



OINTMENTS, CREAMS AND PLASTERS

PREPARATIONS FORMULATED TO HOLD MEDICAMENTS IN CONTACT WITH THE SKIN INCLUDE OINTMENTS, CREAMS AND PLASTERS (OR PLAISTERS)

HISTORY

From very early times man has applied preparations to the skin to soothe or medicate. Ointments were made using greasy bases such as lard, wool fat, goose grease and petroleum jelly (vaseline). It was found that the incorporation of various medicaments could promote healing, allay irritations and bring pain relief.

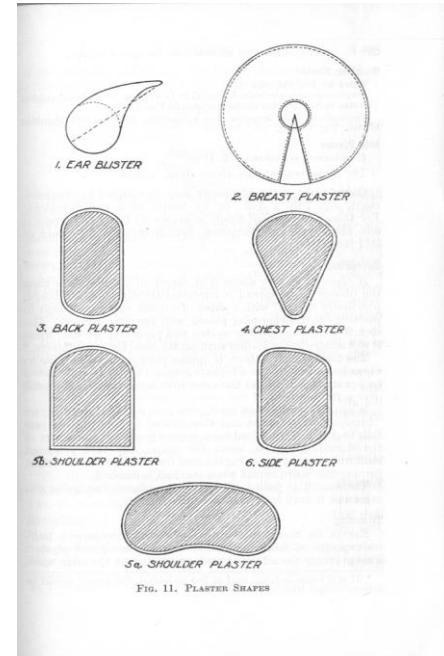
Creams were developed as non-greasy salves, one of the most popular examples being cold cream.

More prolonged contact with the skin was achieved with *plasters* or *plaisters* as they were first known. These should not be confused with wound dressings which were a later product. Plasters are no longer spread in the pharmacy, the last were belladonna plasters for back pain and ear plasters (blisters) for reducing mastoids. Earlier uses for plasters included belladonna for stopping the secretion of milk, cantharides (blistering fluid) as a counter-irritant, mercury for swollen joints or glands and resin plaster for supporting joints and fixing splints. A modern development is the use of plasters as patches for anti-smoking, hormone replacement therapy etc.

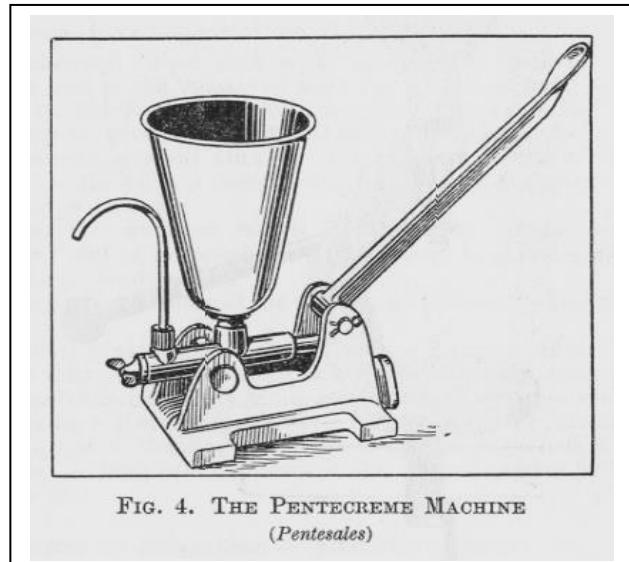
OINTMENTS

Even today small quantities of ointments are sometimes prepared in pharmacies. They are usually made to fill a doctor's specially prescribed formula. The standard procedure is to incorporate any ingredients into a small amount of the base on an *ointment slab* using a *spatula* or in a *mortar* and *pestle*. When perfectly smooth, the remainder of the base is added gradually whilst ensuring thorough mixing.

Packaging is usually in a glass jar but, in the past, round waxed cardboard boxes and *collapsible tubes* have been used. To fill a collapsible tube, the ointment was rolled in a piece of paper and this roll inserted into the tube. The cap of the tube was removed and the ointment squeezed into the tube by pressure from a spatula. Having filled the tube the end was flattened and turned over by small degrees until the ointment was seen exuding from the nozzle.



Shapes for Plasters



An Emulsifier

CREAMS

Creams are basically ointments made less greasy by the incorporation of water. The usual process is to heat greasy or fatty bases and water together with an *emulsifying agent* - a substance which assists the mixing. Machines are available (*emulsifiers*) that will improve the smoothness of the cream. Any further ingredients can now be incorporated, as for ointments.

PLASTERS (PLAISTERS)

The work of the pharmacist was mainly involved in the spreading of commercially manufactured plaster mass on suitable material. The practice continued until about 1950.

Plaster mass consisted of the medicinal ingredient(s) incorporated into resin, wool fat or beeswax. It was a semi-solid preparation that had to be heated to make it spreadable. Over-heating might destroy the efficacy of the ingredients, so gentle heating was usually achieved in a dish over a water-bath. At the same time a *plaster iron* was warmed over a flame.

A shape for the plaster was selected and a stencil cut in stiff paper. Standard sizes were recommended but this could be varied.

The material used to apply the plaster which might be, for example leather, white sheepskin or chamois leather, was stretched tightly on a flat board. The stencil was wetted to afford sufficient adhesion of the stencil to the material and applied.

The melted mass was then poured into the centre of the stencil and spread evenly over the material. The stencil was pulled off just before the plaster had set and the material trimmed to give a border of about 1cm.

Finished plasters were packed in a flat box separated by sheets of oiled or grease-proof paper and labelled with an instruction to warm the plaster gently if adhesion was insufficient.

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The illustrations are taken from *Dispensing for Pharmacy Students*, Cooper and Gunn, Tenth Edition, 1956.

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museum@rpharms.com