

A close-up photograph of the front of St Margaret's Church in Olton. The church is built of red brick with a steep gabled roof. The central feature is a large, ornate Gothic window with intricate tracery. Below it is a smaller arched window and a bright blue door with a pointed arch. To the right, another arched window is visible. A small plaque is mounted on the wall to the left of the door. A large tree is on the left, and a modern brick extension is on the right.

St Margaret's Church, Olton

A photograph of St Margaret's Church from a wider angle. The church has a red-tiled roof and multiple gables. The central tower is prominent. The church is surrounded by greenery, including trees and a low stone wall in the foreground. A tall, thin tree stands in front of the church. The sky is clear and blue.

The Organ

Paul Hale

Researched, designed and written by Paul Hale, with thanks to Eddie Guard
and Jonathan Wallace of Henry Groves & Son for their invaluable help.

Colour photographs © Paul Hale (1966 & 2021)

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The Organ of St Margaret's Church, Olton

Paul Hale

St Margaret's was consecrated in 1880 and a reed organ was installed a year later. This was an 'American Organ' by Estey (supplied by organ-builders Harrison & Harrison of Durham), and though well-received it is likely to have been a temporary measure until funds were raised for a pipe organ worthy of the church. This took twenty years and resulted in a fine installation – a new 3-manual tracker-action instrument, not by Harrison & Harrison (as they must have hoped) but by the busy and renowned Norwich firm, Norman & Beard Ltd, completed in 1900.

This organ was significant enough to be written up in an issue of *The Organist and Choirmaster* journal that year, which reports that it had mechanical key and stop action, hand blowing, three manuals and pedals, and the following list of stops:

Great	1	Open Diapason	8	
	2	Open Diapason	8	'Small'
	3	Claribel Flute	8	
	4	Octave	4	
	5	Mixture 12.15	II	
Swell	6	Salicional	16	stopped wood bass
	7	Horn Diapason	8	
	8	Lieblich Gedact	8	
	9	Echo Gamba	8	
	10	Voix Celestes (tenor C)	8	
	11	Gemshorn	4	
	12	Flautina	2	
	13	Oboe	8	
	14	Horn	8	
		Tremulant		
Choir	15	Keraulophon	8	
	16	Stopped Diapason	8	
	17	Dulciana	8	
	18	Flauto Traverso	4	
	19	Vox Humana	8	
Pedal	20	Open Diapason	16	wood
	21	Bourdon	16	
	22	Violoncello	8	

Swell to Great
Choir to Great
Swell to Choir
Swell to Pedal
Choir to Pedal

Great to Pedal
Balanced Swell pedal
2 composition pedals to the Great
Reversible pedal for Great to Pedal
'Duplex' electric blower



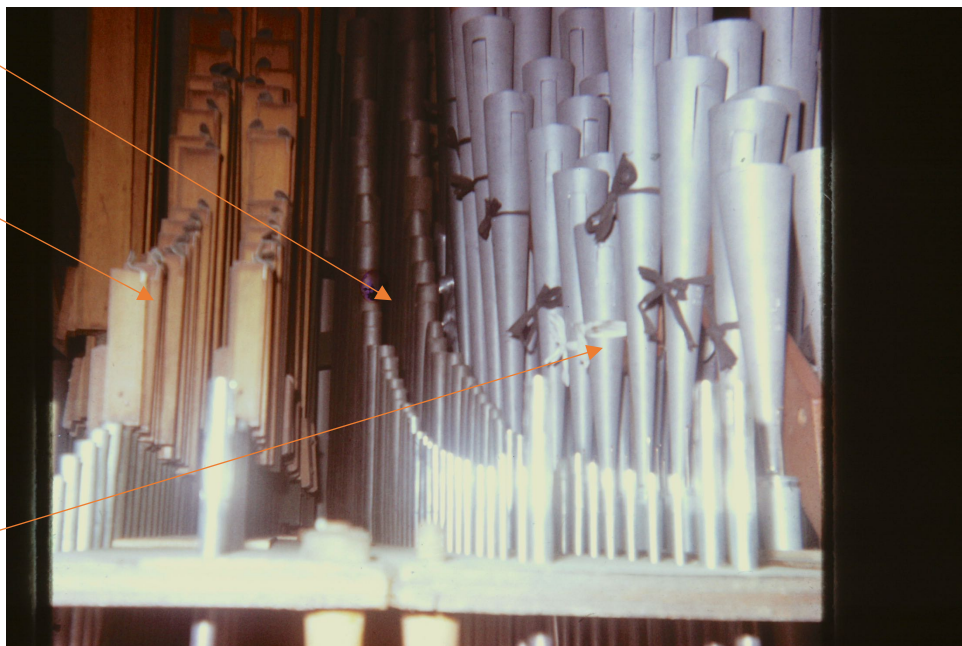
This interesting archive photograph shows the chancel and organ as they originally were. Note that the front pipes of the organ were then behind the arch. They were moved in front during the 1980s.

This instrument remained essentially without alteration, other than the installation of an electric blower and the unfortunate replacement of the Great Mixture with a 4ft Flute, until the mid 1960s. As a 13-year-old fledgling organist in 1965 it was one of the first three organs I encountered, the others being the Solihull School Chapel (then incomplete) and St Francis' Church, Solihull (since removed to St Tudy in Cornwall and the church demolished). Mr Arthur Searle was appointed organist in 1962 and ran a large choir with many boys and a strong adult back-row. The powerful tone of the organ was ideal for accompanying this choir and the hearty congregational singing.

However, the Norman & Beard had a particularly heavy mechanical action, especially when the manuals were coupled, some of the stops very stiff to draw (the Choir 4ft Flauto Traverso regularly jammed up completely during the winter months) and it seemed very much a late-Victorian 'child of its time' to players in the 1960s. Brighter sounds were desired, a lighter action, and ideally a detached console on the south side of the chancel.

Money was tight and Arthur Searle's aspirations proved rather too grand for the available finance. Thus, a very inexpensive local organbuilder, Dunchurch Organs, was employed in 1965 to electrify the organ's mechanism and add some stops, despite the firm having been dismissed by Solihull School for the poor work they were doing to the chapel organ at the time. Dunchurch made electro-pneumatic underactions using lever-magnets exhausting internal power-motors for each soundboard. Wind was supplied as high pressure direct from the blower (to ensure the promptness of the mechanism) so the actions were very noisy. The pedal ventral chest had lever-magnets fitted to exhaust the primary action.

The smaller Great Open Diapason and the Claribel Flute were mounted above the Choir Organ on two second-hand Compton 'Roosevelt' chests, with neither the chest magnets nor the leatherwork renewed. On a third chest was placed a new Tromba stop. The Swell Oboe was transposed to 16ft pitch, though with no bottom octave. The Swell Flautina was moved to the Choir where it replaced the Dulciana; its place in the Swell was taken by new two-rank Mixture (15.19).



The Choir Keraulophon was transposed to 4ft, the Flauto Traverso transposed to a Nazard, and a new Tierce rank replaced the Vox Humana, which was discarded. The Claribel Flute was arranged to draw at 8ft pitch on the Great and 4ft pitch on the Choir.

The Open Diapason unit was arranged to draw at $8.2^{2/3.2}$ on

the Great. The Tromba drew at 8ft and 4ft on the Great and Choir, and 8ft on the pedal. A Trombone 16ft extension was prepared for. A new Mixture (19.22) was fitted to the Great. The new pipework, of good quality, was made by F. J. Rogers, of Bramley, Leeds.

The mechanical stop action was retained. Additional stop-knobs were added for the extra stops; they, and those previously of mechanical action but now operating the unit stops, were fitted with contacts to complete the electrical circuits. The pedalboard was fitted with contact blocks, as was each manual. Some of the electrical components were new ('Stero', made locally in Shirley), though one crucial element – the main Great relay – was second-hand and proved unreliable.

The organ's opening service was booked but the organ-builder, Mr Glanville Jones, ran late. I remember staying up all night with him the day before as he attempted to complete the organ in time. Sadly, he did not manage it: the Tierce was left unregulated and the bass of the extended Open Diapason (facing up the north aisle) was not fully wired up. Mr Jones did not attend the dedicatory service; he moved up North to work with Solway Organs in Scotland.

Chris Grizzell (a former St Margaret's choirboy) and I, having observed the organ being built, were asked to look after it and tune it, and so we did, for two or three years. We tuned the reeds and attempted week by week to keep the unreliable Great relays from creating ciphers. When Arthur Searle left for St Philip's, Dorridge in 1968, the new organist, Roland Keen, naturally felt a professional firm should look after the organ, so the Vicar warmly thanked us during one Sunday Evensong and that was the end of my acquaintance with the Olton organ for forty-four years.

During those four decades, four companies attempted to rectify the poor work done in 1965 and to improve the reliability, sound and control of the instrument: Sheffield Organs, Nicholson & Co, Michael Thompson and Trevor Tipple. The console was largely replaced, with new manual keyboards, a second-hand pedalboard, electro-pneumatic stop action and new electrical stop-knob solenoids (1970s Tom Sheffield). Tonal changes included a second-hand Fifteenth and Dulciana for the Great, a replacement of the Claribel Flute rank with a vintage metal Chimney Flute, augmentation of the Pedal, including a Trombone (a sonorous chipboard bass made by Tom Sheffield), revoicing the Tierce, transposing the Oboe back to 8ft pitch, and improving the 1960s Mixtures (Trevor Tipple). Later on, the Tromba was moved to the east wall of the chamber to join the Trombone bass (which unfortunately reduced its impact in the church) and the other two unit ranks were moved to stand just behind the north aisle case, where they could speak clearly into the nave. A selector-switch adjustable piston system was installed (1970s) and the Great relays replaced with transistorised switching. Michael Thompson converted two of the three Compton electro-pneumatic Roosevelt chests to direct-electric action. The organ was cleaned and had new tuning slides fitted to many pipes. Finally, Trevor Tipple removed the original huge double-rise reservoir, which eventually had needed releathering, and replaced it with a single-rise reservoir, a wind regulator for the Great/Choir/underactions, a regulator for the Swell, and a regulator for the Pedal. A tiny reservoir for the Tromba rank remained. The stop list became [letters are unit ranks]:

Great	1	Open Diapason I	8	
	2	Open Diapason II	8	A
	3	Chimney Flute	8	B
	4	Dulciana	8	
	5	Octave	4	
	6	Principal	4	A
	7	Twelfth	2 ² / ₃	A
	8	Fifteenth	2	
	9	Mixture 19.22	IIrks	
	10	Tromba	8	C
	11	Tromba	4	C

Swell to Great

Choir to Great

Gt. & Ped. Pistons Coupled

Swell	12	Salicional	16	
	13	Horn Diapason	8	
	14	Lieblich Gedackt	8	
	15	Echo Gamba	8	
	16	Voix Celeste	8	
	17	Gemshorn	4	
	18	Mixture 15.19	IIrks	
	19	Horn	8	
	20	Oboe	8	
		<i>Tremulant</i>		

Super Octave

Unison Off

Sub Octave

Choir	21	Stopped Diapason	8	
	22	Principal	4	former Keraulophon
	23	Chimney Flute	4	B
	24	Nazard	$2\frac{2}{3}$	
	25	Flautina	2	
	26	Tierce	$1\frac{3}{5}$	
	27	Krummhorn	8	prepared-for [knob only]
	28	Tromba	8	E
	29	[blank knob]		
		<i>Super Octave</i>		
		<i>Swell to Choir</i>		
Pedal	30	Open Wood	16	
	31	Bourdon	16	
	32	Principal	8	A
	33	Violoncello	8	
	34	Bass Flute	8	B
	35	Fifteenth	4	A
	36	Octave Flute	4	B
	37	Tromba	16	C
	38	Tromba	8	C
		<i>Swell to Pedal</i>		
		<i>Great to Pedal</i>		
		<i>Choir to Pedal</i>		

Combination Pistons

6 thumb pistons to Great
 6 thumb pistons to Swell
 4 thumb pistons to Choir
 6 toe pistons to Pedal
 6 toe pistons to Swell
 1 reversible thumb piston to Swell to Great
 1 reversible thumb piston to Choir to Great
 1 reversible thumb piston to Swell to Choir
 1 reversible thumb piston to Great to Pedal
 1 reversible thumb piston to Swell to Great
 1 reversible thumb piston to Choir to Pedal
 1 reversible toe piston to Swell to Pedal
 1 reversible toe piston to Great to Pedal
 1 reversible toe piston to Swell to Great
 1 reversible toe piston to Pedal Reeds
 1 general cancel piston

Balanced Swell pedal

Voltmeter

Duplex blower

The 2020-21 Rebuild

The present writer was called in during 2012, as an independent professional organ consultant, to report on the organ and to recommend a plan of action. Here is the gist of my report:

With regard to the pipework, almost all was in good condition, other than some flute stoppers needing repacking or releathering where necessary.

The areas which needed addressing were the electrical components and wiring remaining from the 1960s, the layout of the wind system, the piston combination system at the console, and certain tonal matters. In addition, access was dreadfully poor and positively hazardous; this had to be addressed. My recommendations were as follows:

1. The electro-mechanical switching should all be removed and replaced with a new processor-based system.
2. The entire organ should be re-wired, as there remained much cotton-covered wiring from the 1960s.
3. All key contacts should be replaced, together with new pedal jacks. A new electrical system would operate on very low current, thus all contacts need to be in perfect condition; those that have passed larger currents for many years will always be somewhat pitted.
4. A new transformer/rectifier was needed.
5. The piston system needed to be replaced with a new processor-based device. General pistons could be added at the same time, along with a number of memory levels.
6. The slider-machines should be checked to ensure that there is plenty of life left in the leatherwork.
7. The same applied to all pneumatic motors in the under-actions.
8. There was something amiss with the pedal soundboard. Although its pneumatic motors had recently been releathered, notes – particularly on the Open Wood – did not always operate. The 1965 lever-arm magnets and valves might wisely be replaced, to save the cost of working on the pedal chest again.
9. The pedalboard had no point of regulation for the contacts. It would best be replaced with a new one or, if not, rebuilt with new pedal keys.
10. The Great Mixture needed remaking as a three-rank or four-rank stop, starting at 19.22.26 or at 19.22.26.29.
11. The second-hand Great Fifteenth was too small a scale and with the mouths cut up very low. It did not match the bold Norman & Beard pipework at all and should be replaced with a rank of pipes scaled to match the 4ft Octave.
12. The lack of a Clarinet had long been a cause of regret. As none of the Choir stops were superfluous, a new Clarinet might be installed on a unit chest mounted on the side of the Swell box almost behind the arch facing into the north nave aisle. It should be winded from the Choir. The Choir Krummhorn knob, currently inoperative, could be re-engraved and used for the Clarinet.
13. Access to the upper level needed improving. First of all, the two unit chests behind the nave case might be moved up behind the front pipes, then a passage-board run behind them, from which they and the new Clarinet could be tuned, and the Great/Choir and Swell passage-boards reached.
14. The wind trunking around the organ was most disappointing in appearance. The old Norman & Beard had four capacious wooden trunks, each running down to the reservoir,

which formerly filled the entire floor area. With this recently removed and replaced by small wind regulators, the area was strewn with flexible trunks of various types. The Great has recently had an extra wind trunk fitted to improve wind stability. The wind to the Choir was unstable for two reasons: (1) the regulator was the opposite side of the organ from the Choir wind-trunk, and (2) as the under-actions were all winded from the Great/Choir wind regulator (via a too-small wooden distribution box), they tended to shake the wind. The whole wind system and its connecting trunking therefore needed a re-design.

15. The Swell under-action was very slow in repetition. This needed investigating and curing if possible.
16. A Choir Tremulant could be fitted using the currently unengraved knob. A Sub Octave and Unison Off could be added as there was room for two more stop knobs and solenoids.
17. If the Great & Pedal Combinations Coupled knob were moved under the Pedal stops, the Great could retain the Chimney Flute at 8ft pitch as well as a new Claribel or Hohl Flute (which is sorely missed), as there would be the right number of Great stop-knobs.
18. There was no room in the swell box or on the soundboard for a 16ft octave for the Swell Oboe, so it had better remain back at 8ft pitch.
19. Swell box – this was in good condition but for some reason both the reed tuning-flaps had had large hand-holds cut out, which means that when the box was closed, quite a bit of sound emerged through these. They should be filled in again, and handles, as would normally be found, fitted instead.
20. The case pipes (in both case fronts) should be rubbed down, primed, then sprayed with Ardenbrite Metallic Gold. They were a depressing brown colour. Originally, they were painted with 'silver' paint, which can still be seen on their backs. If the congregation were to see the front pipes really smartened up, they would be more likely to feel that their money had been well – and visibly – spent.
21. If they remained where they were (a far from ideal buried position), the Tromba pipes should be fitted with muslin caps to prevent dust, dirt and plaster falling into the shallots, which it regularly does at present. The knuckled basses and Trombones do not need this.

The work went out to tender, resulting in several widely-varying schemes being proposed. In the event, the proposals of Henry Groves & Son (Jonathan Wallace) of Nottingham were chosen, as being the most imaginative and thorough. New windchests were made for Great and Choir, the Great being placed low down behind the north nave aisle case, to give a strong lead to congregational singing. The Choir was turned round and placed behind the chancel case, where the Great had been since 1900. The Swell was turned around, with its back to the east wall of the chamber, so that it faces west and its sound reaches out over the Choir and Great into the nave, yet also into the chancel, to which the shutters are now angled. The swell box was extended to allow for the Oboe at 8ft and 16ft. The main Pedal soundboard remains where it has always been, and now that the Swell box has been removed from being right in front of the Pedal pipes, they speak out far better. The Trombone / Tromba rank has been moved from its buried position against the east wall and stood alongside the Great, speaking out boldly into the nave. A new compact wind system has been installed, with two blowers (one for the Trombone/Tromba on 7ins wind pressure); the Swell soundboard and slider mechanism has been overhauled, the console remade with elegant new stop knobs, refurbished keys, repolished wood and a new bench, and the entire electrical system is new. A significantly revised tonal scheme was drawn up by the present writer, Eddie Guard and Jonathan Wallace of Henry Groves & Son, which offers a more balanced, colourful and nuanced specification. The organ is now also significantly louder in the main body of the church and yet there is a wealth of soft stops, the swell box shutting down to the merest pianissimo.

The Specification of the Henry Groves & Son organ, 2021

Letters indicate unified ranks.

'N&B' signifies Norman & Beard pipes.

Great

1	Bourdon	16	E; 1-12 former Swell 16ft
2	Open Diapason I	8	bass in chancel case
3	Open Diapason II	8	A; bass in nave aisle case
4	Hohl Flute	8	D
5	Chimney Flute	8	G; 1-12 from E
6	Octave	4	
7	Stopped Flute	4	E
8	Twelfth	2 ² / ₃	Nicholson (Groves stock)
9	Fifteenth	2	Nicholson (Groves stock)
10	Tierce	1 ³ / ₅	borrowed from Choir
11	Mixture 19.22.26.29	IV	partly new, 19 th ext. of Twelfth
12	Tromba	8	C
	<i>Swell to Great</i>		
	<i>Choir to Great</i>		

Swell

13	Horn Diapason	8	
14	Lieblich Gedackt	8	loudened
15	Echo Gamba	8	N&B (Groves stock)
16	Voix Celeste	8	N&B (Groves stock)
17	Gemshorn	4	
18	Fifteenth	2	former Great Fifteenth
19	Mixture 19.22	II	recast
20	Bassoon	16	B, Groves stock bass
21	Horn	8	
22	Oboe	8	B
23	Clarinet	8	borrowed from Choir
	<i>Super Octave</i>		
	<i>Unison Off</i>		
	<i>Sub Octave</i>		

Choir

24	Geigen Diapason	8	F; original Keraulophon
25	Stopped Diapason	8	E
26	Fugara	4	F
27	Chimney Flute	4	G
28	Nazard	2 ² / ₃	N&B (Groves stock)
29	Flautina	2	softened
30	Tierce	1 ³ / ₅	revoiced
31	Clarinet	8	N&B (Groves stock)
32	Oboe	8	borrowed from Swell
33	Tromba	8	C
	<i>Super Octave</i>		
	<i>Unison Off</i>		
	<i>Sub Octave</i>		
	<i>Swell to Choir</i>		

Pedal

34	Open Wood	16	
35	Sub Bass	16	
36	Bourdon	16	E
37	Quint	$10^{2/3}$	E
38	Principal	8	from Great Open Diapason I
39	Violoncello	8	former Swell 16ft Salicional
40	Bass Flute	8	E
41	Fifteenth	4	A
42	Hohl Flute	4	D
43	Trombone	16	C
44	Bassoon	16	B
	<i>Swell to Pedal</i>		
	<i>Great to Pedal</i>		
	<i>Choir to Pedal</i>		

Accessories – by illuminating buttons beneath the stop panels

Swell Tremulant

Choir Tremulant

Great & Pedal Combinations Uncoupled

Generals on Swell Toe Pistons

Combination Pistons

6 thumb pistons to Great

6 thumb pistons to Swell

6 thumb pistons to Choir

6 general thumb pistons

3 thumb pistons for Stepper Advance

1 thumb piston for Stepper Retard

6 toe pistons to Pedal

6 toe pistons to Swell

1 reversible thumb piston to Great to Pedal

1 reversible thumb piston to Swell to Pedal

1 reversible thumb piston to Choir to Pedal

1 reversible thumb piston to Swell to Great

1 reversible thumb piston to Swell to Choir

1 reversible toe piston to Great to Pedal

1 reversible toe piston for Pedal Trombone

1 toe piston for Stepper Advance

1 toe piston for Stepper Retard

1 setter piston

1 general cancel piston

Combination system with multiple memories

Compass 58 / 30 notes

Balanced swell pedal

Adjustable bench

Main blower by B.O.B; heavy pressure blower for Tromba/Trombone by Watkins & Watson

Transmission and piston system by Renatus (Bideford)

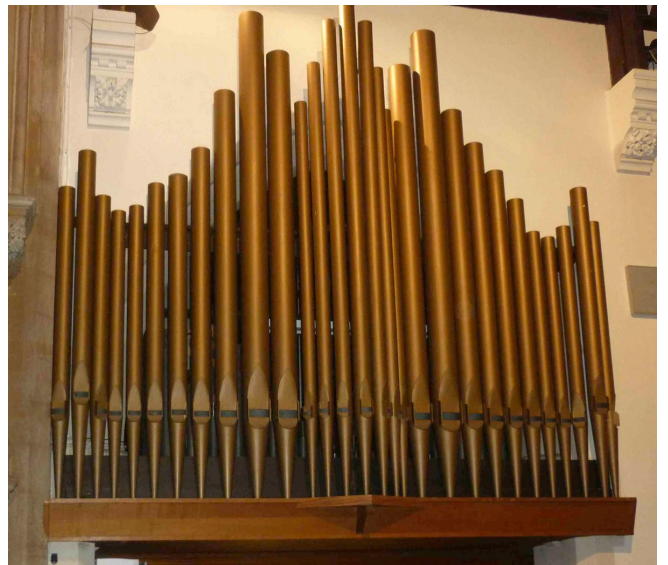
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Photographs taken before the 2020-21 rebuild

Dangerous access to upper levels.



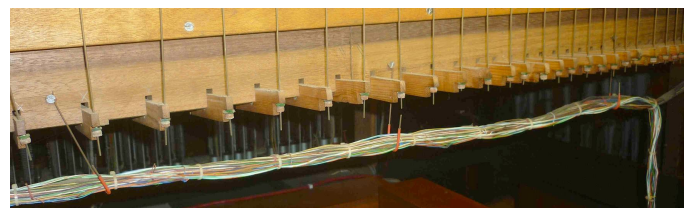
Front pipes whose 'gold' paint had turned brown.



1965 cotton-covered electric cabling in need of replacement.

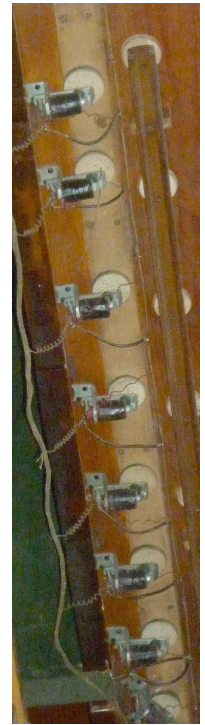
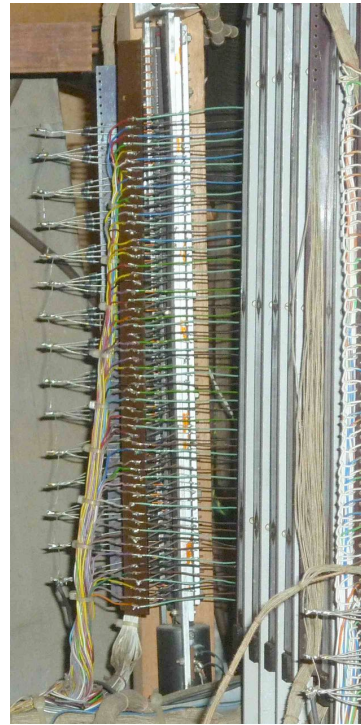


Great soundboard action pulldowns, with 'home-made' 1965 backfalls.



(left)
Stop switch with cobbled-up 'non-return'
wiring; needed replacing.

(right)
1965 pedal magnets and wiring, due
for renewal.



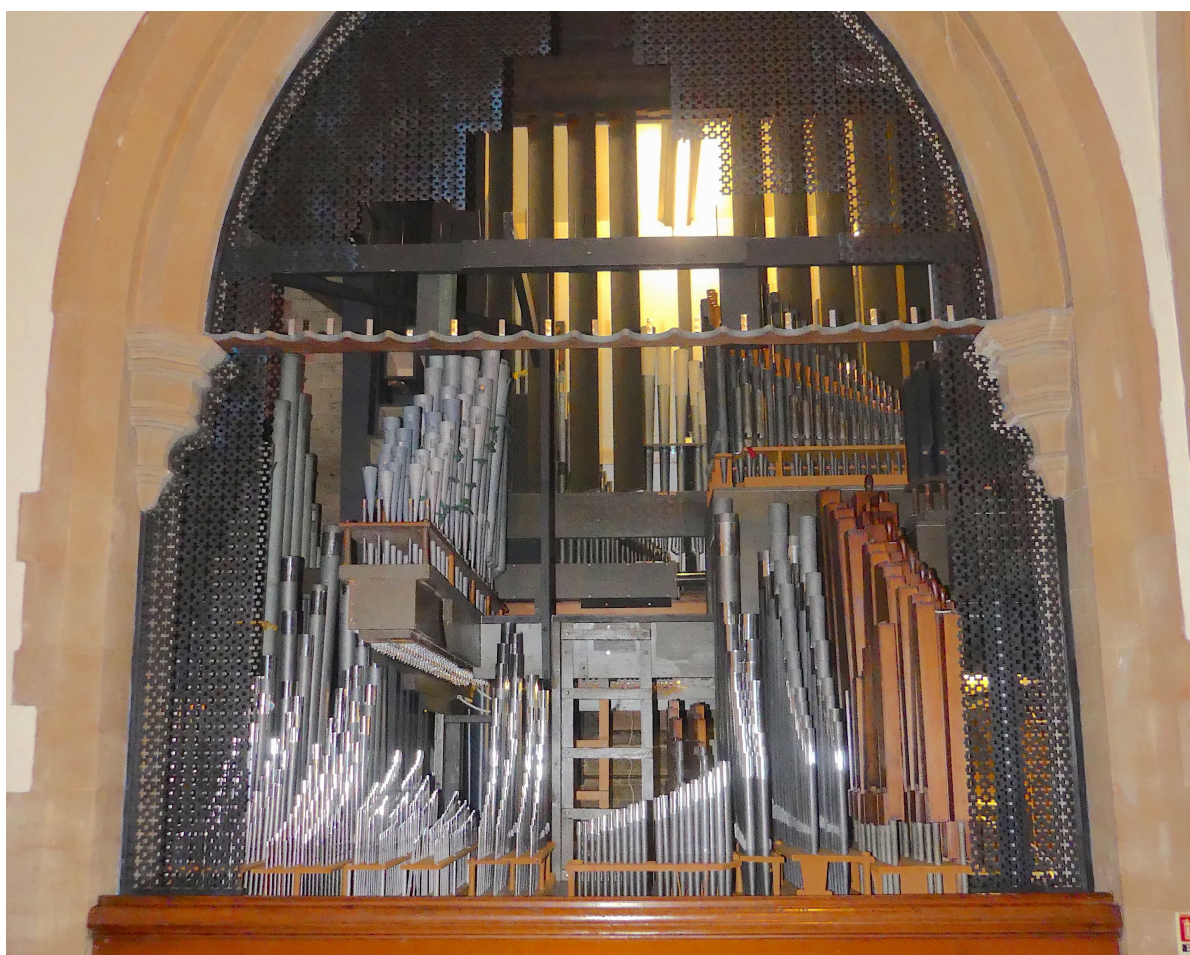
Untidy and haphazard internal layout.



Tromba in need of covers to prevent
plaster ingress.



Photographs taken during / after the 2020-21 rebuild











Photograph on the back cover is the Chancel case, with long-serving St Margaret's Organist & Choirmaster, Eddie Guard, at the console.

