Pyrography by: Dot Rygh & Melody Mullis 2025*

Wood burners – Different brands of burners and tips. Discussion in class
Wood burning tips we will concentrate on using. Discussion in class
skew--sharp tip and sharp or rounded end
writer—rounded tip or ball tip
flat shader—curved tip

Safety Tips

Take measures to protect your hands, fingers, eyes and lungs.
Dust collector or ventilation system
Well ventilated room
Fan pointed away from you.
Wear a dust mask.
Get in the habit of turning the burner off when not in use. Never leave it on for any reason.
Never use treated or sealed wood for burning nor fiberboard or other bonded material (Toxic fumes)
Have a cork heat protector or other material to insulate your fingers from the heat of the hand piece.
Be very careful when changing tips and always remember they are hot.
Have a holder for your burner handle. Always be aware of a hot tip and don't wave it around.

Burning Materials

Wood
Light color is better for contrast.
Little grain as possible
Heavy grain is more challenging.
Soft and evenly textured
Sanded and very smooth 600 or more sanding last.
Leather
Has no grain and design sinks nicely into surface.
Stinks a little more.
Smooth, unblemished pale, vegetable tanned leather is preferable.
Gums up nib and needs to be cleaned often.
Paper
Gentler approach
Smooth paper, but rough is O.K. and can be used for special effects.
Gourds
Clean and smooth surfaces work bes.t
Clean nibs frequently and keep smoke away from you.
Nibs can cut through the surface creating cut outs and used as part of the burning.
Tagua, palm ivory, vegetable ivory
Sand and use smooth surface.
Very dirty and have to clean nibs often.
Bark
Paper bark and paper birch requires gentle hea.t
A challenge for highly detailed work
Inside Bark Carved design. Excellent for accents & depth
Ivory and bone
Old piano keys, animal bones or antlers (no elephant ivory)
Animal horns, Antlers and teeth can be used.

Types of Wood you should never burn on:

Research your material that you plan on using to understand what chemicals may be present & whether those chemicals are released when heat is applied.
Green wood when it is not dry will create a lot of smoke and will take much longer to burn than dry wood.
Moldy wood, diseased, rotting, or wet wood.
Driftwood: according to the epa, it can release toxic or harmful chemicals when burned.
Plywood, particle board, chipboard, wood pallets or any wood with glue in it.
Wood that has been stained, sealed, or treated with any king of glues or oils. Wood burn first & then finish.
Woods with Poiso0n in its name: Poison Sumac, poison Oak, poison, Ivy etc.
Yew Tree is one of the most poisonous woody plants in the world.
Oleander shrubs have every part of it toxic to burning.
Mexican pepper is similar to poison oak, ivy & sumac.
Most of these woods could cause serious rashes &allergic reactions.

Types of Woods to use:

Alder Is a Hard wood. Good wood turning wood. .It burns nicely.
AM Elm is moderately hard. Not very good for burning.
Ash has a rough grain and is rather hard to burn.
*Aspen Light colored and smooth grained. Burns well but does fuzz up a little.
Balsa is o.k. if using in the hardest degree of the wood.
*Basswood has a very fine grained excellent for burning. Harder than pine.
Birch is a heavy wood and classified as a hardwood. Burns O.K.
Butternut is a type of walnut and it's classified as hardwood. Great color range and burns and finishes well.
Cedar is aromatic and has a beautiful grain. Burns O.K.
Cherry is O.k. but darkens with a sealer as does Maple.
Dogwood is extremely hardwood. Used as feather inserts and is O.K.to burn.
Cottonwood is good for carving as well as burning. Similar in structure & grain to Poplar.
Cypress has many colors and a variety in color in each piece. Lighter color is O.K. for burning.
Hazelwood is soft wood. And carves easily. O.K. to burn.
Jelutong is a good carving wood and burns quite well.
*Maple has a fine grain and is found in both hard & soft varieties. Holds detail in burning well.
Myrtlewood has a beautiful grain and can complement your burning. Choices of different colors etc.
Pine comes in many types and species and carves and burns easily. Can create carbon on tips as it is sappy.
*Poplar is similar to cottonwood and carves and burns easily. Is light in color and grain.
Sycamore is O.K. but not the best wood to carve or burn.
Red Mahogany has very fibrous qualities and rarely burned.
Redwood has a good texture and is harder than pine. Carving detail is lost because of the dark color.
Teak is used by carvers and not often by wood burners.
*Tupelo carves and burns extremely well. Fine grained and light weight. Best in my experience.
Walnut is a hardwood and its grain has carving appeal. Burns O.K. and used for gunstocks.
*Willow is light color and O.K. to burn.

Preparing your project for burning:

Price should not be factor.
Knot free and check free surface.
Check your grain direction to use or not use in your project.
The size depends on your project.
Finish the edges of your project.
Sand your project with all grits of sandpaper, depending on surface and end with 600 or higher.
Wash your hands before starting to wood burn.

Choosing a Pattern or Drawing

Chose a picture, painting, sketch, or draw what you are really interested in burning.
Start with a picture, photo, or sketch to fit your wood size. Don't copy someone else's work if you plan on selling it.
Use graphite paper or pencil on back of drawing. Don't use carbon paper, it's too hard to remove.
Trace by using a colored pencil or pen. It shows where you have traced.
Many books have iron on designs well as sketches.
Stick and burn designs and blank sheets are available at many sources.
Be careful in centering your design etc.
Have in mind is you want to Paint, stain, dye, or spray a finish on your project.

Burning your project

Use a mask.
Hold your burner like a pencil.
Turn your work as you work.
Most of your work will have the burner travel towards you.
Let the heat and your burner do the work.
Keep your tips clean. Fine grade sandpaper or emery cloth.
Don't inhale the smoke.
Do not change tips while hot.
Always turn off your burner when not in use.
Follow examples to burn and have fun.

Finishing your project

Use very fine grit sandpaper or a foam core emery board.
Move gently across your work,
Erase any lines from your project with a white artist eraser.
Use a soft brush or lint free cloth to. Remove all dust etc.
Spray polyurethane is a quick and easy seal.
Spray should contain a UV inhibitor.
Use a matt finish for a most of your work, but semi-gloss or other are your choice.
Be careful & build up really light layers.
Other finishes are OK, like Tung or Danish Oil. Paste Wax is a little harder to use.

*Class for beginning wood burning students starts on March 4 and will continue for the following 4 Tuesdays. Please bring your wood burners & tips if you have them. Bring a pencil, eraser, ruler, and several grades of sandpaper up to 600 or more (if you don't have, we will bring an assortment). We will furnish practice wood pieces for your learning sessions. Think about a project you might like to do.

WOODBURNING NIBS: THE SKEW

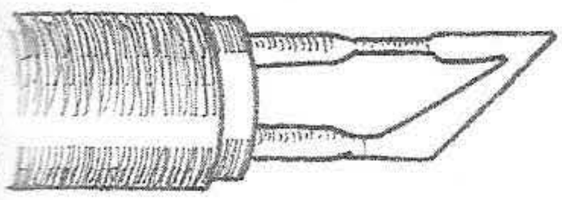
The skew has a straight, often knife-like, edge. Its narrow edge gives it the ability to burn very fine, crisp, and precise lines. It's designed to etch as it burns and is excellent for burning straight or lazy curved lines, but it is limited when burning tightly curved lines. It is also limited to filling in areas by crosshatching and other similar methods.

How to Use the Skew

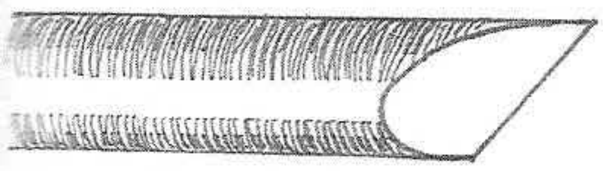
The skew works best pulled toward the body; you will need to keep turning your work so the nib can continue to travel toward you. You will find you need to roll your fingers from side to side (as indicated by the arrows) to burn curved lines.

For optimal performance, keep the skew very clean and sharply honed.

The skew is best pulled toward yourself. A slight twisting motion with your fingers will allow you to burn gentle curved lines.



Wire nib skew



Solid nib skew

Suggested Uses: Skew

1. Line

The skew is capable of burning extremely fine crisp lines. Wire nib skews can be extremely sharp and can cut as they burn. The skew burns across grain well and is especially suited for edging, wildlife, miniature, and linear work.

2. Fill/Shading

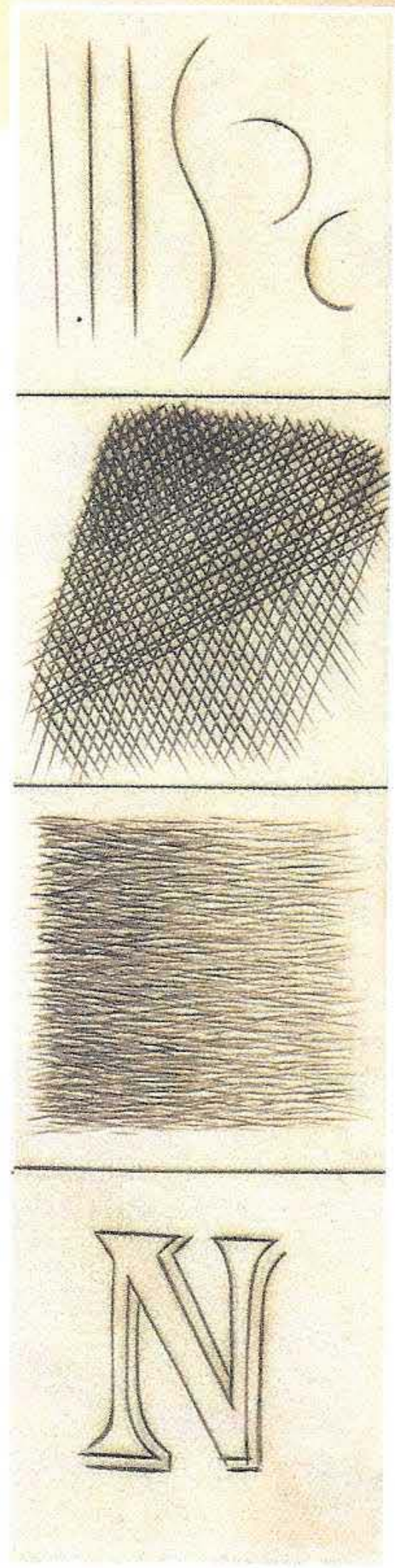
Skews are perfect for cross-hatching, a method of shading by crossing a series of parallel lines. The tighter the lines and the more times they cross, the darker the area.

3. Fill/Shading

Short or long lines running in the same direction, but slightly askew to each other, can create subtle shading or filling. It is especially effective when used to represent animal fur.

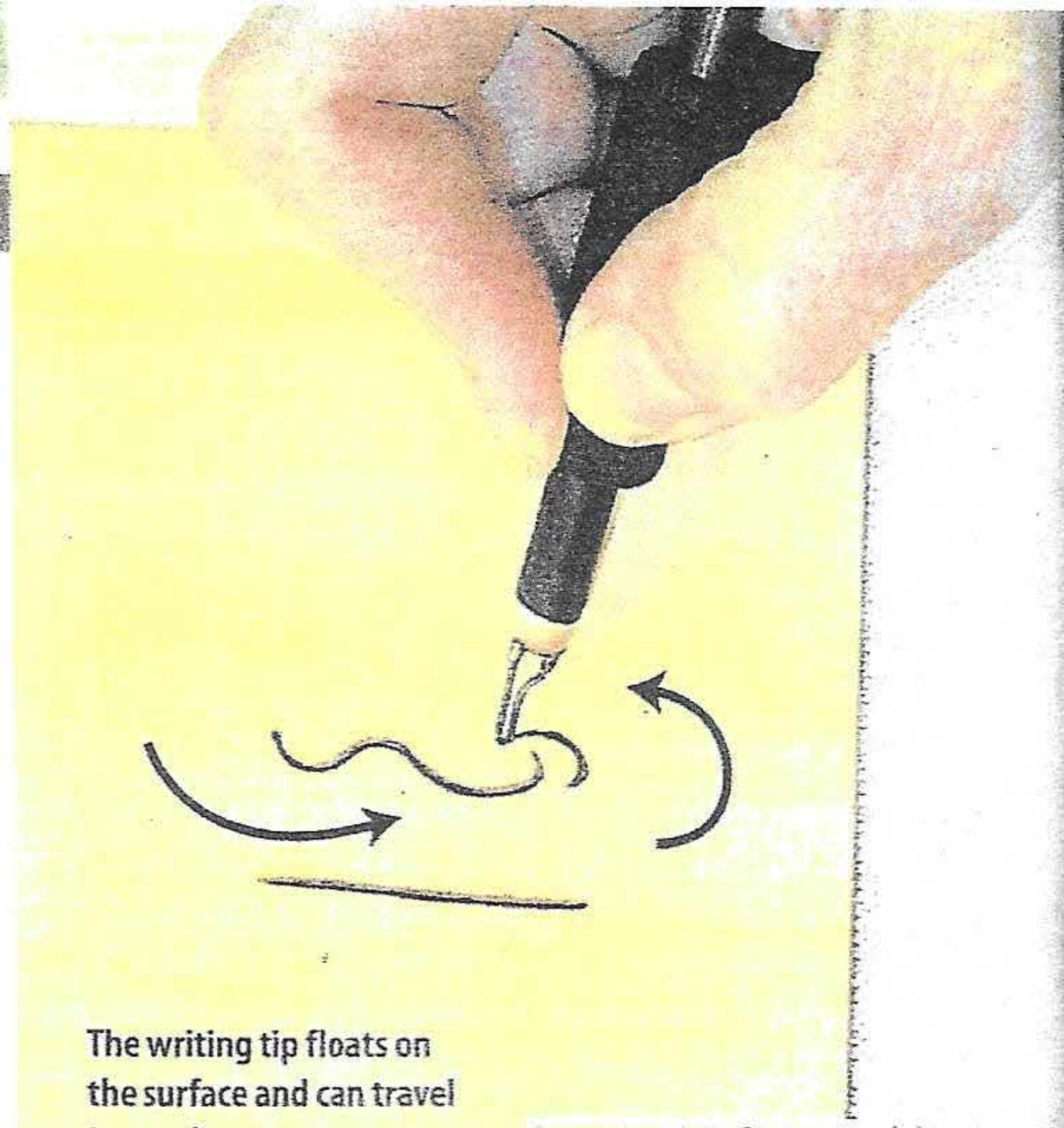
4. Lettering

Lettering with a skew is generally limited to the edging of large letters. The skew is an excellent nib to edge lettering for a sign.



WOODBURNING NIBS: THE WRITER

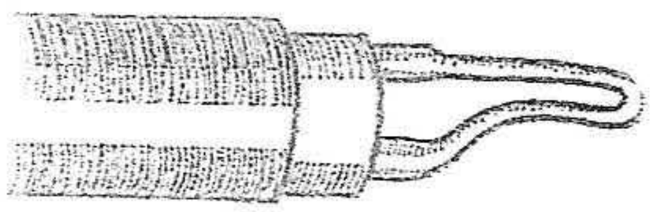
The writer, like a pencil, has a pointed or rounded end, which allows it to go in any direction while in contact with the surface. This makes it ideal for writing or burning tight curves and circles. The writer can be used to fill in and shade areas, although this can take some time and look grainy.



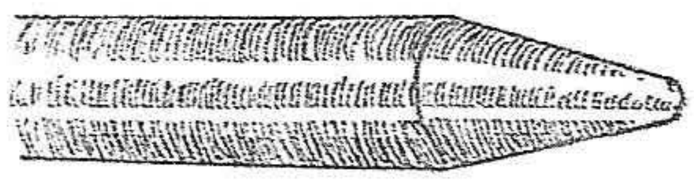
The writing tip floats on the surface and can travel in any direction.

How to Use the Writer

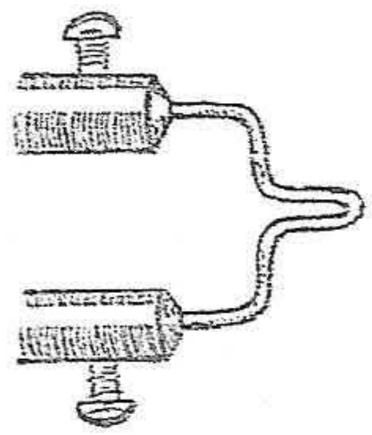
When burning with this nib, your hand can rest on the surface in a typical writing position. Because it floats on the surface (compared to a skew, which cuts through the wood), this nib can travel in any direction. You will, however, find it more comfortable to run the writer toward you when doing most lines, so it's best to keep turning your work to allow your nib to keep moving in a comfortable direction.



Wire nib writer, North American style



Solid nib writer

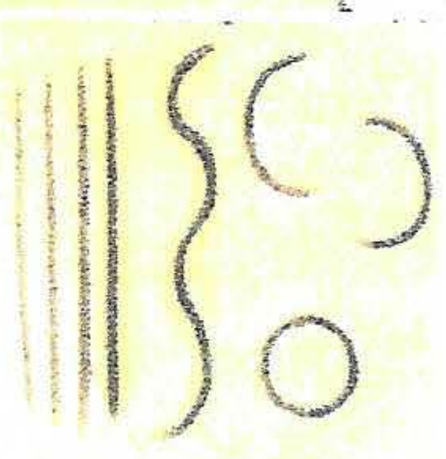


Wire nib writer, European/Australian style

Suggested Uses: Writer

1. Line

Because the writer tends to sit on top of the surface, it is ideal for difficult curves, soft lines, the eyes of animals, lettering, and filling in small areas. However, it takes more control than a skew to burn a neat line.



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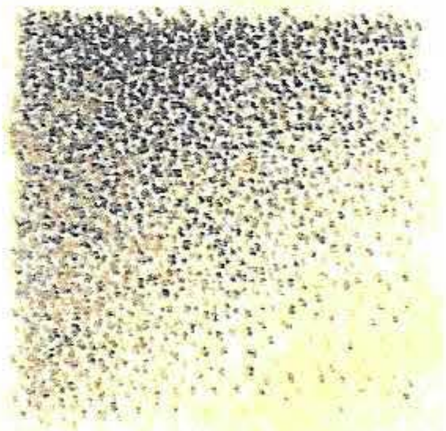
2. Fill/Shading

Stippling (also called pointillism) uses only dots to build up a picture. It is very time-consuming, but the effect is worth the effort; plus it's very difficult to make mistakes. The more dots, the darker the area.



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3. Fill/Shading

Short or long lines running in the same direction, but slightly askew to each other, can create subtle shading or filling. Similar to the effect created with a skew, the writer produces a softer look.

3

4. Lettering

As the name suggests, this writing nib excels in lettering. It is able to burn the tightest of curves, making it possible to smoothly burn difficult letters.

4

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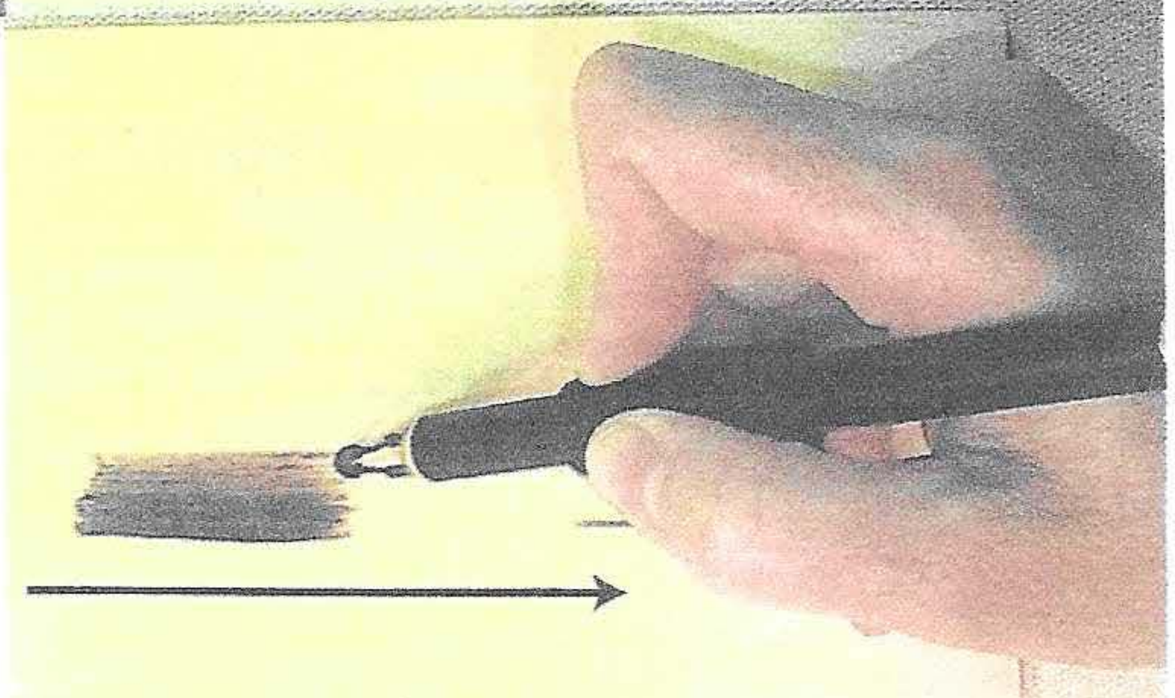
WOODBURNING NIBS: THE SHADER

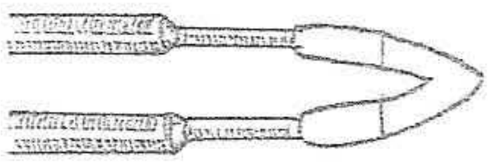
The shader can come in many shapes and sizes, but essentially it is designed to scorch large areas of wood or other material. The base of the shader is very good for filling in black areas, as on signs or the background of a picture. Gentle overlapping of layers can also produce soft gradient tones, such as those used in portraits. The toe of the shader can be used to draw thinner lines or to texture. It is also the ideal nib to use to heat transfer a pattern. The two main types of shaders are the flat shader and the spoon shader.

How to Use the Shader

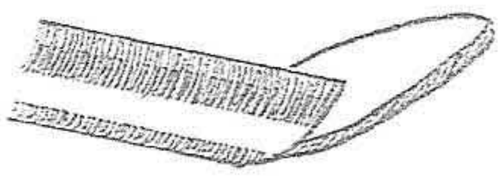
Depending on the shape of your shader, there are generally two ways to use it: draw it toward yourself or sweep it sideways. You will find that the drawing movement will shorten your stroke compared to the longer sweeping motion of moving your hand sideways. I also find it much easier to develop an even rhythm for consistent overlapping of lines when I use a sideways hand motion.



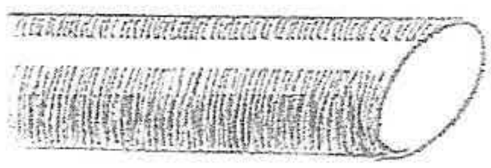
Pulling the shader toward yourself works best for small areas as the length of the stroke is limited.



Wire nib flat shader



Trowel-shaped solid-point shader



Solid-point shader

Suggested Uses: Flat Shader

1. Fill/Shading

Repeated overlapping of thick lines can create fill or shading. It's better to gradually build up the layers to get a smooth transition in color.

2. Fill/Shading

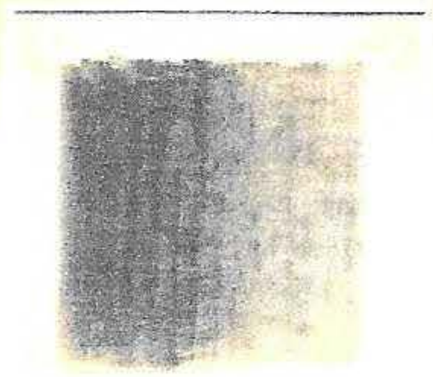
The plate of the flat shader can be pushed repeatedly into the surface in an overlapping random manner. It is a worthwhile method for soft focus work or for darkening a background.

3. Fill/Shading

Squiggling the shader repeatedly over the surface in a random manner will create overlapping circles that will fill an area nicely. Keep the nib moving to avoid laying the squiggles in lines, and build darkness by adding subsequent layers.

4. Fill/Shading

Short or long lines running in the same direction, but slightly askew to each other, can represent coarse animal fur and be used for filling in lettering, for texture, or for darkening a background



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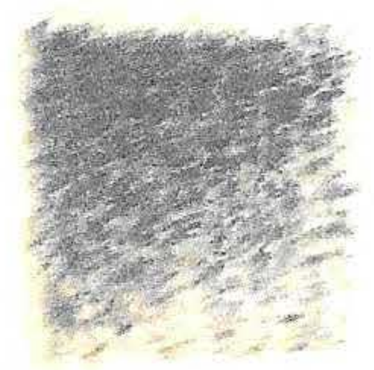

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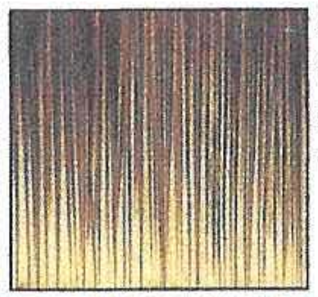
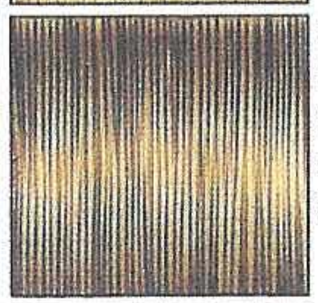
Textures Made with the Skew Nib

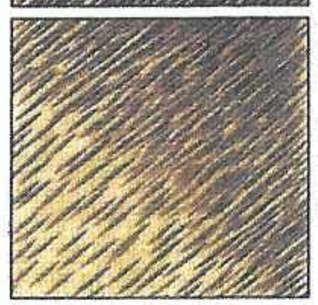


Skew: dragged top to bottom; allowed to trail off



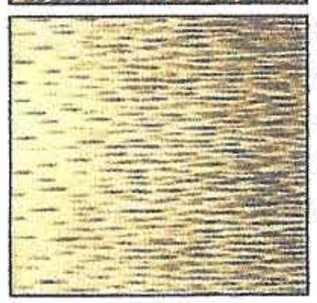
Skew: parallel lines drawn from opposite sides toward the center

Skew: lines drawn close side-by-side in one direction



Skew: pushed in randomly, one direction, more strokes in the darker area

Skew: hot, random slashes, one direction



Skew: short flicks in one direction, darker area has more flicks

Skew: lines crossed at right angles

Skew: very fine lines at cross angles

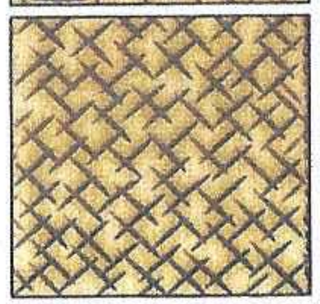
Skew: close, parallel, hot lines at cross angles

Skew: pushed in, herringbone pattern

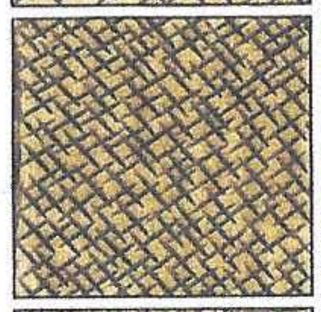
Skew: long strokes overlapping at various angles

Skew: pushed in at both right and cross angles

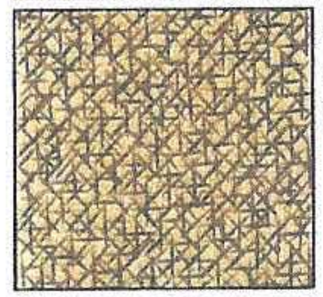
Skew: pushed in; random right-angled pattern



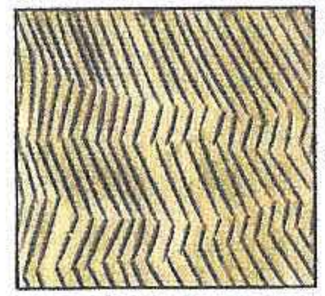
Skew: pushed in: crossed at random right angles



Skew: toe pushed in tight, random pattern at cross angles

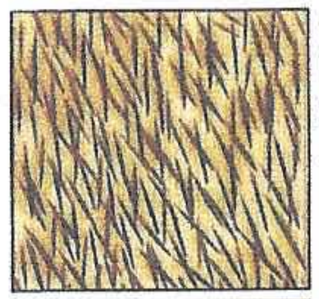


Skew: fine, random flicks at cross angles

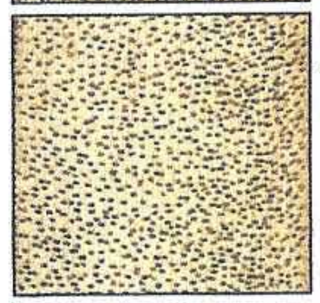


Skew: straight, angled lines drawn parallel to each other

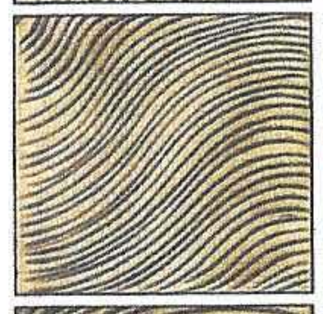
Skew: lines in blocks angled and adjacent to each other



Skew: full length pushed in, shallow cross angles

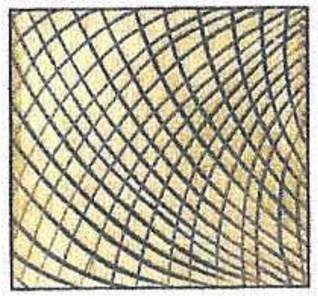


Skew: very tip, random stippling



Skew: lines drawn in tight wavy pattern

Skew: lines in a sloppy quarter circle



Skew: lines arced and crossed

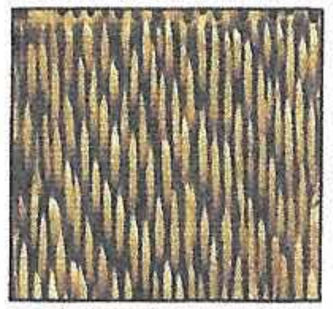
Textures Made with the Writing Nib

Writing nib: pulled from top to bottom and allowed to trail off

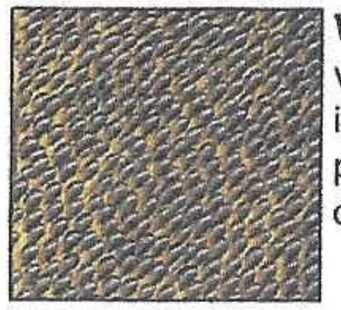
Writing nib: parallel lines drawn from opposite sides toward the center

Writing nib: deep strokes, one direction, peaks scratched off with blade

Writing nib: short, random, staggered dashes, one direction

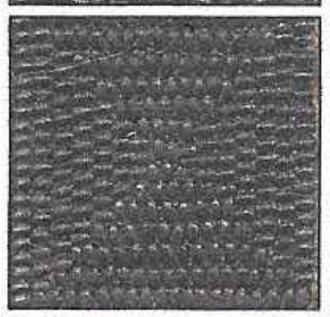


Writing nib: coolish, deep strokes, surface then burnt with shader

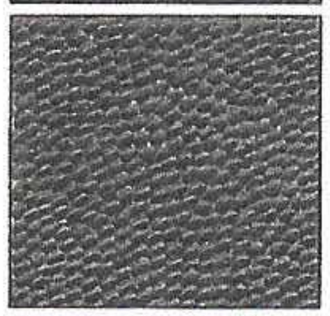


Writing nib: very short flicks in tight random pattern, one direction

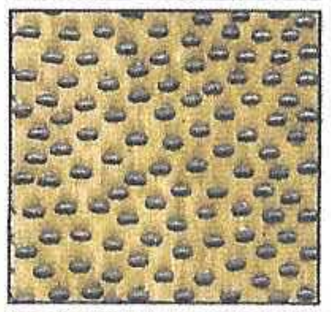
Writing nib: pushed in, herringbone pattern



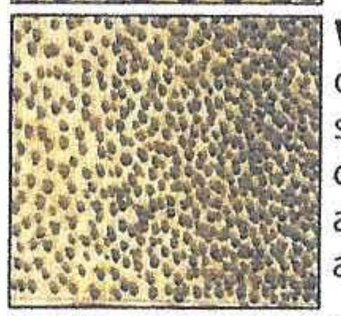
Writing nib: rows pushed in with writing nib, turn the board for next row



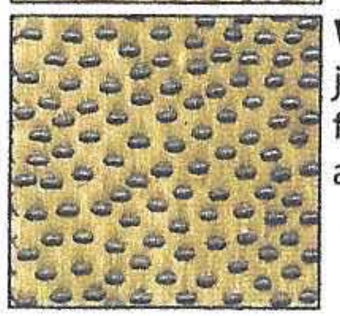
Writing nib: pushed in, tightly abutting each other



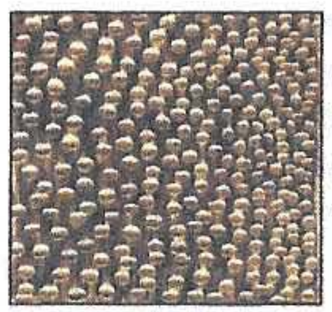
Writing nib: open stippled pattern, shading added on top



Writing nib: dotted on surface; more dots make a darker appearance



Writing nib: jabbed in and flicked to form a tail



Writing nib: coolish; pushed in deeply; surface burnt with shader

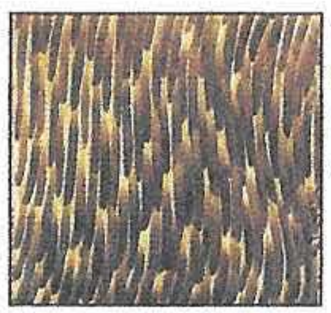
Writing nib: very hot, pushed in deeply, peaks then scratched off with blade

Writing nib: side of a writing nib pushed in; random, tight pattern

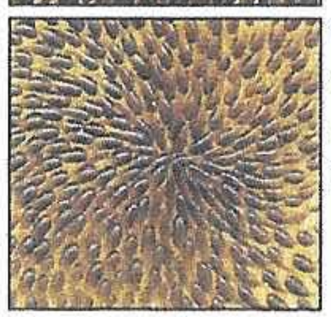
Writing nib: short strokes next to each other in spiral pattern, center out

Writing nib: tight spirals slightly overlapping each other

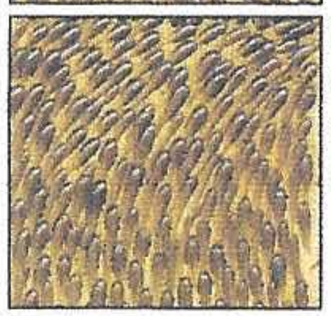
Writing nib: tight, circular, overlapping random pattern



Writing nib: random strokes trailing off, wavy pattern



Writing nib: short flicks radiating out from the center



Writing nib: short flicks arcing in a similar direction

Writing nib: drawn in neat basket weave pattern

Writing nib: lines drawn in curved basket weave pattern

Textures Made with the Spoon Shader

Spoon shader: tip of the nib, short flicks in one direction

Spoon shader: bowl pressed into the surface in overlapping stipple

Spoon shader: turned over, tip pushed in at various angles

Spoon shader: full, smooth cover

Shader or writer: Interlocking random patterns

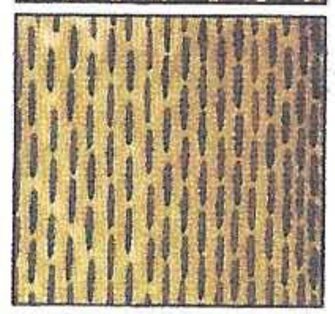
Spoon shader: several layers to build gradual tone

Spoon shader: parallel lines drawn from opposite sides towards the center

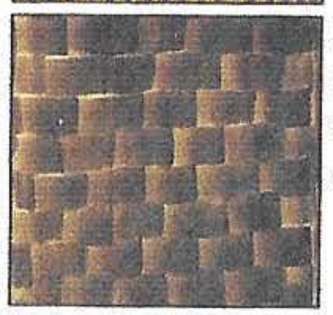
Spoon shader: toe pushed in, lines drawn in wavy pattern

Textures Made with the Flat Shader Nib

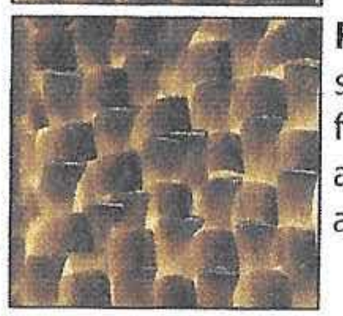
Flat shader: brick pattern



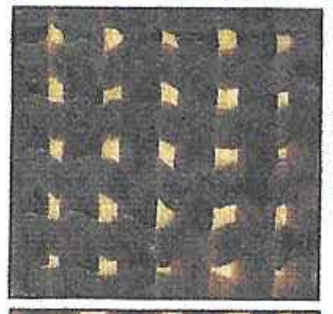
Flat shader: tip pushed in, brick pattern



Flat shader: short strokes trailing off; checker pattern



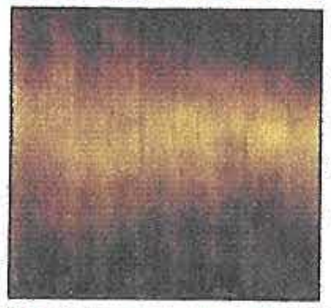
Flat shader: short strokes flicked down and then across



Flat shader: crossed in wavy lines

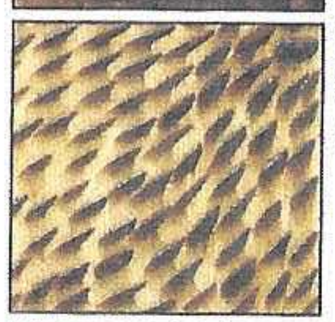
Flat shader: wavy lines next to each other

Flat shader: curved basket weave pattern



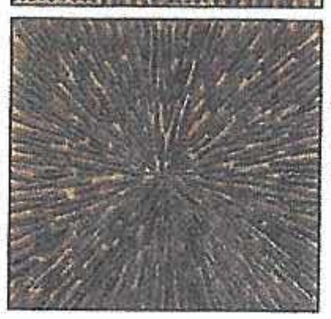
Flat shader: pulled from opposite sides towards the middle

Flat shader: short strokes randomly overlapped

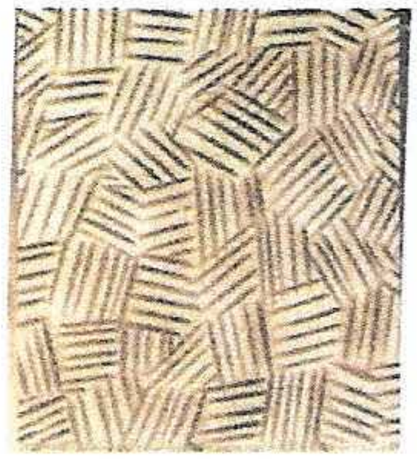


Flat shader: toe pushed in and flicked

Flat shader: toe pushed in, row-next-to-row pattern



Flat shader: jabbed in, radiating from center outward

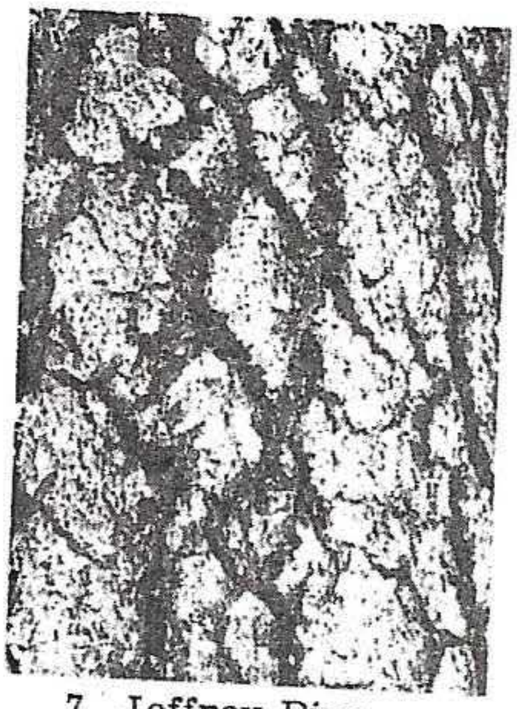


Skew: lines in blocks angled and adjacent to each other

Skew: pushed in, herringbone pattern

Writing nib: drawn in neat basket weave pattern

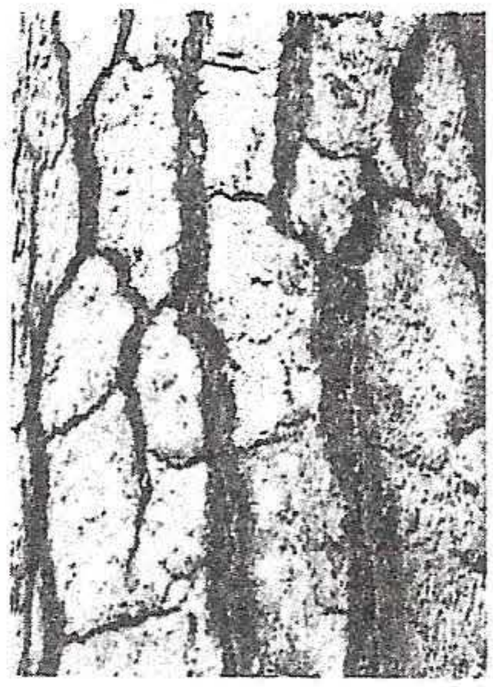
Writing nib: lines drawn in curved basket weave pattern



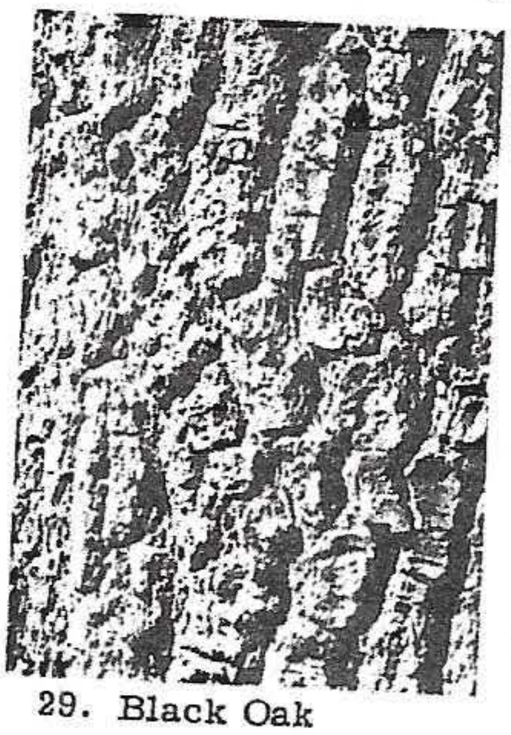
7. Jeffrey Pine

Flat shader: toe pushed in, basket weave pattern

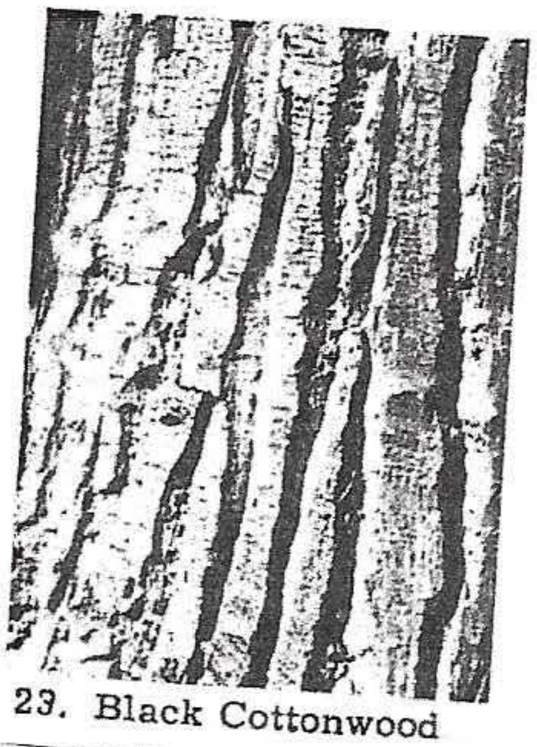
Flat shader: short strokes trailing off; checker pattern



6. Yellow Pine



29. Black Oak



23. Black Cottonwood