

Case study
on the restoration
of the
1735 Richard Bridge Organ
at
Christ Church Spitalfields

Introduction

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General information

Signing of the original contract: 2007.

Commencement of restoration: 2012.

The restoration was completed in 2015 whilst the Quintadena was installed in February 2016.

The Project was funded and managed by the friends of Christ Church Spitalfields on behalf of the Rector and Parochial Church Council. The Friends commissioned this case study.

The advisers for the project were The Reverend Dr Nicholas Thistlethwaite and Dr William McVicker.

Staff involved in this restoration were Geert Noppers, Joost de Boer, Marek Matuszyk and Laurent Robert. The work was initially overseen by William Drake.

Carving restoration by Laurent Robert.

The restoration of old, and the manufacturing of new pipework was undertaken by Terry Shires, using exact specifications given by Joost de Boer, who restored the front pipes.

Flue voicing by Joost de Boer assisted by Laurent Robert.

Preparation and finishing of the reed stops by David Frostick, assisted by Michael Blighton.

The re-gilding of the front pipes and the calligraphy of the stop labels was undertaken by John Brennan.

The project of refinishing the casework was undertaken by David Luard.

Appointment and dismantling

We, at William Drake Organ Builder, were delighted to hear in 1996, that we were the preferred firm to be in charge of the restoration of this grand instrument.

We were asked to dismantle the instrument in 1997 for its removal and safekeeping prior to the start of major restoration works to the Church. The organ had been through the Blitz and through a re-roofing of the nave of the Church after the Church became derelict, this has been without doubt the dirtiest organ we have encountered in our career as organ builders so far.

The dismantling was an exciting period during which became clear how much of the original organ had survived. Also it became clear that a significant number of changes had been made to the organ since the rebuild by Gray & Davison (1852-1857).

Inventory

After dismantling, the following survivals from 1735 were evident:

The case and console area (altered); Great soundboard supports; Choir lower back case frame (altered); The Great and Choir soundboards; All Great and Choir Upperboards and about 70% of the rackboards; The original mounted Cornet benches; The Great sliders and some of the Choir sliders; Great and Choir stop action (stop knobs 19th century); The Great and Choir rollerboards; A Choir double backfall assembly; Three sections of the horizontal main wind trunk, including an original non-return valve(!); The Great vertical wind trunks and fragments of the Choir branched-off trunks; A significant number of chorus and reed pipes on the Great; A significant number of reed pipes belonging to the Swell; One complete stop on the Choir and enough evidence in the form of old pipes to reconstruct missing stops; Evidence for the positioning and size of the original Swell soundboard; The original Swell pedal lever and backfall inside the case (fixed with its original screws); The wooden hook stay for the Drum pipes.

Filling in the gaps

With such a great number of original organ parts, returning the organ back to its original form was a matter of following logic and common sense. Where parts of the organ had been lost they could be quite often reconstructed from where they are duplicated elsewhere in the organ. The keyboards were reconstructed copying the original keys of the 1757 Bridge organ in St Leonard's Shoreditch.

For a number of stops, inspiration from outside the instrument had to be sought.

These were the Great and Swell Cornet, the French Horn and the Quintadena.

The Cornets are copied from the 1760 George England organ in Dulwich, because they are the earliest survivals of both a Great Cornet and Swell Cornet (where the Swell Cornet is of Cornet scale) in the same instrument.

The French Horn is inspired by the French Horn in the J.C. Bishop organ in Bermondsey. J.C. Bishop is loosely linked with Christ Church, in that he repaired the organ in 1822.

The Quintadena in the Spitalfields organ

A number of weeks before the completion of the restoration, attention was drawn by a member of BIOS (British Institute of Organ Studies) to an interesting passage in Sir John Hawkins' History of Music of 1776, concerning a Quintadena stop on the organ of Spitalfields. Hawkins stated that it was the only one of its kind in the country.

The position of this stop in the organ was on the Choir organ, placed on the fourth slider from the front between the Mixture and the Vochumane. The stop knob for this slider happens to be in the same place, between the Mixture and the Vochumane (intentionally?)

A stop on this slider, originally from tenor c, was mentioned by Henry Leffler in 1804 in the earliest recording of the complete stop list of the Spitalfields organ, to be a Flute Cfaut. We can only speculate how through changing aesthetics, the Quintadena might have been replaced by, or remade into a Flute.

No evidence of either stop had survived the many rebuilds of later years. There are no other surviving examples for an English Quintadena. It was therefore necessary to look for this abroad.

The Quintadena of the Barend Smit organ in Edam immediately sprang to mind as a contender, though incomplete historical material made this a less attractive option. For Spitalfields it was decided to use the scale of a Quintadena in the 1742 Rudolf Garrels organ in Purmerend (The Netherlands).

Although this stop was made up by Garrels out of 17th century material, the scale of this stop happens to run parallel to the scale of the Spitalfields Choir Stop Diapason, it being four semitones narrower. In order to aid integration of new with the old, pipe making details and voicing techniques have been copied from the Spitalfields Stop Diapason.

A Quintadena is a stop of modestly scaled, fully stopped and low cut-up pipes. The tone is due to its low cut-up of a gentle and rich quinty character. The first overtone, the 12th (an octave and a fifth away from the foundation), is strongly represented.

The Quintadena can be used to colour many stop combinations. It can be used to make up a solo Flute together with the Choir Stop Diapason, it can be used together in reed combinations, especially with the Vochumane, and it can be used in the full Choir Mixture chorus.

The Quintadena is commonly found on Renaissance and Baroque organs in The Netherlands and in Germany at both 8 foot and 16 foot pitch. It is possible that this stop was introduced into Britain by Organ builders from those countries setting up their businesses over here. The proposed specification of the Bernard Smith organ for St Paul's Cathedral, had next to a Stop Diapason a Quintadena Diapason on the Choir organ. We don't however know whether this stop was ever installed.

By the time that the Spitalfields organ was built, Quintadenas had become a rarity in new instruments, so it is a distinct possibility that in 1735 this stop, and perhaps some other stops like the Choir Stop Diapason and Principal, were re-used from second-hand stock.

Builder: Richard Bridge 1735
Specification 2015

Great Organ, GG – d³, 56 notes

Open Diapason	Bridge
Open Diapason	Bridge/new
Stopt Diapason	Bridge
Principal	Bridge
Principal	Bridge
Twelfth	Bridge
Fifteenth	Bridge/new
Tierce	new
Larigot	new
Sesquialtra (V)	Bridge/new
Furniture (III)	new
Cornet (V)	new
Trumpet	Bridge/new
Trumpet	Bridge/new
Clarion	Bridge/new
Bassoon	Bridge/new

Pedal Organ, GG – e¹, 34 notes

Open Diapason (16)	Lincoln
Principal (8)	G & D
Trumpet (8)	G & D

Drum pedal on C (4 pipes)

Pitch

440 Hz @ 20° Celsius

Temperament

Fifth comma mean tone

Swell Organ, g - d³, 32 notes

Open Diapason	new
Stopt Diapason	new/Bridge
Principal	new
Flute	new
German Flute	new
Cornet (III)	new
Trumpet	Bridge/new
Hautboy	Bridge
Clarion	Bridge/new

Choir Organ, GG - d³, 56 notes

Stopt Diapason	Bridge
Quintadena c°	new
Principal	Bridge/new
Flute	Bridge/new
Fifteenth	new
Mixture III	new
Cremona	Bridge/new
Vochumane	Bridge/new
French Horn d ⁰	new

Couplers

Great to Pedals

Choir to Pedals

My colleagues and I feel humbled by the fact that our employer and colleague William Drake did not live to see the Spitalfields organ completed. The Spitalfields organ had been very important to him, and the instrument has had a considerable influence on the stylistic direction of his firm, since the time it was in storage on our premises in 1997.

We hope that our work will be seen as a fitting tribute to his career as an organ builder. Under his guidance we have been able to grow in our specific fields of expertise and interest, with which we intend to further build on his legacy.

The author of this case study is Joost de Boer.