

THE PRESENT STOPLIST

GREAT

16' Quintaton
 8' Principal
 8' Holzgedeckt
 4' Octave
 2 $\frac{3}{4}$ ' Quint
 2' Super Octave
 Fourniture IV-VII
 8' Trompette-en-chamade (Ant.)
 GREAT 16
 GREAT 4
 GREAT UNISON OFF
 SWELL 16
 SWELL 8
 SWELL 4
 CHOIR 16
 CHOIR 8
 CHOIR 4
 BOMBARDE-ANTIPHONAL 8

SWELL

16' [Bourdon & Flute]
 8' Geigen Principal
 8' [Flute]
 8' Rohrflöte
 8' Viola de Gamba
 8' Viola Celeste
 8' Flauto Dolce
 8' Flute Celeste (t.c)
 4' Prestant
 4' Flute Triangular
 2' Nachthorn
 Plein-Jeu V
 16' Bombarde
 8' Trompette
 8' Hautbois
 8' Vox Humana
 4' Clairon
 Tremolo
 SWELL 16
 SWELL 4
 SWELL UNISON OFF
 BOMBARDE-ANTIPHONAL 8

CHOIR-POSITIV

8' Nason Flute
 4' Koppelflöte
 2' Lieblich Prinzipal
 Cymbal III
 8' Spitzflöte
 8' Unda Maris II
 4' Montre
 2 $\frac{3}{4}$ ' Nazard
 1 $\frac{3}{5}$ ' Tierce

CHOIR-POSITIV *cont.*

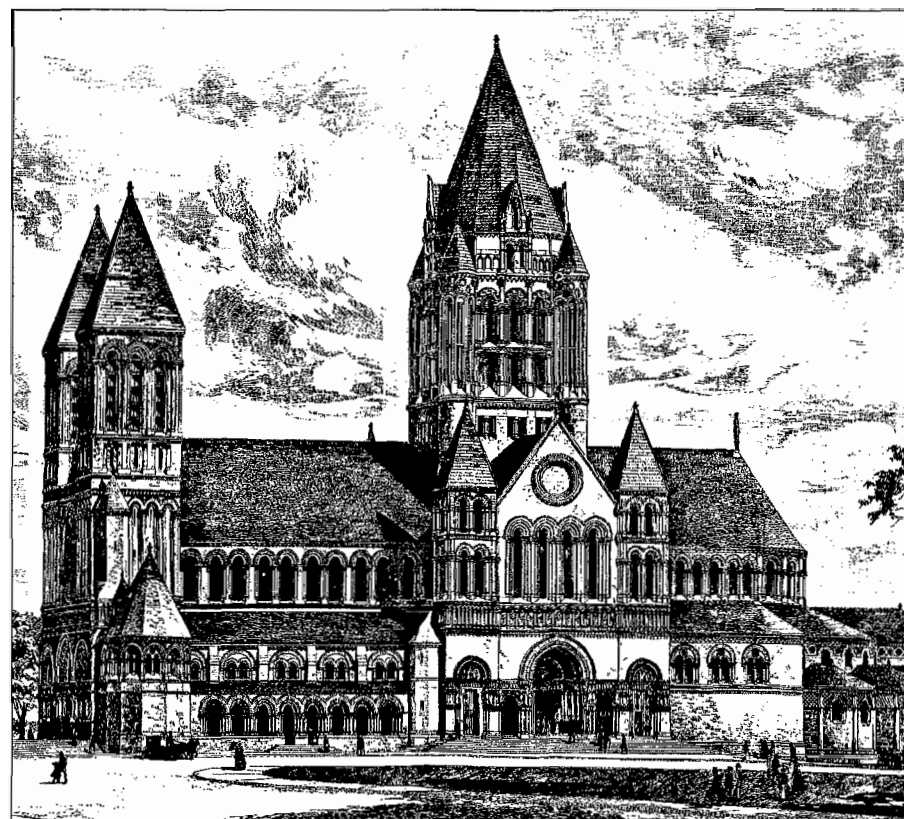
8' Clarinet
 Tremolo
 Cymbelstern
 CHOIR 16
 CHOIR 4
 CHOIR UNISON OFF
 SWELL 16
 SWELL 8
 SWELL 4
 BOMBARDE-ANTIPHONAL 8
 GREAT 8

BOMBARDE-
ANTIPHONAL

8' Trompette harmonique
 BOMB-ANT 16
 BOMB-ANT 4
 UNISON OFF
 GREAT 8
 SWELL 8
 8' Montre
 8' Bordun
 4' Octave
 2' Fifteenth
 Mixtur IV
 8' Trompette-en-chamade
 16' Pedal Bordun

PEDAL

32' Open Bass
 16' Contra Bass
 16' Violone
 16' Bourdon
 16' [Bourdon] (Swell)
 16' Quintaton (Great)
 8' Principal
 8' Violoncello
 8' Bourdon
 4' Choralbass
 4' Flute
 Mixture 11
 32' Contra Bombarde
 16' Ophicleide
 16' Bombarde (Swell)
 8' Trompette
 4' Clairon
 8' Trompette-en-chamade (Ant.)
 GREAT 8
 SWELL 8
 SWELL 4
 CHOIR 8
 CHOIR 4
 BOMBARDE-ANTIPHONAL 8
 PEDAL ON ANY MANUAL ADJ



Above: Henry Hobson Richardson's rejected design for the Cathedral of All Saints

GREAT [manual II]

61 notes

QUINTATON 16

Austin, Aeolian-Skinner. CC-BB ex-Austin Gr. *First Diapason*; zinc, offset, cut-ups lowered, heavy original nicking. Remainder A-S; spotted metal, ears throughout, felted canisters, 2/3 mouth, skived upper lips. CC-BB stamped "OP." scribed "Grt."; c⁰ stamped "1275 GT QUINT C".

PRINCIPAL 8

CC-AA ex-Austin Gr. *Second Diapason*, cut-ups lowered; AA⁴-c⁴ Aeolian-Skinner. CC-BB zinc, slotted, rollers CC-AA⁴. c⁰-c⁴ spotted metal, 1/4 mouth. Ears CC-b¹. CC marked "2nd Open".

HOLZGEDECKT 8

Austin, revised. Stopped pine throughout, CC-b⁰ cherry caps, c¹-c⁴ mahogany caps. CC-BB cut-ups lowered with screwed-on spotted metal plates. CC and c⁰ both stamped "45".

OCTAVE 4

Aeolian-Skinner. Frosted unplanned tin, ears CC-c¹, 1/4 mouth, skived, double-edged nicking favoring languid. CC inked "1275 Grt.", stamped "OCT C".

SPILL FLÖTE 4

Stopkey taped over; no chest preparation

QUINT 2 2/3

Aeolian-Skinner, from supplier. Spotted metal, 1/4 mouth, skived upper lips; ears CC-e⁰.

SUPER OCTAVE 2

Aeolian-Skinner, from supplier. Spotted metal, 1/4 mouth, skived upper lips; ears CC-BB.

FOURNITURE IV-VII

Aeolian-Skinner, frosted unplanned tin, 1/4 mouth, skived upper lips. Ears on all pipes longer than 1'; doubled pitches papered off.

		$1\frac{1}{2}$	I	$\frac{2}{3}$	$\frac{1}{2}$	CC-BB
		2	$1\frac{1}{2}$	I	$\frac{2}{3}$	c^0-b^0
		$2\frac{2}{3}$	2	$1\frac{1}{2}$	I	c^1-f^1
	4	$2\frac{2}{3}$	2	$1\frac{1}{2}$	I	$f^{\#1}-b^{12}$
8	4	$2\frac{2}{3}$	2	2	$1\frac{1}{2}$	c^3-f^3
8	$5\frac{1}{2}$	4	4	$2\frac{2}{3}$	2	$f^{\#3}-c^4$

TROMPETTE EN CHAMADE 8
(Antiphonal)**CHOIR-POSITIV** [man. I]

68 notes

*Unenclosed section (Positiv)***NASON FLUTE 8**

Aeolian-Skinner. CC-c⁴ stained oak, English blocks, no nicking. c⁴-g⁴ open tin, 1:2 taper.

KOPPEL FLÖTE 4

Spotted metal. CC-GG capped, cone-topped canisters; long feet for visual contour; GG¹-g² felted "koppel" canisters; g²-g⁴ open. Ears CC-g², 1/4 mouth.

LIEBLICH PRINZIPAL 2

61 pipes. Frosted unplanned tin, 1/4 mouth, ears CC-BB.

CYMBAL III

61 notes, 183 pipes.

Frosted unplanned tin, 1/4 mouth, no ears.

1/2	1/3	1/4	CC-BB
2/3	1/2	1/3	c ⁰ -f ⁰
1	2/3	1/2	f ⁰ -b ⁰
1 1/2	1	2/3	c ¹ -b ¹
2	1 1/2	1	c ² -f ²
2 2/3	2	1 1/2	f ² -b ²
4	2 2/3	2	c ³ -c ⁴

*Enclosed section (Choir)***SPITZ FLÖTE 8**

CC-BB zinc, c⁰-g⁴ spotted metal. CC-c⁴ 1:4 taper, c⁴-g⁴ cylindrical, 1/4 mouth. CC-AA offset.

UNDA MARIS II 8

124 pipes.

Rank 1: Inked "Ch Unda Maris CC 1275" (originally bass of celeste), rolled, spotted mouths on zinc bodies, fine nicking. c⁰ inked "SAL", long sharp skiving, stamped "MADE LYON" [*Lyon & Healy?*]. From c⁰ stamped "CHO ECH SAL C" (Austin). Spotted metal, 1/5 mouth. Evidence of narrow slotting filled in. Some pipes inked "1275 CH-POS UNDA MARIS". CC-BB offset.

Rank 2: from c⁰, primarily Austin. Spotted metal, 2/3 mouth, rollers c⁰-f⁰, ears c⁰-a³, Aeolian-Skinner fill pipes g⁰-g¹⁰ (re-scaling) and b³-g⁴.

MONTRE 4

Unplanned frosted tin. Slotted CC-c³ (1/4 wide, 1/2 down); ears CC-f¹; 1/4 mouth. Stamped "1275 POS MONTRE C".

NAZARD 2 2/3

Spotted metal, 1/4 mouth, ears CC-e⁰, 2:3 taper CC-c³, remainder cylindrical. Stamped "NAZ C".

TIERCE 1 3/5

61 pipes. Spotted metal, 1/5 mouth, arched cut-ups, ears CC-GG. 2:3 taper CC-c², remainder cylindrical. c³-c⁴ breaks to 3 1/5'. Stamped "1275 TIERCE C".

CLARINET 8

Austin *Corno di Bassetto*. CC block stamped "CC FIW" [*Frederick I. White, pipemaker?*]. Reeds CC-c³, 1/2-length, cylindrical, slide-tuned, tapered shalloots. c³-g⁴ spotted metal flues.

TREMOLO**CYMBEL STERN****SWELL** [manual III]

73 notes

CONTRA AEOLINE 16

Originally Austin 16' string reused, replaced 2005 with flute stop. CC-b⁰: stopped wood, pine bodies and caps, CC-BB box beards, c⁰-c¹⁰ beards. c¹-c³: recycled Aeolian open wood flute, pine bodies, cherry caps, re-scaled one half-step larger and shortened. d³-c⁵: spurious. New unit offset chest for CC-b⁰, also CC-GG of *Flauto Dolce*, following 2004 water damage.

GEIGEN PRINCIPAL 8

CC-BB: Austin Enclosed Great *Geigen Diapason*, CC "GR GEI. DIA", zinc, slotted. c⁰-b⁰: Aeolian-Skinner, spotted metal, 1/4 mouth, "SW 8 PRIN" (since revoiced, no remaining upper lip skive). c¹-g⁴: stamped "15th", Laukhuff pipes, spotted metal, 1/4 mouth.

AEOLINE 8

Extension of 16' [flute]

ROHR FLÖTE 8

CC-c¹ from Skinner Op. 724. CC-BB: stopped pine, walnut caps, German blocks, arched cut-ups, nicking on languid only. c⁰-c¹: common metal, 2/3 mouth, high arched cut-ups, upper lips in the round. c¹-g³: common metal chimney flute, soldered caps, ear-tuned, arched upper lips, fine nicking (c¹: "Waterbury Choir 1863 Flute C"). a³-g⁴: 1:2 tapered open common metal, 1/4 mouth, arched upper lips. g⁴-c⁵ from Skinner Op. 724, open tapered common metal.

VIOLA De GAMBA 8

Primarily Austin. CC-BB: zinc, slotted, CC-FF offset. c⁰-c⁴: spotted metal, CC-f² rollers. b⁴-c⁵: spurious, from Aeolian-Skinner. CC-c⁴ ears, sharp skiving, extremely fine nicking. CC stamped "CON GAM", but majority are stamped "Gt GAMB".

VIOLA CELESTE 8

Several stops combined. CC-f¹⁰: zinc; de-slotted c⁰-f¹⁰; remainder spotted metal, scribed "#2 618 68 G AEOL CEL", inked "SW VIO CEL" with three fill pipes to increase scale. Rollers CC-f³; ears CC-c⁴. c⁴-c⁵ from Op. 724 Viol Celeste, spotted metal. CC: "724 SW SAL C 64". CC-FF offset.

FLAUTO DOLCE 8

Skinner, complete from Op. 724. CC-e⁰: zinc, 1/5 mouths. f⁰-c⁵: common metal. 1:2 taper at CC, graduating to cylindrical at c³, mouth widths graduate from 1/5 to 2/3. Rollers CC-FF³; slots CC-BB; ears CC-c³; offset CC-GG. Treble portion deslotted, tuning slides.

FLUTE CELESTE 8

From c⁰, 61 pipes. As *Flauto Dolce*.

PRESTANT 4

Aeolian-Skinner, from supplier. CC-BB: "SW Pr" "T 4981 Albany N.Y.", spotted metal. c⁰-c⁵ stamped "15th", Laukhuff pipework. 2' c "Pitch pipe, 7" w.p. barometer".

FLUTE TRIANGULAR 4

Skinner, complete from Op. 724. CC-c³ pine with gumwood fronts, walnut caps, inverted mouths, arched upper lips, nicking on block and cap. c[♭]-c⁵ common metal open flues.

NACHTHORN 2

61 pipes. Was Aeolian-Skinner in 1956, replaced 1985 by Austin, replaced again 2005 by Turley. Recycled early 20th-century pipework. CC-b⁰: heavy common metal, ⅔ mouth, heavy nicking, stamped "OP". c¹-c³ linen lead stamped "OPEN". c[♭]-c⁴ linen lead flute trebles.

PLEIN-JEU V

305 pipes. 1986 Austin replacement of 1956 3-rank Aeolian-Skinner mixture replacing original Op. 724 5-rank Mixture. Spotted metal, ¼ mouths.

1	⅔	½	⅓	¼	CC-FF [♯]
1½	1	⅔	½	⅓	GG-c ⁰
2	1½	1	⅔	½	c ^{♯0} -f ^{♯0}
2½	2	1½	1	⅔	g ⁰ -c ¹
4	2½	2	1½	1	c ^{♯1} -c ³
8	4	4	2½	2	c ^{♯3} -c ⁴

BOMBARDE 16

1956 Aeolian-Skinner, from suppliers. CC-FF: offset, spotted metal stems, inserts, scrolls, zinc bodies. CC-b⁰: spotted metal bells on zinc stems. c¹-c⁴: entirely spotted metal. Harmonic at f^{♯3}. g^{♯4}-c⁵, spotted metal Laukhuff flues. Original scrolls soldered shut, new slots cut. c¹ stamped "TR. 8", inked "1275 SW BOM". Revoiced Austin 1986.

TROMPETTE 8

Aeolian-Skinner, from suppliers. CC-BB: zinc, spotted metal sockets and inserts, zinc bodies. c⁰-g³: spotted metal resonators, short boots. Harmonic at f^{♯2}. Stems centered on blocks. g^{♯3}-c⁵: spotted metal Aeolian-Skinner flues. Revoiced by Austin 1986.

HAUTBOIS 8

In 1956, a recycled Skinner English Horn (not from Op. 724). Now Austin, 1986. CC-c³: spotted metal bells on zinc stems. c^{♯3}-f³: capped trumpet (Flügel Horn) construction; f^{♯3}-c⁵

spotted metal flues.

VOX HUMANA 8

Skinner, Op. 724. CC-g³ lifting cap, Hoyt metal, zinc boots. Resonance boots d⁰-g³, spotted metal flues g^{♯3}-c⁵.

CLAIRON 4

Identical in construction to Bombarde and Trompette. Reeds CC-g², harmonic at g^{♯1}, flue trebles from supplier. Revoiced by Austin 1986.

TREMOLO

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BOMBARDE [manual IV]**73 notes****TROMPETTE HARMONIQUE 8**

90 pipes. Formerly named Trompette-en-chamade, renamed Bombarde upon arrival of 1986 Austin Antiphonal. Aeolian-Skinner, combination of supplier (Giesecke) and Aeolian-Skinner pipes; revoiced Austin 1986. CC-BB zinc, CC-EE mitred; replacement spotted metal lower stems. Common metal boots, domed Bertouneche shallops. CC-g^{♯0} weighted. Harmonic at c¹ with reeds to g³. Spotted metal, slotted, short boots at c⁰. At g^{♯3}, two-ranks, open spotted metal flues, equal length feet, Aeolian-Skinner pipes, second rank muted. Markings: Boots stamped "TR." different font, as are the sockets of the bass octave. c¹ stamped "SOLO TR HAR". c⁰ stamped "1480". c¹ stamped "SOLO TR HAR". Chest labeled "Trompette en chamade, 8½" pressure". Second chest label says "12" pressure". Masonite reflector of recent construction forming a back and roof.

BOM-ANT 16

Originally "Bombarde", playing the Trompette as a tenor c 16'.

BOM-ANT 4

Originally "Clairon", playing the Trompette at 4'.

GRAND V

Stop-key preparation only; taped over.

[blank stopkey]

PEDAL**32 notes.****UNTERSATZ 32**

12 pipes, Austin. Extension *Bourdon*. 1904 Austin *Open Wood*, laid horizontally along North triforium. Pipes

constructed of single planks, dead length. CCCC 22½"x18½", wood thickness 1⅞", cut up 5". Wooden frein on top exterior of the block.

CONTRA BASSE 16

CC-f¹ Austin façade pipes without-out windows, FF-f¹ gold-painted pipes (original Great 16' *Diapason* from former façade, see photo). f^{♯1}-g¹ spurious, 19th-century New York-style, in-soldered-lips. Metal portion has been rescaled a half-step; GGG[♯] now playing AAA. In script "Pedal Open," c^{♯1}-f¹, f^{♯1} and g¹ on 1904 Universal chest.

VIOLONE 16

44 pipes, Austin. CC-b⁰ wood, German blocks, English caps, sharply skived upper lip, rollers, no nicking, moderate windways, relieved cap-face bevel. c¹-e¹ zinc, spotted f¹-g². ⅔ mouth, f^{♯2}-g² spurious, on old Universal chest. Wood pipes painted brown, CC scribed "Violon Ped C".

BOURDON 16

56 pipes. CC-f⁰ Austin, CCC ink-stamped "Bourdon 16", Pine bodies, pine caps with mahogany inserts, German blocks, nicking block and cap. f^{♯0}-g² spurious, g^{♯2}-g³ Kimball pipes with 1:1 cutup. All on Aeolian-Skinner chest with separate treble chest attached on the return.

QUINTATON GR 16**CONTRA AEOLINE SW 16****PRINCIPAL 8**

44 pipes. Aeolian-Skinner, Austin. CC-BB from Aeolian-Skinner era but recycled; zinc, slotted, rollered. c⁰-b⁰ zinc, c¹-g² scribed "Oct C" (ex-Austin Great Octave?) inked "Ped. C-B C". Ears CC-f^{♯2}, ¼ mouth.

VIOLONCELLO 8

Extension *Violone*

BOURDON 8 extension

Extension *Bourdon*

CHORAL BASS 4

Extension *Principal*

FLUTE 4

Extension *Bourdon*

MIXTURE II

64 pipes, Aeolian-Skinner chest, recycled pipework, 2⅔'-2' throughout. 2⅔': ¼ mouth. CC-EE zinc, de-slotted, remainder spotted metal. CC-BB arched upper lips, skived; ears CC-a⁰. FF[♯] scribed "F[♯] OCT QUINT" 2': spotted metal, ¼ mouth, skived upper lips, ears CC-e⁰. Was once

slotted. CC scribed "601 69 CC Sup Oct" Both ranks inked "1275 PED MIX TWO C"

CONTRA BOMBARDE 32

32 pipes, Möller pipes and chests (Saint Matthew's Cathedral, Washington, D.C., installed Paul Carey *ca.* 1995). CC-BB half-length resonators on two chests, diatonic. c^0 - f^1 on third chest, f^\sharp - g^1 on fourth chest. CC-GG, c^0 - c^\sharp mitred. Winded from new reservoir. CC- g^\sharp sleeved zinc, a^0 - b^0 slotted, scrolled, c^1 - c^\sharp slotted, spotted metal bells on zinc. Screwed on weights throughout; tapered shallots with face plate, tear drop openings. c^0 scribed "8" wind"; c^1 stamped "8246 4½" sc Bombard C".

OPHICLEIDE 16

CC- g^0 from Skinner Op. 858 (Rollins College, Winter Park, Florida, 1932), varnished common metal bells on zinc, with recent spotted metal inserts; g^\sharp - g^2 Aeolian-Skinner 1956, stamped "PED OPH". 1956-era Aeolian-Skinner Bertounèche shallots throughout. Short boots from g^\sharp .

BOMBARDE SW 16

TROMPETTE 8

Extension *Ophicleide*

CLARION 4

Extension *Ophicleide*

TROMPETTE EN CHAMADE 8

Antiphonal

ANTIPHONAL

MONTRE 8

CC-BB façade, polished zinc, rollers. c^0 - e^0 copper, façade; f^0 - c^\sharp , tin, façade; d^1 - c^4 spotted metal, interior. Ears CC- f^\sharp . Stamped "C-0248 J.R."

BORDUN 8

CC- c^3 mahogany bodies with maple caps, English blocks; c^\sharp - c^4 open tapered common metal.

OCTAVE 4

Spotted metal, ¼ mouth, ears CC- f^1 .

[one blank chest position]

FIFTEENTH 2

Spotted metal, ¼ mouth, ears CC- e^0 .

MIXTUR IV

244 pipes. Spotted metal, ¼ mouth. Ears: 2', c^\sharp - d^0 , 1½', CC-AA $^\sharp$, 1'CC-EE.

1½	1	¾	½	CC- c^0
2	1½	1	¾	c^\sharp - c^1
2¾	2	1½	1	c^\sharp - c^2
4	2¾	2	1½	c^\sharp - c^3
8	4	2¾	2	c^\sharp - c^4

TROMPETTE EN CHAMADE 8

Slotted copper.

PEDAL BORDUN 16

12-note extension of Manual *Bordun*. Poplar, English blocks.

[blank stopkey]

COUPLERS

[to Pedal]

GREAT 8

SWELL 8

SWELL 4

CHOIR 8

CHOIR 4

BOMBARDE-ANTIPHONAL 8

PEDAL ON ANY MANUAL ADJ

[to Swell]

SWELL 16

SWELL 4

SWELL UNISON OFF

BOMBARDE-ANTIPHONAL 8

[blank stopkey]

[blank stopkey]

GREAT 8

SWELL 8

[to Great]

GREAT 16

GREAT 4

GREAT UNISON OFF

SWELL 16

SWELL 8

SWELL 4

CHOIR 16

CHOIR 8

CHOIR 4

BOMBARDE-ANTIPHONAL 8

[to Choir]

CHOIR 16

CHOIR 4

CHOIR UNISON OFF

SWELL 16

SWELL 8

SWELL 4

BOMBARDE ANTIPHONAL 8

GREAT 8

BOMBARDE-ANTIPHONAL 16

BOMBARDE-ANTIPHONAL 4

BOMBARDE-ANTIPHONAL

UNISON OFF

COMBINATIONS

Solo keyslip

BOMB/PED

1-2-3-4-5-6

PED 1-2-3-4

Swell keyslip

GEN 1-2-3-4-5

SW PED

SW 1-2-3-4-5-6-7-8

PED 5-6-7-8

Great keyslip

GEN 6-7-8-9-10

GT PED

GR 1-2-3-4-5-6

SW GT

CH GT

BOMB GT

TUTTI

Choir keyslip

GEN 11-12

CH PED

CH 1-2-3-4-5-6

SW CH

GT CH

GEN CAN

Treble toe controls

GEN 1-10

GT PED REV

SW PED REV

CH PED REV

BOMB PED REV

Bass toe controls

PED 1-2-3-4-5-6

TUTTI

Key cheeks

SWELL NAVE SHADES

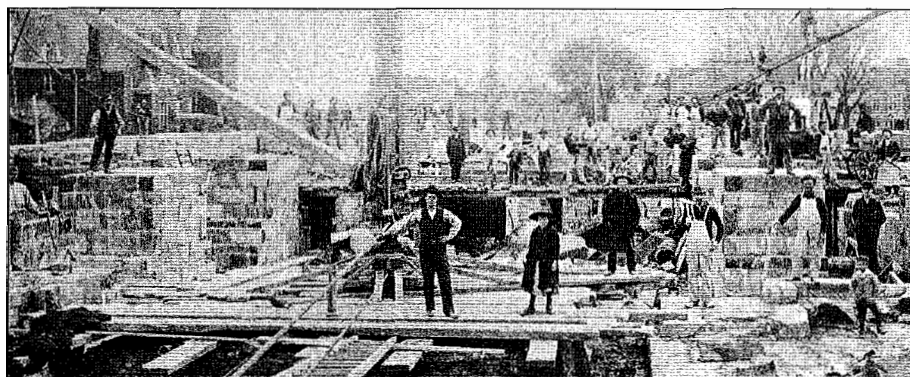
ON/OFF, KEY CHEEK

Expression shoes

CH

SW

CRESC



Above: The laying of the foundation for the Cathedral of All Saints about 1884