

Vermilion and Cinnabar are preparations of mercury, and should never be used; they are of a lively red colour, but carmine will answer most purposes instead.

Bole Ammoniac.—There is also the French and German bole. These earths are of a pale red, and possess alexipharmic qualities; they are frequently used in confectionary for painting and gilding.

Umber.—This is of a blackish brown colour; it is an earth found near Cologne.

Bistre.—This is an excellent light brown colour prepared from wood soot.

These browns are harmless, but sugar may be substituted for them to any shade required by continuing the boiling after it has passed the degree of caramel until it is burnt, when it gives a black-brown, but water may be mixed with it so as to lessen the shades. Dissolved chocolate may also be substituted in some cases for the brown colours.

Black.—Blue-black is powdered charcoal, or ivory black, which is obtained from the smoke of burnt ivory; but bone black is generally substituted instead; either of these may be used, but are only required for painting gum paste, when not intended to be eaten.

Obtain any of these colours in fine powder, and mix them with some dissolved gum Arabic, a little water, and a pinch of powdered sugar candy; mix them to the required consistence for painting. For sugars they must be used in a liquid state, and be added before it has attained the proper degree; it may also be used in the same manner for ices, creams, &c., and for icings it can be used either way.

THE SHADES PRODUCED BY A MIXTURE OF COLOURS.

Purple.—Mix carmine or cochineal, and a small portion of indigo.

Lilac.—The same, making the blue predominate.

Orange.—Yellow, with a portion of red.

Gold.—The same, but the yellow must be more in excess.

Lemon.—Use a solution of saffron.

Green.—Blue and yellow.

SECTION XXIII.—DISTILLATION.

THIS art is of great importance to a confectioner, as it enables him to make his own oils, waters, and spirits for liqueurs and ratafias, instead of purchasing at a high rate those vile adulterations which are often sold.

The still or apparatus for distilling consists of a cucurbit, which is a copper pot or boiler, and contains the wash, dregs, or infusions to be distilled. A cover, with a large tapering neck or pipe in the centre, is fixed on, and a continuation of small pipe, made either of tin

or pewter, of several feet in length, is bent into a spiral form, and termed the worm. This is placed in a tub containing water, which is fastened on to the end of the neck. The joints or crevices are luted, to prevent evaporation, with a paste made of linseed meal, or equal portions of slacked lime or whitening, flour and salt, moistened with water, and spread on rags or pieces of bladder, when it is applied to the joints and crevices. The water in the tub where the worm is should be kept quite cold, except in distilling oil of anise-seeds; and for this purpose a tap or cock should be placed about half-way down the tub, that the top of the water may be drawn off when it is warm. Again fill it with cold water, and keep coarse cloths dipped in cold water to put round the alembic or still in case it should boil too fast. It is by these means that the steam or vapour which rises with the heat is condensed, and runs out at the end of the pipe in a small stream. If the operation is well conducted, it should never exceed this. When the phlegm arises, which is a watery insipid liquor, the receiver must be withdrawn, for if a drop of it should run in, it must be cohobated, that is, re-distilled, as it will thicken the spirit and spoil the taste.

The still should not be filled above three parts full, to prevent it rising over the neck, should it happen to boil violently, as in this case it would spoil what is already drawn, which must be re-distilled.

ON ESSENTIAL OILS.

To obtain these from plants or peels, the articles should be infused for two or three days, or even longer, in a sufficient quantity of cold water, until it has fully penetrated the pores of the materials. For this purpose roots should be cut into thin slices, barks reduced to a coarse powder, and seeds slightly bruised; those of soft and loose texture require to be infused two or three days, the harder and more compact a week or two, whilst some tender herbs and plants require to be distilled directly. After the solvent has fully penetrated, distil it with an open fire; that is, a fire under the still like a common washing copper, which immediately strikes the bottom. Regulate the fire so as to make it boil as speedily as possible, and that the oil may continue to distil freely during the whole process; for the longer it is submitted to an unnecessary heat without boiling, a greater portion of the oil is mixed with the water than there would otherwise be. The oil comes over the water, and either sinks to the bottom or swims on the top, according as it is lighter or heavier than that fluid. What comes over at first is more fragrant than that towards the end, which is thicker, and should be re-distilled by a gentle heat, when it leaves a resinous matter behind.

All essential oils, after they are distilled, should be suffered to stand some days in open bottles or vessels, loosely covered with paper to keep out the dust, until they have lost their disagreeable fiery odour, and become quite limpid: put them into small bottles, and keep them

quite full in a cold place. The light oils pass over the swan neck of the common still, but the heavier ones will not so readily, therefore a large low head is preferable; the heavier oils are those from cloves, allspice, cinnamon, &c., or such as contain a portion of resin.

Some plants yield three times as much oil, if gathered when the flowers begin to fall off,—as lavender; others when young, before they have sent forth any flowers,—as sage; and others when the flowers begin to appear,—as thyme.

All fragrant herbs yield a large portion of oil when produced in dry soils and warm summers. Herbs and flowers give out a larger quantity of oil after they have been partly dried in a dry shady place. Four pounds of the leaves of the dried mint yield one ounce of oil, but six pounds of fresh leaves only three drachms and a-half. This oil is more fine and bright when rectified—that is, re-distilled.

After the distillation of one oil, the worm should be carefully cleansed, by passing a little spirit of wine through it, before another is proceeded with.

A great quantity of oil is wasted by confectioners when they preserve their lemon and orange peels by boiling them in open vessels instead of a still; what is saved by this means alone would soon repay the expense of the apparatus.

DISTILLED WATERS.

These are obtained in a similar manner to the oils, with a high narrow-necked still, and differ from them by the oil being retained or united with the water. Plants for this purpose should be gathered fresh on a dry day, as the water drawn from them in this state is more aromatic when they are dry; for the oil is mixed with an aqueous fluid in the plant, which concretes and separates in drying.

Herbs should be bruised and steeped for a day in about three times their quantity of water when green, but considerably more when dry; but at all times sufficient water should be added that some may be left to prevent the herbs or flowers being burnt to the bottom of the still. After all the water is drawn, the distillation should continue so long as any taste or smell of the ingredients comes over; and the fire should be so regulated that the water may run in a small continued stream.

If a superior article is required, it must be re-distilled by a gentle heat, with the addition of a little pure spirit (about one-twentieth part) which has not got any bad smell.

Orange-Flower Water.—The leaves of orange flowers three pounds, water three pints.

Rose Water.—As orange flower, using either the damask or pale single rose. Neither the purgative quality of the damask, nor the astringent quality of red roses, rises in distillation, but is contained in the water left in the still.

Cinnamon Water.—Cinnamon one pound, water two gallons. Bruise or break the spice, and infuse it in water for two days. Some consider it sufficient to simmer the spice in the still for half an hour, putting back what comes over, and filtering the whole when cold through a flannel bag or blotting paper.

Peppermint Water.—Dried herb one pound and a half, or green herb three pounds, to a gallon of water.

Lemon-Peel Water.—Two pounds of fresh peel to the gallon.

Black-Cherry Water.—Twelve pounds of ripe fruit to a gallon of water. Bruise the fruit in a mortar so as to break the stones, that the flavour of the kernel may be obtained.

Angelica, star, anise-seed, caraway, lavender, rosemary, myrtle, vanilla, raspberry, strawberry, and all other waters, are made in the same manner; the first half of the water which comes over is the best and strongest.

SPIRITS FOR LIQUEURS.

Spirits and alcohol are obtained by the distillation of fermented articles. The peculiar taste of each depends on the essential oil of the article from which it is prepared being held in solution: therefore, by knowing the nature of its oil, alcohol may be made to imitate any desired spirit. A few drops of nitric ether added to malt spirit will impart to it the flavour of cognac brandy; and two scruples of benzoic acid, mixed with one quart of rum, will give it the taste of arrack. Brandy is generally recommended for the use of the confectioner in making spirits for liqueurs, but a superior article may be made with less expense from rectified spirits of wine, or pure spirit which has neither taste nor smell, as the spirit afterwards drawn will only have the flavour of the articles with which it is required to be impregnated. Rectified spirits may be obtained from the dregs of beer, cider, ale or wine, suitable for any purpose, as well as from brandy.

Spirits rise in the still with less heat than watery infusions, therefore it is best to distil by means of the bain-marie, that is, by the still being placed in another vessel containing water. This method is more safe, as it prevents accidents, and the articles from being burnt.

Common spirits may be deprived of their impurities by mixing them with an equal quantity of water, and distilling them by a gentle heat, or in a water-bath. Continue the operation until the phlegm arises, which will appear milky and is of a nauseous taste. A great quantity of the oil which it retained will remain in the water. If the spirit was very impure, a second rectification may be necessary, as before. A very pure and tasteless spirit may be obtained by mixing with the spirit, after rectification, one-fourth of its weight of pure dry salt of wormwood or tartar. Let it stand a little time in a gentle heat, and distil in the bain-marie. A small portion of alum being added,

prevents any of the salt being brought over with the spirit. The result is pure alcohol. It may be reduced to proof spirit by mixing twenty ounces of alcohol with seventeen of water, by weight.

Distilled Spirituous Waters for Liqueurs.—Orange, rose, pink, jessamine, and all other flowers, are made by adding eight pounds of the leaves or petals of the flowers to a gallon of pure proof spirit. Put them in a cold cellar or ice-house to infuse for a week. Distil in the bain-marie to dryness. If they are distilled on an open gentle fire, water should be added to the articles when they are put on the fire, so as to prevent their being burnt.

Lavender, mint, rosemary, angelica, the yellow rind of lemon and orange peels, and bergamot, lemon, vanilla, ginger, and orris-root for violet, and other herbs, are made by adding two pounds of the plant, &c., partly dried, to a gallon of pure proof spirit. Let it steep in a jar close covered for twelve or fourteen days in a cool place, and distil in the bain-marie. Myrtle and balm-melissa, one pound to the gallon. If any of the waters appear rather turbid when they are first drawn, they will become clear and bright by standing a few days. Filter them through blotting paper placed in a glass or earthenware funnel over a bottle to receive them.

Strawberries, raspberries, &c., sixteen pounds to the gallon.

Cinnamon, coriander, caraways, cloves, &c., are made by adding one pound of the bruised seed or spice to the gallon of proof spirit. Cardamoms four ounces, nutmegs and mace three ounces to the gallon.

Hungary Water, or Aqua Regina.—Fresh gathered rosemary flowers in full bloom, four pounds to the gallon of pure proof spirit. It may also be made with the addition of one pound of each of marjoram and lavender flowers, and two quarts more of spirit. Distil immediately. Half a pound of sage leaves, and two ounces of ginger, are recommended as an excellent addition by foreign writers.

Maraschino de Zara.—Morello cherries nine pounds, black wild cherries seven pounds, or sixteen pounds of Morello cherries,* one pint and a-quarter of Kirchenwasser, spirit of roses one ounce and a-half, spirit of orange flowers one ounce and a-half, of jessamine a quarter of an ounce, peach or cherry leaves one pound and a-quarter; pick the stalks from the cherries and press out their juice, pound the stones and skins with the leaves in a mortar, and steep all together for a fortnight,—some only filter the infusion,—and add to it four pounds and a-half of treble-refined sugar; dissolve and strain through a jelly-bag; but a superior spirit may be obtained by the addition of four quarts of rectified proof spirit; distil with the bain-marie, and rectify.

* Genuine Maraschino is the spirit of Morello cherries, as Kirchenwasser is of black cherries. Maraschino may also be made from gooseberries. Ripe gooseberries 102 pounds; black cherry leaves bruised, 12 pounds; ferment as Kirchenwasser; distil and rectify it.

Kirchenwasser.—Get some small black cherries and a few Morello cherries quite ripe, take off their stalks and put them in a cask with the head off, cover the top or surface of the cherries with mortar or wood ashes mixed to a consistence with water, let them stand for six weeks or two months, during which time they will ferment, then take off the covering and distil them.

Eau Divine.—Essence of bergamot and lemon, of each one drachm, rectified spirit one gallon, fresh balm leaves two ounces; distil with the bain-marie; add orange-flower water five ounces. The liquor is made by adding to this four pounds of treble refined sugar dissolved in two gallons of water.

Eau de Cologne.—Spirit of rosemary two quarts, essence of bergamot four ounces, balm water two quarts, essence of cedrats and citrons four ounces, neroli two drachms, rosemary two ounces, spirits of wine ten quarts; draw fourteen quarts.

Balm water two pints and a-quarter, spirit of rosemary three pounds and a-half, oil of rosemary one drachm, essence of lemon three drachms, of cedrats two drachms, of neroli two drachms and a-half, of bergamot three drachms, rectified spirit twelve pounds, distil in the bain-marie, and keep in a cool place for some time.

Curaçao.—This is a species of wild or bitter orange; the dried peel may be obtained from the chemists; the yellow peel of Seville oranges, dried and powdered, will answer as well; use one pound to the gallon of rum or rectified spirit, and distil as the others.

Eau de Mélisse des Carmes.—Spirit of balm eight pints, spirit of lemon and citron four pints; spirit of nutmegs, musk, and coriander, of each two pints, spirit of thyme, cinnamon, anise-seed, marjoram, hyssop, green-verdigris, or the vitriol of iron, sage, angelica-root, and cloves, of each one pint; distil, and keep in an ice-house for twelve months. Supposed to be the original recipe of the barefooted Carmelites, now in possession of the Company of Apothecaries of Paris.

The English Method.—Fresh balm leaves four ounces, fresh lemon-peel two ounces (the yellow rind), coriander seeds and nutmegs, of each one ounce, angelica-root, cinnamon, and cloves, of each half an ounce, rectified spirit two pounds, brandy two pounds, powder the dry ingredients, and steep the whole in a close vessel with the spirit for four or five days. Two pints of rectified spirit and one pint of balm-water may be used instead of the spirit and brandy; distil in the bain-marie nearly to dryness; re-distil and keep it for some time in a cold cellar or ice-house. This is an elegant and beautiful cordial.

Spirit of Coffee.—One pound of the best Mocha coffee, fresh roasted and ground, add to it one gallon of rectified proof spirit, let it infuse for a week, and distil in the bain-marie.

Spirit of bitter Almonds.—One pound of blanched almonds, one gallon of proof spirit; pound the almonds quite fine with a little water, to prevent their oiling, add them to the spirit with an ounce

of bruised angelica-root, steep for a week, and distil in the bain-marie.

Spirit of Tea.—Four ounces of the best tea to a gallon of rectified proof spirit, pour a little cold water on the tea and let it infuse for three or four hours, add it to the spirit, and distil it in a week.

Escuba—Usquebaugh.—Saffron one ounce, catechu three ounces, ambergris half a grain, dates without their kernels, and raisins, each three ounces, jujubes six ounces, anise-seed, cloves, mace, and coriander seed one drachm, cinnamon two drachms, proof spirit six quarts, pound the ingredients, infuse for a week and distil. The whole of these spirituous distilled waters are for making liquors and for flavouring ices, liqueurs, bon-bons, drops, &c., or anything in which liquors are introduced.

LIQUEURS.

These are made by mixing equal proportions of any of the spirits, water, and sugar together, that is, one pint of spirit, one pint of water, one pound of the treble-refined sugar; dissolve the sugar in the water, add it to the spirit, and filter through blotting-paper; being perfectly clear and colourless when drawn, they require to be coloured of the same tint as the articles from which they were extracted, and for this purpose none but those which are perfectly harmless should be employed, as prepared cochineal, infusion of saffron, burnt sugars or indigo.

RATAFIAS.

These are liqueurs made by the infusion of the ingredients in spirits, and are similarly composed to the spirituous wafers, but instead of being distilled they are simply filtered, and sugar is added to them.

Ratafia de Café.—Fresh roasted Mocha coffee ground, one pound, proof spirit one gallon, loaf sugar one pound and a half; infuse for a week, strain it every other day, filter, bottle, and cork close.

Ratafia de Cacao.—Cacao of Caracca one pound, West India cocoa nuts eight ounces, proof spirit one gallon, roast the nuts and bruise them, add them to the spirit and infuse for fourteen days, stirring them occasionally, filter and add thirty drops of essence of vanilla and two pounds of sugar.

Ratafia des Noyaux.—Half a pound of bitter almonds, half a pound of sweet almonds, proof spirit one gallon, (peach or apricot kernels may be used instead of the bitter almonds), three pounds of loaf sugar; beat the almonds fine with part of the sugar, steep the whole together for twelve or fourteen days, and filter; this liqueur will be much improved if rectified spirit is reduced to proof with the juice of apricots or peaches.

Ratafia of Cherries.—Morello cherries eight pounds, black cherries eight pounds, raspberries and red or white currants of each two pounds, coriander-seeds three ounces, cinnamon half an ounce, mace half an ounce, proof spirit one gallon; press out the juice from the fruit, take one-half of the stones of the cherries and pound them with the spices, and add two pounds and a half of sugar, steep for a month and filter.

Ratafia des Cassis.—Ripe black currants six pounds, cloves half a drachm, cinnamon one drachm, black currant leaves one pound and a half, Morello cherries two pounds, sugar five pounds, proof spirit eight quarts; bruise the spice, infuse a fortnight, filter, and bottle.

Ratafia of Raspberries.—Raspberries quite ripe eight pounds, proof spirit one gallon, quarter of an ounce of cinnamon and cloves, steep for fourteen days, stirring it occasionally. Currants and strawberries are made the same.

Ratafia des Fleurs des Oranges.—Fresh orange-flowers two pounds, proof spirit one gallon, sugar two pounds; infuse for eight or ten hours.

Ratafia d'Œillets.—The petals of clove pinks, with the white parts pulled off, four pounds, cinnamon and cloves twenty-five grains, proof spirit one gallon, sugar three pounds. Infuse for a month, filter, and bottle.

Ratafia d'Angelique.—Angelica seeds one ounce, angelica stalks four ounces, bitter almonds four ounces, one drachm each of cinnamon and cloves, proof spirit six quarts, loaf sugar four pounds. Blanch and pound the almonds with some of the sugar, or a little water; pound the other ingredients a little, and bruise the stalks. Infuse for a month, stirring it occasionally. Filter and bottle.

Vespetro.—Coriander seed one ounce, angelica seed two ounces, fennel and anise-seed of each two drachms, two lemons, two oranges, the zest of two citrons, two quarts of rectified spirit and two pounds of sugar, caraway seeds four grains. Bruise the ingredients, pare off the yellow rind of the lemons and oranges, and squeeze the juice. Dissolve the sugar in a pint of water. Infuse the whole together for fourteen days. Strain, filter, and bottle.

Crème de Barbade.—The yellow rind of three oranges and three lemons, cinnamon four ounces, mace two drachms, cloves one drachm, rum nine quarts, fresh balm leaves six ounces. Infuse and distil in the bain-marie, or strain; add an equal quantity of sugar with water.

Crème d'Orange.—Thirty-six sweet oranges, sliced, tincture of saffron one ounce and four drachms, orange-flower water four pints, rectified spirits two gallons, water eighteen quarts, loaf sugar eighteen pounds. Dissolve the sugar in the water; mix the other articles and infuse for a fortnight. Filter and bottle.

Ratafia d'Anis.—Star-anise-seed four ounces, proof spirit one gal-

lon. Infuse for a fortnight; add two pounds of sugar, or a pint and a-half of syrup, and a little essence of vanilla.

Ratafa de Brout des Noix.—Young walnuts, when the shells are not formed, number eighty, mace, cinnamon, and cloves, of each half a drachm, proof spirit one gallon. Pound the nuts in a mortar, add them and the spice to the spirit, with two pounds of sugar. Infuse for two months, stirring it occasionally; press out the liquor through a cloth. Filter and bottle.

SECTION XXV.—THE STOVE OR HOT CLOSET.

This is a useful and indispensable appendage in confectionary; it is generally constructed like a cupboard in the recess of a wall. The walls or sides should be composed of bricks, or wood lined with tin or sheet iron, to retain the heat, with pieces of wood nailed or fastened in the sides, about four inches asunder, to form a groove for trays or boards to rest on, which is necessary for the drying of lozenges, comfits, bon-bons, &c.; there should also be a few strong shifting shelves made either of small bars of round iron or wood, like a grating, on which candy pots or sieves may be placed; the grooves for these should be so constructed as to be capable of inclination so as to drain off the syrup from the candy pots without taking them from the shelves; the door should be made to shut close, with a small door at the top to let out any excess of heat. I have before remarked that it may be heated by means of many of the modern stoves. At places where the oven is heated with wood, furze, &c., a common iron pot or crock with three legs is filled with the live embers, or it may be filled with burning charcoal and covered with wood ashes, which is replenished night and morning, which gives the heat required.

THE PASTRY-COOK.

INTRODUCTION.

WE now come to a very important, because a very difficult, branch of the art of baking, whether exercised as a profession, or by private individuals, namely the manufacturing of what are technically called "*fancy goods*." The reader scarcely need be informed, that this term includes all those varieties of baked manufactured eatables, in which such ingredients as sugar, eggs, spice, and butter, are used, with many other not necessary to enumerate here.

It ought to be observed, that the following directions for making the kind of goods alluded to, have been all *tested*, and found to be so exceedingly accurate as to proportions, that a deviation in a quantity so small as an egg, or even half an egg, will deteriorate the quality of the article. These directions are not generally known in the trade, and out of the trade they are entirely, we believe, unknown. They will be found, therefore, a valuable acquisition to those ladies who manage their own domestic affairs, and who are in the habit of making little *knick-knacks* for their children, or their dessert tables.

Previous to giving the directions in question, it will be necessary for our readers to be made acquainted with the mode of preparing certain articles, which are more or less employed in the manufacturing fancy goods. We are aware that there are many private individuals who would object to use the preparation called "*honey-water*," as well as that called "*prepared treacle*," on the ground of their consisting chiefly of drugs. As regards, however, the use of carbonate of ammonia (*honey-water*), it may be safely affirmed, that there is, in small quantities, nothing unhealthy in it, but on the contrary. The truth however is, the carbonate of ammonia used in biscuits, &c., is volatilized by the heat of baking, and of course it all escapes. Its operation is therefore mechanical, and the only effect it has upon the biscuit is to make it light.

With regard to the article called prepared treacle, which consists of treacle, alum, and pearlash, we have to observe, that alum taken in considerable quantities is decidedly unwholesome, it being of a powerfully astringent nature; but in the very small quantity here