

CHAP. XXVI.

EMPLASTRA.—PLASTERS.

PLASTERS are of similar composition to ointments, but differ from them in their much firmer consistence, which is such, that they do not adhere to the hand. They owe this consistence, in general, to a larger proportion of wax, or sometimes to the addition of certain metallic oxides, particularly those of lead, which unite chemically with the unctuous matter. They require, in general, to be heated, in order to be spread: hence they adhere more firmly, and several of them even afford a mechanical support. They are employed generally to answer the same indications as ointments. The same rules are to be observed in their preparation, as in that of Ointments.

EMPLASTRUM SIMPLEX, *olim Emplastrum Cercum*. Simple Plaster. (*Emplastrum Cerae, Ph. Lond.*)

“Take of Yellow Wax, three parts; Mutton Suet, Resin, of each two parts.”

The principal use of this plaster is as a dressing to the part to which a blister has been applied, after the vesicle has been cut. It is spread thin on linen with a hot iron.

EMPLASTRUM OXIDI PLUMBI SEMI-VITREI, *olim Emplastrum Commune.* (Emplastrum Plumbi, *Ph. Lond.*—Emplastrum Lithargyri, *Ph. Dub.*)

“ Take of the Semi-vitreous Oxide of Lead, one part ; Olive Oil, two parts. Having added water, boil them, stirring constantly, until the oil and the oxide unite into a plaster.”

This, which has been long known by the name of Diachylon, is a chemical combination of the expressed oil with the oxide of lead, and is of a consistence sufficiently hard to form a plaster. There is considerable attention requisite in preparing it, particularly in stirring it constantly to promote the combination, and allow of the escape of the watery vapour. The use of the water is to prevent the heat from rising too high, and if the quantity is dissipated before the combination is complete, an additional portion must be added, taking care to add it hot. The plaster is used, spread on leather or linen, as an application to excoriations, or slight wounds.

EMPLASTRUM RESINOSUM, *olim Emplastrum Adhesivum.*
Resinous Plaster. (Emplastrum Resinæ, *Ph. Lond.*—Emplastrum Lithargyri cum Resina, *Ph. Dub.*)

“ Take of Plaster of Semi-vitreous Oxide of Lead, five parts ; Resin, one part.”

The plaster of litharge is rendered more adhesive, and somewhat more stimulating, by this intermixture of resin. It is applied to similar uses.

EMPLASTRUM OXIDI FERRI RUBRI, *olim Emplastrum Ro-*
borans.

“Take of Plaster of Semi-vitreous Oxide of Lead, twenty-four parts; Resin, six parts; Yellow Wax, Olive Oil, of each three parts; Red Oxide of Iron, eight parts. Rub the red oxide of iron with the oil, and add it to the other ingredients melted.” There is a similar composition in the Dublin Pharmacopœia, under the name of EMPLASTRUM THURIS, in which two pounds of litharge plaster, and half a pound of frankincense, are melted together, and three ounces of red oxide of iron added.

These plasters, spread on leather, are sometimes used as an application in slight cases of lumbago, and give some relief, merely by affording a mechanical support.

EMPLASTRUM ASSÆ FOETIDÆ. Assafœtida Plaster.

“Take of Plaster of Semi-vitreous Oxide of Lead, Assafœtida, of each two parts; Galbanum, Yellow Wax, of each one part.”

This plaster is sometimes applied to the breast or side, as a remedy in hysteric affections, but probably with little advantage.

EMPLASTRUM GUMMOSUM. Gum Plaster.

“Take of Plaster of Semi-vitreous Oxide of Lead, eight parts; Gum-Resin of Ammoniac, Galbanum, Yellow Wax, of each one part.”

EMPLASTRUM GALBANI. Galbanum Plaster. Ph. Dub.

“ Take of Plaster of Litharge, two pounds ; Galbanum, half a pound ; Yellow Wax, four ounces. To the galbanum melted with a gentle heat, add the litharge, plaster, and wax, and melt them with a moderate heat.”

EMPLASTRUM GALBANI COMPOSITUM. Compound Galbanum Plaster. Ph. Lond.

“ Take of Galbanum Purified, eight ounces ; Plaster of Lead, three pounds ; Common Turpentine, ten drachms ; Frankincense bruised, three ounces. To the galbanum and turpentine previously melted together, add first the frankincense, then the plaster of lead, melted with a slow fire, and mix them.”

These three plasters are essentially the same. They are employed as discutient applications to indolent tumors, and sometimes to promote suppuration.

EMPLASTRUM HYDRARGYRI. Quicksilver Plaster. (*Emplastrum Hydrargyri, Ph. Lond.*)

“ Take of Olive Oil, Resin, of each one part ; Quicksilver, three parts ; Plaster of Semi-vitreous Oxide of Lead, six parts. Rub the quicksilver with the oil and resin melted together, and then cooled, until the globules disappear ; then add gradually, the plaster of semi-vitreous oxide of lead, melted, and mix the whole carefully.” The composition in the London Pharmacopœia is somewhat different. It consists “ of Purified Quicksilver,

three ounces ; Sulphurated Oil, half a drachm ; Plaster of Lead, a pound. Rub the quicksilver with the sulphurated oil until the globules disappear, then add gradually the plaster of lead, melted, and mix them." The sulphurated oil causes the mercury to lose the form of globules more quickly, and therefore abridges the labour of the preparation ; but it may be doubted if the quicksilver thus extinguished is in the same state of activity as when this has been done by trituration with unctuous matter alone.

The mercurial plaster is applied as a discutient to indolent tumors ; and it has been supposed, that from its continued application, the mercury will be absorbed, and act locally, particularly in glandular affections.

EMPLASTRUM SAPONACEUM. Soap Plaster. (Emplastrum Saponis, *Ph. Lond. Dub.*)

"Take of Plaster of Semi-vitreous oxide of Lead, four parts ; Gum Plaster, two parts ; Soap sliced, one part. Mix the soap with the plasters melted together ; then boil a little, so as to form a plaster." In the London and Dublin Pharmacopœias, the plaster is formed from litharge plaster and soap alone.

This has been supposed to possess a discutient quality ; but it is much inferior to the mercurial plaster, and is scarcely ever used.

EMPLASTRUM MELOES VESICATORII, *olim Emplastrum Vesicatorium*. Plaster of Cantharides. (Emplastrum Cantharidis, *Ph. Dub.*—Emplastrum Lyttæ, *Ph. Lond.*)

“ Take of Mutton Suet, Yellow Wax, Resin, Cantharides, of each equal weights. Mix the cantharides, rubbed into a fine powder, with the other ingredients, melted together and removed from the fire.”

This is the plaster usually employed to raise a blister, an effect produced from the action of the acrid matter of the cantharides. It is of a softer consistence than the other plasters, that it may admit of being spread without the assistance of heat, which would impair the acrid quality. It is spread on leather, and requires to be applied twelve hours to produce a perfect blister: it is then removed; the vesicle is cut, and the inflamed surface dressed with simple cerate or plaster. In cases where it is of importance that a blister should be raised with certainty, and speedily, it is of advantage to sprinkle a little of the powder of cantharides on the surface of the plaster when spread. Washing the part previously with vinegar, is also useful to insure the effect. Camphor is sometimes mixed with the blistering composition, on the supposition that it prevents the strangury, which is sometimes produced by a large blister; but it appears to have no such virtue, and this painful symptom is more effectually obviated by the free use of diluents while the blister is applied,—a practice always proper where the system is irritable, or even in common cases where the blister is large.

EMPLASTRUM MELOES VESICATORII COMPOSITUM. Compound Plaster of Cantharides.

“ Take of Venice Turpentine, eighteen parts; Burgundy Pitch, Cantharides, of each twelve parts; Yellow Wax, four parts; Sub-acetite of Copper, two parts; Mustard Seed, Black Pepper, of each one part. To the Burgundy pitch and wax melted, add the turpentine. While these are melted and still warm, add the other ingredients mixed and rubbed to a fine powder, stirring constantly, so as to form a plaster.”

It occasionally happens, that the common plaster of cantharides is insufficient to excite a blister, even when its surface has been sprinkled over with powdered cantharides. In such cases, or even in others where it is necessary that a blister should be quickly raised, and where the system is not easily affected, as in comatose diseases, this more powerful composition may be employed. Its operation is accompanied with a very pungent sensation of heat. The application of it ought not to be continued too long, as it might induce ulceration; and the precaution of the patient drinking freely of any mild diluent while it is applied, ought also to be attended to.

EMPLASTRUM AMMONIACI. Ammoniac Plaster. Ph. Lond.

“ Take of Gum-Resin of Ammoniac, purified, five

ounces; Acetic Acid, half a pint. Dissolve the ammoniac in the vinegar; then evaporate the liquor in an iron vessel by the heat of a water-bath, stirring it constantly until it attain a proper consistence."

Under this form, gum-ammoniac is applied as a discutient, and sometimes also as a remedy in tinea capitis; and as it is occasionally used, the London College have received it as an officinal preparation.

EMPLASTRUM AMMONIACI CUM HYDRARGYRO. Plaster of Ammoniac with Quicksilver. *Pharm. Lond. Dub.*

"Take of Purified Ammoniac, one pound; Purified Quicksilver, three ounces; Sulphurated Oil, one fluidrachm. Rub the quicksilver with the sulphurated oil until the globules disappear; then add gradually the ammoniac melted, and mix them."

This is similar to the simple mercurial plaster, its discutient and stimulant powers being perhaps somewhat promoted by the ammoniac. It is applied to the same purposes.

EMPLASTRUM CUMINI. Cumin Plaster. *Ph. Lond.*

"Take of Cumin Seeds, Carraway Seeds, Bay Berries, of each three ounces; Burgundy Pitch, three pounds; Yellow Wax, three ounces. To the pitch and wax melted, add the other ingredients rubbed to powder, and mix them."

This has been applied to the region of the stomach as

a moderate stimulant in hysteric affections and flatulent cholick, but it cannot be supposed to be of any advantage.

EMPLASTRUM OPII. Opium Plaster, Ph. Lond.

“ Take of Hard Opium in powder, half an ounce; Frankincense bruised, three ounces; Plaster of Lead, a pound. To the plaster melted, add the frankincense and opium, and mix them.”

Opium has sometimes been used as an anodyne, by external application, with advantage, as, for example, in relieving the pain of toothach. This plaster, newly introduced into the London Pharmacopœia, is designed to afford a form of applying it, though the more usual mode of extending a piece of opium softened between the fingers on leather or silk is probably to be preferred, as even more effectual.

EMPLASTRUM PICIS COMPOSITUM. Compound Pitch Plaster. Pharm. Lond.

“ Take of Burgundy Pitch, two pounds; Frankincense, one pound; Yellow Resin, Yellow Wax, of each four ounces; Expressed Oil of Nutmeg, one ounce. To the pitch, resin and wax, melted together, add first the frankincense, then the oil of nutmeg, and mix them together.”

Burgundy pitch is in common use as a rubefacient, under the form of plaster. The addition of the other ingredients of this compound plaster, may render it rather

more stimulating, and the wax adds to its tenacity, and gives to the plaster a due consistence.

EMPLASTRUM CALEFACIENS. Warm Plaster. Ph. Dub.

“Take of Burgundy Pitch, seven parts; Plaster of Cantharides, one part. Melt them together with a moderate heat, and stir until they attain the consistence of a plaster.”

By the addition of this small proportion of cantharides, the stimulating power of the Burgundy pitch is still more increased than by the articles added in the preceding composition. This accordingly affords a very excellent rubefacient, which is frequently employed.

EMPLASTRUM AROMATICUM. Aromatic Plaster. Ph. Dub.

“Take of Frankincense, three ounces; Yellow Wax, half an ounce; Cinnamon Bark in powder, six drachms; Essential Oil of Pimento, Essential Oil of Lemons, of each two drachms. Melt the frankincense and wax together, and stir, as it thickens on becoming cold. Mix with it the cinnamon, previously rubbed with the essential oils, and form them into a plaster.”

This is designed as a stomachic plaster, being applied to the region of the stomach in some forms of dyspepsia. It ought to be always extemporaneously prepared, as the essential oils are soon volatilized.

CATAPLASMATA.—CATAPLASMS.

CATAPLASMA FERMENTI. Yeast Cataplasm. *Ph. Lond.*

“Take of Flour, a pound; Yeast of Beer, half a pint. Mix them, and apply a gentle heat until the mixture begins to rise.”

The yeast, mixed with the flour, and aided by the heat applied, soon excites fermentation, and the cataplasm in this state has been applied with much advantage as an anodyne in painful and irritable sores, and as an antiseptic in ulceration, attended with fœtor. Its efficacy appears to depend on the carbonic acid gas evolved by the fermentative process.

CATAPLASMA SINAPIS. Mustard Cataplasm. *Ph. Lond. Dub.*

“Take of Mustard Seeds, Lintseed, of each in powder, half a pound; Vinegar, warm, as much as is sufficient. Mix, so as to obtain the consistence of a cataplasm.” In the Dublin Pharmacopœia, it is formed from equal quantities of mustard seed in powder and crumbs of bread mixed with as much wine vinegar as is required; and it is added, that the cataplasm may be rendered more stimulating by the addition of two ounces of horse-radish root, finely scraped.

The Mustard Cataplasm, or Sinapism as it is named,

is the composition usually applied as a powerful stimulant to the soles of the feet, in typhus, where there is a determination to the head, and in comatose affections. It acts as a very powerful rubefacient; its action is attended with a sense of heat and pain, which soon become urgent, and hence, when applied in a state of coma, the application ought not to be continued too long. It operates on the same principle as a blister, and differs principally in its effect being more quickly obtained, and being more powerfully stimulant to the general system, without producing the same extent of superficial inflammation.