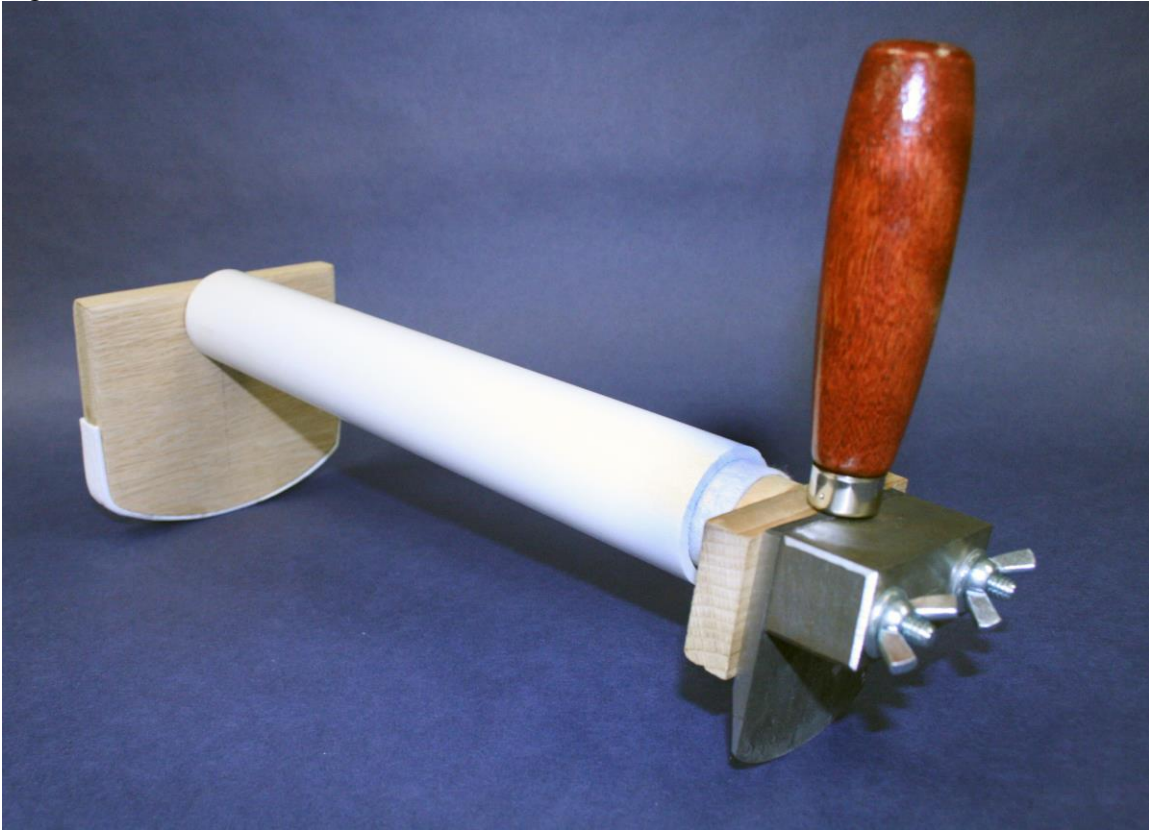


**Mezzotint Rocking Jig:** Designed by Johntimothy Pizzuto, Associate Professor of Printmaking at the University of South Dakota

Fig. A



In the summer 2000 I had the opportunity to take a workshop with Carol Wax to learn the art of mezzotint. I immediately fell in love with the entire method of drawing on the plate and the look of the resulting print. A major obstacle kept me from fully pursuing the medium, and that was wrist and elbow pain from the rocking process. The design of my portable rocking jig in the summer of 2005 now enables me to delve into the art of mezzotint.

Printmaking texts, such as Cyril Davenport's 1904 book *Mezzotints*, describes methods to properly prepare a ground on a copper plate for mezzotint, "The plate should be gone completely over about eighty times." Walter Chamberlain, in his 1972 book entitled, *Etching and Engraving*, states: "It may take days to achieve a perfectly rocked ground." It can be quite a daunting task, enough to discourage many printmakers from exploring the medium. I believe a large part of this recommended number of passes of the rocker over the copper plate is partially due to the physical demand of maintaining even pressure and spacing so that a tight, uniform pattern of burrs is created. And physically demanding it can be on the arm and wrist. Carol Wax, who wrote a definitive book on the art of mezzotint, made an innovation in the process of rocking by devising a means to attach weights to the rocker blade. This provides both stability and weight to the tool, making it much less demanding on the person rocking to provide downward pressure. It helps the tool walk forward in its arcing motion. Still, there is considerable strain on the artist's wrist and arm, and rocking for long periods of time can be notably taxing. This fact prohibited my own early deep exploration into the medium due to issues of carpal tunnel strain.

It was in the summer of 2005 that I again was able to take another mezzotint workshop at Frogman's Print and Paper Workshop at the University of South Dakota. Sean Caufield taught the course and introduced everyone to his method of using a pole rocker jig for rocking plates. He simplified the jig seen in Carol Wax's book, see Diagram # 1, by using an old broom handle for the pole and forgoing the ball tip on the end that nests inside a trough as a guide for the pole. He simply rested the pole on a pillow raised about 6 to 8" off the table. Almost everyone in the class loved using the pole rocker because of how much easier it made grounding the plate. Having access to the sculpture studio at USD, I soon made a couple of extra pole rockers for the workshop class.

Soon after the workshop and before my duties as the printmaking faculty at USD started, the thought occurred to me that by modifying and shortening the length of the pole I would make the jig more portable and take up less space for rocking. You may have seen a similar rocking jig design on my former graduate student, Julie Niskanen's website. The design you see in Fig. A is my current model of the jig. There are two significant modifications to this design since my first prototype. The first change enables the jig to be taken apart, making it more compact for traveling, and the second is the addition of a sleeve to the pole arm to further reduce strain while rocking. See diagram #5 showing all the parts.

To construct a jig I use my 3" rocker as a guide, and draw an arc curve that mirrors the shape of the rocker blade onto a piece of 1/2" hardwood. This becomes the back stabilizing piece for the rocker jig. I slightly widened the curve to provide more stability during the rocking motion. For the length of the pole I find that 12" provides sufficient room for one or both hands. Some people find that there is more control and a better rocking pattern when both hands are used.

To determine the height and angle of the pole from the rocker to the stabilizing back support, I hold my rocker at the angle that I would when hand rocking. From there I align that with the center of the back support piece and mark the center for drilling the counter sink screw bit. This turns out to be 4" for my angle. With the first prototype, I glued and screwed the components together.

The jig is made easy to disassemble and re-assemble, through the use of a counter sink insert screw head at the back end of the pole, with a wing bolt, so that the stabilizing back can be detached from the pole. See diagrams #2 & #3. To further reduce strain on the wrist and arm, a sleeve of PVC pipe is inserted over the pole arm. In order to prevent the bolt heads from rubbing against the PVC pipe, I counter sink the holes into the back of the rocker blade plate. See insert #A in Diagram #4. Also the pole handle is wrapped with a piece of pusher felt, to reduce friction caused by the contact between the wood and PVC pipe. Now, instead of the curling action in the wrist from holding on to the stationary pole, I simply push my arm back and forth in a gentle piston-like motion. This modification I find creates less strain on my wrist and arm, as there is no twisting of the wrist. I find that I can rock a plate faster and with a tighter pattern using this jig, with less overall strain on my wrist, hand and arm. See Fig B.

DIAGRAM #1

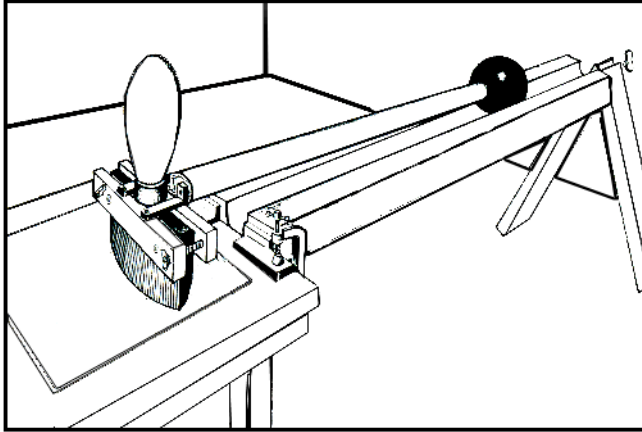


DIAGRAM #2  
VIEW OF POLE WITH WOOD INSERT  
PVC PIPE AND ROCKER BLADE PLATE

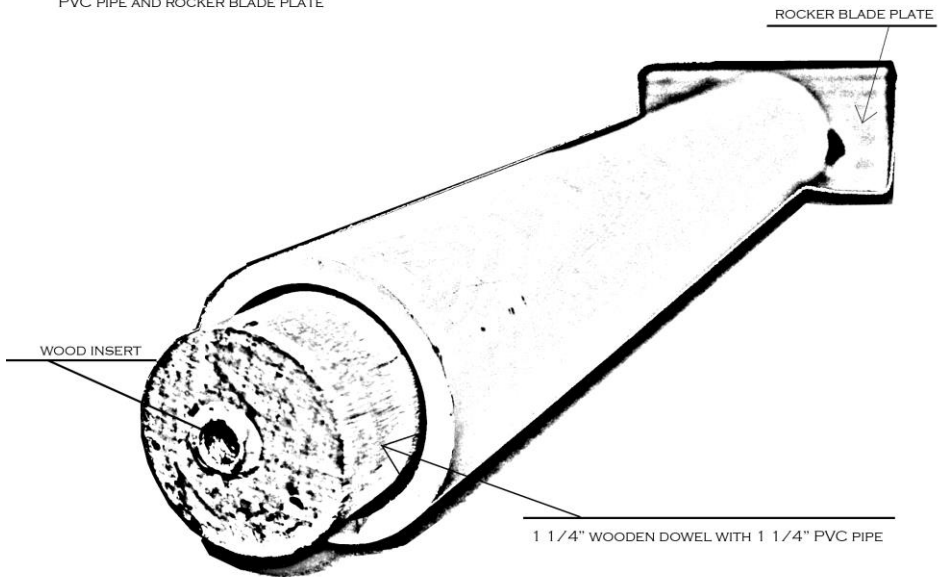


DIAGRAM #3  
REMOVABLE STABILIZING BACK  
SIDE VIEW

WING BOLT AND  
WASHERS

1 1/4" WOODEN DOWEL WITH 1 1/4" INSIDE DIAMETER PVC

WOOD INSERT

INSET A:  
BACK VIEW OF  
ROCKER BLADE PLATE  
SHOWING COUNTER SINK  
FOR BOLT HEADS

INSET B:  
SIDE VIEW OF ROCKER  
ASSEMBLED  
TO FRONT PLATE

WOODEN DOWEL  
WITH PVC PIPE

ROCKER WEIGHT, WASHERS  
BOLTS AND WING NUTS

ROCKER BLADE PLATE

DIAGRAM #4

Parts: See Diagram #5

1) Rocker and weights

1) 1 1/4" diameter hardwood dowel pole cut 12" long

1) 1 1/4" inside diameter plumber's PVC pipe cut 11" long

1) 11" x 1 1/4" piece of sizing catcher felt to wrap around the wooden dowel

1) 3" x 1 1/2" x 1/2" hardwood, with the rocker weight holes centered and drilled out

1) 1/2" x 5" x 4" or 4 1/2" hardwood cut with a curve to match rocker blade on one 5" side

2) wing nuts and 1/4" x 2" bolts

4) 3/8" inside diameter washers

1) 3/8" inside diameter rubber gasket

1) 1/4" x 2" wing bolt

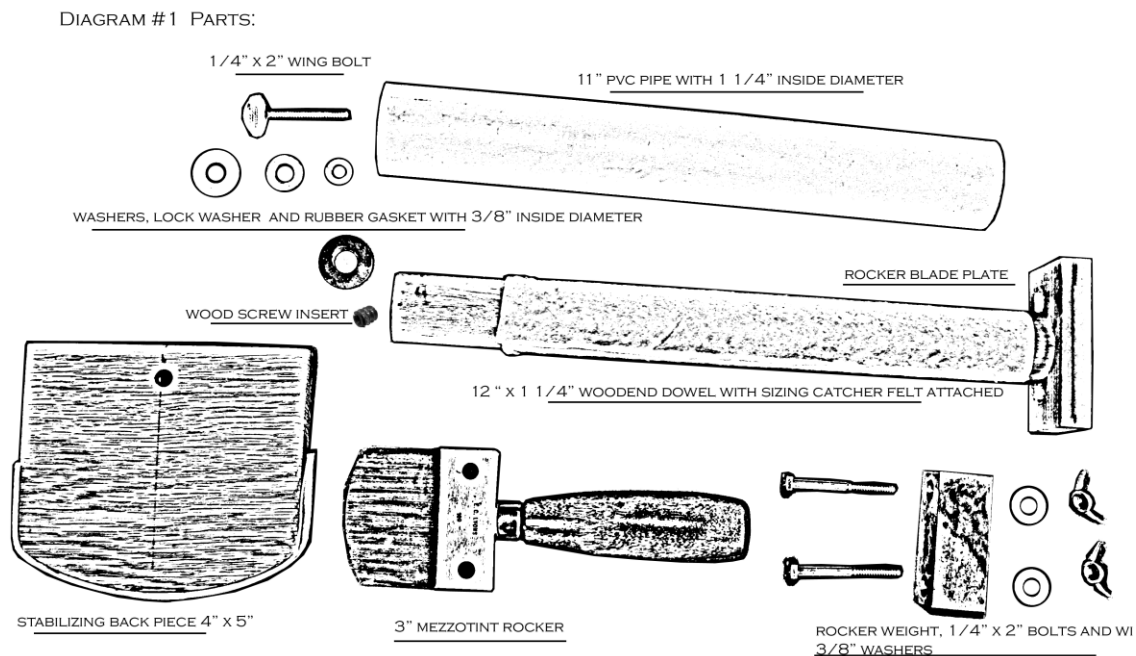
1) 1/4" inside thread wood insert

20 wood screws to attach rocker plate to pole

Some basic tools: Drill and bits and counter sink, sander, screw driver and some glue.

Diagram #5

Parts



I began sharing this information with students and visiting artists, making jigs and giving them away. Most students that I introduce to mezzotint, and the use of the rocking jig, soon find how simple it can be to properly rock a plate. After they have drawn into the burr grounded surface and pull their first print, they become taken with the medium.

It is a simple device to construct and you do not need extensive tools. If you do not have access to a woodshop, a simple scroll saw can be used for cutting the stabilizer back. Following are diagrams of the jig's design and guidelines to build your own. You can make adjustments to customize it for your use.

The jig is very simple to operate and does not take a lot of force. Let the momentum from the rocking action propel the forward motion and let the weights provide the

downward pressure. All you have to do is provide a gentle piston-like motion with your arm and/or wrist and the tool/jig will do the rest. You will find that you will be able to achieve a very even and fine patterning of burr row. Enjoy and happy rocking, drawing and printing. If you have any questions, please email me at [jpizzuto@usd.edu](mailto:jpizzuto@usd.edu), and I will try to answer them as promptly as possible.

The great thing is that you can now find through surfing the web many other sites where people have come up with their own variations on approaching the mezzotint process, and are creating wonderful work with the medium.

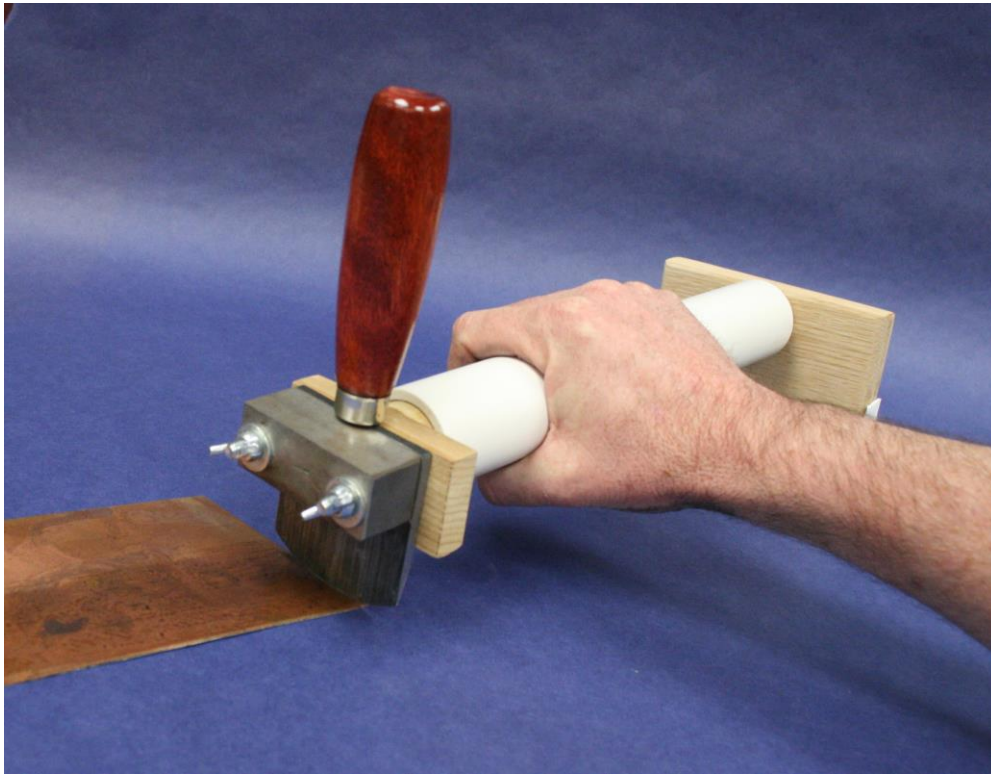


Fig. B