## Cabochon Pendant

## Tools Needed

Round nose pliers
Flat nose pliers
Chain nose pliers
Wire cutter or flush cutter
Small round mandrel, wood dowel or pencil
Ruler or tape measure
Knife with a smooth blade--not serrated (pocket knife works well)
Sharpie pen
Painters blue tape
Telephone wire
Materials 21 Ga . square wire, half-hard in Sterling or Gold filled
21 Ga . half round wire, half-hard in Sterling or Gold filled for Bezel wraps
16 Ga . half round wire, half-hard in Sterling or Gold filled for Bail wraps
Cabochon of choice, 30 mm X 40 mm Rose Quartz pictured.


Click on the image for higher resolution image. Close window to return.
Select your cabochon. To determine the length of wire you will need use low tack tape, either painters or masking tape cut to $1 / 4^{\prime \prime}$ wide. Use a strip of this tape across the face of the cab to mark the center, top and bottom, use a measuring tape to get an accurate center mark. Starting at the center top, leaving a tail, wrap tape around the edge of the cab until you slightly overlap the other end. Cut the tape and leave on the stone. At this time, decide where you want your side wraps and mark the tape. Here I will make five wraps around the bundle. Mark the bottom center of the tape as a reference. I usually mark the center with an x or arrow and the remaining wrap locations with broad marks showing location and the width of the wraps.


Click on the image for higher resolution image. Close window to return.
Remove the tape by cutting through the overlap at the top center of the stone. Stick the tape to your work surface for reference. Measure the length of the tape and add a minimum of four inches, here I have added five inches. This will be the length of the wires you need for the wire bezel. Cut as many wires as you need to equal the thickness of the cab plus two more wires. In this case, since the cabochon has a thin edge, I am using five wires. Straighten wires by carefully drawing the wire between your thumb and fingers using a rouge pad to clean as you straighten.

Lay the wires next to each other in a flat bundle and temporary wrap each end of the wires with telephone wire. Find the middle of the bundle and using your marked measuring tape find and match the middle marks. Use the tape to mark the bundle for wrap wires. Mark the beginning and end of the tape on the bundle. If your design does not include wraps at the top of the pendant, tape the wires just beside the end marks on each side. You may also wish to tape or put a temporary wrap between wrapping marks. It often makes wrapping easier. You will remove the tapes before you form the bail.


Click on the image for higher resolution image. Close window to return.

Starting at the middle wrap mark, wrap your bundles using half round wire. Take 3 to 4 inches of wrap wire and form a $U$ bend on the thinnest part of your flat nose pliers. The short tail wire should be slightly off at an angle. Place the wrap wire over the border wires with the angle on the inside. Make sure the long wire is perpendicular to the border wires and then bend the long wire to the back. Lightly squeeze in place. Now turn your work and wrap the wire to the front, next to the
previous wrap and lock in place. Make your wraps firm but movable in case you need to make final adjustments. Make sure all the cut ends are on the same side, this will be the inside of the pendant. I used five wraps for the bottom wrap and three in every other case.


Click on the image for higher resolution image. Close window to return.
Adjust the wraps to the proper locations. One way to make sure they are an equal distance is to cut your marking tape and use it as a guide. Mark above and below where you want the wraps with a Sharpie so that you can go back and adjust as needed later. Remove any tape or temporary wraps between where the wraps will be placed.


Click on the image for higher resolution image. Close window to return.
Shape your bundle to match the cabochon. A ring mandrel or other rounded item such as a dowel or pill bottle will help for curved cabochons. Square or angular cabs may require pliers or square forms. Make sure the middle marks are in the middle as it is easy to get this off mark. Use equal and firm pressure to keep wires straight and true. Check the fit to the cabochon and make adjustments.


Click on the image for higher resolution image. Close window to return.
You are now ready to make your first locking turns. These are the turns that come over the front and back of the stone. Taking a small knife spread the wires. Spread just enough to allow you to grab individual wires. The photo shows the proper amount of spread.


Click on the image for higher resolution image. Close window to return.
Using your flat nose pliers, grab the back wire next to the bottom (center) wrap and twist towards the center to form the locking wire. Now do the same on the front wire. Check the fit with the cabochon in place and make any adjustments to the next side wraps.


Click on the image for higher resolution image. Close window to return.
Remove the cab and then form your side locking wires in the same manner. Do one side front and then the other side front, then turn the back wires in place. Continue you have finished all turns at wraps.


Click on the image for higher resolution image. Close window to return.
Next we will center the stone in the wrap. The cabochon must be in place, snug up the setting around the sides and the top of the cabochon. Crisscross the wires, centering the stone top and bottom.


Click on the image for higher resolution image. Close window to return.
If you were careful you should have the top wraps meeting at the center, if not adjust any wire wraps to do so. Estimate where each wire bundle would cross the center line if wrapped tightly. Mark each bundle where it would touch the center line. Gently bend each side up at that line using the flat nose pliers, keeping the wires straight and even. Check the fit and when you are satisfied, use telephone wire to temporarily wrap the bail wires together, making sure they are parallel.


Click on the image for higher resolution image. Close window to return.
Take about five inches of the 16 gauge and, using your flat nose pliers, move up the jaw until the depth of one side of the jaw is the thickness of the two wire bundles just above the cabochon. Make a $U$ bend in the wire. The short end should be slightly angled to allow for an even straight wrap around the bail.


Click on the image for higher resolution image. Close window to return.
Start the wrap with the short end facing the back of the cabochon and make two complete wraps ending with the ling end of the wire also pointing toward the back of the cabochon. Do not cut the wrapping wire at this time.


Click on the image for higher resolution image. Close window to return.
Remove the temporary wires and separate the front wire from each side of the bundle from the remaining wires. These front two wires will be used to make the bail so leave them upright. Using your pocketknife, separate the two wire bundles and spread them apart, out of the way, forming a wide V.


Click on the image for higher resolution image. Close window to return. Using a dowel or your round nose pliers, form the front wires into an inverted U with the end of the wires laying snugly along the back wires of the bail wrap and the back of the stone.


Click on the image for higher resolution image. Close window to return.
Straighten the V wires straight up against the bail. With the long end of the 16 gauge wire, continue the wrap capturing each side bundle and the bail. Wrap at least 2 full times ending with the wire facing the back of the pendant. Finish the bail by trimming the end wrap wires flush and tucking the back bail wires under the bail.


Click on the image for higher resolution image. Close window to return.
Use the remaining wires to decorate your pendant. Here I have gently bent each bundle, as a unit, over the face of the stone. I spread them out and, using round nose pliers, curl each end under so it will not catch clothing. This is where you can get creative with what to do with these wires. Have fun.

The finished piece.



# How to Wirewrap A Faceted Pendant That Does Away With Claws Designed by Mavis Llewellyn 

Have you ever wished for a more attractive way to mount a stone in a pendant than the oldfashioned use of "claws"? Mavis Llewellyn used wire wrapping in the project presented here, for that very reason. Mavis' pendant was the project of the month in a recent issue of Wired. Here are Mavis' step-by-step instructions for this lovely pendant project, to introduce you to one of the things wire wrapping can do.

Be aware, however, that wire wrapping is very versatile, as art forms go, and can be used not only in lapidary, but in combination with beading and even by itself, to create designs to be displayed or worn that are made of nothing but cleverly wrapped wire.

A jig of some sort is often used to aid the wire wrapper (whether beading is involved or not), such as the Wigjig described in "The Wonders of Wire" in the April 1996 issue of Jewelry Crafts.

Note from Mavis: I developed the design presented in this article about 10 years ago. I just wasn't happy with the typical faceted stone design with claws, as I found that the stones could come out of the settings too easily. This design is my way of getting around those claws. You will find also that the stone in this design is very secure. I have had many people asking me to teach or publish it over the years, along with my faceted ring stone designs (they will be featured in forthcoming issues of Wired). So here it is folks, hope you enjoy it!
The
Tools
You'll
Need... Pen


Materials Needed for This Project:


- 4 feet of 20 -gauge square soft wire
- 1 foot of 22-gauge half-round hard wire
- $41 / 2$ inches of 22 -gauge square hard wire
- A faceted stone

1: Cut six pieces of 20 -gauge square soft wire each 8 inches long. The depth of the stone coincides with the wire when they are lined up so the stone doesn't fall onto one side when it is finished. Cut two pieces of tape and secure each end of your wires. Find the middle and mark with a fine felt-tip pen. Line the stone up with the center. Now you need to determine how many binding wires are going to be used for the middle section (approx. 1/4 inch for the 12carat size used in these illustrations). Cut a 5 -inch piece of 22-gauge half-round hard wire. (No need to file the ends as the edge will be against the stone.)

2: Using flat-nose pliers, fold over about $1 / 16$ inch of the 22-gauge half-round wire to prepare to bind the six pieces of 20 square soft together. Take this hook and move it out of parallel slightly (with your flat-nose pliers), so that it is on a gentle slant, and where you've marked the center, start your binding. Again, depending on the size of the stone, approximately six turns. Finish off the binding and fold over with flat-nose pliers.
$\square$


3: Make sure you have finished off on the same side as you started. Now turn your work over, and from the binding, measure and mark $1 / 4$ inch and then measure and mark another $1 / 4$ inch from this mark. Do the same thing on the other side.

4: Remove the tapes, and with a penknife, slide the blade up between the first and second wires and pull the first wire out at a slight angle. Do the same on the other side. Where you put the first $1 / 4$-inch mark, bend the wire down slightly and, where it is marked on the second $1 / 4$ inch, bend it up so that the wire now runs parallel to the other wires. Do the same on the other side. Retape ends.


5: You might need to do minor adjustments at the markings to make sure everything lines up okay. Apply binding, starting at the outer mark, and work outward for four turns. Do the same on the other side.

6: As in Step 5, measure and compare spaces between center binding and outer binding. If not the same, adjust the outer binding with your flat-nose pliers. Now form the wires around the mandrel at the center binding, making sure the binding ends are on the inside.

7: Periodically, take the wires and place the stone in the curve, making sure it's a good fit with the bindings sitting just under the edge of the stone. Prepare triangular points for holding the stone.

## Some Helpful Hints:

Your stone should be sitting on the top wire. For the two triangular points to hold your stone securely in place, you will need to carefully guide these just over the top of your stone by working the tip of the point outward. Then slant it in toward the stone. By removing and then replacing your stone while you work, you can determine the degree of the slant. Both points will need slight adjustments until you've achieved the correct degree of slant over the edge of the gemstone. (The reason for working the tip of the points outward first is to make the base of the triangle--as indicated by the two white arrows--the seating for the stone.)

Pull the points inward to secure the stone. When using oval stones, mark the center by using a thin piece of masking tape.



8: Continue bending the wires until you reach the top of the stone. The wires should cross over at the center of the stone. Where the wires cross, bend one side straight up, using flat-nose pliers. Then do the same with the other side. Align them and tape them as shown.


9: Cut a piece of 22-gauge square hard wire and bend it into a $U$ shape, leaving $3 / 4$ of an inch at one end. Place it on the wires and hold it in place with the pliers. Bind four times, moving toward the oval, as shown.


10: Again, check that your stone is sitting correctly in the curve of the wires, with the bindings just under the edge of the stone.

11: Now remove the tape and, with your penknife, spread open the wires. Then separate and bring the top two wires forward, over the front of the piece, and tape them together.


12: Cut a piece of 22-gauge half-round hard wire and bind these two wires, starting as close as possible to the top, about five turns in all. Remove the tape and spread the wires out. Curve the binding forward with your pliers. Start binding here.

13: Put the stone in place by tucking it under the tips of the points first, then bring your two bound wires forward, giving them a slight curve just over the top of the stone, as shown.


14: Where the two wires are spread at the top of the mounting, bring them down on each side, across the mounting, toward the back. Make a curve in the first wire and thread it through so that it comes out just below the base of the triangle, through the V shape.


15: Now bring the wire all the way through and lay it flat against the mount. Cut off, leaving enough wire to tuck in. Repeat these steps for the second wire.


16: Bring down the rest of the wires, one at a time, leaving two for the eye loop. Cut off and curve in toward the top of the stone, forming what will look like a crown.


17: At this stage, go back to the two points and adjust them so they are holding the stone securely. Cut the last two wires, at the top of the pendant, about $1 / 2$-inch long. Spread them slightly and make the loops so that they overlap.

18: To prepare an eye, cut a $13 / 4$-inch piece of 22-gauge square hard wire. Put a loop in one end and center it. Now put a loop at the other end, facing the opposite way, and center it too.

19: To form the eye, bring the two loops together so that they overlap. The loops should be sitting side by side so you can open and close them like the two ends of a jump ring. Feed the eye through the loop on the top of your pendant, and you're all done!


## IDEAS FOR WIRE WRAP



How to Oxidize (Antique) Silver

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Tools and Materials
needed:
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- Rubber gloves
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- Rubber gloves
- Protective glasses
- Protective glasses
- Long sleeves
- Long sleeves
- Silver black oxidizing
- Silver black oxidizing
agent
agent
- Fine steel wool (0000)
- Fine steel wool (0000)
- Paper towels
- Paper towels
- Sink, running water
- Sink, running water
(not kitchen)
(not kitchen)
- Glass containers
- Glass containers
- Old paintbrush
- Old paintbrush
- Steel brush
- Steel brush
- Polishing flannel or
- Polishing flannel or
tumbler
tumbler
- Liquid dishwashing
- Liquid dishwashing
soap
soap
- Steel shot

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- Steel shot
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## Experiment:

If you are afraid of handling toxic materials, try this one: Take a hardboil egg still hot from the stove, and place it in a sealed plastic bag with the jewelry piece to be oxidized. Takes about an hour or two to turn dark.


Before oxidizing


After oxidizing

# How to Oxidize (Antique) Silver 

How to oxidize or antique silver pieces

To give your pieces that antique (oxidized) look, you can use one of two different products: Liver of Sulphur (LOS) or Silver Black (hydrochloric acid).

BOTH products are HIGHLY toxic, and it is very recommended that you use long sleeves, rubber gloves and protective glasses when handling. Silver black CAN burn the skin, even in very small amounts. (Believe me, I've been there).

The containers and brushes used for oxidizing should not be used for anything else, especially NOT for eating. Preferably use disposable containers.

Latest update: I've been told that Silver Black also has very toxic fumes and should only be used in well ventilated areas.

I don't use LOS, because it requires more difficult handling. I use Silver Black instead, which comes in liquid form. I've been told the effects are slightly different: Silver Black turns the piece very black and comes off easily with the steel wool; while LOS gives it a multi-colored/brownish color and cannot be removed
easily once applied.


Before oxidizing


## After oxidizing

These are the steps to oxidize a piece of jewelry using silver black:

1) Pour just a few small drops of Silver black into a glass container. Do not leave the Silver Black container open, to avoid exposure to fumes.
2) Dilute with the same amount of water, just a few drops.
3) Using an old paintbrush or cotton swab, apply the diluted silver black on the piece, avoiding the stones. (See below) The piece will immediately turn dark.
4) Discard the rest of the dilution or store in a tightly closed jar.
5) Wash the piece with lots of water.
6) Pat dry with paper towels.
7) Still with your gloves on, use very fine steel wool (0000) to remove the excess, bringing out the high details. Avoid brushing the stones.
8) Use a steel brush to remove all the smaller pieces of steel wool that got caught in the piece.
9) Wash with water again and pat dry.
10) Using a flannel or a tumbler, polish the piece.
11) If using a tumbler, add 1 or 2 pounds of steel shot to the barrel.
12) Place the piece inside the barrel. Cover with water, just about $1 / 2^{\prime \prime}$ above the level of steel shot and jewelry.
13) Add a tablespoon of dishwashing liquid soap.
14) Close the barrel tightly and tumble for one to two hours.
15) Rinse in water and pat dry.

## Beads \& Stones: can they resist oxidation?

Glass and crystal is practically immune to oxidation. Most stones are totally immune to oxidation too, especially the harder ones. Pearls and soft stones (jade, turquoise) can suffer and be tinted with oxidation, however, that can be avoided if using the paintbrush carefully. Soft stones and pearls don't do well in tumblers either.

## Final note: to oxidize or not?

Oxidation is largely a matter of personal preference. Some people like best the shiny, whitish aspect of new silver; others prefer the more antique look. All silver will tarnish lightly with time. To avoid premature tarnishing, keep your pieces in sealed ziplock bags when not wearing.

Oxidation is usually final, and cannot be easily reversed, so be sure you (and most importantly, your clientele) really like the look...

## Wire Wrap a Cab



Cabochons come in many shapes and are made from a variety of stones such as hematite, aventurine, and agate.Though there are many ways to wrap cabs with wire, I find this method works well for me. If you've never tried to wrap a cab before, I recommend that you start with a fairly large cab. The larger the cab, the easier it is to handle. Of course, the larger the cab, the more wire you'll need.

Here are the supplies/equipment you'll need:

- Your choice of size and type of cabochon
- approx. 1ft 24 gage half-round gold-filled wire
- *22 gage dead soft square gold-filled wire or
- 20 gage dead soft square gold-filled wire
- **clamps
- bent nosed pliers
- wire cutters
- round nosed pliers
- twisting tool
- masking tape
- marker
- soft cloth
- ruler
*Some people recommend using 20 gage vs. 22 gage square wire. However, 20 gage is much stronger and harder. So, if you've got whimpy hands (like me) then try using 22 gage.
**For clamps, you can also use those black binder clips available at office supply stores which are used for binding papers together. Just make sure you cover the inside of the binder clips with a soft cloth or something so you don't scratch up your wire.

1. Take masking tape and wrap it around the edge of the cab. Then carefully unwrap it from the cab and place it along side a ruler. To determine the length of square wire to use, add four inches to the length of the tape. For the cab I did in this example, my length was $71 / 2$ inches.
2. Now cut three pieces of square wire at the length determined, and use a soft cloth to straighten the pieces of wire.
3. Next, fit the three pieces of square wire tightly against each other and use the clamps to keep them together. (Before clamping them together, it also looks nice if the top and bottom wires are twisted. It adds to the finished piece and looks a lot like diamond cutting.)
4. Determine the middle of the wires and make the first wrap here using the round wire. Add two other wraps on either side of the middle wrap approx. 1 inch from the middle.
5. Now fit the cab up against the wrapped wires, and form the wires around the cab so that the middle wrap is against the bottom of the cab and the other wraps are on either side of the cab.

6. Once the wires fit tightly around the cab, make another wrap at the top of the cab so that there is about 2 inches of wires left free at the top.
7. Position the cab and wires so the front of the cab is facing you.
8. Now you need to use either the round or flat nosed pliers to pull the first (of the three wires you previously wrapped) toward the center of the cab. There are four places on the cab that this needs to be done. Two spots are directing on either side of the center wrap which, of course, needs to be positioned at the bottom center of the cab. The two other spots that need the wire pulled are to the left and right of the second two wraps you did.
9. After pulling the wires to the center on the front of the cab, repeat this on the back. Now your cab should be held firmly in place. Separate the wires at the top of the cab.

10. Now, using a hand held wire twisting tool, twist the top wires and trim off about 1 inch from four of the wires. Use round nosed pliers to curl four of the wires down.

11. Use round or bent nosed pliers to pull other two wires to the back of the cab and wrap around wires in the back to create a bale on the back.


And that's it. You can wrap other items besides cabs this way. I also used this technique to wrap a piece of "recycled" glass or what some people call "beach" glass. As I explained before, this is just one way you can wrap a cab. There are many other, more "scientific" methods, but I find this way works for me.


