

Practical Jewelry Rendering



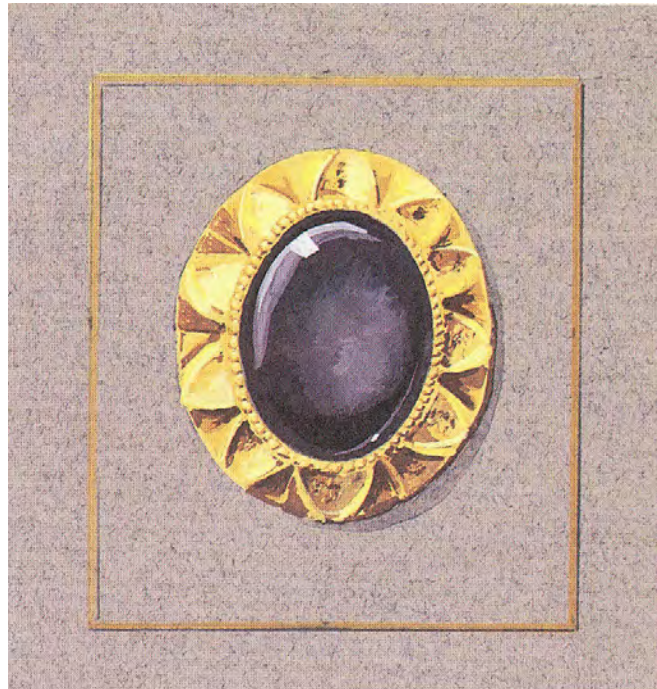
Contains:

- instruction
- structure guides for design
- plastic template of gem shapes

Tim McCreight

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*Pendant with amethyst,
Beaurains Treasure,
c. 300 AD*

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Renderings by Tim McCreight.



In an effort to make the how-to section of this book visually interesting, I have selected work from museum collections to illustrate various techniques. In a few cases small liberties were taken to allow the piece to best convey specific information. Items not listed are the author's design.

Introduction & Tools

The essence of rendering is magic — the grand illusion that something as elusive as an idea seems to exist as a tangible object. The advantages of rendering are obvious: it is faster and more economical to refine an idea on paper than in precious metal. Renderings are often used to convey information accurately to a client or to communicate with a model maker or gem cutter. And just as important, it's fun. Most renderers will acknowledge that they get a kick out of pulling off the illusion, no matter how many times they've done it before.

Renderings of jewelry convey information on two levels. At a quick glance, a rendering describes size, shape, contours, materials and textures. The test of a rendering is that a viewer is able to “read” it without any hesitation or questions.

On a subconscious level, if the rendering is labored and stiff, we assume, perhaps without knowing it, that the jewelry will have these qualities too. If the rendering is smudged or poorly crafted, we will make unfortunate and perhaps unfounded assumptions about the skills of the maker. For this reason, it's important to bring your rendering skills up to the level of your design and metal-working experience.

This book is a practical tool that will take its place alongside your pencils and paintbox. The first section outlines the basic techniques of rendering in an abbreviated outline form, using drawings and written text. This will be a refresher for those with previous instruction, and a jumpstart for the reader who has not rendered jewelry before. Of course no amount of reading can take the place of practice and observation. So practice!

The instructions that follow take a somewhat didactic tone and refer to specific paints and what appears to be a rigid sequence of events. This should not imply that this is the only way to render jewelry. Instead, these very specific techniques are presented as a synopsis of the process so you can quickly acquire the skills of the task. From there each designer is encouraged to modify the process to his or her personal tastes.

Tools & Materials

It is hard to overemphasize the importance of using the best tools and materials available. Sometimes convenience or finances force us to settle for second best, but be aware that cheap paints and leads will interfere with the illusionary quality of a rendering, creating a disappointing effect. This is dampening to anyone's spirits and most especially to a renderer just starting out. Both blending and brightness - the two cardinal attributes of a fine rendering - are more difficult to achieve with poor materials.

After a couple years of rendering, you'll probably settle on a media that you find most comfortable, but if you're just starting it makes sense to try all the possibilities. In addition to the supplies below you'll want tissues and a water container. Work at a well lit uncluttered table from a comfortable chair with proper support. Some jewelers use an Opti-visor[®] when rendering.

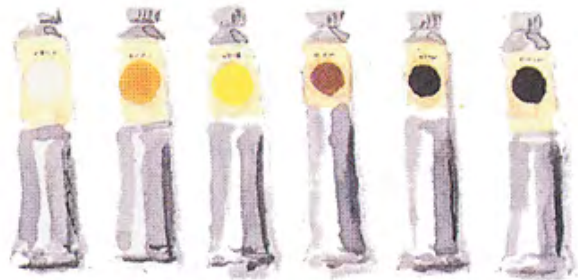
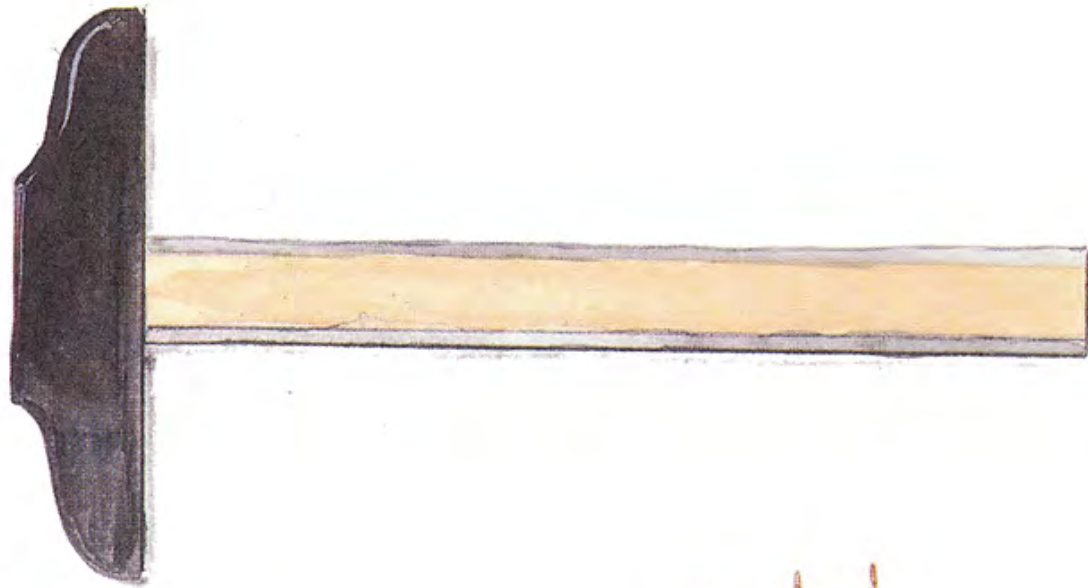
Papers

- Tracing paper
- Frosted acetate
- Vellum
- Canson paper
 - maroon
 - tobacco
 - dark gray
 - mid-gray
 - black

To buy all the paints, colored pencils, brushes, drafting tools listed here, along with tracing paper, vellum and Canson paper will cost about \$75–100. It might help to remember that the tools will last many years if well cared for, and that even small tubes of paint last a long time.



- Mechanical pencil (lead holder)
- Graphite - B, HB, 2H, 4H, 6H
- Transparent triangle
- Cardboard stump
- Kneaded and plastic erasers
- Ruler (metric and inches)
- X-Acto or matte knife
- Templates - circle, square, oval, etc.
- Pencil sharpener or sandpaper
- Colored pencils
- Tape (drafting or repositionable)
- Colored pencils - soft leads are preferred; Prismacolor and Derwent are excellent brands.



- Sable brushes - sizes 1, 0, 2/0
- Reusable palette (white dinner plate)
- T-square
- Paint - gouache ("designers colors") or watercolors can be used. Each manufacturer has slightly different names; use the list below as a point of reference. Avoid the bottom-of-the-line children's paint.

MORE NECESSARY

permanent white
lemon yellow
golden yellow
yellow ochre
Van Dyke brown

LESS NECESSARY

blue
red
black
green
burnt sienna
Payne's Gray

Chapter 2

Basic Skills

Simply put, there are only two skills needed to produce exciting renderings: an understanding of where the colors go and the finesse needed to apply the media correctly. The first can be learned from observation and the other is acquired through practice.



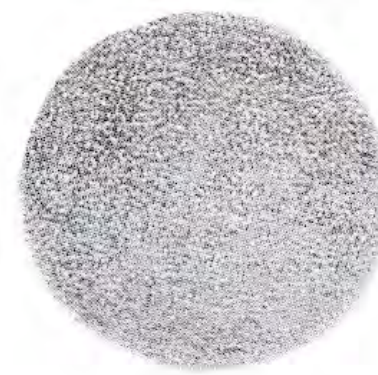
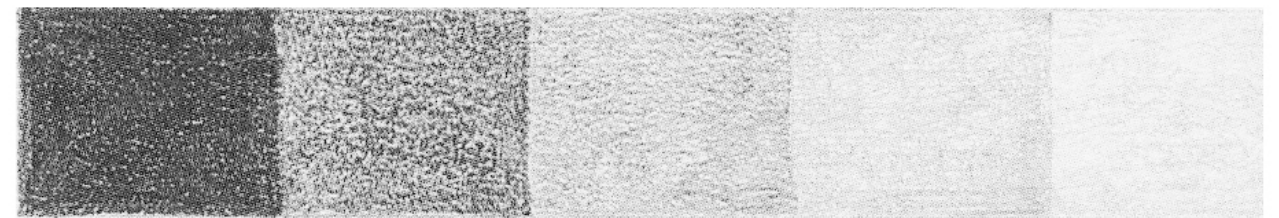
*Graphite rendering by
Dominique Audette, from
"Jewelry Illustration"*

Media

When using a pencil, you must be able to achieve at least 5 distinct shades of gray. As you get better, shoot for 8 or 9 identifiable values. Having fewer than this is like a musician who can only play a few notes; the music is likely to be boring. Practice by making a value ladder like the one shown here. Note that this is partly a matter of dexterity and partly improved perception.

Just as important in the final illusion is the skill of handling the media so that no gesture lines are evident. In the case of pencils this means that the stroke must be soft enough to disappear. Create this with straight lines that are built up in several crossed layers or move the pencil in small circular strokes that overlap slightly. However you get there, practice until you can create an even field of gray tone. Generally make pencil lines lighter than you think they should be.

If you decide they need to be darker you can apply another layer of graphite. Get in the habit of sharpening your pencil frequently; the crispness of fine lines will make the drawings more “metallic” and convincing.



*Convincing
Looks like a
shaded object*



*Not Convincing
Looks like
pencil lines*

Light Source



It is a convention in jewelry rendering that light enters the frame from the upper left corner. It's important to understand how this light will fall on a rounded form as illustrated. The trick of effective rendering lies in the ability to carry this information to a complex form, as in the second example. It might be helpful to draw a simple cross-section plan before starting a rendering to help visualize where the lights and darks will be placed.



A simple cross section showing highlight placement



Objects with more complex cross sections benefit from a sketch like this

A rendering is more impressive when it dominates the space immediately around it. This is easily achieved by drawing a square or rectangle around the form. This can be as simple as a pencil line or as sophisticated as a colored border; in either case it should not overpower the jewelry. By making the right and bottom lines a little heavier, the three-dimensional effect is increased. This frame should not be so close that it impinges on the jewelry, but it must be close enough to establish a reference with the object. Usually about a half inch of breathing space around the design will accomplish this.



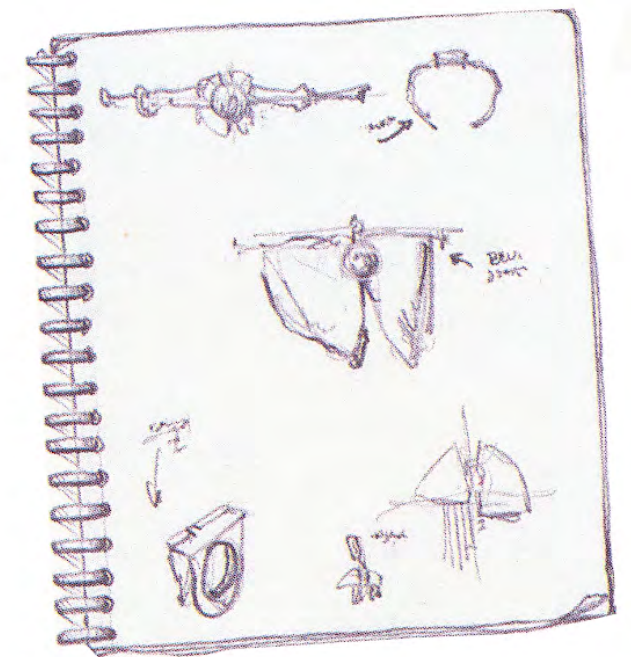


Almost any object can be reduced to basic geometric forms. By understanding the effect of light as it falls on these forms, you will be able to convey the shapes of your jewelry designs.

Transferring the Outline

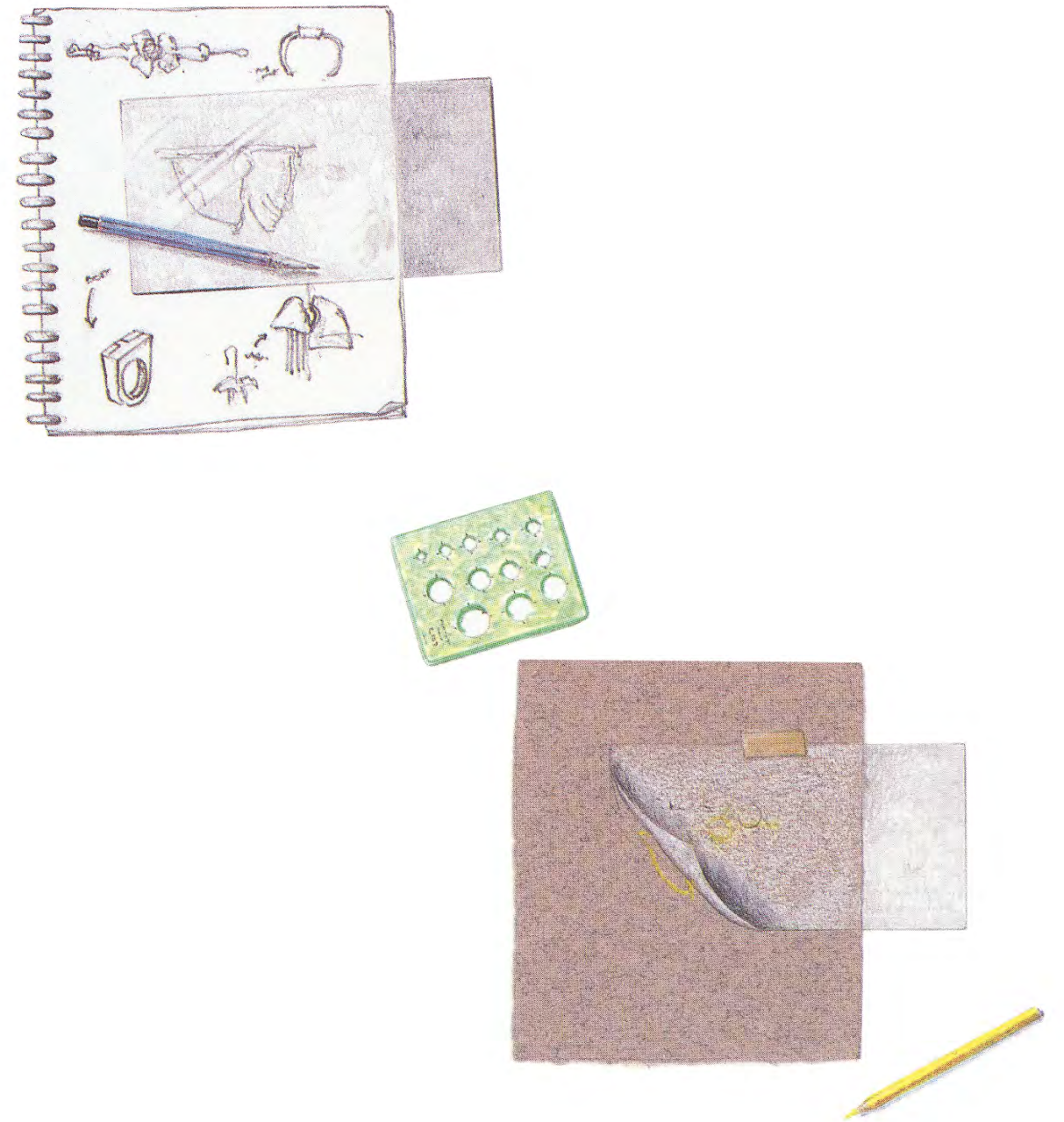
Rendering is the process of creating on a two-dimensional surface a realistic representation of what will later become a three-dimensional object. Technically, rendering is distinct from the process of design, though of course in practice the various elements interact.

Make your working drawing in a sketchbook, using whatever extra lines are needed. When the correct form merges, draw over it, darkening the lines so they will show up clearly. Jewelry is almost always rendered in actual size. Exceptions might occur in the case of large objects such as hollowware, which can be reduced, and small items such as ear studs or small rings, which may be enlarged.



If the rendering is to be made on medium-weight white paper, you can probably trace the original drawing directly. This is easiest on a light table, but you can also lay the work on a window and trace the outline there. Most rendering is done on a heavy colored paper and this requires an intermediate step to transfer the image. Carbon paper is not acceptable because the line it makes is too dark and cannot be erased.

First, copy the original drawing on tracing paper with a soft graphite pencil (at least 2B). Flip the sheet and draw over the back side of the tracing with a regular (#2) pencil or with a colored pencil - yellow for gold, white for silver. Invert the tracing and position it carefully on the rendering sheet perhaps taping it lightly so it can't slip. Use a hinging piece of tape so you can check your progress. Draw over the correct side again, using this pressure to press the soft graphite onto the rendering paper. Use a light touch so the line is faint and will not show in the final rendering.



Templates can be used directly on the rendering sheet and do not require transfer. In fact even if the drawing itself is being transferred, it's best to leave any circles, squares or ovals out of the tracing step and simply insert them directly into the outline.

Some renderings, particularly those with simple outlines, do not require the transfer step. Simply draw the outline on the rendering paper with a pale colored pencil and proceed directly to the rendering.

Always wash your hands before starting to work, and protect the paper from hand oils with a piece of scrap paper, either whole or with a "drawing window" cut away.



When drawing on dark paper like this, use a fine-pointed white pencil to lay in the basic form.

Graphite



While not as convincing as color renderings, black and white drawings can provide a fully realized view of a finished piece of jewelry. They are generally easier to create than color renderings and might be sufficient to your particular needs.

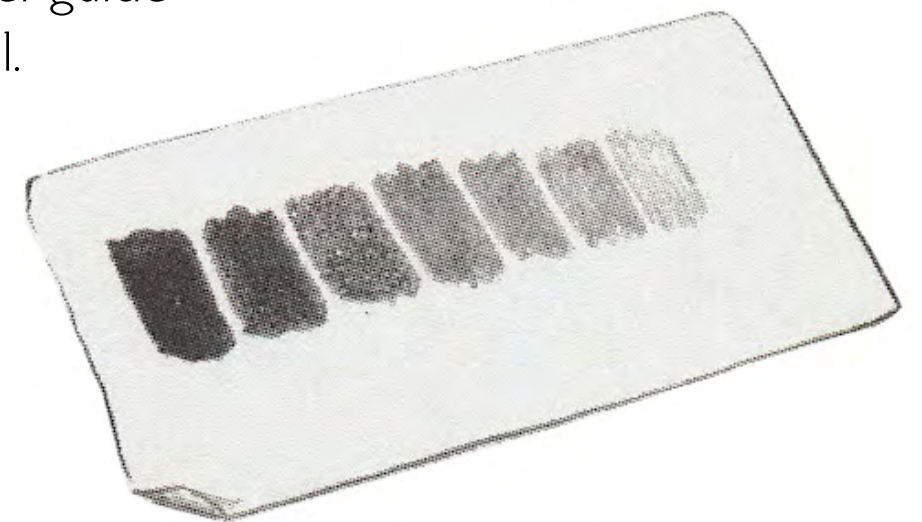
Use a variety of drawing pencils or leads, ranging from HB through 2H, 4H, and GH. These hard leads will make only light marks on the page, allowing great control as you build up many layers of graphite. In addition to pencils you will need a stump, a vinyl and kneaded eraser, and some white paint or chalk.

It is important that you have sufficient control over the graphite to achieve a range of gray tones that show no sign of pencil strokes. On a piece of

scrap paper, practice marking until you can create at least five clearly different shades of gray, each one drawn as a field of value. This is not a once-in-your-lifetime exercise, but calisthenics you should repeat each time you sit down to draw.

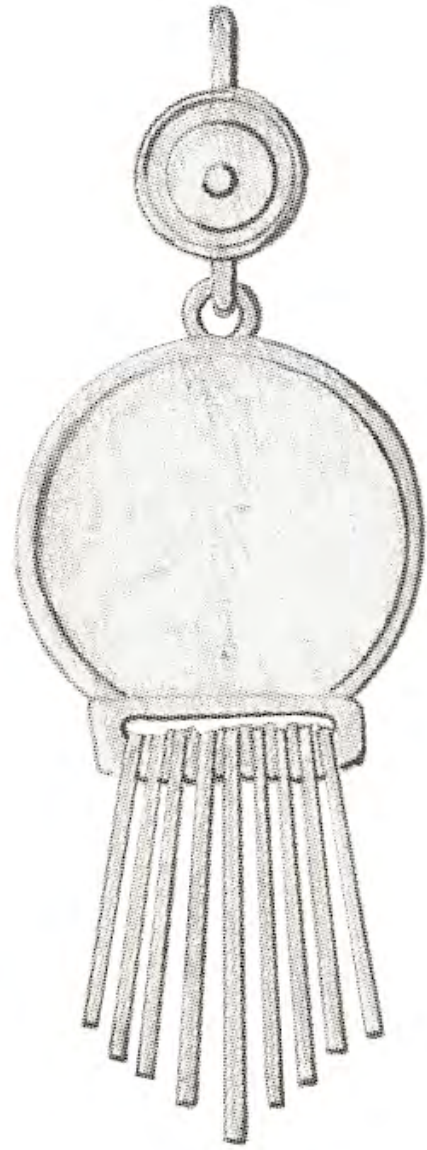
Draw the object in a sketchbook, making whatever guidelines are helpful.

Trace this onto a good quality vellum, using a light table if one is available.





Fill the entire outline with a light shade of gray.



Light striking the object from the upper left will cast a shadow on the quadrant diagonally opposite: the lower right. To convey this, draw over the outline on the lower right quadrant with a relatively soft pencil. As it rounds a corner this line will taper down to the width of the original line.

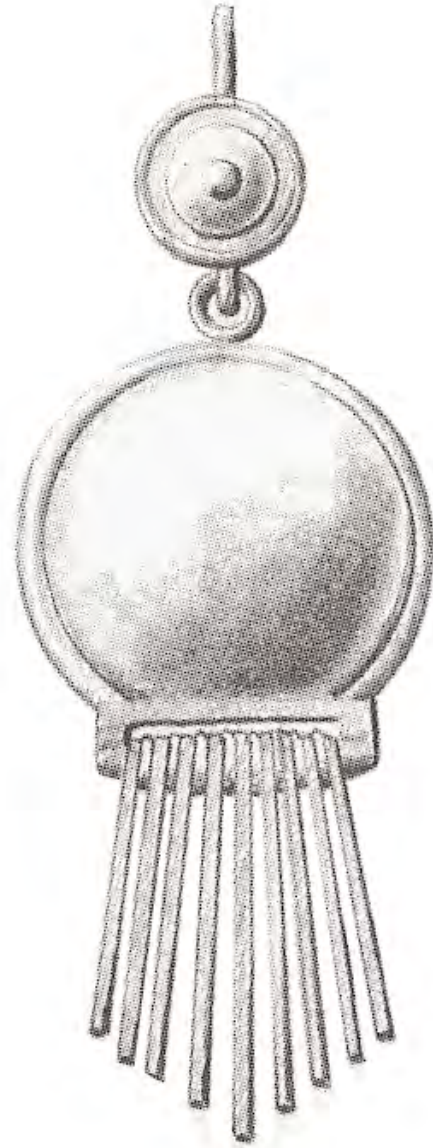


Shade the areas that curve away from the light toward the lower right quadrant. The thicker the piece the greater the transition to dark here. Remember to feather the pencil marks so no stroke is apparent. To communicate the reflective nature of metal, leave a line of pale gray at the extreme edge of the form where light from the table surface bounces back on the piece. Remember to add a shadow to any element that crosses over the basic form.



Lighten the curved areas that arch toward the light by lifting a small amount of graphite with a kneaded eraser. A rubber eraser is not recommended because it will create a smudge.

If the piece is highly reflective, add highlights with white paint directly from the tube. Use a fine brush and follow the contours of the piece.

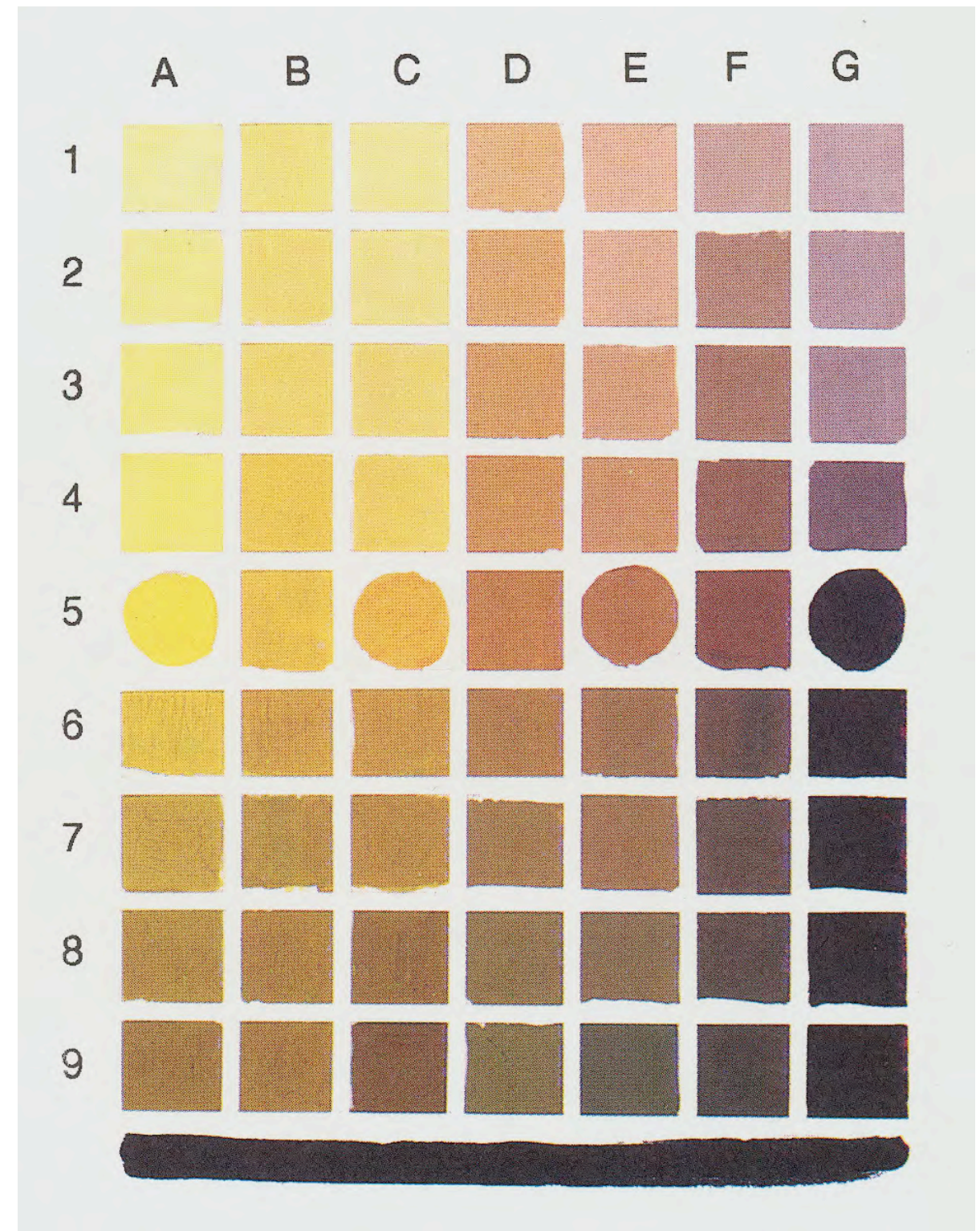


Shadows cast by the piece contribute greatly to the effect of the illusion. The shadow will be opposite the light source, around the lower right of the object. Add a soft gray of a shadow with a stump that has been charged with graphite powder. Use a soft pencil on a piece of scrap paper to create a patch of loose graphite and dab the stump into this.

Color & Colored Pencils

Introduction to Color

To make your renderings believable you should have a clear understanding of the qualities of various colors and the techniques for creating a range of hues and values. High karat gold has a warmer, richer color than 10K for instance, and your renderings should convey that. The sample palette shown here indicates the range of colors typically needed to render gold. The circles are made of pure color, straight from the tube. The areas in between show a middle mix of two pure colors. The hues above the center are made by adding increments of white; those below the center are made by adding the dark gray shown. This was made by mixing red, yellow, and blue. By duplicating this exercise you'll gain experience in mixing colors and an understanding of their relationships.



Refer to this chart by using the letter/number code.