

## The Austin Organ Restoration



The pipe organ at St. Paul's was built by the Austin Organ Company of Hartford, Connecticut in 1928. It was built as a four manual organ of 42 ranks of pipes (now 52 ranks). In the 1960's, the organ was rebuilt, which included some re-leathering of the organ plus the replacement of a lot of the pipework in the organ. It was an attempt to up-date the sound of the instrument. Also, some ranks of pipes were moved from one location to another.

In this rebuild of 2009, the organ was completely rebuilt mechanically. The organ console which had performed for 80 years was worn out. Due to the need to maintain the same location and a small footprint, the old console woodwork was retained and refinished. The console received new keyboards which have bone natural keytops with ebony sharps. The pedalboard was rebuilt and the bench was made adjustable. The "guts" of the console are also completely new, with solid-state coupler and keying systems as well as a 128 memory level combination action.

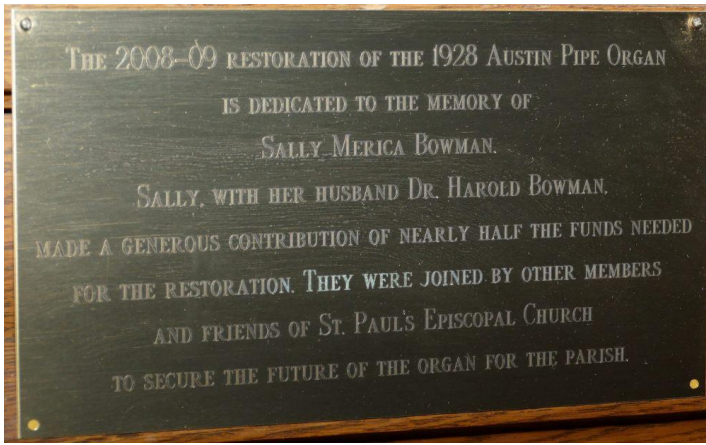
The windchests and organ action were all restored, including re-leathering, re-gasketing and re-wiring. The organ was also cleaned during this process, which includes vacuuming and washing all woodwork, interior parts and pipes. The chimes were rebuilt. Floors were painted. The façade pipes which one sees in the church were also cleaned and repainted gold.

Before the work began, it was known that there were originally two more openings into the organ chamber area which had been plastered up when the Austin organ was installed in 1928. The organ always spoke through the main openings behind the façade pipes which face the chancel. We knew that opening up the chamber to let sound directly into the nave would give the organ a less muffled sound and more presence and dimension in the room. Volunteers removed the pipes from the organ in preparation for cleaning and rebuilding. Removal of the plaster in the existing arches began. As the plaster was chipped away, it was discovered that there were ornamental fretwork grills hidden behind the plaster. With great care, the wooden fretwork grills were removed and restored to their original look and now are visible as they haven't been since 1928. A set of movable shutters called "swell shades" were built and installed behind the left grill since the chancel opening on this side also has swell shades. These shades open and close not unlike Venetian blinds to increase and decrease the volume of sound at the organists command. In order to retain the expression in the choir chamber when the arch was opened, a new wall was built in the choir chamber to maintain the integrity of the expression shades between the choir division and the great division.



The opening of the arches on both great/choir and the swell have greatly improved the sound of the instrument.

In addition to the mechanical rebuilding, the other focus was to improve the tonal aspect of the organ.



The original tonal concept was that of an orchestral organ. At the turn of the 20th century, it was the fad that an organ should imitate the orchestra. It was the original synthesizer. The theatre organ of the 1920's was probably the ultimate in orchestral organs. By mid century there was a huge movement in the organ world to embrace previous, more moderate organ building styles with a strong influence toward the organs of the Baroque (1600-1750) period. Thus, in the 1960's when this organ was rebuilt, many of the old pipes were removed and new ones took their place. Some of the blending between the old and new was not as seamless

as it might have been and the tonal concepts were not thought out as well as one would have liked. In 1980, more work was done to the organ by the Reuter Company, with the installation of the exposed Gallery division and horizontal Trumpet-en-Chamade. The sound of this new division was made with a very bright, aggressive neo-Baroque sound with no sympathy for the rest of the organ. Our goal was to make the 1928, the 1960 and the 1980 parts of the organ sound like one cohesive instrument.

During these earlier rebuilds, some desirable pipes have been lost. There was once a 16' Open Wood in the pedal which would have provided a wonderful deep bass. It was removed to make way for an 8' Diapason which was really the original Swell Diapason. There was also an 8' French Horn in the Choir division which was packed up and stored in the basement of the church for 50 years. It has been restored and revoiced and is now back in the organ. The Choir division also had a percussion instrument called a harp or celesta; metal bars struck by felt mallets. It was removed from the organ, probably because it needed restoration and was out of fashion.

The salient elements to this most recent attempt to improve the sound of this organ include:

Improve the Great principal chorus. The organ originally had a First and Second Open Diapason. The First was removed in 1960. The Second was borrowed from the 16 Double Open Diapason which was a very small sound for an organ of this size. It was therefore decided to make the 4' Octave the new 8' Diapason with 12 new pipes added to the bass. A new 4' Principal of 61 pipes was then made along with a new windchest. The 2 2/3 Twelfth, 2' Fifteenth were revoiced to all work together. The III Mixture had a break added and was revoiced. The Great flutes 8' and 4', which are from 1928, were given a little more volume and bloom to create melodic line.

The Choir division was altered a lot in 1960. The 8' Flute and Flute Celeste were replaced with a new 8' Gemshorn and Gemshorn Celeste. The 8' French Horn was removed and a II Mixture (really a II Sesquialtera) and a 1' Sifflote were installed in its place. The 4' Open Flute was replaced with a 4' metal Nachthorn (stopped) and a 2 2/3 Nazard was added. The 16 Dulciana, 8 Dulciana (independent from the 16') 8' Unda Maris, 8 Concert Flute and 8' Clarinet were original 1928. An 8' Principal was also removed. The current changes are that the original 8' Concert Flute was moved to the Gallery and the stopped 8' Fern Flute was moved into the Choir. This choice was made because the 1980 Gallery addition contains a stopped flute and having two stopped flutes in the Gallery is redundant. The Concert Flute in the Gallery gives better foundation. The 4' Nachthorn which was really a metal Bourdon was moved to the Swell to replace the 2 2/3 Nazard pipes which



were of poor quality. A rank of 2 2/3 Nazard pipes, installed in 1960 in the Choir, were moved to play as the 4' Nachthorn. These pipes are of Rohrflute construction. As a result, the Choir flutes are 8' Fern Flute (basically a Gedeckt) and 4' Nachthorn (really a Rohrflute). The Swell 8' Geigen pipes which were original in the Choir but moved to the Swell in 1960 have been moved back to the Choir as a 4' Principal. It was not of proper scale for the Swell anyway. The Choir was then revoiced and tonally finished to work together and with the rest of the organ.

The Swell division had a new 8' Principal installed of larger scale to work with the existing 4' Octave and 2' and Mixture which were revoiced stronger. The Mixture had a break removed in the treble. The Flutes 8' and 4' were revoiced with more color. Strings were brought up a little. The 2 2/3 Nazard is from the 4' Choir Nachthorn pipes.

The Gallery division (1980 portion) was all softened down and in particular, the upperwork. The enclosed portion (3 stops from 1928) was loudened. Also in the Gallery is the French Horn. The Trumpet-en-Chamade was revoiced so as to smooth out and soften the bass and let the treble ascend.

The pedal division, which was revoiced, consists of a 32/16/8/4 Bourdon unit, a 16' Open Diapason (Gr) 8/4 Octave unit, 16/8 Trombone unit, 16/8 Gallery Bourdon unit and the 16' Waldhorn (sw). This remains largely unaltered.

All reeds in the organ were cleaned, repaired and revoiced. Tonal finishing was done by Jonathan Tuuk and Jim Lauck.

