great an advantage by having your dis-
coloured goods brought to their proper
complexion again, by their being distilled
a second time, as is mentioned before;
so that is balanced by the disadvantage
that you lose all the dulcifying where-
with they were before sweetened; and
by every distillation they are weakened
near one in twenty, though improved in
goodness as aforesaid.

You may colour any sort of goods
according to the fancies of your several
customers; if your raspberries grow too
pale, as they will do after their being
twice or thrice drawn off, and filled up
with plain brandy, then a quart, or what
more you find necessary, of cherry bran-
dy must be put to the raspberry, as you
make it up, to give it a deeper tincture
for sale. If your plain brandy want a
higher tinge, then a little burnt sugar or
treacle does it immediately; and so your
own judgment and experience will di-
rect you in all the rest.
Distillers in drawing off and making up their distilled goods: namely, when you perceive about two-thirds parts of the first quantity you put into your still is come off, then be often trying your goods in a glass or phial; and when you see that the bell, or proof, immediately falls down, and does not continue a pretty space upon the surface, then take away the can of goods, and substitute another vessel to receive the feints; which, if suffered to run among the goods, would cause a disagreeable relish, and be longer in fining down; whereas the feints being kept separate, the goods will be clean and well-tasted, when made up with liquor to their due quantity.

It will improve your goods to throw into your still along with your materials when first charged, about six ounces of bay salt to every ten gallons of spirits, and so proportionably, whereby the goods will cleanse themselves, and separate from their phlegmatic parts.
Some also are wont to cast in a handful of grains to make the goods feel hot upon the palate, as if they bore a better body; yet this conduces nothing towards the advancement of the proof.

When your goods are all come off, and you design them for double goods, you must make them up to their first quantity with liquor; as if, for instance, you charge your still with three gallons of proof spirits, they will yield in distillation about two gallons without feints; which deficiency of one gallon must be made up with liquor, (and sugar used in dulcifying) to their determined quantity.

And if you are to make up your common or single goods, you must add over and above the prescribed quantity in compounding double goods, one and an half part more of liquor, (viz. one gallon and an half) to dilute it for single or common goods.

Thus by this specimen you may learn how to make goods proof, and how to
reduce them lower to what strength or body you please.

You must also observe when you dulcify your goods, that you never put your dissolved sugar amongst your new distilled goods, till the said dulcifying be perfectly cold, for if mixed hot with the goods, it would cause some of the spirits to exhale, and render the whole more foul and phlegmatic than otherwise they would be.

When you want to fine any goods speedily for present use or sale, (especially white or pale goods) add about two drachms of crude allum, finely powdered, to three gallons of goods; which rummage well therein, and it will immediately depurate and will become clear.

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RECIPE FOR 140 GALLONS OF GIN MADE WITHOUT DISTILLATION.

Take 100 gallons of proof malt spirits rectified by agitation; infuse two pounds and an half of the best juniper berries
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for a week or ten days; then take of oil of turpentine three ounces; oil of juniper-berries, five ounces; oil of sweet fennel-seeds, two ounces; fill these essential oils with some dry loaf sugar, and dissolve them in three pints of spirit of wine that will fire gunpowder: add them to the 100 gallons of spirits and juniper-berries, rousing them well up for an hour; next day make up to one in five, with lime water, and sweeten with a quarter of an hundred of clayed sugar. Fine with eight or ten ounces of alum dissolved in two or three gallons of the making-up water reserved for the purpose. These ingredients will make 140 gallons of as good English gin, as any usually made by distillation.

DIRECTIONS FOR PURCHASERS OF A TUN OF FINE GIN.

If you think not proper to sweeten it according to the former directions, apply to your distiller, desiring him to make
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you a tun of fine gin, hydrometer proof, clean and well-tasted.

Being agreed for, you may safely buy it by weight; but this offer will doubtless be rejected, because herein the interest of the distiller would be affected.

Previous to the pipes being filled, be careful they are in good condition, clean and well-seasoned.

At measuring, fail not to keep score with the cellarman or shopman, to prevent mistakes.

When measured, (and your score agreeing with that against you) take your instrument, and be satisfied your purchase is according to agreement, that is, hydrometer proof. A bill of parcels being made out, and the business complete, take a sample of each pipe, and see them carted and sent home.

When unloaded, let the whole be started into a vat, ready for that purpose.

The general process with distillers, I have here set down.
A tun of fine gin, strength
1 to 7 over proof . . . . 252 galls.
When lowered to proof,
gives water . . . . 36
Which, added together, make 288 proof;
and it is further reduced to
1 in 5 below hydrometer
proof, with water, which
gives . . . . . . 57

Total 345 galls.

This done, let a pound of alum be
just covered with water, and dissolved
by boiling; rummage the above well
together, and pour in the alum, and the
whole will be fine in a few hours.

To ascertain the true cost, after the
business is done, supposing the price
you give for the tun of 252 galls at
14s. per gallon, is . . . . 176 8 0
252 galls, reduced to 1 in
5 under proof, gives 345
galls at 12s. per gallon . 207 0 0

176 8 0

Profit on 345 galls . £30 12 0
which is £1. 9½d. per gallon, and if it is further reduced to one in four it will require sixteen gallons of water more. Therefore, I presume, the retailer gains more profit in making up his own goods, than the distiller gains in distilling them.

**DIRECTIONS FOR PURCHASERS OF SINGLE PIPES.**

As single pipes are seldom sold at Hydrometer proof, the buyer must rest satisfied with having the geneva as it is manufactured.

After the cask intended for its reception has been properly examined, care should be taken that the spirits is perfected bright; without which the sale will be injured, and the liquor deprived of a valuable recommendation.

Reduced gin should never be bought by weight, because water, (which is more ponderous than spirits) being great part of its composition, there will be
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a loss of three gallons in a pipe; consequently, buying by measure is here most eligible.

TO PREPARE AND SWEETEN BRITISH GIN BY AGITATION.

Get from your distiller an empty puncheon or cask, which will contain about 133 gallons; then take a cask of clear rectified spirits, 120 gallons, one in five under proof, put the 120 gallons of spirits into your empty cask.

Then take a quarter of an ounce of the oil of vitriol, half an ounce of the oil of almonds, one quarter of an ounce of the oil of turpentine, one ounce of the oil of juniper-berries, get half a pint of the spirits of wine, and half a pound of lump sugar. Beat or rub the above ingredients in a mortar, until the whole is well incorporated; add another half pint of the spirits of wine to the mortar. When well rubbed together, have ready
prepared half a gallon of lime-water, and one gallon of rose-water; mix the whole in either a pail or cask, with a stick, till every particle shall be dissolved; then add to the foregoing 35 pounds of sugar dissolved in about nine gallons of clear rain or Thames water, or water that has been boiled; mix the whole well together, and stir them carefully with a stick, in the 133 gallon cask.

To force down the same, take and boil eight ounces of allum in three quarts of water, for three quarters of an hour. Take it from the fire, and dissolve by degrees six or seven ounces of salt of tartar. When the same is milk warm, put it into your gin, and stir it well together, as before, for five minutes, the same as you would a butt of beer newly fined. Let your cask stand as you mean to draw it. At every time you propose to sweeten again, that cask must be well washed out; and take great care never to shake your cask all the while it is drawing.
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RECIPE FOR MAKING TEN GALLONS OF ROYAL GENEVA BY DISTILLATION.
Take of juniper-berries three pounds; proof spirits, ten gallons; water, four gallons. Draw off by a gentle fire till the feints begin to rise, and make up your goods to the strength required with clean water.

The distillers generally call those goods which are made up proof, by the name of royal.

COMMON GIN BY DISTILLATION.
Take of ordinary malt spirits, 10 gallons; oil of turpentine, two ounces; juniper-berries, one pound; sweet fennel and caraway seeds, of each four ounces; bay salt, three handfuls. Draw off by a gentle fire till the feints begin to rise, and make up your goods to the strength required.—Say 10 gallons of spirit will make about 15 gallons of common gin*.

* It would be surprising that the rich and the poor should accustom themselves to drink it for...
A KEY TO THE DISTILLERY. 47

To Make Ten Gallons of Gin Bitters.

Take ten gallons of common gin, spirits of wine half a pint, in which dissolve the following essential oils with the assistance of a little well dried loaf sugar, finely powdered, viz. essence of lemon and orange-peel, of each an ounce; oil of wormwood, a quarter of an ounce; orange-peel dried, one pound; let them digest without heat for fourteen or fifteen days, then draw off for use as wanted; taking care not to disturb the goods, by stirring the vessel they are made in.

This will be a most pleasant cheap bitter, equally wholesome, and as good as many that are much dearer.

This is only fit to be taken with gin. The same ingredients, and rectified malt pleasure, were they not convinced of its cordial and innocent effects, compared to similar excesses committed with foreign spirits, which are also much more expensive.
sirits, or molasses spirits, will either
of them make a bitter of more general
use.

Compounds prepared without Distillation.

FOR MAKING FROM 120 TO 130
GALLONS OF RUM SHRUB.

Take sixty-five or seventy gallons of
Rum, one in eight; from seven to eight
gallons of lemon-juice; from six to seven
gallons of orange-juice; both fresh ex-
pressed from the fruit; orange-wine,
thirty gallons; two pounds of the rind
of fresh lemon-peel; and one pound of
the rind of fresh orange-peel; both
pared off as thin as it can be done, and
previously steeped for a few days in the
rum; one hundred pounds of loaf-sugar.
Fill up the cask of 120 gallons, or 130
gallons, with fair water; rouse them well
together; if not sweet enough, sweeten
to your palate; if too sweet, add more
A Key to the Distillery.

Lemon-juice. Dissolve your sugar in part of the water used for making up your shrub; let it stand till fine, set up on end, with a cock near the bottom.

For Making 130 Gallons of Brandy Shrub.

Take from 75 to 80 gallons of brandy; eight to ten gallons of lemon-juice; eight gallons of orange-juice; four pounds of thin rind of fresh orange-peel, and two pounds of fresh lemon-peel, both pared as thin as they can be; and add them to the brandy the first thing; with four ounces of terra-japonica; one hundred weight of loaf or clayed sugar, dissolved in part of the water used for making up, added with the above ingredients to the brandy, &c.; fill up with fair water, set the cask on end, with a cock near the bottom, and let it stand till fine.

Shrub may be made in similar manner
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with British Rum or Brandy, or with a pure flavourless spirit, prepared from molasses or grain, with similar ingredients in the before-mentioned proportions. The quantity can be increased or reduced at pleasure, by duly apportioning the ingredients to the quantity of spirits employed. For instance:

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To Make Two Gallons of Rum Shrub.

Take one gallon of rum, at one in eight; of lemon and orange juice, each one pint; one quart of orange wine; and two pounds of loaf sugar; one orange and lemon peel; and fill up your two gallon vessel with water, cork it up loosely, and let it stand until fine, then cork it down close.

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To Make Two Gallons of Brandy Shrub.

Take one gallon and a pint of brandy, one in eight; lemon and orange juice,
of each a pint; four orange and two lemon peels; sugar, two pounds; compound essence of orange and lemon peel, a small tea-spoonful; make up with fair water, and let it stand till fine. Be careful in drawing it off not to shake the vessel.

TO MAKE TWENTY GALLONS OF PEPPERMINT CORDIAL.

Take thirteen gallons of rectified spirits, one in five under hydrometer proof; twelve pounds of loaf sugar; one pint of spirit of wine that will fire gunpowder; fifteen pennyweights, Troy, of oil of peppermint; water, as much as will fill up the cask, which should be set up on end, after the whole being well roused, and a cock for drawing off placed in it.
TO MAKE UP THE ABOVE.

Powder two or three ounces of sugar in a brass mortar, on which pour the oil of peppermint, and beat it into a thin paste, stirring the sugar and oil with a knife, scraping what is in the pestle and mortar together, that the oil may be uniformly incorporated with the sugar; then add the spirit of wine, and blend them well together; have the remainder of your sugar ready dissolved in four or five gallons of the water to be used for making up; rummage, or rouse, the whole well together with a paddle-staff, or rouser; and lastly, fill up the cask with pure clean water; dissolve one ounce and a half of powdered alum in the making up water, boiling over the fire; and when blood-warm, add it to fill up the cask, in which place a cock, and let it stand two or three days, in which time it will be fit for use.

If the essential oil is of your own
making, or such as you can depend on, it will require nothing more than agita-
tion.

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TO MAKE TWENTY GALLONS OF ANISEED CORDIAL.

TAKE fourteen gallons of spirits, one in six; a pint of spirit of wine, strong as the former; from six to eight pounds of loaf sugar; one ounce and an half of oil of aniseed; two ounces of finely powdered alum; dissolve the sugar in one part of the water used for making up, and your alum in the remainder; and proceed as directed in the making up peppermint cordial. Aniseed cordial does not bear to be reduced much below one in five, as part of the oil will separate when too much lowered, and render the goods unsightly.
TO MAKE TWO GALLONS OF NAUYAU.

One gallon and an half of French brandy, one in five; six ounces of the best fresh prunes; two ounces of celery; three ounces of the kernels of apricots, nectarines, and peaches; and one ounce of bitter almonds; all gently bruised; essence of orange-peel, and essence of lemon-peel, of each two pennyweights, killed in the same manner as the oil of peppermint; half a pound of loaf sugar; let the whole stand ten days or a fortnight; then draw off, and add to the clear Nauyau as much rose-water as will make it up to two gallons, which will be about half a gallon.

TO MAKE TWO GALLONS OF CINNAMON CORDIAL,

Take two pennyweights of oil of cassia-lignea, killed as before mentioned, with sugar and spirits of wine; a gallon and an half, at one in six; cardamum seeds, husked, an ounce; orange and lemon-
peel dried of each an ounce; fine with half a pint of alum water; sweeten to your palate with loaf sugar, not exceeding two pounds, and make up two gallons measure with the water you dissolve the sugar in. This is a very cheap and elegant cinnamon cordial; colour with burnt sugar.

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TO MAKE TWENTY GALLONS OF CARAWAY CORDIAL.

Take an ounce and an half of oil of caraway; twenty drops of cassia-lignea oil, and five drops of essence of orange-peel, and the same quantity of the essence of lemon; thirteen gallons of spirits, one in five; eight pounds of loaf sugar; make it up and fine it down, as directed for aniseed.

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TO MAKE TWENTY GALLONS OF CITRON CORDIAL.

Infuse fourteen pounds of Smyrna figs, for a week, in twelve gallons of spirits,
one in five; draw off, and add to the clear spirituous infusion essence of orange and lemon, of each an ounce, killed in a pint of spirits of wine; half a pound of dried lemon, and four ounces of orange-peel; six or seven pounds of loaf sugar: make up as before, with fair water.

TO MAKE TWENTY GALLONS OF IMPERIAL RATAFIA.

In these kingdoms the most compendious way of making the best ratafia is, by taking three quarters of a pound of the kernels of peaches, nectarines, and apricots, bruised; three pounds of bitter almonds, bruised; half a gallon of rectified spirit of wine, in which dissolve half an ounce of compound essence of ambergris; twelve gallons of pure molasses spirit, one in four gallons of British Frontiniac wine; and as many gallons of rose-water as will make up the ratafia to twenty gallons; steep the kernels and almonds for ten days, then draw
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off for use. This quantity will take ten pounds of loaf sugar to sweeten it; but as some may not like it so, it had better be sweetened by a few gallons at a time, as it may be wanted.

RECIPE FOR MAKING RED RATAFIA.

Take of cherries and gooseberries, of each thirty pounds; mulberries, seven pounds; raspberries, ten pounds. Pick all these fruits clean from their stalks, &c., bruise them, and let them stand twelve hours; but do not suffer them to ferment. Press out the juice, and to every pint add three ounces of sugar; when the sugar is dissolved, run it through the filtering bag, and to every five pints of liquor add four pints of clean proof spirit; together with the same proportion of spirit drawn from spices.

Different distillers use different quantities of the spirit drawn from spices.
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The best method, therefore, is to imitate the flavour most universally approved of, which may be easily done, by adding a greater or less proportion of the spiced spirit.

TO MAKE THE SPICY SPIRIT.

Take of mace, one pound; nutmegs, four ounces; spirit, three gallons; and draw off the whole in balneum mariae.

LOVAGE CORDIAL, TWENTY GALLONS.

Take of the fresh roots of lovage, valerian, and celery, and sweet fennel, each four ounces; of essential oil of caraway and savin, each one ounce; spirit of wine, one pint; twelve gallons of proof spirits; loaf sugar, twelve pounds; steep the roots and seeds in the spirits fourteen days; and kill, or dissolve, the oils in the spirit of wine, and add them to the undiluted cordial drawn off from the
other ingredients; dissolve the sugar in the water for making up; fine, if necessary, with alum*.

NECTAR, A TWENTY GALLON CASE.

A pleasant cordial for those whose stomach cannot bear a stronger; particularly if taken in the morning, for gently exhilarating the spirits, and strengthening the animal functions, may be advantageously made with fifteen gallons of the imperial ratafia, a quarter of an ounce of cassia-oil, and an equal quantity of the oil of caraway-seeds, dissolved in half a pint of spirit of wine, and made up with orange wine, so as to fill up the cask.

Sweeten, if wanted, by adding a small lump of sugar in the glass.

* This is a warm aperient active cordial medicine, capable of promoting sweat, urine, &c.
RECIPE FOR TEN GALLONS OF COMMON USQUEBAUGH BY DISTILLATION.

Usquebaugh is a very celebrated cordial, the basis of which is saffron.

There are different ways of making this famous Irish cordial; but the following are equal to any I have seen:

Take of nutmegs, cloves, and cinnamon, of each two ounces; of the seeds of anise, caraway, and coriander, each four ounces; liquorice-root, sliced, half a pound; bruise the seeds and spices, and put them together with the liquorice into the still, with eleven gallons of proof spirits, and two gallons of water; distil with a pretty brisk fire till the feints begin to rise. But as soon as your still begins to work, fasten to the nose of the worm two ounces of English saffron, tied up in a cloth, that the liquor may run through it, and extract all its tincture; and, in order to this, you should often press the saffron.
with your fingers. When the operation is finished, dulcify your goods with fine sugar.

RECIPE FOR MAKING TEN GALLONS OF USQUEBAUGH BY DIGESTION.

Take of raisins, stoned, five pounds; figs, sliced, one pound and an half; cinnamon, half a pound; nutmegs, three ounces; cloves and mace, of each one ounce and an half; liquorice, two pounds; saffron, four ounces; bruise the spices, slice the liquorice, and pull the saffron in pieces; digest these ingredients eight days in ten gallons of proof spirit, in a vessel close stopped; then filter the liquor and add to it two gallons of canary wine, and half an ounce of the tincture of ambergris.
RECIPE FOR MAKING TEN GALLONS OF ROYAL USQUEBAUGH BY DISTILLATION.

Take of cinnamon, ginger, and coriander-seed, each three ounces; nutmegs, four ounces and an half; mace, cloves, and cubeb, of each one ounce and an half. Bruise these ingredients, and put them into an alembic, with lemon and orange peel, pared off thin, four ounces of each dried, or double the quantity of fresh peeled, and eleven gallons of proof spirit and two gallons of water, and distil till the feints begin to rise; fastening four ounces and an half of English saffron, tied in a cloth to the end of the worm, that the liquor may run through it.

Take raisins, stoned, four pounds and a half; dates, three pounds; liquorice-rod, sliced, two pounds; digest these twelve hours in two gallons of water; strain out the clear liquor, add it to that obtained by distillation, and dulcify the whole with fine sugar.
RECIPE FOR TWO GALLONS OF EAU DE LUCE.

Take of the oil of amber, one ounce; of highly rectified spirit of wine, four pounds; put them into a bottle, and let them remain there five days, shaking the bottle from time to time, by which means the spirit will be strongly impregnated with the oil; then put into this impregnated spirit four ounces of the choicest amber, finely powdered, and let it digest three days, by which means you will have a very rich tincture of amber.

The tincture of amber being thus made, take of the strongest spirit of sal amoniac sixteen pounds, and add it to the foregoing tincture, together with eight pounds of highly rectified spirit of wine.

Thus will you obtain the celebrated water called Eau de Luce, so greatly in request, and so useful in all faintings and lowness of spirits.
WORMWOOD CORDIAL BY DISTILLATION.

There are two sorts of wormwood cordial, distinguished by the epithets of greater and lesser.

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RECIPE FOR MAKING TEN GALLONS OF THE LESSER COMPOSITION OF WORMWOOD CORDIAL.

Take of the leaves of dried wormwood, five pounds; of the lesser cardamom seeds, five ounces; of coriander seeds, one pound; of clean proof spirit, eleven gallons; water, one gallon; draw off ten gallons, or till the feints begin to rise, with a gentle fire. It may be dulcified with sugar or not, at pleasure.

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RECIPE FOR TEN GALLONS OF THE GREATER COMPOSITION OF WORMWOOD CORDIAL.

Take of common and sea wormwood, dried, of each ten pounds; of sage, mint, and balm, dried, of each twenty hand-
fuls; of the roots of galangal, ginger, calamus, aromaticus, and coriander, of each three ounces; of cinnamon, cloves, and nutmegs, the lesser cardamoms and cubebs, of each two ounces. Cut and bruise the ingredients as they require; digest them twenty-four hours, in eleven gallons of fine proof spirit, and two gallons of water, and draw off ten gallons, or till the feints begin to rise with a pretty brisk fire.

CHERRY BRANDY.

This liquor is greatly called for in town and country; and is made different ways. Some press out the juice of the cherries, and having dulcified it with sugar, add as much spirit to it as the goods will bear, or the price it is intended to be sold for. But the common method is to put the cherries, clean picked, into a cask, with a proper quantity of proof spirit; and after standing
about eighteen days, the goods are drawn off into another cask for sale, and about two thirds of the first quantity of spirits poured into the cask upon the cherries. This is to stand about a month to extract the whole virtue from the cherries, after which it is drawn off as before; and the cherries pressed to take out the spirit they had absorbed. The proportion of cherries and spirit is not very nicely observed; the general rule is, to let the cask be about half filled with cherries, and then filled up with proof spirits. Some add to every twenty gallons of spirit half an ounce of cinnamon, an ounce of cloves, and about three pounds of sugar, by which the flavour of the goods is considerably increased. But in order to save expenses, not only the spices and sugar are generally omitted, but also a great part of the cherries, and the deficiency supplied by the juice of elder-berries. Your own reason, therefore, and the
price you can sell goods for, must direct you in the choice of your ingredients.—By the same method you may make raspberry brandy; and if the colour of the goods be not deep enough, it may be improved by an addition of cherry brandy, elder-juice, or other colouring substance, as log-wood, &c.

RASPBERRY BRANDY.

Is infused much after the same manner with cherry brandy, and drawn off, and made fit for sale with about the same addition of brandy to what you draw off from the first, second, and third infusion, and dulcified accordingly, first making it of a bright deep colour; but omitting cinnamon and cloves in the first, but not in the second and third infusion.

The first infusion will be of a colour deep enough without help or art to it; the second infusion will be somewhat paler, and must be made deeper co-
loured, by adding cherry brandy about a quart to ten, or more gallons of the said raspberry brandy; and the third infusion will take more cherry brandy to colour the raspberry, which your own judgment will direct you in; here you may assist the colour and flavour with the juice of the elder-berry.

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TO MAKE ELDER JUICE.

When you make elder juice let your berries be fully ripe, and all the stalks (which are very many) be clean picked from them; then, if you have a press for drawing all the juice from them, have ready four hair cloths somewhat broader than your press, and lay one layer above another, having a hair cloth betwixt every layer, which must be laid very thin, and pressed first a little, and then more, till your press be drawn as close as you can; then take out the berries; and press all you have in the like manner; then take your pressed berries,
and break out all the lumps, and put them into an open-headed vessel, and put upon them as much liquor as will just cover them, and let them infuse so for seven or eight days, and put your best juice into a cask proper for it to be kept in, and put one gallon of malt spirits, not rectified, to every twenty gallons of elder-juice, which will effectually preserve it from becoming sour for two years at least.

SPIRITUOUS TINCTURES, OR INFUSIONS.

Rectified spirit of wine is the direct menstruum of the resins and essential oils of vegetables, and totally extracts these active principles from sundry vegetable matters, which yield them to water either not at all, or only in part.

It dissolves likewise the sweet saccharine matter of vegetable, and generally those parts of animal bodies, in which their peculiar smells and tastes reside.
The virtues of many vegetables are extracted almost equally by water and vitrified spirit; but in the watery and spirituous tinctures of them there is this difference, that the active parts, in the watery extractions, are blended with a large proportion of inert gummy matter, on which their solubility in this men- struum in great measure depends, while rectified spirit extracts them almost pure from gum. Hence, when the spirituous tinctures are mixed with watery liquors, a part of what the spirit had taken up from the subject generally separates and subsides, on account of its having been freed from that matter, which being blended with it in the original vegetable, made it soluble in water. This, however, is not universal; for the active parts of some vegetables, when extracted by rectified spirit, are not precipitated by water, being almost equally dissoluble in both menstrua.

Rectified spirit may be tinged by
vegetables of all colours, except blue. The leaves of plants in general, which give out but little of their natural colour to watery liquors, communicate to spirit the whole of their green tincture, which, for the most part, proves elegant, though not very durable.

GENERAL RULES FOR EXTRACTING TINCTURES.

1. The vegetable substances ought to be moderately and newly dried, unless they are expressly ordered otherwise. They should likewise be cut and bruised before the menstruum is poured on them.

2. If the digestion be performed in balneo, the whole success depends upon a proper management of the fire; it ought to be all along gentle, unless the hard texture of the subject should require it to be augmented; in which case the heat may be increased so as to make the menstruum boil a little towards the end of the process.
3. Very large circulatory vessels ought to be employed for this purpose, which should be heated before they are luted together. Circulatory vessels are those which are so contrived, and of such a height, that the vapour which arises during the digestion, may be cooled and condensed in the upper part, and fall down again into the liquor below; by these means the dissipation both of the spirit and of the volatile parts of the ingredients, is prevented. They are generally composed of two long-necked matrasses, or bolt-heads; the mouth of one of which is to be inserted into that of the other, and the juncture secured by a piece of wet bladder.

The use of heating the vessels is to expel a part of the air, which otherwise, rarifying in the process, would endanger bursting them or blowing off the uppermost matrass. A single matrass with a long neck, or with a glass pipe inserted into its mouth, is more commodious than the double vessel.
4. The vessel is to be frequently shaken during the digestion.

5. All tinctures should be suffered to settle before they are committed either to the filter or strainer.

6. In the tinctures (and distilled spirits likewise) designed for internal use, no other spirit, drawn from malt, molasses, or other fermented matter, is to be used, than that expressly prescribed.

7. Resins and resinous gums yield tinctures more successfully, if, after being ground into powder, they be mixed with some white sand, well washed and dried, which will prevent their running into lumps by the heat. If the powders prescribed be sufficient for this purpose, such an addition is unnecessary.
BITTER TINCTURE.

Take of gentian-root, two ounces; yellow rind of Seville orange-peel, dried, one ounce; lesser cardamom seeds, freed from the husks, half an ounce; proof spirit, two pints; digest without heat, and strain off the tincture.

This is a very elegant spirituous bitter. As the preparation is designed for keeping, lemon-peel is an excellent ingredient in the watery bitter infusions.

STOMACHIC ELIXIR.

Take of gentian-root, two ounces; Caraça oranges, one ounce; Virginian snake-root, half an ounce; cochineal, half a drachm; French brandy, two pints.

Let them steep for three days, and then filter the elixir.
AROMATIC TINCTURE.

Take of cinnamon, six drachms; lesser cardamom seeds, freed from husks, three drachms; long pepper and ginger, of each two drachms; proof spirit, two pints. Digest without heat, and then strain off the tincture.

This is a very warm aromatic, too much so to be given without dilution. A tea-spoonful or two may be taken in wine, or any other convenient vehicle, in languors, weakness of the stomach, flatulencies, and similar complaints.

The stomachic tincture, described hereafter, is similar in intention to this, but contrived less hot of the spices, that it may be taken by itself.

Take of cinnamon, six drachms; lesser cardamom-seeds, one ounce; garden angelica-root, three drachms; long pepper, two drachms; proof spirit, two pounds and a half.
Macerate seven days, and filter. This preparation is improved from the preceding editions, by the omission of some articles either superfluous or foreign to the intention; galangal, gentian, zedoary, and bay-berries. As now reformed, it is a sufficiently elegant warm aromatic.

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Of making Compounds or Cordials. The perfection of this grand branch of distillery depends upon the observation of the following general rules, easy to be observed and practised.

1. The artist must always be careful to use a well-cleansed spirit, or one freed from its own essential oil, as were before observed.

For as a compound cordial is nothing more than a spirit impregnated with the essential oil of the ingredients, it is necessary that the spirit should have deposited its own.
2. Let the time of previous digestion be proportioned to the tenacity of the ingredients, or the ponderosity of their oil. Thus cloves and cinnamon require a longer digestion before they are distilled than calamus aromaticus, or orange-peel. Sometimes cohabation (as subsequently explained) is necessary; for instance, in making the strong cinnamon cordial, because the essential oil of cinnamon is so extremely ponderous, that it is difficult to bring over the helm with the spirit without cohabation.

3. Let the strength of the fire be proportioned to the ponderosity of the oil intended, to be raised with the spirit. Thus, for instance, the strong cinnamon cordial requires a much greater degree of fire than that from lax vegetables, as mint, balm, &c.

4. Let a due proportion of the finest parts of the essential oil be united with the spirit; the grosser and less fragrant
parts of the oil not giving the spirit so agreeable a flavour, and at the same time renders it thick and unsightly. This may in a great measure be effected by leaving out the feints, and making up to proof with fine soft water in their stead.

These four rules, carefully observed, will render this extensive part of distillation far more perfect than it is at present. Nor will there be any occasion for the use of burnt alum, white of eggs, isinglass, &c. to fine down cordials, for they will presently be fine, sweet, and pleasant tasted, without any further trouble.

RECIPE FOR SIXTEEN GALLONS OF STRONG CINNAMON CORDIAL.

CINNAMON is a very useful and elegant aromatic bark, of a fragrant delightful smell, and sweet pungent taste, with some degree of astringency; it corro-