

The Grand Dad Of All Automated Street and Fairground Organs

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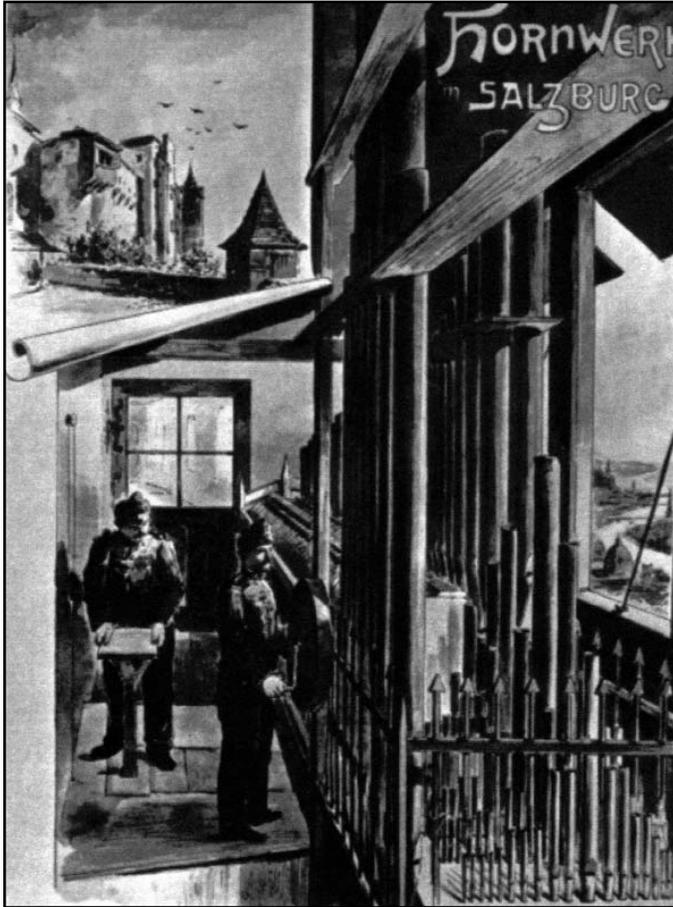


Figure 1. Ink drawing by F. Kulstrunk, presently in the Museum Carolina Augusteum, Salzburg.

Know the minute you look at the great ink drawing by F. Kulstrunk of the Salzburg Stier barrel organ (Figure 1) you said “What is this doing in a magazine dedicated to outdoor mechanical organs?” Well friends, let me be the first to tell you that this is the “Grand Dad” of your Bruder, Gavioli, Limonaire or what ever model organ you have. While this may look like any other early organ made to play in a church or monastery, looks can be deceiving. In fact, this is a high-pressure organ created to play outdoors and were called “Free Organs,” meaning that the organ uses free air in the open, and projects tones horizontally like a horn. So it is also referred to as a “Hornwerk Organs.” Many of the details such as barrel lay out, pipe chest design, keyframe and pallet assemblies etc. were all copied from ancient instruments such as the Salzburg Stier for use in the more modern fair organs of the 1800’s. (Please see the web site at www.salzstier.com for more comparison details)

In the thirteenth century, “Freewerk” organs,” or “Castle Horns,” were to be found in many castles across Europe. It

appears that all of the Castle Horns, except for the Salzburg Stier, have disappeared forever. Most often the castles were destroyed in battle, or, simply abandoned when new technology such as gunpowder and cannons came into existence. The Mighty Fortress Hohensalzburg (Europe’s biggest castle complex) survived the many years since the 11th century and their Castle horn, the “Salzburg Stier,” also survived because it was well protected (Figure 2).

The organ was installed as a form of siren/alarm in 1500 under the instruction of the Archbishop Leonard von Keutschach, who ruled the independent dukedom of Salzburg from 1495 until 1519. The bull roared three times a day for nearly 500 years to remind the inhabitants of Salzburg of the time of day. The roar is actually a very strange organ sound, reminiscent of a bull roaring, hence the local name, which has remained until this day, the “Salzburg Stier.” In 1500 it mainly consisted of an assortment of large pipes, which all played together to give the very audible roar or bellow. Air was supplied by giant bellows powered by men who were usually prisoners of the castle. In approximately 1515 a barrel-operated organ was added to the Castle Horn (Figure 3). Now the Stier was used to send the town folk to bed every night, starting with a roar from the castle horn, and then followed

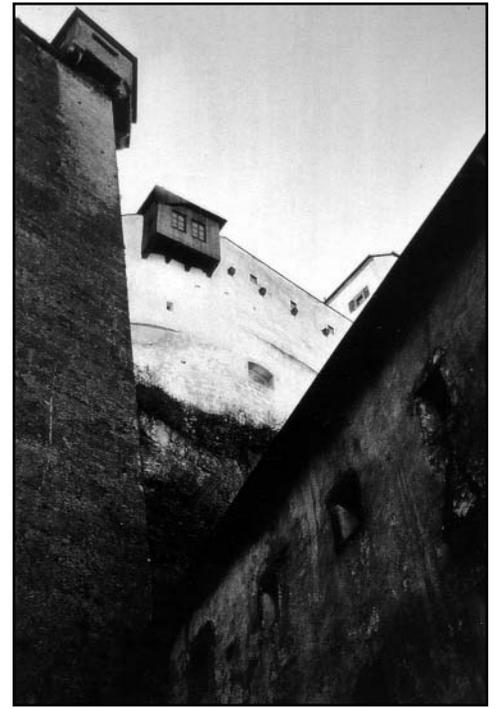


Figure 2. The upward view of the organ located in the Stierhouse. Photo: Philippe Rouille

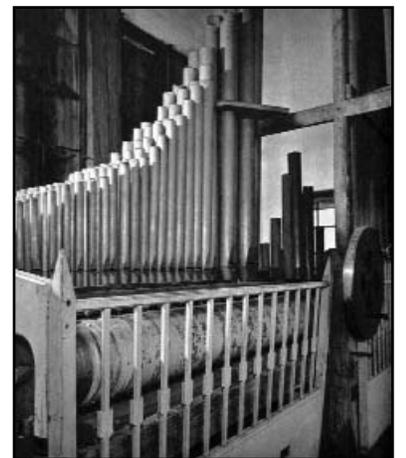


Figure 3. The barrel can be seen behind the array of pipes.

Photo: Alexander Buchner
Mechanical Musical Instruments,

1959

Choral. The same procedure was used to get them up the following morning. Over the last 500 years, many repairs and refinements were made to the Stier.

The barrel itself is made of wood (maple) and is 5 ft, 7 inches long and 9.8 inches in diameter. There are two barrels with the instrument. One has the drive gear made in wood while the other barrel's gear is made of iron. The key frame is weighted with steel blocks and the action adjustment is made at the front end of the key by raising or lowering the actual pins that engages with the barrel.

A physical description of the organ itself—from *Barrel Organ: The Story of the Mechanical Organ* by Arthur W.J.G. Ord-Hume.

In 1759 Leopold Mozart (father of Wolfgang Amadeus Mozart) was in charge of the orchestra in Salzburg and was commissioned to create a new barrel for the Stier. He produced a new barrel containing 12 songs, one for each month of the year. These songs were composed by Haydn, Ebler, Wolfgang Amadeus Mozart, P. Hofhaimer, Eberlin and Leopold Mozart. The organ continued to be played every day through the centuries. Army after army marched through Salzburg and the Stier continued to be used. It was often used to play at various events and new songs were added to its repertoire as late as the 1940s. Finally the barrel was so badly worn that it was decided to have the instrument restored in 1998.



Figure 4. Bob van Wely of the National Museum van Speelklok tot Pierement (Utrecht, Netherlands) makes final adjustments to the Stier's barrel.

The Restoration was completed over a four-year period (Figure 4). The Salzburg Stier was returned to the castle Hohensalzburg in Oct 2002. In honor of this occasion a home-

Mechanical Organ (Hornwerk) at the Fortress Hohensalzburg

This open air instrument was constructed in the manner of a block organ; it has only metal pipes—135 of them, for most part original—bellows and wind box. There is no keyboard to play it. If the bellows are operated a much amplified F-A-C chord results in a pronounced third; the signalling “roar” that can be heard over a wide distance and which, in Salzburg, has led to the addition of the name “bull” to the descriptive term “horn.”

The Salzburg “castle horn” was originally located behind a double door to the balcony of the upper story above the state apartments. It was allegedly moved to its present site—in an oriel on the “long corridor” above the bastion—in the northern perimeter wall in 1640. At this time the barrel organ, which has also survived, was added. It operates independently of the “horn” and at first played just one piece; the *Alter Choral*. The “Stier” could thus be interrupted to give the musical sequence, (horn)—Choral—(horn).

The barrel organ has 125 principal pipes and a range from F-g₂. To correspondingly increase the sound output the tones are executed twice for the deepest up to eight times for the highest.

Open air instruments are exposed, to a certain extent, to the vagaries of temperature and the weather. For this reason the organ has had to be renovated on a number of occasions over the years. In 1725, as part of a repair to the mechanism, a new barrel with three musical pieces was planned, but it never came about. In 1753 the Salzburg court organ constructor, Rochus Egedacher, was responsible for a “complete renovation and expansion of this beautiful mechanism.” For the most part, re-using the original pipes, he rebuilt the instrument as it is known to us today, providing 12 musical pieces, one per month on a new barrel. The short musical pieces were intended to characterize the months of the year and were composed by the court musician, Leopold Mozart and Johan Ernst Ebelin. As a result of public demand, in 1959 Leopold Mozart published the twelve melodies in a piano version under the title *The Morning and The Evening*, a reference to the fact that the “horn” could be heard daily in the early morning and in the evening.

Pins set into the drum relate to the notes to be played; the iron axle of the drum is turned by means of a fly-wheel. This causes the metal pins to come into contact with tiny levers that are responsible for opening the pipe valves and consequently brings about the desired tone. For short notes a single pin is sufficient, where as a bridge is required for the long notes. Notches on the drum allow the mechanism to be disengaged and the musical piece to be changed.

Notations made by Gerhard Walterkirchen on the web site: <http://www.salzstier.com/musicartc>



Figure 5. Wohlgemuth barrel organ orchestration from Hannover, Germany. A rendition (pieces from Bach and Mozart) is played on two barrel organs with 37 and 43 playing notes.

coming party was held. Street organ grinders from all over Europe were hired to perform at the celebration (**Figure 5**). Also period dancers and entertainers were present to the delight of thousands of visitors (**Figure 6**). The Stier played in concert all through the day. Special tours were given to see the Stier close up, as well as castle tours to secret places in the castle never before seen by visitors.



Figure 6. Mr. A. Huber playing a Riemer barrel organ. Currently engaged as a clown at the Austrian Picard Circus, he puts on an amusing and entertaining show for the whole family.

This homecoming party really cemented the bond with the old Stier Barrel Organ and the newer barrel and book organs used in the streets with all of the visitors who attended from around the world.



Figure 7. Norbert Schermann demonstrating his Berlin-made Bacigaluupo, which is considered the “Stradivari” amongst barrel organs.



Figure 8. Gotthard Arnold (playing another Bagicalupo organ) and Pierrot. Mr. Arnold is a restorer of mechanical musical instruments at the Speyer and Sinsheim museums.

All photographs by the author unless otherwise noted.

To learn about the restoration of the Salzburg Stier please visit the web site at www.salzstier.com.

Ron is the owner of The Great Canadian Nickelodeon Co. and is presently involved in restoration projects in Budapest, Prague, Salzburg, Wurtzburg, as well as the USA and Canada.