temperature up to the beforementioned limit does not injure the refining, provided the sample is not mixed vigorously during this operation. Mixing during heating is unnecessary and undesirable, except to the extent that we keep the mass moving just sufficiently to hold a uniform temperature throughout the mass while heating. A speed of 70 RPM with the 1" paddle has been found sufficient. Additional agitation results only in breaking up the particles of foots or preventing them from properly coalescing so as to settle well.

What we are really trying to do at this stage of the refining operation is to separate two constituents of the mixture, and not to mix them.

Practical Application

This may be considered from the standpoints of both laboratory and factory operation.

For laboratory work, the principles described have been embodied in a revision of the official refining method recommended for adoption by the Refining Committee. It will be necessary to obtain new paddles, and to modify existing refining machines to meet the requirements of two speeds with positive drive, and quick heating. Then it will be necessary for chemists to religiously follow instructions to the letter to obtain results equal to those obtained by others.

In applying these principles to factory work, it is a difficult mechanical problem to obtain the same thoroughness of mixing in a given time on such a large scale, or to heat a large mass of oil to a high temperature as quickly as it can be done on a laboratory sample. Hence, while the same principles should apply, it will probably never be possible to get quite as low losses in a large kettle as in the laboratory.

Report of the Chevreul Prize Committee

By DAVID WESSON

THE Chevreul Prizes are being offered for the three best original articles published in OIL & FAT INDUSTRIES during the season 1926 and 1927.

The judges of the article will be selected from members of the American Chemical Society and the American Institute of Chemical Engineers.

The first prize will be $150.00; the second prize $100.00, and the third prize $50.00.

The Contest closes with the July number of the Journal.

The announcement of the winners will be made at the earliest possible moment.

DAVID WESSON, *Chairman.*