office, September 21, 1938, and discussed sampling rules in general, as applied to fats and oils only. We did not consider cottonseed, meal, nor cake, although these materials may be taken up later.

There has been considerable discussion regarding soap stock sampling, and the committee has definitely voted to recommend writing two sets of rules, by divorcing raw soap stock and acidulated soap stock.

Acidulated soap stock offers no particular difficulties, and can be handled both before and after loading, by any of the methods which are satisfactory for any fat.

Raw soap stock, however, is difficult to melt, it coagulates into

lumps, is liable to ferment, etc., all of which renders it practically impossible to sample satisfactorily, after the material has been in the container, whether drum or tank car, any length of time. The committee would probably recommend that the only satisfactory time for sampling soap stock is when it is being loaded.

Our methods for soap stock sampling are very brief, but provide for sampling by the "dip" method and by the "bleeder" method. The committee by correspondence definitely decided to modify both of these methods somewhat, and hoped to have a definite report for this meeting. However, it later developed that the accuracy of "bleeder" sampling was questioned. It was claimed that even after going through the pump, soap stock contains both very fine material, and also lumps of hard material. These lumps will plug the bleeder unless the opening is very large. Upon opening the valve to release the lumps, very thin material will flow through rapidly, and destroy the accuracy of the sample. This question is now being investigated by the committee, and if this criticism proves justified, we will probably recommend that the bleeder method be eliminated entirely.

There has also been discussion of the question of sampling tank

cars containing free water and/or sediment, and also of the use of the two inch tryer, since a two inch core of a tank car does not allow anything for the varying width of the tank car. The committee is investigating the accuracy of the two inch tryer sampler, and also a number of other samplers, comparing the results given with that obtained from the same tank car after unloading and mixing in scale tanks. The committee has further investigated a number of samplers for use with barrels or drums.

The committee has also obtained the methods of sampling used by the British Standards Institution, etc. It is very interesting to know that the British methods of sampling, developed without any cooperation between the two countries, are very similar to ours.

It may be that we can finish some of our work for submission at the Fall Meeting.

While this is a progress report only, the committee has done a considerable amount of work, and should be able to present a good report later.

The Chairman would like to express his appreciation of the active and interested cooperation of all the committee.

H. P. Trevithick, Chairman  
Sampling Committee, A.O.C.S.

## Report of the Referee Board

**F**OR the year 1938-9 the Referee Board granted 33 Referee Certificates. Five check samples of crude cottonseed oil were distributed and ten check samples of cottonseed were sponsored. Law and Company as usual prepared and distributed the seed samples. This year Mr. R. T. Doughtie of the Bureau of Agricultural Eco-

nomics tabulated the reports on each of the seed samples, thereby greatly lightening the burden of work of the Referee Board. There were as many voluntary collaborators as referee chemists receiving each series of samples. The board has no recommendations to offer and no report to make beyond giving this account of its activities

and expressing its appreciation of the cooperation of everyone concerned.

C. H. Cox  
N. C. Hamner  
J. P. Harris  
J. J. Vollertsen  
A. S. Richardson, Chairman.