

Organ Specification

4 Manuals with Pedals

DESIGNED BY

T. J. PALMER

For ST PAUL'S PRESBYTERIAN CHURCH

SIMCOE ONTARIO

Scheme No. 2

OCT: 12TH 1925

T. J. PALMER, A.R.C.O.

Expert and Specialist in

ARCHITECTURAL AND TONAL ORGAN DESIGN

OTTAWA, (Canada)

Specification No. 65

This copy to be returned to T. J. Palmer

REGARDING THE ORGAN BUILDER'S TENDER

This specification is to be tendered for by the Organ Builder as follows:-

1. In its complete form.

\$ 18,860.00

18 860
16 530

3 310
5

3 810

Omitting the Tuba Division, but the stops, couplers, piston and accessories for the same to be prepared in the console.

\$ 17,770.00

3. Omitting Stops Nos:- 1-3-7-10-22-30-46-47-48. Also all Stops, Couplers, Pistons, etc, and all accessories in connection with the Tuba Division. This reduces the instrument to a three manual organ.

\$ 16,680.00

The Organ Builder to sign this sheet in the space provided, and return with this complete specification, sealed and registered to:-

Mr. L.C.Gibson

Treasurer, St.Paul's Presbyterian Church, Simcoe. Ontario

No case, no display pipes nor screen included in this contract.

CASAVANT FRÈRES, LIMITEE,

pr. *Chas Chaput*
Organ Builder

Designed by
T. J. PALMER
OTTAWA

For St. Paul's Presbyterian Church
Simcoe. Ontario.

Four Manuals with Pedals

Compass of Manuals c.c. to c. 61 Keys

Compass of Pedals c.c.c. to G. 32 Keys

October 12th. 1925

PEDAL ORGAN +++-----		FEET	NOTES	MATERIAL
1.	Contra-Bourdon (20 from No.4.)	32	32	Wood
2.	Open Diapason No.1.	16	32	Metal
3.	Open Diapason No.2.	16	32	Wood
4.	Bourdon	16	32	Wood
5.	Violone. (From No.12.)	16	32	Metal
6.	Gedackt. (From No.33.)	16	32	Wood
7.	Octave. (20 from No.3.)	8	32	Wood
8.	Flute. (20 from No.4.)	8	32	Wood
9.	Principal. (20 from No.2.)	8	32	Wood
10.	Violoncello.	8	32	Metal
11.	Trombone.	16.	32	Metal
Chimes (From No.21.)				

Wind Pressure. Flue. 4 inches
Nos 10 & 11. 6 inches

FIRST MANUAL (ORCHESTRAL) ENCLOSED.

12.	Contra Viola	16	73	Metal
13.	Violin Diapason	8	73	Metal
14.	Clarabel Flute.	8	73	Wood
15.	Aeoline	8	73	Metal
16.	Viole d'Orchestre	8	73	Metal
17.	Viole Octaviant	4	73	Metal
18.	Concert Flute.	4	73	Metal
19.	Harmonic Piccolo	2	61	Metal

20. Clarinet.	8	73	Metal
21. Chimes.		25	Metal
Tremulant.			

Wind Pressure. Nos 12,16,17,18. on 8 inches
Remainder on 4 inches

SECOND MANUAL (GREAT ORGAN)

22. Double Open Diapason	16	61	Metal
23. Open Diapason No.1.	8	61	Metal
24. Open Diapason No.2.	8	61	Metal
25. Stopped Diapason	8	61	Wood
26. Dulciana	8	61	Metal
27. Rohr Flote (P)	8	61	Metal
28. Harmonic Flute	4	61	Metal
29. Principal	4	61	Metal
30. Octave Quint	2 2/3	61	Metal
31. Twelfth? <i>Fifteenth</i>	2	61	Metal
32. Trumpet	8	61	Metal
Chimes (From No.21.)		25	Metal

Wind Pressure 4 inches, No.32 on 10 inch.

THIRD MANUAL (SWELL ORGAN) ENCLOSED.

33. Bourdon	16	73	Wood
34. Horn Diapason	8	73	Metal
35. Lieblich Gedackt.	8	73	Wood
36. Dulce	8	73	Metal
37. Viole di Gamba	8	73	Metal
38. Vox Celeste (Throughout)	8	73	Metal
39. Dulce Flute	4	73	Metal
40. Geigen Principal	4	73	Metal
41. Flautino	2	61	Metal
42. Cornet	4	Rks	Metal

43. Cornopean	73	8	73	Metal
44. Oboe		8	73	Metal
45. Vox Humana		8	73	Metal
Chimes (From No.21.)			25	Metal
Tremulant.				

Wind Pressure. 4 Inches
No.43. 7 Inches

FOURTH MANUAL (TUBA) ENCLOSED
IN SWELL DIVISION.

46. Contra Tuba	16	61	Metal
47. Tuba	8	61	Metal
48. Clarion	4	61	Metal
Chimes (From No.21.)		25	Metal

Wind Pressure 15 Inches.

COUPLERS

TO PEDAL

49. Orchestral	8
50. Orchestral	4
51. Great.	8
52. Swell.	8
53. Swell.	4
54. Tuba.	8
55. Pedal.	4

TO ORCHESTRAL

56. Swell	16
57. Swell	8
58. Swell	4
59. Tuba	8
60. Orchestral	16
61. Orchestral	4
62. Orchestral	8 Silent.

TO GREAT

63. Orchestral	16
64. Orchestral	8
65. Orchestral	4
66. Swell	16
67. Swell	8
68. Swell	4
69. Tuba	8

TO SWELL

70.	Tuba.	8	
71.	Swell.	16	
72.	Swell.	4	
73.	Swell.	8	Silent.

TO TUBA.

74.	Orchestral	8	
75.	Swell	8	

ADJUSTABLE COMBINATION PISTONS

1-2-3-4	to Pedal
1-2-3-4	to Orchestral
1-2-3-4-5	to Great
1-2-3-4-5	to Swell
1-2-3	to Tuba
1-2-3-4-5-6	Acting on all stops and Couplers

REVERSIBLE PISTONS

Great to Pedal
Orchestral to Great
Swell to Great
Tuba to Great

Swell to Pedal
Tuba to Swell

Orchestral to Pedal
Swell to Orchestral
Tuba to Orchestral

Pedal to Tuba

PISTONS

IN KEY FRAME ON RIGHT

Whole Organ Off
Great Off
Swell Off

IN KEY FRAME ON LEFT

Orchestral Off
Pedal Off
Tuba Off

FOOT PISTONS. ON & OFF

All Diapasons with unison Couplers
All Reeds, with unison Couplers
All String, with unison Couplers
Full Organ

EXPRESSION LEVERS

Balanced, and expression lever to Orchestral Box
Balanced, and expression lever to Swell Box
Balanced crescendo lever operating on Full Organ

INDICATORS.

All Diapasons.	(Drop)
All Reeds.	(Drop)
All String.	(Drop)
Full Organ	(Light)
Full Organ Crescendo.	(Disk)
Wind	
Voltmeter (For Action)	

REGARDING THE STOPS

- No.1. This stop is an added lower octave to No.4; the upper twenty pipes to be borrowed from No.4.
Great care must be taken to ensure promptness of speech, correct tonal pitch, and to prevent prominence of the harmonics. Consideration may be given to producing the notes below FFF acoustically, or by polyphone open pipes in order to save space and expense. This question to be taken up by the organ builder in consultation with T.J.Palmer.
- No.2. Large scale. To be extended 44 notes to provide for No.9.
- No.3. Tone to be full and round, with a slight leaning to string quality. To contain 44 pipes to provide for No.7.
- No.4. To be prompt in speech and have fullness of tone. To be of large scale and voiced to suit moderately soft combinations. Suggest the scale (CCC) to be 10"X 9", the mouth being cut up $\frac{3}{8}$ of the width. To be extended 44 notes for No.8
- No.5. To be borrowed from No.12.
- No.6. To be borrowed from No.33.
- No.7. 20 from No. 3.
- No.8. 20 from No.4.
- No.9. 20 from No.2.
- No.10. The string tone to be as rich and firm as possible. The 8 ft pipe to have the diameter of 3.13"
- No.11. To be voiced on 7 inch wind pressure. To be full and sonorous and free from extreme blare. The resonators to be of ample scale, and every means must be adopted to secure prompt speech throughout the stop.
- No.12. This stop is to supply the foundation string tone for Nos 16 and 17, thus giving the 16, 8 and 4 feet string section of the organ. The tone of this stop not to be as pungent as nos. 16 and 17 in order to blend with the other stops in the Orchestral Division. To be voiced on 8 inch wind pressure

- No.13. 2/9 mouth, 5½ inch scale at 8 ft, halving at the 18th note.
- No.14. To be patterned, as much as possible, after the Bishop model. Scale:- CC (Stopped) 4¾"X3¾"; Middle C. (Open) 1 7/8" X 1 5/8". The Bishop pattern has the mouth on the narrow side of the pipe and is not inverted.
- No.15. At the discretion of the Builder.
- No.16. The scaling to be small and voiced on 8 inch windpressure. The tone to be very pungent after the Hope-Jones model
- No.17. The same as No.16.
- No.18. At the discretion of the Builder
- No.19. At the discretion of the Builder
- No.20. At the discretion of the Builder.
- No.21. The steel bars to produce the effect of Cathedral Chimes. Deagan's 'Class C' would be acceptable.
- No.22. The tone to be of the true English Diapason quality, smooth, and as free from harmonics as possible. Zinc may be used for the bass octave, but the metal must be thick, with lips, languid and toes of spotted-metal. Scale- CC, 10.04" diameter, 31.52" cir:
- No.23. This stop to dominate effectively the voices of all the other unison stops of the Diapason family. To be free from perceptible upper partial tones. All the pipes of this stop to be of spotted metal and of much thickness. 2/7 mouth, 7 inch scale at 8 ft, halving at the 18th note.
- No.24. The tone to be full, pure, and silvery in quality, and may have a slight trace of harmonics, but free from string tonality. Must be subordinate to that of No.23. ¼ mouth, 6¼ inch scale at 8 ft, halving at the 18th note.
- No.25. At the discretion of the Builder.
- No.26. To have the characteristic quality of tone of the true English Dulciana, but must be voiced softly as in this Division it is primary for accompaniment use. The pipes throughout to be of spotted-metal.
- No.27. To be voiced softly, but with more intensity than No.26.
- No.28. At the discretion of the Builder.
- No.29. The tone of this stop to be similar to that of No.23, but with less intensity. 2/7 mouth, one pipe smaller than No.23.
- No.30. To be voiced very full and ~~firmly~~ to harmonize with 22.23.24.2
- No.31. Tone to be similar to that of Nos 29 and 30. 2/7 mouth, two pipe smaller than No.23. Stops Nos.22,23,24,29,30 and 31 complete the Diapason family, and the voicer to retain this relationship tonally. These stops in combination should produce a very rich and full Diapason tone, and give the pure foundation organ tone to the full organ as well as the Great Division.
- No.32. To be voiced on 10 inch wind pressure. To be full and smooth, but not thick in tone. To have harmonic trebles.

- No.33. The tone to be of medium power, inclining to the covered flute intonation. The lower two octaves to be kept down a little in tone. To be fairly large scale with thick lips cut up fairly high. Care to be taken that the harmonic twelfth be entirely kept down.
- No.34. To be slotted. $\frac{1}{4}$ mouth.
- No.35. Care to be taken to produce a mellow quality of tone.
- No.36. ~~XXXX~~ At the discretion of the Builder
- No.37. At the discretion of the Builder
- No.38. To be carried throughout
- No.39. At the discretion of the Builder
- No.40. At the discretion of the Builder
- No.41. At the discretion of the Builder
- No.42. Four ranks, 8-12-15-17. To be voiced quietly and in no way way to be obtrusive. The top ~~XXXX~~ sections of the various ranks to taper off in tonal intensity.
- No.43. To be voiced on 7 inch wind pressure; to be very smooth in tone and to be kept very horn-like in character. The intensity of tone to be kept down.
- No.44. At the discretion of the Builder.
- No.45. At the discretion of the Builder.
- No.46) These three stops constitute the Tuba Division. To be
 No.47) voiced on 15 inch wind pressure, and placed in the Swell
 No.48) Division. All these stops to be voiced full and smooth, and to top the organ. The character of tone to be after the model of the Harrison & Harrison Tubas at Ely and Durham Cathedrals (England), or St. Paul's (Anglican) Church, Toronto. Each stop to have harmonic trebles.

THE CONSOLE

- (a). The console to be detached, and placed in the location decided upon by the church officials. ~~At six or seven feet at most from the organ.~~ The exterior woodwork to be of oak the interior fittings, such as key-frames, stop-jambs and music rest, to be of polished mahogany.
- (b). The Organist's bench to be of the same material as the console casing.
- (c). The drawstop jambs to be placed in an angle of 45 degrees, and to be fitted with ivory-headed knobs with the inscription in English block letters.
- (d). The arrangements of stops, pistons, tablets, etc. and all matters dealing with the console, to be decided upon between the Builder and T.J. Palmer.
- (e). The Pedal Board to have the compass of CCC to G, 32 notes; to be concave and radiating, with the D under C position. The scale to be the same as adopted by the R.C.O. (England)
- (f). A separate pneumatic controlling the thumb pistons

X.
 approximately 20
 feet from organ
 H39

to be made for each manual and the Pedal, to ensure quick manipulation of the pistons.

- (g). The position of the switch board to be decided upon by the Builder in consultation with T.J.Palmer.
- (h). The console at St.Paul's (Anglican) Church, Toronto, to be taken as a model in the general lay-out of the stops and couplers, etc.

GENERAL REMARKS

23 ft
#2

1. The organ will be placed in the chamber immediately behind the pulpit and choir stalls. The whole space between the outside walls from the basement floor level up is available for the organ. This will give an approximate height of about 30 feet. Back to front at the ~~WIND~~ centre, 19 feet, but as the shape is of a form of oval design, this space is reduced several feet at the extreme sides. Accurate measurements will be given when required.
The opening of the arch into the church auditorium is approximately 12' 1 1/2". For the sake of appearance, it might be advised to extend the front pipes two or three feet beyond each side the arch in order to give the view effect of a much larger opening. In figuring on this contract, therefore, allow for a front case of 23 feet.
The front display pipes to have at least the space of one in between the nearest points of two adjacent pipes. The display pipes to be taken from the Pedal and Great Divisions, and to be finished in plain dull gold effect.
That section that will extend beyond the width of the arch will consist of dummy pipes.
2. The action to be electro-pneumatic throughout.
3. The wind chests to be pneumatic with an individual valve to each pipe.
4. All the wooden pipes and principal parts of the organ to be varnished with shellac or painted to prevent, as much as possible, the influence of atmospheric moisture.
5. All the material used in the organ to be of the first quality. None but perfectly seasoned timber to be used.
6. The organ to be carefully planned with every portion disposed to the best advantage with reference to the free emission of sound, and conveniently arranged for the easy access to all parts for tuning and regulating.
7. Spotted metal to be used as much as possible, including treble harmonics, covered, and cone-tuned pipes. The large Open Diapason on the Great to be of extra fine metal, of great weight and substance, with hardened feet.
8. The wind supply to be equal to any demand.
9. Zinc may be used for basses at the Builder's discretion: medium sized metal pipes, not tuned with the cone, to be supplied with tin tuning slides.
10. The electric supply for the action to be obtained from a dynamo or generator, operated by belt connection with the dynamo of the electric blower.

11. The pitch of the organ to be "French Diapason Normal" i.e. A-435 double vibrations, at a temperature of 60 degrees Fahr:
12. Plans of the lay-out of the Organ to be submitted by the Builder to T.J.Palmer, and to be passed by him (T.J.P.)
13. The Swell boxes to be constructed so as to get the best possible swell effects: to shape the boxes with slanting fronts. The shutters to be operated by electric action.
14. All high pressure reeds, and the Tuba Division, not to be operated by octave couplers.
15. Any alteration to this specification to be made at the mutual agreement between the Builder, the Purchasers, and T.J.Palmer.
16. T.J.Palmer to inspect the organ in the factory when ready; the Builder to accept his judgement upon the voicing and all other matters pertaining to the instrument.
17. Allwork pertaining to the Church, in view of preparing the place for the Organ and accessories, to be done by the purchasers, and at their expense.
18. Plans with exact measurements of the chamber where the Organ is to be erected, as well as exact information about the nature of the electric current for running the motor of the blower, to be supplied free of charge to the Builder.
19. The electric connections to and from the motor, the starter, the enclosure of the motor for protection against cold and dust, and for deadening the noise, where necessary, and all the work to the church needed for the installing of the Organ and its accessories, to be provided by and fitted at the expense of the purchasers. All of the above, excepting enclosing the motor, to be completed before the date appointed for beginning of the erection work.
20. Lighting and heating of the Church, electric current to run the motor during the regulating and tuning of the Organ, to also at the charge of the purchasers.
21. On the arrival of the Organ into the Church, and pending its final acceptance, the purchasers to have it fully insured, and failing to effect such insurance, shall become responsible for any loss or damage by fire.
22. That the structural alterations (if any) to the Church building to be made by the purchasers must be from plans supplied by the Organ Builder, the Purchasers not being responsible for measurements. The Builder must verify all measurements at the Church and be responsible for their accuracy.
23. The Builder to give a ten year guarantee against any defect resulting from bad workmanship or the use of unsuitable material, and agree to make good at his expense, and such defects whenever they may be discovered within the said period of ten years. Ordinary tuning and regulating is not covered by this guarantee.
24. The Organ, when finished in the Church, to be passed upon by T.J.Palmer. Should the Organ not be finally completed to the satisfaction of T.J.Palmer, under the terms of this contract, the same will have to be removed by the Builder within one month after receiving written notification

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given by, or on behalf of, the purchasers.

T. J. Palmer

Ottawa.

Ontario

October 12th, 1925.