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## THE TRACKER Volume 31, Number 3, 1987 THE JOURNAL OF THE ORGAN HISTORICAL SOCIETY

COVER — The 1883 Hutchings-Plaisted Op. 112 at First Parish Church, Congregational, of Brunswick, Maine, has been retrackerized, restencilled, and restored by OHS member David Wallace of Portland, Maine, whose firm provided funds for color printing of the cover photograph by Robin Hodge. The restoration is described beginning on page 4

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# Two Anniversaries, Many Celebrations

This is certainly a year for celebration. The 200th anniversary of the Constitution is an important event in such a young country as ours. We as citizens of the United States of America can be proud that the document written by our forefathers has achieved the honor of being the longest existing Constitution in effect.

However, it can be easy for us to feel dwarfed by the greater and richer history of other countries. Even so, we are now coming more into our own. As time has progressed, Americans have realized better that we have much heritage of which to be proud. How to preserve this heritage for generations to come was learned along the way, not always well, or uniformly, but nevertheless there was always some effort.

Preservation is, of course, a primary reason for our organization. And yet, we are a young organization ourselves. We have had only 30 years in which to pursue our work. In spite of this short time, instruments of great merit and age are extant. In this issue we celebrate the 200th anniversary of an organ built by David Tannenberg. Obviously, we as the OHS cannot take full credit for its longevity. Even considering the enduring craftsmanship of its builder, others before us must have understood and appreciated the worth of such an instrument.

Without their interest and care, the instrument would not likely have had the opportunity to serve so long.

Along the same lines, until recently, it was deemed unfashionable and unworthy for academia to be interested in American music history topics; instead it focused on that of other countries. We can celebrate that there are now publications in the field of great merit, but we must continue to urge more study of American organ history as well.

AN EDITORIAL

We should be thankful to all those preservationists and researchers who preceded our more current work in the OHS. Many times they must have felt like "voices crying in the wilderness." Few of these people and the work they did will be given fame outside a small circle; indeed it is typical of all organizations that many members fade into obscurity as new "stars" continue to appear for their turn on the horizon. Our founding members were as important to the OHS as the founding fathers were to our country. It is easy to forget who dug the well from which we now drink.

Our Constitution survives to this day because of the interest and care of those who followed its writers. The amendments to this document, and the checks and balances within it, have served to keep it alive and to strengthen or clarify laws for the generations that followed.

The calls for replacing or ruining organs in the name of progress will surely continue. It is our duty as the present preservationists to maintain interest and care, to thoroughly study each situation, and to show meritous organs as being musically alive, not just as museum pieces. Of course, no decisions can be made without careful evaluations of all the facts and circumstances, but every decision will affect the generations that follow. SRWF

3



### Stencilling the Facade by Hadi Modr

The original paint and stencils on the organ's 27 facade pipes were in such poor condition that they could not be preserved. It was decided that the original colors of graygreen and maroon should be changed to suit the current decoration for the sanctuary of First Parish. The colors in the lovely wall stenciling above the wainscoating, a border about 15" wide around the sanctuary, was chosen as the base for the new colors of the facade pipes.

The shade of the colors on the pipes is now more blue-green, and after experimenting with the stencil motifs on the green, it was decided to add a cream background color behind the stenciling. The stenciling of dark brown, crimson and green on the cream base color are more pronounced and provide an intersting visual effect across the face of the organ. There is also a visual "widening" of the organ case.

It appeared that a  $3\frac{1}{2}$ " band of gold leaf had been applied to the top of the original work on the pipes. However, the mouths of the pipes had been painted with gold paint. The top bands of gold leaf on each pipe were widened to 6" which puts the band in better proportion to the height of the pipes. All other gold painted surfaces and designs were recovered with gold leaf. A one inch stripe of crimson was added to the design at the edge of the gold bands, both to conceal the edge of the gold leaf and to add a finishing touch. The pink colored paint, which was hidden by the casework, along with the gold band below in the design was changed to crimson.

The stencils themselves are quite Victorian in character, and not at all primitive. They are beautifully balanced and varied, which shows that the original designer had much artistic experience. The quality is quite high compared to any wall stenciling of the same period in Maine. The popularity of wall stenciling had ebbed by the time the First Parish organ was

# A Maine Hutchings-Plaisted Returned to the Fold

by David E. Wallace

The 1883 Hutchings-Plaisted organ at the First Parish Church, Congregational, in Brunswick, Maine has been returned to the Maine extant tracker organ list after a hiatus of 16 years. The first organ in Maine to be retrackerized, the 103-year-old Hutchings-Plaisted remains tonally unchanged since its installation.

The First Parish Society in Brunswick traces its origins to the time of the first settlements in the Brunswick-New Meadows area. The present building is the fourth to be occupied by the First Parish congregation and was completed in 1846 to a design by architect Richard Upjohn of New York City. Two well-known writers have associations here. It was in the Stowe family pew, number 23, on March 2, 1851, that Harriet Beecher Stowe received the inspiration for her novel *Uncle Tom's Cabin* during a scripture reading by Pastor George Adams. Poet Henry Wadsworth Longfellow read his poem "Morituri Salutimus," written for the fiftieth anniversary of his graduation from Bowdoin College, from the pulpit at First Parish.

The Hutchings-Plaisted organ is the second pipe organ owned by the First Parish Society. The first organ, purchased in 1825, went to another Brunswick church after leaving the First Parish Society's building. In 1880, the Ladies' Organ Society began raising money for the present organ through teas, suppers, and entertainments. Hutchings, Plaisted and Company of Boston was commissioned as the builder and the two-manual, 21-stop organ was completed as their opus 112.

The organ arrived in Brunswick on January 29, 1883. A little over two weeks later, on February 16th, the dedication concert was played by Professor R. C. Ford of Old South Church in Boston. On November 23 of that same year a second recital was played by Mr. H. S. Murray of the Williston-West Congregational Church in Portland. A reporter for the *Brunswick Telegraph* critiqued the concert as follows:

It was an organ concert, and the instrument was shown in all its best moods, under the skillful handling of Mr. H. S. Murray of Portland, a young man of twenty-one years of age, of course not having the experience and drill of older organists, but still a real lover of the art, with a touch of great delicacy in all softer strains, not wanting in power in full chorus, and exhibiting a taste in selection quite remarkable. He had two selections from Buck, Rondo-Caprice and Wedding March, a double movement from Scotson-Clark and E. M. Lecott, the Priests' March from Mendelssohn, the Offertoire being by Lefebure-Wely. There was variety enough surely to display the powers and good points of the organ, and to give the organist an opportunity to show his own skill in handling keys, and to bring out whatever there is in him of the artists. He exhibited fine taste in his selected pieces, and a very delicate appreciation of his work in his accompaniments to Mr. Pennell's songs. As we have before said, many of the stops in the organ are very sweet, and nothing could have been purer and more liquid, than the tones which were drawn therefrom in the passages of music played by Mr. Murray; but there is a wild element in that organ, a reedy, brassy tone when in full chorus which is exceedingly offensive to our ear; it will tone down with time, we know, but whether it will ever come to "standard" is what we hardly believe. The break in the organ was of no importance in itself, an accident likely to happen to any instrument. It was merely the snapping of the lever (probably a defective part) from the treadle to the swell organ. Luckily a workman was present, who had, during the day, been tuning and easing the stops, these swelling and not moving readily, and he quickly repaired the break. Had he not been here, we should have had no more organ music, as the break occurrred during Mr. Pennell's first song."

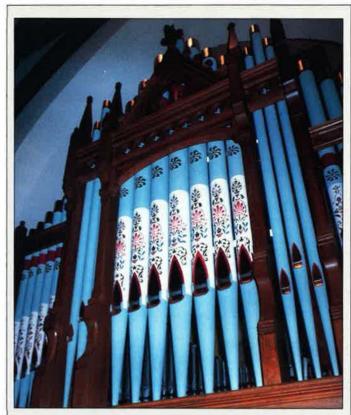
The organ was hand pumped by students from Bowdoin College for twenty years until a water motor was given to the church. The water motor pumped the organ for another nineteen years with some noted problems, the least of which was that it froze solid during the winter months. An electric blower was installed in 1922, ending almost 40 years of carving graffiti and initials on the organ chamber walls.

In 1969, the church underwent a large number of structural repairs. Included with that capital improvement project was a modernization of the organ. The Hutchings-Plaisted tracker mechanisms were discarded, as was the double-rise reservoir and feeder bellows. Supply house pneumatic pulldowns, stop actions, regulators, duct work and console were installed by Ray Douglas of South Harpswell Maine. There were no changes made to the pipework other than removing the Swell 16" Bourdon to a small offset chest to become the Pedal Lieblich Gedeckt. A second-hand string stop was put in place of the Bourdon in the Swell.

By the 1980s, the "modernized" parts of the organ were having significant difficulties with electrical contact and pneumatic malfunctions. There had also been some water damage to the pedal chests and pipes after a serious leak in the tower roof during a hurricane. The music committee of First Parish interviewed a number of organ builders, technicians, and organists in order to fully consider what should be done to the organ. The decision was made to return the organ to its former configuration and to retrackerize it. The committee chose the firm of David E. Wallace, Inc. of Portland, Maine to carry out the work.

The rear gallery organ loft, which prior to 1969 had only been wide enough for the pedal keyboard and bench, was widened to accommodate the parish choir. The deeper gallery





installed in 1883. The workmanship in application of the stencils however, seemed more crude, as it appears that a one-piece stencil was used with sponges of different colors to apply the paint. The resulting finish was rather pebbly. However, striping around the mouths of the pipes was carefully and beautifully executed.

The pipes were removed from the organ loft and transported to the workshop via a specially designed cradle on Mrs. Modr's trailer. The work began with the left and right flats. These pipes had matching designs, and could be restored more quickly by making two like stencils. With succeeding pipes toward the center of the organ, the stencils change slightly both in design and size. The designs on the seven pipes of the center flat are entirely different and also change with pipe size.

The designs of each pipe were carefully traced and catalogued with the corresponding pipe numbers. Even after the old paint was stripped, a faint trace of the original design was etched into the zinc pipe metal. Twenty different stencils were cut to reproduce the designs, as a separate stencil was prepared for each color within a particular design. A traditional technique was then used to reproduce the designs on each pipe. Each design is carefully shaded to keep the appearance from looking flat. The restoration of the facade pipes took 6 months to complete and was done in conjunction with the restoration of the entire organ.

#### **1883 Hutchings-Plaisted** First Parish Church, Congregational Brunswick, Maine **GREAT** 61 notes SWELL 61 notes 8 **Open Diapason** 16' Bourdon Treble TC Melodia 8 16' **Bourdon Bass 12 Violin Diapason** 8 Dolcissimo 8 Octave 8 Salicional **Stopped Diapason** Flute d'Amour 8 4 2²/3' Twelfth Violina 2' Fifteenth **Flute Harmonique III Mixture** 2 Flautina 8' Trumpet Cornopean **Oboe TC** 8 PEDAL 30 notes 8' Bassoon 12 16' Double Open Diapason Tremolo 16' Bourdon **Bellows Signal** Violoncello COUPLERS **Great to Great Octaves Great to Pedal Swell to Great Swell to Pedal**

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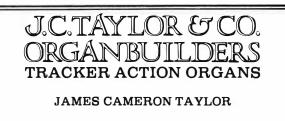
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300 WEST SIXTH STREET KAUKAUNA, WISCONSIN 54130 414-766-2491 presented a problem for the restorers in that, if the keydesk was once again placed in the organ case, the organist would no longer be able to see the chancel and would also be behind the choir. A reasonable compromise was installation of a detached console in the style of those done by Hutchings. This allows the organist to have a clear view of the chancel as well as the choir and be in full view of the choir director.

The new console was designed and built duplicating the materials and the details of the case. The stop knobs, labels and keyboards used in the Brunswick restoration were from Hutchings-Plaisted opus 81 which had been an installation in Dover, New Hampshire, in which Hutchings had incorporated the parts of an older instrument. The cabinet work, including details in the Brunswick console and replacements for case panels that were removed in 1969, was done by cabinetmaker Stan Griskivich of Yarmouth, Maine.

The key action is constructed in a similar manner to that which Hutchings used in the original installation with wooden squares and tracker stock with allowances for the nowdetached console. The couplers in the console are replacements for those that were originally installed in the opus 81 console. Aluminum rollers and arms have been used on all of the organ's rollerboards. A thirty-note concave radiating pedal keyboard was installed in lieu of the original 27-note flat board. The regulators installed in 1969 have been replaced with a new double-rise reservoir and new wind system throughout the organ.

The pipework remains unchanged. The 16'Bourdon is now home again in the Swell and the off-scale string pipes were sold at a church fair as souvenirs. The Swell Bourdon and Oboe, both divided stops that were changed to draw under a single tablet for each stop on the electric console, have now been returned to their original format on the drawknobs as Bourdon Treble, Bourdon Bass, Oboe, and Bassoon. The water-damaged pipes in the Pedal Double Open and the Pedal Bourdon have been repaired and returned to proper speech.

The facade pipes of the case were also a big and very prominent part of the restoration project. The colors used on the 27 case pipes had faded into a nondescript collection of flat greens and faded maroons. Brunswick artist and First Parish member, Hati Modr, copied the original stencil patterns and selected colors for the new stenciling that were complimentary to the organ and to the decor of the sanctuary. The stencil patterns change in hue and colors as the patterns unfold upwards across each pipe. The patterns and portions of the pipes originally done in gold leaf have been redone with the same material.

The organ was rededicated in a special service and recital on December 8, 1985, with recitalist Victoria Sirota. Dr. Sirota's program included pieces by Bach, D'Aquin, Felix Mendelssohn and Fanny Mendelssohn Hensel. The First Parish commissioned Dr Robert Sirota to compose *Festival Prelude on* "Now Thank We All Our God," which was premiered at the dedicatory service by Victoria Sirota.

In addition to David E. Wallace and his crew, numerous volunteers from First Parish assisted in countless ways during the project, not the least of which were music committee chairs David Widmer and Mildred Jones, and organist Zona King. Special rigging to raise and lower the large components to and from the gallery was provided by choir director and lobster fisherman Albert Packard.

To the disappointment of the reporter from the *Brunswick Telegraph* in 1883, the brassy sound of the reeds has not toned down with time. However, all the sweet and fluid stops remain as they were heard in that recital 104 years ago. The sound intended for the organ by George Hutchings and his shop still remains as it was, a tribute to that builder's art, which was not lost to the scrap pile thanks to careful reconsideration by a sensitive First Parish music committee.



1883 Moline, St. Mary's Church, Iowa City

# LETTERS

Editor:

A bit of further clarification needs yet to be made regarding the facade of the 1883 Moline in St. Mary's Church in Iowa City, Iowa, heard during the 1986 National Convention. It was during the most recent renovation of the church interior that the pipes were painted gold, and not previously. At the time of the organ restoration in 1981, the facade was still decorated in what is believed to be a second pattern, a design of tan, coral, and gold which matched the interior design of the church dating from the early 1940s. Although the facade needed restoration, the work was left for a later time; unfortunately, the design was lost when the interior contractors spray-painted the facade the present gold color. At the time I was one of three organists at the parish, had assisted with the organ restoration, and performed routine servicing of the organ until I left Iowa City last August. There are a number of photographs documenting the above information.

Joseph Adam

#### Editor:

Upon reading Bob Reich's letter in 30:4:6, it occurs to me that the organ in "Cedar Rapids Methodist" looks like a Marshall or Moline creation. An entry for that church appears on the Cesander version of the Moline *et.al.* opus list, but without a date. The Muscatine organ looks like a Pfeffer. John Panning

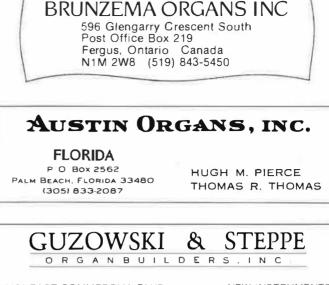
#### Editor:

In the Archivist's Report, 30:4:19, the unidentified organ on the lower left is Hook & Hastings Op. 1689, still in the Federated Church of Orleans, East Orleans, Massachusetts. Robert Newton, Andover Organ Co.

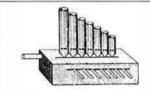
# REVIEWS

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Utilizing works from Marchand to Langlais, Kooiman unfolds the glories of the great West End organ, a recent Schuke rebuild which still contains 22 stops of "historic material" within an eclectic design of 62 stops. Midway during the tour a side trip is made to the justly famous Stellwagen organ (1636–37) of 3 manuals and pedals in the front of the church. Pieces by Sweelinck, Bennett, and Buxtehude aptly demonstrate this historic treasure. A sympathetic restoration by Hillebrand in 1977–78 rectified past mistakes and rendered the organ as authentic as possible in its specification, voicing, temperament (Werckmeister I), and pitch (a whole tone higher than modern pitch).

Herr Kooiman opens the program with Reger's *Toccata in D minor* from Op. 59. His playing is at once electrifying and grandly expansive, fully in the intense spirit of German High Romanticism. A contemplative Reger chorale prelude on "Oh God, do not leave me" receives a most sensitive performance defined by an exquisite rubato. The organ seems particularly right for this repertoire, certainly more so for Reger than for all the French music which follows.

And what follows is a riveting and emotionally satisfying performance of the opening Allegro of Widor's *Sixth Symphony*. No matter that the full organ sound is a bit too brittle, with somewhat glittery mixtures and buzzy reeds, to be convincingly French. Truly masterful playing, the massive 16' and 8' tone of the instrument, the generous acoustics, and the impressive capturing of all of this through excellent digital recording, editing, and encoding processes make for a thrilling listening experience. Kooiman combines energy, rubato, and control in just the right amounts to end up with a stunning creation. The same result is then heard in the Franck *Pièce Héroique*. Utterly compelling playing, grand and glorious, really makes one forget to long for the sound of a Cavaillé-Coll organ.

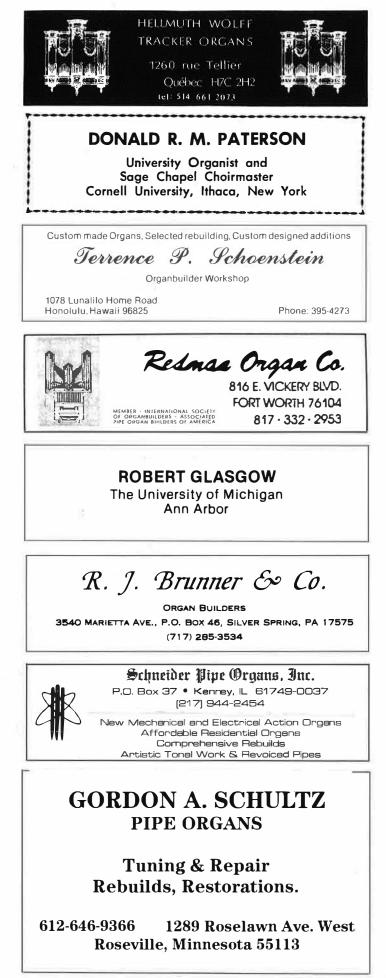
Sweelinck's Balletto del Granduca takes us up to the smaller organ in the front of the church. Thankfully, Kooiman's approach to early music avoids the fulsome thump-and-bump rhythmic style while still making use of subtle note articulations and accentuations which so enliven the music. The grand duke is allowed to dance without constantly tripping over himself. The Bennett Voluntary in F major, another highlight of this fine recording, is noteworthy for the sheer beauty of the three sounds featured: exceedingly warm 8' foundation tone, a quaint small reed, and the most intense and singing 4' flute imaginable. Kooiman's performance of Buxtehude's Prelude in D major, BuxWV 139, has a spontaneity and imaginative fantasy still too rarely heard in performances of 17th-century German music. A distressing feature, however, is that the recording technique used for this smaller organ does not give a realistic impression of the plenum, but in fact gives such a sensation of over-closeness to the pipes that some harshness and lack of blend result. The vastness of the church is lost, and one feels that one is listening to the organ in a very intimate space—not the best setting for bright mixtures.

Kooiman moves once again to the larger organ for the *Grand Dialogue* of Marchand, the *Sonatina in F minor* by Anselm Viola, and the *Pasticcio* and *Te Deum* by Langlais. The Viola work is a sprightly romp in Viennese classical style, charming in every way. In Langlais' popular *Hymne d'Action de grâces "Te Deum"* once again all the glories of wonderful music, player, organ, acoustics, and recording quality converge into a splendid whole.

Aside from there being no written notes about the music and only sketchy notes about the organs, this production is first rate. If you're after definitive performances of these works or simply a very grand 66-minute listening experience, you won't be disappointed with this one. Bravi Kooiman, Schuke, Hillebrand, and Coronata! Bruce Stevens

**Guilmant Garnishes,** Charles Callahan, organist. Aeolian-Skinner Organ, Church of the Epiphany, Washington, D.C. Pro Organo Cassette 7006.

Félix-Alexandre Guilmant (1837–1911) has been enjoying increased exposure in recent times, in recitals, recordings, and print. This is due in part to the celebration of the 150th an-



# **Bruce Stevens**

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niversary of his birth. Guilmant Garnishes serves as a rightful tribute to this important master of the organ. The pieces included, while all of the "characteristic" type, are varied and interesting. Mr. Callahan does an adequate job for the greater part of the tape.

Callahan is obviously an accomplished player, but often fails to follow Guilmant's registrational indications which are clearly in the score. This can be dismissed as artistic license, but certainly shouldn't be. The performances are not always as clean as one might like, nor are they articulate in every instance. Mr. Callahan seems most clumsy at points of transition and at the execution of ritards. The performances seem un-seasoned, and some selections have the feeling of competent sight-reading, rather than the diligent work of a thorough and dedicated performer. Perhaps they were a little premature for immortality.

There has been some renewed clamor over the value of Guilmant's music of late. Many authors during the earlier part of this century had a rather low opinion of his compositions. In a recent article by Rollin Smith *(The American Organist, 21:3, March 1987), these opinions were amply expressed. It might have been interesting if Mr. Smith had given his own opinion, rather than to repeat the thoughts of Guilmant's contemporaries or near contemporaries. If we always took the word of a composer's contemporaries, most of what we consider masterworks today would be lost to obscurity. I suggest that readers take time to form their own judgments.* 

Many of the works presented on this release are of the sugarcoated variety. It is not this reviewer's intention to convince the reader that Guilmant was a great composer. He was inventive and many-sided, certainly worthy of our attention. Pro Organo does an admirable job in presenting these kinds of works and always provides the listener with organ specifications and notes on the composer and works, despite the tiny package of the cassette. I hope, however, that it does not become a habit to give their releases "cutesy" titles (i.e. *Guilmant Garnishes and Lemare Affair*). Regardless of my reservations of Mr. Callahan's playing, this is a rewarding, and moreover, entertaining offering.

Karl Loveland

**Organ Works of J. S. Bach.** George Robert Ritchie performs on the Bedient organ at Cornerstone, Lincoln, Nebraska. CD No. TI-158, Titanic Records, P.O. Box 204, Somerville, MA 02144-0204.

George Ritchie demonstrates on this disc why he has become one of America's most respected players and teachers. His formidable technique, delightful imagination, informed sense of style, and sure taste are in evidence throughout this 72-minute program of eleven Bach works. His extensive notes on the music inform both casual listener and expert alike and are a valued aid to appreciating these performances. Ritchie combines intense yet controlled energy, perfection of touch and articulation, and total mastery of Baroque performance styles as we know them. He thereby infuses these all too familiar pieces with excitement and freshness, a monumental accomplishment indeed.

The "Wedge" Prelude and Fugue, a piece that often tires this writer with its great length and repetitions, is given a performance where virtuoso speed, integrity of each note, forward drive, and expressive nuances of articulation and stress are integrated into a perfect balance. It's too bad that the tuning system of the organ, which is nowhere identified, destroys the much needed sense of rest on the ultimate E major chord of the fugue. Ouch! The Prelude and Fugue in A major fares much better as it is played throughout quite simply and gently on the 8' Principal. Ritchie uses a lovely combination of lyricism and violin-like articulations to make this a real highlight of the disc. The timbre of the Principal is ingratiating in spite of some obvious speech problems with a few pipes in the rank.

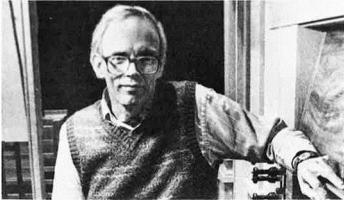
All the touted "antique" qualities of this instrument come to the fore in the famous *Toccata and Fugue in D minor*, BWV 565. Gently flexing wind is an elusive accomplishment in our Niehoff-Scherer school of modern organ construction; it sometimes happens just right, but not always. It did not happen here. This Bedient organ shakes and gulps enough to make Bach himself despair. The effect this has on the strongly unequal temperament, together with some seemingly very out-of-tune pipes, is most distressing, to say the least. The toccata is built up with appropriately dramatic gestures, while the fugue drives ahead, occasionally even falling forward just a little, all with utmost energy, excitement, and good taste.

Even Ritchie's sensitive playing cannot transform a very unlovely 8' Dulciaan into an appropriate stop for the lovely soprano and alto canon in *Liebster Jesu*, BWV 633. Lyric this reed decidedly is not, and the inherent lyricism of the duet remains unrealized. *Jesu Christus, unser Heiland*, BWV 666, fares much better on some sweet and intense flutes which serve to present the flowing lines quite beautifully indeed. The *Prelude and Fugue in G major*, BWV 541, is slightly marred by too much in the way of agogic accents in the prelude. The exuberant dance is halted too often and too forcefully. Then follows a most curious event: the over-all pitch noticably drops in the joint between prelude and fugue. Did the temperature change significantly between takes? Once one makes this adjustment, however, the fugue absolutely charges ahead with grace and aplomb.

The high point of the whole recording for this writer is Ritchie's straightforward, deliberate, and almost profound performance of the "Little" G minor Fugue. The Principal 8' and 4' sound is warm and cooperative, and the piece fairly radiates sincerity and perfection. Among the final four works, the Ricercar a 6 from the Musical Offering, Schmücke dich, BWV654, Vater unser, BWV 682, and the "Jig" Fugue, the performance of Schmücke dich is a model of expressive playing and of beguiling added ornamentations, especially in the long repeat of the first section.

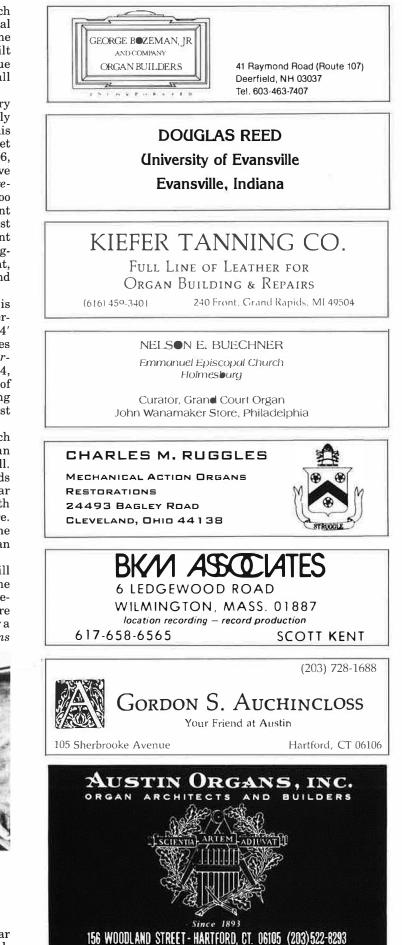
One does wonder at the reason for selecting an all-Bach program to record on this particular organ. It is no more an ideal Bach organ than is an E. & G. G. Hook or a Cavaillé-Coll. True, it does play the music clearly, but the expressive demands are hardly met in a number of instances, and the peculiar antique personality of the instrument at times interferes with full concentration on Bach's complex textures and architecture. Gothic and Renaissance music would be much more at home here, where the "lack of refinement" pointed out by the organ builder himself would charm rather than disturb.

The disc is digitally recorded, edited, and encoded but still has a canned or nasal quality that is not clean. Neither do the dry acoustics help matters. If you're looking for some up-to-theminute, superb Bach performances, do hear Ritchie. If you're anxious to hear this organ do what it wants to do best, hope for a future disc from Ritchie playing older repertoire. Stevens



**Charles Brenton Fisk: Organ Builder.** Edited by Fenner Douglass, Owen Jander & Barbara Owen. Two volumes. Easthampton, MA: The Westfield Center for Early Keyboard Studies, 1986. Available from the publisher at: One Cottage Street, Easthampton, MA 01027.

Vivid is the recollection of a story told during my first year of undergraduate organ literature at Westminster Choir College in 1976. It was recounted by Eugene Roan, and went



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something like this: an American organ student posed this question to Gustav Leonhardt, "Herr Leonhardt, which contemporary European organ builder is the greatest organ builder in the world?" The student automatically assumed this maker must be European! Leonhardt retorted, "He is not European, he comes from the United States ... Gloucester, Massachusetts ... and his name is Charles Fisk!"

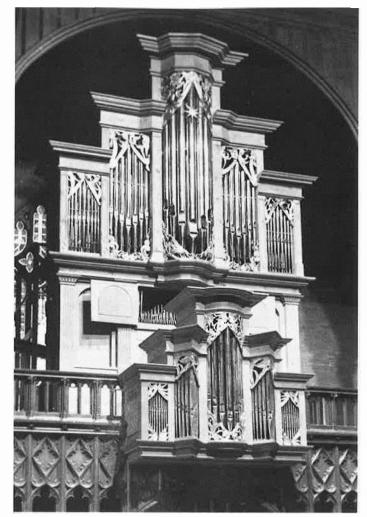
I recall watching Charles Fisk sit on the walkboard, voicing the Westminster Choir College organ, Opus 76A (1978), while Joan Lippincott held keys. I stayed for about an hour, in which time he finished two pipes of the four-foot principal. It was "too loud . . . , too soft . . . , too fast . . . , too much chiff . . ." Whatever it was, it was just too much. While it confirmed my own decision never to build organs, I was astonished at his extraordinary perseverance.

What was there about the personality of Charles Fisk that was so charismatic? There are many American organbuilders who produce fine instruments, and a few who probably better him. However, the sound of a Fisk organ is unique: that "all out" boldness, almost throatiness, that total abandon which leaves you on the fence. At once you are offended by the sometime coarseness and overwhelming volume of the sound, while being thrilled by the exuberance and excitement of it.

Charles Fisk had an uncanny ability to bring music and organbuilding together in a collaborative art. Based on an encyclopedic knowledge, he was able to capture the true essence of period musical style. Few contemporary builders, would attempt a project like the Stanford University organ which plays in two temperaments or the Wellesley mean-tone instrument. What other builder worked in sympathy with a generation of organists to rethink entire periods of performance practice? It was this constant striving for a deeper and more artistic understanding of the organ and its music that made Charles Fisk stand apart from the other makers of his generation.

In this spirit, The Westfield Center for Early Keyboard Studies published *Charles Brenton Fisk: Organ Builder*. This superb reference work, issued in honor of his life and work, is surely among the more important English language organ





The Wellesley Organ by Charles Fisk

publications in recent years. Comprised of two volumes, the first is a *festschrift* including articles by 17 distinguished authors. Volume two is a collection of primary and secondary source documents relating to the organbuilding career of Charles Fisk. The books are attractively bound in cloth covers, and one may opt for the "deluxe version" which includes a matching traycase.

The contents of volume one include, in addition to subjects ranging from the 15th century to the present day, articles on organs of diverse national styles. Among them are German, Dutch, French, English, Italian, Mexican, and yes, even American related subjects. This is perhaps the first organ *festschrift* of its type to include any writings on American topics.

Particularly, David Fuller's "Commander-in-Chief of the American Revolution in Organbuilding: Emerson Richards," is an eye-opening account of this man's involvement in the organ reform movement in this country. Beautifully researched and well documented, it is certain to change a few false notions which many of us have regarding who did what, when. Moreover, it covers a greatly neglected period of organ history. John Fesperman's "Smaller Organs: Evolving American Attitudes Since 1933;" Owen Jander's "The Wellesley Organ's 'Breath of Life;' " and Susan Tattershall's "A Chronicle of the Restoration of a Mexican Colonial Organ," all cover significant subject matter on this side of the Atlantic!

Of interest to mainstream European scholarship will be Kurt Lueders' "Reflections on the Esthetic Evolution of the Cavaillé-Coll Organ;" Kerala Snyder's "Bach and Buxtehude at the Large Organ of St. Mary's in Lübeck;" and Luigi F. Tagliavini's "Notes on Tuning Methods in Fifteenth-Century Italy." Fenner Douglass' superb "Toward the Restoration of Grace in Early French Organ Ornamentation" brings into sharp focus the reason ornamentation was so fluid on certain manuals of the French Classical organ. Other authors include William Porter, Barbara Owen, Peter Williams, Christoph Wolff, Klaas Bolt, Harald Vogel, R. Lawrence & Dana Kirkegaard, and George Taylor and John Boody. All the essays maintain an exceptional level of quality, and all of them have much to teach current students, performers, scholars, and teachers. Authors chose their topics and the results are impressive.

Volume two will probably be of greater general interest to the membership of our Society. Compiled by OHS member and founding President Barbara Owen, it is a documentary of the career of Charles Fisk. The major portion of the volume consists of a lengthy annotated opus list, often with photographs and stoplists. Additionally, Barbara has excerpted commentary on each instrument from many sources, including unpublished materials, such as letters, and more commonly available sources, such as dedication programs, reviews, and articles.

The next section gathers all of Charles Fisk's previously published articles into one place. Then follows a selection of previously unpublished materials, and finally, a compendium of miscellany, including a discography. A useful bibliography



Unknown organ, Hope Moravian Church

# NEW INFORMATION

John E. Ziegler of Hope, Indiana, a member of Hope Moravian Church, reports that the postcard photo which appears in 28:3:23 is of his church. The builder of the organ is still unidentified. Mr. Ziegler, who is associated with the Miller organ firm of Louisville, KY, located several similar photographs of the instrument in the records of his church. He also reported that volumes of letters and financial ledgers ca. 1874 of an organbuilder are located at the Indiana Historical Society in the Indianapolis. Michael Friesen investigated and found them to be hitherto unknown records of William Horatio Clark's organ firm of Indianapolis. lists numerous articles from newspapers and professional journals about Fisk and his instruments which would be nearly impossible to reconstruct thirty years hence.

Regrettably, the volume does not include much in the way of biographical material on Charles Fisk. This is not the source, for instance, to find his exact date of birth, which seems odd. Nor is it the place to find much else about his family, upbringing, or education. But then, in all honesty, the book states forthrightly, "The purpose of the volume is not to provide a biography of Charles Fisk . . ." Some basic facts can be gleaned from the article "Charles Brenton Fisk," in *The New Grove Dictionary of Musical Instruments*, 1984, pp. 762–763, and a similar article in *The New Grove Dictionary of American Music*, 1986, v. II, p. 133, both by the same author, Barbara Owen.

When readers arrive at page 77, they can't help but wonder what happened to opus 1 through 23, which are omitted from the published opus list. Confusion is understandable, since the explanation regarding those instruments is found on page 1. It could have been better organized in the following order: the commentary, now on page 1 and 2; the list, now on pages 77–82; and then the annotations, now on pages 3–75. These problems are small, however, considering the wealth of information the volume puts before us. If only we knew this much about some of our nineteenth-century makers how fortunate we would be.

Helpful is the list of contracts in hand but uncompleted, opus 86 through 101, at the time of publication. Now, also two years removed, many of the instruments have been finished: opus 92 for the Church of the Transfiguration, New York City, is due to be installed during the Fall of 1987. *Charles Brenton Fisk: Organ Builder* stands as a fine example of what can be done to document the work of current organ builders.

I really have only one reservation about this publication, the price! At \$100 per set, it is just too steep for all but the wealthy among us. I paid \$100 for the books, and after reading and studying the contents, I would probably buy the set again.

Those of you who recommend books to libraries, please include this set. Almost two-thirds of the one thousand copies printed has been sold. *Charles Brenton Fisk: Organbuilder*, will probably be regarded as a classic by future generations. I recommend these books without reservation, and they should be in the working library of every organ scholar.

And finally, hearty thanks to Lynn Edwards and Ed Pepe for contributing review copies of this important publication to the Archives of the Organ Historical Society.

Stephen L. Pinel

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1889 Odell Op. 277, Corpus Christi Church, Baltimore



# ARCHIVIST'S REPORT The J. H. & C. S. Odell Company

The archives contains a substantial collection of documents relating to J. H. & C. S. Odell, the New York organbuilding firm which remained in business longer than any of their contemporaries and which supplied organs throughout the Unites States. Thus, the firm is of interest to a wide group of organ scholars. The company was established when John H. (1830–1899) and Caleb S. Odell (1827–1899) left Ferris & Stuart following the death of Richard M. Ferris on 6 December 1858. They set up shop in rented quarters at No. 168 Seventh Avenue and, by 1868, could boast a larger shop at 407–9 West Forty-Second Street. According to the 1870 industrial census they had grown to 20 employees building 15 instruments annually at a total value of \$48,000.

Their earliest contract was signed in 1859 and the organ was delivered in 1860 to the First Baptist Church of Stamford, Connecticut. Within ten years, organs had been shipped from coast to coast and from Maine to Texas. By the turn of the century, operation of the business rested in the hands of a second generation comprising George W. Odell and William H. Odell.

During a century of constructing new organs from 1859 to about 1960, the firm manufactured about 625 instruments. They were known for their reasonable price, sturdy construction, and for being tonally concurrent with the times. The following list of materials, by opus number, indicates our archival holdings as of July, 1987. Stephen L. Pinel

H	OLDINGS ON J. H. &	C. S. ODELL IN THE A	ARCHIVAL COLLECTIO	N, JULY, 1987	
Advertising:	5 (1861) Ref.	78 (1868) S/L.	154 (1876) Ref.	209 (1884) Ref.	402 (1903) S/L.
Hutchinson (1861)	6 (1861) Ref.	81 (1869) S/L.	155 (1876) S/L, Orig.	210 (1884) Ref.	428 (1906) S/L.
Sadlier's Directory (1871)	8 (1862) Ref.	82 (1869) S/L.	ded. pro.	212 (1884) Ref.	444 (1908) S/L.
Sadlier's Directory (1874)	9 (1862) Ref., Art.	83 (1869) S/L.	156 (1877) S/L.	213 (1884) Ref.	454 (1909) S/L.
Unidentified (1879)	10 (1862) Ref.	85 (1869) S/L.	158 (1877) S/L & notes.	214 (1884) Ref.	456 (1909) S/L.
Sadlier's Directory (1880)	15 (1863) Art.	89 (1870) Newspr.	161 (1878) S/L.	228 (1886) Photo.	459 (1910) S/L.
Sadlier's Directory (1895)	21 (1864) Newspr.	Ann.	164 (1878) photo.	233 (1887) S/L.	464 (1910) S/L.
Other Items	Ann.	90 (1870) S/L.	166 (1878) Ref.	245 (1888) S/L.	465 (1910) S/L.
Book of Contracts	27 (1864) Ref.	92 (1870) S/L.	167 (1878) Ref.	251 (1888) Photo, S/L.	475 (1911) S/L.
Catalogue (1917) The Pipes of a	29 (1865) S/L,	95 (1870) S/L.	169 (1879) Ref.	252 (1888) S/L and	483 (1912) S/L, Art.
Thousand Voices	Newspr. Ann.	101 (1871) S/L.	171 (1879) Ref.	notes.	484 (1912) S/L.
Catalogue (1928)	33 (1864) Ref.	107 (1871) S/L, Art.	173 (1879) Ref.	278 (1889) S/L.	489 (1913) Orig. ded.
Census of Industry (1870)	49 (1866) S/L, Ref.	109 (1871) S/L & des.	174 (1880) Ref.	282 (1890) S/L.	pro., S/L.
Census of Industry (1880)	50 (1866) Ref.	112 (1872) S/L, Art.	177 (1880) Ref., S/L,	286 (1890) S/L.	491 (1914) S/L.
Death Notice: George W. Odell	Newspr. Ann., S/L.	114 (1873) S/L.	Photo.	292 (1891) S/L.	494 (1915) S/L.
Dedication program (1873), (1886)	52 (1866) S/L.	115 (1872) Ref.	178 (1880) S/L & notes,	296 (1891) S/L.	497 (1915) S/L.
Misc. Guilmant Reception In-	55 (1866) S/L, Art.	121 (1873) Ded. pro.,	Art.	304 (1892) S/L.	508 (1916) S/L.
vitation (1893)	56 (1867) S/L, Art.	S/L, Scale data.	180 (1880) S/L & notes.	307 (1892) S/L.	514 (1917) S/L.
List: Webber typescript	59 (1867) S/L.	123 (1873) S/L.	182 (1881) Ref.	313 (1892) S/L.	536 (1920) S/L.
Patent Description: No. 122,777	60 (1867) S/L.	124 (1873) S/L.	183 (1881) Ref.	321 (1894) S/L.	540 (1920) S/L.
(1872)	61 (1867) S/L.	127 (1873) Ref.	186 (1881) Photo.	328 (1894) S/L.	553 (1923) S/L.
Patent Description: No. 609,291	62 (1867) S/L.	128 (1873) Photo., S/L.	187 (1881) S/L, Ref.,	331 (1895) S/L.	563 (1925) S/L.
(1898)	63 (1868) Photo	133 (1874) Orig. ded.	Art.	333 (1895) S/L.	571 (1926) S/L.
Photograph: Manufactory	64 (1868) Art.	pro., S/L.	190 (1882) S/L & notes,	340 (1896) Art.	582 (1928) S/L.
Promotional Flyer	66 (1867) S/L.	134 (1874) Photo., Art.	Orig. ded. pro., Photo.	345 (1897) Newspr.	584 (1928) Contract.
References: Webber correspon-	67 (1868) S/L, Scale	137 (1874) Ref.	191 (1882) S/L.	Ann., Photo.	585 (1928) S/L.
dence	info.	138 (1874) Ref.	192 (1882) S/L.	347 (1897) S/L & notes.	594 (1946) Art., S/L.
Sales Brochure (1868)	68 (1868) S/L.	139 (1874) Ref.	197 (1883) S/L.	349 (1897) S/L.	614 (1956) Reded. pro.
Sales Brochure (1895)	69 (1868) Contract,	141 (1875) S/L.	198 (1883) Ref.	350 (1897) S/L.	
Sales Brochure (1898?)	photo.	144 (1875) Ref.	199 (1883) Ref.	352 (1898) S/L.	
Sales Brochure and List (1905?)	70 (1868) S/L.	145 (1875) S/L.	203 (1883) Ref.	353 (1898) S/L.	
Sales Brochure and List (1910?)	71 (1868) S/L.	146 (1875) S/L & notes.		360 (1899) S/L.	
ORGANS BY OPUS NUMBER	72 (1868) S/L.	149 (1875) Photo.	205 (1883) Ref.	368 (1899) S/L, Art.	
1 (1859) S/L, Ref.	73 (1868) S/L.	150 (1876) Ref.	206 (1883) Ref.	369 (1899) S/L.	
2 (1860) Ref.	74 (1868) S/L, Ref.	152 (1876) S/L.	207 (1884) Ref.	381 (1901) Art., S/L.	
4 (1860) Ref.	75 (1868) S/L.	153 (1876) Ref.	208 (1884) Ref.	392 (1902) S/L.	

# ORGAN UPDATE

HE 1844 GEORGE STEVENS 2-24 removed thirteen years ago from First Baptist Church, Groton, MA, by William Visscher while he was employed by James R. McFarland & Co. of Selinsgrove (later of Millersville), PA, is being restored and enlarged by Visscher Associates of Soquel, CA, for St. Augustin Roman Catholic Church in Scotts Valley, CA, and will be completed for a visit by the OHS Convention, June 19-25, 1988. The organ was installed second-hand at the Groton church at an unknown date, and its original location is unknown. Mr. Visscher's firm will replace an electric-action pedal mechanism installed by Robert Hale with a new mechanical-action pedal division, and will extend the short-compass Swell division and the

4

4



1844 George Stevens

Great Trumpet into the bass. No voicing or other tonal changes are planned, though the Great Mixture, earlier raised in pitch by moving all pipes down an octave, may remain at the higher pitch.

The 1929 E. M. Skinner 4-47 op. 660 built for Immaculate Conception Church in Philadelphia and still in entirely original condition has been saved from a slow death by abandonment and water torture through adaptive re-use of a very large art-deco train station. The Museum Center Foundation of Cincinnati has converted Cincinnati Union Terminal to house two museums and the Skinner organ, which was removed in July from the Philadelphia church and professionally packed and transported by OHS member Brantley Duddy. A contract for restoration of the organ is pending as are fundraising plans.



#### Holbrook before move

A ca. 1850 E. L. Holbrook 1-6 has been relocated and refurbished for St. Phillip's Methodist Church in Round Rock, TX, by Geddes Pipe Organs of Austin, TX. The organ was built for what is now Ascension of God Church in Abington, MA, and was sold to Wade Jenkins of Hanover, MA, when the church bought a Hammond. After 15 years in storage, the instrument was obtained by St. Phillip's for a building the congregation moved from Turnersville, TX, to Round Rock and enlarged to become their church. Organist Ken Mowell favored the Geddes firm's proposal to restore the organ as originally built, including the hand pumping mechanism. The 18-note Pedal was extended to 24 notes and slide tuners were fitted to repair damaged pipe tops. The case is painted in simulation of wood grain and the keydesk area is of black walnut with cherry drawknobs.

ca. 1850 Edwin L. Holbrook, East Medway, MA St. Phillip's Methodist Church Round Rock, TX Nomenclature supplied by Geddes Pipe Organs MANUAL 56 notes, enclosed, hitchdown swell pedal 8' Diapason 56 pipes, 12 in facade 8' Clarabella 49 pipes 8' Stopped Diapason (bass) 12 pipes Octave 56 pipes Flute 49 pipes Fifteenth 56 pipes 8' Oboe 39 pipes PEDAL 18 notes enlarged to 24 notes 16' Bourdon 12 pipes Pedal Coupler Composition Pedal

1917 Steere Op. 700

Keith Bigger of Queens, NY, is refurbishing in stages the 1917 J. W. Steere & Sons op. 700, a 4-38, at the 1,200 seat Baptist Temple in Brooklyn. No tonal changes will be made, and the original mechanism will be retained. An earlier edifice was destroyed by fire March 7, 1917. The Diapason, July, 1917, reported the stoplist.

The 8-rank organ with no pedals at Christ Church, Little Tulpehocken (Bernville), PA, now believed to have been built by Joel Kantner of Reading, PA under a contract let in 1862, has been restored by the Columbia Organ Works of Columbia, PA. Heard during the 1976 OHS Convention, the organ is perhaps mistakenly described in the Annual Organ Handbook for that year as having been built in 1837 by Andrew Krauss and installed by Kantner second-hand in 1863. The restored organ was reinstalled during the



1862 Joel Kantner

summer in its unusual case that resembles an 18th century English three-tower style, but with orna-mentation that is "classic" Pennsylvania-German. Rededication activities are tentatively set for March.



1916 Estey Op. 1446

Estey op. 1446 of 1916 has been sold by the Masonic Temple of the Vermont Consistory in Burlington to Faith United Methodist Church in South Burlington. The 2-11 features three 8' stops in the Great, five 8' stops and one 4' stop in the Swell, and two stopped 16' flutes in the Pedal, with no unification or duplexing. A reedless 8' "Horne" is in the Swell.

Samuel Koontz & Co. of Ann Arbor, MI, received a contract in August to perform restorative repairs on the 1930 E. M. Skinner op. 820, a splendid and entirely original 4-77 at Holy Rosary Cathedral in Toledo, OH. Work will include restoration of the exposed Great division, the enclosed Great and Choir divisions, and the console. The cathedral, in public use since 1931, featured an unusual arrangement whereby the organ was installed entirely in a chancel chamber, and the console, organist, and the choir occupied a twin chancel chamber behind matching grillework. The choir and organ console were moved to the chancel floor in June, 1980, when restoration work was begun by Kenneth Holden of Ferndale, MI.



#### Fort Smith organ

The 1921 E. M. Skinner op. 319 for which a buyer had been sought by the First United Methodist Church of Fort Smith, AR, has been rebuilt for that church by Quimby Pipe Organs, Inc., of Warrensburg, MO. The original 3-19 organ was expanded to 42 ranks, retaining little more than the mechanism of the original. Mentioned in this column in 29:3:12, the organ was later found to have been built in the J. W. Steere & Sons plant after its acquisition by the Skinner firm.



#### 1881 Pilcher

The 1881 Pilcher 1-3 which arrived second-hand years ago at Church of the Advent, Cynthiana, KY, is undergoing restoration by the Miller Pipe Organ Co. of Louisville. Writes Miller employee Keith Norrington, "I fell in love with it when we were there to tune it last fall. I left an OHS brochure on the organ and a note lauding the church for their wisdom in maintaining such a fine little instrument. Shortly, we received notice that funds had been raised to begin restorative work, in stages. Hallelujah!" The instrument retains its hand pumping and also has an electric blower.



1884 Hook & Hastings

Phil and Sharon Hoenig of Fort Madison, IA, have restored the 1884 Hook & Hastings op. 1238 at St. Ignatius R. C. in Hickory, MD. A re-dedication recital was played in March by Dennis Stewart on the colorfully-banded 2-9.

The 1830 Thomas Appleton organ at the Metropolitan Museum of Art in New York, featured in 27:4, will be protected with an "organ house" construction of wood and will be inaccessible December through April while new climate control equipment is installed in the musical instruments department, which also will be closed to the public.

The 4m console of E. M. Skinner op. 876 at the Hershey (PA) Theatre has been restored by A. Thompson-Allen Co. of New Haven, CT, using all-original mechanisms.

# Minneapolis Works to "Keep a Vital Organ Alive"

### by David P. Engen

rgan at Auditorium, in Full Song for First Time, Hailed Supreme in Western World." " 'Too Good to Be True Says Dunstedter, After Playing 'Premiere.' "'Immensity Is Overwhelming Says Critic, and Tone Exceptional." So read the headlines in a Minneapolis newspaper on 31 May 1928, just days before Lynnwood Farnam and Eddie Dunstedter played three nights of dedicatory concerts on the 123-rank W. W. Kimball organ before crowds of 9,000 in the Minneapolis Auditorium. The "Voice of Minneapolis" with its 5-manual concert console and 4-manual theater console was said to be the second largest organ in the country at the time, and its purchase and installation were supported by virtually the entire populace of Minneapolis. The \$100,000 organ was dedicated on 4 June 1928, one year to the day after the \$3 million building was dedicated. In 1988, the 61-year-old building will be razed to make way for a new Convention Center which will cover some seven city blocks and seat up to 30,000.

The organ's future is bright—but not secure. Several years ago a similar instrument, built by E. M. Skinner, in Minneapolis' sister city of St. Paul was lost to the community when its building was torn down to make way for another new Convention Center. Happily, that instrument has found a new home in Boston, but its loss to a cultural area rich in pipe organs was a blow to the organ community. When a similar fate threatened the Minneapolis Kimball, a small group (most notably Mike Rider, who maintains the organ voluntarily, and Michael Barone, Music Director of Minneapolis Public Radio and producer of the *Pipedreams* program) rallied to save the instrument. The Minneapolis City Council was convinced that the organ should be saved, and to that end pledged one quarter of the estimated \$1 million removal and renovation costs. The remaining \$750,000 is to be raised from private sources. It is hoped that the organ will be restored and installed in the new Convention Center by 1991. The City of Minneapolis has appointed a coordinator for the project who has assembled a Steering Committee to Save the Kimball Organ, "The Great Minnesota Organ Transplant." A number of organ-related events have occurred in 1987, concluding with a gala concert by the Minnesota Orchestra just days before the organ was removed November 1.

#### The Building

Everything about the Minneapolis Auditorium is monumental. Situated at the southern edge of the downtown area, the massive terra-cotta-adorned building stands at the intersection of two major freeways and can be easily seen by thousands of commuters every day. It is seven stories high and covers half a city block. The original steel and stone structure provided seating for 10,000. Raked seating on three sides faces a tremendous proscenium arch and stage at the east end. The organ is located in chambers on each side of the stage and originally spoke through intricately designed plaster grills. In the early 1960s, a convention center was added on the southern half-block. At that time the interior of the 1928 building was renovated and the main floor was raised, increasing ceiling height in the basement exhibition space but reducing seating in the auditorium to about 8,000. The proscenium proportions are now distorted, the stage area having been raised. Fortunately for the organ, the tone openings started high off the arena floor, so tonal egress was maintained. The elaborate plaster grill that framed the stage and through which the organ spoke, was replaced with plain grill-cloth. The two consoles were moved from their elevators in the orchestra pit to side locations under the grill, the concert console to the left of the stage and the theater console to the right. A restoration of the concert console was begun before the new Convention Center project was initiated, and at that time a four-manual console was substituted until the original could be returned. When the future of the building and the organ came into question, the restoration of the console was stopped.

#### The Organ

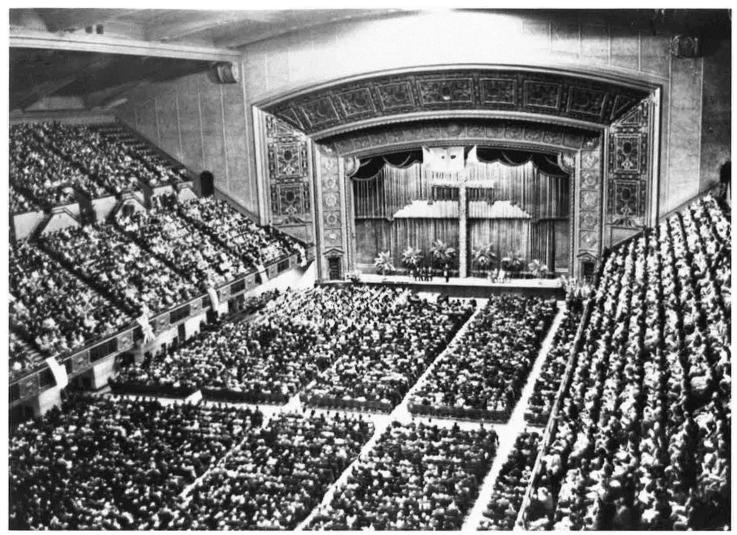
A July 3, 1927 article in the *Minneapolis Journal* quoted A. E. Benson, chairman of the organ selection committee, the day after Kimball was selected to build the organ: "When the MunicipalAuditorium Organ Committee was appointed, it was felt that a large number of Minneapolis citizens would like to participate in this move. We felt that \$30,000 could be raised by



#### \*LARGEST PIPE ORGAN IN THE MIDWEST!

contributions of one dollar and under. This goal has been reached, due largely to the splendid support of the newspapers. The committee is confident that with this fine showing of popular interest larger contributions will be forthcoming. To that end the committee will direct its effort, starting this week, to assure to Minneapolis this great addition to the life and development of the city." Later in the same article, the author quoted Benson's description of the proposed instrument: " 'We feel very keenly the responsibility resting upon us in selecting the builder, for the money comes from citizens in every section of the city,' Benson said. 'This installation is meant for all time and every safeguard will be thrown around the placing of the order and of the actual installation.' An instrument of gigantic proportions, the organ will be both a concert and theater organ, built to serve two types of players. It will take approximately 12 months to complete construction and installation of the instrument. 'The organ itself will be inclosed [sic] in the huge chambers on either side of the stage, and all pipes will be concealed. Each of the two organ chambers measure 42 feet in height, 17 feet in width and 60 feet in depth, which provides ample capacity for an instrument even of the size of the one to be installed. . . .' The organ will be so constructed that both consoles may be played at the same time, without the playing of one organist interfering, mechanically, with the playing of the other. It will be one of the few organs of the world to be equipped with this feature."

The 42' high chambers were subdivided by the addition of wood flooring into two chambers on the left and three on the right. On the left are the enclosed Great/Pedal chamber and the Bombarde chamber above. The unenclosed part of the Great stands in front of the Great/Pedal chamber, immediately behind the stage grill. On the right of the stage, the Swell is on the bottom, the Solo above it, and the Choir on the top. The 32' Double Open Diapason, made of  $2\frac{1}{2}$ ' thick virgin timber, stands unmitered in front of the shutters of these three divisions, right behind the grill, and in the same area which origi-



A "Religious Rally" photographed in 1949 shows the auditorium before the stage and floor were raised.

nally held the Kimball grand piano which played from the pedal, choir and bombarde keyboards. The piano was removed in the 1960s renovation and its present location is unknown.

Like the building, the organ is monumental and the sound is, as stated in the headlines from 1928, overwhelming. The Great consists of some 28 stops of which three are of 16' pitch. There are three mixtures, four reeds, and four mutations sounding fifth, third and seventh. The Pedal includes three fulllength 32' stops a 64' resultant (which was disconnected at some point because it shook the building and some found it offensive), fifth and third-sounding mutations, and eight reeds. Included is a 16' Diaphone. The Bombarde chamber is the smallest division, consisting of four reeds and a cornet (labeled 'Mixture').

On the right side, the Swell includes three 16' stops (two of them full-length), two mixtures, six reed, and four celestes at 8' pitch and one at 4'. The Solo includes many of the theater organ stops and a set of ten highly distinctive reeds. The Choir division includes a number of softer solo stops and combinations. There are percussions throughout the divisions, and the toy counter is located in the Great/Pedal. Wind pressures range from  $7\frac{1}{2}$ " to 30" with 10" being quite common.

The Concert Organ consists of a grand 122 ranks. The Theater Organ plays 22 unit ranks from the Concert Organ, and has one rank of its own, the Kinura.

#### Sesquicentennial Organ

There were four newspapers publishing information about the organ in 1927 and 1928. Dozens and dozens of articles refer to the organ almost daily and the massive fund-drive held for it. Much of the information cited here is taken from those articles.

In mid-March, 1927, Austin Opus 1416, the Sesqui-Centennial Exposition Organ built in 1926 for the Philadelphia world's fair was available for purchase. The organ was designed by a committee of organists and totalled 162 ranks. A March 15 article in the Evening Tribune stated that "Minneapoli must fight the competition of theater owners and junk dealers if it wants to obtain the sesquicentennial grand organ for its new municipal auditorium. According to press dispatches from Philadelphia Thursday night, several offers ranging from \$1,250 to \$50,000 have been made to Mayor Kendrick of Philadelphia. The lowest offer of \$1,250 was made by a junk dealer ..., while the other offers came from theater owners and private persons. They were all rejected." Minneapolis sent A. E. Zonne to Philadelphia to inspect the organ. Henri Verbrugghen conductor of the Minneapolis Symphony (later the Minnesota Orchestra) sent a wire to French organist Charles Courboin to ascertain his opinion of the instrument. James Gillette of the music department of Carleton College, Northfield, Minnesota, had given recitals on it and considered it the "outstanding organ in America." Minneapolis was not to have the Austin organ, however. Publisher Cyrus H. K. Curtis finally purchased the organ and donated it to the University of Pennsylvania where it was installed in Irvine Auditorium. That organ has recently been restored and its building saved by the Curtis Organ Restoration Society.

#### War Memorial

The *Morning Tribune* reported on 11 March 1927 that Mayor Leach had been authorized by the auditorium organ committee to present a proposal to the war memorial committee to make the auditorium organ a memorial to the "soldier dead of

#### 1928 W. W. Kimball, Opus 7030 Minneapolis Minnesota

Note: Numbers placed after the names of stops show unification, of which there are two separate systems, one for each of the two consoles The correspondence of Theater ranks to Concert ranks is shown by placing the number given to the Theater rank in parenthesis after the corresponding Concert rank. An example taken from the Concert Great: **16' Bourdon** 2(8)

indicates that, in the Concert Pedal, the 16' Second Bourdon. 8' Flute, 4' Octave Flute, and  $3\frac{1}{5}$ ' Tierce are derived from this rank, all of them being succeeded by a number "2" The same rank also appears in the Theater organ with various names and pitches all succeeded by a number "8"

Concert Console Specifications

Specifications
CHOIR enclosed, Manual
16' Contra Viola 7 8' English Diapason
8' English Diapason 8' Geigen Principal
8' Viola
8' Concert Flute (19)
8' Forest Flute
8' Flute Celeste
8' Muted Violin
8′ Unda Maris
4' Prestant
4' Flauto Traverso
2 <sup>2</sup> %' Nazard
2' Piccolo 1¾' Tierce
16' Bassoon 8(22)
8' Tuba Horn
8' English Horn (16)
8' Clarinet (10)
Tremolo
8' Harp
8' Piano
Ch 16 4
Sw 16 8 So. 8'
SOLO enclosed, Manual IV
8' Diapason Stentor 8' Tibia Clausa (2)
8' Hohl Flute
8' Gross Gamba (5)
8' Gross Gamba Cele
8' Viole d'Orchestre
8' Violes Celeste II (6
4' Octave
4' Solo Flute 16' Tuba Profunda 10
8' Tuba Mirabilis
8' Tuba Sonora (14)
8' Post Horn (3)
8' French Horn
) 8' Saxophone (15)
<ul> <li>8' Saxophone (15)</li> <li>8' Musette</li> </ul>
<ul> <li>8' Saxophone (15)</li> <li>8' Musette</li> <li>8' Orchestral Oboe (13)</li> </ul>
) 8' Saxophone (15) 8' Musette 8' Orchestral Oboe (1 8' Solo Vox Humana
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Minneapolis." The *Evening Tribune* the same day reported that the committee had decided against the memorial idea and that the original plans for the erection of a cenotaph on Victory Memolrial Drive should be carried out. The war memorial committee, however, enthusiastically endorsed the organ project.

This endorsement was one of hundreds received for the project from throughout the Minneapolis community. The primary fund-raising device was the sale of one-dollar "stock" certificates, with a special emphasis on raising funds from school children. The mayor recalled an earlier fund drive among children which provided some of the bells which still ring daily at the Minneapolis court house. The slogan suggested for the campaign was "organize for an organ." Among those subscribing to the campaign were the Rainbow Division Veterans, the municipal pension and retirement board, labor unions, the Elks, the Professional Men's Club, the YMCA, the newspapers, city employees, the PTA, local choruses, and some 90,000 school children. Individual names of subscribers were listed daily in the four newspapers, and the sheer number of articles and names of organizations and individuals in those papers attests to the popular nature of the fund drive.

#### **Horse Show**

I

On 18 May 1927 the *Daily Star* announced that at a meeting "of the equestrians it was decided to hold a Twin City horse show for the benefit of the municipal auditorium organ fund." The idea took hold, and a week later there were numerous articles about the desire to make the indoor horse show an annual event on a scale with horse shows in Chicago, St. Louis, Kansas City and Los Angeles. The horse show committee sent

PEDAL				Pedal toe stude	s 1-10			
anual IV	64' Gravissima 11 disconnected			Coupler Cancel piston				
tentor (4)	<b>32</b> ' Double Open Diapason 11			Set piston				
a (2)	32' Contra Violone 12 enc. Gr.				ncel rev n	iston with	indicator	light
	16'	Open Diapason 11		Expression Cancel rev. piston with indicator Tremolo Cancel rev. piston with indicator lig				
ba (5)	16'	Second Open Diapaso		Pedal stops a			dicutor ng	110
ba Celeste	16'	Diaphone 13 (13) enc. (	2r	Pedal Separati			disconnect	
hestre 9(7)	16' Violone 12			Couplers to Co			insconnect	
ste II (6)	16'	Violin Diapason 4		Choir Unison	n-off	15 011-011		
	16'	First Bourdon 16 enc.	So	Swell Unison of				
		Second Bourdon 2		Solo Unison or				
nda 10(1)		Viola 7		Bombarde exp		4.1		
oilis		Gedeckt 5		Choir expression		lai		
a (14)		Quinte 14		Swell expression				
3)	1073 Q'	Diaphonic Diapason 1		Solo expression				
'n	8'	Octave 11				n nodol		
(15)		Cello 12		Great (Master)			h+	
(10)		Stopped Flute 14		Crescendo peda Gr to Pd. rev.		incator ng	110	
<b>Oboe</b> (17)		Viole d'Orchestre 9		So. to Pd. rev.				
umana (11)		Flute 2		Sw. to Pd rev.				
		Gedeckt 5		Ch. to Pd. rev.				
olo	51%'	Twelfth 13						
0		Super Octave 13		Sw. to Gr. rev. So. to Gr. rev.	piston			
		Octave Flute 2		REV. TOE LE		h indicato	r lighter	
		Tierce 2		Piano Soft	V LILO WIL	II IIIuicato	i iigiits.	
		Twenty-Second 13		Chimes Soft				
	39,	Contra Bombarde 15 e	and Gr		ain			
	16'	Bombarde 15	file. Of .	Master (All		Great)		
		Trombone 6		Mezzo Organ		Jieat)		
		Ophicleide 3		Celesta Sust				
osed,		Tuba 10		Sforzando (d		ton)		
		Bassoon 8	Gree	t Rauschquinte		.011)		
8, 12, 15, 1 <b>7</b>	8'	Clarion 15	CC		2			
		Octave Clarion 15	c#	4	$\frac{2}{2^{2/3}}$			
a		Piano		t Mixture V	2/3			
		Piano	CC		1 1/3	1	2/3	1/2
		Chimes	G	4	$\frac{173}{2^{2/3}}$	2	11/3	1
	Gr. 8'		g′	8	51/3	4	22/3	2
	Sw. 8			t Cymbel III	073	Т	<u> </u>	
	Ch. 8'		CC		1/3	1/4		
arp	So. 8',		C	2/3	1/2	1/3		
	Bomb		F#		2/3	1/2		
	COM	<b>BINATION PISTONS</b>	c'	1 1/3	1	2/3		
Bells		to 10, Cancel	f#'		11/3	1		
el		to 10, Cancel	f#		2	11/3		
		to 10, Cancel	c''		22/3	2		
		to 10, Cancel		l Mixture V	4/3	-		
		d Touch adds Pedal to ab			11/3	1	2/3	1/2
		1 to 5, Cancel	f	4	22/3	2	11/3	1
		rsal 1 to 12, Cancel	c''		51/3	$\frac{1}{4}$	2 <sup>2</sup> / <sub>3</sub>	2
	0			Ŭ			_ / 0	



When the floor was raised in the mid-1960s, seating was reduced to 8,000

Harry Wilbern, secretary of the organ committee, to Chicago to attempt to set a date with horsemen there. By June 7, Wilbern had returned and had made his report. The setting of dates was the most difficult problem, and evidently was never resolved, for there was never an announced date for the horse show and reference to it mysteriously disappeared from the newspapers.

#### **Fund Drive Falters**

Money kept coming in for many months, and the order for the organ was placed when the fund had reached \$30,000 in mid-1927. The following year the newspapers reported a loose dollar bill had been received which was attached by string to a card bearing the address "Miss Minneapolis, care of the Municipal Organ Fund," with a return address of F. C. Augustine, 3725 29th Ave. S.

The fund drive ran into trouble, however. Flooding in the lower Mississippi valley in the spring of 1928 required massive public relief, so the push for organ funds was relaxed and never regained momentum. Following the June 1928 dedication, the state of the fund drive was reported in detail: the organ itself cost \$100,000, and with building modifications and other incidental expenses, the total project cost \$128,591.48; the entire organ was built and installed based on an initial down payment of \$10,750; a payment of \$15,000 was due 1 June 1928, and payments of \$25,000 were due 1 September 1928, 1 January 1929 and 1 June 1929; as of 15 June 1928, \$26,492.51 had been paid out of the grand total, leaving \$102,098.97 left to pay; unpaid pledges amounted to \$4,372.28. The fund drive faltered and the City never paid the remaining total. A settlement was finally made for \$50,000 in the 1930s.

#### **Building Dedication**

The building was officially opened on 4 June 1927. The festivities marked the opening of an industrial exposition, a "Made in Minneapolis" week celebration. The dedicatory program included the following events, reported in the *Daily Star* on 23 April: "Niagara Falls will roar in a silver cascade of fire from the roof of the new municipal auditorium, all streets leading to the new convention center will be illuminated in a blaze of rainbow colors *[flares]*, and hundreds of aerial bombs *[fireworks]* will spray showers of golden and colored stars over the city as a feature spectacle of the first night's opening program." Performances included operatic stars Florence Macbeth and Lawrence Tibbett, the Minneapolis Symphony, a pageant by the children of the city as directed by Mrs. Alice Dietz, and following the fireworks display there was a "living flag" chorus of 500 women's voices under the direction of Mrs. Lucille Halliday Swain, followed by a "Ball of All Nations." Hundreds of manufacturers exhibited in the basement exhibition hall, including some companies still active 60 years later: Creamette Company, First National Bank, Munsingwear Corporation, Northern States Power, Northwestern National Bank, Old Home Creameries, Pillsbury Flour Mills Company, and Toro Manufacturing Company. At the same time it was announced that a number of organizations had selected Minneapolis as their convention city: International Society for Crippled School Children, National Education Society, American Dental Association and American Medical Association.

The dedication program lists events from Saturday June 4 through Sunday June 12. Many of the weekdays repeated the same events, but the following are of interest:

#### Saturday, June 4th

1:30 pm. Minneapolis Boy Scout Drum Corps escorts Mayor and City Council from City Hall to the New Auditorium.

2:00 pm. Formal Opening Ceremonies of New Auditorium outside main entrance. Music by Luther College Concert Band of Decorah, Iowa.

3:00 pm. Children's Pageant "The Fairy's Gift" in the Arena, directed by Alice Dietz.

8:00 pm. Grand Pyrotechnic Display.

8:15 pm. Women's Auditorium Federated Chorus (500 voices), di-



OHS Historic Organs Committee Chairman Tim Smith, right, presented a citation to Minneapolis Mayor Donald Fraser, left, at the benefit concert on October 27.

Theater Console Specifications **ORCHESTRAL** Manual II **ACCOMPANIAMENT** Manual I 16 Tuba 1 16 **Contre Viole** TC 7 **Contra Tibia Clausa** 2 16' 16' Bourdon TC 19 16 **Post Horn** 3 8 **Trumpet** 12 16 **Diaphonic Diapason** TC 4 8 **Diaphonic Diapason** 13 16 **Bass Viole I TC 5** 8 Tuba 14 **Bass Viols II** TC 6 Tibia Clausa 2 16' 8 **Contre Viole** TC 7 Horn Diapason 4 16 8 16' **Bourdon** 8 8 Violoncello 5 **Bassoon** TC 9 16' 8 Violins II 6 **Bass Clarinet** TC 10 16 8 Violin 7 16 Vox Humana TC 11 **Tibia Minor** 8 8 8 **Trumpet** 12 8 **Oboe Horn** 9 **Diaphonic Diapason** 13 8 8 **Clarinet** 10 8 Tuba 14 8 **English Horn** 16 Tibia Clausa 2 8 8 Vox Humana 11 8 **Post Horn** 3 8 **Open Flute** 19 **Horn Diapason 4** 8 8 **Muted Violins II 20** 8 Saxophone 15 4' Cornet 14 Violoncello 5 Violins II 6 8 4 **Tibia Flute** 2 8 Octave 4 Octave Viola 5 4 8 Violin 7 Tibia Minor 8 4 8 4 Violins II 6 8 **Oboe Horn 9** 4 **Octave Violin 7** 8 Clarinet 10 4 Flute d'Amour 8 8 English Horn 16 **Octave Oboe 9** 4 8 Oboe 17 Vox Humana 11 4' 8 Vox Humana 11 4' **Forest Flute 19** 8 Kinura 18 4' **Muted Violins II 20 Open Flute** 19 8 2²/3' Nazard 19 8 **Muted Violins II 20** 2 **Violin Fifteenth 7 Cornet** 4  $\overline{2}'$ 4 Piccolo 19 4 **Tibia Flute** 2 16 Piano 4 **Octave** 4 Piano 8 **Octave Viola** 5 4 4' Piano Violins II 6 4 8' Harp 4 **Octave Violin** 7 4' Harp Flute d'Amour 8 4 4 Xylophone 4 **Octave Oboe 9** 8' Marimba 4 **Clarinet** 10 4' Marimba 4 **Forest Flute 19** Celesta 8' 4 **Muted Violins II** 20 **Snare Drum Roll** 22/3 Nazard 8 **Snare Drum Tap Super Octave 4 Muffled Drum** 2 **Viole Fifteenth 7 Chinese Gong Roll** 2 Flautino 8 **Chinese Block Tap** 2 Piccolo 19 Tomtom 13/5 **Tierce** 8 Castanet 16 Piano Tambourine Piano 8 Shuffle 4' 8' Piano Orchestral (to Acc.) 8' Harp ACCOMPANIAMENT 4' Harp SECOND TOUCH 8 Marimba 8 Tuba 14 4 Marimba 8' **Tibia Clausa** 2 4 Xylophone 8' Post Horn 3 2 **Xylophone** 8' Cellos III 6(5) 8 Celesta 8 **Oboe Horn 9** 2 Glockenspiel 8' Clarinet 10 2 **Orchestral Bells** 4' **Tibia Flute 2 Snare Drum Tap** 2' Glockenspiel Solo (to Orch.) 8 8' Chimes Solo (to Orch.) 62/5' **Snare Drum Roll** Solo (to Orch.) 51/3 **Chinese Block Roll** Solo (to Orch.) 43/5' (44/7') Triangle Solo (to Orch.) 4 Bird **ORCHESTRAL SECOND TOUCH** Solo (to Acc.) 8 16 **Diaphone** 13 Solo (to Acc.) 4' 16' Tuba 1 **Contra Tibia Clausa** 2 16 **Post Horn** 3 16 16' **Double English Horn** 16 8 Trumpet 12 8 **Diaphone** 13 8 **Tibia** Clausa 2 Glockenspiel 8 Chimes **Snare Drum Roll** Solo (to Orch.) 8 WINDPRESSURES

Unenclosed Great 10°, Enclosed Great Flues 10°, Enclosed Great Reeds 15°, Choir 12°, Swell 10°, 12°, Solo 15°, Bombarde Mixture V 10°, 15°, Bombarde Reeds 30°, Pedal Double Open Diapason 10° or 12°, Pedal Contra Violone 10°, Pedal Diaphone 10°, 25°, Pedal First Bourdon 15°. Pedal Contra Bombarde 25° rected by Lucille Holliday Swain. Assisting Artists Florence Macbeth, Prima Donna Soprano, Chicago Opera Company. Luther College Concert Band of Decorah, Iowa. "Living Flag."

9:15 pm. Ball of All Nations. Music by Bearcat Orchestra, Minneapolis Post 504, American Legion.

#### Sunday, June 5th

8:15 pm. Minneapolis Symphony Orchestra conducted by Henri Verbrugghen. Assisting Artists Florence Macbeth, Prima Donna Soprano, Chicago Opera Company; Lawrence Tibbett, Baritone, Metropolitan Opera Company.

#### Monday, June 6th

2:15 pm. "Miss America Revue," composed of fifty stars including European Ballet of Twelve. Featuring Miss Norma Smallwood, winner of National Beauty Contest in Atlantic City in 1926; Miss Hope Vernon, London Musical Star; Everett Johnson's Chicago Cadet Band, eighteen pieces; Mary Thomas Duffield, Prima Donna Soprano; Atkinson's Style Revue; Fifty Atlantic City Beauty Contestants.

#### Sunday, June 12th

7:45 pm. City-wide all religious meeting conducted by Council of Churches of Minneapolis, Rev. Marion D. Shutter, presiding. Speakers: Rev. Clair E. Ames, President, Federation of Ministers; The Rt. Rev. Monsignor J. M. Cleary; Rabbi Albert G. Minda.

#### **Music** in the Auditorium

In early 1928, the Auditorium played host to two significant concerts: Ignace Paderewski played the piano before a crowd of 9,000 (he was 68 at the time and had been Prime Minister of the Polish Republic in 1919), and the St. Olaf Choir under F. Melius Christiansen performed before 7,000. Reviewers raved about the acoustics of the room, declaring that every nuance could be heard in every seat. Mr. Paderewski stated that the room had inspired him very much in that he felt he was in intimate musical touch with the entire audience.

In April of 1928 the Chicago Civic Opera came to the Minneapolis Auditorium and performed "The Snow Maiden," "Aida," "Tannhaeuser," and "Resurrection." Eighteen freight cars were used to haul the scenery from Chicago, and while the organ fund drive was faltering, opera fans contributed some \$86,000 to bring the Chicago company. It was stated that at least two of the operas could be better handled in this hall than anywhere else in America. The stage offered facilities not available in either the Chicago Opera House or the Metropolitan Opera House in New York. It was expected that more than 36,000 people would attend the opera productions—and all of this was almost concurrent with the organ installation on the very same stage!

A year earlier, on 28 March 1927, workmen in the auditorium were treated to the first concert and acoustical test of the hall when Swedish-born contralto Sigrid Onegin was invited to try out the new room. She was on a tour of America and performed in Minneapolis just before returning to London to sing at Covent Garden. In June, certain organ builders studying the building declared the room was one of the finest in the country for organ music. Two days later, several men conducted the famous "carpet tack test" which earned the Mormon Tabernacle the reputation as the most acoustically perfect structure in the world. A carpet tack was dropped on the Minneapolis stage, and two men at the opposite end of the auditorium (nearly a city block away) heard it. The room was therefore declared "acoustically perfect." On June 25, the Swedish National Chorus performed in the Auditorium and declared the acoustics to be among the best they had ever encountered. Director Emil Carelius stated, "It is very well suited to choral singing." A year later, however, on 30 May 1928 (days before the organ dedication), an editorial stated, "In view of the unmitigated praise which has been bestowed on the \$3,000,000 building, it may be heresy to breathe any insinuation of imperfection. Yet the problem of acoustics is such an allencompassing one and is so inextricably tied up with the auditorium's future role as a house of music and dramatic art, that it can no longer be ignored or set aside . . . The fact remains that sound does not carry, that much of it is lost in transit to the hearer ... When patrons of operatic and musical attractions leave the auditorium grumbling that they 'could not hear,' it



Jinx Ring, foreground, coordinator of the Minneapolis Convention Center; Michael Barone, center, host of *Pipedreams*; and David Engen, left, formed a "pipe band" to play a part of the little g-minor fugue of Bach as they marched in a summer parade to promote the organ move.

bodes ill for the future of the building, so splendid in other respects." That reviewer predicted the future, for the building has not been much used for concerts, and the organ has been heard only rarely in solo. The 1987 fund-raising efforts may in fact represent the greatest and most concentrated use of the organ in its history.

#### The Organ Purchase Committee

On 27 April 1927, the *Evening Tribune* announced the formation of an organ purchase committee. Members were: A. F. Benson, chairman; E. L. Carpenter, president of the Orchestral Association of Minneapolis; A. B. Fruen, chairman of the city council auditorium committee; Mrs. H. S. Godfrey, president of the Thursday Musical; E. A. Purdy, who acted as chairman of the citizens' auditorium committee; Henri Verbrugghen, conductor of the Minneapolis Symphony orchestra; and Miss Elizabeth Quinlan, president of the Young-Quinlan company. An editorial written two days later stated that "A competent committee has been chosen to investigate the organ question and select an instrument suitabl for auditorium purposes... The auditorium itself sets a standard in form and spaciousness which should be matched in an organ. A mansion is not made the setting for the furnishings of a peasant home.'

That same week, the committee sent letters "to all organ makers in the country asking their advice as to the instrument best adapted for the auditorium." At the same time, a benefit concert was being planned for the following Sunday to be given by the Carleton College band from Northfield. The committee finally solicited bids from several companies, among them E. M. Skinner and W. W. Kimball.

The organ was to include a number of design features never before tried. Original building plans called for the construction of a theater east of the auditorium behind the stage. "The organ is to be so designed that it will be available for use in either hall. This will be the first time that such a plan has been tried in the United States." As it turned out, the Great Depression shattered those plans, and the theater was never built. There is space behind the chambers suitable for the construction of several more chambers which would have spoken directly into the proposed theater behind the stage.

The Civic Music League was invited by the Purchase Committee to assist with the organ specification. On 16 June 1927, an article reported that a special committee of the Music

SOLO Manual III	PERCUSSION Manual IV
16' Diaphone 13	16' Post Horn
16' Tuba 1	8' Trumpet 12
16' Contra Tibia Clausa 2	8' Tibia Clausa 2
16' Post Horn	8' Saxophone 15
16' Bass Viols III TC 6(5)	8' English Horn 16
16' Contre Viole TC 7	8' Vox Humana 11
16' Bourdon 8	8' Kinura 18
16' Bassoon TC 9	4' Tibia Flute 2
16' Bass Clarinet TC 10	2' Tibia Piccolo 2
16' Double English Horn TC 16	
16' Vox Humana TC 11	4' Harp
16' Kinura TC 18	8' Marimba
8' Trumpet 12	4' Marimba
8' Diaphonic Diapason 13	4' Xylophone
8' Tuba 14	8' Celesta
8' Tibia Clausa 2	
8' Post Horn 3	2' Glockenspiel 2' Orchestral Bells
8' Saxophone 15	8' Chimes
8' Cellos III 6(5)	PEDAL
8' Violin 7	32' Diaphone 2 resultant
8' Tibia Minor 8	
8' Oboe Horn 9	16′ Diaphone 13 16′ Tuba 1
8' Clarinet 10	
	16' Contra Tibia Clausa 2
8	16' Post Horn 3
8' Vox Humana 11	16' Diapason 21
8' Kinura 18	16' Bourdon 8
8' Open Flute 19	16' Bassoon 22
8' Muted Violins II 20	8' Trumpet 12
4' Octave 13	8' Diapason Phonon 13
4' Cornet 14	8' Tuba 14
4' Tibia Flute 2	8' Tibia Clausa 2
4' Violins III 6(5)	8' Post Horn 3
4' Octave Violin 7	8' Octave 4
4' Flute d'Amour 8	8' Cellos III 6(5)
4' Vox Humana 11	8' Violin 7
4' Forest Flute 19	8' Tibia Minor 8
4' Muted Violins II 20	8' Oboe Horn 9
2 <sup>2</sup> / <sub>3</sub> ' Nazard 19	8' Clarinet 10
2' Tibia Piccolo 2	
2' Piccolo 19	8' Flute 19
	4' Cornet 14
1 <sup>3</sup> / <sub>5</sub> ' Tierce 19	4' Violins III 6(5)
4' Xylophone	4' Flute 19
2' Glockenspiel	16' Piano
Percussion (to Solo) 8'	8' Piano
PISTONS	Bass Drum (Band)
Bird 1	Cymbal
Bird 2	Bass Drum (Orch.)
	Snare Drum Roll
Sleigh Bells 1	
Sleigh Bells 1 Sleigh Bells 2	
Sleigh Bells 1	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8'
Sleigh Bells 1 Sleigh Bells 2	Accompaniament (to Pd.) 8'
Sleigh Bells 1 Sleigh Bells 2 Siren	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band)
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band)
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani 1 Touch adds Pedal cel, 2nd Touch adds Pedal
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Toucl	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal eel, 2nd Touch adds Pedal h adds Pedal
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Toucl Percussion Pistons 1-10, Cancel, 2nd	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal h adds Pedal d Touch adds Pedal
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal h adds Pedal d Touch adds Pedal h adds Pedal VIBRATOS:
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Percussion Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani 1 Touch adds Pedal h adds Pedal 1 Touch adds Pedal b adds Pedal VIBRATOS: Foundation
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal h adds Pedal d Touch adds Pedal h adds Pedal VIBRATOS: Foundation Brass
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Touci Percussion Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal el, 2nd Touch adds Pedal h adds Pedal d Touch adds Pedal VIBRATOS: Foundation Brass Woodwind
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Percussion Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Vibrato Cancel	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani 1 Touch adds Pedal cel, 2nd Touch adds Pedal h adds Pedal 1 Touch adds Pedal VIBRATOS: Foundation Brass Woodwind String
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Orchestral Pistons 1-10, Cancel, 2nd Distons 1-10, Cancel, 2nd Concel, 2nd Distons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Expression Cancel with indicator lig	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal h adds Pedal d Touch adds Pedal h adds Pedal VIBRATOS: Foundation Brass Woodwind String ght, reversible
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Orchestral Pistons 1-10, Cancel, 2nd Checkstal Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Vibrato Cancel Expression Cancel with indicator light	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimes Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal h adds Pedal d Touch adds Pedal h adds Pedal VIBRATOS: Foundation Brass Woodwind String th, reversible reversible to Pd.) 8' PEDAL SC PEDAL SC VIBRATOS: Tibia
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Touch Percussion Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Vibrato Cancel Expression Cancel with indicator light Tremolo Cancel with indicator light Triangle Toe Stud	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal h adds Pedal d Touch adds Pedal h adds Pedal VIBRATOS: Foundation Brass Woodwind String ght, reversible
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Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Touch Percussion Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Vibrato Cancel Expression Cancel with indicator light Tremolo Cancel with indicator light Triangle Toe Stud	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal touch adds Pedal d Touch adds Pedal h adds Pedal VIBRATOS: Foundation Brass Woodwind String ght, reversible , reversible Tuba Vox Reversible Toe Levers
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Expression Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Toe Levers:	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani 4 Touch adds Pedal eel, 2nd Touch adds Pedal h adds Pedal 4 Touch adds Pedal VIBRATOS: Foundation Brass Woodwind String th, reversible reversible persion Tibia Tuba Vox
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Concel Pistons 1-10, Cancel, 2nd Concel Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Vibrato Cancel Expression Cancel with indicator light Triangle Toe Stud Bird Call Toe Stud	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal touch adds Pedal d Touch adds Pedal h adds Pedal VIBRATOS: Foundation Brass Woodwind String ght, reversible , reversible Tuba Vox Reversible Toe Levers
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Touck Percussion Pistons 1-10, Cancel, 2nd Companiament Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Drums On Traps Cancel Vibrato Cancel Expression Cancel with indicator light Tremolo Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Toe Levers: Chinese Gong Roll 1st touch Chinese Gong Stroke 2nd touch	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal h adds Pedal d Touch adds Pedal h adds Pedal VIBRATOS: Foundation Brass Woodwind String th, reversible , reversible Tibia , reversible Toe Levers with indicator lights: Celesta Sustain Muffled Drum
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Concel, 2nd Solo Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Expression Cancel with indicator light Tremolo Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Toe Levers: Chinese Gong Roll 1st touch	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal h adds Pedal d Touch adds Pedal h adds Pedal VIBRATOS: Foundation Brass Woodwind String th, reversible , reversible Tibia , reversible Toe Levers with indicator lights: Celesta Sustain Muffled Drum
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Touch Percussion Pistons 1-10, Cancel, 2nd Companiament Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Vibrato Cancel Expression Cancel with indicator light Tremolo Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Toe Levers: Chinese Gong Roll 1st touch Chinese Gong Stroke 2nd touch Percussion Cymbal Roll 1st touch	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal el, 2nd Touch adds Pedal h adds Pedal d Touch adds Pedal VIBRATOS: Foundation Brass Woodwind String th, reversible reversible pht, reversible total total total total tripe th, reversible total total tripe th, reversible total total tripe th, reversible total tota
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Corchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Corchestral Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Expression Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Toe Levers: Chinese Gong Roll 1st touch Chinese Gong Stroke 2nd touch Percussion Cymbal Roll 1st touch	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal bel, 2nd Touch adds Pedal h adds Pedal d Touch adds Pedal VIBRATOS: Foundation Brass Woodwind String ght, reversible , reversible Tibia , reversible Toe Levers with indicator lights: Celesta Sustain Muffled Drum Piano Soft uch Chimes Sustain
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Concel Pistons 1-10, Cancel, 2nd Percussion Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Expression Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Toe Levers: Chinese Gong Roll 1st touch Chinese Gong Stroke 2nd touch Percussion Cymbal Roll 1st touch Percussion Cymbal Stroke 2nd tour Thunder Soft Roll	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani 1 Touch adds Pedal el, 2nd Touch adds Pedal h adds Pedal 1 Touch adds Pedal VIBRATOS: Foundation Brass Woodwind String th, reversible Tibia , reversible Toe Levers with indicator lights: Celesta Sustain Muffled Drum Piano Soft
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Touch Percussion Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Diversal Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Vibrato Cancel with indicator light Tremolo Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Toe Levers: Chinese Gong Soll 1st touch Chinese Gong Stroke 2nd touch Percussion Cymbal Stroke 2nd touch	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimese 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani 1 Touch adds Pedal h adds Pedal 1 Touch adds Pedal h adds Pedal 1 Touch adds Pedal VIBRATOS: Foundation Brass Woodwind String ght, reversible reversible persible Toe Levers with indicator lights: Celesta Sustain Muffled Drum Piano Soft uch Chimes Soft Master Pedal Lock
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Companiament Pistons 1-10, Cancel, 2nd Companiament Pistons 1-10, Cancel, 2nd Drums On 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Vibrato Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Toe Levers: Chinese Gong Roll 1st touch Chinese Gong Stroke 2nd touch Percussion Cymbal Roll 1st touch Percussion Cymbal Stroke 2nd	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal el, 2nd Touch adds Pedal h adds Pedal d Touch adds Pedal VIBRATOS: Foundation Brass Woodwind String th, reversible reversible Tibia , reversible Toe Levers with indicator lights: Celesta Sustain Muffled Drum Piano Soft uch Chimes Sustain Chimes Soft Master Pedal Lock Sforzando
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Cheestral Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Expression Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Toe Levers: Chinese Gong Roll 1st touch Chinese Gong Stroke 2nd touch Percussion Cymbal Roll 1st touch Percussion Cymbal Stroke 2nd tour Thunder Crash Grand Crash Crescendo and Sforzando on Ord	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal bel, 2nd Touch adds Pedal h adds Pedal d Touch adds Pedal VIBRATOS: Foundation Brass Woodwind String ght, reversible ruba Vox Reversible Toe Levers with indicator lights: Celesta Sustain Muffled Drum Piano Soft uch Chimes Sustain Chimes Soft Master Pedal Lock Sforzando chestral on-off
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Corchestral Pistons 1-10, Cancel, 2nd Corchestral Pistons 1-10, Cancel, 2nd Corchestral Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Expression Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Toe Levers: Chinese Gong Roll 1st touch Chinese Gong Stroke 2nd touch Percussion Cymbal Roll 1st touch Percussion Cymbal Stroke 2nd tour Thunder Soft Roll Thunder Crash Grand Crash Crescendo and Sforzando on Orc	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal bel, 2nd Touch adds Pedal h adds Pedal d Touch adds Pedal VIBRATOS: Foundation Brass Woodwind String th, reversible ruba yox Reversible Toe Levers with indicator lights: Celesta Sustain Muffled Drum Piano Soft uch Chimes Sustain Chimes Soft Master Pedal Lock Sforzando chestral on-off
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Steamboat Whistle Surf Aeroplane Orchestral Pistons 1-10, Cancel, 2nd Accompaniament Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Solo Pistons 1-10, Cancel, 2nd Concestral Pistons 1-10, Cancel, 2nd Universal Pistons 1-7, Cancel Pedal toe studs 1-10 Drums On Traps Cancel Expression Cancel with indicator light Tremolo Cancel with indicator light Triangle Toe Stud Glass Crash Toe Stud Bird Call Toe Stud Bird Call Toe Stud Toe Levers: Chinese Gong Stroke 2nd touch Percussion Cymbal Stroke 2nd touch Percussion Cymbal Stroke 2nd touch Percussion Cymbal Stroke 2nd touch Thunder Soft Roll Thunder Crash Grand Crash Crescendo and Sforzando on Orc	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chimese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani 1 Touch adds Pedal be adds Pedal 1 Touch adds Pedal be adds Pedal 1 Touch adds Pedal be adds Pedal 1 Touch adds Pedal be adds Pedal cel, 2nd Touch adds Pedal be adds Pedal 1 Touch adds Pedal be adds Pedal cel, 2nd Touch adds Pedal be adds Pedal be adds Pedal cel, 2nd Touch adds Pedal be adds Pedal be adds Pedal cel, 2nd Touch adds Pedal be adds Pedal celssa Statin Muffled Drum Piano Soft uch Chimes Sustain Chimes Soft Master Pedal Lock Sforzando chestral on-off companiament on-off companiament on-off
Sleigh Bells 1 Sleigh Bells 2 Siren Fire Gong Factory Gong Auto Horn Doorbell Telephone Bell Locomotive Whistle Steamboat Whistle Percussion Pistons 1-10, Cancel, 2nd Universal Pistons 1-10, C	Accompaniament (to Pd.) 8' Orchestral (to Pd.) 8' PEDAL SECOND TOUCH 32' Diaphone 13 resultant 8' Chimes 8' Chinese Gong Persian Cymbal Bass Drum (Band) Cymbal Tympani d Touch adds Pedal h adds Pedal d Touch adds Pedal h adds Pedal d Touch adds Pedal vIBRATOS: Foundation Brass Woodwind String ght, reversible reversible Tibia reversible Toe Levers with indicator lights: Celesta Sustain Muffled Drum Piano Soft uch Chimes Sustain Chimes Soft Master Pedal Lock Sforzando thestral on-off companiament on-off companiament on-off
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League would meet in the Mayor's office to study the specifications submitted by various organ builders. "The committee is headed by Hamlin Hunt and includes in its personnel the outstanding organists of Minneapolis." Hamlin Hunt was one of the founding members in 1910 of the Twin Cities Chapter of the American Guild of Organists and was for many years the organist/choirmaster at Plymouth Congregational Church, today home of a Holtkamp organ and the Philip Brunelle Plymouth Music Series. Hunt had graduated from Carleton College and had studied with Wilhelm Middelschulte in Berlin and Alexandre Guilmant in Paris. We can assume that the "outstanding organists" also included the other founding members of the AGO chapter: George H. Fairclough, first AGO dean, head of the piano, organ and theory department at Macalester College and organist at St. John the Evangelist Episcopal Church in St. Paul for over 40 years; Stanley Avery, organist at St. Mark's Episcopal Church (later Cathedral) in Minneapolis, teacher at MacPhail school, in the first class at the American Conservatory in Fontainebleau, student of Isidor Philipp and Charles-Marie Widor in Paris; J. Victor Bergquist, graduate of Gustavus Adolphus College in St. Peter, student of Guilmant in Paris, assistant music supervisor of the Minneapolis Public Schools, organist at Augustana Lutheran and Central Lutheran Churches, and a contributor to the 1925 Augustana Synod hymnal.

The Journal reported on 28 June 1927 that the "Municipal Auditorium was called 'unequalled' by Earl M. Skinner [sic], Boston, Mass., head of one of the largest organ manufacturing concerns in America, as he inspected the building's facilities for installing an organ . . . 'You have in the Minneapolis auditorium,' Mr. Skinner said, 'facilities for installing the finest pipe organ in the world. I have studied auditoriums for many years, and I have never seen anything to equal your building. The placing of the organ chambers as to size and location is ideal. With the amount of money that your committee is planning on spending you should have an organ that will attract worldwide attention.' "

On 3 July 1927, the *Journal* announced: "From a field of a dozen bidders, the organ purchase group of the Municipal Organ Committee last night selected the W. W. Kimball Company of Chicago to make the \$100,000 pipe organ for the Municipal Auditorium."

#### W. W. Kimball

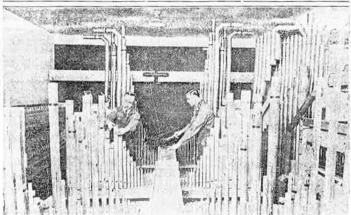
William Wallace Kimball, born in Maine, was a real estate agent in Decorah, Iowa until he moved to Chicago in 1857 to sell real estate. As he was leaving Decorah, a piano salesman traded some pianos for some property Kimball held in Decorah. When he got to Chicago he sold the pianos, ordered more, and opened a music shop. He started building reed organs in 1880, pianos in 1888, and pipe organs in 1891. Frederick W. Hedgeland, age 23, applied for work with Kimball in the 1890s and had already successfully built organs in St. Paul. He was hired and charged with developing a portable pipe organ. Such instruments were successfully marketed in the 1890's. Stationary pipe organs followed in 1894. In 1896, Kimball assumed a national position as one of the largest and finest musical instrument makers in the country. By 1942, when they stopped making pipe organs, the company had built 7,326 organs. W.W. Kimball died in 1904. A Kimball descendant, also named W.W. Kimball, is retired and lives in Florida today.

An article appearing in a music magazine on 19 August 1927 described the design of the Kimball:

The instrument is to be the latest and one of the largest of the great municipal organs of the world, and is to be the feature of the new municipal auditorium. It is to have five manuals, with a stop knob console of the English type. Supplementary to this there is to be a four-manual unit console, controlling a number of the stops and percussions of the main organ and having certain special stops commonly used in theatre organs, including traps and drums. This will make it possible to use the instrument for theatrical performances to advantage.

The unit console will have second touch and various accessories that are not required in the concert instrument and birds, sleigh-

9,999 PIPES IN GREAT AUDITORIUM ORGAN WILL BE TUNED BY EAR



bells, fire gong, automobile horn, etc., will be provided to make the percussion features complete. Twenty stops of the main organ will be used as units in the tonal scheme of the theatre organ.

The list of accessories for the five-manual concert console shows ten double-touch pistons for each of the four principal manuals and five affecting the bombards-percussion manual. On second touch these pistons will draw pedal stops. There will also be twelve universal pistons and ten toe pistons affecting pedal stops and couplers.

Installation was underway by 15 April 1928 (during the Chicago opera performances). A photograph in the *Journal* shows workmen outside the building with low C of the 32' Double Open Diapason, about to hoist it through a hole made in the back of the stage to get the organ parts into the building. A crew of five was sent from Chicago under the direction of Emil Hagstrom.

#### **Organ Dedication**

In late April 1928 the dedicatory series was announced for June 4–6. It was reported on 19 April that a committee of 100 had identified 600 individuals to be targeted for major donations. That same day the organ made its first sounds—an unmusical roar, according to the news report, since it was only a blower test.

Lynnwood Farnam was engaged to play programs on Monday and Tuesday, June 4 and 5, and Eddie Dunstedter on Wednesday, In addition, Edward Benedict and Allen W. Bogen, both of Chicago, gave a demonstration of the organ using both consoles, playing "March Slav" at all three programs. On the eve of the dedication, organ chairman Benson said "While there is one larger instrument in existence . . . the committee determined to attempt to draw the ideal specification, one that includes anything and everything that either theater or concert organist could wish for. I believe we have it. With the magnificent acoustics of the auditorium, this dedication marks the dawn of a new era in organ music in the northwest." As we will see, he could not have been more wrong, at least in regard to the Auditorium organ. In 1949, it was reported that there had not been a single recital on the organ since 1928. Nine thousand people attended each of the three dedicatory programs, each one different:

#### Monday, Lynnwood Farnam

Sketch in C major Robert Schumann Sketch in D-flat Schumann Largo Appassionata from Sonata in A Beethoven Toccata, Adagio and Fugue J. S. Bach Cortège et Litanie Marcel Dupré March Slav (Benedict/Bogen) Tschaikovsky The Legend of the Mountain Karg-Elert Allegro Moderato (Concerto 4) Handel H. L. Baumgartner Divertissement Reverie on "University" Harvey Grace Intermezzo (Symphony 6) Charles-Marie Widor Tuesday, Lynnwood Farnam Dorian Prelude "Dies Irae" Bruce Simonds Fugue in C-sharp minor Arthur Honegger A Gigg William Byrd Concerto No. 5 in F Handel

Carillon To Shepherds As They Watched Vivace (Trio Sonata 6)	Eric DeLamarter J. S. Bach Bach
Tumult in the Praetorium	de Maleingreau
The Mirrored Moon	Karg-Elert
Carillon-Sortie in D	Henri Mulet
Wednesday, Eddie Dunstedter	
Hail, Hail the Gang's All Here	Anonymous
March of the Priests (The Prophet)	Meyerbeer
Dancing Tambourine	Polla
Pilgrim Chorus (Tannhaeuser)	Wagner
Serenade	Schubert
Rhapsodie in Blue	Gershwin
"A Little Bit of Everything"	Dunstedter

The dedication program commentary was unequalled in the praise heaped upon the instrument:

In this magnificent instrument, Minneapolis, the Musical Capitol of the Northwest, boasts the largest and most complete pipe organ in any Municipal Auditorium in the World.

In it are combined the maximum resources of the art of organ building. It has the tonal equipment of a magnificent concert organ, possibly without equal anywhere, together with a theater organ which includes the latest developments in that field.

Every musical tone known to the human ear is to be found in this organ, including the voices of a Symphony Orchestra and the instruments of a modern "Jazz Band." A Concert Grand piano is even included.

By the installation of the two consoles, Minneapolis is assured of the most efficient and frequent use of the organ, it being adapted to the use of either concert or theater organists. Again, both consoles may be played simultaneously with an organist at each console, thus gaining effects heretofore unheard of, and opening a new field of development in organ music.

"The Voice of Minneapolis" will cost \$123,000.00, including installation. It will be a credit to its makers, an instrument in which the artists of the world may revel in bringing enjoyment to countless thousands of listeners at home and abroad and to generations still unborn.

'Of the people, for the people and by the people,' the fame of Minneapolis will be spread abroad by "The Voice of Minneapolis."

The concerts were preceded on Saturday by a parade which included an elephant and an old organ from 1868 belonging to Mrs. Carlyle Scott, a local impressario and wife of the chairman of the music department at the University of Minnesota (after whom was named the music building Scott Hall.) The committee sought both the oldest organ and the oldest organist in the city to sit in a truck and lead the parade down Nicollet Avenue.

Farnam thought very highly of the organ, as reported on Tuesday of dedication week: "A splendid instrument . . . it is without flaw, and is unquestionably one of the finest organs in the world. It has loads of possibilities and heaps of color." William E. Youngquist contributed a poem, published on 6 June which concludes as follows:

Our great pipe organ's splendid thundering tones will oft be heard, Blended with some mammoth chorus with the souls of thousands stirred.

When harmonious tones of grandeur, fill this high and lofty dome, Now we'll all be proud to call this lovely city, "Home, Sweet Home."

May all needless strife be banished from this temple rich and grand;

Toleration for your neighbors, rich or poor all o'er the land. Always shall a place of honor for the "Stars and Stripes," there be, For our country's flag, "Old Glory," emblem of sweet liberty.

#### **Depression, Talkies, War and Virgil Fox**

References to the organ mysteriously disappeared after 15 June 1928. The decline in the world economy, the stock market crash in 1929, and the decline in theater organs as "talkies" arrived nearly silenced the great Kimball. World War II and the musicians' union requirement that 15 musicians be hired whenever there was music in the Auditorium doomed frequent use of the organ, although there is a story that Eddie Dunstedter stopped a riot at a boxing meet by pulling on all of the stops and laying his arms on the keyboards. The organ has been used when the union requirement was waived for religious events. Otherwise, the organ sat in the Auditorium, virtually unused and virtually forgotten.

In June, 1949, the American Guild of Organists Twin Cities Chapter hosted a regional convention and Virgil Fox, then of Riverside Church in New York, played the organ as the only major recitalist since 1928.

#### Lutheran World Assembly

In the late 1950s, the organ had fallen into serious disrepair. The third Lutheran World Assembly was held in Minneapolis in August of 1957 with an estimated 100,000 in attendance, including "famous church musicians from Europe." But, as Dr. Paul Ensrud, chairman of the music department at St. Olaf College, reported, every rank had dead notes and the organ had a number of ciphers. The City Council's Ways and Means Committee suggested that if the Lutherans would contribute \$8,000, they would throw in \$2,000 towards repairs. The Lutherans rejected this idea and, in fact, suggested they had made a mistake in choosing Minneapolis for their convention. The old Met Stadium had been promised for their use and later was re-scheduled for the baseball season. Memorial Stadium at the University was not available to them because of University rules. They found obstacles at every turn, and the state of the organ was very nearly the last straw. The City finally agreed to spend \$13,000 on repairs, including additions of the 2-rank and 3-rank mixtures by M. P. Möller.

#### The Great Minnesota Organ Transplant

The "Voice of Minneapolis" was again resurrected through private contributions and donation of 3,000 man-hours during 1985–86. It was in no way "restored," but it was made usable again for a series of fund-raising programs in 1987 in the attempt to raise public awareness and the \$750,000 necessary to restore and move the organ into the new Convention Center the "Great Minnesota Organ Transplant." A minimallyadvertised concert held 24 October 1986 drew a crowd of 1,800 to hear a thrilling concert given by Dr. Edward Berryman and Robert Vickery. Except for occasional organists' conventions, this was the largest crowd this writer has seen at an organ recital in thirty years. There is growing interest in the salvation of a piece of Minneapolis history which may find a better future than it has had a past.

The Steering Committee has set two goals for itself: (1) restore the organ and place it in the new building; (2) ensure that it is used and properly maintained. It is the second goal which is the most ambitious. Many civic and community groups are kindling interest in the great instrument, as is the AGO, ATOS, and OHS. The organ itself has done the greatest job of conversion, for nearly all who have heard it come away enthusiastic. The 1928 headlines did not exaggerate when they stated: "Immensity is overwhelming . . . and tone exceptional."

Contributions are sought, in any amount. Tax deductible donations may be sent to:

The Minneapolis Organ Trust Fund Minneapolis Convention Center Project 315 E. Grant Street Minneapolis, MN 55404 612-348-8300

Audio and video tapes are available, as are T-shirts with a picture of the 5-manual console on the front and "I helped keep a vital organ alive" on the back. All concerts have been recorded by Minnesota Public Radio.

#### NOTES

The Kimball Concert Grand Piano is removed from the organ chambers and stored backstage. The Rauschquinte II and Cymbal III on the Great were added by Möller in 1957. All mutations above 2' pitch in the Concert organ, with the exception of the Tierce on the Choir, break back an octave at c#3. The Tierces in the Swell Dolce Cornet IV and the Bombarde Mixture V break back an octave at c#3. The three-rank string stops in the Theater organ are derived form the Gross Gamba 8 and the Violes Celeste II 8 in the Solo. On the Theater console, any set of Swell shades, excluding those of the Bombarde, can be switched to any of the four Expression pedals. The Kinura is enclosed in the Choir.

# A Double Tannenberg Legacy

# Restoration of the 1787 and 1793 Organs in Lititz, Pennsylvania

by John L. Speller

**C** omparatively few organs in this country date from the eighteenth century, whether American- or foreign-built. Those that do survive are of great importance and have earned considerable esteem. Among the most revered early American organs are those of David Tannenberg, (1728–1804), the great Pennsylvania German organbuilder who had his workshop in Lititz, an original Moravian settlement. It is fitting that here may be found *two* Tannenberg organs, both located in the Single Brethren's House. One was built in 1878 and is currently celebrating its bicentennial; the other was built in 1793. Both have very interesting histories, and both have recently been restored by James R. McFarland & Company of Millersville, Pennsylvania.

#### The 1787 Tannenberg

The 1787 Tannenberg was originally built for the Moravian Church in Lititz. This is the building next to the Single Brethren's House where the organ is now housed. Lititz Moravian Church was Tannenberg's own church; he himself was responsible for the design of the steeple, and he doubtless took particular pride in designing and building its organ. The dedication took place on 13 August 1787, and the Lancaster newspaper of 15 August 1787 stated that it was attended by "the most prominent people of all religious denomintions of Lancaster borough and county far and wide. The instrumental music, as well as the excellent and harmonious organ manufactured by Mr. David Tannenberger [sic], in addition to the devout singing of the entire congregation, made one's heart feel sublime."<sup>1</sup>

The organ served the Lititz congregation faithfully for 92 years. In 1879 it was replaced by a two-manual E. & G.G. Hook & Hastings (Opus 945,) but the organist of Lititz, Fred Van Vleck, thought highly enough of the Tannenberg organ not only to find it a new home, but also to undertake the work of relocating it himself. Van Vleck was the assistant postmaster in Lititz, and worked as organist of the Lititz congregation and as an amateur organbuilder in his spare time. Van Vleck moved the 1787 Tannenberg to its new home in the South Side Moravian Church in Bethlehem during the summer of 1880, and the opening concert was held on Saturday, 24 July 1880. The Bethlehem paper of 26 July 1880 described the concert in the following terms:

The organ concert given on last Saturday evening in the Moravian Church, South Bethlehem, was a success in every respect; and even the weather, which is usually of the most dismal, rainy character when any concert or sociable is undertaken in this church, put on the best behavior of this occasion. The work of reerecting the Tannenberg organ after its transportation from Lititz, where it had done good service for nearly 100 years, was successfully accomplished by Prof. S. V. Van Vleck, and to him was accorded the first place on the programme. He opened the concert with a short voluntary, from which he glided into a Rink concerto. A portion of the Bethlehem [Central] Moravian Church choir, under the direction of Prof. Theo. F. Wolle, rendered three anthems during the concert: first, "Incline thine Ear, O Lord," by Himmel, in which Prof. Klose's bass voice was heard to good advantage in the opening solo; second, "Lamm und Heupt, es sei geglaubt," by Reissinger; third, the "Gloria" from Haydn's first mass. It may be needless to remark that these anthems were given in the artistic style characteristic of Prof. Wolle's choir. Two German solos were admirably sung by Mrs. Collasius, a lady from New York, at present here on a visit to a sister, and who very generously volunteered her services in the good cause. Mrs. Collasius played her own accompaniment on the organ whilst she sang, in true German style, "Das bettelnde Kind," and "War weiss ob wir uns wieder sehen.'

The second organ voluntary was performed by Prof. Wolle in his customary smooth and flowing style. He developed all the resources of the instrument and demonstrated very plainly that there is still "any quantity" of music in the old organ. Prof. Wolle has told us that he entertains a feeling of regard for the old organ, as upon it he took his first lesson when a boy, and his first performance in a public service was given on this same organ when he was but nine years of age. In the third voluntary Prof. James N. Beck of Philadelphia rendered selections from Reissinger, Rossini, Verdi and other eminent composers of the German and Italian schools. Prof. Beck ranks high as an organist in the city, and he fairly sustained his reputation on Saturday night by his skillful manipulation at the keyboard. The fourth and last voluntary was accorded Prof. Warner of Philadelphia, who, like Prof. Beck, is well known in this community. Prof. Warner opened with an original fantasia, an "impromptu," as musicians call it; and after modulating and harmonizing to develop the qualities of the organ he closed with a brilliant wedding march. The concert was brought to a close by the entire audience rising and singing the usual long metre doxology. We congratulate the members of the South Bethlehem Moravian Church on their acquisition, and hope that the sounds of this organ may long be heard in their beautiful house of worship.<sup>2</sup>

It had long been thought that the 1787 Tannenberg organ from Lititz was the first organ in the South Side Moravian Church, Bethlehem, but this writer happened quite by chance on information which shows that it in fact replaced an earlier organ by Klemm and Tannenberg. In 1759 Klemm and Tannenberg had built an organ for the Old Moravian Chapel in Bethlehem. While this was largely superceded by the 1806 Geib organ when the new Central Moravian Church was built, it was not removed until 1872, when its transfer to the South Bethlehem Moravian Church is recorded in the *Bethlehem Daily Times* of 13 May 1872:

The organ in the *[old]* Moravian Chapel, Bethlehem, which is somewhat over a hundred years old... was removed on Saturday evening to the Moravian Church, South Bethlehem ... where it will still send forth hallowed music.<sup>3</sup>

It is also interesting to discover that even after its displacement at the South Bethlehem Moravian Church just eight years later by the 1787 Tannenberg from Lititz, the 1759 Klemm-Tannenberg organ was again relocated to the Y.M.C.A. Hall of Main and Market Streets in Bethlehem. This is reported in the *Bethlehem Daily Times* for 27 July 1880:

The organ which was formerly in use in the Moravian Church, [South Bethlehem], was yesterday taken to Bethlehem, and placed

### WILL MOVE ANCIENT ORGAN

#### Work of Tannenberg to be Taken from South Bethlehem, Pa., Church.

One of the most interesting and curious of the old organs of this country is about to be removed from the Moravian church at South Bethlehem, Pa., and taken to the Moravian church at Lititz, a place about half way between Lebanon and Lancaster, where it will be preserved as a relic, says the New Music Review. This antique was made in the year 1787 by David Tannenberg, an organ builder of Lititz, who achieved a reputation in Pennsylvania in the latter part of the eighteenth century. He constructed a similar instrument for Nazareth in 1793. An organ built by him in 1801 is still in use at Madison, Va. In a country supposed to be entirely given to "new things" ancient "kists o' whistles" are exceedingly scarce. We know of no American organ in a playable condition older than the Tannenberg creation we have mentioned.



The 1787 Tannenberg, Single Brethren's House, Lititz, Pennsylvania, restored by James R. McFarland & Co.

### **Technical Appendix**

#### **1787 LITITZ ORGAN**

Dimensions of case Width of outside towers: 201% in. Width of center tower: 251% in. Width of flats: 12% in. Depth from front of pillars in facade to back of case: 423/16 in. Chest: 821/2 in. x 33% in. Height from floor to top of center tower, without carving: 13 ft. 3 in. Height from floor to impost: 65 in.

#### Metal composition

	Lititz	Madison	Spring	g City
	(1787)		Quinta	Facade
Antimony	1.1%	0.72%	1.18%	0.77%
Arsenic	0.04%	0.04%	0.04%	0.04%
Copper	0.34%	0.43%	0.25%	0.18%
Lead	38%	39%	38%	39%
Cadmium	0.05%	0.05%	0.05%	0.05%
Bismuth	0.05%	0.06%	0.10%	0.04%
Silver	0.016%	0.016%	0.013%	0.005%
Tin	60.4%	59.7%	60.4%	59.9%

#### LITITZ, 1787

8' **Principal Discant** metal ( $g^0$ - $g^{\#^1}$  in facade)

1st. extant pipe, a						
	Diameter	Mouth Width	cut-up	Toe-hole Dia.	Nickslem.	
a <sup>1</sup>	29	22.5	5.5	5.5	13	
$c^2$	26.5	20	4.5	4	12	
c <sup>3</sup>	15	11	3.5	5	7	

4' Principal metal (C-d<sup>0</sup> in facade)

	1				
	Diameter	Mouth Width	cut-up	Toe-hole Dia.	Nickslem.
$c^0$	51.2	38	8	5	16
c1	29	22.5	5.5	3.7	11
$c^2$	17.5	13	2.5	2.8	8
c <sup>3</sup>	10	7.5	1.7	2	6
		34 1 1 1 1 1	0.0	. 0 .	

Metal thickness 0.6 mm. at c<sup>0</sup> pipe

#### 2' Sub [sic.] Octav metal

	Diameter	Mouth Width	cut-up	Toe-hole Dia.	Nicks/cm.
С	48	38	8	5	16
c <sup>0</sup>	29	22.5	5.5	3.7	11
ci	17.5	13	2.5	2.8	8
c <sup>2</sup>	10	7.5	1.7	2	6
c <sup>3</sup>	5.5	4	1	open	4
	amba C-H	grooved from 8' metal, box mou	Flute		
	Diameter	Mouth width	cut-up	metal t	hickness
c <sup>0</sup>	47	30	10	0	.5
$c^1$	27	18	6		-0.1
c <sup>2</sup>	17	11	3.5		-
c <sup>3</sup>	11	6	2.5		_
$\begin{array}{c} C\\ c^0\\ c^1\\ c^2\\ c^3 \end{array}$	Diameter 89 x 69 52 x 41 28 x 24 18 x 16 10 x 12	ben wood	cut-up 23 14 9.5 5 3		thickness 13 11 6.5 4 4
<b>4</b> ′ ]	H oper	opped pine en pine n pine with wal pen walnut	nut back ar	nd front	
	Diameter		cut-up	wood	thickness
С	50 x 39		17		9
c <sup>0</sup>	30 x 25		9		6
$c^1$	19.5 x 15	j			4
$c^2$	11 x 11		3		3.5
c <sup>3</sup>	9 x 8		2.5		2



Photographed in 1977 with the haphazardly-stored 1787 Tannenberg in its attic room, James R. McFarland, right, inventoried the organ and examined all of the extant Tannenbergs in preparation for the restoration, sometimes assisted by former employee J. Bryan Dyker, left.

in the rooms of the Young Men's Missionary Society, where it will be left permanently.  $^{\rm 4}$ 

The instrument seems to have disappeared from the Y.M.C.A. sometime around the year 1900 and was presumably scrapped. It has sometimes been suggested that Klemm was incompetent as an organbuilder and that all of his instruments were short-lived. The fact, however, that the 1759 Klemm-Tannenberg organ lasted one hundred and fifty years in three different locations suggests that this accusation may be unfair, at least in regard to those instruments built after Tannenberg had begun working for Klemm.

At the time of its move from Lititz to the South Bethlehem Moravian Church, a number of changes were made to the 1787 Tannenberg organ:

1. A "modern" wind system was constructed and placed within the case. The original bellows had been located above the organ in the attic of Lititz Moravian Church, and would have been almost impossible to remove. The original attic bellows remained at the Lititz church until it was destroyed by fire in 1957.

**2.** The layout of the stop action within the case was altered in order to accommodate the new wind system.

**3.** A swell box was fashioned within the case and a balanced swell pedal was provided to operate it.

**4.** The pedal action was extended to accommodate a pedal chest location somewhat remote from the case.

5. A new keyboard and drawknobs were provided.

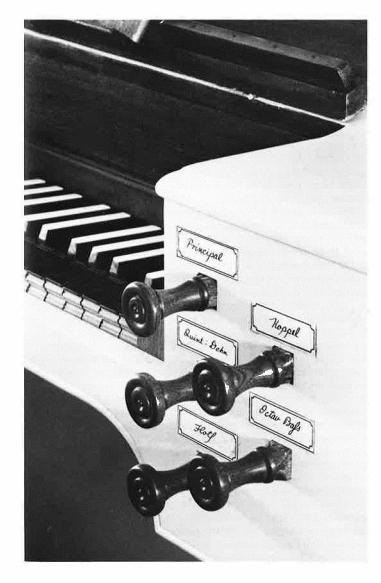
**6.** The tower finials were removed (they apparently never left Lititz).

In 1910, the South Bethlehem Moravian congregation purchased a new two-manual tracker organ built by Charles F. Durner of Quakertown, Pennsylvania, and the 1787 Tannenberg organ was returned to the Moravian congregation in Lititz, where it was placed disassembled in storage in the attic of the Single Brethren's House.<sup>5</sup>

In 1957 the interior of the Moravian Church in Lititz was destroyed by fire. It is fortunate that the 1787 Tannenberg was no longer in the Church building, but safely stored in the Single Brethren's House next door! Tannenberg's steeple, however, was destroyed, and so too was the original attic bellows belonging to 1787 Tannenberg organ. The church was rebuilt according to the original designs, including Tannenberg's steeple, and now has a two-manual electropneumatic M.P. Möller organ.

In 1976, the Archives Committee of the Moravian Church in Lititz approached James R. McFarland & Company, and asked whether the work of restoring the 1787 Tannenberg and reerecting it in the Single Brethren's House might be accomplished with funds set aside for a restoration contract drawn up five years previously. Not wishing to lose a rare opportunity of working on an eighteenth-century organ, the firm readily agreed. Between 1976 and 1983 more than ten thousand manhours were expended on research and re-creation of David Tannenberg's organ-building techniques. Jim McFarland made an extensive examination of the eight other extant Tannenberg organs, and also made a thorough search of all relevant documentary sources. A number of facts emerged from this, of which perhaps the most interesting is that Tannenberg used constant scaling for the principal stops in all his organs. Thus, for example, a 2' pipe in any principal rank (e.g. 4' Octave, 23' Quinte, 2' Super Octave, etc.) will always have the same scale. Indeed, even the cut-ups and mouth-widths are constant for a pipe of given length. The one exception to this is the 8' Principal stop, where Tannenberg appears to have done a great deal of experimentation, and where various scales are to be found, ranging from an almost string-like "Principal Dulcis" to some quite substantial Principals. That Tannenberg was an early adherent of equal temperment, is an interesting characteristic that is seen in all of his instruments.<sup>6</sup> In the restoration of the 1787 Tannenberg organ every effort was made to discover and adopt the methods that David Tannenberg originally used. For example, all new wooden parts were hand planed and all pipe metal was reduced in thickness and polished with hand tools.

After the project began it was discovered that many of the organ parts in storage were not from the Tannenberg organ as had originally been thought, and twice as many new parts had



**PIPESCALES** All dimensions in mm. (Note that Tannenberg, following Sorge, made all his wooden pipes with  $\frac{1}{2}$  mouths. This means that there is necessarily a constant ratio width and depth in wooden Tannenberg pipework.)

	Principal C-0	G <sup>#</sup> stopped pir	ne with w	alnut mouths	
		H open pine w			
	d- <sup>0</sup>	-d <sup>3</sup> metal (c <sup>0</sup> -c	<sup>2</sup> in faca	de)	
	Diameter			wall thickness	nicks/cm
С	90 x 71	-	22	1.2	none
c <sup>0</sup>	74	55	14	1.0	20 light
c1	41	33	9	0.7	12 v. lt.
$c^2$	23	19	5.5		none
c <sup>3</sup>	13	10	4	0.6	none
4' (	Octav C-C# o	pen pine with	walnut	mouths	
		netal (D-H in f			
~	Diameter	mouth width		wall thickness	
$C_{c^0}$	64 x 53		15	1.0	none
	41	33	10	0.7	13
c <sup>1</sup>	23	19	5.5	0.7	10
c <sup>2</sup>	13.5	10 Signature on (	3 С. "Т. І	Minor" [2]	9
		Signature on	C. I.J.	WINDI [:]	
3.1	Quint metal Diameter	mouth width	cut-up	wall thickness	nicks/cm
С	53	42	11	1.0	14 light
$c^0$	30	24	6.5	0.7	11 light
$c^1$	16.5	13	4	0.7	6 v. light
$c^2$	10.5	7.5	3	0.5	none
c <sup>3</sup>	6	5	2	0.5	none
	Sub [sic.] Oc			1.1	
4 :			cut-up	wall thickness	nicks/cm
С	42	33	9	1.0	11
$c^0$	23	18	6	0.7	10
c <sup>1</sup>	13	10	3	-	10
$c^2$	7.5	6	2.5		7 v. light
c <sup>3</sup>	4.5	3.5	1.5	0.5	none
8.1		$A-d^1$ open pine $d^*-d^3$ open wa	e with wa	h walnut mouth alnut mouths	ns
	Diameter	cut-up thi	ckness	nicking lanq	uid above c
С	90 x 70		15	none	0
$c^0$	64 x 53	16	9	none	4
$c^1$	36 x 30	9	7	none	2
$c^2$	20 x 16	5	4	none	1.5
	11 x 9	3	3	none	1
c <sup>3</sup>	11 x 9 Flute open w c# <sup>0</sup> -f <sup>0</sup> f f# <sup>0</sup> -h <sup>0</sup> j c <sup>1</sup> -d <sup>3</sup> w	3 ood C-c <sup>0</sup> pine v pine with oak p pine with walr alnut	with wal fronts nut front	none nut mouths s	1
c <sup>3</sup> 4′]	11 x 9 Flute open w c# <sup>0</sup> -f <sup>0</sup> f f# <sup>0</sup> -h <sup>0</sup> j c <sup>1</sup> -d <sup>3</sup> w Diameter	3 ood C-c <sup>0</sup> pine y pine with oak pine with walr alnut <i>cut-up th</i>	with waln fronts nut front ickness	none nut mouths s nicking lanqui	1 id above cap
c <sup>3</sup> 4′1 C	11 x 9 Flute open we $c^{\#^0-f^0} I$ $f^{\#^0-h^0} I$ $c^{1}-d^3 w$ . <i>Diameter</i> $64 \times 54 \pm 1$	3 ood C-c <sup>0</sup> pine w pine with oak pine with waln alnut <i>cut-up th</i> 15 arched	with waln fronts nut front <i>ickness</i> 11	none nut mouths s nicking lanqua none	1 id above cap 3
c <sup>3</sup> 4' 1 C c <sup>0</sup>	11 x 9 Flute open w $c^{\#^{0}-f^{0}}$ $f^{\#^{0}-h^{0}}$ $c^{1}-d^{3}$ w Diameter $64 \times 54 \pm 36 \times 31$	3 ood C-c <sup>0</sup> pine w pine with oak p pine with waln alnut cut-up th 15 arched 9	with waln fronts nut front <i>ickness</i> 11 6	none nut mouths s nicking lanqui none none	1 id above cap 3 2
c <sup>3</sup> 4' 1 C c <sup>0</sup> c <sup>1</sup>	11 x 9 Flute open w $c^{\#^{0}-f^{0}}f^{\#^{0}-h^{0}}f^{*}$ $c^{1}-d^{3}w$ Diameter $64 \times 54 \pm 36 \times 31$ $20 \times 16$	3 ood C-c <sup>0</sup> pine w pine with oak p pine with waln alnut <i>cut-up th</i> 15 arched 9 5.5	with walt fronts nut fronts <i>ickness</i> 11 6 5	none nut mouths s nicking lanqua none none none none	1 id above cap 3 2 1.5
c <sup>3</sup> 4'] C c <sup>0</sup> c <sup>1</sup> c <sup>2</sup>	11 x 9 Flute open w $c^{\#^{0}}f^{0}$ f $c^{1} d^{3}$ w <i>Diameter</i> 64 x 54 ± 36 x 31 20 x 16 11.5 x 9.5	3 ood C-c <sup>0</sup> pine with oak p pine with waln alnut <i>cut-up th</i> 15 arched 9 5.5 3	with walk fronts nut fronts <i>ickness</i> 11 6 5 3.5	none nut mouths s nicking lanqui none none none none none	1 id above cap 3 2 1.5 1.5
$c^{3}$ 4' ] $C^{0}$ $c^{1}$ $c^{2}$	11 x 9 Flute open w $c^{\#^{0}}f^{0}$ f $c^{1} d^{3}$ w <i>Diameter</i> 64 x 54 ± 36 x 31 20 x 16 11.5 x 9.5	3 ood C-c <sup>0</sup> pine w pine with oak p pine with waln alnut <i>cut-up th</i> 15 arched 9 5.5	with walt fronts nut fronts <i>ickness</i> 11 6 5	none nut mouths s nicking lanqua none none none none	1 id above cap 3 2 1.5
c <sup>3</sup> 4'] C c <sup>0</sup> c <sup>1</sup> c <sup>2</sup>	11 x 9 Flute open ww $c^{\#^{0}}f^{0}f^{0}f^{0}f^{0}f^{0}d^{0}d^{0}d^{0}d^{0}d^{0}d^{0}d^{0}d$	3 ood C-c <sup>0</sup> pine with oak i pine with waln alnut <i>cut-up th</i> 15 arched 9 5.5 3 2	with waln fronts nut fronts 11 5 3.5 2.5	none nut mouths s nicking lanqui none none none none none	1 id above cap 3 2 1.5 1.5 1.5 1.5
C C C C C C C C C C C C C C	11 x 9 Flute open w. $c^{\#^0-f^0}$ f $f^{\#^0-h^0}$ of $c^1-d^3$ w. Diameter $64 x 54 \pm 36 \times 31$ 20 x 16 11.5 x 9.5 8.5 x 6.5 WHITE Principal meter	3 ood C-c <sup>0</sup> pine w pine with oak p pine with walr alnut cut-up th 15 arched 9 5.5 3 2 CFIELD HOU etal (C-d# <sup>0</sup> in t	with walk fronts nut fronts 11 6 5 3.5 2.5 <b>(SE, NA2</b> facade)	none nut mouths s nicking lanqua none none none none None <b>ZARETH 1776</b>	1 id above cap 3 2 1.5 1.5 1.5 (?)
C c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> C <sup>3</sup> 2' ]	11 x 9 Flute open w. $c^{\#^0-f^0} f$ $f^{\#^0-h^0} f$ $c^{1}-d^3 w.$ Diameter $64 x 54 \pm 36 \times 31$ $20 \times 16$ 11.5 x 9.5 8.5 x 6.5 WHITE Principal meter	3 ood C-c <sup>0</sup> pine w pine with oak p pine with walr alnut <i>cut-up</i> th 15 arched 9 5.5 3 2 <b>CFIELD HOU</b> etal (C-d# <sup>0</sup> in the Mouth wide	with walk fronts nut fronts 11 6 5 3.5 2.5 <b>(SE, NA2</b> facade)	none nut mouths s nicking lanqua none none none none ZARETH 1776 ut-up meta	1 id above cap 3 2 1.5 1.5 1.5 (?) al thickness
C C C C C C C C C C C C C C	11 x 9 Flute open w. $c^{\#^0-f^0}f$ $f^{\#^0-h^0}f$ $c^{1}-d^3$ w. Diameter $64 x 54 \pm 36 x 31$ 20 x 16 11.5 x 9.5 8.5 x 6.5 WHITE Principal me Diameter 50	3 ood C-c <sup>0</sup> pine w pine with oak p pine with walk alnut <i>cut-up</i> th 15 arched 9 5.5 3 2 <b>CFIELD HOU</b> etal (C-d# <sup>0</sup> in 1 Mouth wide 33	with walk fronts nut fronts 11 6 5 3.5 2.5 <b>(SE, NA2</b> facade)	none nut mouths s nicking lanque none none none <b>ZARETH 1776</b> ut-up mete 9	1 id above cap 3 2 1.5 1.5 1.5 (?)
C c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> C <sup>3</sup> 2' ]	11 x 9 Flute open w $c^{\#^{0}-f^{0}}f^{\#^{0}-h^{0}}f^{*}$ $c^{1}-d^{3}w$ Diameter $64 x 54 \pm 36 x 31$ 20 x 16 11.5 x 9.5 8.5 x 6.5 WHITE Principal me Diameter 50 28	3 ood C-c <sup>0</sup> pine w pine with oak p pine with walk alnut <i>cut-up</i> th 15 arched 9 5.5 3 2 <b>CFIELD HOU</b> etal (C-d# <sup>0</sup> in 1 <i>Mouth wide</i> 33 21	with walk fronts nut fronts 11 6 5 3.5 2.5 <b>(SE, NA2</b> facade)	none nut mouths s nicking lanque none none none <b>ZARETH 1776</b> ut-up mete 9 7	1 id above cap 3 2 1.5 1.5 1.5 (?) al thickness 0.6
C C c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> C 3 2' ] C c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> C <sup>3</sup>	11 x 9 Flute open w. $c^{\#^0-f^0}$ f $f^{\#^0-h^0}$ f $c^{1}-d^3$ w. Diameter $64 \times 54 \pm 31$ $20 \times 16$ 11.5 x 9.5 8.5 x 6.5 WHITE Principal me Diameter 50 28 16	3 ood C-c <sup>0</sup> pine with oak ip pine with walk alnut <i>cut-up</i> th 15 arched 9 5.5 3 2 <b>CFIELD HOU</b> etal (C-d# <sup>0</sup> in 1 <i>Mouth widu</i> 33 21 12	with walk fronts nut fronts 11 6 5 3.5 2.5 <b>(SE, NA2</b> facade)	none nut mouths s nicking lanque none none none <b>ZARETH 1776</b> ut-up mete 9 7 4	1 id above cap 3 2 1.5 1.5 1.5 (?) al thickness 0.6 - 0.5
$C^{0} = C^{0} = C^{0$	11 x 9 Flute open w $c^{\#^{0}-f^{0}}f^{\#^{0}-h^{0}}f^{*}$ $c^{1}-d^{3}w$ Diameter $64 x 54 \pm 36 x 31$ 20 x 16 11.5 x 9.5 8.5 x 6.5 WHITE Principal me Diameter 50 28	3 ood C-c <sup>0</sup> pine w pine with oak p pine with walk alnut <i>cut-up</i> th 15 arched 9 5.5 3 2 <b>CFIELD HOU</b> etal (C-d# <sup>0</sup> in 1 <i>Mouth wide</i> 33 21	with walk fronts nut fronts 11 6 5 3.5 2.5 <b>(SE, NA2</b> facade)	none nut mouths s nicking lanque none none none <b>ZARETH 1776</b> ut-up mete 9 7	1 id above cap 3 2 1.5 1.5 1.5 (?) al thickness 0.6
$\begin{array}{c} c^{3} \\ d' \\ d' \\ d' \\ c^{0} \\ c^{1} \\ c^{2} \\ c^{2} \\ c^{3} \\ c^{2} \\ c^{3} \\ c^{2} \\ c^{3} \\ c^{2} \\ c^{3} \\ $	11 x 9 Flute open w. $c^{\#^0-f^0}$ f $f^{\#^0-h^0}$ l. $c^{1}-d^3$ w. Diameter $64 x 54 \pm 31$ 20 x 16 11.5 x 9.5 8.5 x 6.5 WHITE Diameter 50 28 16 10 7	3 ood C-c <sup>0</sup> pine with oak ipine with walmalnut cut-up th 15 arched 9 5.5 3 2 CFIELD HOU etal (C-d# <sup>0</sup> in i Mouth wide 33 21 12 7 4.5 mbe C-E stopp	with walk fronts nut fronts 11 5 3.5 2.5 <b>(SE, NA2</b> facade) th cu	none nut mouths s nicking lanque none none none none <b>ZARETH 1776</b> 9 7 4 3	$ \begin{array}{c} 1 \\ id above cap \\ 3 \\ 2 \\ 1.5 \\ 1.5 \\ 1.5 \\ (?) \\ al thickness \\ 0.6 \\ \hline 0.5 \\ 0.5 \\ 0.5 \\ \end{array} $
$\begin{array}{c} c^{3} \\ d' \\ d' \\ d' \\ c^{0} \\ c^{1} \\ c^{2} \\ c^{2} \\ c^{3} \\ c^{2} \\ c^{3} \\ c^{2} \\ c^{3} \\ c^{2} \\ c^{3} \\ $	11 x 9 Flute open wu $c\#^0 \cdot f^0$ f $f\#^0 \cdot h^0$ c $c^1 \cdot d^3$ w. Diameter $64 \times 54 \pm 31$ $20 \times 16$ 11.5 x 9.5 8.5 x 6.5 WHITE Diameter 50 28 16 10 7 Viol del Gam	3 ood C- $c^0$ pine with oak ipine with walk alnut cut-up th 15 arched 9 5.5 3 2 <b>CFIELD HOU</b> etal (C-d# <sup>0</sup> in the Mouth wide 33 21 12 7 4.5 <b>abe C-E stopp</b> F-e <sup>3</sup> open 1st. extan	with walk fronts nut fronts 11 6 5 3.5 2.5 <b>(SE, NAZ</b> facade) th cu ed wood metal t pipe g#	none nut mouths s nicking lanque none none none none <b>ZARETH 1776</b> ut-up mete 9 7 4 3 2	1 id above cap 3 2 1.5 1.5 1.5 (?) al thickness 0.6 0.5 0.5 0.5
$c^{3}$ 4' ] $C^{0}c^{0}c^{1}c^{2}c^{3}$ 2' ] $C^{0}c^{0}c^{1}c^{2}c^{3}$ 8' ]	11 x 9 Flute open w. $c\#^{0}-f^{0}$ f $f\#^{0}-h^{0}$ f $c^{1}-d^{3}$ w. Diameter $64 x 54 \pm 36 \times 31$ 20 x 16 11.5 x 9.5 8.5 x 6.5 WHITE Principal me Diameter 50 28 16 10 7 Viol del Gam	3 ood C-c <sup>0</sup> pine with oak p pine with walk alnut cut-up th 15 arched 9 5.5 3 2 CFIELD HOU etal (C-d# <sup>0</sup> in 1 Mouth widh 33 21 12 7 4.5 nbe C-E stopp F-e <sup>3</sup> open 1st. extan Mth.wdth.	with walk fronts nut fronts 11 5 3.5 2.5 (SE, NA2 facade) th cut ed wood metal t pipe g# Cut-up	none nut mouths s nicking lanqua none none none none <b>ZARETH 1776</b> ut-up meta 9 7 4 3 2 2	1 id above cap 3 2 1.5 1.5 1.5 (?) al thickness 0.6 
$C^{3}$ $C^{0}$ $C^{0}$ $C^{2}$ $C^{2}$ $C^{3}$ $C^{3}$ $C^{2}$ $C^{3}$ $C^{3}$ $C^{2}$ $C^{3}$ $B^{3}$ $C^{3}$ C	11 x 9 Flute open w. $c\#^{0}-f^{0}$ $f^{0}-h^{0}$ $c^{1}-d^{3}$ w. Diameter $64 x 54 \pm 36 \times 31$ $20 \times 16$ 11.5 x 9.5 $8.5 \times 6.5$ WHITE Principal me Diameter 50 28 16 10 7 Viol del Gam Diam. <sup>0</sup> 36	3 ood C-c <sup>0</sup> pine with oak p pine with walr alnut cut-up th 15 arched 9 5.5 3 2 CFIELD HOU etal (C-d# <sup>0</sup> in 1 Mouth wide 33 21 12 7 4.5 nbe C-E stoppen F-e <sup>3</sup> open 1st. extan Mth.wdth. 22	with walk fronts nut fronts 11 6 5 3.5 2.5 (SE, NA2 facade) th cut ed wood metal t pipe g# Cut-up 6.5	none nut mouths s nicking lanqua none none none none ZARETH 1776 ut-up meta 9 7 4 3 2 to hole dia. 3	1 id above cap 3 2 1.5 1.5 1.5 (?) al thickness 0.6 
$\begin{array}{c} c^{3} \\ d' \\ d' \\ d' \\ c^{0} \\ c^{1} \\ c^{2} \\ c^{2} \\ c^{3} \\ c^{2} \\ c^{3} \\ c^{2} \\ c^{3} \\ c^{2} \\ c^{3} \\ $	11 x 9 Flute open w. $c\#^{0}-f^{0}$ f $f\#^{0}-h^{0}$ f $c^{1}-d^{3}$ w. Diameter $64 x 54 \pm 36 \times 31$ 20 x 16 11.5 x 9.5 8.5 x 6.5 WHITE Principal me Diameter 50 28 16 10 7 Viol del Gam	3 ood C-c <sup>0</sup> pine with oak p pine with walk alnut cut-up th 15 arched 9 5.5 3 2 CFIELD HOU etal (C-d# <sup>0</sup> in 1 Mouth widh 33 21 12 7 4.5 nbe C-E stopp F-e <sup>3</sup> open 1st. extan Mth.wdth.	with walk fronts nut fronts 11 5 3.5 2.5 (SE, NA2 facade) th cut ed wood metal t pipe g# Cut-up	none nut mouths s nicking lanqua none none none none <b>ZARETH 1776</b> ut-up meta 9 7 4 3 2 2	1 id above cap 3 2 1.5 1.5 1.5 (?) al thickness 0.6 

	1	C-E stopped F-e <sup>3</sup> capped : 1st. extant p	metal		
				m 1 1 1.	
	Diam.	Mth.wdth.	Cut-up	Toe hole die	1. Nicks/cm.
H	50	40	20		
c <sup>0</sup>	49	38	22.7	open	20
	28.5	23	10	open	15
$c^2$				-	
	17	13.5	5	open	7
$c^3$	9	8	3	open	4
			Metal th	nickness 0.6	mm. at c <sup>o</sup> pipe
8' F1		-f# <sup>0</sup> open pin across n	ne with tur nouth at fl	ue	nd metal strip les and metal
		strip ac F# and G n	ross mouth nitered to (	n at flue 64"	
	Diam.	Cut-up T	'oe hole dia	1. Wd.thckn.	Nicks/cm.
3	$90 \times 64$	25	13	14.5	none
0	$55 \times 38$	13	6	8	none
	$32 \times 23$	7	4.5	5	
2					none
2	$19.5 \times 14$	4.5	3	4	none
3	$12 \times 9$	3	2	2.5	none
1' F	$ \begin{array}{c} \text{loth } C-g\#^{0} \\ a^{0}-e^{3} \end{array} \circ $	pen walnut	with metal	tuning shade tuning shad	es
	Diam.	Cut-up T	oe hole die	. Wd.thckn.	Nicks/cm.
2	$71 \times 60$	19	10	11.5	none
0	40×36	11.5	8	8.5	none
1		6.5	4.5	4.5	
	$22 \times 19.5$				none
2	$13 \times 10.5$	3	2.5	2.5	none
2 <sup>3</sup>	8×7.5	2	2.5	2	none
Ped	al 16' Sub I Diam.				ood thickness
С	159×135		P 100	note and in	19
				19	
	$95 \times 81$	29		13	14
<b>3</b> 0	$70 \times 60$	21		10	12
Ped		shades	3		l metal tuning
	Diam.	Cut-u	p Toe	nole dia. W	ood thickness
C	$121 \times 109$	30			18
c <sup>0</sup>	$73 \times 65$	23.5		10	13
g <sup>0</sup>	E 4 14 40 E	14		8	11
B	04 X 48.0			-	
	$54 \times 48.5$				
	04 × 48.0	SDDI	IC CITY	1701	
4' 0	ctav metal	(c–e <sup>1</sup> in faca		1791	
4′ 0	octav metal many	(c–e <sup>1</sup> in faca pipes marke	de) d "Pr."		Njaholom
	octav metal many j Diam.	(c–e <sup>1</sup> in faca pipes marke <i>Mth.wdth</i> .	d "Pr." <i>Cut-up</i>	Metal thckr	n. Nicks/cm.
С	octav metal many Diam. 87	(c–e <sup>1</sup> in faca pipes marke <i>Mth.wdth.</i> 64	ide) d "Pr." <i>Cut-up</i> 15	Metal thckr 1.0	5 light
C c <sup>0</sup>	octav metal many j Diam.	(c–e <sup>1</sup> in faca pipes marke <i>Mth.wdth</i> .	d "Pr." <i>Cut-up</i>	Metal thckr	n. Nicks/cm. 5 light none
C c <sup>0</sup>	octav metal many Diam. 87	(c–e <sup>1</sup> in faca pipes marke <i>Mth.wdth.</i> 64	ide) d "Pr." <i>Cut-up</i> 15	Metal thckr 1.0	5 light
C c <sup>0</sup> c <sup>1</sup>	octav metal many j Diam. 87 49 28.5	(c-e <sup>1</sup> in faca pipes marke <i>Mth.wdth.</i> 64 38.5 22.5	nde) d "Pr." <i>Cut-up</i> 15 9.5 6	Metal thckr 1.0 0.8 0.75	5 light none none
C c <sup>0</sup> c <sup>1</sup> c <sup>2</sup>	octav metal many j Diam. 87 49 28.5 17	(c-e <sup>1</sup> in faca pipes marke <i>Mth.wdth.</i> 64 38.5 22.5 13.5	dde) d"Pr." <i>Cut-up</i> 15 9.5 6 4.5	Metal thckr 1.0 0.8 0.75 0.5	5 light none none none
C c <sup>0</sup> c <sup>1</sup> c <sup>2</sup>	octav metal many j Diam. 87 49 28.5	(c-e <sup>1</sup> in faca pipes marke <i>Mth.wdth.</i> 64 38.5 22.5	nde) d "Pr." <i>Cut-up</i> 15 9.5 6	Metal thckr 1.0 0.8 0.75	5 light none none
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C c <sup>0</sup> c <sup>2</sup> c <sup>3</sup> 3' Q	octav metal many Diam. 87 49 28.5 17 10 Quinta metal move Diam.	(c-e <sup>1</sup> in faca pipes marke <i>Mth.wdth.</i> 64 38.5 22.5 13.5 8 d 20 notes w <i>Mth.wdth.</i>	de) d "Pr." <i>Cut-up</i> 15 9.5 6 4.5 2.5 rith wood t <i>Cut-up</i>	Metal thckr 1.0 0.8 0.75 0.5 0.6 0.6 0.6 0.6	5 light none none none none 8' Diapason a. Nicks/cm.
C c <sup>0</sup> c <sup>2</sup> c <sup>3</sup> 3' Q	octav metal many Diam. 87 49 28.5 17 10 Quinta metal move	(c-e <sup>1</sup> in faca pipes marke <i>Mth.wdth.</i> 64 38.5 22.5 13.5 8 d 20 notes w	de) d "Pr." <i>Cut-up</i> 15 9.5 6 4.5 2.5 rith wood b	Metal thckr 1.0 0.8 0.75 0.5 0.6 0.6	5 light none none none 8' Diapason
C c <sup>0</sup> c <sup>2</sup> c <sup>3</sup> 3' Q C	octav metal many Diam. 87 49 28.5 17 10 Quinta metal move Diam.	(c-e <sup>1</sup> in faca pipes marke <i>Mth.wdth.</i> 64 38.5 22.5 13.5 8 d 20 notes w <i>Mth.wdth.</i>	de) d "Pr." <i>Cut-up</i> 15 9.5 6 4.5 2.5 rith wood t <i>Cut-up</i>	Metal thckr 1.0 0.8 0.75 0.5 0.6 0.6 0ass added as Metal thckr 0.75	5 light none none none 8' Diapason a. Nicks/cm. 2 light
C c <sup>0</sup> c <sup>2</sup> c <sup>3</sup> 3' Q C c <sup>0</sup>	octav metal many j Diam. 87 49 28.5 17 10 Quinta metal move Diam. 64 36.5	(c-e <sup>1</sup> in faca pipes marke <i>Mth.wdth.</i> 64 38.5 22.5 13.5 8 d 20 notes w <i>Mth.wdth.</i> 41.5 28	de) d "Pr." <i>Cut-up</i> 15 9.5 6 4.5 2.5 vith wood h <i>Cut-up</i> 12 8	Metal thckr 1.0 0.8 0.75 0.5 0.6 0.6 0.6 0.6	5 light none none none 8' Diapason a. Nicks/cm. 2 light 1.5 light
C c <sup>0</sup> c <sup>2</sup> c <sup>3</sup> 3' Q C c <sup>0</sup>	octav metal many j Diam. 87 49 28.5 17 10 Quinta metal move Diam. 64	(c-e <sup>1</sup> in faca pipes marke <i>Mth.wdth.</i> 64 38.5 22.5 13.5 8 d 20 notes w <i>Mth.wdth.</i> 41.5	de) d "Pr." <i>Cut-up</i> 15 9.5 6 4.5 2.5 vith wood b <i>Cut-up</i> 12	Metal thckr 1.0 0.8 0.75 0.5 0.6 0.6 0ass added as Metal thckr 0.75	5 light none none none none 8' Diapason a. Nicks/cm. 2 light
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$C_{c^{0}}^{2}c^{1}c^{2}c^{3}$ $C_{c^{0}}^{2}c^{1}$ $C_{c^{0}}^{2}c^{1}$ $C_{c^{0}}^{2}$	Ctav metal many j Diam. 87 49 28.5 17 10 Quinta metal move Diam. 64 36.5 22.75 ub [sic.] Oc Diam. 49 29	(c-e <sup>1</sup> in faca pipes marke Mth.wdth. 64 38.5 22.5 13.5 8 d 20 notes w Mth.wdth. 41.5 28 16.5 tav metal pipes ba mate Mth.wdth. 38 22	de) d "Pr." <i>Cut-up</i> 15 9.5 6 4.5 2.5 vith wood h <i>Cut-up</i> 12 8 5 dly ovalize <i>Cut-up</i> 9.75 7	Metal thckr 1.0 0.8 0.75 0.5 0.6 bass added as Metal thckr 0.75 0.5  ed measurer Metal thckr 0.75 0.5	5 light none none none 8' Diapason a. Nicks/cm. 2 light 1.5 light none ments approxi- a. Nicks/cm. 5 light 10 light
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$\begin{array}{c} C \\ c^{0} \\ c^{1} \\ c^{2} \\ c^{3} \\ c^{3} \\ c^{0} \\ c^{1} \\ c^{0} \\ c^{1} \\ c^{2} \\ c^{3} \\ c^{3} \end{array}$	Ctav metal many j Diam. 87 49 28.5 17 10 Quinta metal move Diam. 64 36.5 22.75 ub [sic.] Oc Diam. 49 29 17.25 10.25 5.5 rincipal Du	$(c-e^1$ in faca pipes marke Mth.wdth. 64 38.5 22.5 13.5 8 d 20 notes w Mth.wdth. 41.5 28 16.5 tav metal pipes ba mate Mth.wdth. 38 22 13.25 8 4.5 tlcis metal $c^0-d^3$ m	$\begin{array}{c} \text{dde}) \\ \text{d} ``Pr.'' \\ Cut-up \\ 15 \\ 9.5 \\ 6 \\ 4.5 \\ 2.5 \end{array}$	Metal thckr 1.0 0.8 0.75 0.5 0.6 bass added as Metal thckr 0.75 0.5  ed measurer Metal thckr 0.75 0.5  0.5 0.5 	5 light none none none 8' Diapason 1. Nicks/cm. 2 light 1.5 light none ments approxi- 1. Nicks/cm. 5 light 10 light none none none
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$\begin{array}{c} C \\ C \\ c^{0} \\ c^{1} \\ c^{2} \\ c^{3} \\ \mathbf{G} \\ \mathbf{G}$	Ctav metal many j Diam. 87 49 28.5 17 10 Quinta metal move Diam. 64 36.5 22.75 ub [sic.] Oc Diam. 49 29 17.25 10.25 5.5 rincipal Du Diam.	$(c-e^1$ in faca pipes marke Mth.wdth. 64 38.5 22.5 13.5 8 d 20 notes w Mth.wdth. 41.5 28 16.5 tav metal pipes ba mate Mth.wdth. 38 22 13.25 8 4.5 tlcis metal $c^0-d^3$ m	$\begin{array}{c} \text{dde}) \\ \text{d} ``Pr.'' \\ Cut-up \\ 15 \\ 9.5 \\ 6 \\ 4.5 \\ 2.5 \end{array}$	Metal thckr 1.0 0.8 0.75 0.5 0.6 bass added as Metal thckr 0.75 0.5  ed—measures Metal thckr 0.75 0.5  d.5 0.5  Cut-up	5 light none none none 8' Diapason 1. Nicks/cm. 2 light 1.5 light none ments approxi- 1. Nicks/cm. 5 light 10 light none none none <i>Thickness</i>
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$\begin{array}{c} C \\ c^{0} \\ c^{2} \\ c^{2} \\ c^{3} \\ c^{2} \\ c^{3} \\ c^{0} \\ c^{1} \\ c^{2} \\ c^{3} \\ c^{3} \end{array}$	Ctav metal many j Diam. 87 49 28.5 17 10 Quinta metal move Diam. 64 36.5 22.75 ub [sic.] Oc Diam. 49 29 17.25 10.25 5.5 rincipal Du Diam. 81 × 66	$(c-e^1$ in faca pipes marke Mth.wdth. 64 38.5 22.5 13.5 8 d 20 notes w Mth.wdth. 41.5 28 16.5 tav metal pipes ba mate Mth.wdth. 38 22 13.25 8 4.5 dlots metal $c^0-d^3$ n Mth.w	dde) d "Pr." <i>Cut-up</i> 15 9.5 6 4.5 2.5 rith wood th <i>Cut-up</i> 9.75 7 3.75 1.75 1.5 netal dth.	Metal thckr 1.0 0.8 0.75 0.5 0.6 bass added as Metal thckr 0.75 0.5  ed-measuren Metal thckr 0.75 0.5  Cut-up 24	5 light none none none 8' Diapason 1. Nicks/cm. 2 light 1.5 light none ments approxi- 1. Nicks/cm. 5 light 10 light none none none Thickness 10

to be constructed as had been anticipated. (The various origins of all the other part is obscure.) The following parts are thus reproductions:

1. The entire winding system is new. The bellows were proportioned by studying extant Tannenberg examples, and also by studying the remains of one rib of the original bellows, saved from the fire debris in 1957 by some thoughtful individual, probably because the newspaper sizing on the back bore the date 1776. Wind is raised by pulling on two ropes connected to the bellows in the attic above the organ. They hang down to one side of the organ case through holes in the ceiling. The sensitivity of a Tannenberg-style winding system is remarkable, especially when the person pulling on the ropes is experienced. More expressiveness is possible than with any swellbox, particularly on long-held chords where the sound seems to grow and blossom. Even tremolo effects can be engineered by skillful operation of the ropes. (An electric blower was added during the restoration for alternate use.)

2. The orginial pedal rollerboard exists, and the new pedal chest was proportioned in reference to it, and also by comparison with the extant chest from the 1800 Tannenberg in storage at Old Salem, North Carolina.

**3.** The keyboard is new and is patterned after extant Tannenberg examples. The keys of walnut and pear are covered with ebony and bone.

4. Although some original Tannenberg drawknobs exist in other instruments, none of the designs seemed to fit with the console of the 1787 organ; the new turned walnut drawknobs are thus purely conjectural.

5. The original layout of the stop action was extrapolated from the case, chest and keyboard of the Tannenberg organ.

**6.** Although most of the upper part of the three-tower case had survived, the entire lower half of the case from the impost down had to be reconstructed from Tannenberg's original drawing, and from other similar Tannenberg cases. A couple of photographs from the instrument's time in South Bethlehem, although somewhat indistinct, also proved useful.

7. The C# side tower crown, parts of the upper case and all the upper pipe shades, as well as the C# side tower finials had to be extrapolated from the C side of the case and other extant Tannenberg examples. All three gold leafed balls which crown the towers, however, are original; they appear to have remained in Lititz while the rest of the organ was in South Bethlehem. They have been carefully regilded using the traditional gold-leafing process.

8. The new bench is based on extant Tannenberg examples.

**9.** The pedal keyboard frame and rails are entirely conjectural since no other Tannenberg examples are known. The original pedal keys are the only surviving examples.<sup>7</sup>

**10.** All 29 case pipes were missing and had to be extrapolated from other existing examples and by studying the drawing and photographs mentioned above.

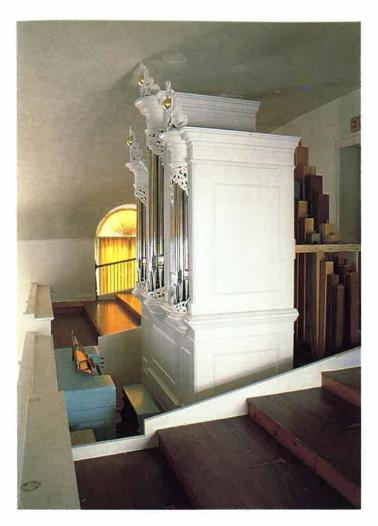
11. Of the 207 interior metal pipes, only 27 are new, though considerable modification was required to bring some of the Tannenberg pipework back to its original form. Non-destructive spectrographic analysis determined that Tannenberg's pipe metal was 60.4% tin, 38% lead, 1.1% antimony, .34% copper, plus trace contaminants. The composition and scaling of the new pipes was matched with the old.

**12.** Of the 156 wood pipes of oak, pine and walnut, 35 are of new construction, with like materials and matching scaling.

**13.** The organ was built with a detached, reversed, console. All that remained of the original console shell was the lid and the C side panel. The rest had to be reconstructed by studying photographs and extrapolation from existing parts.

14. Small numbers of other parts required replacement and were extrapolated from existing examples.

**15.** The original colors of the organ case and console shell were determined by sending parts of them for laboratory analysis. It was determined that the case, like most Tannenberg examples, was originally painted a greyish white. It came as something of a surprise, however, to discover that the detached console was



originally a light turquoise color. Moravian church decoration schemes in the eighteenth-century apparently consisted of various pastel shades and the console was painted turquoise to fit in with this scheme. The old layers of paint were preserved, sanded smooth, as a permanent record of the instrument's visual history, and new paint in the same colors as the original scheme was applied on top.

#### 1787 David Tannenberg Single Brethren's House Lititz, Pennsylvania

MANUAL C-e<sup>3</sup>, 53 notes

- 8' Principal Discant TG, metal, 14 in case
- 8' Viol del Gambe open metal, 5 swb
- 8' Flaut Amabile open wood, 5swb
- 8' Quint: Dehn [sic] capped metal, 5swb
- 4' Principal metal, 15 in case
- 4' Floth open wood
- 2' Sub [sic] Octav metal
- PEDAL C-g<sup>0</sup>, 20 notes
- 16' Sub Bass stopped wood
- 8' Octav Bass open wood

Koppel manual to pedal coupler utilizing a separate set of pallets.

The stop names are hand-written on paper labels in a script imitative of Tannenberg's own hand. The spellings are taken from a letter from Tannenberg to Brother Marshall of Salem, North Carolina, written in December 1797. There is a total of 392 pipes, voiced on 15% inch wind. The "Quint: Dehn" or Quintadena stop is the only known playing Tannenberg example and was apparently not designed to be used by itself; it has a very soft, extremely quinty character, and it would seem that it is intended to be drawn together with the Flaut Amabile to add harmonic development to it. In common with other organs which Tannenberg built for Moravian churches, and in contrast with more forthright instruments which he built for Lutheran churches, the organ was primarily intended for use in an en-

C	c – u ston	ped pine ped walnut	
C	Diam.	Cut-up	Wood thckn.
c <sup>0</sup>	$82.5 \times 63.5$		11.5
00	$50 \times 39.5$	13	9.5
c <sup>1</sup>	$29 \times 23.5$	9	6
c c <sup>2</sup>	$17 \times 14$	4.5	4.5
c <sup>3</sup>	$10 \times 8.5$	2.5	3
4' Flute	e C-H open pin	e	
	c <sup>0</sup> -d <sup>3</sup> open wa		
	Diam.	Cut-up	Wood thckn.
С	$60 \times 50$	15.5	13
c <sup>0</sup>	$37 \times 30.5$	11	7
c <sup>1</sup>	$22.5 \times 19$	5.5	5
$c^1$ $c^2$	$13 \times 10.5$	3	3
c <sup>3</sup>	$9 \times 7.5$	2*	2.5
C	0 1 10	*altered	2.0
	NA7ADE T		UDOU 1709
8' Grob	Gedackt Cur	s nicked, lead toes a	Gedackt; cut-ups raise dded
		Diam.	Cut-up
С		$54.5 \times 44$	
c1		33×25	—
c <sup>2</sup>		$20.5 \times 15.5$	?5.5
c <sup>3</sup>		$12 \times 10$	?4
	g#0;	currently labelled ' I, flues nicked, lead ' Diam.	wood; pine to walnut; "Dolce Flute"; cut-up toes added <i>Cut-up</i>
c <sup>1</sup>		$33 \times 27.5$	
c <sup>2</sup>		$19.5 \times 16.5$	-
c <sup>3</sup>		$12 \times 9.5$	?3
4' Prin	cipal in facade Diam.	Mouth width	Cut-up
С	88	64	15
0	00	04	10
C c <sup>0</sup>		<i>Diam.</i> 33 (now E and has be ) (now e <sup>0</sup> and has be	
	LITITZ, 1	1793 (formerly at G	raceham)
2' Prin	cipal metal (C- Diam.	-g# <sup>0</sup> in facade) Mouth width	Cut-up
С	47	36	10
	28	21.5	6
$c^0$		13	
c <sup>0</sup>			
c <sup>0</sup> c <sup>1</sup>	17.5		4
c <sup>0</sup> c <sup>1</sup>	17.5 10	7.5	4 2
c <sup>0</sup>	17.5		4
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam	17.5 $10$ $7$ abe C-e <sup>0</sup> from G f <sup>0</sup> -f <sup>3</sup> metal	7.5 5 Jedackt	4 2 1.5
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam	17.5 $10$ $7$ abe C-e <sup>0</sup> from G f <sup>0</sup> -f <sup>3</sup> metal Diam. Mouth	7.5 5 Gedackt width Cut-up To	4 2 1.5 e hole dia.Metal thck.
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam	17.5 $10$ $7$ abe C-e <sup>0</sup> from G f <sup>0</sup> -f <sup>3</sup> metal	7.5 5 Gedackt width Cut-up To	4 2 1.5
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam	17.5 $10$ $7$ abe C-e <sup>0</sup> from G f <sup>0</sup> -f <sup>3</sup> metal Diam. Mouth	7.5 5 Gedackt width Cut-up To 2.5 8	4 2 1.5 e hole dia.Metal thck.
$c^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ 8' Gam $f^{0}$ $c^{1}$ $c^{2}$	$\begin{array}{c} 17.5\\ 10\\ 7\\ \textbf{be C-e^0 from G}\\ f^0-f^3 metal\\ Diam. Mouth\\ 44 \qquad 27\\ \end{array}$	7.5 5 Gedackt <i>width Cut-up To</i> 2.5 8 0 5.5	4 2 1.5 e hole dia.Metal thck. 0.75
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam	17.5 10 7 $f^0-f^3$ metal Diam. Mouth 44 27 32.5 2	7.5 5 Gedackt <i>width Cut-up To</i> .5 8 0 5.5 2.5 4	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 —
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> <b>8' Gam</b> f <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup>	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \textbf{be C-e^{0} from G} \\ f^{0}-f^{3} metal \\ Diam. Mouth \\ 44 & 27 \\ 32.5 & 2 \\ 19 & 12 \\ 12 & 8 \\ \textbf{ackt C-f\#^{0} stop} \\ g^{0}-f^{3} stop \end{array}$	7.5 5 Gedackt <i>width Cut-up To</i> 7.5 8 0 5.5 8.5 4 8 2.5 pped pine ped walnut	4 2 1.5 we hole dia. Metal thck. 0.75 3.5 — 2.3 — 3.0 —
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam f <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Ged	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \textbf{be C-e^{0} from G} \\ f^{0}-f^{3} metal \\ Diam. Mouth \\ 44 & 27 \\ 32.5 & 2 \\ 19 & 12 \\ 12 & 8 \\ \textbf{ackt C-f\#^{0} stop} \\ g^{0}-f^{3} stop \\ Diam. \\ \end{array}$	7.5 5 Gedackt <i>width Cut-up To</i> 7.5 8 0 5.5 8.5 4 8 2.5 pped pine ped walnut <i>Cut-up</i>	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 - 2.3 - 3.0 - Wood thickness
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam f <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Geda	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \mbox{be } C-e^0 \mbox{ from } G \\ f^0-f^3 \mbox{ metal } \\ Diam. \ Mouth \\ 44 \ 27 \\ 32.5 \ 2 \\ 19 \ 12 \\ 12 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	7.5 5 Gedackt <i>width Cut-up To</i> 7.5 8 0 5.5 8.5 4 8 2.5 pped pine ped walnut <i>Cut-up</i> 25	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 - 2.3 - 3.0 - Wood thickness 12.5
$c^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Gam</b> $f^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Ged</b> <b>C</b> $c^{0}$	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \textbf{be C-e^{0} from G} \\ f^{0}-f^{3} metal \\ Diam. Mouth \\ 44 & 27 \\ 32.5 & 2 \\ 19 & 12 \\ 12 & 8 \\ \textbf{ackt C-f\#^{0} stop} \\ g^{0}-f^{3} stop \\ Diam. \\ \end{array}$	7.5 5 Gedackt <i>width Cut-up To</i> 7.5 8 0 5.5 8.5 4 8 2.5 pped pine ped walnut <i>Cut-up</i>	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 — 2.3 — 3.0 — Wood thickness 12.5 9
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam f <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Ged C c <sup>0</sup> c <sup>1</sup>	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \mbox{be } C-e^0 \mbox{ from } G \\ f^0-f^3 \mbox{ metal } \\ Diam. \ Mouth \\ 44 \ 27 \\ 32.5 \ 2 \\ 19 \ 12 \\ 12 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	7.5 5 Gedackt <i>width Cut-up To</i> 7.5 8 0 5.5 8.5 4 8 2.5 pped pine ped walnut <i>Cut-up</i> 25	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 - 2.3 - 3.0 - Wood thickness 12.5
$c^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Gam</b> $f^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Ged</b> C $c^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Ged</b>	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \mbox{be } {\rm C}\mbox{-e}^{0} \mbox{ from } {\rm G} \\ {\rm f}^{0}\mbox{-f}^{3} \mbox{ metal} \\ Diam. \ Mouth \\ 44 \ 27 \\ 32.5 \ 2 \\ 19 \ 12 \\ 12 \ 5 \\ \mbox{ackt } {\rm C}\mbox{-f}^{\#}\mbox{ stop} \\ {\rm g}^{0}\mbox{-f}^{3} \mbox{ stop} \\ {\rm D}\mbox{iam.} \\ 81 \times 65 \\ 49 \times 41.5 \end{array}$	7.5 5 Gedackt <i>width Cut-up To</i> 7.5 8 0 5.5 8.5 4 3 2.5 pped pine ped walnut <i>Cut-up</i> 25 15 9	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 — 2.3 — 3.0 — Wood thickness 12.5 9
$c^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Gam</b> $f^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Ged</b> <b>C</b> $c^{0}$	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \mbox{be } {\rm C}\mbox{-e}^{0} \mbox{ from } {\rm G} \\ {\rm f}^{0}\mbox{-f}^{3} \mbox{ metal} \\ Diam. \mbox{ Mouth} \\ 44 \mbox{ 27} \\ 32.5 \mbox{ 2} \\ 19 \mbox{ 12} \\ 12 \mbox{ c} \\ 19 \mbox{ 12} \\ 12 \mbox{ c} \\ {\rm ackt } {\rm C}\mbox{-f}^{\#}\mbox{ stop} \\ {\rm D}\mbox{ of } {\rm m}\mbox{.} \\ {\rm g}^{0}\mbox{-f}^{3} \mbox{ stop} \\ {\rm D}\mbox{ iam.} \\ 81 \times 65 \\ 49 \times 41.5 \\ 30 \times 23.5 \end{array}$	7.5 5 Gedackt <i>width Cut-up To</i> .5 8 0 5.5 2.5 4 3 2.5 pped pine ped walnut <i>Cut-up</i> 25 15	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 — 2.3 — 3.0 — Wood thickness 12.5 9 5
$c^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Gam</b> $f^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Ged</b> <b>C</b> $c^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Ged</b>	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \end{array}$ $\begin{array}{c} f^{0}-f^{3} \text{ metal} \\ Diam.  Mouth \\ 44  27 \\ 32.5  2 \\ 19  12 \\ 12  & \\ \end{array}$ $\begin{array}{c} ackt \ C-f\#^{0} \ stop \\ Diam. \\ 81 \times 65 \\ 49 \times 41.5 \\ 30 \times 23.5 \\ 18.5 \times 15 \end{array}$	7.5 5 Gedackt width Cut-up To 5 8 0 5.5 2.5 4 3 2.5 pped pine ped walnut Cut-up 25 15 9 4.5 2.3 d pine	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 — 2.3 — 3.0 — Wood thickness 12.5 9 5 4.5
$c^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Gam</b> $f^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Ged</b> <b>C</b> $c^{0}$ $c^{1}$ $c^{2}$ $c^{3}$ <b>8' Ged</b>	17.5 10 7 $f^0-f^3$ metal Diam. Mouth 44 27 32.5 2 19 12 12 8 ackt C-f# <sup>0</sup> stop Diam. 81×65 49×41.5 30×23.5 18.5×15 12×9 t C-f# <sup>0</sup> stopped	7.5 5 Gedackt width Cut-up To 5 8 0 5.5 2.5 4 3 2.5 pped pine ped walnut Cut-up 25 15 9 4.5 2.3 d pine	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 — 2.3 — 3.0 — Wood thickness 12.5 9 5 4.5
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam f <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Ged C c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 4' Floe	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \mbox{be } {\rm C}\mbox{-e}^{0} \mbox{ from } {\rm G} \\ {\rm f}^{0}\mbox{-f}^{3} \mbox{ metal} \\ Diam. \ Mouth \\ 44 \ 27 \\ 32.5 \ 2 \\ 19 \ 12 \\ 12 \ & \mbox{s} \\ 12 \ & \mbox{s} \\ \mbox{ackt } {\rm C}\mbox{-f}^{\#^{0}} \mbox{stop} \\ {\rm g}^{0}\mbox{-f}^{3} \mbox{stop} \\ Diam. \\ 81 \times 65 \\ 49 \times 41.5 \\ 30 \times 23.5 \\ 18.5 \times 15 \\ 12 \times 9 \\ \mbox{t } {\rm C}\mbox{-f}^{\#^{0}} \mbox{stopped} \\ {\rm g}^{0}\mbox{-f}^{3} \mbox{-f}^{3} \mbox{stopped} \\ {\rm g}^{0}\mbox{-f}^{3} \mbox{-f}^{3} \mbox{stopped} \\ {\rm g}^{0}\mbox{-f}^{3} \mbox{-f}^{3} -f$	7.5 5 Sedackt <i>width Cut-up To</i> 2.5 8 0 5.5 2.5 4 3 2.5 pped pine ped walnut <i>Cut-up</i> 25 15 9 4.5 2.3 d pine pod	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 - 2.3 - 3.0 - Wood thickness 12.5 9 5 4.5 3
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam f <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Ged C c <sup>0</sup> c <sup>2</sup> c <sup>3</sup> 4' Floe C c <sup>0</sup>	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \mbox{be } {\rm C}\mbox{-e}^{0} \mbox{ from } {\rm G} \\ {\rm f}^{0}\mbox{-f}^{3} \mbox{ metal} \\ 10 \\ 10 \\ 10 \\ 10 \\ 12 \\ 12 \\ 12 \\ 12$	7.5 5 Gedackt width Cut-up To 5.5 0 5.5 2.5 4 3 2.5 pped pine ped walnut Cut-up 25 15 9 4.5 2.3 d pine pod Cut-up	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 - 2.3 - 3.0 - Wood thickness 12.5 9 5 4.5 3 Wood thickness
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam f <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Ged C c <sup>0</sup> c <sup>2</sup> c <sup>3</sup> 4' Floe C c <sup>0</sup>	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \mbox{be } {\rm C}\mbox{-e}^{0} \mbox{ from } {\rm G} \\ {\rm f}^{0}\mbox{-f}^{3} \mbox{ metal} \\ Diam. \mbox{ Mouth} \\ 44  27 \\ 32.5  2 \\ 19  12 \\ 12  81 \\ 2 \\ \mbox{ ackt } {\rm C}\mbox{-f}^{0} \mbox{ stop} \\ {\rm g}^{0}\mbox{-f}^{3} \mbox{ stop} \\ Diam. \\ 81 \times 65 \\ 49 \times 41.5 \\ 30 \times 23.5 \\ 18.5 \times 15 \\ 12 \times 9 \\ \mbox{ t } {\rm C}\mbox{-f}^{\# 0} \mbox{ stopped} \\ {\rm g}^{0}\mbox{-f}^{3} \mbox{ opped} \\ {\rm G}\mbox{-f}^{3} \mbox{ opped} \\ {\rm G}\mbox{-f}^{3} \mbox{ opped} \\ {\rm G}\mbox{-f}^{3} \mbox{-f}^{3} \mbox{-f}^{3}$	7.5 5 Gedackt width Cut-up To 2.5 8 0 5.5 2.5 4 3 2.5 pped pine ped walnut Cut-up 25 15 9 4.5 2.3 d pine pod Cut-up 14 8	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 2.3 3.0 - Wood thickness 12.5 9 5 4.5 3 Wood thickness 9 5 4.5 3
c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Gam f <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 8' Ged C c <sup>0</sup> c <sup>1</sup> c <sup>2</sup> c <sup>3</sup> 4' Floe	$\begin{array}{c} 17.5 \\ 10 \\ 7 \\ \mbox{be } {\rm C}\mbox{-e}^{0} \mbox{ f}^{0}\mbox{-f}^{3} \mbox{ metal} \\ \mbox{Jiam.} \mbox{ Mouth} \\ 44 \mbox{ 27} \\ 32.5 \mbox{ 2} \\ 19 \mbox{ 12} \\ 12 \mbox{ 44} \\ 27 \\ 32.5 \mbox{ 2} \\ 19 \mbox{ 12} \\ 12 \mbox{ 40} \\ \mbox{ moth} \\ 12 \mbox{ 40} \\ \mbox{ moth} \\ \$	7.5 5 $5$ Gedackt $width Cut-up To$ $5 8$ $0 5.5$ $2.5 4$ $3 2.5$ pped pine ped walnut $Cut-up$ $25$ $15$ $9$ $4.5$ $2.3$ d pine $Cut-up$ $14$	4 2 1.5 e hole dia. Metal thck. 0.75 3.5 — 2.3 — 3.0 — Wood thickness 12.5 9 5 4.5 3 Wood thickness 9

-			MADIS	ON, 1802			
8' F	Principa	l Dulcis C-l	H capped	l metal metal (d <sup>0</sup> –d <sup>1</sup>	in facado		
		C -	-i open marked '	'Goc Qunta (s	ic l = Del	יי חר"	
	Diam.			Toe hole dia.			
С	81.5	65	16	10	1.0	10	
c <sup>0</sup>	69	51.5	13	7	0.75	10	
c <sup>1</sup>	40.5	30.5	8	6.5	1.0	10	
c <sup>2</sup>	24	18	5.5	5	0.6	10	
c <sup>3</sup>	13.5	10.25	3	3.5	0.5	none	
4' (	Octav m	etal (C–d <sup>0</sup> in	n facade)				
	Diam.			Toe hole dia.	Thckn.	Nicks/cm.	
С	82	60	15	10	1.0	20	
c <sup>0</sup>	48.5	36	10	7	1.0	10	
C1	29	21	6	7	0.5	10	
c <sup>2</sup>	17.5	12.5	3.5	4	0.5	20	
c <sup>3</sup>	10	7.5	2.5	3.75	0.5	none	
3' 🤅	Quinta n		0	markala dia	<b>T</b> L . L	Mishelen	
C	Diam.			Toe hole dia. 6	1 <sup>thckn.</sup>	Nicks/cm. 10	
C c <sup>0</sup>	58 35	41.5 26.5	10.5 6.5	5.5	0.75	10 20 light	
c° c <sup>1</sup>	35 20.5	26.5 13.5	0.0 4	5.5 4	0.6	20 light	
c <sup>2</sup>	20.5	8.5	4 3	4 5	0.5	5 v.light	
c <sup>-</sup> c <sup>3</sup>	7.75	8.0 5	2	4.5	0.5	none	
C	1.10	0	2	1.0	0.0	none	
2' 5		/ Octav met Mth.wdth.		Toe hole dia.	Thckn.	Nicks/cm.	
С	47.5	35.5	8.5	8	0.75	10	
c <sup>0</sup>	28	20	5	5	0.5	10	
c <sup>1</sup>	16.5	11.75	3	3.5	0.4	none	
c <sup>2</sup>	10	7	2.25	4.75	0.4	none	
c <sup>3</sup>	6.5	4.5	1.5	3.75	0.4	none	
1%		reaks back t marked Eo	c Terz"				
	Diam.			Toe hole dia.			
C	39.5	29	7.5	6	0.75	10	
c <sup>0</sup>	23.5	17	4.5	4	0.6	25 v.light	
c <sup>1</sup> c <sup>2</sup>	23.5	17	4.5	4	0.6 0.6	25 v.light	
c <sup>3</sup>	13.5 8.5	10 5.5	3 2	4 2.5	0.0	none none	
L	0.0	0.0	2	2.0	0.1	none	
Miz	stur II r	$-h^0 19-22$					
		$f^{3} = 6^{-1} - f^{3} = 6^{-1}$					
_			Cut-up	Toe hole dia.	Thckn.	Nicks/cm.	
	wer Rai		0.5		1.0	10	
C c <sup>0</sup>	35 20.5	24.5 16	8.5	7.5 5	1.0 0.5	10	
c <sup>o</sup> c <sup>1</sup>	20.5 28	20	5 6	5	0.5	none none	
c c <sup>2</sup>	16.5	12	3.5	5.5	0.3	none	
c <sup>3</sup>	10.5	7.5	2.5	5	0.4	none	
Up	per Ran						
C	28	20	5.5	6	0.5	10	
<b>c</b> <sup>0</sup>	16.5	12	3.25	6	0.4	none	
c <sup>1</sup>	20	15	4	5	0.5	none	
c <sup>2</sup>	12.5	9	2.5	5	0.4	none	
c <sup>3</sup>	7.5	5	1.5	4	0.4	none	
8' Gedackt C-c <sup>#1</sup> stopped pine d <sup>1</sup> -f <sup>3</sup> stopped walnut							
		Diam.		Cut-up	Wood	l thckn.	
С		86×69		-		15	
c <sup>0</sup>	53×41 14 9						
$c^1$	$31 \times 25$ 9.5 7						
c <sup>2</sup>		19×14		5		4.5	
c <sup>3</sup>		11.5×		3		3.5	
4' 1	Floete C	–f <sup>0</sup> open pir –f <sup>3</sup> open wa	ne Ilnut				
		Diam		Cut-up	Wood	thickness	
С		66×53		18		1.5	
c <sup>0</sup>		$40.5 \times 3$		9.5		8	
c <sup>1</sup>		24×20		5		5	
c <sup>2</sup> c <sup>3</sup>	$x^2$ 14.5×10.5 3 3.5						
C		$10 \times 8$		2.5		3	

semble with other instruments and for soft accompanimental and continuo effects. The voicing is thus extremely sweet and gentle, qualities which are enhanced by the gentle and expressive winding.

Members of the McFarland firm responsible for the restoration of the 1787 Tannenberg organ included, besides Jim McFarland, Paul Maye, Ray Brunner, Phil Hoenig, Richard Alford, David King, Alan Heller, and Lawrence Angel. Replacement ironwork for the instrument was made by Garry and Sharon Gilmore. The services of rededication of the organ were held on 17 and 24 April 1983, and included a recital by Dr. James Boeringer of Moravian music appropriate to the organ. McFarland and Alford wrote detailed explanations of the restoration for the program booklet for the rededication, which served as a basis for this report.

#### The 1793 Tannenberg

The 1793 Tannenberg organ was built for the Moravian congregation in Graceham, Maryland. According to Armstrong,<sup>8</sup> members of the congregation held a subscription on Sunday, 27 May 1792, which raised sixty-five pounds, and on the following day Johannes Weller left Graceham for Lititz to negotiate the contract with David Tannenberg. Tannenberg arrived in person to install the organ on 25 April 1793, and the instrument was played for the first time on 4 May 1793, at a communion service in which Tannenberg sang one of the solos. The organ was used in Graceham well into the twentieth century, and was acquired by the Lititz Moravian Church in 1957 through a donation from Curtis Hensel in memory of his wife and daughter. The instrument received minor repairs and was installed by M. P. Möller, Inc. of Hagerstown, Maryland. The Möller firm seems to have done little to the organ apart from stripping and repainting the casework and providing new folding doors to the attractive Chippendale-style case. Further restoration has been conducted under a number of contracts by James R. McFarland & Company of Millersville, Pennsylvania, between 1974 and 1986. Members of the firm involved in the work were Jim McFarland, Larry Pruett, Paul Maye, Ruth Brunner, Fred Zander, Richard Alford, Alan Heller, and Brian Dvker.

Remarkably little has been done to the 1793 organ during the two centuries of its existence, and the instrument exists in a fine state of preservation. The organ possesses its original winding system, and can be pumped either by the organist with a pedal at the player's right, or by a calcant pulling on a leather strap situated on the C side of the case. All the pipework is intact and has required little in the way of regulation.

#### 1793 David Tannenberg Single Brethren's House Lititz, Pennsylvania

MANUAL C-f<sup>3</sup>, 54 notes

8 Gedackt stopped wood

8 Gambe 17 basses grooved to Gedackt

4 Floet open wood, 7 basses stopped wood

2 Principal metal, 19 in facade

There are no stop labels and it appears there never were.

The keyboard is of ivory, walnut and pear. The missing finials on the broken pediment at the top of the casework were replaced according to the design of extant examples, but otherwise, apart from the doors, most parts of the 1793 organ are original. Like the 1787 Tannenberg, the organ has a gentle, sweet tone. Most organists who have heard both instruments consider the tonal qualities of the 1793 organ to be finer than those of the 1787 organ. The McFarland pipemaker, OHS member Paul Maye, commented that the 1793 organ is so beautiful that it "transcends the concept of a musical instrument." Experiments were tried with swapping ranks of pipes from one instrument to the other; these experiments demonstrated that there is no discernible difference between the sound of the pipework of the two organs. It must therefore be that the intimate layout of the chest of the 1793 organ, or its winding system, or the acoustics of the room in which it is placed, or



1793 Tannenberg

some combination of these factors, rather than the voicing itself, is responsible for the difference in sound of the two organs.

The most recent restoration work carried out on the 1793 Tannenberg organ, completed in 1986, was replacement of the folding doors. The decision to replace the doors involved considerable agonizing. It was eventually decided, however, that the doors provided by M. P. Möller, Inc. in 1957, although beautifully made, were not entirely in keeping with the original design of the organ, and that it would be better to replace them with some of slightly different proportions. The mortices from the original hinges were found in the case, and from these it proved possible to reconstruct the design of the original hinges. These proved to have been curiously unlike the extant hinges on the organ, attributed to Tannenberg, at Whitefield House, Nazareth, Pennsylvania. (The present author suggests this instrument to be the David Tannenberg organ originally built for the Single Brethren's House, Bethlehem, in 1776.) The Whitefield House hinges are three times the size of those on the 1793 Tannenberg at Lititz. The replica hinges for the 1793 Tannenberg were made by Tom Tyson of Tyson's Forge, Fritztown, Pennsylvania, using traditional tools and techniques.

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So effectively was the casework of of the 1793 Tannenberg stripped in 1957 that it has proved impossible to determine with certainty the color of the original paint. Once scrap of paint was found on one pipeshade which may conceivably be original;

YORK, 1804						
8' Principal m	Diam.		Ma	outh width		
c <sup>o</sup>	78			58		
2' Sub [sic.] O	ctav metal Diam.	Mouth	width	Cut-up		
С	44.5		3	?9.5		
8' Gedackt cu			Ξ.	17 7 .1		
	Diam.	Cut-up	,	Nood thickness		
C	$86 \times 71$	32		14		
c <sup>o</sup>	$52 \times 41$	18		7		
c <sup>1</sup>	$31 \times 26$	12		5		
c <sup>2</sup>	$19 \times 15$	6.5		4		
c <sup>3</sup>	$11.5 \times 9.5$	4		3		
4' Floete open	wood					
cut-u	ips have been	raised				
	Diam.	Cut-up	1	Nood thickness		
C	$65 \times 51$	22.5		11		
c <sup>0</sup>	$38.5 \times 30$	14		5.5		
c <sup>1</sup>	$22.5 \times 18$	7		4		
$c^2$	14×11	4		3		
c <sup>3</sup>	$7.5 \times 7$	2		2		
8' Gamba C-0 F-f	G# capped me <sup>3</sup> open metal	tal				
Diam.	Mouth u	width	Cut-up	Metal thickness		
C 80	58	i cu i i	33.5	0.7		
c <sup>0</sup> 48	33		10	0.7		
$c^{1}$ 28	20		6.5	0.6		
$c^{2}$ 17	14		3.5	0.6		
			2.5	0.6		
$c^3$ 10.5	7		2.0	0.0		
Pedal 16' Bourdon C-c <sup>1</sup> stopped wood						
0	Diam.	Cut-up		Nood thickness		
	$150 \times 125$	58		21		
c <sup>0</sup>	$90 \times 76$	30		14		
c <sup>1</sup>	$54 \times 47$	19		8		
Pedal 8' Flute open wood						
	Diam.		Woo	od thickness		
C	$116 \times 105$			18		
c <sup>0</sup>	$67 \times 60$			11		
c <sup>1</sup>	42×9			7		

both this and conjecture suggest that the organ was originally painted the same color as the 1787 Tannenberg, so the 1793 organ has been painted this color also.

The 1793 Tannenberg organ will be familiar to OHS members who attended the 1976 Convention, when Timothy Braband gave a demonstration on it. Part of this is heard on the record, OHS-3 (now out-of-print) of the 1976 Convention, which also includes a recording of the Lititz Moravian Church Trombone Choir.

#### NOTES

- 1. Neue Unpartheyische Lancaester Zeitung, 15 August 1787, quoted by William Armstrong, Organs for America: The Life and Work of David Tannenberg (Philadelphia: University of Pennsylvania Press, 1967), p. 77.
- 2. Bethlehem Daily Times, 26 July 1880.
- 3. Bethlehem Daily Times, 13 May 1872.
- Bethlehem Daily Times, 27 July 1880.
   The Diapason, 1 June 1910, p. 4.
- 6. Georg Andreas Sorge's treatise, Kunst der Mensuration der Orgel-Pfeiffen (1764), passim, recommends the adoption of equal temperament. That Tannenberg followed Sorge's advice on this point is clear from a letter he wrote to Brother Marshall of Salem on 11 December 1797.

7. The pedals of the 1800 Tannenberg organ built for the "Home Church" in Salem and now in storage at Winston-Salem are not by Tannenberg but by Henry Erben. Henry Erben was also responsible for adding the swellbox to this organ. 8. Armstrong, pp. 63, 102.

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A program of music for the king of instruments

1/4/88Program No. 8801 Going on Record... a collection of new recordings to begin the New Year, selected with an ear for good sound and impressive playing.

Program No. 8802 1/11/88 Jean Guillou on Tour . concert performances by the astounding French virtuoso

- MOZART: Fantasia in f, K. 608 played on the 1738 Christian Müller organ / St. Bavokerk, Haarlem (Festivo S-501)
- S-501)
  BACH: Ricercare in Three Parts, fr The Musical Offering, S. 1079 St
  Bawakerk (Festivo S-507).
  WIDOR: Alegro fr Organ Symphony No. 6 in g. Op. 42, no. 2 (with cadenca by J. Guillou) performed on the 1984 Ruffatti organ / Davies Symphony Hall, San Francisco (Philips CD 412 619-2).
  GUILLOU: 3 Pieces from Organbook (Hautbois damour; Au miroir des flutes: Tutti oxinati) performed on
- (Hattobis damour; Au miroir des (lutes; Tutti ostinati) performed on the 1969 Aeolian-Skinner organ / Uihlein Hall, Performing Arts Center, Milwaukee) (r. 10/9/85 for this branchest
- broadcast). LISZ T: Fantasy and Fugue on a Theme by Meyerbeer (Ad nos, ad salutarem (indam) – performed on the 1979 C.B. Fisk organ / House of Hope Presbyterian Church, St. Paul

GUILLOU: Improvisation

#### Program No. 8803 1/18/88

Music from Saint Mark's a conversation with and performances by Cathedral organist Howard Don Small and his choir

- BOYCE: Organ Voluntary in D MYRON ROBERTS: Prelude & Trumpetings BACH: 2 Chorale-pre-ludes Ich ruf zu Dir, S 638; In Dir ist
- Iudes Ich ruf 24 Dir, 5 030, In Dir 5 Freude, 5 615) PARRY: Psalm 84, How amiable are Thy tabernacles LENNOX BERKELEY: Psalm 23, The
- Lord is My Shepherd LEO SOWERBY: Psalm 121, I will lift
- up mine eyes HEALEY WILLAN: Sing alleluya forth ALBERT DeKLERK: Concerto for
- Organ & Brass (1967) DUPRE: 3 Magnificat Settings, fr Op 15 MALL: Magnificat
- PARKY: Psalm 122, I was glad
- Assisting artists include the Minnesota Brass Ensemble led by Philip Brunelle

Program No. 8804 1/25/88 Spirits and Places...musical impressions of personalities and locales and the mythic muse.

- PERCY WHITLOCK: *Plymouth* Suite (1937) Jennifer Bate (Rushworth & Dreaper organ / St. Andrew's Parish,
- Direaper organ / St. Andrews Partsin, Plymouth). Hyperion A-66033 (LP). JOSEPH BONNET: *Elfes* Jane Parker-Smith (Harrison organ / Coventry Cathedral). ASV DCA-539 (CD). SAMUEL SCHEIDT: Cantelina Angelica Fortunae Elisabeth Gamier (Marc Castior organ / Marc Catheral). Arign
- Garnier organ / Metz Cathdral). Arion ARN-38642 (LP). HANNES MEYER: Suite Paysanne –
- Hannes Meyer, o; Sonare Quartet Claves 50-8511 (CD) ERNST BACON: Spirits and Places (12)
- movements honoring American personages and geography of the native soil) - Marian Ruhl Metson (1983 Bozeman-Gibson organ / St. Paul's Episcopal Church, Brookline, MA). Raven OAR-130 (LP).

Program No. 8805 2/1/88 Guy Bover in Concert ... conversation with and performances by the unconventional Swiss artist, heard on the C.B. Fisk organ at House of Hope Presbyterian Church in St. Paul, MN. JOSE JIMENEZ: Obra de 1 tono de llena

PABLO BRUNA: Tiento de falses JUAN CABANILLES: Tiento al vuelo; Batalha

- NICOLAS DeGRIGNY: Ave Maris Stella Versets J.S. BACH: Praeludium in G, S. 567; Fugue in G, S. 577 ("Jig"); Fugue in c, S. 575 JOHANNES BRAHMS: Prelude &
- Fugue in a; Chorale-prelude, O Welt, ich muss dich lassen OTTORINO RESPIGHI: Chorale-prelude, ich hab mein Sach';Prelude in d
- GUY BOVET: Hamburger Prelude No 2

Program No. 8806 2/8/88 A British Cathedral Spectacular. sonically beguiling music by British composers performed at the Cathedral of St. Paul, MN. SIMON PRESTON: Alleluias WILLIAM BOYCE: Voluntary in D WILLIAM MATHIAS: Wedding "Te

- Deum
- HERBERT HOWELLS: Psalm Prelude, Op. 32, no. 1 (This poor man cried, and the Lord heard)
- EDWIN H LEMARE: Andantino in Db JOHN GOSS: Hymn, Lauda Anima BASIL HARWOOD: Organ Sonata No
- 1 in c#, Op. 5 HUBERT PARRY: Coronation Anthem,
- HUBERT PARRY: Coronation Anthem, *I was glad* FRANK BRIDGE: *Adagio* in E BENJAMIN BRITTEN: Prelude & Fugue on a Theme of Vittoria EDWARD ELGAR: *Pomp & Circum- stance* March No. 1, Op 39 (Land of *Hope and Glory*) Participating organ-icty: Poul Boeback, E. Luke Hager
- ists: Paul Boehnke, E. Lyle Hagert, Helen Garvey Jensen

Choirs from the College of St Catherine and St Thomas, the University of Wisconsin-River Falls, and Macalester College join with an audience of 1500 souls to make the rafters really ring.

Program No. 8807 2/15/88 Ames to Please performances from inaugural concerts on the new John Brombaugh organ at Iowa State University.

- BACH: Prelude, Largo & Fugue in C, S. 545a BACH: 2 Neumeister Chorales (Herr
- Gott, nun schleuss den Himmel auf, 1092; Machs mit mir, Gott, 957a
- BACH: Chorales & Preludes on Allein Gott in der Hoh sei Ehr, S 716 / 711 / 663 / 715
- PINKHAM: Revelations
- GIGOUT: Scherzo SCHEIDEMANN: 2 Chorale-preludes (Jesu, wollst uns weisen; Vater unser
- im Himmelreich) BACH: Contrapunctus No. 11, fr The Art of Fugue, S. 1080 BYRD: Fantasie in C BACH: Fugue in F, S. 540
- Recitalists include Peter Williams, David P. Dahl, David Boe and Martha Folts

Program No. 8808 2/22/88

- The Heroic Mr. Handel... jubilant and enticing original scores and arrange-ments from the "inventor" of the organ concerto.
- HANDEL: Trumpet Overture, Atlanta; Fugue in G; Grand March, fr Rinaldo Edward Carroll, tpt; Anthony Newman, o (1982 Casavant / Rye Presbyterian Church, NY); New York Trumpet Ensemble MMG / Vox
- MWCD-7100 (CD). HANDEL: Fugue in g Leo van Doeselaar (1769 Hinsz / Reformed Church, Wassenaar). Etcetera ETC-2005 (LP)
- HANDEL: Organ Concerto in F, Op. 4, no. 4 Ton Koopman, o; Amsterdam Baroque Orchestra. Belgian Radio tape.
- HANDEL: Organ Solo Concerto in D (after Op. 6, no 5) – Leo van Doeselaar (1827 Bätz / Grote Kerk Hardewijk). Etcetera ETC-2005 (LP).
- HANDEL: Organ Concerto in Bb, Op 7, no. 1 Andre Laberge, o (1874 Dery / St. Roch-des-Aulnaies, Quebec); Ensemble Carl Philipp. Alpec A-83043 (LP)
- HANDEL: Fugue in c Edgar Krapp (1664 Reichel / Market Church, Halle) Eurodisc 201 423-366 (LP)

- HANDEL (?) : Voluntary in C; 6 Tunes for Clay's Musical Clock, Set II Franz Haselböck (1752 Hencke / Her-zogenburg Monastery). Schwann VMS-2619 (LP).
- VMS-2619 (LP).
  HANDEL (arr. R.F. Goldman): Air & Variations in Bb Hannes, Wolfgang & Bernhard Läubin, tpt; Simon Preston, o (Marcussen / Lübeck Cathedral). DG 419 245-2 (CD)

#### Program No. 8809 2/29/88

An American Anthology ... works by native composers, including selections from the new A.G.O. 90th Anniversary Anthology of American Music.

- AARON COPLAND: Preamble for a Solemn Occasion (1949) – Ray Urwin (Welte-Moeller organ / St. Mark's Cathedral, Minneapolis, MN) JAMES HEWITT: Trip to Nahant –
- JAMES FIEWITT: Trip to Nahant James Welch (Schoenstein organ / St Mark's Church, Los Olivos, CA) Wilson Audio S-8419 VINCENT PERSICHETTI: Prelude, Prayer & Toccata, fr Dryden Liturgical Suite (1979) Marilyn Maann (Caseavant organ / Central Mason (Casavant organ / Central Lutheran Church, Minneapolis, MN) DANIEL PINKHAM: 2 Versets – Karen
- Larson GERRE HANCOCK: Prelude on Slane
- Mary Seboldt
   ELIZABETH LARSEN: Sonata in One Movement on Kalenda Maya Karen
- DAVID HURD: Evening Song John Seboldt (this and the three preceding works played on the Dobson organ / St. Michael's Church, Stillwater, MN) NED ROREM: Elms, fr Views from the
- NED ROREM: Elms, tr Views from the Oldest House; 3 Movements, fr A Quaker Reader Nancy Whipkey (Dobson organ / Ascension Episcopal Church, Stillwater, MN)
  SAMUEL BARBER (arr. Strickland): Adagio for Strings Paul Martin Maki (Aeolian-Skinner organ / Cathe-dral of St John the Divine, NYC)
  CHARLES IVES: Variations on America Günther Kaunginger (Klais organ /
- Günther Kaunzinger (Klais organ / Ingolstadt Münster). Christophorus CD-74521.

Program No. 8810 3/7/88 Recital at Riverside Church ... a concert by Wilma Jensen with encores by Virgil Fox and John Walker played at the famous New York City landmark. MESSIAEN: Meditation No 6, fr Meditations on the Mysteries of the Mediations on the Mysteries of the Holy Trinity FRANCK: Fantasy in A TOURNEMIRE: 3 Improvisations (Petite rapsodie; Cantilene; Chorale Fantasy, Victimae Paschali) RICHARD DIRKSEN: Cantilena PECEP: Chorale Fantasy. Viral mich

- REGER: Chorale-Fantasy, Straf mich nicht in deinem Zorn, Op. 40, no. 2 SETH BINGHAM Roulade, Op 9, no. 3 DANIEL LESUR: In Paradisum MULET: Toccata, Tu es Petra
- Wilma Jensen, Professor of Music at Scarritt College in Nashville, was recorded in recital on 7/8/86. Fox and Walker, former and present Riverside Church organists, appear via disc releases (Fox: Columbia CL-813; Walker: Gothic S-18517).

#### Program No. 8811 3/14/88

- Bach on Campus...some college and university instruments display a diversity of Bach's works.
- BACH: Prelude in D, S. 532 James Johnson (Flentrop organ / Busch-Reisinger Museum, Harvard U )
- Ashmont A-1 BACH: Largo & Allegro, fr Concerto in d, S. 596 Joan Lippincott (Fisk organ / Memorial Chapel, Harvard U.) Gothic S-68422.
- BACH: 4 Pieces Nun danket, S 657; Jesu, joy of man's desiring, S. 147; Andante in g, S. 969; Allabreve in D, S. 589) Fenner Douglass (Flentrop organ / Duke U.) Gothic S-38108, S-38114.
- BACH: Partita, Sei Gegrüsset, Jesu gütig, S. 768 (selections) David Craighead (Van Daalen organ / Fer-guson Hall, University of Minnesota)

- BACH: Prelude & Fugue in e, S. 548 (Wedge) Marianne Webb (Reuter organ / Southern Illinois University, Carbondale).
- BACH: Capriccio on the departure of his most beloved brother, S 992 Peter Williams (Brombaugh organ / Iowa State University, Ames)
- BACH (trans. Snow): Badinerie, fr Orchestral Suite No. 2 E M. Skinner and Aeolian player organs
- Skinner and Aeolian player organs (Boston University Symphonic Organ) BACH (trans. Rübsam): Air, Gavottes & Gigne, Ir Orchestral Suite No. 4 Wolfgang Rüsam, Jeffery Campbell (Aeolian-Skinner organ / Northwestern University, Evanston, IL)

Program No. 8812 3/21/88 John Scott and the Choir of St. Paul's ... concert and recorded performances by the young British organist and the famous voices of London's historic Cathedral.

- GIGOUT: Grand Choeur Dialogue GUILMANT: March on a Theme of
- Handel DUPRE: Prelude and Fugue in g, Op. 7,
- no. 3 ROBIN ORR: Magnificat
- WILLIAM MATHIAS: Antiphonies HOWELLS: Anthem, Like as the hart
- (Psalm 42) VIERNE: Scherzo, fr Organ Symphony
- No. 2 KARG-ELERT: *Harmonies of Evening* PROKOFIEV (trans. Guillou): Toccata,

Op 11 DUPRE: Choral et Fugue, Op. 57 Performances originated at St Paul's Cathedral, London (Guild GRSP7022, Hyperion A-66205); Southwark Cathedral (Alpha ACA-507); St. Mary's Basilica, Minneapolis (MPR tape, r. 1980); and Plymouth Congregational Church, Minneapolis (MPR tape, r. 1987). Mr. Scott offer commentance 1987). Mr. Scott offers commentary.

Program No. 8813 3/28/88 Of Passion and Rebirth ... music on the themes of Holy Week and Easter.

- WIDOR: Marche-Pontificale, fr Symphony No. 1 Jane Parker-Smith (Harrison organ / Coventry Cathedral) ASV DCA-539 (CD). LANGLAIS: Dominica in Palmis Ann Labourghy (Covence), core of Column
- Labounsky (Casavant organ / Calvary Episcopal Church, Pittsburgh) MHS
- PEPPING: Passion Chorales (O, wir armen Sünder), fr Das Grosse Orgel-buch Christian Schlicke (Rieger organ / Neander-Kirche, Düsseldorf)
   Schwann AMS-4516 / 7 (LP)
   ACHL O, Lowrer Cetter prochables
- BACH: O Lamm Gottes, unschuldig, S 656 – Jacques van Oortmerssen (Hinsz organ / Bovenkerk, Kampen) Denon 38C37-7120 (CD) BACH: Erbarm dich mein, o Herre Gott, S. 721 – Robert Noehren (Reiger
- organ / Pacific Union College, Ang-win, CA) Delos D / CD-3028 (CD). JOSEPH AHRENS: Easter Chorales

JOSEPH AHRENS: Easter Chorales (Christ ist erstanden; Erschienen ist der herrlich' Tag; Ist das der Leib, Herr Jesu Christ; Gelobt sei Gott im höchsten Thron), fr Choralwerk für Orgel – Sieglinde Ahrens (Klais organ / Mülheim Parish Church, Ger-many) Musica Viva MV 60-1114 (LP) DUPRE: Symphonie Passion (4 move-ments on the life of Christ), Op. 23 (The world awaiting the Saviour:

(The world awaiting the Saviour; Nativity; Crucifixion; Resurrection). Each movement features a different instrument and player... Daniel Roth (Cavaille-Coll organ / St. Sulpice, Paris) Motette, CD-10981; Ladd Thomse (Modlwa corgos (Mariagal)

Paris) Motette, CD-10981; Ladd Thomas (Moeller organ / National City Christian Church, Washington, D.C.) MPR tape; Max Miller (Skinner organ / Old South Church, Boston) MPR tape; Pierre Cochereau (Cavaille-Coll organ / Nortre Dame Cathedral, Paris) RCA / FY CD-020.

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