

Edible and Soap Oil Requirements Mutually Supplementary

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UNLESS I am greatly mistaken most of our members are primarily interested, either directly or indirectly, in at least some phase of the production of edible oils.

A consideration of the scope of an "oil chemist's" work discloses many interesting relationships. He may be concerned in the yield of oil from a given source and its quality. He is apt to be concerned with refining methods and refining losses: With color, odor and taste and methods of improving these. If he is interested in the economical side of the question as well as the scientific, as he is almost sure to be, he will inquire into the cost of seeds, and he will give heed also to other oil seeds than those he is using. He can not entirely neglect fats from all the various sources, or inedible grades or low grade by-products and the market prices of these. The fact is he is concerned also with soap and glycerine and soap fats and oils that he does not handle.

There was a time when large quantities of cotton seed oil found their way with great regularity into the soap pan. Greater care in refining and education of the public have increased the demand for this oil for edible purposes until its cost is usually well above the cost of fats and oils regularly used for soap-making.

Refining losses send "foots" to soap pans. Foots are made into low grade soap direct by complete saponification and "washing," or into soap powder by mixing with soda ash after saponification, this latter product probably forming their chief outlet. A certain quality of foots is subjected to some form of acid saponification yielding dark colored fatty acids which are then subjected to steam distillation. The fatty acids thus obtained yield a better colored soap than can be made by direct alkaline saponification of foots. There is some loss in this process, however, part of the acids going into a tarry residue and some going into gases.

The edible oil trade and the soap trade are sometimes looked upon as competing for certain oils. In reality this is not the case for the edible oil trade can pay and does pay so much higher prices for oils that the soap trade is forced to look elsewhere or to utilize the poorer grades only, unless there is a temporary overproduction which seldom occurs.

Many of us can remember when coconut oil found little use outside of the soap pan. Now the demand for this oil for use in butter substitutes and other edible products forces the soap maker to pay higher prices or to use poorer grades.

The demand for edible oils is enormous and the need for soap fats and oils is beyond any one's

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realization. The demand for each is increasing and will continue to increase.

Oil consumers are often embarrassed by the acts of some legislators who would put prohibitive tariffs on the importation of fats and oils. I believe there has never been a sound basis for such excessive rates nor that there has been a need for it or even a general demand therefor from our producers. The origin of such moves is generally with the legislators themselves who think they see in it a bait to catch more votes.

I would like to see American produced oils so well refined and so superior in quality that there would be a large export demand for them. This is true to some ex-

tent now. We should have no prohibitive or even excessive fat or oil duties.

If crude foreign oils can be brought in free, or at low rates, American chemists and American industry can benefit by it. Our chemists and our refineries would then be doing some of the extra business that now goes to foreign countries, our American soap factories would have less trouble in getting their supplies and the public would benefit by cheaper soap.

The oil and fat industry is a multiphase one and no one can do more than touch on a few of these phases in a short talk. I have merely aimed to point out a few of the more important relations that exist in the industry.

Progress in Cotton Oil Milling

A Discussion of Advanced Practice in America's Largest Vegetable Oil Industry

BY ALAN PORTER LEE

JANUARY 1, 1928, will see the cottonseed oil mills of this country well advanced in the season's crush, and the Christmas season is a good time for the miller to take a "breathing spell," and review his situation.

Due to the comparatively short cotton crop this season, we have seen a repetition of that old evil, competitive bidding and overbidding for seed on the part of mill owners or managers, apparently based on the theory of keeping each mill running at any cost.

When the price of oil and meal fails to pay even the cash expended for seed, without considering the operating and interest charges of the mill, there is only one inevitable outcome, the suspension of those mills which lack the needed

financial reserve for the absorption of the season's losses.

These conditions are causing more and more mill managers to awaken to the fact that their only salvation lies in sane seed-buying and in the reduction of operating costs in the mill, as interest charges are fixed, and selling costs already so low that they may be considered at an irreducible minimum.

Wages cannot be expected to take any material decline and are more likely to go the other way as the continuing industrial development of the South increases the demand for labor.

The harassed cottonseed oil miller, then must turn to his manufacturing methods as the only source of reductions in his cost of doing business.