which always adhere to the gum: the linen may be placed in a funnel.

Mucilage of gum arabic is very useful in many operations in pharmacy; it is also much used for properties peculiar to substances of its own class; and of all the gums, it seems to be the purest.

Decoction of Quince-seed.

Take of

Quince-seeds, two drachms;

Water, one pint.

Boil, with a slow fire, for ten minutes, and strain.

This mucilage, though sufficiently agreeable, is perfectly superfluous, especially as it is apt to spoil, from being mixed with the other principles of the seeds soluble in water. It is, besides, never so transparent as mucilage carefully prepared from gum arabic, is not cheaper, and is unfit for many purposes, being coagulated by acids.

### CHAP. XXVII.—SYRUPS.

Syrupi. Dub.

Syrups.

In making syrups, where neither the weight of the sugar, nor the manner in which it should be dissolved, are directed, the following rule is to be followed:

Take of

Double refined sugar, in fine powder, twenty-nine ounces;

The liquor prescribed, one pint.

Gradually add the sugar, and digest, with frequent agitation, in a close vessel, and in a moderate heat, until it be dissolved; then set it aside for twenty-four hours; take off the scum, and pour off the syrup from the fæces, if there be any.

Lond.

Syrups are to be kept in a place whose temperature never exceeds 50° Fahr.

Syrups are solutions of sugar in any watery fluid, whether simple or medicated. Simple syrup is nutritious and demulcent. When made of fine sugar, it is transparent and colourless. If necessary, it is easily clarified, by beating to a froth the white of an egg, with three or four ounces of water, mixing it with the syrup, and boiling the mixture for a few seconds, until the albumen coagulates, and enveloping all heterogeneous matters, forms a scum, which may be easily taken off, or separated by filtration. When, instead of simple water, any other fluid is used for dissolving the sugar, the syrup is then said to be medicated. Medicated syrups are prepared with expressed juices, infusions, decoctions, or The object of forming these into syrups is saline fluids. either to render them agreeable to the palate, or to preserve them from fermentation. In the latter case, the quantity of sugar added becomes a matter of great importance; for, if too much be employed, the sugar will separate by crystallization; and, if too little, instead of preventing fermentation, it will accelerate it. About two parts of sugar to one of fluid are the proportions directed by the British colleges with this view. But, as in some instances a larger quantity of fluid is added, and afterwards reduced to the proper quantity by decoction, it will not be superfluous to point out some circumstances, which shew the evaporation to be carried far enough. These are the tendency to form a pellicle on its surface, when a drop of it is allowed to cool: the receding of the last portion of each drop, when poured out drop by drop, after it is cold; and what is most to be relied on, its specific gravity when boiling hot, being about 1.3; or 1,385, when cold. The syrup which remains, after all the crystallizable sugar has been separated from it, has been much, and probably justly, recommended by some for the preparation of medicated syrups and electuaries, although its pharmaceutical superiority is actually owing to its impurity.

> SYRUPUS SIMPLEX SIVE COMMUNIS. Simple or Common Syrup.

Take of

Double refined sugar, in powder, fifteen parts;

Water, eight parts.

Let the sugar be dissolved by a gentle heat in the water, and boiled a little, so as to form a syrup.

SYRUPUS SIMPLEX. Lond. Jimple Syrup.

Take of

Refined sugar, two pounds and a half;

Water, one pint.

Dissolve the sugar in the water, in a water-bath; let it stand for twenty-four hours, then skim it, and decant off the pure syrup from the fæces, if there be any.

SIMPLE syrup should have neither flavour nor colour, and is more convenient in extemporaneous prescriptions than sugar undissolved.

> SYRUPUS ALTHÆÆ OFFICINALIS. Syrup of Marshmallow.

Take of

Fresh marshmallow roots, sliced, one pound;

Water, ten pounds;

Refined sugar, four pounds.

Boil down the water with the roots, to one-half, and strain the liquor, with strong expression. Set aside the strained decoction till the fæces have subsided; add the sugar to the depurated decoction, and boil so as to make a syrup.

> SYRUPUS ALTHÆÆ. Lond. Syrup of Marshmallow.

Fresh root of marshmallow, bruised, half a pound;

Refined sugar, two pounds;

Water, four pints.

Boil the water with the marshmallow root to one-half, and press out the liquor when cold. Set it at rest for twentyfour hours; and after the fæces have subsided, pour off the decoction. Add the sugar, and boil it to a proper consis-

This is merely a mucilaginous syrup, and is chiefly used in nephritic cases, for sweetening emollient decoctions, and the like.

> SYRUPUS DIANTHI CARYOPHYLLI. Ed. Syrup of Clove July-flower.

Take of

Clove July-flowers, fresh gathered and freed from the heels, one pound;

Boiling water, four pounds;

Refined sugar, seven pounds.

Macerate the petals in the water for twelve hours; and dissolve in the filtered infusion the sugar in powder, by a gentle heat, so as to form a syrup.

Syrupus caryophylli rubri. Dub. Syrup of Clove July flower.

Take of

The petals of fresh clove July-flowers, without the heels, two pounds;

Boiling water, six pints.

Macerate for twelve hours in a glass vessel; and in the strained liquor dissolve refined sugar, so as to form a syrup.

As the beauty of the colour is principally attended to in this syrup, no force should be used in expressing the infusion from the flowers.

Some have substituted to it one easily prepared at seasons when the flowers are not to be procured: An ounce of spice-cloves is infused for some days in twelve ounces of white wine, the liquor strained, and with the addition of twenty ounces of sugar, boiled to the proper consistence of a syrup, to which a little cochineal gives a colour exactly similar to that prepared from the clove July-flower; and its flavour is of the same kind, though not so pleasant. The counterfeit may be readily detected, by adding to a little of the syrup some alkaline salt or ley; which will change the genuine syrup to a green colour; but, in the counterfeit, it will make no such alteration, only varying the shade of the red.

Syrup of Saffron.

Take of

Saffron, one ounce;

Boiling water, one pint;

Refined sugar, two pounds and a half.

Macerate the saffron in the water for twelve hours, in a loosely covered vessel; and dissolve the sugar in the strained liquor.

SAFFRON is very well fitted for making a syrup. It is said to be a pleasant cordial, and gives a fine colour to juleps.

SYRUPUS TOLUIFERÆ BALSAMI; vulgo SYRUPUS BALSAMICUS. Ed.

Syrup of Balsam of Tolu, formerly Balsamic Syrup.

Take of

Common syrup, two pounds;

Tincture of balsam of Tolu, one ounce.

With the syrup just prepared, and when it has almost grown cold, after having been removed from the fire, gradually mix the tincture with constant agitation.

> SYRUPUS TOLUTANUS. Lond. Syrup of Tolu.

Take of

The balsam of Tolu, one ounce;

Boiling water, one pint;

Refined sugar, two pounds.

Boil the balsam in the water for half an hour, in a covered vessel, stirring it occasionally; strain the liquor when cold, and add the sugar as in making simple syrup.

THE intention of the contrivers of the two foregoing processes seems to have been somewhat different. In the latter, which is certainly the most elegant, the benzoic acid of the balsam alone is contained; the other syrup contains the whole substance of the balsam in larger quantity. They are both moderately impregnated with the agreeable flavour of the balsam.

> SYRUPUS VIOLE ODORATE. Ed. Syrup of Violets.

Take of

Fresh violets, one pound;

Boiling water, four pounds;

Refined sugar, seven pounds and a half.

Macerate the violets in the water, for twenty-four hours, in a covered glass or glazed earthen vessel; then strain without expression, and to the strained infusion add the sugar powdered, so as to form a syrup.

> SYRUPUS VIOLE. Dub. Syrup of Violets.

Take of

The fresh petals of the violet, two pounds;

Boiling water, five pints.

Macerate for twenty-four hours; afterwards strain the liquor, without expression, through thin linen. Add double refined sugar, that it may be made a syrup.

This syrup has a very agreeable flavour; and, in the quantity of a spoonful or two, proves to children gently laxative. It is apt to lose, in keeping, the elegant blue colour, for which it is chiefly valued; and hence, some have been induced to counterfeit it, with materials whose colour is more permanent, and which are more easily obtained. If the syrup be genuine, acids will change it red, and alkalies green; but if counterfeit, these changes will not happen. From this mutability of colour, the syrup of violet forms an excellent test of the presence of acids and alkalies; and it is also obvious, that a prescriber would be deceived, if he should expect, by means of it, to give a blue tinge to acidulated or alkalized juleps or mixtures.

### Syrupus Rosæ Gallicæ. Ed. Syrup of Red Roses.

Take of

The dried petals of red roses, seven ounces;

Refined sugar, six pounds; Boiling water, five pounds.

Macerate the roses in the water, for twelve hours; then boil a little, and strain the liquor; add to it the sugar, and boil again for a little, so as to form a syrup.

This syrup is supposed to be mildly astringent, but is principally valued on account of its red colour.

# Syrup of Hundred-leaved Roses.

Take of

The fresh petals of the hundred-leaved rose, one pound;

Boiling water, four pounds; Refined sugar, three pounds.

Macerate the petals in the water for twelve hours; then to the strained infusion add the sugar, and boil them into a syrup.

## Syrup of Roses. Lond.

Take of

The dried petals of the hundred-leaved rose, seven ounces; Refined sugar, six pounds;

Boiling water, four pints.

Macerate the roses in the water for twelve hours, and strain.

Evaporate the strained liquor, in a water-bath, to two pints and a half, and add the sugar, as directed for making syrup.

This syrup is an agreeable and mild purgative for children, in the dose of half a spoonful, or a spoonful. It likewise proves gently laxative to adults; and with this intention may be of service in costive habits.

> SYRUPUS SENNA. Dub. Syrup of Senna.

Take of

Manna,

Refined sugar, each one pound;

Senna, half an ounce;

Boiling water, a pint.

Macerate the senna in the water, in a covered vessel, for twelve hours; then, with the strained liquor, mix the manna and the sugar, so that they may be dissolved.

Lond. The sends of points

Take of

Senna leaves, two ounces;

Fennel seeds, bruised, one ounce;

Manna, three ounces;

Refined sugar, one pound;

Boiling water, a pint.

Macerate with a gentle heat the senna leaves and seeds in the water for twelve hours. Strain the liquor, and mix with it the manna and sugar, then boil to a proper thickness.

This preparation, which is intended to be an officinal substitute for an excellent nursery purgative, is a proof of the impropriety of colleges sanctioning prescriptions which they have not brought to the test of experiment. Mr Phillips found, that the proportions as given by the Dublin college yielded, instead of a fluid syrup, a substance so thick, that it could not even be shaked out of an inverted vessel, owing to the crystallization of the manna. Treacle is the best addition for forming infusion of senna into a syrup, as it has no tendency to crystallize, and covers its taste so completely, that children take it readily.

> SYRUPUS RHAMNI CATHARTICI. Ed. Syrup of Buckthorn.

Take of

The juice of ripe buckthorn berries, depurated, two parts;

Refined sugar, one part.

Boil them so as to form a syrup.

Syrupus Rhamni. Lond. Syrup of Buckthorn.

Take of

The fresh juice of buckthorn berries, four pints; Ginger, sliced,

Pimento, powdered, each half an ounce; Refined sugar, three pounds and a half.

Set aside the juice for three days that the fæces may subside. and then strain it. To one pint of the defæcated juice, add the ginger and pimento; then macerate with a gentle heat for four hours, and filter. Boil away the rest of the juice to one pint and a half; mix the liquors, and add the sugar as directed for making Syrup.

Both these preparations, in doses of three or four spoonfuls, operate as brisk cathartics. The principal inconveniencies attending them are, their being very unpleasant, and their occasioning a thirst and dryness of the mouth and fauces, and sometimes violent gripes; these effects may be prevented by drinking liberally of water gruel, or other warm liquids during the operation.

#### SYRUPUS CITRI AURANTII. Ed. Syrup of Orange-peel.

Take of

The fresh outer rind of Seville oranges, six ounces; Boiling water, three pounds;

Refined sugar, four pounds.

Macerate the rind in the water for twelve hours; then add to the filtered liquor the sugar, in powder, and, with a gentle heat, form a syrup.

#### Syrupus aurantii. Dub. Syrup of Orange-peel.

Take of

Fresh outer rind of Seville oranges, eight ounces;

Boiling water, six pints.

Macerate for twelve hours, in a close vessel; and, in the strained liquor, dissolve refined sugar to make a syrup.

#### SYRUPUS AURANTIORUM. Lond. Orange Syrup.

Fresh orange rind, two ounces; Boiling water, one pint; Refined sugar, three pounds.

Macerate the rind in the water in a loosely covered vessel, for twelve hours; then pour off the liquor, and add to it the

In making this syrup, it is particularly necessary that the sugar be previously powdered, and dissolved in the infusion, with as gentle a heat as possible, to prevent the exhalation of the volatile parts of the peel. With these cautions, the syrup proves a very elegant and agreeable one, possessing a great share of the fine flavour of the orange-peel.

SYRUPUS CITRI MEDICI; olim SYRUPUS LIMONUM. Ed. Syrup of Lemons.

Take of

Juice of lemons, filtered after the fæces have subsided, three parts:

Double refined sugar, five parts.

Dissolve the sugar in the juice, so as to make a syrup.

SYRUPUS LIMONIS. Dub. Syrup of Lemons.

Take of

Strained lemon juice, one pint; Refined sugar, two pounds.

Dissolve the sugar in the lemon juice as directed for syrup.

SYRUPUS LIMONUM. Lond. Lemon Syrup.

Take of

Lemon juice, strained, one pint;

Refined sugar, two pounds.

Dissolve the sugar in the lemon juice, in the same manner as directed for the formation of simple syrup.

> SYRUPUS MORI. Lond. Syrup of Mulberry.

Take of

Mulberry juice strained, one pint;

Refined sugar, two pounds.

Dissolve the sugar in the mulberry juice, as directed for syrup.

THESE are very pleasant cooling syrups; and with this intention they are occasionally used in draughts and juleps, for quenching thirst, abating heat, &c. in bilious or inflammatory distempers. They are sometimes, likewise, employed in gargarisms for inflammations of the mouth and tonsils.

SYRUPUS ACIDI ACETOSI. Ed. Syrup of Acetous Acid.

Take of

Acetous acid, two pounds and a half; Refined sugar, three pounds and a half; Boil them, so as to form a syrup.

This is to be considered as simple syrup merely acidulated, and is by no means unpleasant. It is employed in mucilaginous mixtures, and the like; and, on account of its cheapness, it is often preferred to syrup of lemons.

> SYRUPUS ALLII. Dub. Syrup of Garlic.

Take of

Garlic, sliced, one pound; Boiling water, two pints.

Macerate the garlic in the water, in a covered vessel, for twelve hours; then add the sugar to the strained liquor, and form a syrup.

This is a very disagreeable syrup; but when we wish to extract the virtues of garlic by a watery menstruum, it is the best means we can employ.

> SYRUPUS SCILLÆ MARITIMÆ. Syrup of Squills.

Vinegar of squills, two pounds;

Refined sugar, in powder, three pounds and a half. Dissolve the sugar with a gentle heat, so as to form a syrup.

This syrup is used chiefly in doses of a spoonful or two, for promoting expectoration, which it does very powerfully. It is also given as an emetic to children.

> SYRUPUS COLCHICI AUTUMNALIS. Ed. Syrup of Colchicum.

Take of

Colchicum root, fresh, cut into thin slices, one ounce; Vinegar, sixteen ounces;

Refined sugar, twenty-six ounces.

Macerate the root in the vinegar for two days, occasionally shaking the vessel; then strain the infusion with gentle expression. To the strained infusion add the sugar, and boil a little so as to form a syrup.

This syrup seems to be the best preparation of the colchi-

cum. We must take care to gather this root in the proper season: and, from errors in this particular, we are to ascribe the uncertainty in the effects of this medicine as found in the shops.

It is chiefly employed as a diuretic, and may be taken from a drachm or two to the extent of an ounce or more.

> SYRUPUS PAPAVERIS SOMNIFERI. Syrup of White Poppy.

Take of

White poppy heads, dried, and freed from the seeds, two pounds;

Boiling water, thirty pounds; Refined sugar, four pounds.

Macerate the sliced heads in the water for twelve hours; boil the infusion till only one-third part of the liquor remain; then strain the decoction with strong expression. Boil the strained decoction to one-half, and strain again; lastly, add the sugar, and boil a little, so as to form a syrup.

> SYRUPUS PAPAVERIS. Lond. Syrup of Poppy.

Take of

The heads of white poppies, dried and bruised, without the seeds, fourteen ounces;

Refined sugar, two pounds;

Boiling water, two gallons and a half.

Macerate the capsules in the water for twelve hours; boil them to one gallon in a water-bath, and strongly press out the decoction. Boil this down, after being strained, to two pints, and strain it while hot; set it aside for twelve hours that the fæces may subside. Boil the liquor, poured off from the fæces, to one pint, and dissolve the sugar in it, in the manner directed for making syrup.

> SYRUPUS PAPAVERIS ALBI. Dub. Syrup of White Poppy.

Take of

White poppy-heads, gathered unripe, dried, and emptied of their seeds, one pound;

Boiling water, three pints.

Slice and bruise the heads, then pour on the water, and macerate for twelve hours; express the liquor, and evaporate in a moderate heat to one pint; strain through thin flannel, and set aside for six hours, to allow the fæces to sub-

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side: to the decanted liquor add the sugar, and make into

This syrup, impregnated with the narcotic matter of the poppy-heads, is given to children, in doses of two or three drachms, and to adults, of half an ounce to an ounce and upwards, for easing pain, procuring rest, and answering the other intentions of mild opiates. Particular care is requisite in its preparation, that it may be always made, as nearly as possible, of the same strength; and accordingly the colleges have been very minute in their description of the process, although, as Mr Phillips remarks, the use of a water-bath in forming the decoction, as directed by the London College, is unnecessary.

#### SYRUPUS OPII. Dub. Syrup of Opium.

Take of

Watery extract of opium, eighteen grains; Boiling water, eight ounces by measure.

Macerate until the opium be dissolved, then add sugar so as to make a syrup.

This syrup is an elegant substitute for the former. It is made with infinitely less trouble, and is always of an uniform strength. It contains about two grains and a half of opium in the ounce.

#### SYRUPUS PAPAVERIS ERRATICI. Dub. Syrup of Red Poppy.

The fresh petals of the red poppy, one pound; Boiling water, twenty ounces, by measure.

Put the flowers by degrees into the boiling water. After this, the vessel being removed from the fire, and taken out of the bath, macerate for twelve hours; then press out the liquor, and set it apart, that the fæces may subside. Lastly, make it into a syrup with refined sugar.

### Syrupus RHŒADOS. Lond. Syrup of Red Poppy.

Take of

Fresh petals of red poppy, one pound; Boiling water, one pint and two fluidounces;

Refined sugar, two pounds and a half.

Gradually put the petals into the water, heated in a waterbath, stirring it occasionally, then having removed the ves-

sel from the fire, macerate for twelve hours; express the liquor, and set it aside to let the impurities settle at the bottom: then add the sugar, as directed for syrup.

THE design of putting the flowers into boiling water in a water-bath is, that they may be a little scalded, so as to shrink enough to be all immerged in the water: without this precaution they can scarce be all got in; but they are to be continued no longer over the fire than till this effect is produced, lest the liquor become too thick, and the syrup be rendered ropy.

As a medicine it is perfectly insignificant.

SYRUPUS AMOMI ZINGIBERIS. Ed. Syrup of Ginger.

Take of

Ginger in powder, three ounces; Boiling water, four pounds;

Refined sugar, seven pounds and a half.

Macerate the ginger in the water, in a close vessel, for twentyfour hours: strain the infusion, and form a syrup, by adding the sugar.

> Syrupus zingiberis. Dub. Syrup of Ginger.

Ginger, bruised, four ounces; Boiling water, three pints.

Macerate for twenty-four hours, and strain; then add the refined sugar, and make into a syrup.

Lond.

Take of

Ginger, sliced, two ounces; Boiling water, one pint; Refined sugar, two pounds.

Macerate the ginger in the water for four hours, and strain; then add the sugar as directed for making syrup.

This is an agreeable and moderately aromatic syrup, impregnated with the flavour and virtues of the ginger.

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