## Cabinet Maker's Mork.

DARKENING WOOD.—Equal parts of manganate of soda and crystalised Epsom salts are dissolved in twenty to thirty times the amount of water, at about 144 deg., and the planed wood is then brushed with the solution; the less water employed the darker the stain, and the hotter the solution the deeper it will penetrate. When thoroughly dry, and after the operation has been repeated if necessary, the furniture is smoothed with oil, and finally polished, the appearance being then really beautiful. Before smoothing, however, a careful washing with hot water will have the effect of preventing the efflorescence of the sulphate of soda formed. In the treatment of floors, the solution may be employed boiling hot, and, if the shade produced is not dark enough, a second application of a less concentrated solution is made; after it is quite dry, it is varnished with a perfectly colorless oil-varnish. On account of the depth to which the coloring solution penetrates, a fresh application, it is stated, is not soon required.

FURNITURE POLISH.—Pearlash, 1 oz.; water, 8 oz.; beeswax (genuine), 6 oz. Mix while hot, and a.ld sufficient water to reduce it to the consistency of cream. For use, add more water, and spread it on the wood with a painter's brush. Let it dry, and polish with a hard brush or cloth. If white wax is used it may be applied to polish plaster casts, statues, etc. 2. Melt three or four pieces of sandarach, each of the size of a walnut, add 1 pt. of boiled oil, and boil together for 1 hour. While cooling, add 1 dr. of Venice turpentine, and if too thick a little oil of turpentine also. Apply this all over the furniture, and after some hours rub it off. Rub the furniture daily without applying fresh varnish, except about once in two months. Water does not injure this polish, and any stain or scratch may be again covered, which cannot be done with French polish.

Damaged Looking Glass.—Take the glass out of the frame, and lay it face downwards upon a flat table; then carefully clean the portion of the glass from which the silver has been detached. Now get a piece of tinfoil, quite clean, and some good mercury; lay the tinfoil upon a second small glass, a little larger than the vacant space on the mirror; then pour a few drops of mercury upon the tinfoil, and with a tuft of cotton wool well rub the mercury into the foil until you obtain a good amalgam. Place a piece of clean tissue paper over the vacant space in the looking glass, and put on it a few drops of clean mercury; then upon this lay the tinfoil, press gently until the tinfoil is quite flat, and remove the tissue paper by gently drawing it from under the tinfoil. Allow the mirror to lie flat for at least two days, when it may be re-framed and hung again.

Polish for Floors.—One pound of beeswax, one quart of benzine—the beeswax melted soft, to which add the benzine; put them over a range or stove, the fire closely covered, as benzine is highly inflammable; stir together till well mixed. These are the proportions; the quantity must depend upon the space to be covered. Apply to the floor, first making it clean, and rub in thoroughly. It shows the grain of the wood, and makes a permanent polish, growing better by use and rubbing in. It is free of dust, and clean, and is not laborious to take care of, twice a year rubbing, and sweeping, so to say, with a broom in a flannel cover. The floor of the Louvre has on it this preparation, and all who have seen it will recall its smooth and clean appearance.

How to Clean a Carpet.—To clean a carpet after it has been well beaten and the floor is perfectly dry, it can be nailed down tightly, and then the soiled portions can be rubbed clean with soap and water. But, if it is much faded, a bullock's gall added to two quarts of cold water is the best wash for it. Rub it on with a soft brush, and wipe dry with a cloth. If a carpet is thick, like those of Brussels or Axminster, and is much soiled, take a clean mop and dip it into warm water, to which one teaspoonful of aqua-anumonia has been added for each quart. Wring out the mop as dry as possible, and rub it over the carpet in breadths. When the water becomes soiled take a fresh supply.

Varnishing Wood.—See that the woodwork is quite smooth, and then give two coats of good oil varnish that does not dry too quickly. Take some ground pumice-stone and woollen cloth and water, rubbing it until it gets quite even, then give it another coat and repeat the pumice. Now give a coat of good carriage varnish (which will not dry under 48 hours), and repeat the pumice. Let each coat of oil varnish stand 24 hours between each coat, and 96 hours for the carriage varnish. Do not rub down until this is quite hard.

IMPROVEMENT IN BENDING TIMBER.—The bending of hard wood, especially beech, is effected at present by means of hot water or steam, a process somewhat costly as regards fuel, and taking a long time. A patent has recently been taken out in Germany by Bahse and Hændel for making sieve hoops and like objects by a dry process, more cheaply and in shorter time, from cut wood. Two rollers are used, one above the other, and having less velocity, so that the upper acts by holding back, while the lower extends the wood fibers. When the board, thus bent, leaves the rollers, it is fastened in the mouth of the sieve. The upper roller is fluted, the under one smooth. If two smooth rollers were used a very much greater pressure would be necessary.

Mordants for Staining Woods.—Sulphuric acid, more or less diluted, according to the intensity of the color to be produced, is applied with a brush to the wood, previously cleaned and dried. A lighter or darker brown stain is obtained, according to the strength of the acid. When the acid has acted sufficiently, its further action is arrested by the application of ammonia. Tincture of iodine yields a fine brown coloration, which, however, is not permanent unless the air is excluded by a thick coating of polish. Nitric acid gives a fine permanent yellow, which is converted into a dark brown by the subsequent application of tincture of iodine.

EBONIZING WOOD.—Apple, pear, and walnut woods, especially the fine-grained sorts, may be satisfactorily ebonized by first boiling in a glazed vessel, with water, 4 ounces of gallnuts, 1 ounce of legwood chips, ½ ounce of green vitriol, and ½ ounce of crystallised verdigris, these being filtered while warm and the wood brushed a number of times with the hot solution. Thus stained black, the wood is then coated two or three times (being allowed to dry completely after each coating) with a solution of one ounce of iron filings in a quart of good wine vinegar. This to be prepared hot and allowed to cool before it is used.

Polishing Tables.—Buy half a pint of the best French polish; then rub in plaster of Paris, to stop up all the holes; then color it with a little dragon's blood, after which he must rub the polish in with a small piece of wool or a linen rag, keeping up a circular movement. After doing this for some time lay it on one side, and allow the polish to sink in and dry for some hours; then finish it off with polish, and a small drop of oil added.

POLISHING VENEER WOOD.—After scraping up veneer, first give a coat of size for stopping up grain, then color or stain, and proceed to polish. It is a great mistake to use too much oil. For all hard woods the polishing is the same, but not for stopping, as size is generally used for dark woods, and plaster or chrome for light. Putty-lime is a good stain for Honduras mahogany, chestnut, and other woods.

GILDER'S WATER SIZE.—It is easily made in the following way:—Buy some parchment cuttings (sold by first-class oil and color shops, at 1s. per lb.); put as much as will make the quantity you require in water, boil and allow it to simmer for an hour or so, strain off, and there it is. Strength depends on the quantity of water used.

Polishing Cross-Grained Top of Box.—Get some naphtha, and dissolve some shellac—about \$\frac{1}{2}\$ b. to \$\frac{1}{2}\$ pint. When dissolved allow it to settle until quite clear, and pour off. Paint the top of your box with it two or three times, sandpapering it off. Finish by polishing it with French polish.

TO TURN OAK BLACK.—The Revue Industrielle states that oak may be dyed black, and made to resemble ebony, by the following means. Immerse the wood for forty-eight hours in a hot saturated solution of alum, and then brush it over with a logwood decoction.

RENOVATING VENEERED COUCH.—Well clean the couch with a sponge and cold water; when dry give the couch a coat of varnish, made as follows: 1 gill brown hard varnish, ½ gill French polish, well mixed, and applied with camel hair brush.

TANNIN is said to be prepared in a liquid form at a manufactory at Elmira, in the State of New York. It is said to yield a fast black upon cotton, bears fulling, and is well adapted for fixing the coal-tar colors.

For joining the porcelain heads to the metal spikes used for ornamental nails, the *Prakt. Maschinen Construct.* recommends the use of a thick paste made of a mixture of Portland cement and glue.