

Caps and Closures

Address before the Fourth Annual Convention of the Mayonnaise Products Manufacturers of America

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MAYONNAISE originated as a product made in the home, which required a great deal of time and patience in its preparation. Being a very palatable article it gained in favor to the extent where many people wished to use it, but did not have the time and patience to prepare it themselves, so it gradually developed into a manufactured product for local consumption. At this stage, not much attention was paid to the package or its closure because the product was used almost as fast as it was manufactured. As the demand increased and the manufacturers improved their production, they had to spread their distribution over an increasing area, making it necessary to transport the mayonnaise and to improve it in such manner as to make it stand up without separation for a considerable period, owing to the fact that it sometimes stood on the distributors' shelves for weeks. Not only did they have to prepare their mayonnaise in such a manner to meet this new condition, but also they had to give attention to the container and the closure.

Many different types of closures have been used in the sealing of mayonnaise, but after many years it has resolved itself into two methods of sealing, vacuum and non-vacuum. The most popular is the non-vacuum type of cap, and because the popular size jar for average house use is not consumed at one time, a cap which can be re-applied has become the most practical. Various liners have been used in caps for mayonnaise—pulp and waxed paper—pulp and oil paper—and, pulp and oil paper waxed all over.

Pulp and waxed paper is not satisfactory for the reason that the waxed paper, due to the vinegar in the product, is subject to breaking down and permits the saturation of the pulp, which eventually may cause a leak. Pulp and plain oil paper has been found to be objectionable in many instances because the oil paper may impart a foreign flavor to the mayonnaise. Pulp and oil paper waxed all over overcomes these objections, and is the one which is in general use. As a safe delivery of a product and the good name of the packer rests almost

entirely upon the thin disc of paper and board, nothing but the finest raw materials should be used in cap manufacturing. That is why years of research work and thousands of dollars have been expended in development of their manufacture by the industry. Some packers are of the belief that their product would have greater keeping qualities if packed under a vacuum closure, but due to the density of the mayonnaise, which limits the degree of vacuum which can be created in the package, and due also to the fact that considerable air is beaten into the mayonnaise in its emulsification, which eventually works to the surface of the product, and to a certain extent counteracts the degree of vacuum, it is questionable whether the degree of vacuum actually obtained justifies the additional cost of a vacuum cap.

In connection with research and experimental work conducted by the cap manufacturers, there is much that does not appear to the cap buyer. Caps are made for a great variety of products covering foods, pharmaceuticals, prescription and preparatory medicines. Each product is put through an extensive test to determine the best liner available at that time. These tests extend over a period of several months and the liners are examined every thirty days. The products are subjected to tests paralleling those conditions which the product would undergo in general use. The test does not stop here; the laboratories are always searching to find a still better liner for each product, and better methods for making the liners. The Experimental Departments are working to improve the methods of manufacturing the caps, and designing automatic machines to get greater production. Speed and automatic operation involve higher class workmanship and greater accuracy. This greater accuracy has made it possible for the packer to use cap-applying machines with satisfactory results.

While standards have been set up for glass measurements, the cap manufacturer must work out his formulas for the making of a cap to fit standard glass that will take in the

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tolerance necessary in glass making. These formulas differ with different cap manufacturers, due partly to the type of equipment used. The cap manufacturer not only has to contend with the tolerance required by the glass manufacturer, but the metal he uses is not obtainable in uniform guage and temper. A cap to meet all conditions must be so constructed as to be pliable enough to conform to minor variations in the glass finish and still rigid enough to have the required strength to make a secure seal. All the materials going into the manufacture of caps must be checked against specifications for quality, guage and measurements, because variations cause trouble in manufacturing and also may cause trouble in the user's plant.

Many cap manufacturers maintain service departments not only to advise the packer as to the proper handling of the caps, but to assist in any of his packing problems. Should there be any trouble because of glass and cap fit, this is referred through regular channels, and handled in such a manner as to give the packer as little to worry about as possible. While some cap manufacturers still buy on the outside much of the material which they use, others not only have their own litho and liner departments, but compound their own rubber and make their own lacquer, varnish and inks, so as to control as many of their processes as is possible, although in some instances it is more expensive to do so.

All of the foregoing is with the thought in mind of producing high quality, accuracy and uniformity in an article which when received by the packer permits him to get high production with a minimum of trouble. The packers of mayonnaise putting up a high quality product, can ill afford to buy anything less than the best to be obtained in closures, so as to insure their product getting to the consumer in the best condition. It also behooves them to buy their closures from a reliable source, to get the best results.

Tariff

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to be taken back to the farms for feed and a corresponding decrease of seed reaching the mills. The resolution also commented that the coconut industry in the Philippines belongs largely to foreign interests, the native labor receiving 18c. to 20c. in direct competition with the Southern farmer. The resolution asked that the tariff rate applied to the Philip-

pinas be set at 25 percent in the crushers' favor, or that imports of coconut oil be limited to 300,000,000 pounds annually.

According to figures reported to the United States Bureau of Internal Revenue by margarin manufacturers, production in November, 1929, compared with the output in November, 1928, as follows:

	Pounds	
	1929	1928
Uncolored oleomargarin	31,708,818	29,126,253
Colored oleomargarin	1,728,074	1,442,957

Walter O. Hastings, formerly Secretary of Marden, Orth and Hastings, and well known in the oil trade, died at his home in Braintree, Massachusetts, on January 1, after a protracted illness.

Armour & Co., which assumed \$15,000,000 of Morris & Co.'s 7½ percent gold notes when it took over that company's packing business, will pay off the notes when they become due in September. Sinking fund provisions will then have reduced the original amount to \$9,500,000. Payment will be made out of Armour & Co. surplus, which is \$47,138,668.