

Photographing Glass Bottles

by Charles Harris

I have been writing magazine articles about the American Civil War artifacts for over 30 years and have published two books. One of my great downfalls has been trying to obtain good photographs of glass bottles. They just wouldn't come out decent. Oh, yes, I could sometimes get great photos of some of the bottles, usually by accident when the reflections happened to be just right, but that was the exception, not the rule. My one big disappointment was when I photographed the Roy Blick collection in Murfreesboro, Tenn. Roy had dug over 100 different varieties of Civil War glass bottles and jars and I spent an entire evening photographing his superior collection. Almost all of them had been dug out of the Civil War 1862-1863 campfire and garbage pits around Murfreesboro. Sadly, Roy Blick is now gone on to the Happy Bottle Hunting Grounds and his collection has been disbursed all over the United States.

It was only 2-3 years ago that I finally figured out the secret of how to photograph glass bottles and how to obtain a decent rendition of what I was photographing. The laughable answer to my problem is so simple that I had just overlooked it all of these years. Maybe the advent of the digital camera also helped some, for I could now instantly see the results of my futile efforts, where I previously used a strobe for lighting and had to wait until I got the prints back from the camera store.

Here is the secret of how to photograph bottles or jars. Take hold of your precious possession, walk over to the window and hold it up to the sky. What do you see? Surprising isn't it — you are seeing all of the details of the lettering, designs and

old bubbles just jumping out at you. Wow! The only problem with this was that you also have tree limbs, clouds, other houses, fences, etc. in your view messing up that beautiful image. Also if you place the bottle on the window sill, you also have the edges of the windows, the lower edge of the window frame and dirty window glass also degrading that image that your mind's eye is seeing without all of the distractions — the camera sees it all.

Now that I had the vision of what was possible imbedded in the interior of my cranium, I could begin experimenting with my setups until I could actually create what my mind was expecting to see as a final image.

First I needed an uncluttered sky, night or day. Hmmm! Ah, a doctor's X-ray viewer, but none of my doctors would let me into their office on my whim without wanting to do at least a full physical on me first. None of my doctor friends had any extra light boxes that they would let me have or buy. Hmmm! What next? In the publishing industry they used to use light tables to lay out the pages of books and magazines. They would take negatives of the text and splice into them the negatives of the photos to make up a page. Everything had to be perfect and square and it was done on a light table. Well, I became a little more lucky here and managed to acquire an old surplus light table that I am still using. I would like a bigger one, but this one does the trick as long as the bottle isn't too large.

Because my light table has a large rim around it, I needed a base to set the bottle on in order to center it more in front of the light. I first put the bottle close to the light table (box) and "Yukkkkk, it looked terrible and was all washed out. There

was no detail like I saw when holding it up to the sky." What was wrong? Umm, the sky is millions of miles out beyond and I'm in the inside of the darkened house. Ding, ding, the sky is not lighting up the bottle; it is just a light source behind the bottle, kind of like a backlight. Ah, ha, I just moved the bottle and base out from the light box about two feet and Wallalla! I couldn't believe it. Every bit of detail, design and lettering just automatically outlined itself. It was miraculous! All I had to do now was to take a photo of what I was seeing.

That is just what I did. In the resulting photo I had the frame of the light box encroaching tightly upon the bottle that was only six inches high and the white plastic of the light box was 9 inches by 17 inches. If I moved the bottle much closer it would wash out. There's got to be a solution. Well, duh! I do know a little about photography and my digital camera has a 10-power zoom lens. Instead of setting up close to the bottle with the camera and using wide angle, I just backed up a few feet and used some of the telephoto and there was a beautiful image. Here an illustration might do better than words in telling the story, but I'll try both ways.

With a wide angle lens you are getting close to the object being photographed which fills the frame of the camera, but the back ground is also wide angled making the small light box very small in relation to the size of the bottle. When I backed up and used the telephoto (narrow angle) mode, the item still filled the frame, but the small light box was now relatively large in relation to the size of the bottle. Does that make sense? No, well, maybe the attached illustration will help.



Both photos are of the same "Good Luck Nursing Bottle." The left photo had the bottle only about three inches in front of the light table. For the taking of the right hand photo, I just moved the bottle about eighteen inches out in front of the light table. All other factors were exactly the same.



My photographic set-up on my wife's dining room table. I'm shooting the camera from in between the work lights with the bottle about 18-inches in front of the light source.

Now I had one other small, and to me insignificant, problem since most of my illustration are to be black and white for magazine and book illustrations. The digital camera keeps looking for a true white background and while I am focusing the camera the background cycles from a blue cast through the brown and tan range to a pukky green color and back again. If I were going to use color I would probably settle on the bluish or tannish backgrounds. For colored glass such as aqua-green or amber I just take the exposure when the right background color cycles through.

For my photo editing I use "Jasc Paint Shop Pro 7". I know that there is at least an "8" and a "9" version out but I am familiar with the "7". I accidentally found

a little button under the "Colors" button labeled "Colorize". When I click on it, the program turns the color image to a beautiful black and white image. Simple! There is also a Grayscale button on most programs that does the same thing. Then I usually have to click on the "Colors" button again and then click on the "Adjust" button and add some contrast and maybe lighten or darken the image some to make it really look good. I then save the completed image on a floppy disc or CD for later use in an article or inventory of bottles.

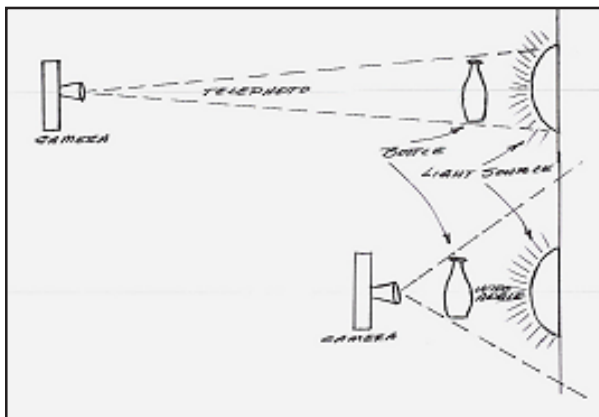
This system works wonderfully for clear glass bottles and also for the colored ones. Some of the real dense or dark bottles can also be wonderfully photographed this way. Just because they

are very dark, the camera's automatic exposure just has to work a little harder and if you crop tight on the bottle the light easily comes through that dark glass bottle.

In some cases where a bottle has colored painting or pyroglazing on it I need to front light the bottle at the same time as I backlight it. If I don't front light the painted surface, it will be silhouetted and become black, whatever color it is. I was afraid that a strong front light would cancel the effects of the backlighting, but luckily that is not normally the case. I went down to Home Depot or Lowe's and purchased a set of their 1000 watt halogen work lights for about \$35.00 and set them up on the dining room table, much to the objections of my wife. You can shoot from between the light housings and have plenty of light on the front surface of the bottle. You can then use the lights in your workshop or where ever you need some extra light, so they can actually do double duty for you. You can even light the front of your house at Christmas time with them. That just helps justify their cost to your wife and family.

After you have saved all of your images of those wonderful bottles, you can now go into self-publication by using the "Insert" button on Microsoft Word and write about those wonderful experiences that you have had collecting the bottles before your pet cat jumps up on the display shelf and knocks all of them off onto that hard floor in your display room.

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In the illustration, notice how when the photo is taken with the wide angle lens and up close the area around the light source is behind the image of the bottle. With the telephoto lens the bottle is completely in front of the light source.



The left pyroglazed Nursery Rhyme baby bottle is photographed with only the backlight, which outlined the bottle well, but also silhouetted the orange pyroglazing. The bottle on the right is also front-lit as well as back-lit, presenting the best of both systems combined. In color the differences are much more obvious.