OIL & FAT INDUSTRIES

The Editor's Page

Business Standards

IN THIS issue we are privileged to publish in full the text of the Code of Ethics proposed for adoption by the National Association of Soybean Oil Manufacturers. In reading over the Code one cannot escape being impressed by a sense of pride that the business of producing oils has made rapid strides in recent years toward the goal of uniformity of uprightness and fair dealing. The soybean oil manufacturers are not alone in striving to place their business dealings upon such a plane of integrity that they will command the respect of all who have occasion to contact them.

The National Cottonseed Products Association in its present form represents the culmination of years of effort on the part of far-sighted leaders of the Interstate and Texas Crushers' Association directed toward the promotion of uprightness and the entire elimination of chicanery in the cottonseed milling industry of this country.

The records of the past have not been entirely enviable insofar as the vegetable oil milling trades have been concerned. Not in every community has the oil mill owner or manager been considered an example of fair dealing for his fellow townsmen. In some of the oil milling industries the general estimate of those conducting the industry has been sometimes quite the reverse. The writer was once informed by a banker in one of our largest cities —"I have been forced to conclude that everybody in the vegetable oil milling business is afflicted with myopia whenever it is necessary to observe the rights of anyone else."

Oil milling is an honest, respectable business and industry. It has attracted to its ranks many business men of first-class ability and the most sterling probity. During long years of unselfish striving through the channels of the cottonseed milling trade associations those men have endeavored to preserve for the entire industry a reputation for fairness and uprightness in business dealings which would be comparable with their personal records. That they have succeeded and are continuing to succeed is evidenced by the adoption of such Codes of Ethics as those of the National Cottonseed Products Association and the National Association of Soybean Oil Manufacturers.

Soon there will be no place whatever in this country for the oil miller who cannot subscribe to such a Code, or who, subscribing to it, promptly files his adherence in that convenient corner of his mind marked "Dormant Matters".

Chemistry — Ancient and Modern

WE HAVE recently received from the Department of Chemistry and Chemical Engineering of Virginia Polytechnic Institute, a copy of an attractive little circular giving the list of 92 Chemical Elements, (Gaseous, Liquid, Metallic, Crystalline and Amorphous), with the name, atomic number, symbol, atomic weight, melting point, and year of discovery of each, (excepting Number 85, which, while its existence is predicted by the Periodic Law, still remains undiscovered).

This little table, with its cryptic symbols and numerals, holds between its lines all the romance of man's progress on earth. The reader's attention is first arrested by the extreme small number of the elements which were discovered before the time of Christ. A check of the list shows that in the first several million years of his existence on this sphere man had become acquainted with just nine of the elementary substances, those of course which he found in their native state, or which he was able to recover by smelting with crude fires. The nine elements he knew were carbon, sulfur, iron, copper, silver, gold, tin, mercury and lead.

The table reveals further that the study of chemistry, or alchemy, awakened no interest in mankind for more than fourteen centuries after the beginning of the Christian era, its first unfoldings being manifested in the discovery of antimony and bismuth in 1450. Followed about three hundred more years of darkness, or semi-darkness, marked only by the discovery of zinc, in 1520, phosphorous in 1669 and arsenic in 1694.

About the middle of the eighteenth century, less than two hundred years ago, during the time which marked truly the beginning of

modern science, pure and applied, man commenced to master the secrets of chemistry and as a consequence, was able to life the curtain which had concealed from him the existence of many of nature's elementary substances. These were the days of Newton, Brandt, Cronstedt, Cavendish, Priestley and Lavoisier, and the world's knowledge was enriched by the discovery of cobalt, 1735; nickel, 1751; fluorine, 1771; platinum, 1741; hydrogen, 1766; nitrogen, 1772; and chlorine and oxygen, 1774. The infant science now commenced to grow and the nineteenth century marked progress with which we are all familiar.

The Periodic Law leaves but one element undiscovered, so that the chemist of the future must content himself with devising new uses of the known elements, with delving more deeply into the laws of physical chemistry, and advancing the art of synthesis for the production of new utilities for his fellow men.

Baled Copra vs. Copra in Sacks

A series of experiments has been conducted in British Malaya recently under the supervision of the Department of Agriculture of that country to determine the advantages resulting from the shipment of copra in the form of bales in place of sacks. The method pursued in preparing the copra for shipment in this manner was to cut the copra into eight pieces as uniform in size as possible. The copra which of course had been dried was then put into a rectangular container of steel equipped with sides and ends that could be removed after compression, which was accomplished by means of hydraulic pressure, had been completed. The copra was then in the form of a bale and the sacking which had been inserted in the container before the copra was introduced was in place ready to be brought together for stitching after which sealing wire was placed around the bale. Experiments demonstrated that the cost of packing material per English hundredweight was reduced from 38 cents to 23 cents and that 3400 cwt. of copra per hour could be baled as against average performance of 1200 cwt. of copra when sacked, 8 cwts. of stowage are saved on a vessel through the lessening of the bulk of the copra in baled form. There was no loss of oil during the compression of the copra or later while the copra was en route to overseas destination in the hold of the vessel. The facility with which copra bales are stacked minimizes the danger of self-heating and better circulation of air is gained thereby. Again, the free fatty acidity in the copra when baled, only increased from .7 of 1 per cent. to 1.5 per cent. whereas the control shipment of sacked copra showed an advance in acid content of from .18 of 1 per cent. to 2.25 per cent. between the time of loading and arrival of steamer at destination.

Shortening and Oil Prices

Prices of shortening and salad and cooking oils on Thursday, Aug. 28, 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.	@10¾
3,500 lbs. and up	@11
Less than 3,500 lbs.	@11½
Southeast:	
3,500 lbs.	@10¾
Less than 3,500 lbs.	@11¼
Southwest:	
Carlots, 26,000 lbs.	@10½
10,000 lbs. and up	@10¾
Less than 10,000 lbs.	@11
Pacific Coast:	@11½

Salad Oil

North and Northeast:	
Carlots, 26,000 lbs.	@10½
5 bbls. and up	@10¾
1 to 4 bbls.	@11½
South:	
Carlots, 26,000 lbs.	@10¼
Less than carlots	@10¾
Pacific Coast:	@10¼

Cooking Oil—White

⅛c per lb. less than salad oil.

Cooking Oil—Yellow

¼c per lb. less than salad oil.

When soap made from sperm head oil by saponification with caustic soda at 150° C. is distilled at 200° C. and 13 millimeters pressure, wax alcohols, chiefly oleyl and cetyl, are obtained. The residue from distilling the wax alcohols have no fishy smell and are soluble in warm water.—*J. Soc. Chem. Ind. Japan* 32, Suppl. Bin. 253-4 (1929).

Sulfonated naphthalene derivatives and castor oil are the basic materials for many "wetting out" agents in use in the textile industries. One such agent consists of a solution of highly sulphonated castor oil in turpentine. —*The Melliand* 1, 96-8, 843-8 (1929).