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Brief History of the Organs of the Cathedral Basilica of SS. Peter and Paul *Philadelphia, Pennsylvania*

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THE CATHEDRAL OF ST. PETER AND ST. PAUL,¹ AS IT WAS referred to in contemporary sources, was built in the midnineteenth century, during a period of strife between Roman Catholics and Protestants in Philadelphia. Modeled reportedly after the Lombard church in Rome, San Carlo al Corso,² the cornerstone for the new building was laid September 6, 1846, and after several delays in construction,³ the building was dedicated on November 20, 1864. At the time of its consecration it was reported in contemporary newspaper reports to be "now the largest church on [sic] the Western hemisphere with the exception of one grand temple in Mexico."4 When construction began in 1846 Roman Catholics were a minority in Philadelphia, and the "Know-Nothing" riots did not provide a hospitable environment for building such a grand new edifice in the face of anti-Catholic sentiment. The fact that the cathedral was designed with no windows at street level is a reminder of that environment.5 In 1864, when the cathedral was completed and the opening ceremonies were announced, the front page of the Philadelphia Inquirer carried news of "Sherman's New Movement" with a map entitled "How he Outgenerals Hood: Line showing his Route to Charleston and Savannah."6 The Civil War was in high gear and for some time the papers carried daily reports of battles and deaths, reports of activities of the "Rebel" government, and "statements" and news from Washington. Economics were certainly not in the best state. It was not an opportune time to celebrate opening the largest church in the United States of America! However, it was clearly a major event; the Announcement of the Opening of the Cathedral, "By order of the Committee of Arrangements," carried eight points of order and instruction. "All persons seeking admission to the Cathedral for the Dedication Services must be provided with Tickets."7 The tickets were color-coded in at least three groups: red and blue tickets entitled holders to seats in temporary pews, and green ticket holders were to line up outside and follow the procession into the new church. Special tickets were issued to re-

I Built 1846–1864, Napolean LeBrun (1821–1901), architect. Known especially for ecclesiastical buildings, LeBrun's greatest work in Philadelphia is considered to be the cathedral. In collaboration with Gustav Runge, he designed the Philadelphia Academy of Music (1855), home to the Philadelphia orchestra for over one hundred years, and still serving magnificently as an opera house. Following the Civil War, LeBrun moved his family and firm to New York City.

Montgomery Schuyler, "The Work of N. Le Brun & Sons" Architectural 2 Record 27, no. 5 (May 1910): 365-381. Historical architectural opinion differs. In a report on the career of Napolean LeBrun (and the firm bearing his and his sons' names), upon the January 1910 opening of the Metropolitan Life Insurance Company tower in New York City, the author reports how unusual it was to honor and welcome the architects at the celebrated opening of a grand new building. He takes the opportunity to expound upon the accomplishments of LeBrun [and his sons]. Describing the cathedral in Philadelphia in an interesting historical perspective some forty-six years after its completion, Schuyler waxes poetic about the imposing edifice: "... the Renaissance dome of the Philadelphia cathedral stood complete and challenged the wondering admiration of cis-Atlantic [i.e., this side of the Atlantic] mankind. In fact, it was worthy to excite that emotion. There was nothing in sacred architecture, if one may apply the adjective, to the very mundane pomps and vanities of the Italian Renaissance, on this side of the ocean, to be compared with it...with...its interior height of some hundred and fifty feet, it worthily exemplified the school of Bramante...though, in fact, it seems to have been a compilation from the works of other artists than Bramante. The Madonna di Carignano, at Genoa, may have furnished a suggestion...and San Andrea at Mantua."

³ Bishop Francis Kendrick announced the construction of the cathedral in a pastoral letter, June 28, 1846 with a "pay as you go" philosophy. St. John Neumann (then Bishop of Philadelphia) spurred on the construction in his pastoral letter of May 4, 1852, complaining of slow progress. Finally, Bishop James Wood completed the project by reducing some project costs (see note 13), and financing the balance of the funds needed for completion of the cathedral.

⁴ The Philadelphia Inquirer, Saturday, November 19, 1864, 3.

⁵ The original design included light-colored stained glass windows only in the clerestory and the dome, some seventy-five to one hundred feet above street level. Lower windows were added to the new sanctuary apse and baptistery during the 1955–57 renovation and expansion.

⁶ The Philadelphia Inquirer, Monday, November 21, 1864, 1.

⁷ The Philadelphia Inquirer, Saturday, November 19, 1864, 8.



porters of the press and to the choir, with all groups being given specific instructions as to where to assemble and which gate of Logan Square to enter. Since no organ had yet been installed, the Mass and ceremonies were accompanied by a thirty-five-piece orchestra with a choir made up of members from the various Catholic choirs in the city. The day following the opening, coincidently placed between sewing machine ads for the "Ladies' Friend—Florence" and the "Empire," Mr. William Boell was advertising a "fine colored lithographic view of the great Cathedral" available for sale.⁸ Modern-day Ebayers seem to sport no advantage over the nineteenth-century entrepreneurs.

The magnificent new building of vast proportions was not entirely finished inside; much decoration remained to be completed. The space offered a challenge to the organbuilders of the day, and it appears that the diocese had a desire to acquire an instrument capable of filling the very resonant space. The publicity and pomp surrounding the opening of the cathedral suggests that the bishop intended that no appointment to the building was anything less than stellar, including the organ. The first pipe organ known to have been installed in **Opposite**: Artist rendering of the cathedral exterior as originally proposed. Lithograph by Edward Schnabel from a drawing by John Notman. Printed by P.S. Duval, Philadelphia, ca. 1850.

Left: Cathedral under construction. View looking west: ceiling vault and west wall before installation of organ loft, ca. 1860. The man facing the photographer appears to be the architect, Napolean LeBrun. Photo by Robert Newell. Courtesy of the Library Company of Philadelphia.

the cathedral was built by John C.B. Standbridge in 1868 at a cost of cost of \$10,000. The organ is known only from historical sources: including a pencil sketch of the case made by the Austin Organ Co. salesman⁹ in 1920, contemporary newspaper reports of the opening of the organ, all supported by numerous undocumented verbal accounts of organ enthusiasts familiar with the Philadelphia area.

Standbridge was, among other things, a musician, organist, church music scholar, and organbuilder. His career as an organbuilder was relatively short. He was born in Birmingham England ca. 1800, and emigrated with his family to America in 1801.¹⁰ Eventually he graduated from the University of Pennsylvania with a degree in medicine. After spending some time working with his father in "the business of cotton-spinning" in Philadelphia and as a wholesale druggist, he began building organs in 1840 and quickly gained a reputation for building exceptional pipe organs in prominent churches in Philadelphia and the surrounding area. No Standbridge organs are known to remain extant fully intact.¹¹ Standbridge also built organs in St. Clement's Episcopal Church, Arch Street United Methodist Church, Arch Street Presbyterian Church and St. Patrick's Roman Catholic

⁸ The Philadelphia Inquirer, Monday, November 21, 1864, 5.

⁹ Most likely it was Herbert Brown, an influential salesman for the company, based in New York, who sold a great number of instruments in the nineteen-teens and -twenties. Handwritten notes on a letter dated September 22, 1920, to Mr. Brown from Percival Stark, chief draftsman of Austin Organ Company, indicate that Stark visited the cathedral and met with Mr. Brown on September 28 to "look the situation over." Mr. Stark had expressed concern at "not understanding the conditions there from DeBaun's drawings." James DeBaun of Philadelphia was in communication with the electric company authorities concerning voltage for blowers at several Philadelphia area organ blower installations, and it is not likely he produced the drawings in the Austin files.

¹⁰ Historically his birth year has been reported as 1801. "The birth year is incorrect however. According to the ship's manifest he came over as an infant and that was in 1801. I suspect because it is mentioned he was born in January...." Kay Standbridge, great-great granddaughter of the organbuilder, personal communication to the author, October 19, 2005.

II However, at the time of this writing, two divisions of a three-manual organ are known by the author to be extant, essentially unchanged, having been traded to St. Paul's Episcopal Church, Troy, Pennsylvania, by the Hook & Hastings Co. in the 1890s. What appear to have been the Swell and Choir divisions were rearranged as Great and Swell in a new case, but remain on the original ca. 1860 Standbridge chassis. Hook & Hastings built a straight façade and added a Pedal Bourdon and Pedal action, installing the organ in a three-walled chamber on the north side of the church.





Church, all in center city Philadelphia. Standbridge died on December 15, 1871.¹²

The case enclosing the organ was likely to have been built by Edwin Forest Durang, one of the cathedral architects and builders. According to some reports, the freestanding case was made of cherry (although, in fact, it is more likely that it was made of local walnut) and virtually filled the original organ gallery, which was supported by pilasters, and was smaller than the current gallery configuration, now atop an enclosed narthex. The simple case was tri-part in form, and comprised of three rectangular sections (probably the Great 16' Principal pipes supplemented with non-speaking pipes, as is suggested by the scale and height of the case pipes shown in a pencil sketch). The center section curved outward, and was capped by a triangular pediment with a (gilded?) cross (mounted on a finial?), essentially mirroring the shape and appearance of the west-end exterior of the cathedral.13

The following description of the organ was published in the *Philadelphia Inquirer* on the day following the official opening:

THE NEW ORGAN AT THE CATHEDRAL — Last night the splendid new organ at the Cathedral was formally opened in the presence of a large audience. Bishop Wood was seated on his Episcopal throne, and a large number of the Very Reverend and Reverend Clergy were present in the sanctuary.

The programme chosen by the several organists was one well adapted to display the many and brilliant beauties of the instrument, which, for quality of tone and superior workmanship, will rank as one of the best in the city.

The style of architecture of the organ is such as to correspond with that of the Cathedral, and the external appearance such as most favorably impresses the beholder. It has four manuals, each from CC to A, 58 keys and pedals, CCC to E, 29 keys.

The case is about 31 feet wide, 16 feet deep, and from the floor of the organ gallery to the top of the cross, 41 feet high. The largest pipe in front is 14½ inches in diameter, and nearly 19 feet long. In the whole organ there is [sic] 3155 speaking pipes, with room for 58 more in the solo organ.

¹² *The Press*, Philadelphia, December 18, 1871, "Obituary, John C.B. Standbridge, Esq." His obituary indicates the incorrect birth date as 1801. 13 This modified design is predominantly by John Notman (1810–1865), an English-born Philadelphia architect. The original design by Napolean LeBrun called for two towers, one dedicated to St. Peter, the other to St. Paul, at the corners of the west-end façade, as well as a dome raised on a ring of columns. Bishop Wood, as part of a concerted effort to complete the building, requested a simplified west end to save money. LeBrun would not alter his design, and was dismissed. John Notman was hired to design the simplified west exterior, but was dismissed by 1857 for inflating of labor and delivery costs. LeBrun was brought back to complete the project ca. 1860 and after the west end was raised. LeBrun later wrote, "I was engaged to resume charge of the work, and carried it to completion in 1864, entirely according to my own designs and original plan...." [The American Architect and Building News, Feb 3, 1877; 2, 58; APS Online pg. 37].



These are subdivided as follows:—Great organ, 1159; swell, 812; choir, 749; solo, 290, and pedal, 145. There are 50 stops, of which 39 are metal, and 11 wood, with one tremulant. These may be specified in the order of their location in the several organs, as follows:—

Great Organ—Double open diapason, open ditto [sic], violin, dulcissima, Melodia, stopped diapason, principal, octave violin, traverse flute, twelfth, fifteenth, nineteenth, sesquialtera, mixture, trumpet and octave trumpet.

Swell Organ—Bourdon, open diapason, kalaphane [sic], stopped diapason, principal flute, vox humana, twelfth, fifteenth, seventeenth, sesquialtera, (two ranks) oboe, trumpet and tremulant.

Choir Organ—Bourdon, open diapason, viol d'amor, dulciana, stopped diapason, principal chimney flute [sic], twelfth, fifteenth, seventeenth, sesquialtera and clarionet.

Solo Organ—Stopped diapason, orchestral oboe and corno, trumpet, clarionet and bassoon, and harmonic flute.

Pedal Organ—Double open diapason, double dulciana, open diapason, violoncello and trombone.

The couplers are as follows:—Great and swell unison, great and solo unison, choir to great sub-octaves, swell to choir unison, pedals and great, and pedals and choir. There are three composition pedals for the great organ, viz., diapason and principal, positive organ and full organ, with two shifting movements for pedal double open diapason. The reed stops are especially fine, and among other of the stops shown forth to great advantage last night were the vox humana, bassoon, chimney flute, bourdon, kalophane, [sic] violoncello and trombone.

The pedals are especially good, and in the general quality of tone unexceptionable, although it remains to be yet fully demonstrated whether the instrument possesses sufficient volume and power for the wants of the spacious Cathedral.

The selections chosen last night were from the works of Kreuzer, Bach, Zeuner, Mozart, Rossini, Handel, Nares and Meyerbeer, and their execution reflected credit upon the ability of the several organists who performed upon the in-

Above: Detail of cathedral dome interior, "Assumption of the Virgin," oil on canvas by Constantino Brumidi. The cathedral dome and pendentives (oil on canvas), transepts, transept walls and original east wall (frescoes) were all painted by Brumidi, the famed artist of the Capitol Building in Washington, D.C. Photo by Paul R. Marchesano, 2006.

Opposite Above: Interior nave view, 1910, from Schuyler, "The Work of N. Le Brun & Sons" (see footnote 2).

Opposite Below: 1920 sketch of original Standbridge case, assumed to be by Herbert Brown. Courtesy Austin Organs, Inc.

G REAT MUSICAL TREAT. OPENING OF THE NEW ORGAN, CATHEDRAL, LOGAN SQUARE.

This magnificent instrument, built by Mr. J.C.B. Standbridge, will be opened on the 18th instant, at 8 o'clock, under the auspices of the following distinguished Professors:

Programme

Part I.

1. Grand March Kreutzer. Mr. M.H. Cross

2. Prelude and Fugue, in A minor.....Bach. Mr. H.G. THUNDER

4. Andante and Variations from the Quintette in E flat......Mozart. MR. H.A. CLARKE

5. Fugue, in E minorBach. Mr. David Wood

6. Overture to "Stabat Mater"......Mercadante. Mr. H. G. Thunder

Part II.

1. Fantasie and Variations Mr. M.H. Cross

2. Air and Variations...... Handel. MR. DAVID WOOD

3. Prelude and Fugue, in E flat.....Dr. Nares. Mr. H.A. Clarke

4. Overture, William Tell......Rossini. Mr. David Wood

5. "Torchlight Dance" in B flat Meyerbeer. MR. M.H. Cross strument, viz.:—Henry G. Thunder, David Wood, Hugh A. Clarke, Michael Cross and William A. Newland.

The combinations of an appropriate character in the several departments of the structure, the superior manual and pedal performance, the presentation of choice individual stops, and the general portrayal of the beauties of the instrument, was, in every respect, artistic and praiseworthy. The organ is, in a word, a most superior instrument, and will doubtless prove of much service and benefit at the Cathedral.¹⁴

The *Catholic Standard* published an advertisement of the dedication with the headline, "Great Musical Treat." At a time when post-Civil War economics were impacting the economy, the advertised fact that "Tickets of Admission One Dollar" and that "persons desiring to secure a Reserved Pew, can do so on payment of Five Dollars" seem to indicate just how extraordinary the event must have been.¹⁵

In 1920, Herbert Brown, a New-York-based, highly successful sales representative for the Austin Organ Company of Hartford, Connecticut, sold a new organ to the cathedral for a cost of \$30,000. The contract for Austin Organ Opus 939four manuals and pedal, consisting of seventy-two stops, fifty-six pipe ranks and 3,672 pipes-contained some interesting features. In addition to the pipe specifications and stops, the Choir organ contained a forty-nine-note Harp, and the Echo organ contained a twenty-note set of "Cathedral Chimes" (made of bronze), both of which were installed on a "free trial" basis for six months. The Echo/Antiphonal Organ was installed in the South Transept chamber above the Sacred Heart Altar. Should the cathedral decide that the two stops were not satisfactory or desired, they would be removed, and a credit of \$3000 would be issued to the church. In addition, the contract was to be paid in thirds, with no down payment: one-third at the completion of the installation, one-third one year from completion, and one third paid two years from the date of completion. The contract also specifies in a hand-

15 The Catholic Standard, November 21, 1868, 5.



¹⁴ The Philadelphia Inquirer, Thursday, November 18, 1868, 2.

written addendum that the Austin Organ Co. would provide all necessary wiring and ductwork, which was usually provided by the church.¹⁶ The contract was signed by the rector of the cathedral, Rev. Daniel Gercke, and Herbert Brown for the Austin Organ Co. The witnesses may well have had some influence on the tonal design of the organ, for both were famous and influential organists at the time: Charles Courboin and William S. Thunder.¹⁷

Even before the expansion of the cathedral in the 1950s, it was a very large space to fill, and the Austin contract reflects this in several ways. A general note at the top of the specification instructs the voicers: "Voice powerful especially diapasons and flutes in middle and upper registers. Large auditorium."¹⁶ Austin used its common compound scaling of the period to increase scales of diapasons as they progressed toward the treble. This was done to ensure that the organ retained power in the upper registers and didn't "die off" in the large, resonant space. There are no specific contemporary reports of the reverberation in the cathedral, but the building as it currently exists has a reverberation time of approximately five seconds in warm weather and relative high humidity.¹⁸

The organ was a fine example of organbuilding at the height of the symphonic/concert organbuilding period, featuring numerous solo voices and strings. Most of the Great division was enclosed, and included a large-scale Harmonic Trumpet and a Diapason chorus through 2' Fifteenth, two 16' stops (Diapason and Tibia Clausa) and three 8' Diapasons. The Swell contained an independent four- to five-rank Mixture, a unified Oboe stop that played at 16', 8', and 4' pitches and, typically, a powerful and generously scaled Cornopean. The Choir featured a Clarinet and an English Horn. The en-

18 Reverberation measurements by the author.

tire Solo organ was on fifteen water column inches of wind pressure and even had two Tubas: a unified Harmonic Tuba playing at 16', 8', and 4' pitches, and a Tuba Magna 8' (all enclosed). The Pedal organ was, characteristically, highly unified, and contained a 32' Double Open Diapason (wooden, playing at 32' and 16' pitches) and independent 16' Open Wood Diapason, 16' Bourdon, and 16' Bombarde. Herbert Brown clearly thought highly of the job as well. In his handwritten notes for the contract, in addition to notes on pricing considerations, scaling, etc., he writes, "This is a wonderful, large, truly [sic] cathedral, the old organ case and front will remain as now.... Should make the finest organ in Philadelphia on account of the wonderful building and splendid acoustic. No commission. Our friend, Monsignor Murphy of Manyunk is responsible for AOCo. getting it." Cost figures indicate the job was also profitable for the Austin Organ Company-the organ cost \$19,366.80!

During 1955–57, renovations to the cathedral were undertaken, oddly bringing the design closer to LeBrun's original proposed plan, adding an ambulatory, and expanding the sanctuary fifty-four feet to the east. The main altar was replaced with a free-standing altar originally used *ad orientem*, but with adequate space for use *ad populum*, beneath a bronze baldachin, its interior being fitted with gold mosaic depicting a dove in blue and white and crowned with four ten-foot-tall angels of Italian marble atop each supporting pillar.¹⁹ At the same time, renovations were planned for the organ loft. These included an expansion to provide more room for the choir, which had been established since at least the 1920s. This also provided the opportunity to enclose the narthex and to manufacture and install large-scaled bronze doors, which replaced

¹⁹ In January 2007 a new tabernacle and reredos of Italian marble to match the altar were installed, commissioned by Justin Cardinal Rigali. The gilded tabernacle is centered in a niche in the cream-colored marble reredos, surrounded by miniature columns of black marble matching the treatment of the baldachin, and replacing a simple wooden frame with drapery. This latest addition indicates a sensitivity to the architectural integrity of the cathedral. With discussion beginning for repairs and restorative renovations, a positive outlook for the organ seems probable.



¹⁶ Original contract, Austin Organ Company records.

¹⁷ Courboin, who was organist for the John Wanamaker stores in New York and Philadelphia (and later organist of St. Patrick's Cathedral in New York for thirty years), went on to become an influential organ consultant, striving for years to create a model "cathedral organ" that culminated in his relationship with the George Kilgen & Sons company of St. Louis, and the famous organs built for St. Patrick's Cathedral in 1928–30.



Above: The 1957 Eggers organ case. Photo by Paul R. Marchesano, 2006.

Left: *Architect's drawing for the original organ loft, 1862. Courtesy of the Athanæum of Philadelphia.*

Right: Organ case and aisle. Photo by Paul R. Marchesano, 2006.

the original wooden doors. With the planned expansion of the loft and changes to the sanctuary, it was decided to rebuild the Austin organ. The traditional convenient excuse of "the organ had fallen into disrepair" was touted as the main reason the organ needed to be replaced. As part of the loft redesign it was decided to have a new case with the organ re-arranged.20 A spectacular new case was designed by the architect Otto Eggers, whose most notable projects were the Jefferson Monument, the Mellon Art Gallery, and the National Gallery of Art, all in Washington, D.C. The case design is French-inspired and incorporates the theme of angels crowning the architecture. The case was made famous in William H. Barnes's book "The Contemporary American Organ: Its Evolution, Design and Construction"21 as an example of the impressive accomplishments of (then-recent) American organbuilding. A contract was given to the Tellers Organ Company of Erie, Pennsylvania, on June 15, 1955 for \$39,000 to renovate the organ. The payment terms had changed with time as well: \$3,900 due upon signing of the contract, the balance due at completion. However, Tellers warranted the organ for a period of ten years, rather an extended warrantee for the time. The contract was signed by Herman J. Tellers and The Most Reverend John F. O'Hara, Archbishop of Philadelphia.²² The organ was voiced and finished by Charlie Berlis, Tellers Co. head flue voicer, who had trained under Anton Gottfried and was Gottfried's head flue voicer.23 Tellers discarded the 32' stops from the Austin (an all-too-common practice of the day).24 The original Austin Antiphonal Organ pipework was retained, as well as almost all of the pipework from the gallery organ. The "new" Tellers organ of four-manuals, about

21 William H. Barnes, *The Contemporary American Organ: Its Evolution, Design and Construction*, 8th ed. (Glen Rock, NJ: J. Fischer, 1964).

23 Letter to the author from Aaron Tellers, September 1, 2006.

ninety-nine stops, and 4,151 pipes was installed on time in the new case. The console was placed in the center of the loft facing the case. Popular legend held that the console was on a rotating platform, although the original contract does not reflect this feature. If it indeed had been fitted with a rotating platform, this may have been installed as an "extra" or installed later by a local concern. Regardless of legends, no record has been yet found to sustain the claim. Limited funds clearly kept intrusion of 1950s organbuilding philosophy to a minimum, and tonal changes were not as drastic as was typical of the period.

The Austin mechanism was discarded and new ventil chests built by Tellers were installed. Some minor reworking and rescaling of pipework occurred, with the addition of a Mixture V to the Great organ, as well as a Gemshorn and a Twelfth. However, the bulk of the original 1920 Austin organ remained tonally intact. New chests were clearly necessary with plans to rearrange the organ in its new wider, shallower footprint. Based on the author's experience with leather of the original period and much empirical data gathered over the past twenty years, it is not likely that the original leather had failed completely by that time, as the leather used in the organ industry in the late nineteen-teens and early-nineteentwenties was rather formidable and, in clean environments, often able to survive into the 1990s. The Spencer blower was likely installed in the original loft, since there is no other practical place it could have been installed within the building. In the new configuration it was installed in a closet-sized blower room at the south end of the case. Oral tradition had maligned both the Austin and the Tellers organs as dull and muddy, unusable for any organ repertoire, but the facts of the construction of these two instruments lead this author to conclude that these claims were exaggerated over time, and were influenced by the neo-baroque organ movement of the 1950s through the 1970s.25

The new Chapel of Our Lady of the Most Blessed Sacrament, which had been added to the north side of the cathedral in 1954,²⁶ was supplied with an organ under a separate contract from the Tellers Organ Company. A stock model, unified organ was provided for the chapel, which is larger than many churches, seating approximately 500 people. The fully enclosed chapel organ was placed at loft level in a small, unsealed concrete block chamber, speaking through a small grate into the south-side aisle of the chapel. The console was placed

²⁰ In fact, the Orgelbewegung and "American Classic" movements had been actively progressing for some fifteen to twenty years in America at that point, and the broad-scaled, symphonic style of the Austin organ was viewed as old-fashioned. Its tonal scheme was touted as unusable for organ repertoire or church music, choral or congregational, despite the fact that it had already served the cathedral well for thirty-five years. The excuse of an organ in poor condition was commonly employed in selling new instruments, or by organists who wanted the latest fad in organbuilding.

²² This was the first time the Archdiocese bore the cost of the organ. Henceforth, the organ would be financed more and more by funds from the Archdiocese rather than the cathedral parish.

²⁴ That they were too heavy and that there was no room for them in the expanded loft were among the most prominent reasons given for this practice.

²⁵ This philosophy was truly the apex of the "American Classic" organ design movement.

²⁶ The year 1954 was declared a Marian year, and impetus to complete the chapel within the year were successful. Breaking ground in January, the construction of the chapel was completed in time for dedication to the Blessed Virgin on the Feast of the Immaculate Conception, December 8, 1954. This also ensured that there was sufficient space available to use for parish masses while the major construction was underway in the cathedral proper.



traditionally at the center of the loft, facing a small rose window, and pews provided a place, presumably, for a choir. The six-rank, two manual and pedal instrument consists of a Diapason, Violin Diapason, Flute, Gamba, Dulciana and Trumpet, all placed on unit chests, playing at various pitches and manuals, making available thirty-one stops on the console quite a surprising throwback to earlier tonal design.

A roof leak in the chapel in the early 1990s caused a substantial flood, pouring thousands of gallons of water though the organ chamber, damaging the chests, leather, relays, and switches of the organ (the Spencer blower and switches were installed in a room in the ceiling above the organ chamber). Before a historic organ could be located to replace the damaged instrument, the rector of the cathedral contracted with their organ maintenance firm to releather the organ and relocate it into two chambers in the loft on either side of the rose window (built by the parish's handymen) at a cost of approximately \$28,000.

Right: Antiphonal organ façade. Photos by Paul R. Marchesano, 2006.

The cathedral was placed on the National Register of Historic Places on June 24, 1971. By the mid-1970s, it was apparently decided that the cathedral organ was inadequate for the requirements of organ or church music, and that it was again time to install a new organ, or to renovate and "modernize" the twenty-year-old Tellers instrument. Once again, the ever popular "decrepit condition" argument was applied: "The once magnificent organ had become a victim of neglect over the years and was in need of extensive repairs. [John] Cardinal Krol provided for a complete overhaul of the organ, and as a result, the tremendous instrument was restored to its position as one of the great organs of the country."27 In 1976 the 40th Eucharistic Congress was held in Philadelphia, and the following year John Nepomucene Neumann, having been declared "Blessed" in 1963, was canonized as a Saint in the Roman Catholic Church. Pope Paul VI raised the cathedral to a minor basilica on September 27, 1976. These major events likely provided impetus to find money for the project. The new "neo-baroque" instrument promised to provide clarity in contrapuntal music and the "ability to play any repertoire written for the organ" from any period, with particular emphasis on German and French Baroque and Classical music. The younger neo-baroque movement, accelerated by the tracker action revival of the 1960s, had now reached its zenith, although old, electropneumatic chests apparently sufficed when it was considered not feasible to build a new tracker-action organ. It is surprising to see how short-lived the Tellers instrument was, only twenty years old at that point. Partial blame might be laid on the Tellers console, which reportedly did not function well by that time. The outdated ventil chest design that Tellers embraced was possibly problematic as well, although there is no documentation to support these claims, which may well have been exaggerated reports to help sell the cathedral a new instrument. Neither feature was as durable or reliable, or as easy to maintain and repair, as was the Austin Universal Air Chest mechanism that Tellers had discarded. Another reasonable assumption might be poor condition of the leather, causing numerous dead notes. By the 1950s, leather used in the organ industry had fallen to a much lower quality than that of earlier years; post-World War II leather did not last as long as the previous generation of leathers. Increased pollution may also have contributed to the decline in leather life.

In 1977 Brantley A. Duddy (a well-known Philadelphia area Austin Organs representative) of Cedars, Pennsylvania, was contracted to rebuild the Tellers organ. Duddy appended two exposed chests to either side of Eggers's famous case. Retaining the Tellers chests, recovering some of the actions²⁸ in

Left: Antiphonal organ façade detail.

²⁷ Virginia Dugan, *A History of the Cathedral Basilica of Saints Peter and Paul* (Philadelphia: Archdiocese of Philadelphia, 1979).

²⁸ The Choir chests were not releathered at the time of the rebuild. Personal interview by the author with B.A. Duddy, June, 2005.

Perflex (a synthetic material, based on poly vinyl chloride, developed in the 1960s for dropping water to military troops), Duddy undertook a major rebuilding of the organ.

The pipe organ industry had latched on to the new Perflex material as a space-age solution to the problem of releathering organs. After all if it could expand to about 20 times its original size and return to normal, after being dropped from helicopters or planes, without breaking or leaking, it would "never have to be replaced" in a pipe organ mechanism, where it had to move only a small distance and under little pressure. The early- to mid-1970s saw much installation of Perflex in electropneumatic actions of pipe organs, mostly in the United States. The material was guaranteed by the manufacturer for five years. Experience, especially in larger cities, found that the Perflex began failing about five years after being installed (compared to previous history of leather lasting in organs for generally approximately thirty to forty years, depending upon environmental conditions and location of the blower).

The Tellers console was replaced with a used four-manual, mechanical Austin console (from the 1922 organ built for the Eastman Theatre, Rochester, New York), with newly engraved stop tabs replacing the originals. Some pipework from the Solo Organ was retained (original Austin stops which Tellers had retained) and a small amount of pipework from the Great, Swell, and Choir divisions was retained, though much revoicing, rescaling, relocating, and reworking of stops, pitches, and layout was carried out. New reed stops were installed with an eclectic mix of German and French nomenclature. The result is the current-day specification of the gallery organ. The tonal scheme was based on narrow scaling with edgy voicing and a predominance of bright, high-pitched mixtures, which was, for the most part, in keeping with the prevailing attitudes of the time. Reeds were narrow-scaled, and power was achieved through parallel shallot construction to emphasize upper harmonic development. Unfortunately, the reeds in the rebuilt organ suffer from another common problem of that period: bad zinc.29 The result is that reeds collapse under their own weight, bending and splitting into contorted shapes, eventually becoming unplayable, often with resonators breaking off at the reed blocks. The 16' reeds are contorted and twisted and are almost entirely unplayable at the time of this writing. Many planned additions were provided for in the new organ tonal design, none of which have been carried out following completion of the rebuilding project in 1977-78.

During the mid-1980s, the gallery organ was releathered again, replacing the deteriorated Perflex in favor of timeproven, effective use of leather. In 1988 a Trompette-en-



chamade with spun-brass resonators (built and voiced by the Trivo Company, Hagerstown, Maryland) was mounted horizontally atop the organ case. A concern at the time of its installation was that it not be "visible" and detract from the appearance of the west end of the cathedral.

Meanwhile, discussions had been underway regarding expanding the organ by adding an instrument to the chancel area in the north transept pipe chamber, opposite the original Austin Antiphonal chamber, into which no organ had ever been installed. John Cardinal Krol advocated for the installation of an electronic substitute, while others suggested finding a redundant pipe organ that could be adapted for the cathedral's use as a chancel organ. A decision was reached by the cathedral rector, Msgr. James Howard, to contract with C.W. Gibson & Co. of Moorestown, New Jersey (who were maintaining the cathedral organs), to install portions of a used organ manufactured by the M.P. Möller Company of Hagerstown, Maryland, originally built for Atonement Lutheran Church, Wyomissing, Pennsylvania (Opus 4323, 1925, Rebuild R-595, 1956). Only the 1956 Swell pipework and the Swell and Choir chests were installed in the chamber, with tentative plans to add additional ranks of pipes to the empty chest. The organ as it was installed is, unfortunately, not suit-

²⁹ The general supply of cold-rolled zinc (used in making the resonators and boots of the reed pipes) was troublesome and weak, particularly in the thicknesses used for organbuilding, causing an industry-wide problem for years afterward.

able for congregational accompaniment, since it lacks a Great division and has no Diapason. Concurrently, the relay for the gallery organ was replaced with a new solid-state relay, and the new installation in the chancel was made playable from the gallery organ as a slave division only, duplicating similar stops on the gallery organ, but not selectively separate from the gallery organ. The gallery organ was now playable from the front console, albeit only through the use of blind pistons.30 Most likely installed as a stopgap measure, no additions or improvements to the chancel organ have been undertaken since its installation. This author considers the intervention fortuitous, in that it prevented the introduction of a substitute instrument into the cathedral. The Echo/Antiphonal organ in the South Transept chamber was not made playable from the chancel console, nor was it releathered with the rest of the organ. At the time of this writing, the chancel console is disconnected, and the chancel and Antiphonal organs are not playable.

Tastes change with time, and time has taught many lessons to the educators, historians, and preservationists of today. When looking at the progression of instruments in the Cathedral Basilica of SS. Peter & Paul, this author is led to the general conclusion that with each replacement or rebuilding the cathedral organ was diminished.³¹ It cannot be seen what lies in the future, but one fervently hopes that a wise plan is developed to insure that the cathedral continues its long-standing heritage of traditional and excellent music, and to preserve the value of the pipe organ in the Roman Catholic liturgy.³²

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³² Complete stoplists and PDF files of the Austin and Tellers contracts may be found in the online OHS Pipe Organ Database, http://www.organ society.org.



Above: The main altar and baldachin, designed and installed in 1957. The reredos and tabernacle are new, installed in March 2007. Photo by Paul R. Marchesano, 2007.

³⁰ Discussions about a chancel console had been carried out at various times, including for the Austin installation in 1920. The Austin Opus 939 file shows correspondence on this topic also in 1970, 1976, and 1977. It had been dismissed each time as being not cost-effective and unnecessary.

³¹ The length of time each organ served before being (or needing to be) rebuilt also presents a declining progression: fifty-two years for the Standbridge organ, thirty-five years for the Austin organ, twenty years for the Tellers organ, ten years for the Duddy organ. The current organ is plagued by intermittent dead notes (caused mostly by contact problems in the console), as well as a failing mechanical combination action.