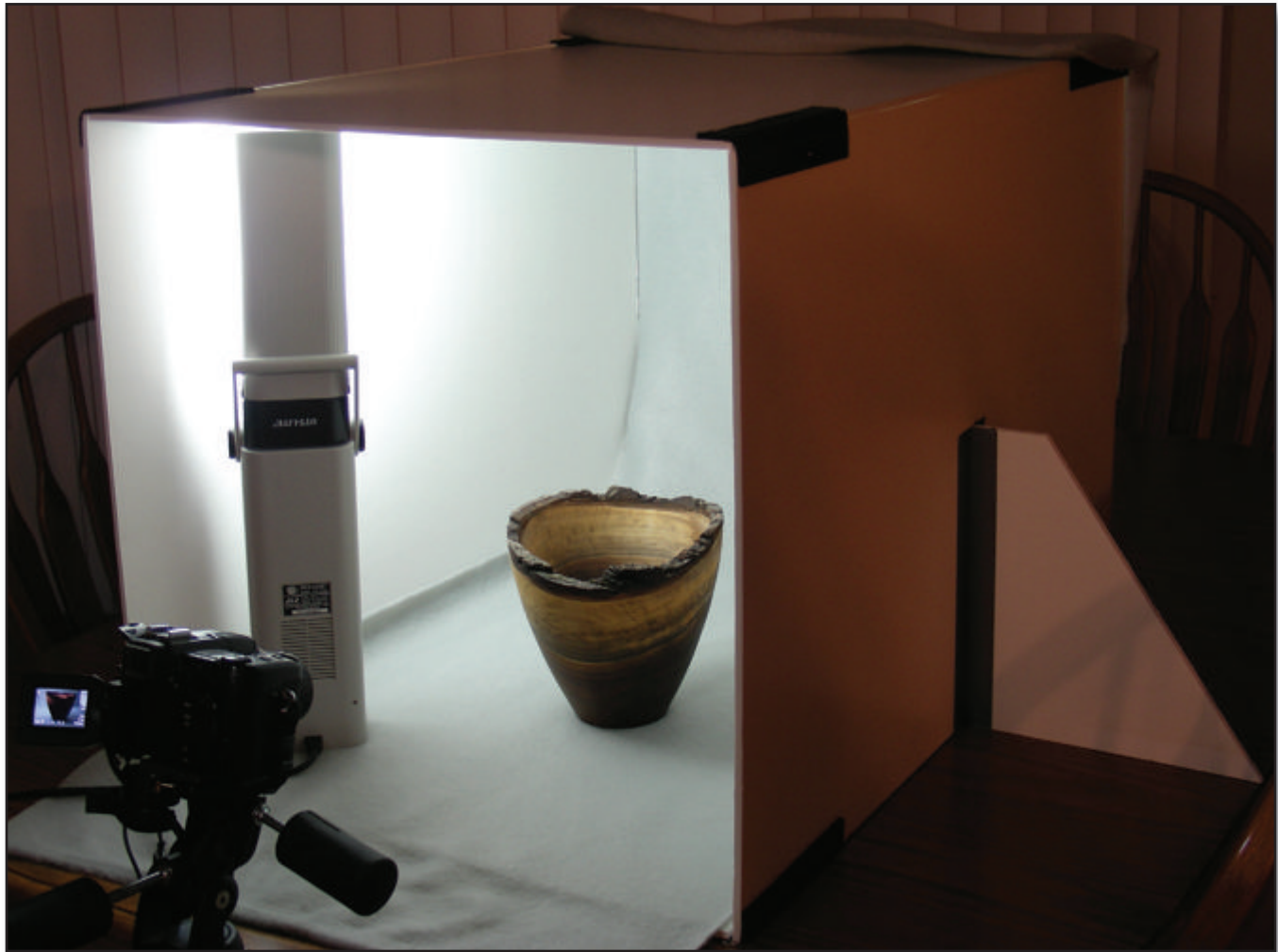


Do-It-Yourself Photo Tent

Simple, Sweet, and Inexpensive

by Kurt Hertzog



Whether you are taking simple photos for eBay auctions and Internet forum postings or high-resolution photos for publication, here is a simple, inexpensive project idea that will help improve your photographs. Regardless of the camera being used, controlling the lighting and eliminating background distractions will allow you to do a better job. Here is how to make an inexpensive light tent to use for photos of smaller turnings.

MIXED LIGHTING

In the old days, film was purchased based on the type of lighting under which it would be used. If photos were to be

shot outdoors, you bought a daylight-balanced film. If shooting indoors, you bought a tungsten-balanced film. Special filters also allowed for some corrections. Without getting deeply into color temperature, accept the fact that each type of lighting has an impact on how the images appear.

Remember getting prints with off-color tinted faces, rather than a pleasing flesh tone? Today's modern camera does a good job of automatically correcting for the type of lighting available during photography. In the more advanced cameras, there are often manual controls used to set the white balance needed for specific types of light-

ing, rather than letting the automatic setting do it.

However, there is no setting that does a good job of handling "mixed" lighting. Mixed lighting is a combination of lighting with different color temperatures. An example of mixed lighting is having daylight coming in from the window with additional incandescent or fluorescent lighting emanating from overhead and/or task lighting.

CONTROLLING THE LIGHT

The "best" lighting for most situations is soft, diffused sunshine and will usually provide the best rendition of the photo subject. Shooting pictures of turnings on a backdrop with indirect lighting from a northern exposure window bouncing all around the room works nicely. There is enough light so you can turn off the overhead lights and still have sufficient light for a good exposure. With only one source of light, the color temperature is not an issue and is automatically handled by the camera. The problem is that you may not often have that specific lighting situation. So what can be done if you don't have that north-facing window available or you are taking the photos at other times of the day?

The do-it-yourself photo tent featured here will allow for total control of the lighting at your convenience. It will allow you to control the light source(s), direction(s), qualities, and color temperature of all the subject lighting as well as the background.

MATERIALS

Everything needed for this project can be picked up at local art and home improvement stores. For example, **Fig. 1** shows the posterboards, gray craft paper, tape, and "light stick" that I purchased.

I used *Elmer's Bienfang White Foam Core Poster Boards* that measured 20" x 30" (five pieces: four for the tent and one for the wings and some bounce cards) for a few dollars per board at my local art store. However, any easily workable cardboard with a white surface would work for this project as well. Posterboard or foam core board comes in various sizes. Select the size needed based on the size tent to be constructed. For instance, you could make a smaller tent than the one featured here by buying smaller foam core board or by cutting larger foam core into smaller pieces with a razor knife.

I like to use a seamless neutral gray paper or cloth for

SUPPLIES

Tools: razor knife, ruler
Foam core board or posterboard
Gray craft paper
Foam tape or other non-stretching tape
Fluorescent light stick
Duct tape

Please refer to all manufacturers' labels for proper product usage.

my backdrops, so I purchased a large piece of gray paper from the art store (see **Fig. 2**). We don't have room to get into the discussion about matching the 18% neutral gray card; suffice to say that you should pick a shade of gray that is not too dark. It should be light enough and bright enough to reflect light, and still be unobtrusive as a background. Take care to keep this material from bending and getting visible creases or dents. The backdrop should be seamless and totally free from visible distractions.

I selected a fiberglass-reinforced foam tape (see **Fig. 3**), usually used for taping insulation on heaters. Even though it is reinforced, it will still stretch and give a bit. Duct tape or other non-stretching tape would work as well. That is all that is needed for construction of the tent.

Depending on your lighting sources, you may want to buy portable lighting fixtures that can be used with the appropriate bulb and moved around to light the subject. I bought the full-spectrum, daylight fluorescent bulb in a small portable fixture (see **Fig. 4**). Another good source for true color lighting is the lamp used by seamstresses. The number and location of light sources, diffusion and bounce techniques, and other issues are way beyond the scope of this article.

Editor's Note: I suggest that you check out "Photographing Your Turned Projects for Publication" by Barry Gross in *Woodturning Design* Issue #5, Spring 2005. And Bob Hanks has two articles posted on the AAW website (www.woodturner.org) on the Journal's "Photo Guidelines" page that will provide additional information as well.

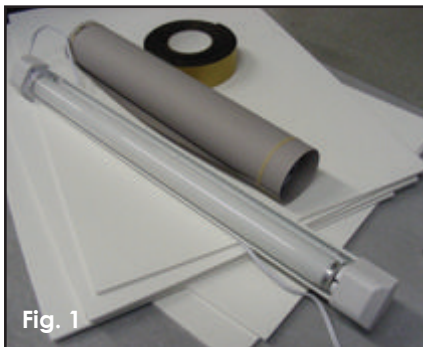


Fig. 1

All of the materials shown here are readily available at art supply and home improvement stores.



Fig. 2

The seamless backdrop should be a neutral gray to help the metering and to be nonintrusive.

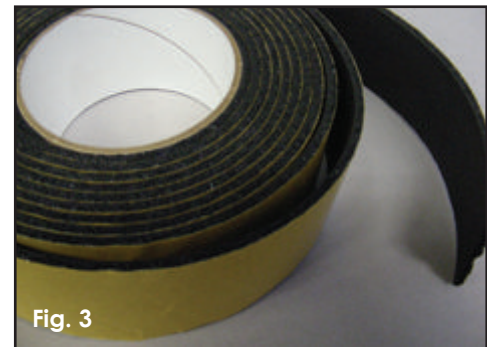
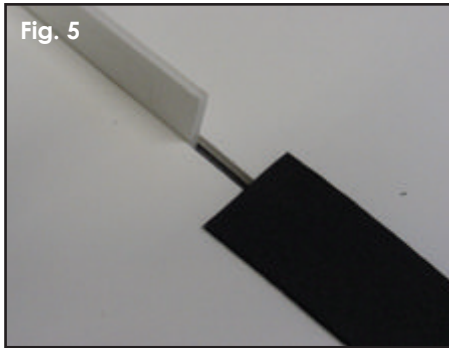


Fig. 3

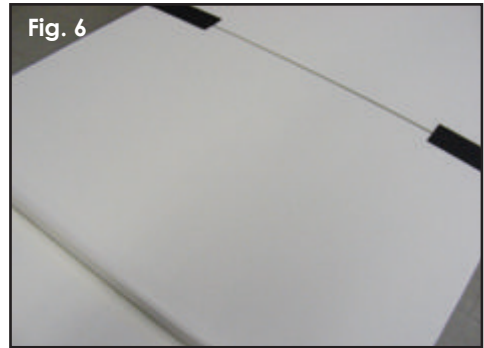
Though I chose a reinforced foam tape, almost any masking, duct, or reinforced tape will work nicely.



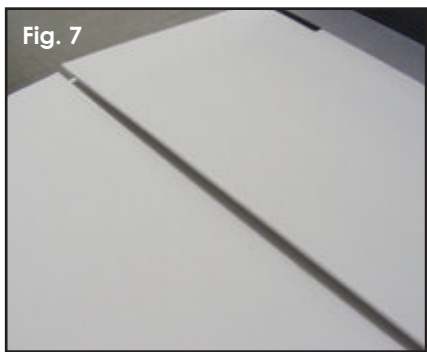
Full-spectrum or daylight fluorescent lamps in a portable fixture work well to provide light.



I use a piece of foam core as a spacer when taping to make folding easier.



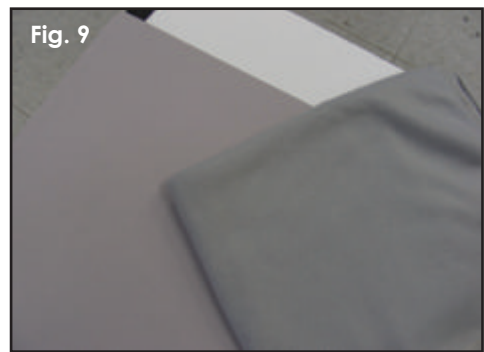
A piece of tape at each end of the board will do nicely.



The tent folded flat to tape the last seam.



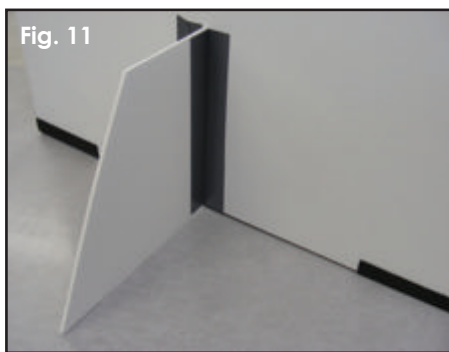
The backdrop is fastened with tape and can be replaced as needed.



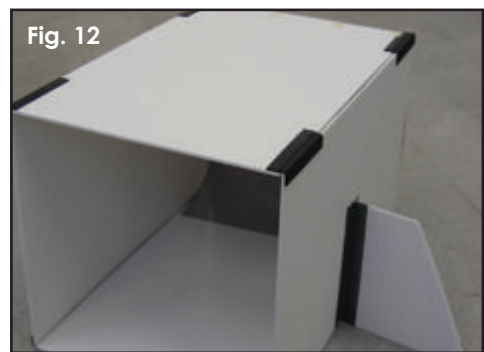
You can use gray paper, gray cloth, or other material as the backdrop material.



A couple of folding legs can be attached on the two vertical outside walls.



Folding these legs out will make the tent freestanding when being used.



The finished photo tent opened up.

CONSTRUCTION

Making the light tent is as simple as fastening the four pieces of posterboard together with the tape. But because I want the tent to fold for storage, I used a spacer (see **Fig. 5**) that I cut from a scrap piece of foam core to space my seams.

Continue working around the tent (see **Fig. 6**) to create a square box. I only taped the two ends of each seam, but the entire seam can be taped for light tightness

if you desire. Position any soiled or dented board so it will be on the outside of the finished tent.

Continue taping the box together until the last seam is finished (see **Fig. 7**). You should then have a box that can either be folded flat or opened into a box with no ends. Now install the backdrop material and fasten it so that it will lie flat during the folded storage mode, but hang nicely when the box is opened for use (see **Fig. 8**).



Fig. 13

Opened for use, the tent blocks out light from outside yet will bounce any lighting placed inside.



Fig. 14

Quickly opened, with lighting added, and you are ready to take photos.



Fig. 15

The tent is folded flat when finished.



Fig. 16

The folded tent can be stored behind the china cabinet, in the back of a closet, or wherever there is space.

On the other hand, a gray cloth or felt (see Fig. 9) could be used for the backdrop if you desire. Rather than fastening it, simply leave enough material lying on the top of the photo tent so it will hang over the back and inside without falling. If you have the gray paper fastened, flip the paper out the back and over on top. You can then use any other color/type of backdrop material by draping it across the top and into the box through the back.

Once the backdrop is fastened, you've committed to the orientation of the box so a couple of outriggers can be cut to fasten to the two sides of the box. I used duct tape and assembled them so they folded flat against the side for storage (see Fig. 10). In use, the wings fold out to support the photo tent in a stable, upright position (see Fig. 11).

FINISHED

The photo tent is completed. Open it and position the outriggers for stability (see Fig. 12). The neutral gray seamless backdrop should hang nicely to provide a non-distracting background for the subject (see Fig. 13). The paper is easily replaced

when it becomes soiled or creased.

The photo tent, positioned properly, will shield the subject from external light sources and allow your own controlled lighting to be added. Bouncing the light off the white interior walls and ceiling will help diffuse the light and minimize harsh shadows.

When I use my tent, I eliminate all external light sources by turning off the overhead lights and drawing the shades. With the external light gone, I can have total control over the lighting by positioning one or more light sources and bouncing/diffusing them appropriately.

QUICK SET UP

Your completed photo tent is convenient, easy to use, and allows you to effectively control the lighting situation. Fold it open, add some light, and you are ready to shoot some pictures of your latest turnings as I have done in Fig. 14. When finished, remove the turnings and lighting and fold up the tent.

The photo tent is ready in moments and it can be put away as quickly. Close up the photo tent carefully (see Fig. 15), making sure that the backdrop paper lies flat on the inside. Then find a spot to squirrel it away. I'm sure you can find one that is out of sight, but keeps the tent readily available for use. I slide mine behind the china cabinet (see Fig. 16) where it is kept flat, can be quickly retrieved, but is still out of sight.

Try it. I think you will like it.

Editor's Notes on WOODTURNING SAFETY

to complete any specific turning task and will strive to offer different alternatives. You should always choose the method that you feel comfortable with, the one that works for you, and the one that is safe.

Woodturning can be a dangerous activity. Always wear the proper eye and ear protection and take the necessary precautions to eliminate nuisance dust. Read and understand the manuals that come with your tools and never use a tool in a way that endangers you or anyone around you. If you are not comfortable performing any operation or technique presented in *Woodturning Design*, DON'T!