

## An Organ Wagon for Elizabeth

Mike Barnhart

Liz and I have attended many of the band organ and monkey organ rallies over the past many years. Even though we did not have a suitable organ to bring to the rallies we enjoyed walking around visiting with the many participating friends and listening to their organs. Without an organ, though, Liz felt a little inadequate and left out of the festivities. She wanted to dress up for the part of an organ grinder. Worse yet, she wanted me in a costume as well. Liz even had a monkey hand puppet to show off. But, alas it was not the same without an organ. So came the day when Liz exercised her wifely privilege by stating that she was to have a monkey organ. "O.K." I said, as I picked up my hammer and saw, "I will make you one." It soon became obvious to Liz that the organ I was making was going to be too big for her to handle and take too long to make. I was overruled with the edict that we purchase a brand new organ. "But, But," I said. "We need a monkey organ now" she replied. An order subsequently was placed for a 25-note paper roll (37 pipes) Alan Pell organ.

The purchase of an organ solved one problem. But, I now faced another dilemma. How was I to transport the organ and rolls during the rallies? Over the years I have seen many monkey organs mounted on a wide variety of ungainly conveyances that ranged from baby buggies to miniature Conestoga Wagons. The soft sprung buggies allowed the organ to swing and sway as it was being cranked. Wagons having wooden spoked wheels with steel rims were difficult to steer and threatened to shake the organ to a pile of tooth picks as it was moved over uneven pavement (brick, cobblestone, gravel, boardwalks, curbs, train tracks, etc.) Liz favored the wooden spoked wheels because they are traditional with monkey organs. I agonized over possible cart configurations using wooden spoked wheels over an extended period of time without a satisfactory solution. The solution to my cart problem came in the form of a children's wagon ordered from Lehman's Hardware and Appliances.

Lehman's, my all-time favorite hardware store, is located in Kidron, Ohio, the heart of the Ohio Amish country. Lehman's caters to the Amish life style supplying all manner of high quality hardware, appliances, lighting, house wares, tools, toys, etc. to be found in rural America a hundred years ago. Lehman puts out a 150-page catalog titled the Heritage Non-Electric Catalog. On page 55 you will find iron and brass yard bells, Swiss cow-

bells, sleigh bells and pickle crocks. Pages 64 and 65 list children's wagons of various sizes and configurations.

The catalog is also accessible on line at [www.lehmans.com](http://www.lehmans.com). or at 877-438-5346. If you are in north/east Ohio visit Kidron and Lehman's. Thursday before noon is a good time. The locals bring in livestock in horse drawn wagons for auction. There is also an open-air produce and flea market. Have lunch, with the Amish, in the basement of the Kidron Town & Country Store. Watch out for the buggies!

The Lehman Model 4-WSW-A Medium 4-Wheel Steered Wagon was an ideal solution to my dilemma (**Figure 1**). The size of the sturdy wagon was right for the Pell organ. The wagon came with wide 10" diameter pneumatic wheels that would roll smoothly over the smaller cracks in the pavement. The steering is automotive style with independently swiveled wheels that provide good stability in turns. The most unique aspect of the wagon is the articulated steering of all four wheels to provide a very sharp 19" turning radius. The wagon turns immediately where it is,



Figure 1. Liz Barnhart with her newly "constructed" organ wagon for the 25-note Alan Pell Organ.

without the need for making wide swings or moving back and forth to get around a corner on a narrow pathway.

The wagon was customized to the needs of the organ by replacing the "stake bed" with a new box sized to accommodate the base of the organ and the stowage of 16 roll boxes (**Figure 2**). The sides and ends of the wagon box are made of 3/4" oak. The sides are clamped to the ends by 1/4" threaded rod. The bottom of the box is 1/2" oak veneer plywood (in my case two sheets of 1/4" plywood glued together) and set in grooves cut into the sides and ends. The top of the box is made of 1/4" oak veneer plywood assembled in three sections. The middle section, sized to the base of the organ, is screwed down over internal boards to carry the weight of the organ to the bottom of the box and to the wagon frame. The front end of the middle section has a cleat with a lip to hold one side of the organ base to the wagon.

The larger end section is hinged to provide access to the roll boxes. The smaller end section provides access to a stowage space in the rear. The smaller end section also has a cleat with a lip to hold the other side of organ base to the wagon. Both end sections are clamped in place with luggage clasps. The organ is released from the wagon by removing the rear end section.



Figure 2. The base of the organ wagon has been modified to accommodate 16 25-note roll boxes.

The steel handle supplied with the wagon was replaced by an oak boot fastened to the wagon tongue and an oak handle that can be released from the boot with removal of a pin (Figure 3). This was done for aesthetics and convenient stowage of the wagon without having the handle sticking out at odd angles. The handle is held upright by two springs between the tongue and boot. A semicircle block fastened on the front of the wagon box allows for pushing the wagon from the handle and boot.



Figure 3. On front of the wagon is the oak boot which makes removing and attaching the handle much easier.

The wagon cannot be steered with the handle in an upright position. The handle must be lowered from the upright in order to turn the wheels. With the handle in the upright or near upright position turning the handle will twist the tongue. A block of oak was clamped in the tongue with two bolts to give the tongue more strength against twisting.

*The most unique aspect of the wagon is the articulated steering of all four wheels to provide a very sharp 19" turning radius.*

A rack made of two oak boards (from the original stake bed) with cross cleats was mounted beneath the wagon frame (Figure 4). This rack provides for the following functions: As a skid to prevent the wagon from dropping all of the way down on the edge of curbs and steps between the wheels; As a rack for an additional stowage box between the wheels (when required); As a lower support for the umbrella stand. The umbrella and its stand are stowed beneath the wagon box inside the wagon frame (clear of the steering linkage).



Figure 4. Looking underneath the organ wagon one will find the "skid" rack which also serves as a support for additional storage.

Another rack is fastened to the back of the wagon box providing for the upper support for the umbrella stand and for convenient stowage of two wheel chocks. The chocks in one position allow the wheels to set on level pavement. Or the chocks can be turned over to elevate the wheels to help level the wagon on uneven ground. Is there anything that I did not think of?

The next time you're at an organ rally you may find me faithfully cranking Liz's Pell organ on her Amish wagon in my generic German costume. You may ask. "Where is Liz?" I will answer. "Oh she and her monkey are walking around visiting with her many participating friends and listening to their organs."

Mike Barnhart, and his Wife Liz, are avid mechanical musical instrument enthusiasts who reside in Dayton, Ohio. In addition to being active in both the AMICA and MBSI organizations, Mike has found time to construct a "retirement" room complete with a large G-scale model outdoor garden railway which runs through the room.