

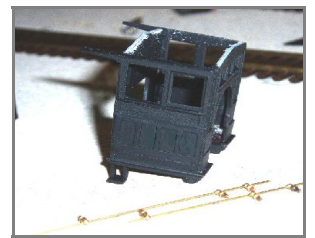
A Turn of the Century 0-4-0 Conversion Project



The Kansas City Belt Railway #3 started life as an *AHM, Pocher*, V&T #21 "Bowker". I picked-up this gem on E-bay and ordered a handful of parts from Walthers. The rest of the details came from my scrap yard or were built-up from scratch.

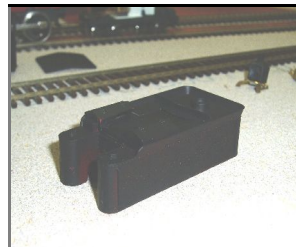
The first thing to change was the tender. The enormous "woodpile" conceals an antique sheet metal motor 1" in diameter that extends into the undercarriage of the tender. The motor was removed and replaced with a lower profile open frame motor from an old MDC Hon3 2-8-0 a styrene mount had to be imagineered and I may soon replace that with a small can motor. The woodpile was removed and a flat deck was built out of styrene ready to accept a coal load. The tender shell was then painted black .

the windows. Gaps here and there were filled with *Squadron Green Putty* and the cab painted black. The roof supports were sanded to a peak and a styrene roof was bent framed and installed.



AHM Pocher "Bowker" in its original condition.

The "Bowker" is a tender drive model that comes molded in red plastic with gold ornaments and filigree, etc... that distinctive water pump and a towering "wood" pile. It really is quite a good looking locomotive. The 60" drivers are a bit larger than the 52" drivers on the prototype, and look at those flanges, but that high wheeled look was what I wanted, so we compromise.



The tall straight stack was formed from a length of aluminum tube flared at the top with the point of my needle-nosed pliers. A commercial casting for this stack is available but I didn't think it looked tall enough. The stack was then painted with my boiler cladding mixture. (see below)

Attention then turned to the cab and boiler. The "Bowker" cab is so cool, that I considered leaving it as it was, but I happened to have a *Precision Scale Company* kit for a C-16, 4 panel cab that more closely followed the prototype, so off it came.

The prototype has an extended smoke box. To achieve this look, the smoke box front on "Bowker" was removed and saved. Once again I went to the ol' scrap yard and dug out a *Kemtron C-16* smoke box which was then ACC'd to the front of the old smoke box. The original smoke box front was then reattached drilled and a new *PSC* brass number plate applied. (continued on next page)

The steam dome and sand dome are pinned onto pedestals molded on the boiler. These domes were discarded and the pedestals filed off. The water pump, balloon stack and headlight and bracket were also discarded. (A note here, I chose to leave the driver fenders on just because I liked the look of them.)

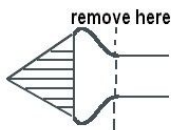
The new cab was constructed. The prototype cab was a bit taller than the C-16 cab so a bit of styrene was added at the bottom and at the panel below



Title photo: My locomotive converted from AHMs Bowker.

Inset: CB&Q #562 circa 1895, from Steam Locomotives of the Burlington Route, Bernard Corbin and William Kerka, Bonanza Books, 1978.

(continued from previous page)



for the tender.

Two early Baldwin sand domes, steam dome bell, and headlight bracket from Precision Scale Company were purchased painted black and positioned on the boiler.



Cut levers, fabricated from brass wire and PSC eye bolts, were installed on either end of the locomotive

I had originally purchased an arc type headlight from PSC, but I preferred the look of the box type light and fabricated one out of styrene and parts again from the scrap yard. This new headlight was glued to the PSC bracket and mounted on the smokebox. An old Cal-Scale brass oil headlight was affixed to a styrene base and added to the rear of the tender.



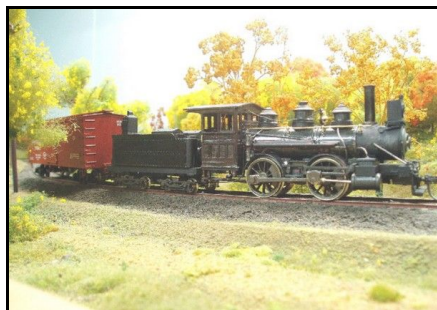
Next came the engine pilot and steam chests. The original pilot was cut off at the point where it curves out (see above diagram) and the pilot truck was removed. A scale 12 X 12 wooden pilot beam, with n-b-ws and foot boards fabricated from piano wire and styrene, was acc'd in place.

The prototype steam chests were capped a little differently and a few bits of styrene were applied there. The top of the steam chests were then drilled and oil lines of brass wire were acc'd.

At this point I realized that my smoke box extension was a bit too long. Out came the dremel and a cut-off disk and the smoke box was shortened to a more appropriate length.



The driver flanges were beginning to draw attention to themselves. I wasn't comfortable with pulling the drivers. A model of this period might not respond well to that kind of aggressive treatment and having done so much work thus far, I was afraid to make a mess of it. For a while I decided to accept the oversized flanges as another compromise. Still, having made so many alterations toward the goal of a "scale" model, those flanges, which were at least eight scale inches tall were becoming unacceptable. With only a dremel tool to work with the challenge was how to turn the drivers without pulling them from the axles.



The solution was to place the mechanism on its back, drivers up, wire it to the power supply and run it at top speed. With the drivers spinning freely, the dremel with a grinding wheel running against the motion of the drivers was placed against the flanges and in that manner the flanges were ground down.

The transformation is completed.

The final step in the conversion was to add decals. The tender would receive a number the cab lettered for the KC Belt Ry and small numbers applied to the front sand dome and headlight.

The model was then dulcoated, and the coal load added. Once the cab windows were glazed the cab roof was secured with white glue. Finally the headlight lenses were installed.

Kadee Magnetic couplers were installed at each end and the locomotive spent the next few days running tests while I contemplated the next step.



Early locomotive color schemes have always been an interest of mine. Particularly regarding the boiler cladding.

With the boiler stripped down, it was painted with a mixture, of 4 parts Model Masters, Burnt Metal Buffing Metallizer, 1 part dark blue enamel and 3 parts gloss black enamel. The effect is a nice bluish gray metallic finish.

The original brass hand rails were reinstalled. Additional details were added including hand grabs on the cab, air lines, a right side mounted air pump for those new fangled air brakes required after 1893, and connections