



A tale of three organs

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The Cambridge Camden Society, which sprung into being in the late 1830s and 40s, as did its Newmanesque counterpart the Oxford Movement, had an influence on church building and restoration whose significance cannot be overstated. Its tenets were that Perpendicular Gothic architecture was the style for churches, that churches should be Trinitarian in having a nave and two aisles, that chancels and rood screens should be reintroduced, that choirs should be surpliced and moved to the east end together with an accompanying organ, that the sanctuary should be raised so that the altar becomes once more the focal point of the church (remember that in the

18th century the three-decker pulpit was the dominant feature), and that ornament and "the beauty of holiness" should be rediscovered.

Consequently, in the great church rebuilding work of the second half of the nineteenth century, when virtually every church in the land was rebuilt or replaced, there proved to be an enormous amount of work for organbuilders, most of whom came to specialise in building instruments in chambers off the chancel. Just as organs were becoming established for accompanying chancel choirs, a spanner was thrown in the works by the rise of congregational hymnody, sparked by the publication in

1861 of the first commercially available complete collection of hymns: *Hymns Ancient and Modern*.

Congregational hymn singing took root and flourished over the next few decades, as did the establishment of a choir of boys, girls, ladies and men – in any combination – in most Anglican churches. These large, often strong-voiced choirs proved adept at leading congregational singing and as time went on found new subtleties in the singing of cathedralesque music, aided by the pioneering work of Sir Sydney Nicholson, founder in 1927 of The School of English Church Music which later became the Royal School of Church Music.

Since the heyday of parish church choirs, which peaked around the time of the Second World War, numbers in choirs and numbers of choirs have drastically reduced, so much so that the church organ today effectively bears the entire burden of accompanying the now essentially congregational services of the Church of England with little help from the choir. Even in churches where choirs still exist, the rise of congregational singing in the nave demands that the organ has the predominant role – a role for which instruments enclosed in chancel chambers are often ill-suited. Thus it is in many churches that when consideration of a new organ or the redesigning of an old organ is undertaken, some sort of additional provision for “getting the organ tone down the nave” is striven for.

By happy coincidence, three organs completed in the Autumn of 2011 have each aspired to overcome this conundrum, and each has accomplished it in a different manner. The instruments are at St Paul’s, Bedford (by Charles James), at St Oswald’s, Ashbourne (by Henry Groves & Son), and at St John’s, Boxmoor (by Nicholson’s).

The three methods employed are those most regularly found elsewhere, including in cathedrals:

- 1 add a Diapason chorus facing down the nave (Ashbourne),
- 2 place a dominant solo reed facing down the nave (Boxmoor), or
- 3 place the Great in a position where it speaks directly down the nave (Bedford).

All three organs have also fitted swell shutters to the side of the swell box which faces down the nave, each with a different method of control. At Bedford both shutter fronts are always in action, controlled by the one swell pedal. At Ashbourne each of the two fronts has its own electric “swell engine”, controlled by a single swell pedal, but with the shutters selected by three buttons: Nave/Chancel/Nave & Chancel. At Boxmoor, each shutter front again has its own swell engine but here each front also has its own swell pedal. To understand the reasoning behind the varying approaches it is, of course, necessary to know something about the circumstance of each church and its organ.

Bedford in many ways is the most dramatic example. The church moved its

choir and organ to the chancel in the 1860s and eventually commissioned Norman & Beard of Norwich to build in 1900 a new three-manual organ in a two-bayed chamber at “first floor” level on the north side of the chancel. The organ had tubular pneumatic action, Roosevelt soundboards and a semi-detached console. Its synoptic stop list was:

Great 16.8.8.8.8.8.4.4.2²/3.2.III.8
 Swell 16.8.8.8.8.8.8.4.4.2.III.16.8.8.8
 Choir 16.8.8.8.8.8.8.4.2.8.8
 (all enclosed)
 Pedal 16.16.16.10²/3.8.16.8

Just as war was about to break out in 1939, Hill, Norman & Beard completed a rebuilding operation, using electro-pneumatic action to the Roosevelt soundboards with a new console on the opposite side of the chancel. At last the organist could hear his choir and organ in balance. Tonal changes were minimal: the Pedal gained 8/4 Diapasons, on the Choir a Nazard and Piccolo replaced two of the 8fts, a Swell Clarion replaced the Vox Humana, and a Great 4ft Octave replaced the 8ft Hohl Flute. In 1984 a rather extraordinary rebuild left the organ’s ailing soundboards and wind system unrestored, but added numerous unit chests wherever space could be found to create the following specification:

Great 16.8.8.8.5¹/3.4.4.3¹/5.2²/3.
 2.IV.V.8
 Swell 16.8.8.8.8.8.4.4.2.II.III.16.8.
 8.8.4
 Positive 8.8.4.4.2²/3.2.1³/5.1¹/3.1¹/7.8/9.
 V.16.8.16.8.4 (unenclosed)
 Pedal 32.16.16.16.16.16.10²/3.8.8.
 6³/5.5¹/3.4⁴/7.4.4.2.16.16.8.4

Alas, the organ soon became mechanically unreliable, with the wind system and Roosevelt soundboards failing. Its tone was totally bottled-up, the Swell particularly so, and little reached down the nave. The current organist, Ian Runnells, blessed with the most musical of vicars, Fr John Pedlar, determined to start afresh, using the N&B 1900 pipework. This has come to pass, the organ-builder Iain Harvey masterminding the scheme, using P&S to build the new frame, soundboards, actions, wind system and swell box. Ian Tracey opened the instrument on 22 October 2011. The stop list is listed on the right.

At Ashbourne, in Derbyshire, in an almost cathedral-sized church of great

St Paul’s, Bedford, specification

GREAT ORGAN	
Double Diapason	16
Open Diapason I	8
Open Diapason II	8
Claribel Flute	8
Principal	4
Harmonic Flute	4
Twelfth	2 ² /3
Fifteenth	2
Mixture	19.22.26.29
Trumpet	8

SWELL ORGAN	
Lieblich Bourdon	16
Open Diapason	8
Rohr Flute	8
Salicional	8
Vox Angelica (TC)	8
Principal	4
Suabe Flute	4
Fifteenth	2
Mixture	17.19.22
Oboe	8
Tremulant	
Double Trumpet	16
Horn	8
Clarion	4

CHOIR ORGAN (UNENCLOSED)	
Open Diapason	8
Stopped Diapason	8
Dulciana	8
Principal	4
Lieblich Flute	4
Nazard	2 ² /3
Gemshorn	2
Tierce	1 ³ /5
Mixture	15.19.22
Clarinet	8
Tremulant	
Tuba	8

PEDAL ORGAN (FOUR EXTENDED RANKS)	
Resultant Bass	32
Open Wood	16
Open Diapason	16
Bourdon	16
Lieblich Bourdon (Swell)	16
Principal	8
Bass Flute	8
Fifteenth	4
Trombone	16
Trumpet	8

beauty and interest, an organ was installed in a similar space to Bedford – “upstairs” in two bays on the south side of the spacious chancel. Built by Hill in 1858, it was augmented by Hill & Son in 1876 and 1882, at which point it was:

Great 16.8.8.8.4.4.2²/3.2.III.8.4
 Swell 16.8.8.8.8.4.2²/3.2.II.8.8
 Choir 8.8.8.4.4.8
 (enclosed in ?1882)
 Pedal 16.16.8.16
 (on a slider soundboard)

Eleven years after electrifying the Bedford organ, with a new console,

Left: St Paul’s, Bedford

St Oswald's, Ashbourne, specification

GREAT ORGAN

Contra Viola	16
Open Diapason No.1	8
Open Diapason No.2	8
Claribel Flute	8
Gemshorn	8
Principal	4
Nason Flute	4
Twelfth	2 ² / ₃
Fifteenth	2
Mixture	III
Posaune	8
Tromba (from Choir)	8

NAVE GREAT CHORUS

Open Diapason	8
Principal	4
Fifteenth	2
Mixture	IV

SWELL ORGAN

Lieblich Bourdon	16
Open Diapason	8
Rohr Cedeckt	8
Salicional	8
Vox Angelica (TC)	8
Octave	4
Twelfth	2 ² / ₃
Fifteenth	2
Mixture	IV
Tremulant	
Contra Fagotto	16
Horn	8
Trumpet	8
Oboe	8
Clarion	4

CHOIR ORGAN (ENCLOSED)

Stopped Diapason	8
Viole d'Orchestre	8
Wald Flute	4
Nazard	2 ² / ₃
Flageolet	2
Tierce	1 ³ / ₅
Clarinet	8
Tremulant	
Tromba (unenclosed)	8

PEDAL ORGAN

Harmonic Sub Bass	32
Open Wood	16
Violone	16
Contra Viola (from Great)	16
Bourdon	16
Octave Diapason	8
Bass Flute	8
Fifteenth	4
Trombone	16
Contra Fagotto (from Swell)	16
Octave Coupler (with an additional top octave of pipes for all Pedal ranks)	

HN&B carried out similar work at Ashbourne, though employing one of their low level stop-key consoles over which the organist could direct his choir. It ought to be said that the choral tradition at each of these three churches was then and is still wonderfully strong, with full stalls and committed singers of all ages and both genders. HN&B left the Ashbourne instrument thus:

Great 16.8.8.8.8.4.4.4.2²/₃.2.IV.



St Oswald's, Ashbourne

8(Tromba)
Swell 16.8.8.8.8.4.2²/₃.2.IV.16.
8.8.8.4
Choir 8.8.8.8.4.2.16.8(Tromba)
Pedal 32.16.16(Great)
16.8.8.16.16(Swell)

Electrical upgrading and one minor tonal change were carried out by HN&B in 1982. When the organ became due for a thorough refurbishment, the organist and choirmaster, Michael Halls, felt that the situation which had been in place for a number of years of amplifying the organ to enable its fine tone to reach beyond the huge pillars that support the central tower was inadequate and unmusical. Henry Groves & Son Ltd (Jonathan Wallace) proposed adding a nave chorus to be played on the Great manual, with the pipes placed behind the array of gold-painted Diapason basses which HN&B had planted facing down the nave in 1950/1 to hide their new Tromba. A vintage Norman

& Beard slider soundboard with matching pipework and a new Mixture was duly employed for this purpose, complete with its own blower and wind system. The instrument was completely restored, with a new wind system and blower to replace that of 1950, entirely new electrical components and some tonal refinements. The present writer opened the instrument on 30 October 2011 – a week after Bedford's opening.

The situation at St John's Church, Boxmoor (Hemel Hempstead), was in some ways similar but in one major way quite different: the church was far from ancient and far from being as large as those as Ashbourne and Bedford – it was built as recently as 1883. In 1906 the eccentric Captain Lindsay Garrard built an instrument occupying every available nook and cranny on the south side of the chancel, with three case fronts. Here is the synoptic stop-list:

St John's, Boxmoor, specification

GREAT ORGAN

Bourdon	16
Open Diapason	8
Viola	8
Stopped Diapason	8
Principal	4
Open Flute	4
Nazard	2 ² / ₃
Fifteenth	2
Blockflute	2
Tierce	1 ³ / ₅
Full Mixture	15.19.22.26
Corno di Bassetto	8
Tremulant	
Solo Trumpet (facing down south nave aisle)	8

SWELL ORGAN

Open Diapason	8
Chimney Flute	8
Salicional	8
Vox Angelica (TC)	8
Principal	4
Nason Flute	4
Fifteenth	2
Mixture	19.22.26.29
Contra Fagotto	16
Trumpet	8
Hautboy	8
Clarion	4
Solo Trumpet (Great)	8

PEDAL ORGAN

Open Diapason	16
Subbass	16
Bourdon (Great)	16
Principal	8
Bass Flute	8
Octave	4
Trombone	16
Fagotto (Swell)	16
Solo Trumpet (Great)	8

Couplers are as expected, plus the unusual Great to Swell. There are, as mentioned above, two swell pedals, one for the chancel swell shutters, the other for the nave swell shutters.

Great 16.8.8.8.4.4.2²/₃.2
 Great (Solo division) 8.8.4.8.4
 Swell 8.8.4.III.16.8
 Swell (Echo division) 16.8.8.8.4.8
 Choir (part enclosed) 8.8.8.4.4.2.8.8
 Pedal 32.16.16.16.16.8.8.16

Though made of the finest materials, with thick spotted metal, the organ was impossibly crammed in and difficult to maintain – a problem made all the worse because, like Thomas Casson, Garrard invented and included in this organ a whole range of imaginative pneumatic devices. These rendered the console a nightmare for the unaware, and one by one they became unreliable and were disconnected. By the 1960s much of the organ had ceased to function, so a low-budget rebuild and rationalisation was undertaken in 1969–71 by Davies of Northampton, reducing the organ's space and size by more than one half. Influenced by the Baroque revival

and employing the extension principle liberally, the scheme became:

Great 16.8.8.4.2²/₃.2.1³/₅.IV.8
 Swell 8.8.8.4.2²/₃.2.III.16.8.4
 Positive 16.8.4.2²/₃.2.1³/₅.I¹/₃.I.8.8
 Pedal 16.16.8.8.4.2.16.16.8.4

There was a detached stop-knob console at the head of the north nave aisle. Never a reliable or musically satisfactory instrument, the organ was eventually considered by the current St John's organist, Nicholas King – and another musical vicar, the Revd James Reveley, to be unworthy of the musical and liturgical standards and aspirations of the church, a building used by many choral societies, orchestras and chamber groups as a splendid venue for concerts.

A new organ was planned, which needed, once again, to be able to accompany the church's fine choir in the chancel yet reach down the nave for concerts and to lead congregational singing. Nicholson's of

Worcester were chosen as the craftsmen, building the organ in 2010/11; this writer gave the opening recital (which included a splendid *Festival Toccata* commissioned from Malcolm Archer) on 22 November 2011. The tonal scheme can be seen to the left.

Perusing the stop-list the reader will spot all the registers one might expect to find on a three-manual organ – but contained within two manuals. Such economy is no handicap to the player when the organ is fitted with a comprehensive combination system with multiple memories and a Stepper. Furthermore, the (non-coupling) Solo Trumpet, when drawn, causes all the other stops on whichever department it is drawn to be mute on that keyboard but still play through the couplers. Thus one can accompany the Solo Trumpet, when drawn on the Great, by some Great and Swell stops combined on the Swell



St John's, Boxmoor

keyboard through 'Great to Swell' and coupled to Pedal stops in the normal way. This is an enormously useful device in both piece playing and in congregational hymn playing (often drawing the stop on the Swell keyboard instead of a solo Tuba on a third or fourth manual).

How, then, do these three organs succeed in their triple tasks of accompanying a nave congregation in both hymns and also service music for the Eucharist; accompanying a chancel choir in a wide range of choral repertoire; and playing the solo organ repertoire?

Boxmoor has to rely on a vivid solo reed to energise the nave. Nonetheless, as the church is not large and the Great is cantilevered forward in the chancel, a satisfying amount of the Great's tone pervades the church without the organ being too loud in the chancel. The two sets of swell shutters are particularly effective, those facing down the nave (behind the Solo Trumpet) allowing a goodly volume of "Full Swell" to sound directly into the south aisle. I would judge it a success, and an organ which balances perfectly in both chancel and nave.

Ashbourne's organ can never send its tone down the nave because of the size of the building and of the colossal central piers which block its tone. However, the new Nave Great chorus, combined with tone from the west-facing swell shutters, plus, when occasion demands, the heavy pressure solo reed, ensure that the congregation is now well supported. Indeed, rather than standing apart from the main organ (which sounds wonderful in the chancel) the Nave Great Chorus seems to pick up and "grow" the tone so that in the Nave one is simply unaware which section of the Great one is hearing. The rebuild has enabled the main Swell shutter front to open vastly better than it did before (also the Choir box), has refreshed the Mixtures and put back a new Hill-scale Great Posaune, all of which has in any case hugely improved the tone, colour and projection of the organ.

Bedford's Swell has had a similar transformation, indeed an even more dramatic one, the Full Swell being a blazing experience in the chancel. The new heavy pressure Tuba (placed at the rear of the Great) also speaks west. Behind it, the west-facing swell shutters make less difference than one might expect, though they still help

this magnificent Swell in its attempt to blend with the full-toned and bright Great chorus, now set in pole position facing down the north side of the wide nave. This Great packs a considerable punch in the nave and of the three organs is much the most dominant nave department. This does, however, come at a price, as the remainder of the organ is put somewhat in the shade, even the Pedal and the hugely powerful Swell reeds. In the chancel this is fine, as the large and well-conceived Choir Organ acts as a perfect Great for choral accompaniment, but in the nave, for recital use, the Swell does sound rather more distant than one would hope, and the Choir (furthest away) is really a delightful echo division. The project has produced a new organ based on the 1900 Norman & Beard pipework, built, (as are all three instruments) to the highest standards, employing the most intelligent and effective layout that the chamber would allow; thus despite any remaining balance issues it must be judged as successful an outcome as could possibly be contrived, serving the choir and congregation of the church to great effect. If we had more space I would give more details of this enterprising project by Iain Harvey of Charles James Organs; as we do not, I will direct you instead to his company's informative website www.charlesjamesorgans.co.uk.

A final word should be said about adding a set of shutters to the side of a swell box. It is far from being a universal panacea, the reason being that if the soundboard is planted in C and C-sharp sides, there are likely to be 8ft-long bass pipes on either side, standing in front of any shutters which may be inserted later and blocking tonal egress through them. If the Swell has its basses in the centre (the typical Hill pattern, though not at Ashbourne), then shutters on one side will favour the pipework on that side as basses in the middle will block the tone of the other half of the pipework. Side shutters work best when the soundboard is chromatic (as in Binns's work) and the shutters are placed at the treble end, or when all the basses are (or can be removed to) the back of the box, leaving nothing longer than 4ft at the side.

These three churches deserve warm congratulations for grasping a tricky and costly nettle, each of them succeeding in creating a fine, long-lasting musical instrument of great integrity and colour. Let them be an inspiration to others; such things are possible, even in these cash-strapped times.

Consultants for the churches were Ian Bell (Bedford) and Paul Hale (Ashbourne and Boxmoor).

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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 Association of Independent Organ Advisers and has designed new and restored organs for cathedrals, churches, concert halls and universities throughout the UK. He is a diploma examiner for the RCO, Chairman of the RSCM in his area, and has been awarded honorary fellowships by the GCM and the RSCM for his contribution to church music. More information is available at www.PaulHale.org