
CHAP. XVIII.—FIXED OILS.

THESE oils are commonly denominated Expressed Oils, an appellation which is manifestly improper, as, in some instances, they are obtained without expression, and, in others, expression is employed to obtain volatile oils. The Edinburgh college have therefore distinguished these different classes of oils by the terms Fixed and Volatile, which accurately characterise them.

Fixed oil is formed in no other part of vegetables than in their fruit. Sometimes, although very rarely, it is contained in the parenchyma of the fruit. Of this the best known example is the olive. But it is most commonly found in the seeds of dicotyledonous vegetables, sometimes also in the fruit of monocotyledonous plants, as the *cocos butyracea*. It has various degrees of consistency, from the tallow of the *croton sebiferum* of China, and the butter of the butter-tree of Africa, to the fluidity of olive oil.

Fixed oils are either

1. Fat, easily congealed, and not inflammable by nitric acid, such as oil of olives, almonds, rapeseed, and ben.
2. Drying, not congealable, inflammable by nitric acid, such as oil of linseed, nut, and poppy.
3. Concrete, such as palm oil, &c.

Fixed oil is separated from the fruits and seeds which contain it, either by expression or decoction. Heat, by rendering the oil more limpid, increases very much the quantity obtained by expression; but as it renders it less bland, and more apt to become rancid, heat is not used in the preparation of oils which are to be employed in medicine. When obtained by expression, oils often contain a mixture of mucilage, starch, and colouring matter; but part of these separate in course of time, and fall to the bottom. When oils become rancid, they are no longer fit for internal use, but are then said to effect the killing of quicksilver, as it is called, more quickly. Decoction is principally used for the extraction of the viscid and consistent oils, which are melted out by the heat of the boiling water, and rise to its surface.

Those who prepare large quantities of the oil of almonds

blanch them, by steeping them in very hot water, which causes their epidermis to swell and separate easily. After peeling them, they dry them in a stove, then grind them in a mill like a coffee-mill, and, lastly, express the oil from the paste, inclosed in a hempen bag. By blanching the almonds, the paste which remains within the bag is sold with greater advantage to the perfumers, and the oil obtained is perfectly colourless. But the heat employed disposes the oil to become rancid, and the slight colour the oil acquires from the epidermis does not injure its qualities. For pharmaceutical use, therefore, the almonds should not be blanched, but merely rubbed in a piece of coarse linen, to separate, as much as possible the brown powder adhering to the epidermis. Sixteen ounces of sweet almonds commonly give five ounces and a half of oil. Bitter almonds afford the same proportion, but the oil has a pleasant bitter taste.

OLEUM AMYGDALÆ COMMUNIS. *Ed.*

Oil of Almonds.

Take of

Fresh almonds, any quantity.

After having bruised them in a stone mortar, put them into a hempen bag, and express the oil, without heat.

In the same manner prepare from the seeds,

OLEUM LINI USITATISSIMI. *Ed.*

Oil of Linseed.

OLEUM AMYGDALARUM. *Dub.*

Oil of Almonds.

Bruise fresh almonds in a mortar, and express the oil in a press, without heat.

OLEUM LINI. *Dub.*

Oil of Linseed,

Is expressed in the same way from the seeds.

OLEUM AMYGDALARUM. *Lond.*

Oil of Almonds.

Macerate almonds, either sweet or bitter, in cold water, for twelve hours, and bruise them. Then express the oil, without heat.

OLEUM LINI. *Lond.*

Oil of Linseed.

Bruise the seeds of common flax, and express the oil, without heat.

OLEUM RICINI. *Lond.**Castor Oil.*

Bruise the peeled seeds, and express the oil without heat.

THE chemical properties of these oils have been already mentioned; and an account of the medical virtues of each will be found in their respective places in the *Materia Medica*.

CHAP. XIX.—OILY PREPARATIONS.

OLEUM AMMONIATUM, vulgo LINIMENTUM VOLATILE. *Ed.*LINIMENTUM AMMONIÆ. *Dub.*

Ammoniated Oil, commonly called *Volatile Liniment*. *Liniment of Ammonia*.

Take of

Olive oil, two ounces;

Water of ammonia, two drachms.

Mix them together.

LINIMENTUM AMMONIÆ FORTIUS. *Lond.**Stronger Liniment of Ammonia.*

Take of

Water of ammonia, one fluidounce;

Olive oil, two fluidounces.

Shake them together until they mix.

LINIMENTUM AMMONIÆ SUBCARBONATIS. *Lond.**Liniment of Subcarbonate of Ammonia.*

Take of

Solution of subcarbonate of ammonia, one fluidounce;

Olive oil, three fluidounces.

Shake them together till they are mixed.

THE most commonly adopted generic name for the combination of oil with alkalies is soap, and the species are distinguished by the addition of the name of the alkali they contain. On these principles, volatile liniment should be called Soap of Ammonia, as hard soap is soap of soda, and soft soap, soap of potass.

The ammonia used in the two first of these preparations,