

26 June 2007

Terrence John Becker 4728
Dodge Street Duluth, MN
55804

Dear TJB:

Here follows a descript of what I have deduced from my fotos (and the info you supplied in the contract docs from the rebuild...)

- 1 New expression chambers (1937) required modification of bass pipes
- 2 Pipe damage has been due to gravity and lack of adequate pipe support
- 3 Tuning sounded stable despite bass pipe conditions
- 4 Access to pipe work is currently marginal in Swell; prohibited to Great pipes
- 5 Extant console condition is generally good; most contact faults due to lack of use
- 6 Chamber wiring and 1937 install by Iverson not on par with original work
- 7 Access to chest work adequate—barely; any winding repairs will be difficult
- 8 Access to Pedal Reed basses virtually impossible

The ideal scenario would be to improve pipe and chest access via the upper rear chamber wall opening we discussed. The extant removable wall panel permits some ability to address lower chest & winding ills. The general tone and condition of the pipes is just what one expects of a early 20th century Kimball. The Pedal Tromba 16' appears to be a later addition; it is not part of the contract from 1937. Perhaps it was added mid-project? Or a rider was added by verbal agreement? Or another builder has done yet more work in the intervening decades? Input from a building inspector or engineer re: load bearing function of the common wall between auditorium and office is essential before doing any opening of same.

As I said, aside from tuning the reed pipes, and accessing flue and reed pipes which are damaged to extract them for remedial repairs, the organ is in surprisingly good shape. Lack of access has prevented much "fooling" around, although the bent pipes do show that someone of girth did attempt to gain entry. I have several similar situations here in Milwaukee!

Regarding work on the organ, I heard from Bob Sipe (a superb organbuilder in Dallas) that he has a reliable service colleague who is in your neighborhood. Not sure if that is Mpls/StP or actually Duluth. Hope this helps with plans and thoughts on the future of the Kimball at the Temple.

Best to you,

David Lynn Beyer, SRR&A Ltd/Organ tech

REPORT: Masonic Temple WW Kimball Organ – Duluth, MN [work Sept 12-13/2011]
David L. Beyer, technician / v-pres SRR&A Ltd, Milwaukee, assist by Terrence Becker

A recent Late Summer full tuning & repairs confirmed the two serious concerns:

- 1) Pedal output cable from console to chamber has no continuity for note d27.
 - 2) Potential degradation of manual key actions due to leather fatigue in primary rails.
- Both issues are related to the deteriorating condition of extant ca.1937 materials:

- 1) Wiring cable using cloth-covered small-gauge wires bundled in fabric binding.
- 2) Desiccated thin sheet Havana leather covering the “new” primary action rails.

Possible remedies for the Pedal wiring fault are a *rewire* of the console’s output cable via a spare line (if one is found in the extant cable bundle) or adding a *new wire run* for note d27. NB: NEC (National Electrical Code) stipulates that any re-working of extant fabric-covered wire mandates complete replacement of all such. Thus, it may be necessary to pull a new pedal keying cable in order to comply with NEC code.

Probable remedy for the several faulty manual key actions (pipe stutter or slowness of response when key is depressed, or cipher, or dead note) will be *new leather* on the extant primary pneumatic rail(s.) Further review of the primary rails is needed to learn if they can be disassembled for re-leathering, or if they must be cut apart. Both manuals exhibit one or more keys having action stutter and/or failure to fire when a key is depressed; both manuals employ double primary actions. The older rails seem to be intact but are at the mercy of “new” primary rails & magnets. Chest pouch leathers (under each pipe) are an unknown, as no bottom boards have been dropped to inspect these leathers.

Today, I spoke with Philip Swartz, a Mason and an organbuilder working frequently in Wisconsin, re: the problems identified above. Phil has offered to assist in repair of these concerns, and has volunteered to provide replacement materials for the work at no cost. Unfortunately, Phil’s schedule for any such work is next spring, at the earliest.

Pipe conditions are much improved after repairs by JB Meyer pipeshop in Milwaukee; I saw at least one more Swell pipe that should have more restorative work done. Reed pipe tuning is much facilitated by the addition of a small fluorescent light fixture in the Swell, power via extension cord for more light under Swell chest and lower component repairs.

Façade pipe tuning was completed for 2 previously unreachable GT Open Diap. pipes: we cut a port in the fibreboard “walls” backing the façade at the Pedal (stage) end of the chamber. A cover panel was crafted (by Raul) of similar material and affixed by high-strength Velcro. This ensures future access if/when tuning adjustments must be made.

No work was done to winding system components during this appointment, beyond an adjustment of the exhaust valve in the central large wooden plenum that divides the lower Swell & Great areas. A full inspection of static and main regulator reservoirs is advised to verify leather condition in these critical components. Tuning was done to the extant pitch level: approx 17cents sharp at 78~80F in room, 82~84F in chamber upper levels.

[DLB – 22 Sept 2011]

Specifications for Duluth Lodge of Perfection, Scottish Rite, at The Masonic Temple.

Pipe Organ by WW KIMBALL Company, Chicago, Illinois, Op. 4790, ca 1910 (?)
Rebuilt by Harry O Iverson (Mpls, Minn.) under joint contract # 42637, with WW Kimball Co., signed May 1937. NB: pipe additions & site modifications, beyond 1937 contract details, are undocumented. Additional pipes were installed and internal chamber component location changes were made, for which no other contracts have been found.

[pre-1937] Two-Manual & Pedal, tubular-pneumatic key/stop action (attached console)

PEDAL 32 notes (unenclosed, located in front / side wall corner of organ area)

1. 16' Bourdon (stopt wood)

[2. 16' Gedeck [sic] (stopt wood) perhaps a later addition?]

Couplers: GT/PD, SW/PD

GREAT 61 notes (unenclosed?) presumably in current location, toward the stage

3. 8' Open Diapason (Zinc basses – a few speaking façades, and Hoyt-metal trebles)

4. 8' Doppel Flute (stopt wood)

5. 8' Gamba (zinc basses & polished Tin trebles)

6. 8' Dulciana (Zinc basses & spot-metal trebles)

7. 8' Melodia (stopt wood basses, open wood trebles)

8. 4' Octave (zinc basses & spot-metal trebles)

[Chimes (25 tubes, pneumatic-action hammers, below front passboard) added later?]

Couplers: SW/GT 8' (+ others?)

SWELL 61 notes (enclosed w/ mechanical linkage for shades; in current location)

9. 16' Bourdon (stopt wood)

10. 8' Violin Diapason (Zinc basses & spot-metal trebles)

11. 8' Stopped Flute (stopt wood)

12. 8' Salicional (Zinc basses & Tin trebles)

13. 8' Aeoline (Zinc basses & spot-metal trebles)

14. 4' Flute Harmonique (common-metal trebles)

15. 8' Oboe (Zinc stems w/ spot-metal bells)

Tremolo

Iverson's 1937 contract stipulates major changes:

- a) removal of original console, with filler 'end-of-case' wood panels to match, by owner
- b) install of new Kimball electro-pneumatic action console, at some distance from organ case, finished to match the wood trim in Lodge Hall
- c) wire cables from console to new junctions & switching relays in extant case chamber
- d) completely 'inclosing' [sic] the organ in two chambers (new roof & panels for GT?)
- e) two sets of 'new' Kimball expression shades (w/ single-pull electro-pneumatic motors)
- f) remove extant tubular-pneumatic key & stop actions, adding new electro-pneumatic primaries (magnets + valves on large suspended key rails) & new stop ventill actions
- g) replace the original exhaust tremolo w/ a new Valve Tremolo
- h) install a new electric blower & generator (per higher pressures & added bass stops?)

- i) add new Kimball 8' Vox Humana: 61 pipes & chest (housed below SW main chest)
- j) add new Kimball 8' Trumpet, 61 pipes (on previous space for oboe? new toeboards?)
- k) add II Mixture: 12th+15th, used "M.E." pipes, (on GT rear chest—w/ new toeboard?)
- l) swap GT Gamba & SW Aeoline rks between chests to 'celeste' with extant string rks
- m) provide PD Bourdon 8' extension via addition of chest & 12 pipes (used, stopt wood)

Not in contract was a PD Tromba 16' added on a large floor-level chest, buried between hall walls and chest chassis. The pneumatic chest also holds PD Bourdon 16' basses. Three openings in the hall's sidewall backing the chambers have been cut thru the chalk-block to access (1) winding & under-GT chest area, (2) upper GT pipes for tuning, and (3) PD Tromba/Bourdon upper pipe area. A used (from?) e-p chest for stopt wood pipes of PD Bourdon 8' stands on the chamber floor, under the SW chest, adjacent to original console area. It parallels the 1937 Vox Humana chest and relocated Chimes. We presume Iverson's contract accurately describes extant conditions prior to his proposed additions.

Remnants of original stop & key action lead-tube guide blocks are extant at several places in the chamber. When adding the large-scale PD 16' Tromba, it appears that SW & GT chamber ceilings were lowered, to hide roof-mounted horizontal pipes & chests of PD Gedeckt 16' behind cornice panels. Further evidence of a height change are numerous SW & GT pipes mitered to fit under shorter ceilings. Cut & solder work was on-site by Iverson, evidenced by roughly crafted solder joints and an inelegant tangle of miters that resulted. Also ranks of similar scale were swapped between GT to SW. Photos of similar 'Masonic' Kimball organs of the period indicate almost no mitered pipes as normative.

The result of Iverson's (or others?) struggles to squeeze more pipes and changes behind and below the finely painted pipe façade, within lowered chamber height, is rather tight access for tuning. Once adequate walkways are nearly impassable due to 'new' Kimball swell shade frames & motors intruding across and above the internal passboards. In fact, access to speaking façade pipes for tuning requires multiple GT shade removals. In the Pedal 16' end-of-chamber area, another hole was cut in the façade-backing Masonite panels to reach three "unreachable" speaking basses for tuning. Other (2009) corrections included repairing solder joints, re-mitering several Oboe & Trumpet resonators to better fit under the suspended Swell engine, and adding 24 absent topmost GT Mixture pipes.

The current console's 37 stoptab and miscellaneous controls list follows--

GREAT

1. 8' Diapason (in facade bass C~Gs)
 2. 8' Doppel Flute
 3. 8' Melodia
 4. 8' Dulciana
 5. 8' Unda Maris (also draws Dulciana, not independent)
 6. 4' Octave
 7. Mixture II (2-2/3'+2') (NB: cs 50~c61 pipes were removed, replacements added 2008)
- Tremolo
 GT Sub 16', GT Unison Off, GT Super 4'
 SW to GT Sub 16', 8', Super 4'

SWELL

8. 16' Bourdon
9. 8' Violin Diapason
10. 8' Stopped Flute
11. 8' Salicional
12. 8' Vox Celeste (also draws Salicional, not independent)
13. 4' Flute Harmonic
14. 8' Trumpet
15. 8' Oboe'
16. 8' Vox Humana
- [blank stoptab]
- Tremolo
- SW Sub 16', SW Unison Off. SW Super 4'
17. Chimes

PEDAL

18. Bourdon 16'
19. Gedeckt 16'
20. Tromba 16'
- [blank stoptab]
- Pedal Octave (4' coupler)
- GT Unison (8')
- SW Unison (8')
- SW Super (4')

Accessories

- General 1~6 pistons
- Swell 1~6 pistons
- Great 1~6 pistons
- Pedal 1~3 toestuds
- Chimes sustain paddle
- Chimes soft paddle
- Great to Pedal toestud (reversible)
- Sforzando paddle (Reversible)
- General Cancel piston
- Great Expression Shoe (shades)
- Swell Expression Shoe (shades)
- Register Crescendo Shoe (Chime & Tremolo cut-out, per Iverson contract)

RECENT HISTORY

An initial visit in March 2007 proved that access to Great pipes was very restricted. Subsequent drilling & sawing through the Hall's chalk-block wall, avoiding the steel girders, improved treble GT pipe tuning access. A general cleaning followed in 2008, to learn all pipe and chamber conditions; it also revealed original chest inscriptions under decades of dust and soot. Much-needed repair of bent & broken metal pipes was done by Anders Meyer, of JB Meyer & Sons, Milwaukee, in 2008. This included corrective

mitering of SW reeds to stand under the SW shade motor rail, thereby improving tonal egress and tuning stability. More remedial corrections in 2009 included adding end-stools & rack-boards for treble boots of Pedal Tromba 16'; the treble pipe boots had leaned far enough to damage bugle miters in adjacent basses. Pipe resonators were better secured.

A careful review of space and budget limits helped the Lodge determine that restoring upright basses of most extant manual ranks was not practical. Such work would involve significant changes to chamber roof structures, requiring pipes to be re-cut & re-soldered, plus purchase & install of new swell shade motor(s), and loss of gallery floor space (for relocation of all Pedal Gedeckt 16' bass & treble pipes.)

A consequence of having pipes, chests, framing, and roof panels over two main Pedal 16' basses (at 'stage' end of the case/chamber) means potentially robust voices must speak up, over and through both GT pipes and expression shades. Were it cost possible and visually acceptable, the Lodge could move the wood Pedal 16' Gedeckt to gallery floor level, thereby restoring Swell & Great chamber ceiling height akin to original, removing any overhead panels above the Pedal chest. The organ's sonic impact would be much enhanced in the room. As it stands, current chamber configuration reflects tonal goals for a 'theatrical' venue, in the late-1930's. All voices are under expression, except the softer Pedal 16' atop the case chambers.

Historical Significance

Gracing the upper gallery area of the Scottish Rite Temple for over 100 years, the WW Kimball organ façade is an integral part of the room's unique décor. The rich array of Egyptian revival motifs and colors on the Lodge Hall walls are echoed in the polychromed pipe façade. Most of the façade pipes are non-speaking, per the norm for theatre organs of the era.

The tonal contents of the original organ installation met the musical needs of 1910, and revisions of 1937 expanded possibilities all the more. These include providing solo and ensemble support for Lodge rehearsals, functions, and ceremonies, the accompaniment of Lodge choral song, and 'civic' presentations of silent-films, plays and operettas.

Its musical concept is decidedly orchestral in character, with stops (voices) imitating the sonorities of woodwinds, brass and string instruments. The single percussion stop is a short-compass set of tubular chimes.

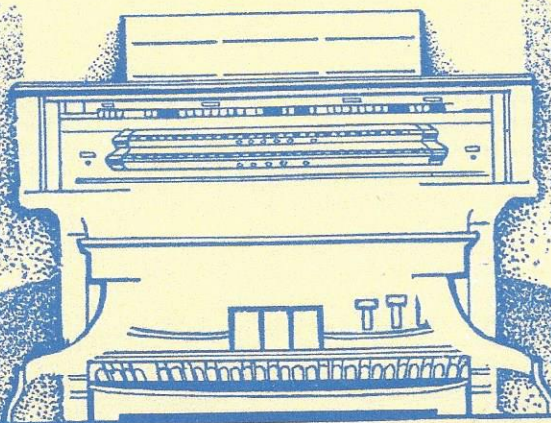
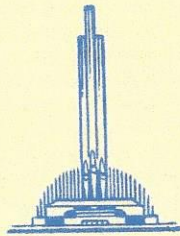
Opus 4790 is Duluth's historic example of similar 'function' organs installed in larger Masonic buildings across America. A research article & photos, describing such organs, was published in two parts in *The Diapason* – a journal of North American pipe organ construction, events, history and industry news, which celebrated its centennial in 2009.

(DL Beyer, 22 Aug 2013)

AN ORGAN SPECIFICATION

From

KIMBALL



Henry O. Green

2510 Thomas Ave. S.

Minneapolis

W. W. KIMBALL COMPANY

Page 2

Number 42637

Specification of parts, additions and work to be done in connection with the re-building of the organ now located in the Scottish Rite Temple Duluth, Minn.
The completed work shall include the following:

- 1- Completely inclosing the organ in Two Chambers. Included in price.
- 2- New Kimball Expression Shades. Two sets.
- 3- Primary actions fitted for Electric operation.
- 4- New Kimball Two Manual Console. Wood to match trim in Lodge room.
- 5- Extension of Pedal Bourdon for Flute 8', 12 pipes and chest.
- 6- New Valve Tremolo
- 7- New Blower and Generator
- 8- New Kimball Vox Humana, 61 pipes and Chest.
- 9- New Kimball Trumpet 61 pipes only.
- 10- Fit Mixture II (12th and 15th,) to Great. (used M.S. pipes)
- 11- The Camba and Aeoline to be moved as shown and tuned as Celests.

The Console to be located in balcony as directed by purchaser.

The purchaser shall provide any carpenter work necessary in connection with Console location also pannel for filling in space left by removal of old Console. The Motor connections to city current and neccery lights shall also be provided by purchaser.

Harry O. Iverson agrees to complete the work including tuning the organ leaving same in good working order ready for use.

The Specification of the completed organ shall be as stated on page 3.

W. W. KIMBALL COMPANY

Number
42637

Page
3

SPECIFICATION

as it will appear after completion of re-building.

GREAT ORGAN

8' Clarinet
8' Doppel Flute
8' Melodia
8' Dulciana
8' Unda Maris (reedline)
4' Octave
Mixture II
Chimes

SWELL ORGAN

16' Bourdon
8' Violin Clarinet
8' Stopped Flute
8' Salicional
8' Vox Celeste (Gamba)
4' Flute Harmonic
8' Vox Humana
8' Oboe
8' Trumpet

PEDAL ORGAN

16' Bourdon
16' Gedeck
8' Flute

COUPLERS

Great to Great 16-4 Soft.
Swell " 16-4-8
Swell to Swell 16-4 Soft.
Great to Pedal 8
Swell to " 8-4

ACCESSORIES

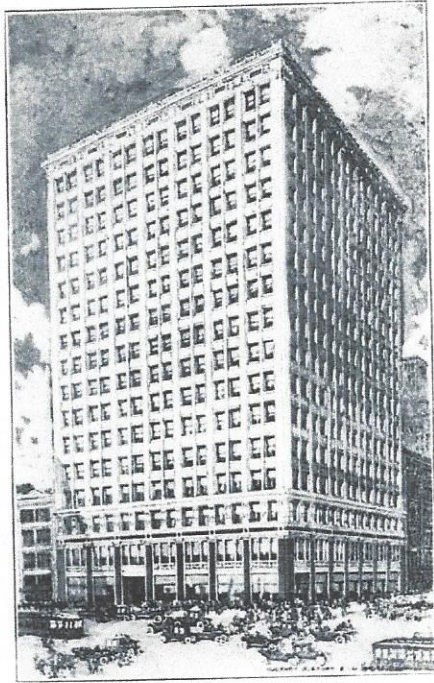
Great Expression pedal
Swell " "
Crescendo " (with Chime and Tremolo cut-out)
Sforzando " " " Reversible.
Chimes Soft " "
Great to Pedal Reversible Pedal
Tremolo

PISTONS (adjustable)

Six General Pistons
Six Great " (controlling stops and couplers)
Six Swell " " " "
Three Pedal "
General Cancel

and Coupler

Stop Keys White. Needs Red lettering
Balance Black lettering



KIMBALL HALL
CHICAGO

The home and executive offices of the W. W. Kimball Company. Here in a spacious auditorium and beautiful organ salon, organists from all over the world come while in the city to play and to discuss organs.

This Organ Specification

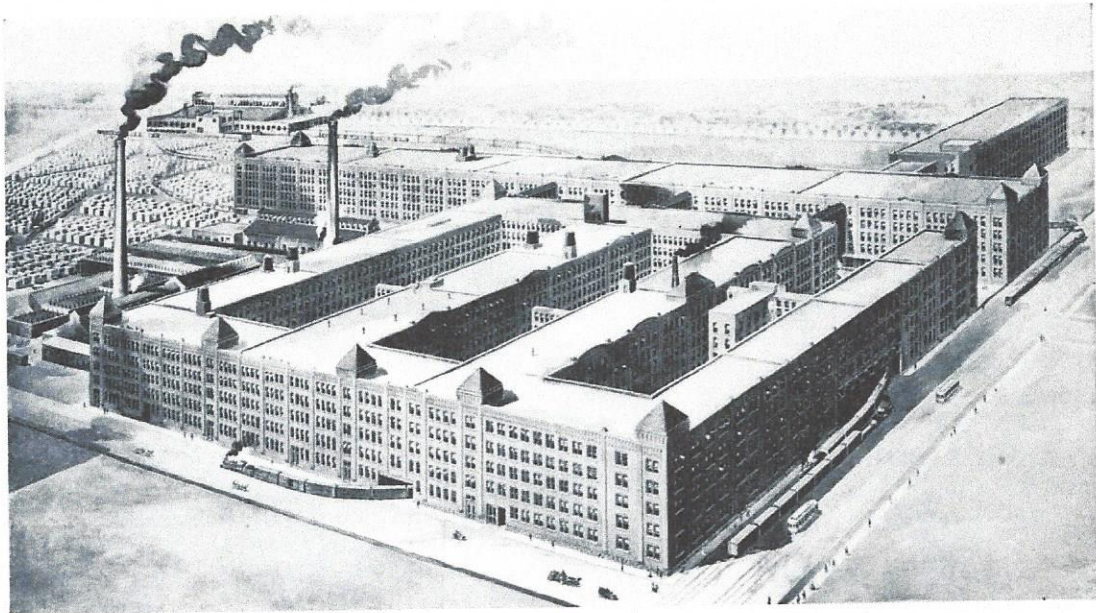
has back of it an institution of unquestioned integrity and financial responsibility—

A Factory of vast proportions and great resources—

An experienced organization maintained down thru the years by succeeding generations of the Kimball Family—

A reputation for successful achievement extending over an unbroken period of 80 years—

These salient facts and the qualities of the instrument itself assure every purchaser of a Kimball Organ a degree of satisfaction not obtainable from any other builder.



This illustration will give a slight impression of the vastness of the Kimball Factory. Located in the heart of Chicago's great manufacturing district, it covers 17 acres and provides more than 850,000 square feet of working space.