

Woodturning Projects

Module 23

Visual Hollowing System



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“Working with wood is part of my everyday life. It is my connection to the earth and the environment in which I live. While pursuing my Bachelor of Fine Arts degree in photography and sculpture, I became interested in the art of woodturning.

My philosophy has always been to work in harmony with our environment and not to destroy something in order to create something. In all my art, I use only recycled and easily sustainable woods. Being conscious of this has allowed me to work with the subtle beauty and dimension this discarded wood possesses.

My intent as an artist is to express my feelings about nature, my family and natural processes. I work in series or bodies of work, which allows me to explore these issues in depth. Throughout the creative process I am continually reminded that I have not and will not ever be content. I will continue to create and strive for that body of work that has yet to be conceived.”

-Trent Bosch

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RUMERYWOODS



Learn to hollow the right way. The stabilizer gives your tool extra support but still allows the control and finesse that you get by tucking the tool handle into your body and using your body to manipulate the tool. Use it as if you are hollowing by hand, but get the support of a captured type system. It is simple, easy to set up design which lets you move back and forth between tools easily. This new tool allows for smooth operation and the ability to enjoy the hollowing process without fighting with the tool or jig. The 3/4" stabilizer comes complete with tool rest, pin, and bushings to allow you to use 5/8" and 1/2" hollowing tools with the 3/4" stabilizer. The 3/4" Stabilizer is generally suited for lathes with a 16" or larger swing. Clicking add to cart will add one 3/4" Trent Bosch Hollowing Tool Stabilizer (note: please specify your lathe type in the "Add Comments About Your Order" section) This will allow us to include the proper tool rest post for your stabilizer. Watch a short video on the use of the stabilizer

http://www.youtube.com/watch?v=RxWJAdWLn_Y

\$350.00

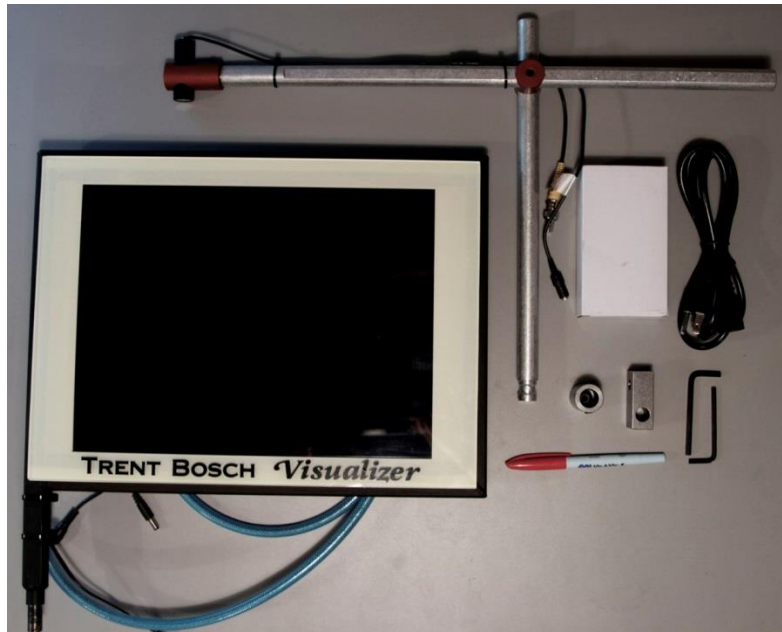
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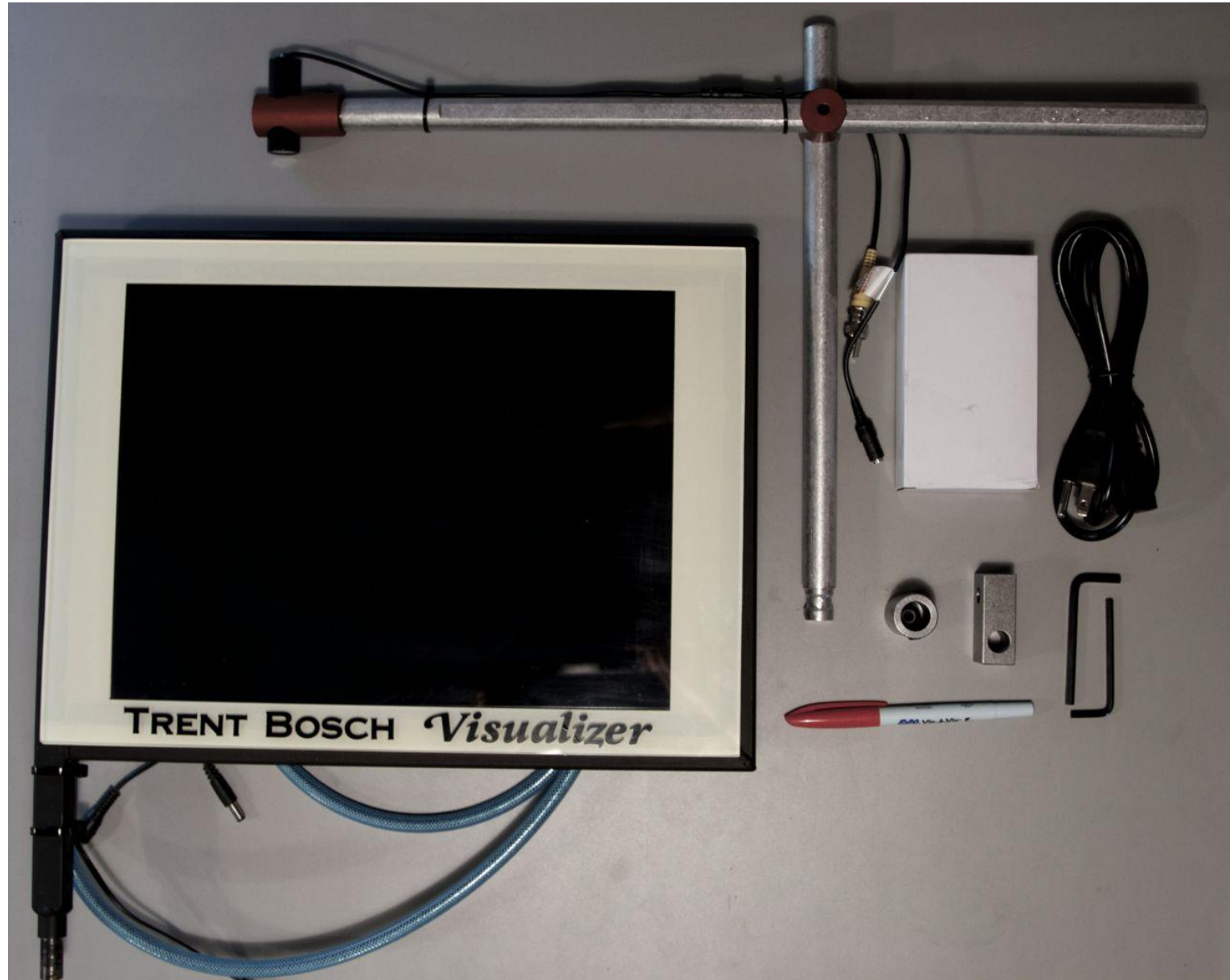
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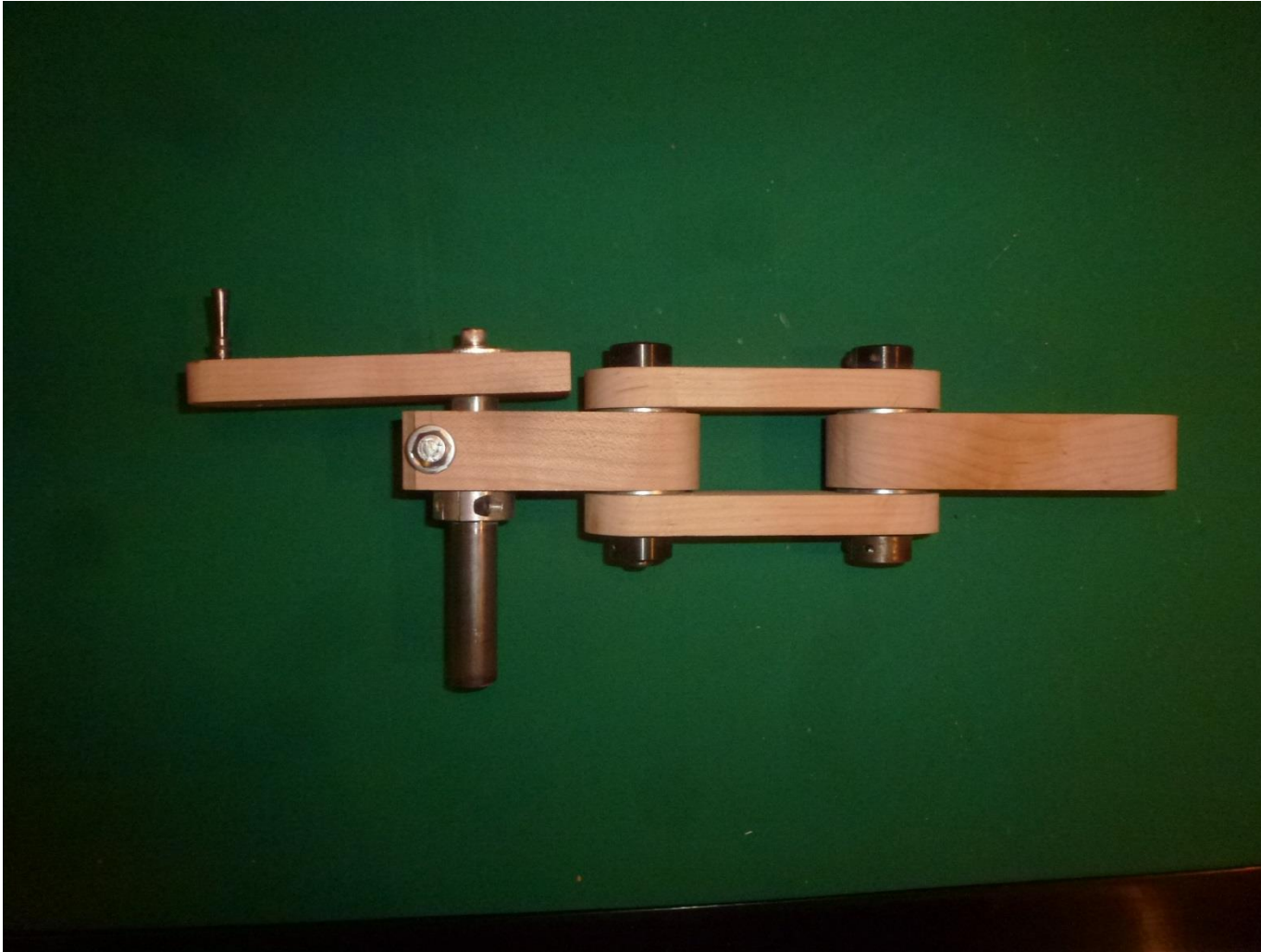
The Visualizer will change the way you hollow. It will give you the ability to see exactly where the tool is inside your vessels, which gives you absolute precision wall thicknesses. It is designed to quickly attach to either the 3/4" or 5/8" Stabilizer. It can also be adapted to other hollowing systems. This revolutionary new design will allow you to take hollowing to the next level and beyond. Note: Please specify your lathe type in the "Add Comments About Your Order" section. This will allow us to include the proper mount for the monitor.

\$650.00

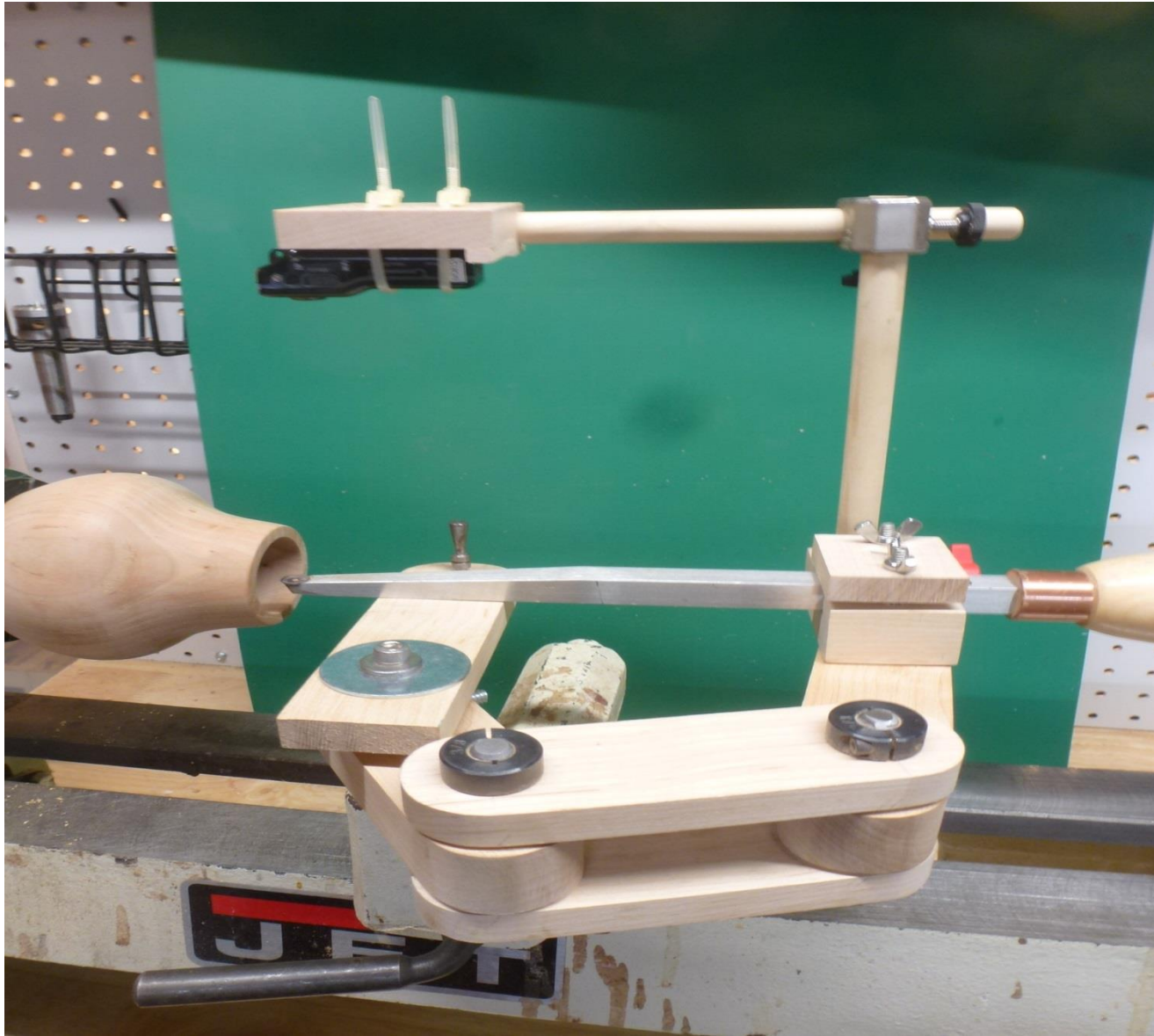
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The replica arm assembly, with pivot posts, thrust washers and clamps providing the elements of the four bar linkage.

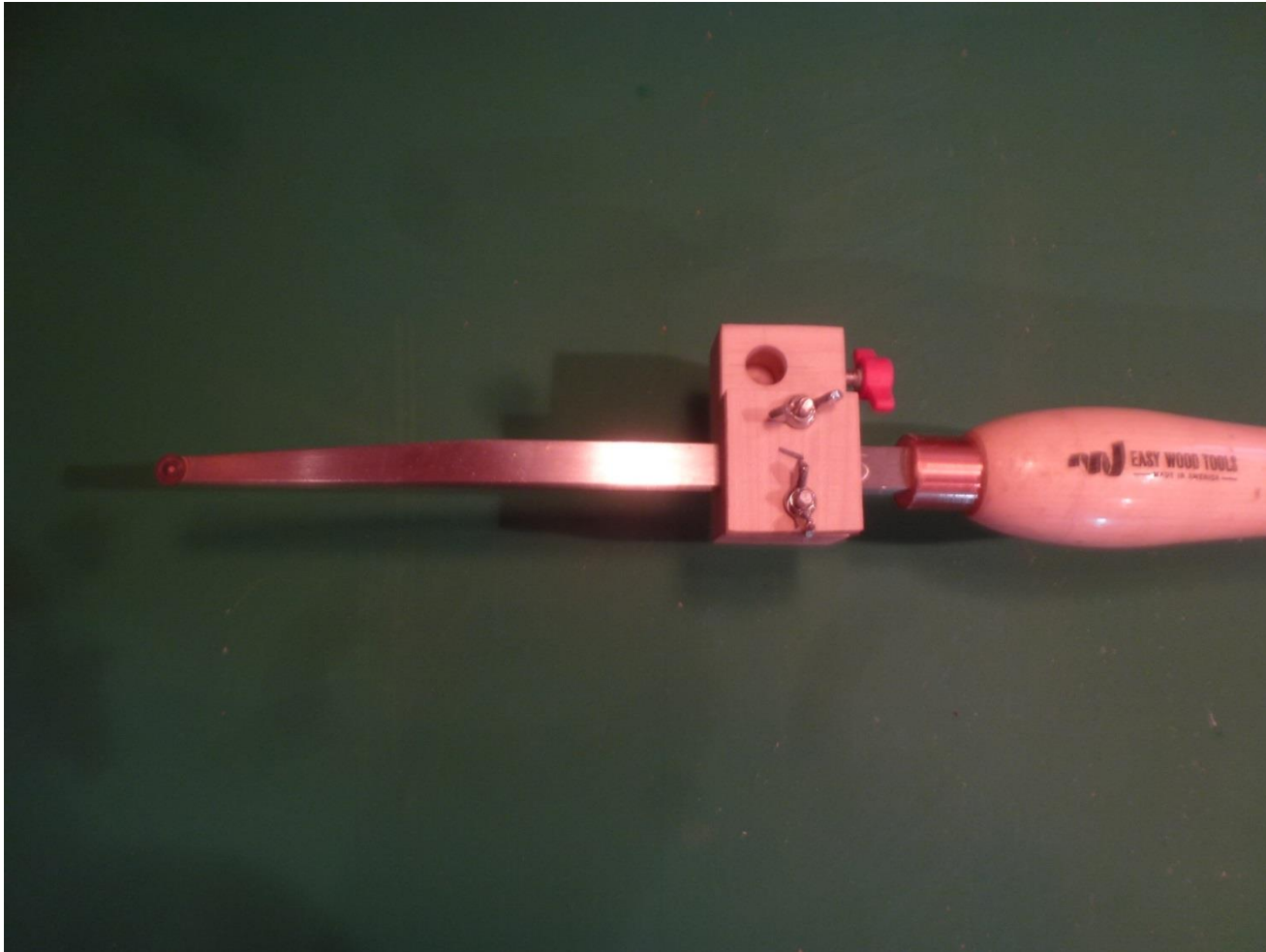


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Camera Position

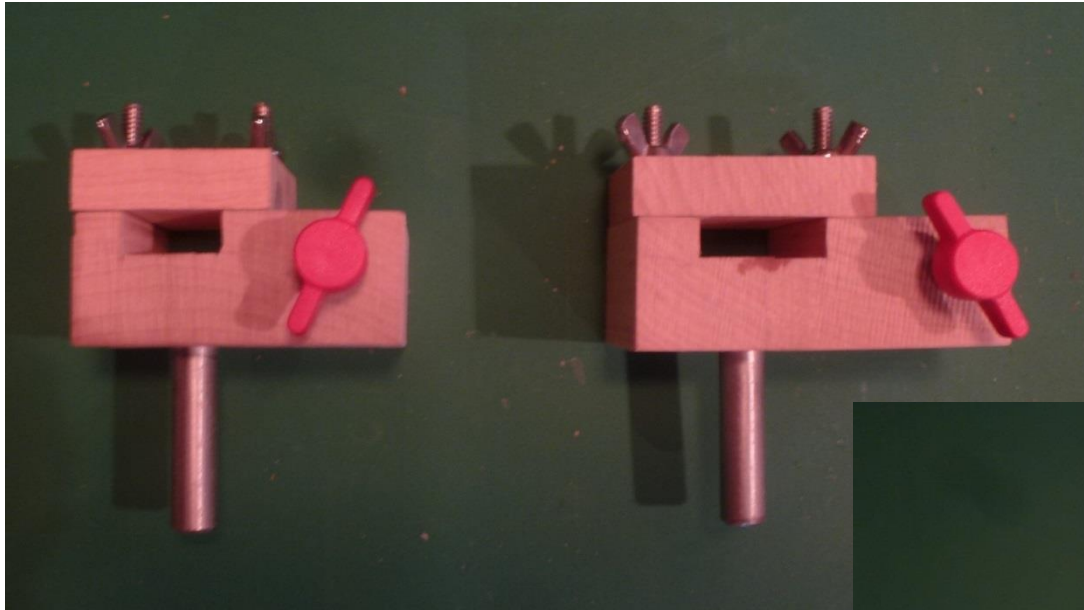


With the camera mounted directly over the end of the tool, the image that is sent wirelessly to the video display will always remain the same. That is, the end of the tool will always be in the same position relative to the camera image.



Easy Wood
Hollower
mounted in a
custom tool
holder, the the
added
mounting hole
for the camera
support.

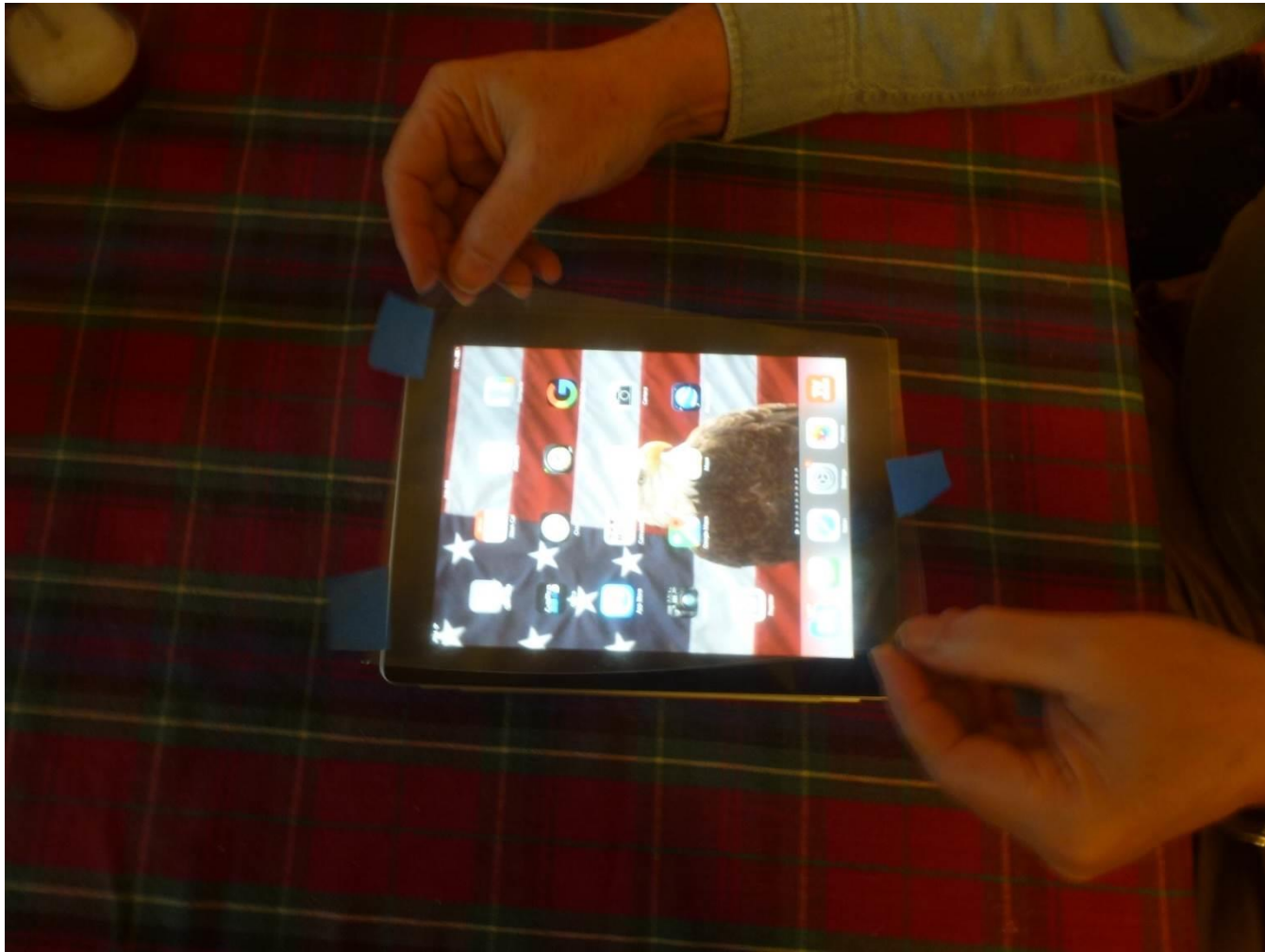
Additional Camera Mounts



For Easy Wood
Hollowers #2 and #3

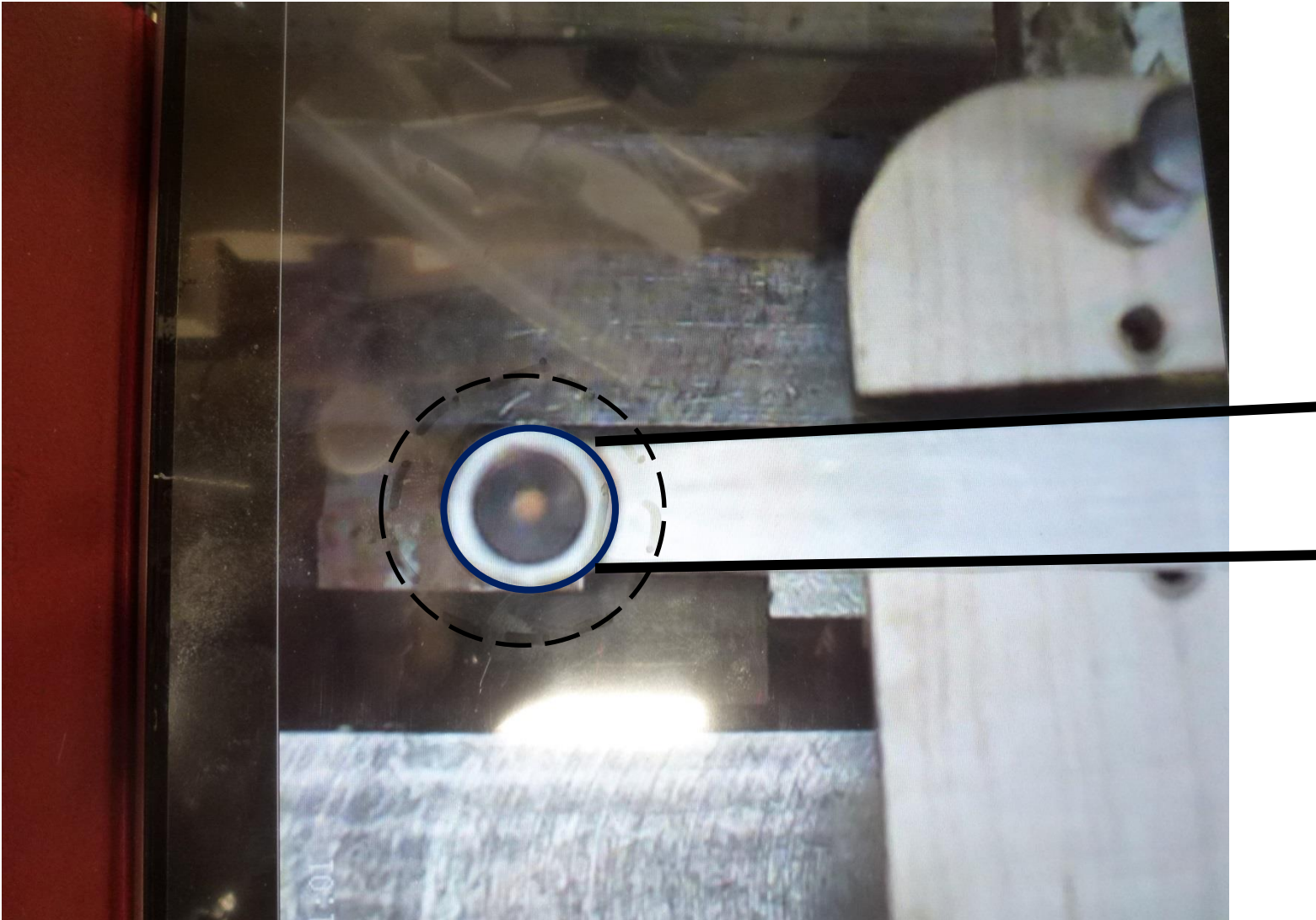
For round rod hollowers,
such as the Ellsworth set
(note the camera mount directly
above the tool pivot)



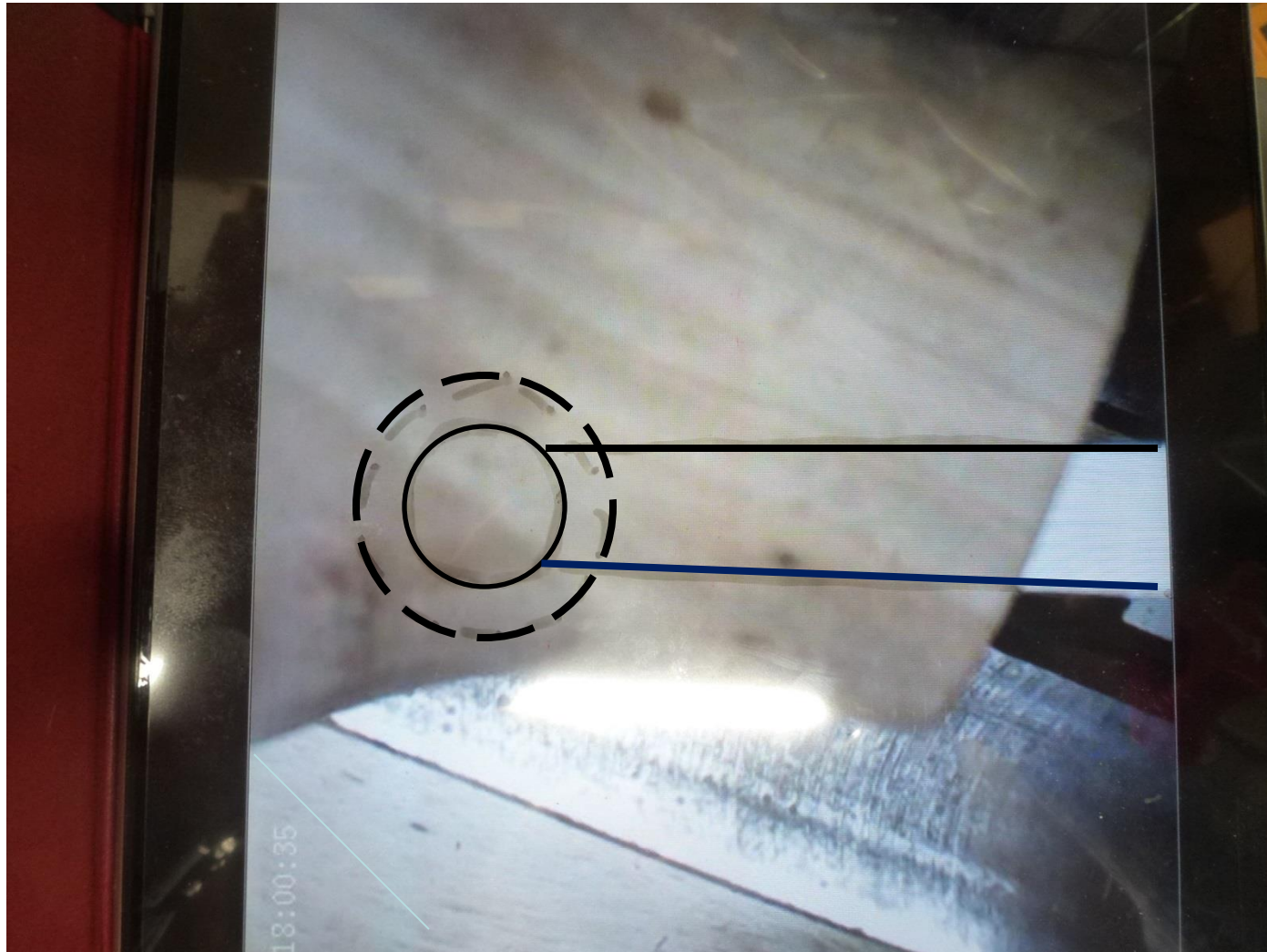


Secure a sheet of clear acetate to the face of the visual display (iPad) onto which you will draw the shape of the tool holder and cutting edge with Dry Erase markers

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Draw the profile of the tool and cutter onto the display screen, along with offset



Now the trace drawn on the display shows even when the cutter is inside the hollow form

Components

- Tool post (compatible with your banjo)
- Support collar (to set the consistent height on center)
- Tool Rest Plate *
- Anchor Pivot *
- Pivot Arms *
- Thrust Washers
- Pivot Shafts
- Clamp Collars
- Custom Tool Holder
- Cross Axis Clamps
- Support Posts *
- Custom Camera Mount *
- WiFi Camera
- iPad or similar Tablet Device

* made from Hard Maple

Hollowing Systems

Laser Pointer

- + Inexpensive
- + Easily home built
- + Can be used with Captive Bar system

- - Indicator spot changes shape on curved surfaces

Visualizer

- + Can “see into” the hollowed shape
- + Emulates an X-ray image
- + Can be used with Captive Bar system

- - Very Expensive

Justification for plagiarism

Commercial Visualizer

- + Rugged support
- + Direct wired camera connection
- + Full support from vendor

- Expensive \simeq \$1000
- Dedicated to one post size and one tool shape

Home built copy

- + Easily shop built
- + Added components can be made to adapt to multiple tools
- + Can be used with already owned components (GoPro, iPad, iPhone, etc)
- Can be adapted to captive bar hollowers
 - Not as rugged, must take lighter cuts
 - Joints subject to moisture changes

Note: my out of pocket cost for this system was under \$30 for purchase of the steel shafts, thrust washers, and clamp collars. The smaller WiFi camera was an additional \$24 for better resolution and less vibration.

Improvements to Design

- Would make the tool rest plate out of aluminum plate for strength
- Would add length to the swing arms
- Create a series of bushings to accommodate other banjos
- Would consider a wired camera system for more positive connection

With great Appreciation

While I had never considered the opportunity to spend nearly a thousand dollars on a fixture that I would use infrequently, I fully appreciate the inspiration and generous approval of Trent to go ahead and mock up a similar device based on his concept for personal use and to be able to share this concept with my local AAW club. The credit for this idea is all his and his daughter's.



Questions ?

Any questions about the content of this presentation?

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