

A Practical Talk on Sponges.*

(Western Druggist)

The sponge, in a low form of animal life, is distributed in fresh salt waters over the tropical and temperate zones of our globe, but reaches its highest development in the warmer waters of the earth. About eighteen species of sponge are known, but two or three only of these furnish the sponges of commerce. These are found most abundantly off the coasts of Florida, Cuba and other West Indian Islands, Greece, Turkey, North Africa, Australia, and the East Indian Islands. All of the sponges that enter the commerce of the United States come from Florida and the West Indies or from the Mediterranean.

Sponges are obtained from the water by three methods: (1) In waters not exceeding thirty feet in depth, by fishers with a three-pronged hook attached to a long pole who pull up the sponges from the rocks. (2) In waters not exceeding sixty or seventy feet in depth, by divers in regular diving outfits, who cut the sponges from their attachment, collecting them in a bag. (3) In waters exceeding sixty feet, by dredging with small grappling hooks. This is the least satisfactory method, as by it many of the sponges are badly torn. The first method is the principal one used, especially in American waters. To enable the fisher to see the sponge, he provides himself with a short cylinder, usually a pail in which the bottom is replaced by a piece of stout glass. By placing the pail glass-end downward, a little way into the water, it is possible to see clearly to quite a depth. Having sighted a sponge which appears to be valuable, the fisher with his hook carefully detaches it from the rock and pulls it up. Most of the fishers are of a very poor class, being negroes or indigent whites.

The sponge as taken from the water is composed of a great mass of gelatinous material adhering to the fibrous skeleton and possessing a very disagreeable odor. Its preparation for the market consists in washing when first gathered, to remove the bulk of the gelatinous material, then drying in the sun for a period not exceeding one day, during which time all of the organic matter partially decomposes, and is finally removed by heating and further washing; lastly, drying well preparatory for the market. The principal Florida sponge market is Pensacola, while the Mediterranean market is Trieste. At

*From an address by L. M. Landecker before the Chicago College of Pharmacy.

these markets the fishers pile up their goods on the wharves and ask for bids on the whole pile. The highest bidder receives the lot, and he then proceeds to sort, trim and bale them.

Sponges are "bleached" to remove the natural dark-gray color of the sponge and more especially the red color of the roots always present in Mediterranean sponges. "Bleaching" is performed, first by soaking the sponge in a strong solution of sodium hyposulfite, washing, and then treating with dilute hydrochloric acid, and finally removing all the acid by washing. This treatment gives the sponge a nice yellow color, but it also largely destroys the "life," i.e., the elasticity and the toughness of the sponge, hence unbleached sponges are always preferable to bleached sponges when intended for bathing and cleaning purposes.

The quality of a sponge is determined by its texture and softness, its elasticity and toughness, as well as its size and shape. The texture of a sponge determines its adaptability to a certain use, still, as a rule, sponges of the finest texture bring the highest prices. The elasticity of the sponge is what dealers call the "life" of the sponge, and is best preserved in those sponges which are not bleached. The toughness and durability of a sponge depend on its structure. Those sponges are the most durable that are the most closely woven. As to shape, sponges may be either entire or "full-form," i.e., nicely rounded, "half-form," or flat on one side, "coupee" or "cut," when sliced, so as to have several flat faces, and "glove" or "rag," when in poor, irregular pieces. Size is a very important factor in determining the price of a sponge. Sizes are graded according to the number the sponges run to the pound.

West Indian sponges are classified according to their geographical source into Florida, Nassau, Cuban, and Bermuda sponges. Each of these classes includes, according to texture, "sheepswool," "velvet," "reef," and "grass" sponges. The sheepswool sponge is considered the finest bathing sponge, and of this variety the "Rock Island" sheepswool is the most highly prized. Velvet sponges rank next to the sheepswool and are used for the same purposes, but are not so durable. The "Bermuda yellow" and the "Nassau yellow" are considered the best qualities. The reef sponges are much less expensive than the sheepswool, the

larger sizes being used for scrubbing and cleaning and the smaller sizes for slate sponges. The grass sponges, when bleached, resemble sheepswool in appearance, but are practically worthless as bath sponges, as they soon fall to pieces. It is these sponges which are sold as great bargains by the department stores. The grass sponges cost only about one-sixth as much as sheepswool of the same size.

Mediterranean sponges are classified into Greek, Zimoca or Turkey, Mandruca or North African, and the finest of all sponges, the "silk" sponges. The Greek, Zimoca, and Mandruca sponges come, as regarding shape, in full-form, half form, and coupee, are usually bleached, and are used almost entirely for bathing purposes. Silk sponges are classed into "cup," "surgeons'," and "flat." Cup sponges are those with large oval cavity in the top, giving the sponge a cup-shaped appearance, and were formerly used by surgeons in administering anesthetics. Surgeons' sponges are the fine, oval, silk sponges, formerly extensively used in surgery, but now almost entirely supplanted by absorbent cotton.

In addition to the uses mentioned above, sponges are now largely employed in many of the arts, thousands of pounds being annually utilized in carriage, furniture and shoe factories, potteries, etc.

Bleached sponges are sold in cases, i.e., a certain number of sponges are packed in a case, so that the buyer knows just how much he is paying per sponge. But here again the nicest sponges are always on the top, so that, if the retailer places his retail price per piece at a fair margin of profit, he will find the best sponges of the case will go all right, but the poorer ones will stay on his hands, and must be sold at a loss. It is, therefore, advisable to ask a higher price for the nicer pieces, and be prepared for a lower price on these poorer ones.

A sponge should never be placed in very hot water. To do so almost invariably destroys its "life," causing it to become flabby. A sponge should be aired frequently and not placed away, damp, into close boxes or cupboards. With this care a good sponge will last for years.

It is the man who pulls when the tide is against him, not he who only rows when the tide is in his favor, that anchors in the Harbor of Success.