

RAISED GILDING: USING TRESSER'S LIQUID GESSO

This gesso contains slaked plaster of Paris. It is made following Cennini's recipe from the late fourteenth-century, found in his book *Il Libro dell' Arte (The Book of the Art)*. There are two changes to Cennini's recipe that should be noted.

The first change is that this formulation contains NO white lead (lead carbonate). I have used titanium dioxide in lieu of the white lead, which is a poison. Titanium dioxide is not a simple replacement for white lead. They are two different substances with entirely different chemical properties. (For example, white lead has binding qualities that titanium dioxide does not have, but titanium dioxide mixes more easily in water than white lead.) White lead has a 1000-year-old history and was considered the premier white for all forms of pigment making. It is still used in the production of traditional gesso for raised gilding on paper or vellum. However, it is an accumulative poison and materials containing it must be used with care. Using titanium dioxide instead of white lead, I developed this non-poisonous, plaster-based gesso by combining the ingredients in a specific order.

The second change is that, unlike in Cennini's recipe, once the gesso has been made, the entire mix is kept in a liquid state and stored in a refrigerator for later use. The low-temperature storage prevents mold and keeps the gesso fresh.

Instructions for use: After taking the liquid gesso out of the refrigerator, allow it to reach room temperature. If using a ruling pen or brush, use a coffee stirrer or similar tool to stir the mix until it is a creamy solution. Take out a small amount of the gesso, place it into a dappen dish, and use it at full strength. For a broad-edged or pointed pen, I like to dilute it with some of its own liquid: Before stirring the jar, transfer some of the top portion of the liquid (a drop or two) into the dappen dish. Next, stir the jar and then add some of the stirred gesso to the drops in the dish. This thins the gesso from within its own system, and this avoids adding water, which would weaken the gesso once dry.

Once the gesso has been laid, allow it time to dry. While it dries, this gesso is like a turtle: it has a hard outside shell but a soft inside body. If pressure is applied too soon, either directly or through glassine, you can damage the gesso. **Patience is the key.** Wait a minimum of 24 hours. Once dry, your window for applying gold remains open – even if you wait a week.

During the gilding stage, a breathing tube is used to activate the gesso before applying the gold leaf. Apply the gold in small sections at a time, until the gesso is completely covered.

THINNING TRESSER'S TITANIUM DIOXIDE LIQUID GESSO

Before doing any thinning, first let the gesso come to room temperature. Refrigeration thickens the gesso; it will be more liquid when it warms up.

You should use **glair** to thin this liquid gesso to the consistency you need. The preparation of glair is simple. Take the white of an egg and beat it to a stiff froth. Allow it to settle overnight – the liquid that collects at the bottom of the bowl is the glair. It can be used full strength, but I prefer adding an equal amount of water to the glair in the bowl. Allow it to sit undisturbed for a day; then strain, as there may be some stringiness left over from the frothing. It is now ready to use.

One or two drops into the liquid gesso will thin the mix. Stir until the gesso has absorbed the glair. The amount of thinning needed depends on the instrument used. For example, I do not thin the gesso when using a ruling pen, but a dip pen may require the mix to be thinner. Do not use water alone to thin, as it can do more harm than good. This is true of both this formula (using titanium dioxide) and Cennini's original formula.

Glair is a wonderful natural product that has many applications. As glair ages, it becomes an adhesive. For this titanium dioxide gesso formulation, it is best to use it fresh. (If we were using Cennini's white lead formula, it would be best to use glair at least 6 to 9 months old.) The glair that is not used should be refrigerated. Glair will hold up for years in the refrigerator, but you need to re-strain stored glair before use. Without refrigeration, glair does have a tendency to break down and putrefaction does occur. It was traditionally called *la putrido*, the stinky method.

See Jerry Tresser's CD book The Technique of Raised Gilding (CD14, \$24.95) for more information and detailed instruction on gilding, both with traditional white lead gesso and titanium dioxide gesso.

Jerry has also posted some video instruction online:

http://www.johnnealbooks.com/prod_detail_list/Tresser