M. P. MÖLLER Organ Factory

Pipe Organ No. 4949 Date Dec. 1, 1926

For St. Michael's R. C. Church, Wausau, Wis.,

Action Elec. Console Detached 16' cable

Casing No. Quar. Sawed Oak Finish

Decorations Gilt dull finish Motor Elec.

Width of Key-bed Stop Controls Stop Keys

No. Manuals Three Wind Pressure see Spec.

To be completed August 1, 1927 Blower pipe furnished by Church

SPECIFICATIONS

Ap440

STOPS; Controlled by stop keys white & couplers black

Organ chambers enclosed by church

No Casing

5" except where shown 7"

All leads to 49 only

GREAT ORGAN - 73 Note Chest.

1	16'	Double Diapason-unit-1-24 wood-25-85 metal-44 scale.	85 Pipes
2	8'	First Open Diapason....metal 40 scale.....	61 "
3	8'	Second Diapason.....from #1.....	73 Notes
4	8'	Gross Floete.....7-1/8 x 8-3/8.....wood.....	61 Pipes
5	8'	Concert Flute.....open bass.5 x 5-3/4..wood.....	73 "
6	8'	Gemshorn.....metal.45 scale-harves at 17th...	73 "
7	8'	Viola da Gamba.....metal.56 scale.....	73 "
8	4'	Octave.....from #1.....	61 Notes
9	4'	Harmonic Flute.....metal.....	73 Pipes
10	2-2/3'	Twelfth.....metal.66 scale.....	61 "
11	2'	Super Octave.....#28.....	61 Notes
12	8'	Tuba.....(7" wind).....	73 Pipes
13	4'	Clarion.....#12.....	61 Notes
		Blank Stop	

SWELL ORGAN - 73 chest.

14	16'	Bourdon.....wood-unit-7" x 8½".....	97 Pipes
15	8'	Open Diapason.....metal-42 scale.....	73 Pipes
16	8'	Stopped Diapason.....#14.....	73 Notes
17	4'	Orchestral Flute.....#14.....	73 "
18	2-2/3'	Flute Twelfth.....#14.....	61 "
19	2'	Flautino.....#14.....	61 "
20	1-3/5'	Tierce.....#14.....	57 "
21	8'	Viole d'Orchestre....metal.64 scale.....	73 Pipes
22	8'	Salicional.....metal.60 scale.....	73 "
23	8'	Voix Celeste.....metal.62 scale..Tenor C.....	61 Pipes
24	4'	Violin.....(2) Rks...#22 and 23.....	61 Notes
25	16'	Contra Oboe.....T.C..#26.....	61 "
26	8'	Oboe.....	73 Pipes
27	8'	Vox Humana.....S.S.B.....	61 "
		Blank Stop	
		Blank Stop	

CHOIR ORGAN - 73 Chest

28	8'	English Open Diapason..46 scale metal.....	85 Pipes
29	8'	Concert Flute.....#5.....	73 Notes
30	8'	Gemshorn.....#6.....	73 "
31	8'	Dulciana.....58 scale.metal.....	73 Pipes
32	4'	Rohr Floete....metal canister tops with inverted chimney.....	73 Pipes
33	4'	Dulcet.....#31.....	61 Notes
34	2'	Flageolet.....#32.....	61 "

CHOIR ORGAN (Continued)

35	8'	Clarinet	73 Pipes
36	16'	Contra Clarinet.....T.C.#35	61 Notes
		Blank Stop	
	8'	Blank Stop Unda Maris — — TC — — — 56 Scale — 61 Pipes	

PEDAL ORGAN

37	32'	Acoustic Bass.	32 Notes
38	16'	Open Diapason.....#1	32 Notes
39	16'	Sub Bass.....9¾ x 11½	32 Pipes
40	16'	Contra Bass....#7..12 Pipes Ext.). Wood	32 Notes
41	16'	Liebli ch Gedeckt.....#14	32 "
42	8'	Major Flute.....#4	32 "
43	8'	Flauto Dolce.....#14	32 "
44	8'	Violoncello .....#7	32 "
45	8'	Tuba.....#12	32 "
	4'	Flute #14	32 "

COUPLERS

46	Swell to Great 2' Double Octave	60	Choir to Choir 16'
47	Swell to Great 4'	61	Choir to Swell 4'
48	Swell to Great 8'	62	Choir to Swell 8'
49	Swell to Great 16'	63	Choir to Swell 16'
50	Choir to Great 2' Double Octave	64	Swell to Swell 4'
51	Choir to Great 4'	65	Swell to Swell 16'
52	Choir to Great 8'	66	Swell to Pedal 4'
53	Choir to Great 16'	67	Swell to Pedal 8'
54	Great to Great 4'	68	Great to Pedal 4'
55	Great to Great 16'	69	Great to Pedal 8'
56	Swell to Choir 4'	70	Choir to Pedal 8'
57	Swell to Choir 8'	71	Swell Unison Off)
58	Swell to Choir 16'	72	Great Unison Off) Jambs right
59	Choir to Choir 4'	73	Choir Unison Off)
		74	All Couplers Cancel by piston & stud

MECHANICALS

75	Swell Tremulant
76	Choir Tremulant
	Crescendo Indicator
	Test Light or Lamp indicating power.

ADJUSTABLE COMBINATIONS

Great	1-2-3-4-5-6 and Cancel
Swell	1-2-3-4-5-6 and Cancel
Choir	1-2-3-4-5-6 and Cancel
Pedal	1-2-3-4-5-6 and Cancel
General	1-2-3-4-5-6 and Cancel, duplicate studs on toe board

Pedal to Manuals "On and Off" piston located on cheeks.-left.
"On and Off" Pistons coupling all manuals to Great.

PEDAL MOVEMENTS

1	Great to Pedal Reversible
2	Balanced Swell Expression Pedal
3	Balanced Choir & Great Expression Pedal
4	Swell to Pedal Reversible
5	Sforzando Pedal, by stud & Light indicator duplicated by manual piston.
6	Grand Crescendo Pedal (Beginning at the softest stop and drawing all stops including reeds and couplers in their order of power by a single movement of couplers are canceled in their order.
A.G.O.	Concave Radiating Pedals

Organ Bench with music shelf. Electric motor, blowe , generator
3/4/27 freight and drayage from factory to building and installation.
ACZ Checked by..... date

The whole organ built by M. P. Moller, Inc., of Hagerstown, Maryland, for St. Michael's Congregation at Wausau, Wisconsin, is to be under expression, and divided.

Characteristics

The characteristics of this Church Organ should be,
REPOSE,
IMPRESSIVENESS,
POWER, measured by volume and prevading character, not loudness,
GRANDEUR combined with
REFINEMENT of tone for appropriate accompaniment of choral and congregational singing, and the performance of voluntaries and other incidental music of a solumn and dignified character,
GRAVITY secured by an adequate and properly balanced pedal department,
DIGNITY by volume of foundation tone in basic division of the instrument,
SOFTNESS by skillfull voicing with copious wind stream at a moderate pressure,
DIGNITY AND SOFTNESS to be gotten by larger scaled Diapasons both in Pedal and Manual Departments.
TONE to be rich and refined, having sufficient volume, individuality and clearness of voice, being effective even when the Swells are closed, full and brilliant when the Swells are fully open.
EVERY STOP, namely, sets of pipes, is to be endowed with individual character.
There should be perfect balance of Great, Swell, Choir and Pedal Organs, also of the whole organ played.
The Voicer and the architect will combine their knowledge, laws of music, regulation of scales, materials, skill, art, science and experience to build this organ so that it will stand as a piece of art tonally and mechanically.
Voicing to receive special attention.
PLANS.
The organ builder will prepare complete plans and lay-out of the whole organ in detail, and submit the same for purchasers' approval, to make the contract finally binding.
SWELL CHAMBERS AND SHUTTERS.

There are to be two (2) Swell Chambers constructed by the purchaser to receive the organ, with four (4) openings to receive four (4) complete sets of Swell Shutters, on (1) set in each opening. Every set of shutters to be so constructed that each Shutter will open and close consecutively in each set. The builder will furnish plans for chambers, openings in them, Shutters, display pipes and whole organ-case. He will also furnish and install all Swell Shutters complete in good working condition, they are to be on pivots permitting adjustment. The openings for Swell Shutters should be the largest size possible for majestic expression of the organ. They should be at least (2") two inches or more thick, to secure pianissimo effect when closed, full and brilliant tone when open. They are to be absolutely noiseless while in operation, thickly felted or triple grooved, laminated of wood that does not warp and will keep them permanently in true form to close them perfectly when it is desired to do so.
CONSOLE.

Console to be detached, strictly of modern design, small, durable, reliable and accessible mechanism, complete in itself, containing all the coupler and combination mechanism.

Wood casing to be quarter sawed oak of first class piano finish, and color of same selected by purchaser.

All trimmings around the manual keys to be mahogonized and hand-polished in first class piano finish.

The manual key-boards to be arranged to hinge upward when desired so that all parts of same are easily accessible.

The manual keys to be double bevelled and of an overhanging pattern, set together in their proper relation according to the best approved system to give the greatest reach and facility to the player.

The Natural Keys to be covered with the best pure white A No. one Ivory, and the Sharps to be of the finest Ebony.

All Keys to be perfectly noiseless, their construction permitting regulation.

The touch-system of the Keys to be of the highest grade Grand Piano.

The Music-Rack to be large and roomy, placed as low and near as is possible for convenience to the organist.

All Parts of the console to be accessible.

The stop-keys are to be arranged in their proper order above the upper manual. They are to be newest improved pattern, wider at the base and narrower at the tip operating all speaking stops and couplers. The printing on them is to be clear-cut and large. White stop keys to be used for speaking stops, and black for the couplers. The print on the white in black, and on the black in white.

Combinations to be operated by large pistons visibly affecting the stop-keys.

ACTION.

Action to be Electro-Pneumatic throughout, of the most modern and highest type and efficiency, simple, durable, capable of prompt and rapid repetition, mechanism, free from complications not to be affected by cold, heat or dampness.

Contacts, wires, cables, magnets, valves and pneumatics of the best type, highest efficiency and durability, protected by the best modern methods used.

STOPS OR SETS OF PIPES.

Each stop in the organ should be carried throughout its compass in pipes of its own class and tonality unless otherwise agreed between the builder and purchaser.

The voicer will take special care to regulate the tone of every stop perfectly, and wherever fullness of tone in the treble octaves is required, the stops shall halve accordingly.

SYMPATHY.

There shall be no sympathy that is absorption of tone in the Diapasons or any other stops.

SCALES.

The scales should be generous wherever necessary and of an appropriate size throughout the whole organ, also scientifically graduated and regulated.

TREBLES.

The fullness of tone in trebles should not be over-looked in some of the stops that demand it by adopting the proper scale ratio.

SLIDES.

Pipes to have slides for tuning instead of rolls.

WOOD AND METAL PIPES.

All pipes of wood and metal to be of approved standard thicknesses, to withstand pressure and volume of tone, and secure entirely steady tone, constructed of the best woods and metals.

MATERIALS AND LABOR.

All materials to be of the best quality and the labor skillful of the highest type.

WIND PRESSURE.

The wind pressure to be (5") five inches throughout the whole organ except 8' Tuba on 6" or 7".

THE BLOWER PLANT WITH GENERATOR.

The Blower Plant with Generator to be erected in Tower Chamber indicated by the purchasing party. It should be noiseless, of slow speed and sufficient size to supply the organ with ample wind capacity under all requirements.

TREMULANTS IN SWELL AND CHOIR ORGANS.

The Tremulants to be absolutely noiseless when in operation. The construction allowing faster or slower tremolo adjustments at the will of the organist. Each should operate with even precision.

THE DIAPASON FAMILY IN GREAT ORGAN.

There should be cohesion in the Diapason chorus of Great Organ in the 16', 8',4',2-2/3' and 2' Stops (numbers 1, 2, 8, 10 and 11) and so constructed, that each rank will contribute something to the others. This necessitates, that each individual rank of the Diapason family will possess its own degree of harmonic delvelopment, in other words, its own Diapason individual character, using in construction scales and style of voicing markedly dissimilar, by which alone cohesion can be secured between the members, not speaking of other essential qualities in the foundation tone.

The Chorus of Diapason should not be too near each other in strength of tone and character or timbre.

The power of each rank must be adjusted with due regard to the laws of proportion and balance, that no rank will upset the balance of the structure.

The scale-ratio of each rank to be determined by the relative position that rank occupies in the Diapason series; the diminution during ascent increasing in rapidity with each higher octave rank.

The tone of the 8' First Diapason to be the purest of the series, the scale largest voiced to yield a tone of great volume and roundness - a tone forming as one might say, a cushion of pure sound upon which all other sounds will rest in perfect repose.

The 8' Second Diapason to be of smaller scale and different timbre.

The 2-2/3' Twelfth should be a certain Diapason rank voiced on fluty side or a thick walled open Flute.

The 4' octave is taken from the 8' Second Diapason.

The 2' Super Octave is from the 8' English Open Diapason.

The highest octaves of this 2' Super Octave and the separate rank 2-2/3' Twelfth to be given special care in voicing.

This Diapason tone structure to be so arranged, that it will be an aggregate timbre of a whole.

The material in all Diapasons of this organ should be of proper thicknessess ot withstand all vibrations giving and ideal Diapason timbre.

All Diapasons in Great, Swell and Choir Organs to have different character.

In one work, great care should be taken in construction of the Diapason series.

16' BOURDON IN THE SWELL ORGAN.

The tone should be fuller, purer, more distinct and audible in the lowest octave of the 16' manual Bourdon, than that constructed for SS Cyril and Methodius Church in Milwaukee, Wis., where a rush of wind only can be heard, the tone being annihilated, when the shutters are closed, and very indeterminate when open. I would suggest a more generous scale, than the normal ratio, in the lowest octave-there are other ways of remedying it.

To avoid shrillness in voicing of 2-2/3' Flute Twelfth, 2' Flautino, etc. derived from this 16' Bourdon the tone should decrease in strength as it rises in pitch in the highest octaves. 8' VOX HUMANA

In the 8' Vox Humana arrangement should be made to play it Piano and Forte with a separate tremulant for it.

8' TUBA.

The 8' Tuba to be voiced on 6" or 7" pressure, giving golden sheen above the balance of the voices, timbre creation, corroboration and brilliance, not towering over them to that extent almost drowning them. The tone majestic, impressive, of great volume, dominating although of pleasing quality.

8' GROSS FLOETE AND 8' CONCERT FLUTE.

The 8' Gross Floete and 8' Concert flute to be both open in the lowest Octave, not covered.

16' CONTRA BASS IN PEDAL ORGAN

A fine double bass string tone imitation even to the rasp of the bow is desired in the lowest octave; the more faithfully it can be reproduced the better. The pipes to be of wood well gluesized few times and better still if painted with hard, drying enamel or indestructible gloss paint. The block throat and cap should be made of hardwood, the flue being polished with shellac and blackleaded.

16' SUB BASS IN THE PEDAL.

The 16' Sub Bass, made for SS Cyril and Methodius Church, Milwaukee, Wis., is a fine specimen in the Pedal Organ. We would appreciate it highly if you would make a better one for us.

REED STOPS.

The reeds should give a gloden sheen to the already richly colored embroidery of sounds.

8' CLARINET.

This stop to be carried throughout its whole compass except possibly above top d substituting flue pipes.

The tone to be normal, round, woody, extremely pleasing and full of character. It is to imitate as closely as possible the tones of the orchestral clarinets. The voicer should do his utmost to impart to the bass and tenor as much of the Chalumeau quality as his skill can accomplish.

The voice to be rather brighter and clearer than that commonly obtained in clarinets usually made.

8' OBOE

The oboe pipe should be carried up as far as the top of the fifty-fourth note from CC.

This stop to be norman class 8' oboe, and not the orchestral oboe.

The tone to be unimitative, smooth, of medium strength, inclining to a plaintive quality, giving charm and impressive character.

8' SALICIONAL.

The tone of the 8' Salicional should have life-like quality, a combination of pure organ - tone and delicate string-tone, partaking of the true English Dulciana and a delicate singing string-tone of Viole d Amour.

Too pungent and cutting voice is to be avoided.

The tone also is to be considered in combination with the stops with which it is directly associated.

8' DULCIANA.

The 8' Dulciana is to be furnished with tuning slides for tuning and on no account are the pipes to be slotted.

The lowest octave CC should be either bearded or rollered in order to secure prompt speech.

The tone to be resposful pure organ-tone of a sweet "cantabile" singing slivery quality, and not running in to the Salicional string quality.

8' GEMSHORN.

The timbre of this stop being hard to describe should be norman, unimitative, reed-tone and a string-tone of a horn-like quality, singing, bright, rich, clear, penetrating, not cutting.

4' ROHR FLOETE.

The 4' Rohr Floete to have sliding tops or canisters.

WHOLE ORGAN.

The whole organ is to be built durable, accessable, for tuning, regulating, repairs, all adjustments, and convenient for the organist.

GENERAL.

There are very many other points not mentioned here, in regard to the construction of this organ, and other, if mentioned are not specified in detail. It is up to the builder's responsibility to give his best in knowledge as to the tone, materials and construction, to build real church organ.

REMARKS.

These remarks are written as supplementary specifications, not to teach you how to build an organ, but that you may know what kind of an organ we desire to have, having full confidence in you for being able to build it.