
 CHAP. X.

SYRUPS are saturated solutions of sugar in water, in watery infusions, or in vegetable juices. They are seldom very active medicines; and are more commonly employed to render others agreeable, and in pharmacy to communicate peculiar forms.

The proportion of sugar in syrups is generally two parts to one of the fluid; if it is more than this, the solution is disposed to crystallize; if less, it is liable to ferment, and become acescent. Refined sugar ought always to be employed. It is to be melted in the liquid by a gentle heat, and any impurities which collect on its surface when boiling are to be removed. The syrup ought to be kept in a cool place, to prevent the fermentation, which is favoured by a high temperature. The London College have given the general direction of keeping them at a temperature not higher than 55°.

SYRUPUS SIMPLEX *sive communis*. Simple or Common Syrup.

“Take of Refined Sugar beat to powder, fifteen parts;

Water, eight parts. Dissolve the sugar with a gentle heat, and boil a little so as to form a syrup."

This solution of sugar is used merely to communicate sweetness of taste, or for the pharmaceutical purposes to which syrups are applied.

SYRUPUS ACIDI ACETOSI.

"Take of Acetous Acid (Vinegar,) two pounds and a half; Refined Sugar, three pounds and a half. Boil so as to form a syrup."

This acidulous syrup being sufficiently pleasant, may enter into mixtures in which it cannot occasion any chemical decomposition. It is, however, so rarely employed, that being liable to decomposition on keeping, it is not found in the shops.

SYRUPUS ALTHÆÆ OFFICINALIS. Syrup of Althæa. (Syrup. Althææ, *Ph. Lond.*)

"Take of Fresh Althæa Root cut, one pound; Water, ten pounds; Refined Sugar, four pounds. Boil the water with the root to one half, and expressing it strongly, strain. Put aside the strained liquor, that the impurities may subside, and to the purified liquor add the sugar; then boil it so as to form a syrup."

The water dissolving the mucilage of the althæa, less than the usual proportion of sugar is required to give it the consistence of a syrup. This mucilage is supposed to give the syrup some demulcent power; this, however,

must be very trivial, and it renders it more liable to spontaneous decomposition.

SYRUPUS AMOMI ZINGIBERIS. Syrup of Ginger. (Syrup. Zingib. *Ph. Lond. Dub.*)

“Take of the Root of Ginger beat, three ounces; Boiling Water, four pounds; Refined Sugar, seven pounds and a half. Macerate the root in the water, in a close vessel, for twenty-four hours; and to the strained liquor, add the beat sugar, so as to make a syrup.”

This syrup is impregnated with the aromatic flavour and pungency of the ginger, which renders it sufficiently grateful.

SYRUPUS CITRI AURANTII. Syrup of Orange-Peel. (Syrup. Aurant. *Ph. Lond. Dub.*)

“Take of the Fresh Outer Rhind of the Orange, six ounces; Boiling Water, three pounds; Refined Sugar, four pounds. Macerate the rhind in water for twelve hours; then to the strained liquor add the sugar beat to powder, and, by the application of a gentle heat, form a syrup.”

This syrup, like the former, is used on account of its grateful aromatic flavour. The proportion of sugar in it is too small, especially as it is necessary to avoid any dissipation of the water by boiling, to prevent the loss of the flavour of the orange-peel.

SYRUPUS CITRI MEDICÆ, *olim Syrupus Limonum.* Syrup of Lemon. (Syr. Limon. Ph. Lond. Dub.)

“Take of the Juice of Lemons strained, after the impurities have subsided, three parts; Refined Sugar, five parts; dissolve the sugar so as to form a syrup.”

This is a pleasant syrup, used to sweeten and acidulate mixtures, especially those of the mucilaginous kind: there are others, into the composition of which it cannot properly enter, from the chemical agency of the acid.

SYRUPUS COLCHICI AUTUMNALIS. Syrup of Colchicum.

“Take of the Fresh Root of Colchicum, cut into small pieces, one ounce; Acetous Acid, sixteen ounces; Refined Sugar, twenty-six ounces. Macerate the root in the acid for two days, shaking the vessel occasionally; then expressing it gently, strain it; to the strained liquor add the sugar in powder, and boil a little, so as to form a syrup.”

Colchicum has been used under this form as a diuretic in dropsy, the dose being from half an ounce to an ounce. The root itself being little employed in modern practice, this syrup is scarcely ever prescribed.

SYRUPUS DIANTHI CARYOPHILLI. Syrup of Clove July-Flower. (Syr. Caryoph. R. Ph. Dub.)

“Take of the Fresh Petals of the Clove July-Flower freed from the heels, one pound; of Boiling Water, four pounds; of Refined Sugar, seven pounds. Macerate the

petals in the water for twelve hours; then to the strained liquor add the sugar in powder; which dissolve with a gentle heat, so as to form a syrup."

This syrup derives from the flowers a rich red colour, and an agreeable flavour, and from these qualities is frequently used in mixtures.

SYRUPUS PAPAVERIS SOMNIFERI. Syrup of White Poppy. (*Syr. Papav. Ph. Lond. Dub.*)

"Take of the Dried Capsules of the White Poppy, freed from the seeds, two pounds; Boiling Water, thirty pounds; Refined Sugar, four pounds. Macerate the capsules cut, in the water for twelve hours; then boil until a third part only of the liquor remain; and pressing it strongly, strain; boil down the strained liquor to one half, and again strain; lastly, the sugar being added, boil a little, so as to form a syrup."

The active matter of the capsule of the poppy is extracted by water by decoction, and, by boiling down the liquor as directed in this formula, and in those of the other Pharmacopœias, is obtained in a more concentrated state, whether with any diminution of its powers from the continued decoction has not been ascertained. The syrup has a considerable narcotic power; and the taste being agreeable, and the dose easily regulated, it is convenient for exhibition to children, a drachm being given to a child a year old. From the supposition that it is uncertain in strength, it has been proposed to substitute for it a composition of simple syrup and tincture of

opium ; but it is not certain if the operation of this is exactly the same, and there is some risk, that from spontaneous decomposition, part of the active matter of the opium may be precipitated.

SYRUPUS RHAMNI CATHARTICI. Syrup of Buckthorn.
(Syrup. Rhamn. *Ph. Lond.*)

“ Take of the Clarified Juice of ripe Buckthorn Berries, two parts ; Refined Sugar, one part. Boil, so as to form a syrup.”

The juice of the buckthorn is best preserved by being made into a syrup, and it is under this form that it has been used as a cathartic, the dose to an adult being an ounce, or an ounce and a half. Its operation, however, is unpleasant, and the preparation has nothing to recommend it. In the composition of the London Pharmacopœia, ginger and Jamaica pepper are added, which will communicate a pleasant flavour, and may obviate the griping it is liable to produce.

SYRUPUS ROSÆ CENTIFOLIÆ. Syrup of Damask or Pale Rose. (Syrup. Rosæ, *Ph. Lond.*)

“ Take of the Fresh Petals of the Damask Rose, one pound ; Boiling Water, four pounds ; Refined Sugar, three pounds. Macerate the petals in water for twelve hours ; then to the strained liquor add the sugar, and boil, so as to form a syrup.”

The agreeable flavour of the rose is entirely lost in this syrup ; but it has a very weak purgative power, and is

sometimes from this quality given to infants in a dose of two or three tea-spoonfuls.

SYRUPUS ROSÆ GALLICÆ. Syrup of Red Rose.

“ Take of the Dried Petals of the Red Rose, seven ounces ; Boiling Water, five pounds ; Refined Sugar, six pounds. Macerate the petals in water for twelve hours ; then boil them a little, and strain ; to the strained liquor add the sugar, and again boil, so as to form a syrup.”

Water, by infusion, extracts the slight astringency and the colour of the rose ; the astringency has been supposed to be at least such as to counteract the laxative quality of the sugar, and it is usually this syrup that enters into the composition of astringent mixtures.

SYRUPUS SCILLÆ MARITIMÆ. Syrup of Squill.

“ Take of the Vinegar of Squill, two pounds ; Refined Sugar, three pounds and a half. Dissolve the sugar with a gentle heat, so as to form a syrup.”

This is a syrup of considerable power, the active matter of squill being dissolved by vinegar, and being little injured in forming it into a syrup. It is the form under which squill is usually given as an expectorant, in a dose of one or two drachms, and it is often added to combinations of expectorant remedies. It is also given to children as an emetic, especially in pertussis, the operation of it being sometimes promoted by the addition of a little ipecacuan or antimonial wine.

SYRUPUS TOLUIFERÆ BALSAMI, *vulgo Syrupus Balsamicus.* Syrup of Tolu Balsam. (Syrup. Tolut. *Ph. Lond.*)

“Take of Common Syrup, two pounds; Tincture of Tolu Balsam, one ounce. With the syrup newly prepared, and removed from the fire, when it has nearly cooled, mix the tincture gradually with agitation.”

This is an economical mode of preparing this syrup; but the old method, still retained in the London Pharmacopœia, of boiling Balsam of Tolu in water in a close vessel, and afterwards forming the liquor into a syrup by the addition of sugar, affords a more grateful composition, the syrup being impregnated with the odour of the balsam, without its resinous matter being diffused through it, which, as prepared by the formula of the Edinburgh College, renders it white and turbid. The syrup is used merely on account of its flavour, and to many this is rather disagreeable. On the supposition of tolu balsam being an expectorant, it sometimes enters into the composition of mixtures used in catarrh.

SYRUPUS VIOLÆ ODORATÆ. Syrup of Violet. (Syrup. Violæ, *Ph. Dub.*)

“Take of the fresh flowers of the Sweet-scented Violet, one pound; Boiling Water, four pounds; Refined Sugar, seven pounds and a half. Macerate the flowers in water for twenty-four hours in a covered glass or earthen vessel. Then strain, without expression, and

to the strained liquor add the beat sugar, so as to form a syrup."

This syrup has a fine blue colour, which is, however, lost on keeping. It is a very gentle laxative, and as such is given to infants in a dose of one or two tea-spoonfuls.

It remains to notice those few syrups which have exclusively a place in the London or Dublin Pharmacopœia.

SYRUPUS CROCI. Syrup of Saffron. Ph. Lond.

"Take of Saffron, an ounce; Boiling Water, a pint. Macerate the saffron in the water for twelve hours, in a vessel lightly closed; then strain the liquor, and add the sugar to it."

This syrup is employed in mixtures merely on account of its colour.

SYRUPUS MORI. Syrup of Mulberry. Ph. Lond.

"Take of Mulberry Juice strained, a pint; Refined Sugar, two pounds. Dissolve the sugar in the juice in the manner directed with regard to syrup."

The syrups of several acidulous fruits had formerly a place in the London Pharmacopœia. This is retained as one of the most grateful.

SYRUPUS RHOEADOS. Syrup of Red Poppy. Ph. Lond.
(Syr. Papav. Errat. Ph. Dub.)

“ Take of the Recent Petals of the Red Poppy, one pound; Boiling Water, a pint and two fluidounces; Refined Sugar, two pounds and a half. To the water heated by a water-bath, add the petals of the red poppy gradually, stirring them occasionally, then having removed the vessel, macerate for twelve hours; press out the liquor, and put it aside, that the impurities may subside; lastly, add the sugar in the manner directed with regard to common syrup.”

This syrup is valued only on account of the fine red colour which it receives from the petals of the flower.

SYRUPUS SENNAE. Syrup of Senna. Ph. Lond. Dub.

“ Take of Senna Leaves, one ounce; Bruised Fennel Seeds, one drachm; Manna, Refined Sugar, of each one pound; Boiling Water, one pint. Macerate the senna leaves and the fennel seeds in water for twelve hours. Strain the liquor, and mix with this the manna and sugar.” The directions in the Dublin Pharmacopœia are similar, except that the proportion of senna is only half an ounce, and the fennel seeds are omitted.

This is designed as a purgative syrup for children, and will answer this purpose perfectly well; though the infusion of senna, sweetened with sugar, which is in common use, being of extemporaneous preparation, is perhaps preferable.

SYRUPUS ALII. Syrup of Garlic. Ph. Lond.

“ Take of the Roots of Garlic, cut, one pound ; of Boiling Water, two pounds. Macerate the garlic in the water for twelve hours in a covered vessel, and form a syrup, by adding sugar to the strained liquor.”

Garlic has been employed as an expectorant in some forms of catarrh and dyspnœa, under the form of syrup. It has perhaps, however, no such power as to entitle it to a place as an officinal preparation.

SYRUPUS OPII. Syrup of Opium. Ph. Lond.

“ Take of the Watery Extract of Opium, eighteen grains ; Boiling Water, eight ounces. Macerate them together until the opium be dissolved ; then add sugar, so as to form a syrup.

This is designed as a substitute for the syrup of poppy ; and as the watery extract of opium, not the opium in substance, is dissolved, it may not be liable to the objection of any portion being precipitated from decomposition. It is not altogether certain, however, whether, in the preparation of the watery extract, (to be afterwards noticed), the narcotic power of the opium is not impaired, and, therefore, whether this preparation from it will be always of uniform strength. An ounce of the syrup contains about one grain of the watery extract ; its strength, therefore, will be similar to the medium strength of the syrup of poppy.

MELLITA.—MEDICATED HONEYS.

HONEY has been employed instead of saccharine matter in some pharmaceutical preparations. Combined with vinegar, either alone or with the impregnation of the active matter of vegetables, the kind of composition named Oxymel is formed. Combined merely with infusions of vegetable substances, it forms what are more exclusively named Medicated Honeys. As these preparations have no particular advantage over syrups, and as honey, from idiosyncrasy, produces unpleasant effects on some individuals, they have been rejected by the Edinburgh College. A few, however, retain a place in the London and Dublin Pharmacopœias.

MEL DESPUMATUM. Clarified Honey. Ph. Lond.

“Liquefy honey in a water-bath, then remove the scum.”

Honey, as it is expressed from the comb, is liable to contain wax and other impurities. When the honey is liquefied, these, in a great measure, separate and rise to the surface, so as to be easily removed. The honey thus purified is ordered in the other preparations into which honey enters.

MEL BORACIS. Honey of Borax. Ph. Lond.

“Take of Borax in powder, a drachm; Clarified Honey, an ounce.” Mix them.

In this composition, honey is useful, as giving the

proper consistence. It is designed as an application in aphthous affections of the tongue and fauces, the borax giving a sense of coolness, and removing the foul crust.

MEL ROSÆ. Honey of Rose. *Ph. Lond. Dub.*

“Take of the Dried Petals of the Red Rose, four ounces; Boiling Water, three pints; Clarified Honey, five pints. Macerate the petals in the water for six hours, then to the strained liquor add the honey, and boil it down in a water-bath to the proper consistence.”

This preparation is similar to the syrup of the red rose, and may be applied to the same purposes.

OXYMEL. Oxymel. *Ph. Lond. Dub.*

“Take of Purified Honey, two pounds; Acetic Acid (Distilled Vinegar) one pound. Boil them in a glass vessel, on a slow fire, to the proper consistence.”

This has long been in use as a remedy in catarhal affections, and is also the basis of a cooling detergent gargle.

OXYMEL SCILLÆ. Oxymel of Squill. *Ph. Lond. Dub.*

“Take of Clarified Honey, three pounds; Vinegar of Squill, two pounds. Boil in a glass vessel, over a slow fire, to a proper consistence.”

Under this form squill has been employed, principally as an expectorant. Its dose is one or two drachms.

OXYMEL COLCHICI. Oxymel of Colchicum. *Ph. Dub.*

“Take of the fresh Root of Colchicum cut into thin

slices, one ounce ; Distilled Vinegar, one pint ; Clarified Honey, two pounds. Macerate the colchicum with the vinegar for two days, in a glass vessel ; then strain the liquor pressed out strongly from the root, and add the honey. Lastly, boil the mixture, stirring it frequently with a wooden spoon, to the consistence of a syrup."

This is essentially the same with the syrup of colchicum already noticed ; nor can it derive any advantage from honey being used in its preparation.

OXYMEL ÆRUGINIS. Oxymel of Verdigrease. Ph. Dub.
(Liniment. Æruginis, *Ph. Lond.*)

"Take of Prepared Verdigrease, one ounce ; Vinegar, seven ounces ; Clarified Honey, fourteen ounces. Dissolve the verdigrease in the vinegar, and strain it through linen, then add the honey, and boil the mixture to a proper thickness."

Under this form, verdigrease has been applied as a stimulant and escharotic to foul ulcers.