

# M. P. MÖLLER Organ Factory

Pipe Organ No. 4763 Date May 22, 1926  
 For Ninth St. Baptist Church, Cincinnati, Ohio.  
 Action Elec. Console Detached 8'  
 Casing No. Poplar Finish Ivory finish  
 Decorations Gold Bronze Motor Elec.  
 Width of Key-bed Four Stop Controls Draw Knobs  
 No. Manuals Four Wind Pressure Church  
 To be completed March 31, 1927 Blower pipe furnished by U.S.

## SPECIFICATIONS

### SECTION A.

### KEYBOARDS, COMPASS AND EXPRESSION CHAMBERS.

Four manuals,.....61 notes,.....CC-c4.  
 Pedal,.....32 notes,.....CCC-G.  
 Great-Choir Chamber. Enclosing tonal elements of Great and Choir Organs.  
 Swell Chamber. Enclosing tonal elements of Swell Organ.  
 Solo Chamber. Enclosing tonal elements of Solo Organ.  
 Echo-Antiphonal Chamber Enclosing tonal elements of Echo and Antiphonal Organs.

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### SECTION B.

### GREAT ORGAN.

8 Tonal Elements. 24 Stops. 644 Pipes  
 Wind pressure, six (6) inches.

No.	Stops.	Pipes. Notes.
1	8' Dulciana,.....(fr. Ch. #49,).....	73
2	8' Melodia,.....(fr. Ch. #51,).....	73
3	8' Gemshorn,.....	73....73
	8' - 73 pipes, Gr. 8' Ch. 8'	
4.	8' Gemshorn Celeste, (Tenor C,).....	61....61
	4' - 61 pipes, Gr. 8' T. C.	
5.	8' Doppel Flote,.....unit.....	97....73
	16' - 97 pipes, Gr. 8' 4' 2-2/3' 2' Ch. 8'	
	Ped. 16' 32' res. 10-2/3' 4'	
6.	8' Diapason,.....unit-29 wood-44 scale metal treble.....	97....73
	16' - 97 pipes, Gr. 8' 4' 16' Ch. 8'	
	Ped. 16' 8' 32' res.	
7.	8' Viola da Gamba,.....58 scale.....	85....73
	8' - 85 pipes, Gr. 8' 4'	
8.	8' Major Diapason,.....17 wood-38 scale metal treble.....	73....73
	8' - 73 pipes, Gr. 8'	
9.	4' Melodia,.....(fr. Ch. #51).....	73
10.	4' Doppel Flote,.....(fr. Gr. #5,).....	73
11.	4' Diapason,.....(fr. Gr. #6,).....	73
12.	4' Viola da Gamba,.....(fr. Gr. #7,).....	73
13.	16' Melodia,.....(fr. Ch. #51).....	73
14.	16' Diapason.....(fr. Gr. #6,).....	73
15.	5-1/3' Dulciana quint,.....(fr. Ch. #49).....	73
16.	2-2/3' Doppel flote 12th,.....(fr. Gr. #5,).....	66

GREAT ORGAN (Continued)

No.	Stops.	Pipes.	Notes.
17.	2' Doppel flote,.....(fr. Gr. #5,)	61	
18.	1' Melodia,.....(fr. Ch. #51)notes 50-61 wired an octave lower,....	61	
19.	IV rk. Synthetic Mixture,.(fr. Ch. #51 & 49,).....	61	
	consisting of Melodia 1-3/5'(17th)		
	" 1-1/3'(19th)		
	" 1' (22nd)		
	Dulciana 2/3'(26th)		
20.	8' English Horn,.....	73	73
	8' - 73 pipes, Gr. 8' Ch. 8'		
21.	8' Harmonic Trumpet,.....unit.....	85	73
	8' - 85 pipes, Gr. 8' 4' 16' T.C. Ped. 8'		
22.	4' Harmonic Trumpet,.....(fr. Gr. #21,)	73	
23.	16' Harmonic Trumpet, (Tenor C,).(fr. Gr. #21).....	61	
24.	8' Chimes, (A-E2,).....(fr. So. #81).....	20	

SECTION C.

7 Tonal Elements. 20 SWELL ORGAN Pipes. 49 Percussives.

12 Tonal Elements. 24 Stops. 924 Pipes  
Wind pressure, six (6) inches.

No.	Stops.	Pipes.	Notes.
25.	8' Quintaeoline,.....unit.....	85	73
	8' - 85 pipes, Sw. 8' 1'		
26.	8' Quintaeoline Celeste, (Tenor C,).....	61	61
	4' - 61 pipes, Sw. 8' T.C.		
27.	8' Salicional,.....	85	73
	8' - 85 pipes, Sw. 8' 4'		
28.	8' Salicional Celeste, (Tenor C,).....	73	61
	4' - 73 pipes, Sw. 8' T. C. 4'		
29.	8' Gedeckt,.....unit.....	97	73
	16' - 97 pipes, Sw. 8' 4' 16' 2-2/3' 2'		
	1-3/5' 1-1/3' Ped. 16' 8'		
30.	8' Rohr flote,.....metal-with chimneys.....	73	73
	8' - 73 pipes, Sw. 8'		
31.	8' Diapason,.....46 scale.....	85	73
	8' - 85 pipes, Sw. 8' 4'		
32.	8' Viole d'Orchestre,.....	73	73
	8' - 73 pipes, Sw. 8' 16' T. C.		
33.	8' Viole Celeste, (Tenor C,).....	61	61
	4' - 61 pipes, Sw. 8' T. C.		
34.	4' Salicional,.....(fr. Sw. #27,)	73	
35.	4' Salicional Celeste,....(fr. Sw. #28,)	73	
36.	4' Gedeckt,.....(fr. Sw. #29,)	73	
37.	4' Diapason,.....(fr. Sw. #31,)	73	
38.	16' Gedeckt,.....(fr. Sw. #29,)	73	
39.	16' Viole d'Orchestre, (Tenor C,) (fr. Sw. #32,)	61	
40.	2-2/3' Gedeckt 12th,.....(fr. Sw. #29,)	66	
41.	2' Gedeckt.....(fr. Sw. #29,)	61	

SWELL ORGAN (continued)

No.	Stops	Pipes.	Notes
42.	1' Quintacoline.....(fr. Sw. #25,) notes 50-61 wired an octave lower.....	61	
43.	III rk. Synthetic Mixture,.(fr. Sw. #29 & 25,)..... consisting of Gedeckt 1-3/5' (17th) " 1-1/3' (19th) <i>Quintacoline</i> 1' (22nd)	61	
44.	8' Vox Humana.....(separate enclosure and tremolo,)..... 8' - 61 pipes, Sw. 8'	61.....	61
45.	8' Oboe,.....unit..... 16' - 97 pipes, Sw. 8' 4' 16' Ped. 16'	97.....	73
46.	8' Cornopean,..... 8' - 73 pipes, Sw. 8'	73.....	73
47.	4' Oboe,.....(fr. Sw. #45,).....	73	
48.	16' Oboe.....(fr. Sw. #45,).....	73	

SECTION D.

CHOIR ORGAN

7 Tonal Elements. 20 Stops. 462 Pipes. 49 Percussives.  
Wind Pressure, six (6) inches.

No.	Stops.	Pipes.	Notes.
49.	8' Dulciana.....unit..... 8' - 85 pipes, Gr. 8' 5-1/3' 2/3' Ch. 8' 1-3/5' 1-1/3' 1'	85.....	73
50.	8' Dulciana Celeste, (Tenor C,)..... 4' - 61 pipes, Ch. 8' T. C.	61.....	61
51.	8' Melodia,.....unit..... 16' - 97 pipes, Gr. 8' 4' 16' 1-3/5' 1-1/3' 1' Ch. 8' 4' 16' 2-2/3' 2' Ped. 16' 8'	97.....	73
52.	8' Melodia Celeste, (Tenor C,)..... 4' - 61 pipes, Ch. 8' T. C.	61.....	61
53.	8' Gemshornr,.....(fr. Gr. #3,).....	73	
54.	8' Quintadena,..... 8' - 85 pipes, Ch. 8' 4'	85.....	73
55.	8' Doppel flote,.....(fr. Gr. #5,).....	73	
56.	8' Diapason,.....(fr. Gr. #6,).....	73	
57.	4' Melodia,.....(fr. Ch. #51,).....	73	
58.	4' Quintadena,.....(fr. Ch. #54,).....	73	
59.	16' Melodia,.....(fr. Ch. #51,).....	73	
60.	2-2/3' Melodia 12th,.....(fr. Ch. #51,).....	66	
61.	2' Melodia,.....(fr. Ch. #51,).....	61	
62.	1' Dulciana,.....(fr. Ch. #49,) notes 50-61 wired an octave lower,.....	61	
63.	III rk. Dulciana Mixture,...(fr. Ch. #49,).. consisting of Dulciana 1-3/5' (17th) " 1-1/3' (19th) " 1' (22nd)	61	

CHOIR ORGAN (continued)

No.	Stops	Pipes.	Notes
64.	8' English Horn,.....(fr. Gr. #20,).....	73	
65.	8' Clarinet,.....	73.....	73
	8' - 73 pipes, Ch. 8' 16' T. C.		
66.	16' Clarinet,...(Tenor C,)....(fr. Ch. #65,).....	61	
67.	4' Harp,.....bass octave duplicating tenor octave,.....	61	
	49 bars, (C-c4,) Ch. 4' 2'		
68.	2' Harp,.....(fr. Ch. #67,)notes 50-61 wired an octave lower,.....	61	

SECTION E.

SOLO ORGAN

8 Tonal Elements. 13 Stops. 803 Pipes. 20 Percussives.  
Wind pressure, ten (10) inches on  
Major Viol, Major Viole Celeste, French Horn and Tuba Mirabilis;  
five (5) inch pressure on remainder.

No.	Stops.	Pipes.	Notes.
69.	8' Major Flute,.....	97.....	73
	16' - 97 pipes, So. 8' 4'		
	Ped. 16'		
70.	8' Stentorphon,.....38 scale.....	73.....	73
	8' - 72 pipes, So. 8'		
71.	8' Major Viol,.....(10 inch wind,)..56 scale-unit.....	97.....	73
	16' - 97 pipes, So. 8' 4' 16'		
	Ped. 16' 8'		
72.	8' Major Viol Celeste, (Tenor C,)..(10 inch wind,)..56 scale...	61.....	61
	4' - 61 pipes, So. 8' T. C.		
73.	4' Major Flute,.....(fr. So. #69,).....	73	
74.	4' Major Viol,.....(fr. So. #71,).....	73	
75.	16' Major Viol,.....(fr. So. #71,).....	73	
76.	V rk. Grand Mixture,.....	305.....	73
	(8ve, 12th, 15th, 19th, 22nd,)		
	305 pipes, So. and Ped.		
77.	8' French Horn,.....(10 inch wind,).....	73.....	73
	8' - 73 pipes, So. 8'		
78.	8' Tuba Mirabilis,.....(10 inch wind,)....unit.....	97.....	73
	16' - 97 pipes, So. 8' 4' 16'		
	Ped. 16'		
79.	4' Tuba Mirabilis,.....(fr. So. #78,).....	73	
80.	16' Tuba Mirabilis,.....(fr. So. #78,).....	73	
81.	3' Chimes, (A-E2,).....(Deagan class A,).....	20	
	20 tubes, Gr. 8' So. 8'		

SECTION F.

ECHO ORGAN.

(Playable from Choir manual.)  
3 Tonal Elements. 6 Stops. 243 Pipes.  
Wind Pressure, five (5) inches.

No.	Stops.	Pipes.	Notes.
82.	8' Muted Viol,.....	63 scale tapered-unit.....	85.....73
		8' - 35 pipes, Ec. 8' An. 8' 1-3/5' 1-1/3' 1'.	
83	8' Muted Viol Celeste, (Tenor C,).....	66 scale tapered.....	61.....61
		<i>4'-61 Pipes Ce. 8' T.C. an. 8' T.C.</i>	
84.	8' Lieblich Gedeckt.....	unit.....	97.....73
		16' - 97 pipes, Ec. 8' 4' 16' 2-2/3'	
		An. 8' 4' 16' 2-2/3' 2'	
		Gal. Ped. 16' 8'	
85.	4' Lieblich Gedeckt,.....	(fr. Ec. #84,).....	73
86.	16' Lieblich Gedeckt,.....	(fr. Ec. #84,).....	73
87.	2-2/3' Lieblich Gedeckt 12th,..	(fr. Ec. #84,).....	66

SECTION G.

ANTIPHONAL ORGAN

(Playable from Solo manual.)

4 Tonal Elements. 14 Stops. 304 Pipes.  
Wind pressure, eight (8) inches except diapason five (5) inches.

No.	Stops.	Pipes.	Notes
88.	8' Muted Viol,.....	(fr. Ec. #82,).....	73
89.	8' Muted Viol Celeste, (Tenor C,) (fr. Ec. #83,).....		61
90.	8' Lieblich Gedeckt,.....	(fr. Ec. #84,).....	73
91	8' T.bia Clausa,.....	(8 inch wind,).....	85.....73
		16' - 85 pipes, An. 8' Gal. Ped. 16'	
92.	8' Diapason,.....	(5 inch wind,)..40 scale.....	85.....73
		8' - 85 pipes, An. 8' 4'	
93.	8' Lieblich Gedeckt,.....	(fr. Ec. #84,).....	73
94.	4' Diapason,.....	(fr. An. #92,).....	73
95.	16' Lieblich Gedeckt,.....	(fr. Ec. #84,).....	73
96.	2-2/3' Lieblich Gedeckt, 12th,..	(fr. Ec. #84,).....	66
97.	2' Lieblich Gedeckt.....	(fr. Ec. #84,).....	61
98.	III rk. Viol Mixture,.....	(fr. Ec. #82,).....	61
		consisting of Muted Viol 1-3/5' (17th)	
		" " 1-1/3' (19th)	
		" " 1' (22nd)	
99.	8' Vox Humana,.....	(separate enclosure and tremolo,).....	61.....61
		8' - 61 pipes, An. 8'	
100.	8' French Trumpet,.....	(8 inch wind,).....	73.....73
		8' - 73 pipes, An. 8' 16' T. C.	
101.	16' French Trumpet, (Tenor C,) (fr. An. #100.).....		61



SECTION H.

PEDAL ORGAN

17 Stops.

Stops derived thru transmissions and extensions  
from Great, Swell, Choir and Solo divisions.

No.	Stops.	Notes.
102.	16' Gedeckt,.....(fr. Sw. #29,).....	44
103.	16' Melodia,.....(fr. Ch. #51,).....	44
104.	16' Doppel flote,.....(fr. Gr. #5,).....	44
105.	16' Diapason,.....(fr. Gr. #6,).....	44
106.	16' Major Viol,.....(fr. So. #71,).....	44
107.	16' Major Flute,.....(fr. So. #69,).....	44
108.	8' Gedeckt,.....(fr. Sw. #29,).....	44
109.	8' Melodia,.....(fr. Ch. #51,).....	44
110.	8' Diapason,.....(fr. Gr. #6,).....	44
111.	8' Major Viol,.....(fr. So. #71,).....	44
112.	32' res. Diapason,.....(fr. Gr. #6 and #5,) notes 13-44 fr. Gr. #6 only...	44
113.	10-2/3' Doppel flote quint, (fr. Gr. #5,).....	44
114.	4' Doppel flote,.....(fr. Gr. #5,).....	44
115.	V rk. Grand Mixture,.....(fr. So. #76,).....	44
116.	16' Oboe,.....(fr. Sw. #45,).....	44
117.	16' Tuba Mirabilis,.....(fr. So. #73,).....	44
118.	8' Harmonic Trumpet,.....(fr. Gr. #21,).....	44

SECTION I.

GALLERY PEDAL ORGAN.

3 Stops.

Stops derived thru transmissions and extensions  
from Echo and Antiphonal divisions.

No.	Stops.	Notes.
119.	16' Lieblich Gedeckt,.....(fr. Ec. #34,).....	44
120.	16' Tibia Clausa,.....(fr. An. #91,).....	44
121.	8' Lieblich Gedeckt,.....(fr. Ec. #34,).....	44

SECTION J.

COUPLERS, VENTILS AND SWITCHES. (70) (All draw knobs.)

Great. (13)

122. Unison	125. Swell 8'	128. Choir 8'	131. Solo 8'
Ventil	126. Swell 4'	129. Choir 4'	132. Solo 4'
123. Great 4'	127. Swell 16'	130. Choir 16'	133. Antiphonal 8'
124. Great 16'			134. Antiphonal 4'

Swell. (9)

135. Great 8'	136. Unison	139. Choir 8'	142. Solo 8'
	Ventil	140. Choir 4'	143. Antiphonal 8'
	137. Swell 4'	141. Choir 16'	
	138. Swell 16'		

Choir. (11)

144. Ventil (Ch.off)	146. Great 8'	147. Swell 8'	150. Unison	153. Solo 8'
145. Echo Switch (Ec.on)		148. Swell 4'	Ventil	154. Antiphonal 8'
		149. Swell 16'	151. Choir 4'	
			152. Choir 16'	

Solo. (16)

155. Ventil (So. off)	158. Great 8'	161. Swell 8'	164. Choir 8'	167. Unison
156. Antiphonal Switch (An. on)	159. Great 4'	162. Swell 4'	165. Choir 4'	Ventil
157. Expression Ventil-Switch So. on Gr.-Ch.	160. Great 16'	163. Swell 16'	166. Choir 16'	168. Solo 4'
				169. Solo 16'
				170. Pedal Bass 8'

Echo. (1)

171. Echo 4'

Antiphonal. (4)

172. Expression Ventil-Switch An.-Ec, on Sw.	173. Unison Ventil
	174. Antiphonal 4'
	175. Antiphonal 16'

Pedal. (12)

176. Ventil (Chancel Ped. off)	178. Great 8'	180. Swell 8'	182. Choir 8'	183. Solo 8'
177. Gallery (Antiphonal) Switch (Gal. Ped.on)	179. Great 4'	181. Swell 4'		184. Solo 4'
				185. Antiph. 8'
				186. Pedal 4'
				187. Ped. 16' res.

Gallery Pedal. (4)

188. Antiphonal 8'	189. Echo 8'	190. Gallery Pedal 4'
		191. Gallery Pedal 16' res.

SECTION K.

FINGER PISTONS. (61)

192. Tutti Reversible.  
193-197. General Combinations 1, 2, 3, 4, 5.  
198. General Cancel.  
199-205. Great and Pedal Combinations 1, 2, 3, 4, 5, 6, 7.  
206. Great Cancel.  
207-213. Swell and Pedal Combinations 1, 2, 3, 4, 5, 6, 7.  
214. Swell Cancel.  
215-221. Choir and Pedal Combinations 1, 2, 3, 4, 5, 6, 7.  
222. Choir Cancel.  
223-229. Solo and Pedal Combinations 1, 2, 3, 4, 5, 6, 7.  
230. Solo Cancel.  
231-234. Antiphonal and Gallery Pedal Combinations 1, 2, 3, 4.  
235. Antiphonal Cancel  
236-238. Echo and Gallery Pedal Combinations 1, 2, 3.  
239. Echo Cancel.  
240-246. Pedal Combinations 1, 2, 3, 4, 5, 6, 7.  
247. Pedal Cancel.  
248-251. Gallery Pedal Combinations 1, 2, 3, 4.  
252. Gallery Pedal Cancel.

SECTION L.

TOE PISTONS. (33)

253. Tutti Reversible. Duplicating #192.  
(If controlled by Register Crescendo this item to be omitted.)  
254-257. General Combinations 1, 2, 3, 4. Duplicating #193-196.  
258-261. Great Combinations 1, 2, 3, 4. Duplicating #199-202.  
262-265. Swell Combinations 1, 2, 3, 4. Duplicating #207-210.  
266-269. Choir Combinations 1, 2, 3, 4. Duplicating #215-218.  
270-273. Solo Combinations 1, 2, 3, 4. Duplicating #223-226.  
274. Solo coupler Pedal Bass 8' Reversible.  
275-281. Pedal Combinations 1, 2, 3, 4, 5, 6, 7. Duplicating #240-246.  
282. Pedal coupler Great 8' Reversible.  
283. Pedal Coupler Swell 8' Reversible  
284. Pedal coupler Choir 8' Reversible.  
285. Pedal coupler Solo 8' Reversible.

SECTION M.

ACCESSORIES. (20)

286. Register Crescendo Foot Lever.  
287. Multiple Expression Foot Lever. Controlling all shutters of all chambers  
(Great-Choir, Swell, Solo and Antiphonal-Echo.)  
288. Great-Choir Expression Foot Lever.  
289. Swell Expression Foot Lever.  
290. Solo Expression Foot Lever.  
291. Antiphonal-Echo Expression Foot Lever.



ACCESSORIES. (20) (Continued)

292. Great Tremolo. (Affecting Great and Choir.) (Draw knob.)  
 293. Swell Tremolo. (Draw knob.)  
 294. Choir Tremolo. (Duplicating #292.) (Draw knob.)  
 295. Solo Tremolo. (Draw knob.)  
 296. Antiphonal Tremolo. (Affecting Antiphonal and Echo.) (Draw knob.)  
 297. Echo Tremolo. (Duplicating #296.) (Draw knob.)  
 298. Choir Harp Sostenuto. Removing dampers. (Draw knob.)  
 299. Solo Chime Sostenuto. Removing dampers. (Draw knob.)  
 300. Solo Chime Piano. Felt curtain. (Draw knob.)  
 301. Register Crescendo Indicator. Graduated. Sliding. Red light.  
 302. Tutti Indicator. Red light.  
 303. Action Current Test Light. Red light.  
 304. Pedal Lights. One on bass side and one on treble side. Wired to motor.  
 305. Organ Bench. Adjustable and provided with back and foot rest.

SECTION N.

SUMMARY.

Tonal Elements.	Stops.	Pipes.	Percus- sives.	Couplers, Ventils, Switches.	Finger pistons.	Toe pistons.	Accesso- ries.
General,	.....	.....	.....	.....	7.....	5.....	6...
Great Organ,	8.....	24.....	644.....	13.....	8.....	4.....	2...
Swell Organ,	12.....	24.....	924.....	9.....	8.....	4.....	2...
Choir Organ,	7.....	20.....	462.....	49.....	11.....	8.....	4.....
Solo Organ,	8.....	13.....	803.....	20.....	16.....	8.....	5.....
Echo Organ,	3.....	6.....	243.....	1.....	4.....	.....	2...
Antiphonal Organ,	4.....	14.....	304.....	4.....	5.....	.....	1...
Pedal Organ,	.....	17.....	.....	12.....	8.....	11.....	1...
Gallery Pe- dal Organ,	.....	3.....	.....	4.....	5.....	.....	.....
Totals,	42.....	121.....	3380.....	69.....	70.....	31.....	33.....

SECTION O.

GENERAL MATTERS.

1. General Layout. The chancel organ, (comprising the Great, Swell, Choir, Solo and Pedal Organs,) to be located on the west side of the chancel. The Great-Choir chamber and the Solo chamber to be located on floor level, adjoining each other; the Swell chamber to be superimposed over these.

The gallery organ, (comprising the Antiphonal Organ, Echo Organ and Gallery Pedal Organ,) to be located in the north end recess in a chamber specially to be constructed for this purpose by the builder.

The builder to submit, for approval, the complete layout.

Console to be stationary and located in west chancel.

GENERAL MATTER. (continued)

Blowing plant to be situated in the basement.

2. Exterior. Pipe fronts to be provided for chancel and gallery divisions. Also white enamel case work. Displayed pipes to be finished as later directed. Cloth to be applied behind them.

Drawings showing designs of both organ fronts to be submitted by builder for approval.

3. Expression Chambers to be constructed by builder, with vertical shutters except for the Swell where horizontal shutters are to be applied.

Expression shutters to provide opening to the fronts of the expression chambers to the fullest practicable width and height. Shutters to be not less than two inches (2") thick, bevelled, and operated by noiseless swell engines. The builder to do all that may be advisable to secure the greatest practicable tone reduction. The supervisor considers this matter as being of greatest importance, second to none other, and will criticise on that basis before acceptance.

Vox Humana separate enclosures to be located within Swell and Antiphonal-Echo chambers and to be provided with adjustable hinged fronts permitting any degree of opening to be set. For reasons of equalization of temperature when organ is not in use, said hinged fronts to be connected with reservoirs in such manner that the latter, in deflating, cause the former automatically to open.

4. Blowing Plant to consist of a Kinetic blower operated by a direct connected motor of approximately 1165 R. P. M. Operation warranted to be noiseless in the church. Remote control Starter.

Capacity to be sufficient to sustain, without complete collapse of reservoirs, the following for one minute, all stops and all couplers being drawn: Pedal, CCC and GGG; Great, C, E, G, cl, el, gl, c2, e2.

5. Action Current Supply to be provided by a generator of ample capacity, direct connected to the aforementioned motor.

6. In general. All materials used in the construction of every part of the organ to be of the best quality of their respective kinds and used in only their perfectly suitable conditions.

CONSOLE.

1. Exterior to be constructed of a native hard wood. Kind and finish to be selected by purchaser.

Access to be provided to the greatest practicable extent. Panels and top to be removable without the use of tools. Back and side panels to be held in place with one kind lock for which three keys, all exactly alike, are to be supplied by the builder. The top to be held in place by moulding applied to under edge and fitting around console frame.

2. Interior exposed parts of key desk to be finished as later directed.

3. Manuals. Horizontal distance between manuals to be four inches (4"); vertical distance, two and one-half inches (2-1/2").

Sharps to have level tops, (not sloping downward at back;) width of top, six to seven sixteenths of an inch; height, six to seven sixteenths of an inch.

-11-  
CONSOLES (continued)

To allow sufficient playing room, the distance from the nose of a sharp to a piston must be not less than three and three sixteenths inches ( $3\text{-}3/16"$ ). (This dimension is standard with some builders.)

4. Manual key frames to be hinged and to be provided with supports for holding them in raised position during action regulating operations.

5. Pedal board. American Guild of Organists type to be furnished.

6. Stop jambs to be terraced and provided with draw knobs of one and one eighth inch ( $1\text{-}1/8"$ ) face diameter for all stops, couplers, tremolos and some accessories. Location of these registers to be determined by supervisor.

7. Finger pistons to be placed over and under manuals as later directed.

8. Toe pistons. Reversibles to have nickel finish; others black finish. To be placed as later directed.

9. Foot levers to be provided with a foot guide rod between the second and third levers and another between the fourth and fifth levers.

10. Various mechanical accessories to be placed as later directed.

11. Name plates to be furnished by builder as required by supervisor, engraved and applied as later directed.

12. Engraving to be plain Gothic, in black, red and white as later directed.

13. Pedal lights. A small pedal light (such as Mazda 15 candle power, 110 volts, round bulb,  $1\text{-}7/16"$  diameter) to be affixed to under side of bed of key desk over treble end of pedal board; and, similarly, one such over bass end of pedal board.

14. Music rack to be of same material and finish as console exterior. as an aid to seeing choir when seated at rehearsals, rack to be adjustable in angle of position and also capable of being lowered or raised. Rack to have solid back for convenience in writing, and further to have a plain, ungrooved ledge, glued from below (not hinged) on body of rack at an angle slightly exceeding ninety (90) degrees, thus facilitating turning of music and avoiding scuffing of sheets at their bottoms. Dimensions: Length, twenty-eight inches ( $28"$ ); height, eleven inches (11) clear; depth one and one-half inches ( $1\text{-}1/2"$ ) clear.

15. Organ bench of same material and finish as console exterior. To be adjustable, and provided with reclining back and foot rest.

16. In general. The console and all its necessary fittings, and all details specified or implied, to be executed in the most substantial and artistic manner to the entire satisfaction of the supervisor.

SECTION Q.

ACTION.

1. Draw Knobs. Motion of draw knobs to be seven eighths of an inch ( $7/8"$ ). Response and release to be in center of motion.

2. Key Action. Motion of manual keys to be three eighths of an inch ( $3/8"$ ), at intersection with sharp keys. Response and release in center of motion to facilitate positive repetition. Resistance not to exceed four ounces.

Pedal keys to respond and to release in center of motion. To be provided with means for adjusting the key resistance to suit the comfort of the player.

3. Coupler Action. Chancel organ and gallery organ each have their own couplers, hence must not affect one another. For example: If Choir coupler "Choir 16'" be drawn it must not affect the Echo; if echo coupler "Echo 4'" be drawn it must not affect the Choir; all this irrespective of whether Choir or Echo be played alone or together. The couplers must perform their functions only as labeled, not beyond. Similarly, therefor, Solo and Antiphonal couplers must not perform each others functions and Pedal and Gallery Pedal couplers must also be independent of one another.

Chimes and Harp to be affected by couplers in the same manner as are other stops. Thus, for example, if it be desired to play the Chimes (compass A-e2) from the pedal, the pedal couplers "Great 4'" or "Solo 4'" must perform that function for the twenty Chimes.

The Solo coupler "PEDAL BASS 8'" to be so constructed that, when drawn, only the lowest notes played on the Solo manual will have chancel Pedal response.

The 2 Pedal couplers "PEDAL 16' RESULTANT" to be wired as follows: Notes 1-12 have response a fifth higher, notes 13-32 have response an octave lower. Consequently the lowest octave constitutes a quint (super) coupler and the remainder a suboctave coupler. (for producing 32' effect on any 16' pedal stop.)

4. Ventil and Switch Action. The name "VENTIL" is employed to designate a "cut-out" (the opposite of a "Switch," which is a "cut-in"). When drawn, a ventil "cuts out" or silences. When withdrawn, it "cuts in" or restores to speech.

The name "SWITCH" is employed to designate a "cut-in" (the opposite of a Ventil which is a "cut-out"). When drawn it "cuts in" or causes speech. When withdrawn, it "cuts out" or silences.

Thus, for example, with Choir Ventil and Echo Switch draw knobs conveniently placed next to each other, the simultaneous drawing of these two will silence the Choir and give Echo response alone; withdrawing both will give Choir response alone; drawing the Echo Switch alone will give both Choir and Echo response.

A "VENTIL-SWITCH" is both a "cut-out" and a "cut-in." When drawn, it transfers the functions of a register from the normal register to some other one, leaving the normal register absolutely neutral. When withdrawn, the functioning is restored (transferred back) to the normal register.

The CHOIR VENTIL, (in conformity with the foregoing,) when drawn, must "cut out" all Choir response without visibly affecting the draw knobs. Even tho there be drawn all Choir stops, all Choir couplers (Choir to Choir 4' & 16', Swell to Choir, Solo to Choir, etc.), Register crescendo and Tutti, the Choir manual must nevertheless have no response whatsoever. If thereupon the Echo Switch be drawn the Echo alone must respond. In constructing the Choir Ventil, the stop action need not be interfered with. Altho the builder is privileged to use his own discretion in the construction of this ventil, he may find it expedient to construct an intercepting device (gang switch or other) controlling the Choir couplers (Ch. Unison Ventil, Gr. 8' Sw. 8' 4' 16' Ch. 4' 16' So. 8' Antiph. 8') so that altho any or all couplers may have been drawn by draw knobs, Register Crescendo or Tutti, they nevertheless will not respond when the Choir Ventil is drawn. (That the Choir Unison Ventil requires treatment the reverse of the couplers is, of course, selfevident.) Be it noted, however, that with Choir stops drawn, Choir Ventil drawn, and Choir 8' coupled to Great (for example) the Great manual must have Choir response, as ordinarily, because of its coupler, Choir 8' to Great; the Choir manual, however, has no response, because of Choir Ventil being drawn.

The SOLO VENTIL to operate similarly to the Choir Ventil. When drawn it must "cut out" all Solo response (including the Solo coupler "Pedal Bass 8'") in spite of stops, couplers, Register Crescendo or Tutti being drawn.



THE PEDAL VENTIL to operate similarly to the Choir Ventil. When drawn it must "cut out" all Chancel Pedal response in spite of stops, couplers, Register Crescendo or Tutti being drawn. This device is intended to serve in several ways. It must serve to silence the Chancel Pedal when it is desired to play Gallery Pedal alone. It must serve to keep silent the Pedal when stepped upon in approaching or leaving the console even the registration be fully drawn for the organist's next number. It must also serve in permitting the organist to stand upon the pedals while conducting the choir without compelling Pedal registration previously to be withdrawn. Be it additionally noted that if the organist, before conducting an unaccompanied number, should give the singers their pitch from the keyboard, and in so doing should touch one or more notes corresponding with the Pedal notes being stood upon, such Pedal notes must not respond.

The ECHO SWITCH, when drawn, must "cut in", ready for playing on the Choir manual, Echo stops and coupler as drawn by draw knobs, Register Crescendo or Tutti.

The ANTIPHONAL SWITCH, when drawn, must "cut in," ready for playing on the Solo manual, Antiphonal stops and couplers as drawn by draw knobs, Register Crescendo or Tutti.

The GALLERY PEDAL SWITCH, when drawn, must "cut in," ready for playing, Gallery Pedal Stops and couplers as drawn by draw knobs, Register Crescendo or Tutti.

The foregoing design makes it possible to registrate for the eight divisions (Gr., Sw., Ch., So., Ped., Antiph., Ec. & Gal. Ped.) in advance and utilize the five Chancel divisions while holding the three Gallery divisions in reserve. The drawing of the three Switches (Ec., Antiph. and Gal. Ped.) combines the entire Gallery Organ with the Chancel Organ. The further drawing of the three Ventil silences the Chancel Choir, Solo and Pedal, converts the Gallery Organ into a two manual and pedal organ, and leaves Chancel Great and Swell still available, as these manuals always are available in any and all registrational layouts on this instrument.

The EXPRESSION VENTIL-SWITCH "SOLO ON GREAT-CHOIR," when drawn, "cut out" the expression control entirely from the Solo expression lever (thus rendering this lever completely neutral) and "cuts in" or transfers the expression control to the Great-Choir expression lever.

The EXPRESSION VENTIL-SWITCH "ANTIPHONAL-ECHO ON SWELL," when drawn, "cuts out" the expression control entirely from the Antiphonal-Echo expression lever (thus rendering this lever completely neutral) and "cuts in" or transfers the expression control to the Swell expression lever.

The foregoing two Ventil-Switches make it possible to control the entire organ's expression with one foot while yet retaining expression contrasting possibilities. They must not in any wise interfere with the Multiple Expression Lever which always and under all conditions retains control of all expression shutters as hereinafter will be explained.

5. Stop Action. Each Vox Humana draw knob (Sw. and Antiph.) to provide for response as follows; Upon being drawn about one third of drawing distance the stop is to respond. Upon being drawn about two thirds the Tremolo is to respond. (For tuning and other purposes.)

Celestes are not to draw their complementaries.

6. Chest Action. The Solo V rank Grand Mixture to be provided with a separate slide for each rank to facilitate tuning.



7. Combination Action. The entire system of adjustable combinations to be set by one combination Adjuster in form of a self-returning finger piston placed where later directed.

With the exception of the two Expression Ventil-Switches (So. on Gr.-Ec. and An.-Ec. on Sw.), which are not to be included in any combination action, each and every adjustable combination is to affect each and every draw knob within its own division, no matter whether such draw knob control a speaking stop, a coupler or an accessory.

Each GENERAL COMBINATION to affect every draw knob in the console except the aforementioned two Expression Ventil-Switches, These combinations therefor control the entire Pedal divisions independently and do not merely duplicate the Pedal finger pistons as do the individual manual pistons hereinafter mentioned. The General combinations have no second touch.

Each GREAT COMBINATION, on first touch, to affect all Great stops, Great couplers and Great Tremolo; also, on second touch, to duplicate Pedal combinations as follows:

Great Combination #1 to draw Pedal Combination #2.  
 " " #2 " " " " #3.  
 " " #3 " " " " #4.  
 " " #4 " " " " #5.  
 " Combinations #5,6,7 to draw Pedal Combination #1.

Each SWELL COMBINATION, on first touch, to affect all Swell stops, Swell couplers and Swell Tremolo; also, on second touch, to duplicate Pedal Combinations as follows:

Swell Combination #1 to draw Pedal Combination #1.  
 " " #2 " " " " #2.  
 " " #3 " " " " #3.  
 " " #4 " " " " #4.  
 " Combinations #5,6,7 to draw Pedal Combination #1.

Each CHOIR COMBINATION, on first touch, to affect all Choir stops, Choir couplers, Choir Tremolo, Choir Ventil, Echo Switch and Harp Sostenuto; also, on second touch, to duplicate Pedal combinations as follows:

Choir Combination #1 to draw Pedal Combination #1.  
 " " #2 " " " " #2.  
 " " #3 " " " " #3.  
 " " #4 " " " " #4.  
 " Combinations #5,6,7, to draw Pedal Combination #1.

Each SOLO COMBINATION, on first touch, to affect all Solo stops, Solo couplers, Solo Tremolo, Solo Ventil, Antiphonal Switch, Chime Sostenuto and Chime Piano; also, on second touch, to duplicate Pedal combinations as follows:

Solo Combination #1 to draw Pedal Combination #2.  
 " " #2 " " " " #3.  
 " " #3 " " " " #4.  
 " " #4 " " " " #5.  
 " Combinations #5,6,7 to draw Pedal Combination #1.

Each ANTIPHONAL COMBINATION, on first touch, to affect all Antiphonal Stops, Antiphonal couplers and Antiphonal Tremolo; also, on second touch, to duplicate Gallery Pedal combinations as follows:

Antiphonal Combination #1 to draw Gallery Pedal Combination #1.  
 " " #2 " " " " #2.  
 " " #3 " " " " #3.  
 " " #4 " " " " #4.

ACTION (continued)

Each ECHO COMBINATION, on first touch, to affect all Echo stops, Echo coupler and Echo Tremolo; also, on second touch, to duplicate Gallery Pedal combinations as follows:

Echo	Combination	#1	to	draw	Gallery	Pedal	Combination	#1.
"	"	#2	"	"	"	"	"	#1.
"	"	#3	"	"	"	"	"	#2.

Each PEDAL COMBINATION of Chancel division to affect all Chancel Pedal stops, Chancel Pedal couplers, Pedal Ventil and Gallery Pedal Switch. No second touch.

Each GALLERY PEDAL COMBINATION to affect all Gallery Pedal stops and Gallery Pedal couplers. No second touch.

The Pedal combinations and Gallery Pedal combinations must be adjustable only when, in addition to the Adjuster piston, a Pedal piston is used. If, while setting a manual piston, the second touch be engaged, said second touch must not under any circumstances affect the Pedal or Gallery Pedal combination connected with said manual piston.

CANCELS to visibly withdraw all draw knobs controlled by the finger pistons with which the respective cancels are grouped. Antiphonal cancel not to affect the Expression Ventil-Switch "Antiph.-Echo on Sw." Solo cancel not to affect the expression Ventil-Switch "Solo on Gr.-Ch."

The combination action must move the respective draw knobs their full dis-  
distance.

draw knobs 3. Reversible Coupler Action. Reversibles must move their respective full distance on or off.

9. Register Crescendo Lever to operate in accordance with schedule prepared by supervisor; wiring to be done in the church.

Response to begin after the foot-lever has moved one-half inch, and to be completed at a point from which one-half inch further motion is possible.

10. Tutti to operate in accordance with schedule prepared by supervisor; wiring to be done in the church.

11. Expression Levers & Shutters. The expression shutters to be operated by noiseless swell engines of not less than sixteen stations each.

The MULTIPLE EXPRESSION LEVER to control all shutters of the entire organ without visibly operating their foot levers. While opening, this lever is to open all shutters not already opened; while closing it is to close all shutters except such as are held open by a fully or partly open position of other levers. For example: With Great-Choir Open, Swell half open, Solo closed and Antiphonal-Echo closed, the Multiple Lever upon being opened must open all shutters. Upon closing it must leave Great-Choir open, Swell half open, Solo closed and Antiphonal-Echo closed. As hereinbefore stated, the Multiple Expression Lever must not in any wise be interfered with in its action by the two Expression Ventil-Switches "Solo on Great-Choir" and "Antiphonal-Echo on Swell".

Response of expression levers to begin almost immediately with the initial motion of the foot-lever, and to continue as gradually as possible until full response of shutters has been accomplished, this being at a point from which one-half inch further motion of the foot-lever is possible.

12. Sostenutos. The Choir Harp Sostenuto and the Solo Chime Sostenuto each to consist of a device for holding the dampers removed from the sounding bodies.

ACTION (continued)

13. Chime Piano to have a felt curtain together with a device for dropping and holding same between the tubes and the mallets.

14. Register Crescendo Indicator to be of sliding type, with graduation marks. To be provided with miniature red light.

15. Tutti Indicator to consist of miniature red light.

16. Action Current Test Light to consist of miniature red light and to be provided with electric push button. This device to prove functioning of generator.

17. Pedal Lights. Wired to motor. Burning while motor is running and extinguishing when motor stops.

SECTION R.

PIPEWORK, Etc.

1. Prefatory. Thruout these specifications, stops of the same pitch are listed in the order of their strength beginning with the softest, and to obtain the intentions of the designing, these gradations are scrupulously to be carried out. Gradation comparisons to be made at factory in order to avoid excessive regulating at the church or replacements.

Particular attention to be paid to avoiding overassertive trebles.

18 GREAT ORGAN.  
(See page 2 for order of gradations, etc.)

2. Gemshorn. (Gr. 8' Ch. 8') of considerable tapered structure and voiced to yield the tone quality sometimes named "Erzähler."

3. Gemshorn Celeste. (Gr. 8' T. C.) Tuned sharp.

4. Doppel flöte. (Gr. 8' 4' 2-2/3' 2' Ch. 8' Ped. 16' 32' res. 10-2/3' 4') Single-mouthed stopped pipes of large scale for the lowest 24 notes and double-mouthed stopped pipes from 4' C upward. Bass must constitute quite a loud-toned so-called "Bourdon" or "Sub Bass" free from barking.

5. Diapason. (Gr. 8' 4' 16' Ch. 8' Ped. 16' 8' 32' res.) Scale 44. Lowest 29 pipes of wood; no zinc. Slide tuners. Voiced bright; in power to yield a proper 4' Octave effect in relation of the Gr. 8' Major Diapason. Bright tone color to be carried down to 16' C.

6. Viola da Gamba. (Gr. 8' 4') Tone round and full rather than too keen. In power between Doppel flöte and Diapason.

7. Major Diapason. (Gr. 8') Scale 38. Lowest 17 pipes of wood; no zinc. Slide tuners. Bold voicing, free from stringiness.

8. English Horn. (Gr. 8' Ch. 8') To be softer than Clarinet and louder than Oboe. The veiled, melancholy tone-color to be quite pronounced. To further this quality, the resonators to be surmounted by full capped truncated cones of liberal dimensions, slotted. The resonator bodies to be of slim scaled inverted conical shape.

9. Harmonic Trumpet. (Gr. 8' 4' 16' T. C. Ped. 8') Bass voiced smooth.

SWELL ORGAN  
(See page 3 for order of gradations, etc.)

10. Quintaeoline. (Sw. 8' 1') A very small scaled Quintadena, in power between an Aeoline and an Echo Salicional, voiced somewhat stringy. To serve as softest Swell stop and as timbre creator with Vox Humana to which it must be subordinate in power even with Vox Humana separate enclosure almost closed.

11. Quintaeoline Celeste. (Sw. 8' T. C.) Tuned flat.

12. Salicional. (Sw. 8' 4') to be of ordinary Vox Humana strength with which latter it must blend well.

13. Salicional Celeste. (Sw. 8' T. C., 4') Tuned sharp.

14. Gedeckt. (Sw. 8' 4' 16' 2-2/3' 2' 1-3/5' 1-1/3' Ped. 16' 8') Altho the Bass will constitute the organ's softest 16' Pedal stop, the scale nevertheless must be sufficiently large to make possible, without "barking," the obtaining of a tone that can still be heard when Swell expression shutters are fully closed. The treble to be tone regulated with greatest care, diminishing sufficiently in ascending because of the numerous mutation derivatives.

15. Rohr flote. (Sw. 8') Constructed with sliding canister tops having their tubes turned inward. Tone considerably louder than the Gedeckt.

16. Diapason. (Sw. 8' 4') Scale 46. Slide tuners. This organ's "Full Swell" is designed to be of a rich and glittering but not overpowerful character, produced greatly by shimmering strings and abundant mutations. Hence this small Diapason scale. Tone power to be reasonably subdued, thus avoiding neutralizing the aforesaid brilliancy while nevertheless adding its quota of unison body, Tone free from windiness, especially in the tenor octave.

17. Viole d'Orchestre. (Sw. 8' 16' T. C.) The loudest Swell flue stop, much stronger than the Diapason. Tone very keen and assertive.

18. Viole Celeste. (Sw. 8') Tuned sharp. To be a keen-toned complementary to the Viole d'Orchestre, producing a shimmering, assertive celeste.

19. Vox Humana. (Sw. 8') Full capped pipes, with revolving regulating cap perforated at the side. Reeds to be carried up to g3.

20. Oboe. (Sw. 8' 4' 16' Ped. 16') Pipes full capped with slotted bells. Tone to be of bright, nasal color. Power a trifle less than English Horn.

21. Corno pean. (Sw. 8') Tone not too assertive. Bass to be voiced smooth and free from blatancy and rattle.

CHOIR ORGAN  
(See page 4 for order of gradations, etc.)

22. Dulciana. (Gr. 8' 5-1/3' 2/3' Ch. 8' 1-3/5' 1-1/3' 1') Spotted metal. Slide tuners. To be the softest tone stop in the Chancel organ.

23. Dulciana Celeste. (Ch. 8' T. C.) Spotted metal. Slide tuners. Tuned flat.

24. Melodia. (Gr. 8' 4' 16' 1-3/5' 1-1/3' 1' Ch. 8' 4' 16' 2-2/3' 2' Ped. 16' 8') Stopped pipes of fairly liberal scale for the lowest 24 notes, to form a so-called "Bourdon" of fair power free from "barking." General strength of treble not to exceed a Concert Flute.



25. Melodia Celeste. (Ch. 8' T. C.) Tuned sharp.

26. Quintadena. (Ch. 8' 4') Full toned. In power between Gemshorn and Doppel flote.

27. Clarinet. (Ch. 8' 16' T. C.) Of full, rich tone, stronger than English Horn and Oboe.

28. Harp. (Ch. 4' 2') To have bars of metal; resonators of wood; and to be provided with prompt piano hammer action and felt hammers.

SOLO ORGAN.  
(See page 4 for order of gradations, etc.)

29. Major Flute. (So. 8' 1/4' Ped. 16') Very large scale. Ordinarily (though erroneously) this stop is named Pedal Open Diapason. This stop to be the loudest-toned flute stop in the organ and the loudest Pedal flue stop. The treble to equal, if possible, the Stentorphon in power.

30. Stentorphon. (So. 8') Scale 36. 8' Octave of very heavy zinc; pipe metal from tenor c. Slide tuners to be carried down into the bass as far as practicable. This stop to constitute the loudest flue stop in the organ. Every precaution to be taken to obtain massive strength and yet avoid windiness.

31. Major Viol. (So. 8' 4' 16' Ped. 16' 8') The most powerful string toned stop in the organ.

32. Major Viol Celeste. (So. 8' T. C.) Tuned sharp.

33. Grand Mixture, V ranks. (So. & Ped.) to be of the following composition:

cc-b1,.....8--12--15--19--22  
c2-b2,.....5-- 8--12--15--19  
c3-c4,.....1-- 5-- 8--12--15

Inasmuch as this mixture stop is designed for Pedal as well as Solo, its lowest (octave) sounding rank must be subordinate to, and therefor smaller than, the Pedal 8' Diapason of 44 scale. The 12th to be smaller in scale than the octave. the 15th smaller than the 12th. The 19th smaller than the 15th. The 22nd smaller than the 19th. In voicing, the tone power of each rank must gradually decrease as it rises in pitch, and in keeping with the scaling, each higher rank must be subordinate in power to the rank next beneath it. (The fallacy of voicing all quint-sounding ranks softer must not obtain except where the break occur and the 5th is below the octave.)

34. French Horn. (So. 8') The pipes of this stop to be of the make and voicing of the A. Gottfried Co.

35. Tuba Mirabilis. (So. 8' 4' 16' Ped. 16') The lowest 24 notes of wood. Metal of harmonic length from 4'c upward. This stop to be of commanding power, dominating the whole instrument.

36. Chimes. (Gr. 8' So. 8') Of Deagan make, class A; tubes graduated not only in length, but also in diameter and thickness of walls.

ECHO ORGAN.  
(See page 6 for order of gradations, etc.)

37. Muted Viol. (Ec. 8' Antiph. 8' 1-3/5' 1-1/3' 1') To be voiced as the softest Echo stop.



ECHO ORGAN (continued)

38. Muted Viol Celeste. (Ec. 8' T. C. Antiph. 8' T. C.) Tuned sharp.

39. Lieblieh Gedeckt. (Ec. 8' r' 16' 2-2/3' Antiph. 8' 4' 16' 2-2/3' 2' Gal. Ped. 16' 8') Tone color to be darker than Swell Gedeckt.

ANTIPHONAL ORGAN.

(See page 18 for order of gradations, etc.)

40. Tibia Clausa. (Antiph. 8' Gal. Ped. 16') Very large scale. Thick upper lips. This stop must serve as the Major Flute or so-called "pedal 16' Open Diapason" of the Antiphonal Organ and must support the whole Gallery division in congregational singing and also in antiphonal effects in alternation with the Chancel Organ.

41. Diapason. (Antiph. 8' 4') Scale 40. lowest 17 notes of wood; no zinc. Slide tuners. Full toned voicing.

42. Vox Humana. (Antiph. 8') Full capped pipes, with revolving regulating cap perforated at the side. Reeds to be carried up to g3.

43. French Trumpet. (Antiph. 8' 16' T. C.) Voicing of commanding brilliancy.

44. Tuning to be 440 A at 68 degrees Fahrenheit.

SECTION S.

DRAWINGS, ETC.

1. Drawings. The builder shall submit, for approval, drawings of the designs of the organ fronts; drawings of the general layout; and whatever drawings the supervisor may require.

The supervisor shall submit drawings showing the disposition of the registers and accessories in the console; and schedules for the wiring of the Register Crescendo and the Tutti.

2. In general. The builder shall adhere strictly, in letter and in spirit, to all as hereinbefore specified or implied, And shall not deviate from such provisions without the approval of the supervisor. The whole organ shall be finished to the entire satisfaction of the supervisor whose decision shall be binding on all parties concerned.