

## **LOZENGES AND PASTILLES**

### *PROLONGED MEDICATION FROM PALATABLE PREPARATIONS*

#### **HISTORY**

Medicine is usually taken from a spoon or a measure and swallowed straight down. For some ailments it is more efficacious to have the release of medicine prolonged. Such ailments would include coughs, sore throats, catarrhal conditions, oral thrush etc. *Lozenges* (from the French *losenge* which means a diamond shaped figure of four equal sides), and *pastilles* (or *jujubes*) were developed as palatable preparations which would comply to this requirement. Medicament is incorporated into a base which, when sucked, slowly releases the medicament. Sweeteners and flavourings can be added at the same time as the medicament to increase palatability.

Lozenges and pastilles were prepared in the pharmacy until well into the 1900s but are now made commercially.

#### **LOZENGES**

Lozenges are normally hard and solid. The two most usual shapes are flattened round or oblong, but any shape is acceptable and is only for presentation.

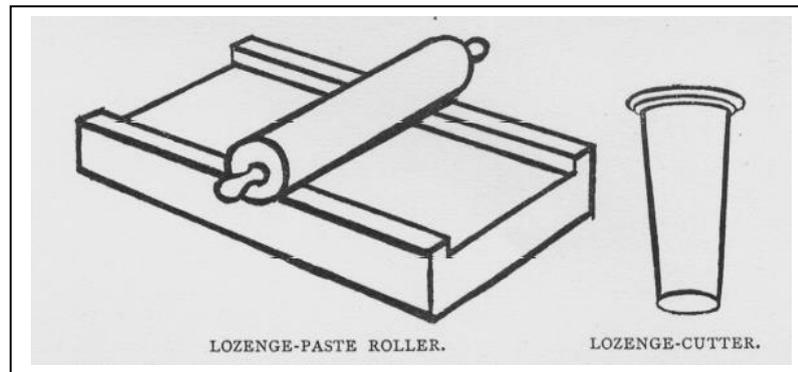
The base is usually refined sugar and an edible gum such as gum acacia. The sugar and powdered gum are mixed with the required medicaments then bound with some distilled water and some pre-wetted gum. From here onwards the process is similar to making pastry shapes. The massed ingredients are rolled out to a uniform thickness using a cylindrical roller and a lozenge cutter is used to remove one piece. This piece is weighed to ensure that the correct amount is contained in one lozenge. If this is not the case the rolling-out and cutting is repeated. When the thickness is correct, as many lozenges as possible are cut. Remaining mass is again rolled to the same thickness, more lozenges cut and this process is repeated until no more base remains. The mass can be dusted with a sugar and starch mixture to prevent sticking.

The rolling process may be carried out on a tile or a wooden base but, during the 1800s, an adjustable piece of apparatus called a *lozenge board* was introduced to help ensure even rolling of the mass.

*Lozenge cutters* (or *punches*) developed from a single metal tube to machines which allowed many lozenges to be cut each time.

After cutting, the lozenges are dried thoroughly by placing in an oven at 400 C for forty minutes.





From *Art of Dispensing*, 1926

## PASTILLES

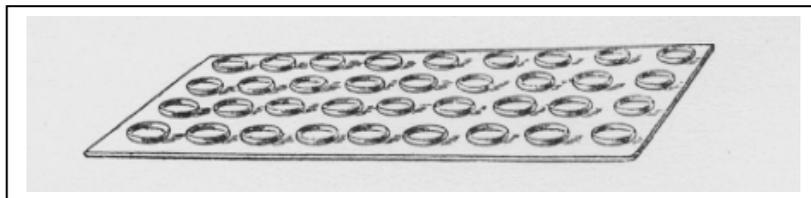
Pastilles (sometimes known as jujubes) are hard, jelly-like preparations made from a mixture of glycerin and gelatin, to which medicament, colour and flavourings may be added. The glyco-gelatin base may be melted by gentle heating and any ingredients added. The warmed base is then poured into moulds and allowed to set.

A temporary mould can be made using a layer of starch powder in a tray. Indents are made in the starch using a small, rounded object and filled with melted mass. When set, excess starch is removed by rapid washing.

Moulds may be ready made. One example would consist of a square, shallow tin with a series of deep grooves in the base which form squares. The molten mass would be poured into the tin, allowed to set and cut into pieces using the grooves as guides. This style of mould has also been made in plate glass.

Another example of a mould consists of small circular tin saucers secured to a metal base. The moulds are lubricated with a thin film of oil and filled to the brim with the molten mass. The pastilles when removed are equally rounded top and bottom.

To avoid adhesion pastilles may be coated with granulated sugar or dusted with powdered sugar before packing in a damp-resistant container.



A Pastille Mould. From *Art of Dispensing*, 1926

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The illustration overleaf shows a selection of tins for pastilles and lozenges. From S Maw, Son and Son's 1903 wholesale catalogue.

This information sheet is also available in a large font size.

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