# What To Burn: Materials for Pyrography

# **Exploring the different surfaces suitable for pyrographic work**

By Sue Walters

Once you've purchased a burning machine and gathered your basic kit, it's time to choose some materials to burn. Although wood is the most popular venue, pyrography is not limited to burning on wood. Leather, paper, gourds, bark, nuts, and ivory are among the materials you can transform with pyrography. Each offers its own advantages and challenges.

#### Wood

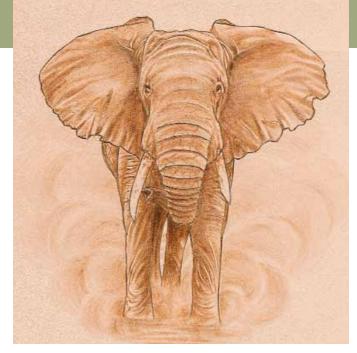
Many woods can be burned, but some are more suited to pyrography than others. Light-colored wood allows for the best contrast between the burned picture and the surface. Dark wood can also be used, but the burned image tends to get lost in the background, especially after varnishing. Most people prefer wood with as little grain as possible to provide a blank canvas for burning. Heavily grained wood is more of a challenge, but if the grain is incorporated into the design, the results can be dramatic. With a powerful pyrography machine, the hardest of woods can be burned, but soft and evenly textured woods are more consistent to burn on and also allow the nib to make an easy impression in the wood if you wish to texture heavily.

The form of wood will depend on what you want to do with it. If you want to frame and hang your work, consider using cabinet or furniture-quality plywood. Planks of solid wood are excellent for signs, functional items, and wall hangings. Wood that still has its bark edge left in place makes a natural and effective self-framed surface to burn. Wood blanks come in the form of untreated picture frames, kitchen utensils, boxes, plaques, and other functional items and are made from a variety of woods. All of these can be found in craft, woodcarving, and lumber stores in the United States and Canada.

Another popular application of pyrography is on furniture. With some time and imagination, an inexpensive pine coffee table can be turned into a family heirloom. Even the wooden features of a house, like kitchen cabinets, can have an individual touch added to them. It's important to remember not to burn on wood that is already treated or sealed.



Platypus Diving. Natural-edged wood slabs can provide a dynamic canvas for pyrography. This can be especially effective when care is taken to select a subject that suits the shape of the wood.



Charging Elephant. Being very soft and having no grain, leather is extremely easy to burn on compared to many other materials.

### Leather

Leather is an absolute joy to burn. There is no wood grain to negotiate or fight. The heated nib (cooler than needed for wood) sinks nicely into the surface and lets you draw with a smooth fast rhythm. Leather is also quite versatile. It can be presented in a frame as something purely decorative or it can be used on functional items, such as dog collars, belts, and bags.

Leather does have a few drawbacks. It can stink a bit, and compared to burning on wood, leather burning can gum up and dirty your nibs very quickly. You will find yourself constantly needing to clean your tip. If you don't, your nib can stick and hop across the surface, often leaving dirt deposits behind.

Good leather is more expensive than wood and it can be much harder to find. I drive some distance to hand-pick leather that is clean and good quality. Smooth, unblemished, pale, vegetable-tanned leather is preferable for obvious reasons, so I suggest you go in to pick it out yourself if at all possible. A search in the phone book or on the Internet for leather merchants would be the best start for finding a supplier.

Cowhides are the most common leather and most readily found, but many other types of hide, including buckskin, moose, and kangaroo, are suitable as long as they are vegetable-tanned and not chromium-tanned or treated with wax or oil. Many soft leathers are chromium-tanned or bleached and the fumes caused by burning these could be harmful to your health and should be avoided. Please ask if you have any doubts.

The thickness of the leather isn't overly crucial, except if you plan to employ a three-dimensional effect

or emboss heavily as you burn. Surface burning is easy with any of the basic nibs, including a shader, a skew, and a writing nib.

If your finished product will be handled often, protect your leather from dirt and moisture with a leather conditioner or leather lacquer. You can use varnish spray if the piece will remain flat and rigid.

### **Paper**

Paper is actually quite resilient when it comes to burning. It does take a more patient and gentler

approach than some other forms of pyrography, but you will find that paper pyrography is not only very possible, but also aesthetically lovely. The brilliant thing about paper burning is that you never have to spend hours searching for the perfect piece of burning wood—it's all there waiting for you at the art or craft store. It's affordable, plentiful, and easy to frame and present.

Both hot- and coldpressed, acid-free rag paper can be used. Cold-pressed paper has a rough texture, while hot-pressed tends to be smooth. Smooth paper is sometimes preferable for the beginner due to its level surface. Don't discount the character of rough paper, though—it can create interesting effects or romantic/rustic moods.

The thickness of the paper will depend on the effect you want and your experience



Eagle Owl. Paper burning is far more forgiving than most people expect, and the sepia effect of pyrography on paper can be quite striking.

level. It's possible to burn on very thin paper, but this increases the chance of punching through and also limits how heavy-handed and textural you can be. You could also try uncolored illustration cardboard if you want to heavily texture and engrave the paper. It is possible to burn on colored cardboard and paper and achieve some exciting results. However, for your own safety, consider what chemicals or dyes were used to color the paper.



Elephant Gourd. Gourds are one of the most popular of all mediums to burn on. Their exotic shape and leathery appearance work beautifully with pyrography.

#### Gourds

The combination of gourds and pyrography lends itself beautifully to designs of natural and realistic themes, but geometric patterns and stylized subjects are also used extensively and to wonderful effect.

Gourds burn dirty compared to some types of wood, so you will need to clean the nib as the work proceeds. Gourds are a little trickier to burn than flatwork because of their spherical shapes, so you will have to find a comfortable way to hold your work.

All of the usual nibs work well on gourds, but the surface of a gourd is a little shell-like and slightly more slippery to burn than soft flat timber. This can cause an odd skid, and, for that reason, I prefer using a sharp skew to burn my lines. This knife-like nib seems to dig in and anchor itself in the surface, helping to prevent accidents and to promote a clean crisp line.

Because the light hits at various angles, texture seems to work particularly well on gourds, so don't be afraid to experiment with patterns. You can also physically cut entire pieces out of the gourd shell with a hot nib, opening up a whole new dimension in your work. Use color in conjunction with your burning if you wish. I prefer to use acrylic paints, but many other pigments, including leather dyes and pencils, can be used for various effects. For smooth coverage and ease, I recommend a spray varnish to seal your work.



high. Tagua is also called vegetable ivory, palm ivory, and corozo. It can be a challenging material to burn, but the rewards can be worth it.

#### **Tagua**

Tagua (pronounced *tah-gwah*) is also called palm ivory or vegetable ivory. It is the dried nut of the ivory palm, which grows in the Amazon rainforest. (Note: Sustainable tagua harvest helps prevent forest destruction and promotes employment.)

Because of their unique nature, tagua are sometimes difficult to locate. They can be found at some woodcarving supply shops as well as specialized stores. Because of the unpredictable color and the presence of a void in the center of most nuts, I prefer to buy individual slices from the suppliers.

I love burning on tagua, but it is one of the most challenging materials I've ever used. Its hard nature makes hand-sanding time-consuming, so I prefer to use an inverted belt sander set on a slow speed. Due to its high oil content, tagua doesn't seem to burn so much as cook and produce a tar-like substance. This odd effect can make certain subjects, like fur, appear quite lifelike, especially when using a sharp skew to burn the tagua. However, I recommend simple subjects, such as a flower or a butterfly, for the beginner; more advanced projects require a lot of practice.

Tagua pyrography is by far the most dirty of all burning I have tried. Constant cleaning of nibs is essential to enable a smooth clean burn. Nib selection is limited to fine nibs—I use a very fine skew for most of the work I do on tagua.

It's essential to spray the finished work several times with a spirit-based acrylic to completely seal the pyrography because tagua burning will bleed on contact with water. It will also wear away with handling, so good coverage is essential to protect your work.

#### **Bark**

The papery bark from several varieties of trees can be used for pyrography. Of the barks I have tried, both the Australian paper bark and North American paper birch require a gentle heat. I found the surface to be so soft and spongy that it was difficult for lines to hold their edge or for shading to be uniform. This created a somewhat soft, romantic effect, but it did prove a challenge for highly detailed work. It's an interesting burn, but unless you have a practiced hand, I recommend it for high-contrast work or simple subjects. Silhouettes create a very effective look on this sort of medium.





Hunting Dogs, monochrome pyrography on piano key ivory. Approximately ¾" by ¾". Natural animal materials, such as bone, mastodon ivory, and piano key ivory, can provide a unique surface for miniature pyrography.

#### **Ivory and Bone**

It is illegal to buy, sell, or trade African elephant ivory unless it is of pre-embargo stock. Generally speaking, only old piano keys and some parts of old tusk can be used for pyrography projects. Fossilized mastodon ivory can be freely bought and sold, but please check with your customs authorities about any import/export restrictions that might apply. Please note: It is illegal to buy, sell, or trade Indian elephant ivory of any kind in any situation.

Burning bone and ivory is not for the faint-hearted. They both require a red-hot nib that can crack ivory if used for extended periods, so the ivory must be burned in short bursts. I've had the most success by burning with a pointy skew, which I sometimes turn over to use the very tip to chink into the surface. The picture is made up of a series of small cuts and incised dots, something like scrimshaw with heat.

My experience of ivory burning is only on piano keys so far, and, overall, I found it to be sticky, hot, and smelly, but the effect can be delicate and attractive.

#### **Animal Horns, Antlers, and Teeth**

Animal horns, antlers, and teeth are unusual materials to burn. I've not had a chance to burn on antler or horn (and I'd rather not burn on teeth), but I have seen some excellent examples of pyrography on both, especially antlers. The butt end of the antler can be cut crossways to make a disc that can be turned into a pin or pendant. A light-colored area can also be sanded on the flat surface of the antler to create an ideal canvas for a pyrographic picture. Nature scenes seem fitting and ideal for this kind of unusual platform.



Because subtle detail is difficult to burn on cork, simple designs are better.

## **Cork**

Detailed burning on cork is limited because of its bumpy and soft texture. Simpler designs or silhouettes are better suited to this material. Make sure you use natural cork that hasn't been treated or impregnated with any chemicals. Leave the finished picture natural or apply a craft spray or varnish to protect the work.

# **Artist's Conks (Tree Fungus)**

Ganoderma applanatum, the artist's conk, is a highly unusual medium for pyrography. Artist's conk is a plate-like fungal growth you might see protruding from the base of a tree trunk or dead stump. The upper part of the plate is hard and brown, but the creamy white underside can be burned. If the conk is still damp, the underside is soft and very easily marked, so pick it carefully and let it dry before use. Spray the finished piece with craft varnish for protection.

For more information on Sue Walters, see page 8.