The DeBence Wellershaus Fairground Organ

Scotty Greene

This is a Wellershaus Fairground Organ built in Saarn, Germany before 1904. It started life as a stepped case barrel organ and was later converted to a keyed book music drive. It has 58 keys, but in its present incarnation only 57 are active. The breakdown of active keys is as follows: five bass, 12 accompaniment, 18 melody, 11 trumpet, six trombone, three for drums, and two rank (stop) control. It has 214 pipes, with 36 mounted underneath.

Chronology of the Repair

By the spring of 2001 Martin Anderson and Scotty Greene were active as local volunteer restoration mechanics in the museum (DeBence Antique Music World). Having done minor repairs on most of the machines, and with prior experience as an organ restorer Martin was ready for more challenging jobs. Scotty was an experienced mechanic, but had little background with band organs. During the summer of 2000 Scotty broke in on a Wurlitzer 105 band Organ, doing a complete disassembly and repair. During the winter of 2000/2001 Scotty and Martin successfully raised an Artizan model XA from the dead for the Conneaut Lake Park carousel [see issue #16 of the Carousel Organ—Rebuilding an Artizan Model XA Pump by Scotty Greene]. This job included a complete pump rebuild, and in the words of Dr. William Black—"pumps are tough."



Figure 1. The keyframe before restoration.

Feeling empowered by these experiences Scotty said to Martin "Why don't we get the Bruder playing?" A review of the condition showed that this would be a big job, as the bottom of the case was full of beetle tunnels, the back of the case where the music reader [key frame - Ed.] was mounted was warped out of shape, a lot of the control tubing was unhooked, and there appeared to be some pieces missing (**Figure 1**). About this time we also tumbled to the fact that it was not a Bruder, but a Wellershaus (the fact that the front of the case says Gebruder Wellershaus was a confirming tip off).



Figure 2. Wood borer damage.

During February of 2001 we moved the organ off the main floor and into the storage area of the second floor. It was suspected from the start that this attempt to get the organ playing could not be an original restoration for a number of reasons, and that some revisions would probably be required as the organ had been seriously modified over the years—more details later in the story. After some serious study of the situation I decided that the first repair had to be to the bottom of the case as it had been greatly weakened by the borers (**Figure 2**). Thus on April 13, 2001, with the help of my sons and son in law, we turned the organ onto one end and the job was begun.

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Figure 3. The exposed windchest.

On January 31, 2002, it played for the first time in many years, but the sounds coming forth were not recognizable as music. After working through most of the music loop Martin recognized the *Blue Danube Waltz*, but not in any arrangement that anyone ever heard before. There followed weeks of various attempts to decode the music scale in use. The riddle was solved with help from Hans van Oost who led us to Johan Weima and Henk Veeningen of The Netherlands who provided the proper scale. Thus on March 26, 2002, we listened to it playing prop-



Figure 4. Assembly of the organ has started.

erly for the first time in many years. A lot of adjustments were still needed on the music reader valves which took a few weeks to complete, but eventually I stopped all the leaks and ciphers. The bad news was that the main pump seemed to be lacking in volume, and the sounds indicated it was pumping on three of its four bellows.

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So on May 23, 2002, I tore the whole organ apart and extracted the main pump for rebuild (Figure 3). This job turned out to be extra tough as the previous rebuilders had used rubber cement of some sort to glue the leather to the wood, and before the correct glue could be used every trace of the rubber cement had to be removed. Twelve hours later I turned the pieces over to Martin for fitting and gluing the leather in place. On Sept. 27 I started putting it all back together again. (Martin didn't take that long, I was in Maine for three weeks.) and on Sept. 29 it was playing again. The air supply was better, but the reservoir still bottomed out at times. I removed one of the four reservoir springs to reduce the playing pressure and thus air consumption, also changed the relief valve stop to allow the reservoir to open about ½ inch more to provide more storage volume. These changes helped some, but we still ran out of air once in a while. We made new pulleys for the music drive to allow the pump to run faster while the music played at the same rate. This helped some, but we were still a little short of air at times. It seems likely to me that this had been the case since the conversion in 1934, so we will leave it that way. As of Sept 10, 2002, it was ready to again take a place of honor on the main floor of the museum.



Figure 5. A rear view of the partial assembly of the organ.

While Martin and I were working on the inside parts Ed Hlawati, another volunteer, was working on the case and façade. The front was in decent shape, but each wing had pieces of trim missing which Ed copied from the other end to effect a very good restoration. He did some touch up painting, and replaced the bottom portions that had been rotted away. The results are that the façade is almost complete to original, and you have to look really hard to tell the areas that Ed restored from the original unrestored parts. Ed also repaired and painted the rest of the case, and made me some other internal parts as I determined what was needed.



Figure 6. A view of the completed installation of the inside pipes.

History of the Organ

As the repair work progressed I attempted to gather information about the places the organ had been. What follows is



Figure 7. A barrel on display with the Wellershaus. While not the original it was acquired with the organ and represents an example of the original method of playing.

based on the best information we came up with, but much of it lacks full documentation and thus is open to question.

The organ was built before 1904 as a stepped case barrel organ (**Figure** 7) by the firm of Gebruder Wellershaus (August and Wilhelm) located in Saarn in the Rhur valley of Germany. By 1934 it had migrated to Holland where it was converted to a keyed book music machine by workers of Louis Ch. van Deventer. Two of the artisans who worked on the conversion were Fred Hellerman and Vern . . ?

In 2002 Henk Veeningen in Holland, a dealer in Fairground Organs, looked at the organ on our web site, and believes that

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Figure 8. Original book music is now playing on the restored key frame of the Wellershaus.

in 1973 it was still in Holland and he owned it for one day. At that time it was in rather poor shape and riddled with borer damage. Based on newspapers inside the pumps, it seems that in 1974 the pump and reservoir assembly was rebuilt in the Austin Texas area by an unknown repair service.

Jake DeBence bought it in Rochester PA, and brought it to Franklin where it played for some time. It came to its present home at 1261 Liberty Street in Franklin, PA as part of the group of instruments purchased in 1994 by the Oil Region Music Preservation Museum from Elizabeth DeBence.

When brought to the old G. C. Murphy building which is its present home it was identified as a Bruder. The museum's post card depicting it said "The Bruder European Band Organ was manufactured in Germany before 1930." Apparently it had not played for some time before the move. When the museum was sending instruments out for restoration it was reviewed by a professional and declared "beyond repair" so it sat mute in a place of honor in the exhibits at its new home until 2001 when the latest repair was started.

From the physical condition of the organ it seems to have led an active and tough life. Aside from the borer damage it shows physical handling damage consistent with use by a traveling carnival or other service requiring frequent knock down and reassembly. The maintenance was of a patch-and-get-by nature, and many parts are obviously borrowed from other

machines.

Music for the Organ

The music that came to Jake DeBence is in the form of an endless loop which contains 13 songs and takes about 1 ½ hours to play completely through. Twelve of the arrangements are by Louis Ch. van Deventer, including *The Blue*

Danube Waltz, and some others we cannot put names to. The other arrangement, which has obviously been spliced into the loop, is *Under The Double Eagle* and was done by Marcel van Boxtel of Nijmegen in The Netherlands (**Figure 8**).

Louis Ch. Deventer died in 2001 at the age of 94. He was active in converting many barrel organs during the 1930s, and arranged and produced much music for the converted machines. Marcel van Boxtel was active as an arranger of music for these machines mainly in the 1950s. We were able to correspond with him in 2001 about our machine and got interesting information from him.

The music book is 225.3 mm (8.9") wide with a slot spacing of 3.83 mm (0.15") center



Figure 9. The completed organ as it displays today in the DeBence Antique Music World Museum.

to center. The key frame has a key spacing of 3.94 mm (0.15") and was originally provided with 60 keys, though only 58 are active as presently configured. We are told by our friends in the Netherlands that the scale used is a common Wellershaus scale.

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About the Wellershaus Firm*:

Wilhelm Wellershaus (1764-1821) founded a firm in Remscheid Germany in 1793 where he built and repaired standing clocks, and later church organs. In 1832 his son Frederich (1796-1856) started his business in the village of Saarn, now a suburb of Mulheim. He specialized in building church organs, but gradually moved to also making pianos. His son Julius gradually changed from building church organs to building small

hand cranked barrel reed organs for use outdoors. As the fairground attractions grew, so did the size of the organs, and organs of up to 140 keys were built.

Julius had two sons, August (1861-1927) and Wilhelm (1876-1910) These brothers founded the firm of Gebruder Wellershaus. August seems to have been the driving factor in expansion of the works which now also built orchestrions. Their barrel organs were beautiful creations made with great care, featuring as many as three rows of moving

figures and lots of rotating pillars. While most organ fronts at that time were black with gilt edges and decorations, the Wellershaus was the first to use white painted fronts, which started the trend to more brightly decorated instruments. Another patented feature of their machines involved positioning of the key frame so that endless book music loops could be used.

In 1904 the village of Saarn was annexed by Mulheim a/d Ruhr. Organs built before that date are marked Saarn a/d Ruhr on the front façade. (Note that this is how the DeBence Wellershaus is marked.)

From 1911 on the firm built and repaired pianos as well as organs. August had two sons, August Jr. (1897-1965) and Emil (1900-1969) who took over operation of the firm. In 1943, during WW2, the firm was destroyed by allied bombing with the loss of 43 organs and most of the inventory of spares. It was rebuilt on the same spot after the war, but business was declining by the time they got operational again.

The firm existed for a while longer, but shrank and disappeared with the market for fairground organs and the death of August Jr. in 1965.

* Information regarding the Wellershaus firm history is from Jan L.M. van Dinteren of the Netherlands as published in "Het Pierement" 2001/2002 and translated by Hans van Oost.

Scotty Greene is a mechanical engineering graduate of the University of New Hampshire, and currently lives in Franklin, PA. He worked for Joy Mining Machinery for 41 years in design and application of underground mining machinery. His current project is an 1890 62-key Frati Concertino class barrel organ which was delivered to Debence in 2002. He hopes it will play next year.