



Choir Flutes and Cromorne



Flauto Dolce and Celeste trebles, Choir division

**Quimby Pipe Organs, Inc.
Warrensburg, Missouri
Samford University, Reid
Chapel, Birmingham, Alabama**

In memory of Jane Slaughter Hardenbergh

Samford University began life as Howard College. For those interested in its history, a Google search will produce details of its fascinating history in a turbulent part of the country. When the Aeolian-Skinner pipe organ was purchased, it was still Howard College after 100+ years.

In 1958, Howard College contacted Aeolian-Skinner to build a three-manual instrument of 42 ranks to be installed in Reid Chapel. This organ was to be the primary teaching instrument and accompany the active life of the chapel. By the close of 1961, the pipe organ was installed. Depending upon one's viewpoint, the pipe organ was fortunately, or unfortunately, designed during Joseph Whiteford's tenure at Aeolian-Skinner. At this period of time in organbuilding, many organbuilders were trying to bring more "clarity" to their instruments. To achieve this clarity, eight-foot foundational tone was decreased, while four-foot tone and higher pitches were emphasized. At Reid Chapel, this was accomplished by tapering the pipes of the manual eight-foot open flues, along with a decrease in scale compared to the four-foot pipes above. In general, the principal chorus scaling is turned upside down from historical practice. The flute stops gained articulation—chiff—in the

belief that this also helps clarity. The chorus reeds were among the smallest scales Aeolian-Skinner built, while the color reeds, at this point, were standard baroque reeds that had been built for many years already. Ironically, the strings had lost their edge and tended to blandness. In general, the cut-ups of the flue pipes were also very low, even when the wind pressure was taken into consideration.

Another interesting twist at Reid Chapel is that the Choir division is, in reality, an enclosed Positiv. Needless to say, the wind pressure was but a mere breath. With that being said, for its period, it was a very successful instrument. The pipe organ was capable of playing a large part of the repertoire with reasonable accuracy. Mechanically, it was typical Aeolian-Skinner: first class. Visually, the pipe organ made a dramatic statement in the chapel. This is how the instrument remained when we first saw it.

In the year 2010, change was afoot. The instrument had been releathered several years before and was soldiering on. The change came in the way of Firmon Hardenbergh of Birmingham, Alabama. Hardenbergh's wife, Jane (Slaughter), had passed away recently and he wanted to do something in her memory. Jane Slaughter was for many years the organist at Reid Chapel and was the person who chose Aeolian-Skinner those many years before. Hardenbergh decided that Reid Chapel would be an ideal expression as a memorial. He consulted with Barry Norris, also of Birmingham, who suggested Quimby Pipe Organs. Hardenbergh then called Nelson Barden for

his thoughts, and Barden agreed that Quimby Pipe Organs was a good choice. Michael Quimby and I flew to Birmingham to meet with Firmon Hardenbergh and Dr. Ted Tibbs to investigate what would be a fitting memorial gift. After talking with Firmon and exploring the Aeolian-Skinner, it was thought that the most fitting tribute would be a general revoicing with the addition of color stops that earlier Aeolian-Skinners were known for. This would entail new stop jams for the console, so the decision was also made to thoroughly modernize the switching system.

This brings us to today, and a description of what happened to Opus 1384. In early 2011, all of the pipework was removed, along with the pouch boards and bottom boards of two stops that were borrowed to the Pedal, but would become unit stops. Once the material was in our shop, all of the pipework was repaired and cleaned, and construction of the new windchests and pipes commenced.

Quimby Pipe Organs has been blessed to have the Aeolian-Skinner pipe scale book and quite a few pipe patterns in our possession. This is a tremendous help to match appropriate scales when making additions to Aeolian-Skinners. We also possess the personal ledger books of G. L. Beaudry, who was the pipe shop foreman from 1930 to the early 1960s. The ledger books offer a fascinating evolution from E. M. Skinner, through G. Donald Harrison, and ending with Whiteford. Resources such as these allow us to scale new pipework as Aeolian-Skinner would have scaled them. Amazingly, only two stops changed position—the 4'

Gemshorn, which was in the Swell division, and the 4' Principal, which was in the Choir division. The 4' Gemshorn was in reality a Spitz Principal, so it made perfect sense for it to be in the Choir (Positiv, actually). When the pipework was ready for the voicing machine, some decisions had to be made. As a voicer, I am a firm believer in variable cut-ups as opposed to variable scaling. Far more good (and harm) can be done by cut-ups than variable scaling can account for, though variable scaling has its place.

The Great 8' Principal received the most attention. The cut-ups were raised rather severely to achieve warmth in the bass, while the treble pipes of this stop were untouched. This turned out to be the general theme throughout the flue revoicing. Having large cut-ups in the bass allows the power to be maintained without resorting to beards or other means to achieve proper speech, while low cut-ups in the treble allow the clarity to be maintained. Nicking of the pipes was deepened in the bass and added to the treble pipes. The blower had ample reserve, so this was possible without changing the blower. Increasing cut-ups and adding nicking increase the wind requirements, so we had to be sure the blower had the capacity even though the wind pressures were not changed. This theme was carried throughout the flue work, to increase the warmth in the bass while maintaining the incisiveness of the trebles. Except for the Holz Gedeckt on the Great, the articulation (chiff) was removed. With the Holz Gedeckt we felt some articulation should remain, which lends a buoyancy to its tone. The Swell Violes were increased

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Aeolian-Skinner Opus 1384, Boston, Massachusetts, 1962
Quimby Pipe Organs, Inc., Warrensburg, Missouri, 2011

GREAT (Unenclosed)

16'	Holz Gedeckt	73 pipes
8'	Principal	61 pipes
8'	Harmonic Flute	61 pipes
8'	Holz Gedeckt (extension)	
4'	Octave	61 pipes
4'	Rohrflöte	61 pipes
2'	Octave	61 pipes
2 3/4'	Cornet II	122 pipes
1 1/2'	Mixture IV-VI	312 pipes
8'	Trumpet	61 pipes
	Chimes	21 tubes

SWELL

16'	Quintaton	80 pipes
8'	Viole de Gambe	68 pipes
8'	Viole Celeste	68 pipes
8'	Rohrflöte (extension)	
4'	Principal	68 pipes
4'	Triangle Flute	61 pipes
2'	Principal	61 pipes
1'	Mixture III-IV	232 pipes
16'	Fagotto	80 pipes
8'	Trompette	68 pipes
8'	Fagotto (extension)	
4'	Rohr Schalmey	68 pipes
	Tremulant	
16'	Swell to Swell	
	Swell Unison Off	
4'	Swell to Swell	

CHOIR

8'	Gedeckt	68 pipes
8'	Flauto Dolce	61 pipes
8'	Flute Celeste	49 pipes
4'	Gemshorn	68 pipes
4'	Koppelflöte	68 pipes
2 3/4'	Nazard	61 pipes
2'	Blockflöte	61 pipes
1 3/4'	Terz	61 pipes
1 1/2'	Quint	61 pipes
3/8'	Scharf III	183 pipes
8'	Cromorne	68 pipes
	Tremulant	
16'	Choir to Choir	
	Choir Unison Off	
4'	Choir to Choir	
	Harp	49 bars
	Zimbelstern	

PEDAL

32'	Resultant (Great)	
16'	Principal	44 pipes
16'	Subbass	32 pipes
16'	Holz Gedeckt (Great)	
16'	Quintaton (Swell)	
8'	Principal (extension)	
8'	Holz Gedeckt (Great)	
8'	Rohrflöte (Swell)	
4'	Octave	44 pipes
4'	Harmonic Flute (Great)	
2'	Octave (extension)	
2 3/4'	Mixture III	96 pipes
	Grave Harmonics (derived from Pedal ranks)	
32'	Contre Bombarde (extension)	
16'	Bombarde	68 pipes
16'	Fagotto (Swell)	
8'	Trompette (extension)	
8'	Fagotto (Swell)	
4'	Clarion (extension)	
4'	Cromorne (Choir)	

Total ranks – 48



The "New" Swell 4' Triangle Flute



Restored Wurlitzer Chrysoglott (named Harp)

in power and re-bearded to put some edge into their tone. Since the Principals were no longer borderline Violes, the Violes should now become strings and not Geigen Principals.

Also notable are the Mixtures. Though the Mixtures were scaled correctly, they were voiced to dominate the ensemble. The quint ranks were as loud as the unison ranks, which added a reedy tone to the ensemble. Fortunately, the cut-ups were quite low, allowing the pipes to be softened. The quint ranks are now approximately 20% softer than the unison ranks, which brings the Mixture into proper balance. The Mixtures now cap the ensemble instead of dominating the ensemble.

The reeds, what to do with the reeds? Our initial thoughts were to increase the scale of the chorus reeds to the next larger Aeolian-Skinner scale, since there was room on the chest to do this. The fly in the ointment was the Pedal reed, since it is so prominently displayed in the façade. Once the reeds were in the shop, I decided to try some samples with new tongues and the decision was made to keep the old resonators and to re-tongue the chorus reeds. Doing this, we were able to make the sound warmer yet still retain the "bite" that is distinctly Aeolian-Skinner. The Choir Cromorne was also re-tongued to be a cross between a Krummhorn, which it was, and a Clarinet. The Rohr Schalmey was rather nice to begin with, and therefore only the curve of the tongue was tweaked. The former Dulzian, on the other hand, saw the greatest change. As installed in the pipe organ, it was little more than a buzz-saw

that would not stay in tune. As built, this stop was a half-length Fagotto with English Horn shallots. At the very beginning, the resonators from 8' F-sharp up were removed, and full-length Fagotto resonators made and soldered on. Once this was done, I started to voice some samples, fully expecting that the shallots would need to be changed also. After some experimentation, the sound we wanted was there. The Fagotto now sounds like an Aeolian-Skinner Fagotto, with just a bit more brightness. The bottom 18 notes were obviously re-tongued to bring out the typical Fagotto tone.

This brings us to the additions. Since the Great Mixture lost its reedy quality, a Trumpet on the Great was needed. This Trumpet was built using the next larger Aeolian-Skinner scale than the Swell Trompette. Typical Aeolian-Skinner French shallots were also used. This produced a reed with a little more foundation than the Swell Trompette, yet still with some "bite"—a perfect complement to the Great Chorus. The Choir division received a Flauto Dolce and Celeste. These two stops are from E. M. Skinner Opus 404, and are exactly what one would expect from E. M. Skinner. Finally, the Choir is more than a Positiv. The Choir division also received a Harp, which is unenclosed beneath the Great. Dare I say it, this stop is actually a Wurlitzer Chrysoglott. In its buried position, it is quite delightful. Another new stop is the Great 8' Harmonic Flute. This stop from 4' C is part of the façade. It flanks both Great windchests and adds a bit more interest to the display. This stop is Aeolian-Skinner's "Great Type"

and is voiced with considerable treble ascendancy. It also has open pipes to low C. Chimes were also added. Now if we only had a Vox Humana, the Holy Trinity would be there: Chimes, Harp, and Vox (the three stops to put money in the offering plate, as the saying goes).

One final addition had special meaning for Firmon though. For many years, Firmon attended Independent Presbyterian Church in Birmingham. One of his favorite stops was the 4' Flute Triangulaire. As fate would have it, IPC was acquiring a new Dobson organ during this period and we purchased many of the old ranks that Dobson was not going to re-use. When Firmon heard of this, he asked about the Triangle Flute. We said we had it, and it was going to Reid Chapel. Except for adjusting to the change in wind pressure, it is as he heard it in IPC. When Firmon first heard this stop,

it brought tears to his eyes, and made the whole project worthwhile.

The story does not end here though. This fall, two "prepared for" stops are being added. The first is an actual Bourdon stop to the Pedal, which, like St. John the Divine, New York City, was conspicuously lacking. The second is an extension of the 16' Bombarde to 32' pitch. This stop is partly full-length and half-length due to the fact that it will become a major part of the façade. Sometimes space and visual effect overcome idealism.

If you are ever in Birmingham, please visit Reid Chapel at Samford University. We think you will like what you hear. Also, do find Bogue's Restaurant; you won't be disappointed.

—Eric D. Johnson, Head Voicer
Quimby Pipe Organs, Inc.

Cover photo by William F. Davis

Samford University, Reid Chapel, Birmingham, Alabama

Inter-divisional Couplers

Great to Pedal 8
Swell to Pedal 8-4
Choir to Pedal 8-4
Swell to Great 16-8-4
Swell to Choir 16-8-4
Choir to Great 16-8-4
Choir to Swell 8
Great to Choir 8

Combination Action

Peterson ICS 4000: 256 levels of memory
Great, thumb pistons 1-5
Swell, thumb pistons 1-5
Choir, thumb pistons 1-5
Pedal, thumb pistons 1-5 (1-3 duplicated by toe pistons)
General, thumb pistons 1-11
"Next Piston" piston sequencer
"Previous Piston" piston sequencer
Set Piston
General Cancel Piston

Crescendo and Expression Pedals

General Crescendo Pedal: 60 positions, with three adjustable and one standard
Swell Expression Pedal
Choir Expression Pedal

Reversibles

Great to Pedal, thumb & toe paddle
Swell to Pedal, thumb
Choir to Pedal, thumb
Swell to Great, thumb & toe paddle
Full Organ, thumb & toe paddle
Zimbelstern, toe piston

MIDI

MIDI in and out
Sequence Recorder



Choir Division