Print 16x20 in a Home Darkroom

by Michael Havelin

I like making big black-&-white prints. I sell a good number of them and I can't let a commercial lab handle them and take all the profit. So my darkroom needs to be 16x20-capable.

When I moved to Atlanta I looked for an apartment that could be home and office. The commitment was made to a two-bedroom, two-bath place. The main reason was because of the walk-through closet with washer and dryer hook-ups. For the story on how the place was built, see *Shooter's Rag #10*. Adaptable as the place was, there were still problems, especially for making big prints. The floor sloped and the enlarger, even with the extended rails, couldn't rise high enough to print on the baseboard. The 16x20 easel would have to rest on the sloping floor.

The first 16x20 printing session in the newly constructed darkroom was supposed to produce seven prints. It would be a short session, maybe three hours in all, with some additional time for setting up and restoring the place to normal. The problems were figuring out how to get four trays into a shortened sink and that the floor sloped. Let's solve the problems in order.

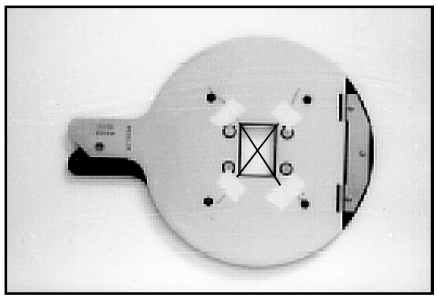
Remember that the darkroom was constructed in a walk-through closet. More properly, it was a walk-through closet with a bedroom (now an office) at one end and a bathroom (now storage and print drying) at the other. I figured that a 16x20 tray would sit neatly in the bathtub and a Kodak print tray siphon's hose would slide up over the bathtub's water nozzle. Wrong! The bathtub did in fact accept one of the smallest 16x20 trays, but the rubber siphon hose's "universal" adapter didn't seal on the water inflow. It would have required replacing the tub nozzle with something smaller and less elegant (sic). I pulled and pushed that adapter and finally duct taped it in place, only to see a minimal pressure flowing into the washing tray and water spraying upwards in the totally wrong direction. This meant that the fix and wash trays were going to have to be stacked in the darkroom sink, and that required building some sort of a frame to support one or the other.

With the developer and stop bath trays in the darkroom sink, little space remained. Not much, but a quick test showed that a fixer tray would fit if turned 90-degrees from the others' orientation. No problem. But what about a wash tray. That could sit on top of the fix, but would require a framework to support it. I had just enough 2x4s left. Nothing fancy, but by noon the sink was ready.

Having been through a similar struggle in my previous darkroom, I already knew how to set up the enlarger. It had to be turned 180-degrees on its base so it could project onto the floor and the baseboard had to be clamped or weighted down to prevent a disastrous crash. I unscrewed the enlarger from its base and turned it around. This was the easy part.

The critical issue in an arrangement like this is for the negative stage and lens to be parallel to the easel. But the easel was going to be on the floor, which sloped steeply. Once again, my little circular bubble level came to the rescue. It was a simple matter of putting a flat board on the floor and shimming under it until the bubble level read the same on it and the negative stage. Not very difficult.

Since this article is about printing big, there's no need to discuss how to print. Big prints approached that same way you would do smaller prints. They're awkward

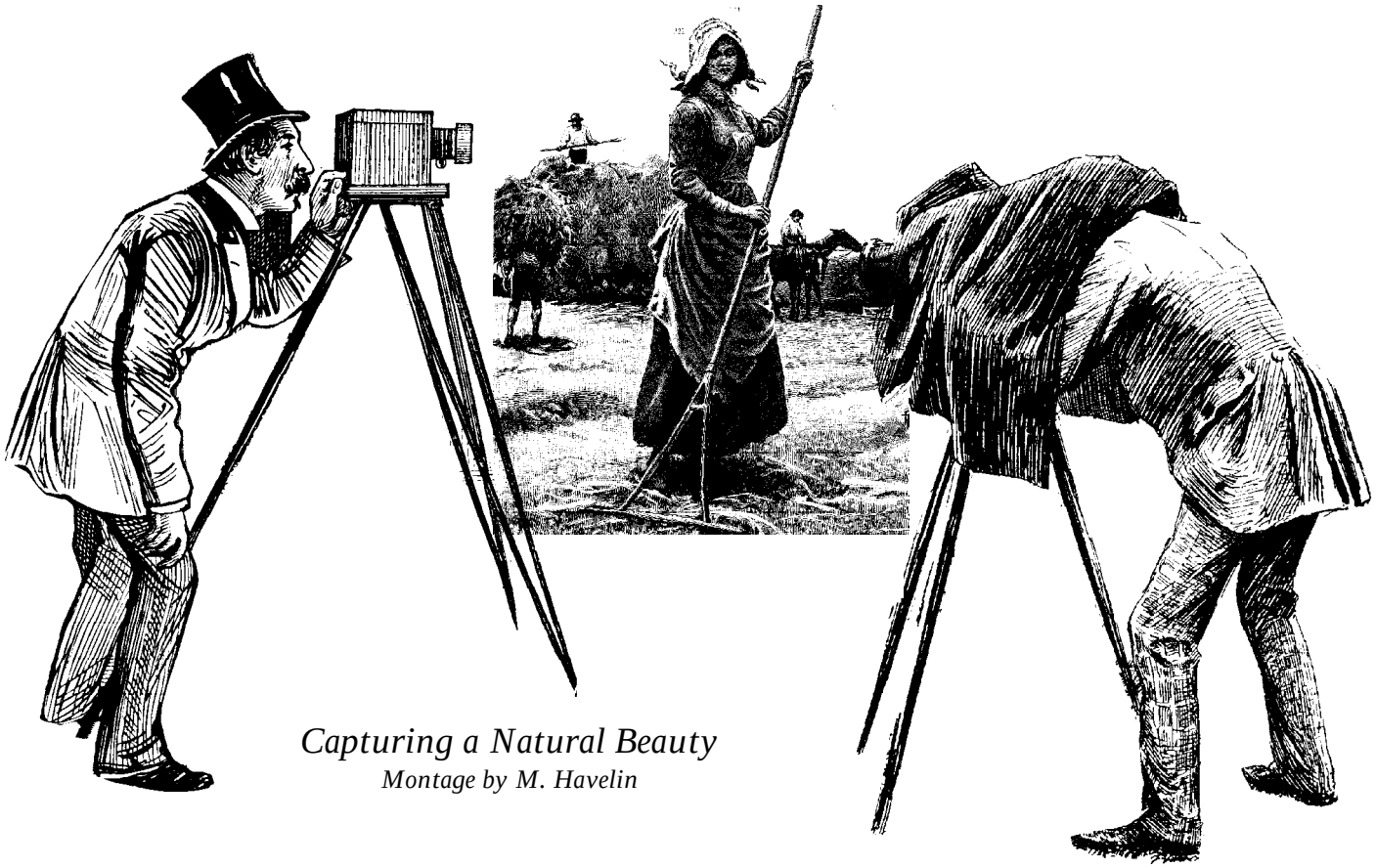


Useful for lining up the 16x20 easel on the floor is this little trick: tape threads diagonally across the cutout in the negative carrier and project the result as you would a negative. Presto!

to handle though, and that's the difference for me. Always place your print into the developer face down, and in one of two ways. The first method bends the print into a "U" shape. The middle of the prints face hits the developer first, then both sides drop down at the same time. This is my preferred method. Be careful not to flex the print too much and so cause the emulsion to crack. The second method keeps the print flat and starts it into the developer tray from one edge and smoothly drops the rest of the print onto the surface of the solution. Done properly, either way results in little time lag in getting the entire print started, and keeps air from being trapped between the print and developer.

When transferring from solution to solution, lift your print gently from one edge and drain towards the corner, then drop the print into the next solution using the same insertion method as above. When transferring from the fixer to the wash tray located below the tray rack, I actually rolled the print losely and placed it that way, allowing the print to unroll in the wash. No problem. The prints were dried on racks made of 1x2 and plastic screen door material.

It took about two hours to do my experimenting and get things organized for the first 16x20 printing session. The accompanying photo shows the final setup. The prints looked great. ℜ



Capturing a Natural Beauty
Montage by M. Havelin