RESTORATION AT RANMOOR

The organ of St John's Church, Ranmoor, Sheffield

Paul Hale

It is a real pleasure to be writing about a first-class organ, recently restored, which supports a church where the choral tradition is still very much alive and flourishing, a new Director of Music, Philip Collin, having just been appointed. Here is the story of this instrument – without a doubt the finest and most comprehensive church organ in Sheffield.

St John's Church, Ranmoor – an affluent Sheffield suburb – was completed in 1888 following the destruction by fire of the 1877 building. The leading Sheffield firm of Brindley & Foster supplied a modest-size 3-manual organ, in the Schulze-influenced style which was their trade-mark. There were 26 speaking stops, tubular-pneumatic action, and the ventil chests for which the firm was well-known.

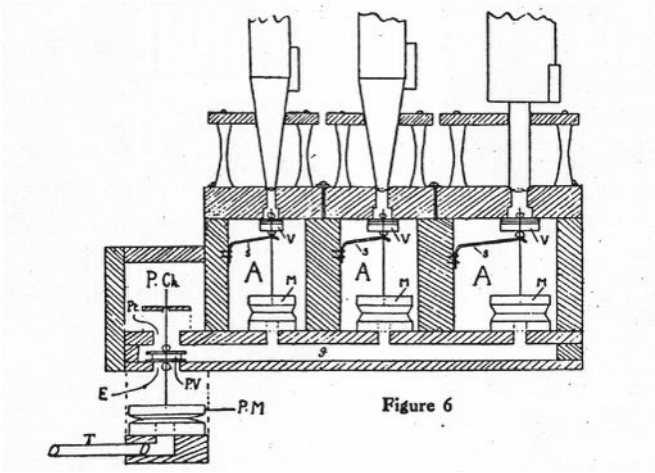


Figure 6

This drawing is of a standard Brindley & Foster ventil soundboard, as used for the Ranmoor organ. It shows a small three-stop chest, in which every pipe has its own pneumatic motor (M) and valve (V). The note action – common to all three pipes shown – is of the 'charge' or 'pressure' type where depressing a key allows pressurised air in tube T to inflate pneumatic motor PM, lifting the double-acting primary valve PV and allowing all three note motors (M) to collapse as they exhaust to atmosphere through boring E. They in turn pull down the pipe valve (V) against the spring normally holding it shut (S) so that wind can enter the pipe and sound the note. Pressurised wind in the primary action chest (P.Ch.) once again inflates the pipe motors (M) when the note is released. Not shown is the 'ventil' stop mechanism, which allows wind into the chamber underneath each stop (A) only when that stop is drawn. The pipes would remain silent without that wind supply, even when their note action has been played. Correcting faults on such chests is an unenviable job, as a whole rank of pipes has to be removed, along with the toe-board and its multiple screws, to gain internal access. These chests did not endear themselves to later generations of organ-builders whose task was to repair or restore them; consequently, many have been scrapped (as at Ranmoor), or remade with direct-electric action.

The 1888 organ was considerably enlarged in 1900 and fitted with a 32ft Sub Bass, a new Chancel case (containing the basses of a new Violone and new Great Large Open Diapason). In 1911, on the occasion that the church gained its oak choir-stalls, Brindley & Foster extended the 32ft Sub Bass to 16ft pitch and added an Orchestral Oboe to the Choir Organ. The 1911 specification formed a very complete instrument, one of the largest and finest in Sheffield;

1888 Specification

GREAT ORGAN (58 NOTES)			
1	Bourdon	16	
2	Open Diapason	8	
3	Claribel	8	
4	Principal	4	
5	Harmonic Flute	4	
6	Mixture 12.15	II	
7	Posaune	8	
	Swell to Great		
	Choir to Great		
SWELL ORGAN (58 NOTES)			
8	Bourdon	16	
9	Geigen Principal	8	
10	Lieblich Gedeckt	8	
11	Echo Diapason	8	
12	Unda Maris (t.c.)	8	
13	Geigen Principal	4	
14	Mixture 12.15	II	
15	Horn	8	
16	Oboe	8	
CHOIR ORGAN (58 NOTES)			
17	Lieblich Gedeckt	8	
18	Dulciana (tenor C)	8	
19	Concert Flute	4	
20	Piccolo	2	
21	Clarinet (tenor C)	8	
PEDAL ORGAN (30 NOTES)			
22	Major Bass	16	
23	Bourdon	16	
24	Octave	8	
25	Flute Bass	8	
26	Bombardon	16	wooden pipes

1911 Specification

GREAT ORGAN (58 NOTES)			
1	*Bourdon*	*16*	*1888*
2	*Open Diapason Large*	*8*	*1900*
3	*Open Diapason Small*	*8*	*1888*
4	*Claribel*	*8*	*1888*
5	*Dolce*	*8*	*1900*
6	*Principal*	*4*	*1888*
7	*Harmonic Flute*	*4*	*1888*
8	*Mixture 12.15*	*II*	*1888*
9	*Mixture 17.19.22*	*III*	*1900*
10	*Posaune*	*8*	*1888*
11	*Clarion*	*4*	*1900*
SWELL ORGAN (58 NOTES)			
12	*Bourdon*	*16*	*1888*
13	*Geigen Principal*	*8*	*1888*
14	*Lieblich Gedeckt*	*8*	*1888*
15	*Echo Diapason*	*8*	*1888*
16	*Unda Maris (t.c.)*	*8*	*1888*
17	*Geigen Principal*	*4*	*1888*
18	*Mixture 12.15*	*II*	*1888*
19	*Mixture 15.19.22*	*III*	*1900*
20	*Cor Anglais*	*16*	*1900*
21	*Horn*	*8*	*1888*
22	*Oboe*	*8*	*1888*
23	*Vox Humana*	*8*	*1900*
CHOIR ORGAN (58 NOTES)			
24	*Viola*	*8*	*1900*
25	*Lieblich Gedeckt*	*8*	*1888*
26	*Salicional*	*8*	*1900*
27	*Dulciana*	*8*	*1888/bass 1900*
28	*Viole de Gambe*	*8*	*1900*
29	*Viole Céleste (t.c.)*	*8*	*1900*
30	*Concert Flute*	*4*	*1888*
31	*Piccolo*	*2*	*1888*
32	*Clarinet*	*8*	*1888/bass 1900*
33	*Orchestral Oboe*	*8*	*1911*
PEDAL ORGAN (30 NOTES)			
34	*Sub Bass*	*32*	*1900*
35	*Major Bass*	*16*	*1888*
36	*Sub Bass*	*16*	*1900/1911, ext 32ft*
37	*Violone*	*16*	*1900*
38	*Bourdon*	*16*	*1888*
39	*Quint*	*10⅔*	*1900*
40	*Octave*	*8*	*1888*
41	*Flute Bass*	*8*	*1888*
42	*Bombardon*	*16*	*1888*

1963 Specification

GREAT ORGAN (61 NOTES)

1	Bourdon	16	1888
2	Open Diapason no.1	8	1900
3	Open Diapason no.2	8	1888
4	Claribel	8	1888
5	Octave	4	1963
6	Principal	4	1888
7	Harmonic Flute	4	1888
8	Twelfth	2⅔	1963 [lower rank of Mixture 1888 Mixture II]
9	Fifteenth	2	1963 [upper rank of Mixture 1888 Mixture II]
10	Mixture 19.22.26	III	1963 [1900 Mixture recast]
11	Posaune	8	1888
12	Clarion	4	1900

SWELL ORGAN (61 NOTES, ENCLOSED)

13	Geigen Principal	8	1888
14	Lieblich Gedeckt	8	1888
15	Echo Diapason	8	1888
16	Unda Maris (t.c.)	8	1888
17	Geigen Principal	4	1888
18	Koppel Flute	4	1963, replacing Bourdon
19	Twelfth	2⅔	1963 [lower rank of Mixture 1888 Mixture II]
20	Fifteenth	2	1963 [upper rank of Mixture 1888 Mixture II]
21	Mixture 19.22.26	III	1963 [1900 Mixture recast]
22	Double Trumpet	16	1963
23	Horn	8	1888
24	Oboe	8	1888
25	Clarion	4	1963

CHOIR ORGAN (61 NOTES, ENCLOSED)

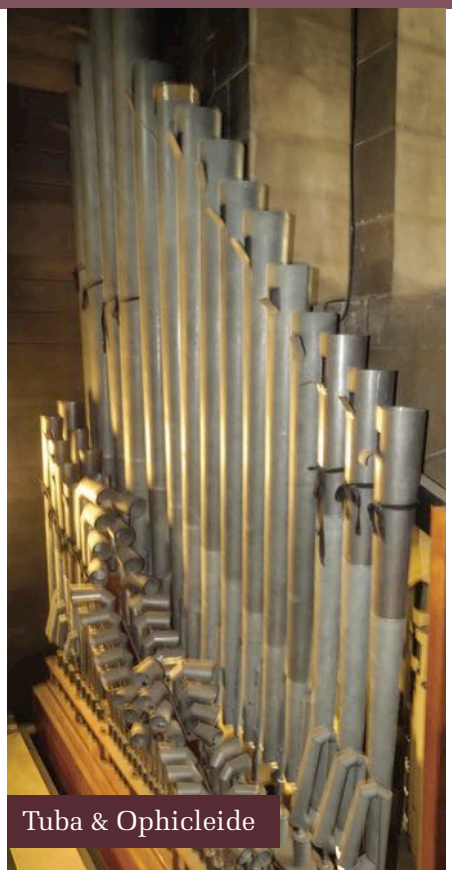
26	Contra Salicional	16	1900, 1963 Haskelled bass; rank A
27	Viola	8	1900
28	Lieblich Gedeckt	8	1888
29	Salicional	8	1900, rank A
30	Dulciana	8	1888/bass 1900
31	Viole de Gambe	8	1900
32	Viole Celeste (t.c.)	8	1900
33	Concert Flute	4	1888
34	Salicet	4	1900, 1963 top octave bass; rank A
35	Nazard	2⅔	1963
36	Piccolo	2	1888
37	Tierce	1⅗	1963
38	Clarinet	8	1888/bass 1900
39	Orchestral Oboe	8	1911
40	Tuba	8	1963, heavy pressure, unenclosed; rank E

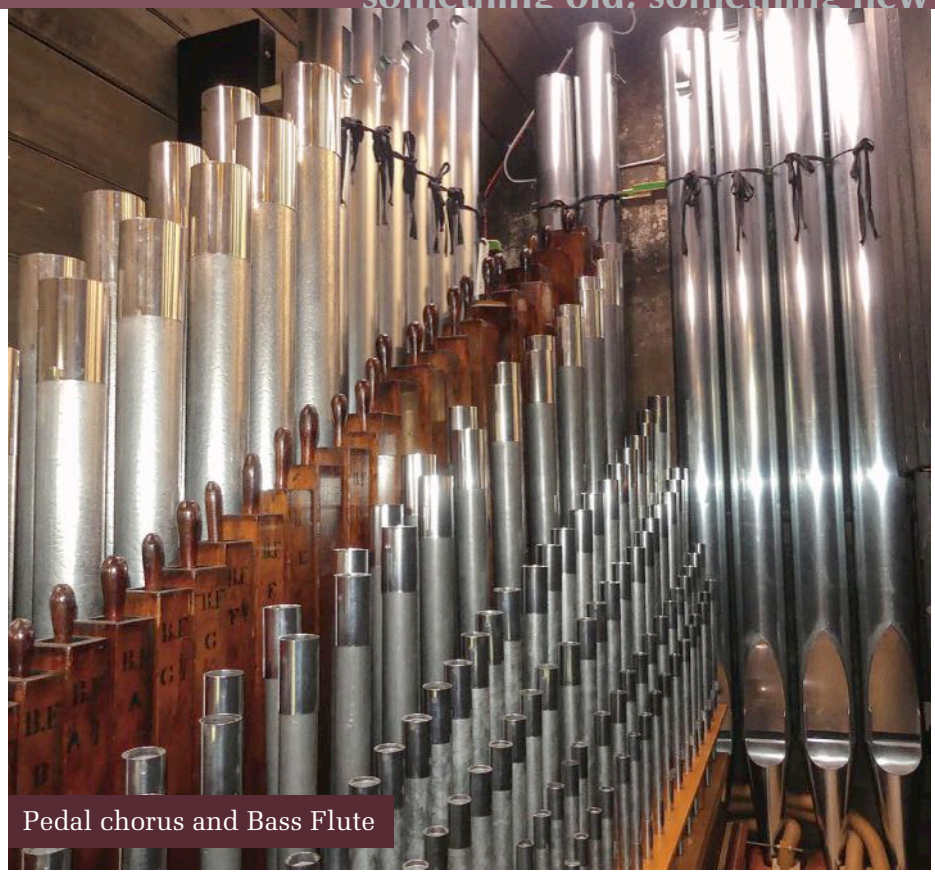
PEDAL ORGAN (32 NOTES)

41	Sub Bass	32	1900, rank B
42	Major Bass	16	1888, rank C
43	Violone	16	1900
44	Sub Bass	16	1900/1911, rank B
45	Bourdon	16	1888
46	Salicional	16	1900, 1963 Haskelled bass; rank A
47	Quint	10⅔	1900
48	Octave Wood	8	1888, treble 1963; rank C
49	Principal	8	1888, rank D
50	Flute Bass	8	1888
51	Fifteenth	4	1888/treble 1963; rank D
52	Quintade	4	1963
53	Mixture 12.15.19.22	IV	1963, two extended ranks, one a stopped quint, 88 pipes
54	Ophicleide	16	1963, heavy pressure; rank E
55	Trombone	16	1888 wooden Bombardon, revoiced
56	Tuba	8	1963, heavy pressure; rank E

Bass stop jamb

Treble stop jamb


Tuba & Ophicleide


Pedal chorus and Bass Flute

ideal for the accompaniment of the splendid choral tradition which the church had developed and which is maintained to this day.

The 1900/1911 organ flourished with this specification, its ventil chests and tubular-pneumatic action, for an impressive half century. Electric blowing was installed in 1914 and in 1927 the internal ventil chest pneumatic motors were releathered. However, by the late 1950s it was clear that a complete mechanical rebuild was necessary.

Norman Barnes had been appointed Organist & Choirmaster in 1949 and proceeded to build the choir's strength up to 30 boys and 20 men. He remained in post, enormously-respected, until 1982, having been appointed MBE in 1977 in recognition of his achievements. Barnes advised the PCC that the organ needed major work, and took advice from Dr Harold Spicer of Manchester College, Oxford, where the chapel organ had been rebuilt in 1959–60 by Nicholson & Co. of Worcester. Thus it came about that in 1963 the Ranmoor instrument was thoroughly reconstructed by Nicholsons, which introduced new mahogany slider soundboards for the Great, Swell and Choir, electro-pneumatic action, a detached console elevated on the south side of the chancel, a new wind system and a BOB blower.

Numerous tonal changes and additions were made, two of which (the 'Baroque-revival' Koppel Flute and Quintade) were similar to ranks they had added at Manchester College. The key compass was extended to 61/32 notes.

The renowned organ expert and author, Professor William Sumner, wrote warmly about this organ in an article in *The Organ* of January 1971. From the mid-1980s George Pace and his colleague Ronald Sims (York architects), carried out much work in the church. Most obvious was the lime-washing of all the previously dark wood in the chancel, which included both organ cases and took place as part of a general re-ordering in 1991. Somewhat controversially they also caused the 1900 zinc pipes in the chancel case to be emulsioned a matt stone colour, leaving the general appearance of this case disappointingly drab. Mercifully, the beautiful spotted-metal 1888 pipes in the nave aisle case were not also despoiled with paint. Behind this nave aisle case stood the Pedal Principal/Fifteenth chest and the bulky Choir swell-box, containing no fewer than 14 ranks – a very large Choir Organ. This box severely constrained the sound of the rest of the organ, preventing it from reaching down the nave, whereas it was very loud in the chancel.

When the 1963 electrical components came to the end of their reliable life, after 25 years or so, some radical action was considered necessary to improve this state of affairs. A report by John Norman was made in 1995, David Wells was appointed to do the work and a suitable scheme was devised by Andrew Kirk (Director of Music from 1994) along with consultant Ian Bell, to bring about improvements in how the organ projected into the nave, as well as making some desirable changes to the stop-list.

In 1997 David Wells of Liverpool replaced the 1963 electrical mechanisms, made numerous tonal changes with improvement to the wind supply (including an additional blower), the stop action, some of the soundboards and chests, and the layout. The electro-pneumatic slider machines were replaced with solenoids and the unsatisfactory direct-electric action

2021 Specification

GREAT ORGAN (61 NOTES; PIPE & ACTION WIND PRESSURE 4 INS)			
1	Bourdon	16	1888
2	Open Diapason No.1	8	1900
3	Open Diapason No.2	8	1888
4	Claribel	8	1888
5	Octave	8	1963
6	Principal	4	1888
7	Harmonic Flute	4	1888
8	Twelfth	2⅔	1963 [lower rank of Mixture 1888 Mixture II]
9	Fifteenth	2	1963 [upper rank of Mixture 1888 Mixture II]
10	Mixture 19.22.26	III	1963 [1900 Mixture recast]
11	Posaune	8	1888
12	Clarion	4	1900
SWELL ORGAN (61 NOTES, ENCLOSED, PIPE WIND PRESSURE 3½ INS, ACTION WIND PRESSURE 6½ INS)			
13	Geigen Principal	8	1888
14	Lieblich Gedeckt	8	1888
15	Viole de Gambe	8	1997 [1900 rank moved from Choir]
16	Viole Celeste (t.c.)	8	1997 [1900 rank moved from Choir]
17	Geigen Principal	4	1888
18	Koppel Flute	4	1963, replacing Bourdon
19	Fifteenth	2	1963 [upper rank of Mixture 1888 Mixture II]
20	Sesquialtera 12.17	II	1997 using the existing 12th plus a new 17th
21	Mixture 19.22.26	III	1963 [1900 Mixture recast]
22	Double Trumpet	16	1963
23	Horn	8	1888
24	Oboe	8	1888, revoiced 1997 with fresher tone
25	Clarion	4	1963
CHOIR ORGAN (61 NOTES, UNENCLOSED EXCEPT FOR 37 & 38, PIPE & ACTION WIND PRESSURE 4½ INS, TUBA 12½ INS)			
26	Contra Salicional	16	1900, 1963 Haskelled bass; rank A
27	Open Diapason	8	1997
28	Lieblich Gedeckt	8	1888
29	Salicional	8	1900, rank A
30	Principal	4	1997
31	Concert Flute	4	1888
32	Nazard	2⅔	1963, revoiced in 1997
33	Fifteenth	2	1997
34	Piccolo	2	1888
35	Tierce	1⅗	1963, revoiced in 1997
36	Mixture 19.22.26	III/IV	1997
37	Clarinet	8	1888/bass 1900
38	Orchestral Oboe	8	1900
39	Posaune (Gt)	8	1888, from Great
40	Tuba	8	1963, unenclosed; rank D
PEDAL ORGAN (32 NOTES, WIND PRESSURE 4¼ INS EXCEPT FOR 49,50,51,52 ON 3½ INS, 53,54,56 ON 12½ INS)			
41	Sub Bass	32	1900, rank B
42	Major Bass	16	1888, rank C
43	Violone	16	1900, revoiced 1997
44	Sub Bass	16	1900/1911, rank B
45	Bourdon	16	1888
46	Salicional	16	1900, 1963 Haskelled bass; rank A
47	Quint	10⅔	1900
48	Octave Wood	8	1888, treble 1963; rank C
49	Principal	8	1997
50	Flute Bass	8	1888
51	Fifteenth	4	1997, using vintage pipework
52	Mixture 19.22.26.29	IV	1997, replacing 1963 pipework
53	Contra Trombone	32	1997, rank D [since 2021], full length to bottom F♯
54	Ophicleide	16	1963, heavy pressure; rank D
55	Trombone	16	1888, wooden Bombardon, revoiced 1963
56	Tuba	8	1963, heavy pressure, unenclosed; rank D

to the Great reeds replaced with electro-pneumatic. The Choir box was removed and a tiny Swell box for the Choir's two orchestral reeds installed at the rear of the chamber, high up behind the Choir, using the original Choir shutter front. Alongside it was placed a new slider soundboard for the pipes of the Pedal's Diapason chorus from 8ft upwards, plus the formerly buried 8ft Flute Bass.

A 32ft reed was added, extended from the Trombone, though actually of equal power to the Ophicleide. A powerful second blower was added for these big reeds, whose pressure was raised to 12". The electrical components were replaced with a new transmission and drawstop solenoids by A.J. Taylor, with the very welcome addition of general pistons and a capture system. The effect of the organ in the church was completely transformed by this rebuild, the new Diapason chorus on the Choir, with its vivacious Mixture, having a dramatic effect and actually sounding louder than the Great down the church. The Pedal and Swell also 'got out' better, and the new 32ft reed was truly impressive.

All was thus set fair for many decades of inspiring music making; however, the heating system in the church began to wreak havoc with the instrument and the tuners could not get the wind supply to the Great to behave itself, resulting in severe tuning problems. Discussion took place over the next few years, with attempts by organ-builder Andrew Carter to deal with splits in the wind system, major wind leaks in the blower room and other problems such as perished leatherwork. Eventually a full overhaul was decided upon, based on proposals made by Andrew Carter in September 2018. This overhaul was made all the more necessary by stone dust deposited

Lime-washed casework and pipes

Andrew Carter at the restored Nicholson console, 2021

throughout the organ following major structural work to the church.

The work took place during 2020–21 and was far-reaching. In addition to the work my report had recommended, Andrew Carter cleaned the entire organ and every pipe, re-leathered four Nicholson reservoirs and a Wells wind regulator, plus the underactions to the soundboards and chests,

and added a break-down bellows and wind control in the blowing chamber to drop the pressure of the main wind supply before it entered the organ. At a stroke this sorted out the long-standing problems with the wind to the Great and made regulating the pipework far easier.

All the front pipes had badly torn tuning slots, so they were fitted with internal sprung tuning slides, which have proved a great success, some pipes being able to be tuned to the correct pitch for the first time in years. New lagging was installed to the heating pipes which run from the top of the organ to the bottom, to prevent, once and for all, further desiccation. The Swell shutters had never opened sufficiently and their connection to the console was impossibly stiff, so an electric swell motor was installed and connected with new components at the top of each shutter, enabling the box to open wider and thus let the sound fully emerge.

The 32ft reed – the bottom octave of which was as loud as the Ophicleide, and was by then on a similarly high pressure – was reprogrammed as an extension of the Ophicleide rather than of the Trombone, and was re-engraved 'Double Ophicleide 32ft'. The occasionally useful Choir Sub Octave (removed in 1997) was reinstated by adding a new stop-knob.

The 1997 tonal specification, with its 2021 minor tonal modification and technical improvements, has cemented this instrument's place as the finest organ in a Sheffield church. One hopes that one day the cathedral will once again install a fine pipe organ at least to match in quality and colour that at St John's Ranmoor, but for now – in this Olympic year – Ranmoor retains the gold medal.

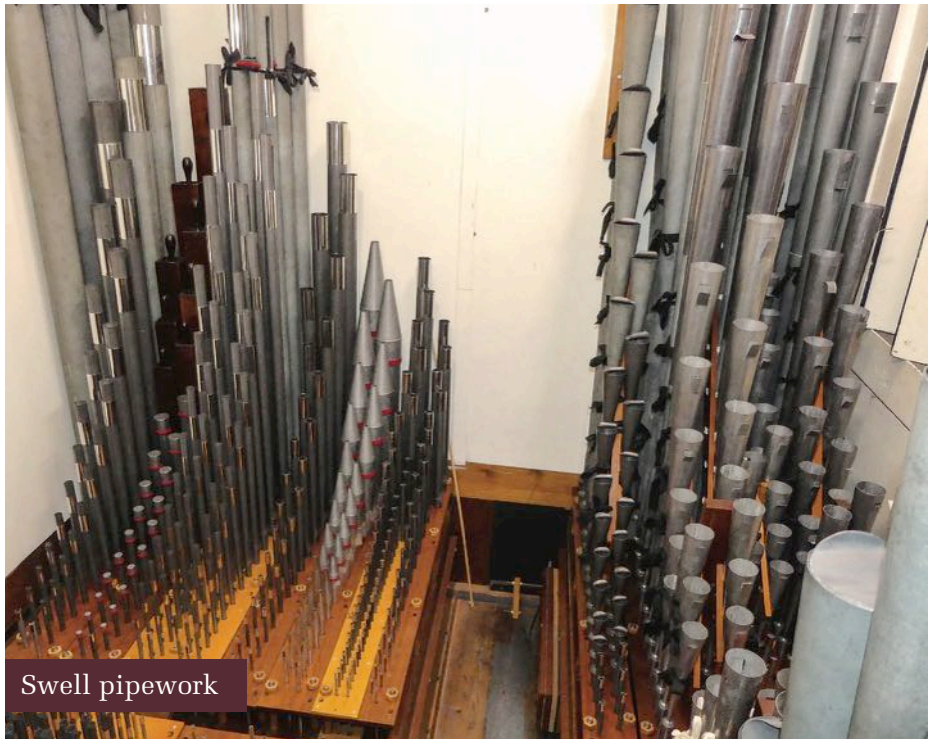
Andrew Carter – organ builder

The Ranmoor instrument was the final major project carried out by Andrew Carter, a highly-regarded and meticulous organ-builder who over his lifetime in the trade worked on some of the finest and largest organs in the North. This booklet offers an appropriate opportunity to outline his career:

Andrew was born in Nottingham in March 1950. His father was organist at Kingswood Methodist Church in Wollaton, where in 1966 J.W. Walker were carrying out some work to the organ. Frank

Fowler, who was the Midlands area manager for Walkers at the time, mentioned to Mr Carter senior that they were looking for a lad to start as an assistant in the Midlands area, so that was the start of Andrew's life in organ building. For two years he learnt his trade from the Walker reps in the area, then, aged 18, Andrew left home to move to Ruislip, where the Walker factory was then situated. He spent six months in each department; several of his contemporaries also went on to become distinguished organ builders. Whilst serving his apprenticeship Andrew became more involved with putting up new organs and at the age of 20 he started to be put in charge of such installations. While in the factory he worked on Blackburn Cathedral, City of London School, Brompton Oratory, Kendal Parish Church, St Alkmund Derby and Paisley Abbey among others. He then became a tuning rep in the Midlands again, moving to Kettering. Shortly after marrying in 1974, Andrew was made redundant by J.W. Walker when the firm was taken over and moved to Brandon in Suffolk. Later, Andrew was taken back on as a sub-contractor and in 1977 the Carters moved up to Wakefield, because Walkers wanted an experienced organ builder to help in the York area. The first jobs he worked on were Bradford Cathedral, Rochdale Town Hall and Doncaster Minster, all of which organs he is still looking after.

By the end of 1983, he branched out on his own, becoming self-employed in February 1984 and gradually being offered tuning and more major work in his own right. The first major job was in 1985 at Whiston PC (Rotherham) a pneumatic restoration with tonal changes. Andrew set up his workshop in Wakefield where he remained until 1998, when the family moved to a house that had a workshop attached, which is where he has worked from since then.


Swell pipework

Andrew took on Nicholson's northern tuning round and tuned at Ampleforth Abbey and Bridlington Priory for many years. Gradually becoming more independent he gave up both the Walker and Nicholson tuning rounds because there was too much to do. He has a large tuning round of his own and has now worked on many wonderful instruments over the years, such as York Minster, Leeds Minster, Leeds Town Hall, Chesterfield Parish Church, Worksop College, Manchester Town Hall, and St Marie's Cathedral, Sheffield (with Nicholson & Co.), and has restored worthy instruments in Cumbria, such as Penrith Parish Church and Patterdale church. Smaller projects have included churches at Hackthorn, Welton by Lincoln, Spridlington, Cantley, Gainsborough, St Columba in York, Hornsea, High Bradfield, Bainton, and St Mary's in Scarborough.

Reaching the age of 71 during the Ranmoor project, Andrew's plan for the future is to carry on with his tuning round and gradually hand the reins over to Mark Wood (organ-builder of Harrogate), who helped with the Ranmoor restoration and whose firm will now carry out the restorations and rebuilds for Andrew's many clients.

Paul Hale is a professional organ consultant, recitalist and choral conductor.

Whilst Organ Scholar of New College, Oxford (1971–4), Paul Hale began to write about the organ – his first published piece was in *Organists' Review*, of which he was later to become Reviews Editor and then Editor (1990–2005). A noted recitalist, lecturer and choir trainer, Paul is well-known in the UK, in Europe and in the USA. As well as being an Organ Adviser for the Dioceses of Southwell and Lincoln, Paul is an accredited member of the AIOA and has designed many new and restored organs throughout the UK. He is a diploma examiner for the RCO, and has been awarded honorary fellowships by the GCM and the RSCM and the Archbishop of Canterbury's 'Thomas Cranmer Award' for his contribution to church music. More information is available at www.PaulHale.org