OIL & FAT INDUSTRIES

The Editor's Page

Depression? — or Inattention

INDUSTRY in general, and the fatty oil producing and manufacturing interests have not proven exceptions, has just passed through a most difficult year. There is hardly anyone in our country who will sigh at the passing of 1930 and most of us are looking forward to the dawn of a new year with the hope that business will take a decided turn for the better.

In reviewing the events and conditions of 1930, however, we wonder if the country's managers of businesses have not to a certain extent allowed themselves to be led into a timid state of mind by the cry of "Wolf-wolf." Have we not, all of us, been inclined to take our economic lessons from the wrong teachers, the stock markets, for example, rather than from the progress of general trade around us?

According to the United States Census enumeration just completed, on April 1st, 1930 there were nearly 123,000,000 people in this country, and every one of those people is a potential purchaser and user of any necessary product the country produces, as well as a hopeful prospect for those products which fall into the luxury classification. These American people have succeeded in raising the average standards of living in this country to a place far above that of any other nation or people in the world's history and it is idle to think that these living standards will ever be abandoned or reduced in the United States or Canada.

All during the "Depression" of 1930, of which we read so much in the contemporary news, the roads have seemed just as crowded with automobiles, the railroads have not cancelled limited trains, the theatres and moving-picture houses have had capacity audiences, the radio broadcasters have continued their aerial advertising; in short, Life in America has continued about the same.

Those American manufacturers who have kept their eyes away from the Stock Market and who have labored earnestly to cultivate their own domestic markets with the people of the United States, have stayed in business and will stay in business, and will grow as the country grows.

It is, of course, in times like these that the pressure of competition is felt most strongly by those who, for lack of attention to scientific progress, have allowed themselves to fall into the category of marginal producers; whose processes and machinery will not permit them to produce their products of competitive quality or at competitive costs. They are inevitably lost in the dark forest of Depression, for lack of the lamps of Applied Research.

If we then, all of us, will go about our daily business in 1931, with renewed determination to advance and to progress by the sheer force of strict attention to business and neglect of disquieting rumors, we cannot fail to see a splendid revival of business, which will, we hope, be held within the bounds of reason for the very avoidance of repetition of a following "Depression."

Europe Crushers to "Cooperate"

THE European crushers of vegetable oils are not making sufficient profit and they plan to take steps to increase their margin if reports which were rendered before the convention of the International Association of Seed Crushers recently at Hamburg are to be taken at their face value. "Closer cooperation between the members with a view to the elimination of competition" is the way a report of the meeting stated the aims of the oil producers. Although it was also explained that the elimination of competition was chiefly planned in the purchase of seeds and other materials for crushing, there is every reason to believe that success there would mean an extension of the policy to cover the selling prices of oils.

No American crushers are members of the Association and none were represented at the meeting. At the same time, the activities of European producers have a direct bearing on the American markets. There is no doubt that the overproduction of vegetable oils in Europe and Asia, including also the overproduction of seeds, has been

a prominent factor in the low prices for oils and fats which have been ruling in the United States for the past year. The possible effects in the United States of any "elimination of competition" abroad are obvious. If the crushers of Europe are to increase their profits, it is apparent they will have to do it by paying less for raw materials or selling finished oils at higher prices, or both. If their talk of "cooperation" is not just so many empty words, and definite arrangements are made to control prices, American oil crushers and soap makers may view some significant developments in the course of the next year.

Borneo Tallow Analysis

The Borneo tallow examined (from trees of the genus *Shorea,* mainly *Stenoptera, Dipterocarpaceae*) had m.pt. 36-36.5°C., solidification pt. 28.8°C., saponification equivalent 290.7, iodine value 32.3, and contained 0.74 per cent. of unsaponifiable matter. The methods of analysis used were as for cocoa butter (Analyst, 1929, 54, 242), and the composition of the mixed fatty acids was: Myristic, 1.5; palmitic, 21.5; stearic, 39.0; and oleic acid, 38.0 per cent. Oxidation of the tallow with potassium permanganate in acetone solution showed the presence of 4.5 per cent. of fully saturated glycerides containing 6 per cent. of unsaponifiable matter, and the fatty acids consisted approximately of 57 per cent. of palmitic and 43 per cent. of stearic acid; as with cocoa butter, the palmitic acid appears to be relatively concentrated in the fully saturated glycerides in spite of the preponderance of stearic acid in the total fatty acids. The deduced component glyceride structure of the tallow showed that 95.5 per cent. of the fat consisted of mixed saturated-unsaturated glycerides, with saturated and unsaturated acids in the molecular ratio of 1.55:1. Mono-oleo-glycerides must form at least 78 per cent. of the fat, which cannot contain more than 17.5 per cent. of dioleoglycerides or more than 8.5 per cent, of triolein, and this was confirmed by experimental examination of the acidic products of oxidation of the tallow. A possible approximate composition of the tallow is: Palmito-stearins 4.5, mono-oleodisaturated glycerides (mainly oleopalmitostearin) 85; dioleomonosaturated glycerides 6.5, and triolein 4 per cent. Slightly more fully saturated glycerides and definitely more mono-oleo-glycerides are present than in cocoa butter, and there is also probably more oleodistearin. These slight differences account for the somewhat higher m.pt. and tendency to granulation shown by Borneo tallow, but the results bring out the similar features of glyceride structure which render the two fats specially suitable for confectionery purposes. *J. Soc. Chem. Ind.,* 1930, 49, 196—200T.

Shortening and Oil Prices

Prices of shortening and salad and cooking oils on Wednesday, Nov. 26, 1930, based on sales made by member companies of the Shortening and Oil Division of the National Cottonseed Products Association, were as follows:

Shortening

	Per lb.
North and Northeast:	
Carlots, 26,000 lbs.	@10¼
3,500 lbs. and up	@10½
Less than 3,500 lbs.	@11
Southeast:	
3,500 lbs.	@10
Less than 3,500 lbs.	@10½
Southwest:	
Carlots, 26,000 lbs.	@10¼
10,000 lbs. and up	@10¼
Less than 10,000 lbs.	@10¾

Salad Oil

North and Northeast:	
Carlots, 26,000 lbs.	@10
5 bbls. and up	@10¼
1 to 4 bbls.	@10¾
South:	
Carlots, 26,000 lbs.	@ 9¾
Less than carlots	@10

Cooking Oil—White

⅛c per lb. less than salad oil.

Cooking Oil—Yellow

¼c per lb. less than salad oil.

Herman Aspegren, Vice-President of Portsmouth Cotton Oil Refining Corporation, Portsmouth, Virginia, has accepted our invitation to become a member of the Editorial Advisory Board of *Oil and Fat Industries.* Mr. Aspegren has been a member of the American Oil Chemists' Society for many years and has been an active contributor to research and experimental work on the refining of oils, the development of shortening products, and the combatting of oxidation and deterioration in fats.