

Cabinet Making.

RE-GILDING PICTURE FRAMES.

The tools required for the job are the following: A pint basin with a lip, two moderate sponges, and two small finger sponges, three fitches, one flat, $\frac{1}{4}$ in. wide, one round $\frac{1}{4}$ in., and one $\frac{3}{4}$ in. or $\frac{1}{2}$ in., round. We will count these three one set, for sizing. You will want another set for whitening, another for claying, one fitch for skewing, one small sash-tool for washing off, and one about 1 in. in diameter for duster, a gilder's cushion, a gilder's tip, a camel-hair dabber, a gilder's knife, some fat pipeclay, some prepared whitening, some plumbago, oil gold-size, crystal size, or parchment cuttings to make some, two agate burnishers, one round, about the diameter of a goose-quill, and one oval, larger, or about double the above on the broad part, and some composition made of glue, whitening and linseed oil. The picture taken from the frame, dust well, and proceed to wash off with clean water, not letting your brush hold too much, to make your work too wet. When washed off, let stand by for some time to get dry and steady. Now is your time to make all ornamental work good, or repairs. To work the compo you will need two pieces of brass wire, one about $\frac{1}{4}$ inches and one about $\frac{3}{4}$ inches full, bent in the shape of an *f*, the ends being flattened to form a kind of trowel in miniature, such as are used by artists in clay modeling. Make your compo warm, and work it well, that it may not work lumpy. Having some hot glue, dab some upon the sore place, press your compo upon it; in a few minutes you may proceed to shape it to correspond to the rest of the pattern. Having made all things shipshape, that which is to be matt, *i.e.*, the bottom of design, is to be laid down with gold size very sparingly, and after that has been gilded, if the prominent parts or that which is in relief is to be burnished, it is to be sized and clayed; then, after being allowed to dry, another coat of weak size; this is allowed to dry. When you are about to lay the gold on, wet it with clean water. The oil gold-size will take from two to five hours before it will be fit to receive the gold, and will depend, in a great measure, upon the weather. This oil gold-size is composed of prepared linseed-oil, very finely ground litharge, and stone ochre. The cushion-knife and tip can be dispensed with, although these and the dabber are all held in the hands when laying on the gold by the professional. The cushion is a board about the dimensions of a half-sheet of note paper, the back half of which is walled around with a piece of parchment about $2\frac{1}{2}$ in. high; the floor of the cushion is wash-leather, as it is usually called, prepared with red chalk; on the under side is a strap to strap it upon your thumb, or the gilder's thumb of the left hand, the hooded or walled part projecting over the back of the hand, the fingers being curled.

The tip is placed between the second and third finger, and the knife between the little finger and next, and the dabber between the forefinger and thumb. He takes a book of gold and shakes out three or four leaves into the hood—pell-mell as it would seem to the uninitiated, places the book down in a safe place, takes the knife and picks up one of the leaves and tosses it about, gives it a puff of wind from his lips, and there it is spread out upon the cushion without a wrinkle in it. He then proceeds to carve it up into the shape or size pieces that he sees most convenient to cover his job. He then returns the knife to its proper place, and takes the tip, which is some long badger hair between some card for a handle. He whisks the tip over the hair upon his head or down his whiskers, and applies it to a piece of the leaf gold; it instantly picks it up like a magnet. By these means he conveys and deposits the gold where required, replaces the tip, and takes the dabber and dabs it down. Some will dab with the dabber between the little finger and next upon the right hand with the dabbing part outside, and will pick up and dab and cover a frame in a few seconds. After covering (see that it is all covered) let stand for an hour or two, and skew off. That is done by the skewing fitch; the tool is held between the thumb and forefinger of the right hand, and pressed lightly down upon the gold, and a slight skewing or twisting action given to it, and the fine gold or pounce liberated by the action is skewed by the same action into the interstices and angles of the pattern that the dabber could not get at. Continue this action with the powder under your brush, until you have gone around your frame; then skew your gold powder off on to a highly glazed piece of paper and preserve. When you commence gilding, the best plan is to spread a sheet of manilla paper under your work—this is a very highly glazed paper of a whitey-brown hue, and very tough; the parts to be burnished should have at least two coats

of size and whitening and of clay before gold is laid on. Thus far I have spoken about the matt and ornamental work; now for the dead and burnished. Having washed and repaired mitres, etc., and set aside to steady or dry, have some No. 1 glass paper and rub down with finger or cork rubber. Give one coat of parchment size and whitening; the size must not be too thick or thin, that it will not congeal at the ordinary temperature of the room or atmosphere. But the test of the thumb and finger is the best criterion to go by; if too thick your work will peel off when placed in a warm room, or on a hot summer's day. If new work, a coat of weak size first, next whitening and size; let dry and rub down. A second coat, dry and rub down, then a coat of clay, then drop down and go over with weak size, and set by to dry. When dry see that there are no cracks or chance of its peeling off. Then, with clean water and soft brush lightly damp, and lay the gold on immediately after and dab down. Let stand by to dry. The flat remaining dead, the hollow or bead may be burnished. The burnishers here mentioned are curved like a horn that you can get into a hollow, a quirk, or over a bead. When completed so far, you may either size or varnish; but let me tell you that neither improve gilding.

It is usual to size matt and ornamented work and dead upon moldings. It is a great protection against dust. If not sized, it would soon be smothered in dust, and no dusting or washing would remove it or improve it. Now for sizing: Take a clove of garlic about as thick as a quill, and finely grind up with a little water. Mix with a couple of tablespoonfuls, let settle and filter. Dissolve size in it and apply. This will lay the rough surface, and is said to protect it from that nuisance, fly-soils, but if you would like to varnish that, you may remove the fly-soils with impunity. Take $\frac{1}{2}$ oz. gum-sandarac to half-pint good spirits of wine, and in another small phial (about an ounce), put one pennyworth of saffron. When the former is dissolved and settled clear, pour off, and add some few drops of stain until of the desired color; go over the gold with a coat of very weak size, and, when dry, varnish and turn upside down to dry free from dust. The way I have made oil gold size—take, say a pound of white lead and red lead, mix with half-pint of good raw linseed oil, pour about a gill of boiling water into it; when well mixed up let stand for a day, then add another half-pint of oil, and well stir up twice a day (morning and night), and in a few days you will have a beautifully clear, fat oil, almost colorless; this must be mixed or ground up with stone ochre and litharge, not as a paint, but as a stain, and to render it siccative; this may, when prepared, be kept some considerable time, without drying, in a jar or gallipot, if covered with a piece of paper, dressing the top with oil, but will dry in a very little time when put on very thin, as for gilding, as I said before, subject to the state of the weather. I have known it to be ready in an hour, and not to have been fit in five hours. Being a great fumbler with the cushion-tip, etc., though not having practice, your humble servant used to cut his books in half from front to back, or into three, and fish out with a small damp fitch or camel-hair pencil, and deposit and dab down. Deep, extra deep gold, is used for the purpose. If you prepare your own whitening, it must be well washed, and remain to allow the coarse to settle a few seconds, and then decant it into another jar to settle; finally, make a tray of a square of blotting-paper double, pinch up the corners, and put upon a Bath-brick; pour the water off as far as you can, and the thick into the tray. The brick and paper will soon absorb the water, and your whitening, after the paper covers are taken off, will be free from grit, and may be placed in a jar or bottle fit for use. Your plumbago must be served the same, and your clay, and about two per cent. plumbago is mixed and washed with your clay, after being washed separate, and your clay is fit for use. By the Bath-brick the liquor is absorbed very readily, and preparations of this kind, and precipitates, filters, etc., reduced to a minimum of trouble. Your sponges you will find use for in case of swamping.—*American Cabinet Maker.*

When a sound is produced near the sounding-board of a piano, the chords in unison with the sound, or with one of its harmonies, are, it is known, set vibrating. M. Bourbouze has lately observed that if a microphone be applied to the sounding-board, the sound transmitted in a telephone-circuit is considerably strengthened, and neither the distinctness nor timbre of the voice are sensibly affected. Thus, with a sounding-board containing three octaves (the extent of the voice), and a carbon microphone on the side opposite that of the strings, he makes a very sensitive transmitter.