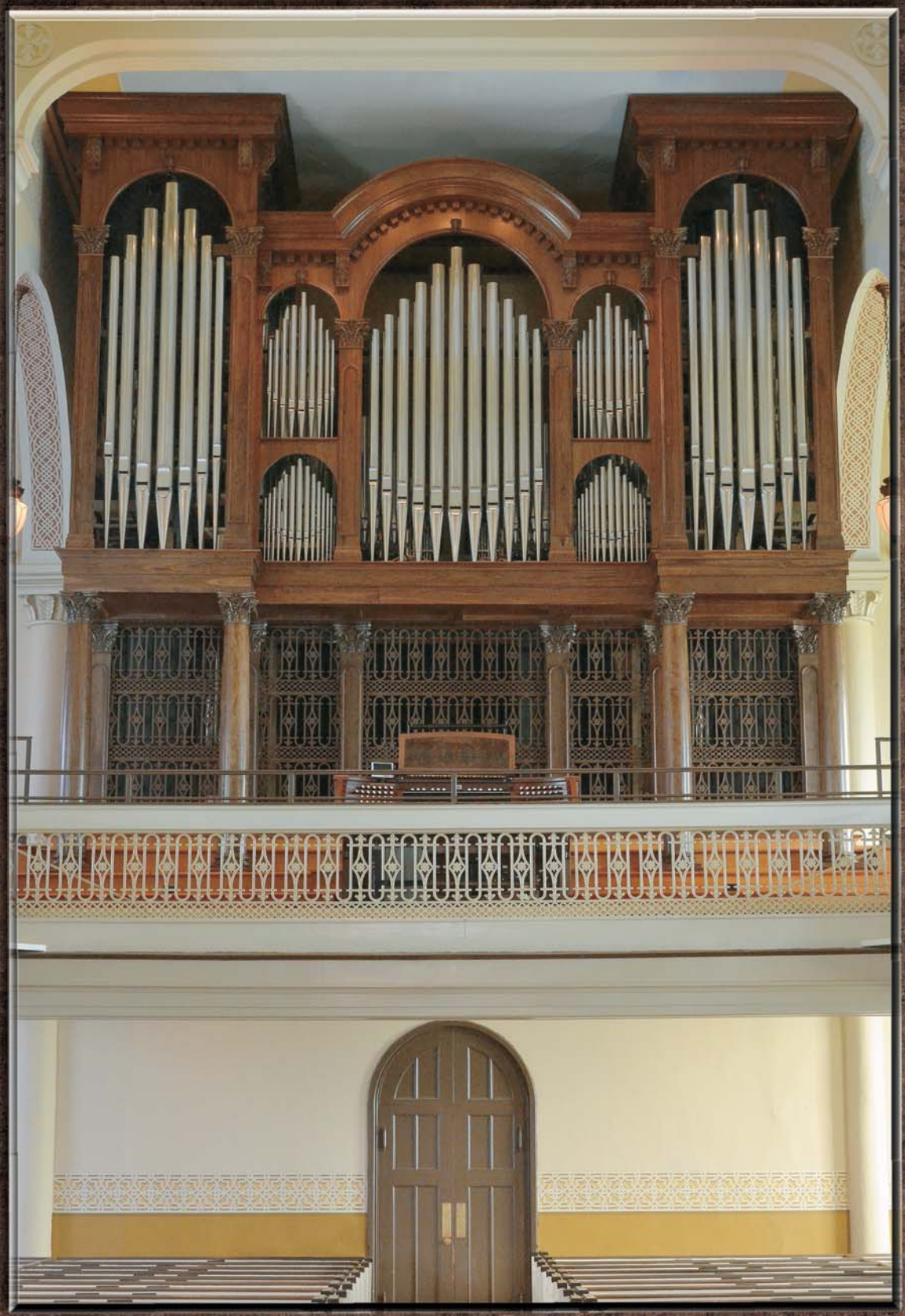
The American Organist

October 2011



COVER FEATURE
ST. GEORGE'S EPISCOPAL CHURCH
FREDERICKSURG, VIRGINIA
PARSONS PIPE ORGAN BUILDERS

Balcony View

From the Builder

The current building of St. George's Episcopal Church was constructed in 1849 in the Italianate style fashionable at the time. The tower has been a city landmark ever since and can be seen in photographs of the battle of Fredericksburg in December of 1862. The building originally had only a rear gallery. Side galleries were added after a fire in 1854. In 2002 St. George's created a Nave Renovation Task Force, to work with an architect and recommend how the nave should be restored and enhanced for worship. A new organ became part of this project, and a contract was signed with Parsons in 2007.

In approaching the organ case design for this historic church, the obvious choice was to create an instrument that would complement the beautifully restored church sanctuary. The design of the case was a collaborative effort between Parsons Pipe Organ Builders, Mr. Jim Wollen, a preservation architect from the Baltimore area, and Dan Cole of PipeShader. As a result, the organ façade is also designed in the Italianate style, and many details of the case mimic the architectural details found throughout the room. In our research, we found that the original iron grill pattern used for the balcony railing is still being cast. This was purchased to be used in place of traditional raised panel casework below the entire impost, as the means of allowing tonal egress for the bass notes of the Pedal division.

In utilizing the services of PipeShader we were able to provide the church with a poster-sized computer rendering of the organ just as it would look once completed and in the surrounding church environment. This provides a means for the organ committee to engage the congregation in the project and build upon the anticipation and excitement of the new instrument.

Working with this organ committee was a pleasure. Director of Music Ministries, John Vreeland, used his extensive knowledge of the organ to educate his committee on the various aspects of design and placement. One of many difficult engineering challenges faced by the church's Project Manager, Earl Baughman, was the need to remove the existing rear balcony structure, design a steel frame that would hold the 30,000 pound organ and then reconstruct the balcony to match the original; all while providing our design team with very specific measurements for use in our CAD design.

The stop list is traditional in design. Our goal is to design a worship instrument having a wide range of tone and volume to support a soloist or full congregation. The 2,667 pipes are controlled from three keyboards and pedalboard. The wood pipes are constructed of clear pine or poplar; the facades are of polished 75% tin. Interior pipes are of combinations of tin and lead ranging from 12.5% to 75% tin.

The manual chests are of slider and tone channel construction. The Great is located in the center behind the impost. It is flanked on both sides by the Positive at the same level, with the Pedal located above. The Swell is located behind the Great in the tower. While the 2 foot thick masonry tower side walls offered a suitable reflective surface, a new, dense rear wall and ceiling were constructed to keep the Swell enclosure as shallow as possible and effectively project sound into

the room. The 2¼" thick Swell shades are made of solid maple and are mechanically controlled to provide a wide range of expression.

The blower and static reservoir are located in the tower behind the new back wall of the Swell division. Two large wedge bellows, located under the Swell, supply wind pressure to the majority of the organ. One bellows supplies the Great and Positive with 3.4" wind pressure, while the second supplies the Swell and Pedal basses with 4.0". This type of wind regulator system gives a certain life to the music by allowing gentle fluctuations in pressure as it reacts to the changing requirements in wind consumption as more pipes are played. Wind stabilizers, located throughout the organ, can be disengaged to provide more flexible wind for early music.

One of the major challenges we faced in this project was designing a responsive key action for a detached console that is located four steps lower than the rest of the organ in the gallery. Custom, laser-cut squares were made to allow the trackers to travel at a 15 degree angle uphill beneath the balcony steps. The steel frame of the organ was designed by engineer John Seest, and is used to reduce the large mass required for a totally wood structure and to stabilize movement of the organ components relative to one another. The use of carbon fiber and other components that offered reduced mass and friction and numerous ratio adjustments, produced a key action that is a delight to play.

Three manual walnut console with wenge inlay

The console exterior is of walnut; the interior is of bloodwood with accents of wenge wood. The music rack is of burled walnut with a wenge inlay. The manual keys are of polished bone and ebony; the Pedals are maple with blackwood capped sharps. The stop terraces gently curve to help keep all controls in easy reach and view of the organist. The console incorporates a state-of-the-art, digital controller which provides 200 levels of combination action memory.

This organ required several months to design and subsequently 15 months to build; a total of 16,000 hours. By erecting and testing the complete organ at our workshop, the unloading, hoisting and installation of the main components and casework, could be completed between Sunday services, so as to minimize disruption of church activities in the Sanctuary. When the day came for the organ to be set up in the church and tonal regulation to begin, we were extended the most warm and welcome working environment any organbuilder could hope for. The church graciously provided gourmet meals and hospitality, along with many eager hands to unload the tractor-trailer filled with organ parts and to carry components up into the balcony. Eight weeks later, the organ was used for the first time in worship. While pre-voicing is completed at our workshop by using sample pipes voiced in the church acoustic, the final product is painstakingly completed once the organ is installed in the church.

This three-manual organ is the culmination of a uniquely close union of musical and engineering skills. It is our goal to combine tonal versatility and quality workmanship to ensure that this organ provides inspiration for this congregation for many generations to come. Listening to performers like Ken Cowen at the dedication of the organ, preclude the need for words as to why we continue in this labor of love; it is an honor to do what we do. This instrument is now placed in the hands of those who will use it to worship and glorify the Lord.

—Richard Parsons, President

Tony Martino leathering wedge bellows

From the Tonal Director

When first asked to visit St. George's Episcopal Church, Fredericksburg, Virginia, we were met with an open-minded organ committee. These fine people were searching for solutions to a broad

and diverse music program that craved a more unified location for its musicians and instruments. The organ we heard, though possessing certain interesting tonal elements, was dispersed throughout the building, resulting in a less than cohesive tonal impact for the congregation and choirs. Vocal choirs, bell choir, string ensembles, and jazz group were also allocated space wherever possible in the room. It was clear that while these groups could "travel" around the space on special occasions, they should have one, centralized location from which to offer their varied musical settings.

Hence the decision to re-locate the organ back to where it once stood, in the rear gallery. Little is known of the church's original Henry Erben instrument (1875); however, church records show it was located in the rear gallery of the sanctuary's balcony — a logical placement for a new instrument would be in this same, historic location.

We always welcome the opportunity to design and build a mechanical-action instrument, as they often offer "limitations" that allow us to focus on quality and not just quantity. This new instrument, though not decadent in size, offers all of the tonal elements that St. George's needs from an organ to support a vibrant music program.

The principals are bold and blending, the flutes are varied and colorful, the strings are evocative and rich, and the reeds are powerful and distinctive. We scaled the organ quite generously, as the room is large and not without challenges. With a full, wrap-around balcony, it was important to scale carefully, and cut the pipes higher so that sound could penetrate under the balcony and still be palatable up close. The expressive Swell is decidedly darker and more "English" in character. The Great and Positive possess colors that are equally at home in early or romantic literature. The Pedal easily adds the perfect bass to any manual selection and is powerful when necessary.

Rarely, as artists, do we take the time to step back and enjoy the fruits of our labors. The entire Parsons crew were treated to one of the finest organ concerts I, personally, have ever encountered at the Dedication Recital May 6th, 2011. The organ was masterfully played by recitalist Ken Cowan. I hope that the congregation of St. George's enjoys this instrument each week as much as we did for that one special evening.

—Duane Prill

Tonal Director, Duane Prill, making final tonal adjustments

From the Director of Music Ministries

St. George's is blessed with both a historic building and a rich musical heritage. The newly renovated Romanesque sanctuary features Tiffany windows, beautiful woodwork, decorative stenciled painting and excellent acoustics. In choosing a builder for our new pipe organ, the organ committee was concerned not only with the musical elements of the project, but also how the new organ case would complement the existing historic architecture. Our new three-manual Parsons mechanical action organ has exceeded all of our expectations. Its ample tonal resources can support introspective preludes, vibrant congregational singing, choral accompanying and concert performances, while the design and details of the walnut case and console blend flawlessly with the beautiful architecture of our sanctuary. We at St. George's are very proud of our new instrument, and offer our heartfelt thanks to the staff of Parsons Pipe Organ Builders for their hard work and dedication to their craft.

—John H. Vreeland

From the Rector

Our wonderful new instrument from Parsons is just what we were hoping for, and more, for leading and enhancing our worship. The entire Parsons family and crew were a joy to work with, both professionally and personally.

—The Rev. James C. Dannals

Matt Parsons racking Swell Bassoon & String

Pedal façade installation

ST. GEORGE'S EPISCOPAL CHURCH
FREDERICKSBURG, VIRGINIA
PARSONS PIPE ORGAN BUILDERS
CANANDAIGUA, NEW YORK
OPUS 29/2010
THREE MANUALS, 44 RANKS, 36 STOPS

GREAT (I)

16 Praestant
8 Principal
8 Harmonic Flute
8 Chimney Flute (prep.)
8 Gamba
4 Octave
4 Spire Flute
2⅔ Twelfth
2 Super Octave
1⅗ Tierce (prep.)
Mixture IV
8 Trumpet
4 Clarion (prep.)
8 Festival Trumpet (Pos.)
Chimes
Swell to Great
Positive to Great

SWELL (III) (expressive)

16 Lieblich Gedeckt
8 Geigen Principal
8 Bourdon
8 Viole de Gambe (prep.)
8 Voix céleste
4 Principal
4 Harmonic Flute
2 Doublette
Plein Jeu IV
16 Bassoon
8 Trumpet
8 Oboe
4 Clarion (prep.)

POSITIVE (III)

8 Viola
8 Gedeckt
8 Spitz Flute
8 Flute Celeste (prep.)
4 Principal
4 Koppel Flute
2⅔ Nasard
2 Block Flute
1⅗ Tierce
1⅓ Quint (prep.)
Scharff III
8 Cromorne
8 Festival Trumpet
4 Festival Trumpet (ext.)
Swell to Positive

ACCESSORIES

Tremulant: Great and Positive
Tremulant: Swell
Flexible Wind
Cymbelstern (prep.)
Nightingale (prep.)

PEDAL

32 Contra Bourdon (digital ext.)
16 Open Wood
16 Praestant (Gt.)
16 Bourdon
16 Lieblich Gedeckt (Sw.)
8 Octave
8 Open Flute (ext.)
8 Bourdon (ext.)
8 Gedeckt (Sw.)
4 Choral Bass (ext.)
4 Gedeckt (Sw.)
Mixture IV (prep.)
32 Contra Bombarde (prep.)
16 Posaune
16 Bassoon (Sw.)
8 Trumpet (ext.)
4 Clarion (ext.)
Great to Pedal
Swell to Pedal
Positive to Pedal

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