

The techno-chemical receipt book: containing several thousand receipts, covering the latest, most important and most useful discoveries in chemical technology, and their practical application in the arts and the industries (1886)

Author: Brannt, William T. (William Theodore), b. 1844 pp. 349-355 Old Tobacco & Snuff Recipes
<http://tinyurl.com/5fuwyf>

only be used for coarse yarns. The root ends, or jute-butts as they are called in commerce, are generally darker in color and harder and more woody than the middle and upper portions. The fibres are free from stems, and only inferior qualities exhibit dark scarf-skin cells adhering quite tightly. The fibres are generally $6\frac{1}{2}$ to 9 feet long, although there are some varieties 14 feet long. The medium qualities are of a dark brown color, while the ordinary qualities are yellow or reddish-brown, and both are harder and more woody than the best quality, and their root ends very hard and coarse. The jute-fibre is very hygroscopic, and in an ordinary state contains about 11 per cent. of water, and, if stored in a damp room, may absorb as much as 30 per cent. and more. The better qualities of raw jute are much used for enveloping submarine telegraph cables and as bandages for surgical purposes, for which they are especially prepared. If they are to be employed for bandages they are saturated either in the dry state with salicylic acid (salicyl-jute) or in a half-moist condition with carbolic acid (carbolic-jute). Jute yarns are prepared according to two processes. By the first the jute is first cut up in stricks about $2\frac{1}{2}$ feet long, which are then heckled by machines, and finally worked like flax into finished yarn, but always upon the dry frame. This method is employed in England, France, and Belgium for a few numbers of yarns only, namely, for Nos. 16, 20, and 22, and furnishes also the article which comes into commerce under the name of "heckled yarn" or "jute line yarn."

The second process for all numbers from No. 14 down is almost generally used in Germany and exclusively in Austria. By this process the jute-stricks are torn to short fibres by special carding machines very strongly built, and these short fibres are joined together in an endless band, which is then stretched in the usual way in a drawing-frame, and double-milled. It is then converted into roving upon the fly-frame, and finally into finished yarn upon the dry frame. But the jute, before it is actually worked up, undergoes several

other processes in order to make it softer and more flexible. These consist in moistening the fibres with train oil and water, and then passing them repeatedly through between fluted rollers. The yarns and the threads prepared from them are either worked into actual jute-fabrics, which are used as a packing material, or employed in the production of mats, carpets, table-covers, and curtains, which, by reason of their naturally yellow and glossy color, are much in demand for decorative purposes. The yarns, either raw, bleached, or colored, are used as filling either by themselves or mixed with cotton warp. Jute yarns, mixed with cotton, wool, and flax, are also used in the manufacture of drills, bed-ticking, furniture reps, lamp-wicks, canvas of all kinds, and many small articles.

Utilization of Hop-stalks. In Sweden a strong cloth is manufactured from hop-stalks. The stalks are gathered in autumn and soaked in water during the whole winter. The material is then dried in an oven and woven as flax.

A New Yarn is produced in France in the following manner: Upon a mule is placed another row of rollers through which at different speeds is passed a colored or plain thread, but twisted in the reverse way of the yarn to be operated upon. Thus, when the spindles revolve, the two threads are twisted, but the additional yarn is untwisted. This double yarn is again twisted with the same or other yarn, but running it again in the opposite direction, which untwists the first thread and produces a very singular effect, and one which in the loom will, no doubt, produce a novelty.

TOBACCO. SMOKING TOBACCO, SNUFF, STERNUTATIVE POWDERS, ETC.

SMOKING TOBACCOS. *Brazilian Tobacco* is brought into commerce either in rolls or cut and in three qualities.

I. Known as "*Legitimo*," is prepared by mixing equal parts of best unribbed Brazilian leaf and Havana leaf.

II. Havana leaf alone is used for this and treated in the customary manner, as follows: Extract pounded cassia

bark 100 parts and sugar 300 parts in 2250 parts of soft water; then press out the liquor and add cinnamon water 500 parts, saltpetre 100 parts, wine vinegar 450 parts, and common salt 125 parts.

III. Ordinary American leaf of good dark brown color is used for this. For 500 parts of such leaf the following mixture is required: Pulverize dried plums 20 parts, tamarinds 15 parts, cassia bark 5 parts, figs 10 parts, and juniper berries 30 parts. Macerate the powder in 225 parts of soft water for 24 hours, and add to the resulting liquor: juice of Spanish licorice 30 parts, molasses 20 parts, honey and saltpetre each 10 parts.

Chinese or Star Tobacco. Yellow Virginia leaf is used and treated as follows: Commiute orris root 10 parts, large raisins 5 parts, angelica root 12½ parts, fresh walnut leaves 15 parts, calamus root and elder blossoms each 7½ parts; pour 187½ parts of water over them, digest for 24 hours, and then press out the fluid. Now mix in a glass matrass: Benzoine powder 1 part, pulverized storax ½ part, cinnamon blossoms 1 part, rosewood oil ½ part, and spirit of wine of 70 per cent. 15 parts. Close the matrass with a piece of wet bladder perforated with a needle. Digest the whole in a sand-bath for 24 hours, then pour off the liquor and press out the residue. Mix the two fluids and the product is ready for use.

Canaster. To convert 500 parts of Virginia leaf into canaster proceed as follows: Pulverize 20 parts of cascarilla bark, 1½ parts of nutmeg, 5 parts each of orris root and lavender blossoms, and sift them into a tin tank, and pour over them 185 parts of a solution of 1½ parts each of purified potash and fresh burned lime in soft water. Cover the vessel and let it stand 24 hours in a warm place, so that the mixture is heated nearly to the boiling point without actually boiling. The liquor when cold is strained through linen and the residue pressed out. Then dissolve in the fluid thus obtained: Purified saltpetre and common salt each 10 parts, and white sugar 12 parts. Moisten the leaves with the mixture, and pile them together and turn them frequently, so that they become uniformly permeated with the liquor, which will be the case

in 6 to 8 days. While still moist the leaves are cut, and when dry packed in tin-foil or paper.

Half Canaster. I. Moisten 50 parts of Virginia leaf before cutting with the following mixture: Dissolve 2 parts of sugar in 24 of water, and add ½ part of cinnamon wine, ¼ part of extract of mastic, and 2 of juniper wine. The tobacco after moistening is pressed into a barrel, remaining there 24 hours, when it is cut and packed.

II. Moisten 100 parts of Virginia leaf with the following mixture, obtained by boiling for 3 hours: Raisins 3 parts, bay-leaves ½, and pulverized cascarilla bark ¼ in water 80. Let the decoction cool and strain the liquor through a linen cloth, and then add 4 parts of cinnamon wine and 1½ of sugar. The tobacco, after moistening, is dried and cut.

Maracaibo Tobacco or Varinas Canaster. Finest Quality, No. I. Finest Havana leaf 30 parts, small Orinoco leaf and genuine Porto Rico leaf each 25, light yellow and green Virginia leaf each 10.

Quality No. II. Havana leaf 15 parts, Louisiana leaf 20, Porto Rico leaf 40, yellow Virginia leaf 15, and green Virginia leaf 10.

Quality No. III. Havana and Louisiana leaf each 5 parts, Porto Rico leaf 40, and yellow and green Virginia leaf each 25.

These mixtures have a very light color. When a darker color is preferred the yellow and green leaf is replaced by dark yellow or brown.

Ostend Tobacco consists of a mixture of American leaf. There are four varieties:

No. I. Porto Rico leaf 33 parts, light brown Maryland leaf 35, and brown Virginia leaf 32.

No. II. Louisiana leaf 45 parts, light yellow Virginia leaf 35, and light yellow Pennsylvania leaf 20.

No. III. Louisiana leaf 25 parts, brown Virginia leaf 30, and good brown Pennsylvania leaf 45.

No. IV. Equal parts of long Orinoco leaf, yellow Virginia leaf, and yellow Maryland leaf.

Petit Canaster comes into commerce cut and packed in tin boxes. There are two varieties of pure American leaf:

No. I. Long Orinoco leaf 10 parts, Louisiana leaf 45, Porto Rico leaf 45.

No. II. Louisiana leaf 5 parts, long Orinoco leaf 45, and brown Virginia leaf 50.

Petum Optimum, according to the Dutch Process. Free 50 parts of Virginia leaf from the stems and moisten it with the following mixture: Dissolve 3 parts of rock-candy in 60 of soft water, sprinkle the solution over the leaf, press the latter into a barrel, and then cut it. Dry the tobacco in the air, but not near a fire, and then sprinkle it with a mixture of juniper wine 1 part, extract of mastic and cinnamon wine each 2 parts, so that it is just moistened, and then pack it in tin-foil or paper.

11. Moisten 100 parts of Virginia leaf with water, let it stand 24 hours, cut and dry in an airy room. In the meanwhile boil the following ingredients for 3 hours in 32 parts of soft water: One part of raisins, 3 of yellow rock-sugar, and $\frac{1}{2}$ of bay-leaves, and, when the liquor is cool, add 3 parts cinnamon wine. Sprinkle the tobacco with the mixture and work it thoroughly through. Dry it for some time in an airy room, then put it in a barrel, let it stand in a cool place for 8 days, and then pack in paper or linen bags.

Portocarero Tobacco. Boil in 24 parts of water, 2 of loaf sugar, $\frac{1}{2}$ of pulverized fennel-seed, $\frac{1}{2}$ of pulverized cascarilla bark, $\frac{1}{2}$ of powdered cubeb, and a like quantity of powdered cloves. Moisten with the liquor 60 parts of Maryland leaf, allow it to lie for 8 hours, then cut, dry, and pack it.

Porto Rico Tobacco, according to the Dutch Process. Boil in a covered boiler for 3 hours: Best wine-vinegar 12 parts, water 90, honey 1, large raisins 3, and bay-leaves $\frac{1}{2}$. Filter the liquor and, when cooled off to milk-warm, treat with it 100 parts of Porto Rico leaf.

In Holland tobacco treated with the above mixture is put up in rolls and is in great demand.

Porto Rico Tobacco from Ordinary Leaf. For 100 pounds of ordinary leaf, cured for 1 year, the following mixture is used. When the leaves are thoroughly permeated they are piled together for 8 days and turned once every day. Commi-

nute: Lemon peel, green dried orange peel, coriander seed, figs, and sassafras wood each 1 pound, elder blossoms 12 ounces, cassia and juniper berries each 5 $\frac{1}{2}$ ounces, and galanga 12 ounces. Pour 60 pounds of water over the above ingredients; allow them to digest for 24 hours; then pour off the liquor and press out the residue. Dissolve in the liquor 2 pounds of pure saltpetre, 3 pounds of common or rock salt, and 4 pounds of sugar. The product is now ready for use. To improve the scent of the tobacco in smoking, compound the above before using it with benzoin 2 $\frac{1}{2}$ ounces, mastic 1 ounce, myrrh 8 $\frac{1}{2}$ ounces, and spirit of wine of 60 per cent. 1 $\frac{1}{2}$ pints.

Swicent Tobacco (English Process). Remove the lower thick stems from 100 parts of Virginia leaf, and moisten the leaf with 60 parts of water, then cut it up fine and kiln-dry it. In the meanwhile boil the following ingredients in 10 parts of water: sugar 3 parts, raisins 2, and cascarilla bark $\frac{1}{2}$. Strain the liquor, when about milk-warm, through a linen cloth, and when it is entirely cold add 1 part of extract of mastic and $\frac{1}{2}$ of cinnamon wine. Moisten the tobacco with this mixture, and then pack in paper or linen bags.

Swicent Tobacco (Ordinary). Macerate $\frac{1}{2}$ part of powdered cascarilla bark 8 days in 2 parts of spirit of wine. Then boil the whole in 24 parts of water together with 2 parts of wine-vinegar, $\frac{1}{2}$ of bruised juniper berries, $\frac{1}{2}$ of saltpetre, and $\frac{1}{2}$ of bruised angelica root, strain the liquor and with it treat 100 parts of ordinary country tobacco.

Sweet-scented Tobacco. This is pure Virginia leaf, but most of the article sold under this name is an imitation prepared from ordinary country tobacco. Treat 100 pounds of ordinary tobacco in the usual manner. Prepare the following compound: Commi-
4 pounds of dried prunes, 2 pounds each of orange peel and rosewood, 1 pound of coriander seed, and 2 pounds of raisins; pour over them 8 $\frac{1}{2}$ ounces of purified potash and let the whole stand for 24 hours. Then heat it nearly to the boiling point, draw off the liquor, and press out the residue; dissolve in the liquor 2 pounds of purified saltpetre, 4 pounds each of common salt and honey. Pour 40 pounds of this

mixture over the 100 pounds of prepared tobacco.

Varinas Tobacco. I. Prepare a mixture by boiling in 90 parts of soft water 1 of raisins, 1 of raisin stems, 2 of fine sugar, and $\frac{1}{2}$ of pulverized fennel seed. Cover the boiler and let the mixture cool. When cold sprinkle 60 parts of yellow Porto Rico leaf and 40 of Maryland leaf with it; cut and kiln-dry the tobacco. Then sprinkle it with 3 parts of cinnamon wine, and pack it immediately.

Improvement of Inferior Qualities of Tobacco. We here give a number of mixtures which can be recommended for converting inferior qualities of leaf tobacco into good smoking tobacco. Each mixture is calculated for 100 pounds of leaf, the latter being treated with it in the usual manner. It is left to the manufacturer to adopt a suitable name for each brand.

I. Comminute orris root, juniper berries, and coriander seeds each $8\frac{1}{2}$ ounces; pour $3\frac{1}{2}$ gallons of water over them and let the whole digest 24 hours. Now dissolve saltpetre 2 pounds, sugar syrup 4 pounds, in water $1\frac{1}{2}$ gallons, and mix the solution with the above liquor. Then macerate in a glass matrass with the assistance of heat $8\frac{1}{2}$ ounces of liquid storax in 2 pounds of strong spirit of wine, filter the extract and compound it with the above mixture, and the mixture is ready for use.

II. Comminute cascarilla bark, angelica root, cinnamon blossoms, and badiane each 7 ounces, and cloves $2\frac{1}{2}$ ounces; pour 4 gallons of water over them, macerate the whole 24 hours, then press out the liquor and compound it with a solution of $1\frac{1}{2}$ pounds of saltpetre and $2\frac{1}{2}$ pounds of brown syrup in $1\frac{1}{2}$ gallons of water, and it is ready for use.

III. Comminute cassia bark, orris root, licorice root, angelica root, and rosewood each 7 ounces. Macerate with 4 gallons of water, press out the liquor and compound it with a solution of 2 pounds of pure saltpetre and $3\frac{1}{2}$ pounds of white sugar in $1\frac{1}{2}$ gallons of water.

IV. Comminute juniper berries and fresh bay-leaves each $1\frac{1}{2}$ pounds, fresh walnut leaves 2 pounds, and green oranges $8\frac{1}{2}$ ounces; macerate with 4 gal-

lons of water for 24 hours, and press out the fluid. Now pound in a mortar 1 fluid ounce of oil of lemon and $\frac{1}{2}$ ounce of amber together with $3\frac{1}{2}$ pounds of white sugar; dissolve the mixture in $1\frac{1}{2}$ gallons of water, add 2 pounds of pure saltpetre, and mix this solution with the above liquor, and the mixture is ready for use.

V. Comminute orris root and angelica root each 7 ounces, vanilla 1 ounce, and cassia bark $8\frac{1}{2}$ ounces. Pour 4 gallons of water over the ingredients, let the whole stand for 24 hours and then press out the liquor. Rub up $1\frac{1}{2}$ pounds of white sugar with a like quantity of rosewood oil and $8\frac{1}{2}$ fluid ounces of oil of bergamot, add $1\frac{1}{2}$ pounds of pure saltpetre, dissolve the mixture in $1\frac{1}{2}$ gallons of water, and compound the solution with the above liquor.

VI. Convert into a coarse powder cascarilla bark 7 ounces, cassia bark 4 ounces, digest with 4 gallons of water for 24 hours, and press out the liquor. Now rub up 2 pounds of sugar with $\frac{1}{2}$ fluid ounce each of Peruvian balsam and oil of cloves, add $1\frac{1}{2}$ pounds of pure saltpetre, dissolve the mixture in $1\frac{1}{2}$ gallons of water, and compound it with the above fluid.

VII. Pulverize cassia bark and badiane each 4 ounces, nutmeg 2 ounces, and purified potash $3\frac{1}{2}$ ounces; digest them 24 hours in 4 gallons of water, then pour off the fluid and press out the residue. Now dissolve Peruvian balsam and olibanum each 1 fluid ounce in strong spirit of wine 1 quart, add 2 pounds of sugar and $1\frac{1}{2}$ pounds of saltpetre, and mix the solution with the above liquor.

VIII. Convert into a coarse powder orris root $8\frac{1}{2}$ ounces, cardamons with their shells $2\frac{1}{2}$ ounces, cubeb $2\frac{1}{2}$ ounces, cassia bark 4 ounces, cloves 1 ounce, mastic $2\frac{1}{2}$ ounces; digest them in $2\frac{1}{2}$ gallons of water and 1 quart of alcohol of 70 per cent. for 24 hours, and then pour off the liquor. The residue is extracted with $2\frac{1}{2}$ gallons of water, with the assistance of heat, and the liquor obtained from this mixed with the first. Then dissolve in the mixture $3\frac{1}{2}$ pounds of white sugar and $1\frac{1}{2}$ pounds of saltpetre, and add to the whole $1\frac{1}{2}$ gallons more of water.

IX. Comminute the following ingredients and macerate them with $\frac{1}{2}$ gallon of spirit of wine of 60 per cent.: Sassafras wood $8\frac{1}{2}$ ounces, cubeb 4 ounces, cloves $2\frac{1}{2}$ ounces, rosewood and fennel seed each 7 ounces, and, after 24 hours, press out the liquor. The residue is macerated with 4 gallons of hot water, the fluid poured off and the residue pressed out. Dissolve in this last liquor $2\frac{1}{2}$ pounds of white sugar, $1\frac{1}{2}$ pounds of pure saltpetre, and then mix the whole with the liquor obtained first.

X. Comminute the following ingredients and macerate them 24 hours in $2\frac{1}{2}$ gallons of soft water: Orange peel $8\frac{1}{2}$ ounces, coriander seed 7 ounces, and preserved rose leaves $1\frac{1}{2}$ pounds, and then press out the liquor. Macerate at the same time $1\frac{1}{2}$ ounces of nutmeg and $2\frac{1}{2}$ ounces of storax with $\frac{1}{2}$ gallon of spirit of wine of 60 per cent., press out the liquor and dissolve in it $1\frac{1}{2}$ fluid ounces of oil of bergamot and $1\frac{1}{2}$ pounds of sugar-syrup. Now mix this gradually with the first liquor and then dissolve in the whole $1\frac{1}{2}$ pounds of saltpetre.

XI. Comminute: Cascarella bark $4\frac{1}{2}$ ounces, orris root 7 ounces, badiane $3\frac{1}{2}$ ounces, cubeb $2\frac{1}{2}$ ounces, and galanga $3\frac{1}{2}$ ounces. Digest them in 4 gallons of water in the sand-bath for 24 hours, and then press out the liquor. In $\frac{1}{2}$ of the liquor dissolve $1\frac{1}{2}$ pounds of sugar rubbed up with 1 fluid ounce of oil of cloves, and in the other half 1 pint of licorice juice and $1\frac{1}{2}$ pounds of saltpetre, and then mix both thoroughly together.

XII. Comminute: Fresh lemon peel and fresh orange peel each $8\frac{1}{2}$ ounces, cubeb $3\frac{1}{2}$ ounces, calamus root and coriander seed each 7 ounces, and figs $1\frac{1}{2}$ pounds; macerate 24 hours in 4 gallons of soft water, strain off the liquor, and dissolve in it 2 pounds of sugar-syrup and $1\frac{1}{2}$ pounds of pure saltpetre.

To Remove the Disagreeable Smell and Taste of Inferior Qualities of Tobacco. Treat 100 parts of ordinary cured tobacco with a mixture of solutions of $1\frac{1}{2}$ to 2 parts of potash in 100 parts of water and 20 of soda water-glass in 500 to 600 parts of water. The solution is poured over the leaf, the

latter remaining in it 2 days, with frequent turning. The solution is then poured off and the tobacco dried.

SNUFF MANUFACTURE. The tobacco leaf is well fermented, then dried and ground. The snuff-mill resembles somewhat a coffee or cocoa-mill with a continuous rotation of the cone or crusher. The ground tobacco travels on an endless cloth to a vibrating sieve where it is sifted, the fine particles are carried forward into a box, while the coarser are returned to the mill to be reground.

Bärenburg Snuff. Treat 100 pounds of ground tobacco with a sauce prepared from the following ingredients: Brown syrup 2 pounds, loaf sugar $6\frac{1}{2}$ pounds, oil of jasmine $1\frac{1}{2}$ fluid ounces, oil of bergamot $\frac{1}{2}$ fluid ounce, purified potash $3\frac{1}{2}$ pounds, common salt $12\frac{1}{2}$ pounds rose water $8\frac{1}{2}$ pounds, and soft water $2\frac{1}{2}$ gallons.

Bergamot Snuff. Treat 100 pounds of ground tobacco with the following mixture: Stems of American tobacco cut up $4\frac{1}{2}$ pounds, rasped rosewood $4\frac{1}{2}$ pounds, calamus root and orange peel cut up each 2 pounds, angelica root cut up 1 pound, loaf sugar $4\frac{1}{2}$ pounds, oil of bergamot 2 fluid ounces, oils of lemon and lavender each $\frac{1}{2}$ fluid ounce, elder flower water $4\frac{1}{2}$ pounds, rose water $6\frac{1}{2}$ pounds, purified potash 2 pounds, pure common salt $12\frac{1}{2}$ pounds, and soft water 2 gallons.

Dutch Musino Snuff. Convert 100 pounds of fat Virginia leaf to a coarse powder and mix it with the following ingredients previously pulverized: Cassia bark, orange peel, angelica root each 1 pound, galanga and Brazil wood each 2 pounds. Treat the above with the following mixture: Dissolve loaf sugar 2 pounds, saltpetre 1 pound, sal-ammoniac $3\frac{1}{2}$ pounds, common salt 10 pounds, and purified potash $3\frac{1}{2}$ pounds in elder flower water $2\frac{1}{2}$ gallons.

Espaniol or Sevilla Snuff. Convert 100 pounds of Orinoco or Havana leaf into a fine powder, and treat it with a mixture prepared from the following substances: Purified potash $4\frac{1}{2}$ pounds, common salt $5\frac{1}{2}$ pounds, cassia water $1\frac{1}{2}$ gallons, melilot water and rose water each $\frac{1}{2}$ gallon, tonka beans 2 ounces, and color with 3 to 4 pounds of colcothar.

Frankfort Snuff. Convert 100 pounds of leaf tobacco into powder and treat it as follows: Stems of Virginia tobacco cut up 4½ pounds, bruised juniper berries 4½ pounds, elecampane root cut up 12½ ounces, cassia bark, St. John's bread, tamarinds, juniper-berry juice, orange peel, and purified potash each 2 pounds, licorice juice and sal-ammoniac each ½ gallon, brown syrup 3½ pounds, pure saltpetre 1½ pounds, and water 4 to 4½ gallons.

Parisian Rappée. Boil dried prunes 8½ pounds, juniper berries 1 pound, tamarinds 4½ pounds, syrup 3½ pounds, sal-ammoniac 8½ ounces, salt of tartar 1 pound, and common salt 12½ pounds in 6 gallons of water, and then add ½ gallon of French brandy and 1½ quarts of wine-vinegar. Moisten as much tobacco powder as possible with this mixture and pack the finished snuff in tin-foil. It improves with age.

Rappée (Genuine). Boil in a covered boiler for 1 hour, in 5 gallons of water, 1 pound of licorice root cut up, 8½ ounces each of calamus root and bay leaves, and 1½ pounds of best logwood. Filter the decoction while still warm into a small barrel and dissolve in it, stirring constantly: Common salt 9½ pounds, potash 1 pound, sal-ammoniac 4½ ounces, and sulphate of iron 8½ ounces. When all is entirely dissolved and thoroughly mixed add 2½ quarts of wine-vinegar. With this moisten 100 pounds of ground tobacco, press the snuff into a barrel, and let it stand well covered for 6 weeks, when it is ready to be packed in tin-foil.

St. Vincent Rappée. Convert 100 parts of tobacco into powder and treat it with the following mixture: Stoned plums 4 parts, honey 2, bruised juniper berries 1, calamus root chopped up ½, angelica root cut up ½, sal-ammoniac 4, purified potash 2, wine-vinegar 6, pure common salt 12, and soft water 24.

STERNUTATIVE (SNEEZING) POWDERS. **Green Sternutatory.** Convert into a fine powder leaves of marjoram, sage, pennyroyal with the flower, betony, and origan each 30 parts, and pass the powder through a hair-sieve. Then add 15 parts of pulverized orris root, 3 parts of cloves, and 2 parts of cinnamon, each pulverized by itself. Mix the powders intimately and color

with 1½ parts of fine indigo and 2½ parts of turmeric rubbed to an impalpable powder, and moistened with spirit of wine. This imparts to the powder a green color. Finally add a few drops each of the following oils: marjoram, cajepot, lavender, and bergamot.

Variegated Sternutatory. Pulverize dried corn flowers, common marigolds, lavender flowers, leaves of marjoram, sage, and savory each 2 parts. Pass the powders through a fine sieve, and then add the following ingredients all finely pulverized and rubbed up with ½ part of sugar: White sandal wood, yellow sandal wood, orris root, cinnamon, cloves, zedoary of each ½ part, and musk ¼ part, and finally oils of cloves, cinnamon, and cardamon each ¼ part. Mix all intimately with an addition of 2 parts of spirit of wine, and preserve in well-corked glass bottles.

White Sternutatory. Pulverize: Orris root and cinnamon each 30 parts, white Castile soap 6 parts, white sugar 15 parts, arum root 3 parts, white hellebore ½ part. Mix intimately and add a few drops of oil of marjoram and essence of ambergris.

Sternutatories for Cold in the Head. I. Convert into a fine powder and mix: Dried leaves of the witch-hazel 3 parts, marjoram blossoms and lavender blossoms each 1 part.

II. Valerian leaves and snuff each 8 parts, oils of lavender and marjoram each a few drops.

III. (*Corrizino*). Mix: Salicylic acid ½ part, tannin 2½ parts, and pulverized borax 2½ parts. Or, Sodium salicylate 10 parts, rose leaves 20 parts, and snuff 70 parts.

Perfumes for Cigars. I. Fluid extract of valerian 1 ounce, tincture of tonka beans 8 ounces, alcohol 23 ounces.

II. Valerianic acid 3 drachms, butyric aldehyde 10 minims, acetic ether 40 minims, and sufficient alcohol to make 64 ounces of mixture.

III. Tincture of valerian 4 drachms, butyric aldehyde 4 drachms, tincture of vanilla 2 drachms, ethyl-nitrite 1 drachm, alcohol 5 ounces, and sufficient water to make 16 ounces of mixture.

Turkish Smoking Tobacco. The po-

cular flavor of this tobacco depends not so much, as is generally supposed, on climatic conditions and a particular sauce, as on the peculiar treatment of the leaf. As soon as the leaves have been cut, they are moistened with soft water, and then piled up in layers on the floor of the tobacco house, a small quantity of melilot (*Herba meliloti*) being scattered upon each layer. In a few days the tobacco begins to ferment, becomes hot and diffuses a pungent but stupefying smell. When fermentation is complete, which is recognized by the pile becoming cold, the leaves are freed from the adhering melilot, and then strung on cords or packed in boxes.

The honey-aroma of the melilot has been imparted to the tobacco during fermentation, the cumarin of the melilot forming very likely a new combination with the pectine substances of the tobacco, since without fermentation the desired result is not obtained. In some parts of Servia and Turkey the tobacco, after cutting, is slightly sprinkled with honey-water, and then pressed for transportation into leather bags or tin boxes.

To Impart to Common American Tobacco the Flavor of Havana Tobacco. To dissolve the gummy substance, which causes the bad taste, soak the tobacco in cold or hot water for 6 to 12 hours. The tobacco is then freed from the gum by pressing, dried, and steeped in an infusion of stems and ribs of genuine Cuba tobacco, and again dried. Leaves thus prepared are equal to imported leaf, and can be used as wrappers for Havana fillers without injury to the taste of the cigars.

New Process of Preparing Tobacco. Fill an enamelled sheet-iron pot with pressed tobacco leaves and cover it with a perforated lid to allow the escape of the gases. Heat the vessel gradually in a sand or water-bath so that in the course of 6 hours the temperature rises to 212° F., but in the first 3 hours it must not rise above 180° F. The tobacco curls, loses weight, and the leaves, which have assumed a darker color, are covered with a grayish dust. Tobacco thus prepared burns well, has an agreeable odor, and

is especially suitable for the manufacture of cigars, since it is freed from all injurious constituents.

Preparation of Leaf Tobacco for Cigars. Prepare a lye from red and white beech-ash, filter it while hot, and after pouring it boiling hot over the tobacco leaves let them soak for 24 hours. Then rinse the tobacco in baskets with clean water, and press and dry. When thoroughly dry the leaves are treated as follows: Boil for one hour over a moderate fire 28 parts of beer-wort, $\frac{1}{2}$ of powdered cubebs, $\frac{1}{2}$ of bay-berries, $\frac{1}{2}$ of bruised juniper berries, $\frac{1}{2}$ of powdered coriander seed, and $\frac{1}{2}$ of storax. In another vessel boil 1 part of wine and $\frac{1}{2}$ of powdered cascarilla bark previously soaked for 12 hours in the wine and add the decoction to the first liquor. Pour off the supernatant liquid; when cold, moisten the tobacco with it.

To give to cigars, made from tobacco prepared as above, the odor of genuine Havana tobacco, proceed as follows: To 100 parts of French wine add 2 parts of cascarilla bark and 2 of vanilla previously grated with 15 of sugar. Cork the flask and let it stand in a warm place for 8 days. Then pour off the liquid and add 50 parts of mastic extract. Moisten the cigars with this and pack them in boxes. Keep the lids of the boxes nailed down to prevent the access of air.

VINEGAR. MANUFACTURE OF ORDINARY AND FINE TABLE VINEGARS.

Altwater's Process of Manufacturing

Vinegar. A. Arrangement of the Factory. The building should be solid, with tight fitting windows and doors to prevent outside atmospheric influences. The walls should be covered with hard plaster or clay, not lime-washed, but coated with asphaltum, and all wood and iron painted with oil paint.

B. Utensils. It is best to use conical barrels, as represented by Fig. 42, each of a capacity of about 265 gallons.



Fig. 42.