



ASH MILLS

# Willis revived

Sir Frederick Ouseley once described it as 'the finest church organ in the world'. **Paul Hale** describes the latest work carried out by Harrison & Harrison at Salisbury Cathedral

There have been two famous four-manual organs in Salisbury Cathedral, the renown of the first having been somewhat eclipsed by the fame of the second.

In 1710, Renatus Harris (c.1652-1724), then at the peak of his creative powers, installed on the quire screen at Salisbury the most advanced instrument then known in these lands. In a sumptuous case, where the ornamental woodwork above the central tower was equal to the height of the tower itself, Harris created an instrument with a Great, Borrowed Great, Choir and Echo. The Great and Choir manuals had 50 notes, the Echo 25. Using his system of 'communication' within the soundboard, Harris was able to 'borrow' a second Great from the first, so that each stop could be used, quite independently, on two keyboards.

The synoptic stop-list was:

**Great** 8.8.8.4.4.2<sup>2</sup>/3.2.1<sup>3</sup>/5.1<sup>1</sup>/3.IV.V.8.8.8.4

**Choir** 8.8.4.4.2<sup>2</sup>/3.2.8

**Echo** 8.8.4.4.2<sup>2</sup>/3.2.1<sup>3</sup>/5.1<sup>1</sup>/3.8.8.8

**Drum pedal** tuned to 8ft C

*The Borrowed Great was the same as the Great, though with only one of the two 8ft Open Diapasons.*

The extraordinary abundance of mutations and reed stops (four reeds on the Great and three on the Echo is remarkable) shows at a glance the dominant influence on Renatus Harris of the classical French organ, an influence which reached him through his father Thomas, and grandfather Robert Dallam.

That this organ was not only spectacular but well-made is evident from the fact that it was little altered (though regularly repaired) for the next 80 years – quite remarkable for a British organ at any period in our history.

◀ The twin cases of Salisbury Cathedral's Father Willis

Indeed, it would have lasted longer and the case might even have still been in existence had the cathedral itself not been 'restored' by James Wyatt in 1789-92. In 1788 the Bishop of Salisbury had prevailed upon George III to present the cathedral with a new organ once restorations were complete. Samuel Green, who held the Royal Warrant and – after the death in 1785 of Johannes Snetzler – was probably the best-known organ builder in Britain at the time, provided a 23-stop three-manual instrument in 1792 in casework which drew much criticism – as did Wyatt's 'Gothic' screen on which it stood. In 1877 the Green instrument was given to St Thomas's

## Willis provided the organ with as complete a stop-list as any cathedral organ could reasonably expect to have at that period

Church, a mere 600 yards away, where much of it remains to this day – including the somewhat mutilated case – and is currently under restoration.

The advent of the cathedral's second four-manual organ heralded the removal of the Green instrument. At this point, Green's 23 gently blown, sweetly singing ranks were replaced by the greatest possible contrast – 55 stops voiced in the powerful style of Father Henry Willis, mounted either side of the choir stalls with minimal casework. The shock to listeners must have been enormous – and not all would have approved, for there is correspondence in several places where a Willis replaced a Green (such as at Wells Cathedral a few years earlier, and New College, Oxford, a few years later) that the advent of the distinctly 'heroic' sound of a Willis at the expense of the sweeter, more beguiling 'Old English' sounds of our 18th- and early 19th-century instruments was not to everyone's taste.

However, the Willis sound soon came to prevail in cathedrals up and down the land, with Salisbury, Durham, St Paul's, Truro and Hereford becoming the most renowned. Today, that is still the case. Indeed, it is little short of a miracle that three of these organs survive almost unaltered, and that the other two retain a strong Willis character. Whereas Truro is the least altered, Salisbury has the advantage over it of being considerably larger, and thus far more rich in 'colours'. Hereford shares that richness but lacks the perfect internal balance of Salisbury, as its Swell and Solo are so recessed. Durham became a Harrison and St Paul's a Mander, so in the

view of many, Salisbury is top of the tree. Indeed, Sir John Stainer is on record as saying that it surpassed his Willis at St Paul's, and Sir Frederick Ouseley wrote to the cathedral's organist that 'I honestly believe that you have the finest church organ in the world – certainly the best in England.'

Willis provided the organ with as complete a stop-list as any cathedral organ could reasonably expect to have at that period. The instrument even boasted pneumatic thumb pistons to each manual. All his signature stops were specified; indeed, he somewhat ran out of flute varieties, as there are four lieblich and six harmonic flutes at various pitches. Willis appeared not to be constricted by the lack of space afforded by having to fit the organ in to a single bay on either side of the quire, with as little projection as possible into the side aisles. The only – inevitable – trespass on a further part of the building was his unapologetic parking of the two 32ft stops against the east wall of the north transept, ▶

## Salisbury Cathedral

HENRY WILLIS (1876); HENRY WILLIS & SONS (1934); HARRISON & HARRISON (1978/1993/2020)

### GREAT

1. Double Open Diapason	16
2. Open Diapason no.1	8
3. Open Diapason no.2	8
4. Claribel Flute	8
5. Stopped Diapason	8
6. Principal no.1	4
7. Principal no.2 (1934)	4
8. Flûte Couverte (1934, was Great Piccolo)	4
9. Twelfth	2 <sup>2</sup> / <sub>3</sub>
10. Fifteenth	2
11. Mixture (15.17.19.22)	IV
12. Trombone	16
13. Trumpet	8
14. Clarion	4

### SWELL

15. Contra Gamba	16
16. Open Diapason	8
17. Lieblich Gedackt	8
18. Viola da Gamba	8
19. Vox Angelica	8
20. Octave	4
21. Flûte Harmonique	4
22. Super Octave	2
23. Mixture (15.17.19)	III
24. Hautboy	8
25. Vox Humana	8
26. Contra Fagotto	16
27. Trompette (renamed 1934, was Cornopean)	8
28. Clarion	4
<i>Tremolo</i>	

### CHOIR

29. Lieblich Gedackt	16
30. Open Diapason (1934)	8
31. Flûte Harmonique	8
32. Lieblich Gedackt	8
33. Salicional	8
34. Gemshorn	4
35. Flûte Harmonique	4
36. Lieblich Gedackt	4
37. Nazard (1934)	2 <sup>2</sup> / <sub>3</sub>
38. Flageolet	2
39. Tierce (1934)	1 <sup>3</sup> / <sub>5</sub>
40. Trumpet (1934) <i>Tremolo (1934)</i>	8

### SOLO

(41-47 enclosed)

41. Violoncello (1934)	8
42. 'Cello Célestes (1934)	8
43. Flûte Harmonique	8
44. Flûte Harmonique	4
45. Cor Anglais (was on Choir at 8ft)	16
46. Clarinet (renamed 1934)	8
47. Orchestral Oboe <i>Tremolo (1934)</i>	8
48. Tuba	8
49. Tuba Clarion	4

### PEDAL

50. Double Open Diapason (metal)	32
51. Open Bass (wood)	16
52. Open Diapason no.1 (extension of 50, 1934)	16
53. Open Diapason no.2	16
54. Violone	16
55. Bourdon	16
56. Lieblich Gedackt (from 29, 1934)	16
57. Octave	8
58. Viola (extension of 54, 1934)	8
59. Flute	8
60. Super Octave (2020)	4
61. Octave Flute (1934, was Great 4ft)	4
62. Mixture (12.15.19.22)	IV
63. Contra Posaune (wood)	32
64. Ophicleide	16
65. Clarion	8

*Usual Willis III couplers.*

*Wind pressures: 2<sup>1</sup>/<sub>2</sub>" to 18<sup>1</sup>/<sub>2</sub>"*

▼ In the restoration, Harrison & Harrison have given the console new electro-pneumatic actions



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▲ Work included (l) restoring ebony caps to the pedal sharps, to the Willis pattern; a central task (r) was releathering many of the reservoirs

◀ with the blowing equipment room on the other side of the wall, outside the building. Such a thing would never be allowed now – but thank heavens it was then, when aspiration and creativity outweighed issues of conservation and the current unwillingness to change the appearance of anything old in our cathedrals.

By 1934 the Willis organ was in need of a major overhaul. Unsurprisingly, Henry Willis III wished to convert the action to electro-pneumatic and install one of the company's up-to-date, Skinner-inspired consoles, bristling with more clever and useful devices than the consoles of any other British firm. The organist at the time, Sir Walter Alcock, was content to go along with this (after all, Willis had been refining and fitting such consoles and actions from the mid-1920s and they had reached a peak of perfection and reliability), but was determined that his wonderful Father Willis reed pipes would remain unaltered. This was quite a challenge, as Henry III was distinctly inclined to gild the lily and 'improve' his grandfather's voicing wherever he could – he boasts as much in the short-lived Willis house journal, *The Rotunda*. It has been believed until very recently that the reeds were indeed left unaltered – but cunning are the ways of reed voicers, and as we will shortly see, they, or voicers at a later date, left their mark, invisible until now.

Willis made several oft-applied tonal changes when it came to rebuilding his grandfather's organs, several of which he carried out here. One was to turn the Great 4ft Flûte Harmonique into a Flûte Couverte (by cutting down the pipes and fitting stoppers), which he varied here by transposing and stoppering the 1876 Great Piccolo, removing the 4ft Flûte Harmonique to the Pedal. Another was to add a second Great 4ft Principal, which here replaced the Piccolo. A third was to add Choir mutations of small scale and delicate tone – a stopped Nazard and open Tierce (as were found in Ernest Skinner's Choir Organs in the USA). A fourth was to add his broad-toned Solo strings and to replace a duplicate Clarinet or Corno di Bassetto (here on the Choir Organ) with 'more useful' stops. The often largely unenclosed Solo organs were enclosed (except for the Tubas), and development of the Pedal took place, often by extending lower-pitched ranks higher and sometimes by borrowing manual doubles. All this can be seen at Salisbury and remains in place today, with but one alteration, to be explained shortly.

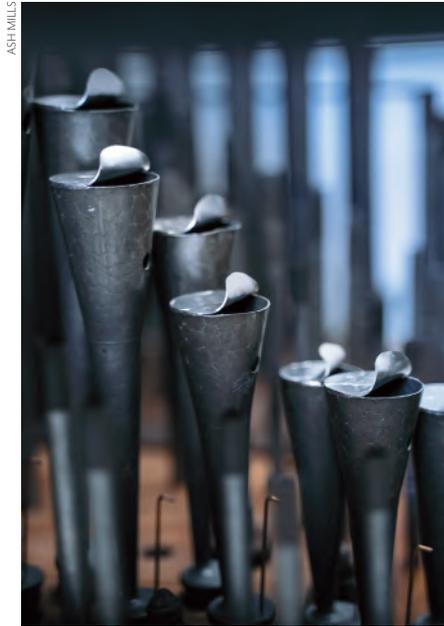
In 1968 Watkins & Watson installed new blowers and a cleaning took place in 1969, with new whiffle-tree swell engines replacing the clever 1934 'Infinite Speed and Gradation' machines (still to be found – hurrah – at Liverpool Cathedral). From 1971-78 Noel

Mander's firm looked after the organ, until a restoration, some releathering, console revisions and an electrical upgrading by Harrison & Harrison in 1978.

And so the organ remained until 2019, by when it became abundantly apparent that further work was required, in particular to the complex and many-pressured wind system, which was in need not only of releathering but also of reorganising, especially on the north side, where its convolutions defied logic – or even analysis. Harrison & Harrison carried out the work during 2019 and 2020, when the following tasks were completed:

- ▶ All pipes cleaned, the original cone tuning for the metal flues being retained.
- ▶ All reservoirs, concussions and swell engines releathered, rationalising the wind system on the north side, with fewer reservoirs and internal wind control valves.
- ▶ New wind trunking where needed, with additional concussions to improve wind stability, particularly on the Solo.
- ▶ Swell shutter whiffle-tree machines replaced with modern electric equivalents.
- ▶ New internal actions to all soundboards, replacing 1934 external action conversions.
- ▶ Various pedal unit chests and front pipe chests – complex and altered 1876/1934 actions replaced with electro-pneumatic actions.

## SALISBURY CATHEDRAL



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▲ (clockwise, from top left) Swell Hautboy pipes; pipe repairs under way; typical Father Willis 'tulip' stoppers behind the upperwork

- ▶ Manual keyboards restored with gaps between sharps slightly increased.
- ▶ Pedalboard restored, the previously plain sharps capped with ebony in the Willis manner.
- ▶ New key and pedal contacts fitted.
- ▶ New solid-state coupler system.
- ▶ Improved safe access to several areas, Solo and Tubas in particular.

In addition, one modest tonal weakness was addressed. In 1934, in an attempt to

provide more of a Pedal chorus, Henry Willis III added two octaves of treble pipes to the Pedal Violone, making them available as an 8ft Viola (which proved very useful) and a 4ft Octave Viola (which proved of very little use). The Octave Viola was very much softer than the powerful 8ft Octave and Mixture IV, so failed to act as a bridge between them, or to 'lead up' to adding the Mixture. In the recent work, the Octave Viola extension has been replaced by an independent Father Willis-type 4ft Super Octave, placed on a new

slider soundboard which also contains the Bourdon, Flute, Octave Flute (previously on a 1934 unit chest) and Mixture. This replaces a less satisfactory slider soundboard and is situated on the north side where the original Father Willis console stood.

When cleaning the reeds, it was discovered – to the considerable surprise of Harrison's voicers – that at some stage a voicer or tuner had altered the Great 16.8.4 reeds and Tubas by introducing felt within the resonators – cunningly gluing it out of sight! This was removed and the pipes immediately regained their original freshness. In 1934 Willis had revoiced the Choir Cor Anglais for the Solo (where the pressure was higher), transposing it to 16ft pitch and doubtless trying to modify it towards the beautiful 1920s Ernest Skinner pattern of Cor Anglais which, among many other Skinner stops such as the Waldhorn, French Horn and Erzähler (called by Willis 'Sylvestrina'), had inspired Henry III on his 1920s visits to the USA. The result was a very uneven stop, during its compass changing tone several times; neither did the pipes remain in tune. With the voicing now corrected back to what one would expect of a Father Willis stop, in the words of Duncan Mathews (the H&H production director responsible for the restoration), it 'now sounds like one stop.'

The organ came back into full use at the start of Lent this year. It can now look forward to a further extended period of glorious service, retaining its golden reputation at the pinnacle of Father Willis's ever-inspiring cathedral organs. ■

*Due to the coronavirus, Salisbury Cathedral's new Organ Festival to mark the restoration of the Willis/Harrison & Harrison organ will be launched on 13 May with a digital recital given by the home team; the originally planned concert, of David Briggs performing his transcription of Mahler's Symphony no.2, will now take place on 23 September. The monthly Sunday Organ Music will also go digital, with mini recitals on 26 April (Sam Bristow), 17 May (John Challenger), and 7 June (David Halls). Further details can be found at [bit.ly/39g09H7](http://bit.ly/39g09H7).*

*Paul Hale has been writing about the organ and acting as a consultant (including at Salisbury) since the 1970s, while being a cathedral organist and recitalist.*