A Mighty Midget in Mansfield Woodhouse

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You may enjoy, as I do, reading the bi-monthly magazine *Church Building*, which features articles about restored, re-ordered or completely new churches. It is clear that there is marvellous work going on all over the UK. However, search the plans of these churches for the siting of a pipe organ and more often than not all you will see is a kitchen-table-sized rectangle labelled 'organ'. No pipes, and scarcely even room for a player – the digital option is depressingly the order of the day especially in re-orderings. This article is the story of an unusual method of ensuring that a typical village church kept its pipes despite minimal space being available in a re-ordered building.

St Edmund, King and Martyr, enjoys a smattering of churches dedicated to his name. One such is at Mansfield Woodhouse, Nottinghamshire. Although this church is not mentioned in the *Domesday Book* of 1086 it is possible that a wooden church existed at Mansfield Woodhouse in the 11th century. Following a disastrous fire in 1304, a grant of Sherwood Forest timber from King Edward I allowed Woodhouse village and the church to be rebuilt. Between 1804 and 1810, the nave and aisles were, virtually replaced; further restorations took place in 1850 and 1878. Simple in plan, with a double-aisled nave and a chapel on the south side of the chancel, St Edmund's proclaims its presence with a sturdy west end tower and short, stout spire. By the 1980s, the church had suffered mining

St Edmund, Mansfield Woodhouse

subsidence; it was sympathetically refurbished between 1986 and 1988.

A high point of the 1980s restoration was the installation of a Henry Willis II organ originally built in the early 1900s for St Stephen's Church, New Hutton, near Kendal, Cumbria, and purchased from there on the imaginative advice of David Butterworth. It was renovated by David Jones of Cousans Organs and installed in St Edmund's Church in 1989. Placed at the head of the north aisle in its compact oak case, speaking south across the church, the organ's ringing Willis tone made a fine sound, augmented by a singularly bright Mixture added by Cousans.

With surprisingly heavy tracker action to the manuals, and the pedals originally being pneumatic (rendered electro-pneumatic by Cousans), the organ had a rather unexpected specification and was totally enclosed, excepting the Great Open and the Pedal Bourdon.

After a few years, woodworm found its way into the organ with a vengeance, causing major timbers and the blower box to need replacement. In the early 2000s the church decided to re-order and felt

St Edmund's specification

GREAT	
Open Diapason	8
Hohl Flute	8
Principal	4
Fifteenth	2
Mixture	II–III

SWELL	
Lieblich Gedackt	8
Echo Gamba (grooved)	8
Voix Celeste (T.C.)	8
Harmonic Flute	4
Cornopean	8

PEDAL	
Bourdon	16
Flute (ext.)	8
Swell to Great	
Swell to Pedal	
Great to Pedal	

St Edmund, Mansfield Woodhouse old organ

that the organ was simply in the way where it was, in addition to which it blocked the easterly window of the north aisle and was musically unbalanced in tonal appointment. The Willis was closely inspected and found not only to be rife with woodworm (even in the soundboards), but that there was also several ranks of pipes which were not of Willis's make.

Thoughts inevitably turned to the replacement of the organ by a space-saving digital organ. However, Henry Groves & Son (Jonathan Wallace) of Nottingham came up with an equally radical but musically and visually more acceptable concept.

Groves argued that the space at the head of the north aisle, between the north east window and the east wall of the aisle, was deep enough and wide enough (given the height) to construct a new organ based on the old pipework and case, using direct electric action (air-damped vertical pallet-magnets) so that new windchests could be designed to fit the space. In fact the space was slightly augmented by an opening in the wall which led to a previous organ chamber on the north side of the chancel.

The original organ (above) was 10ft wide, 8ft deep and 11ft high. For the remade instrument there was 4ft depth for the Swell and Pedal Bourdon, a tiny 2ft 9ins depth for the Great, a total width of 11ft, the height being as before. The new organ thus had to occupy much the same height and width but less than half the depth – a tall order.

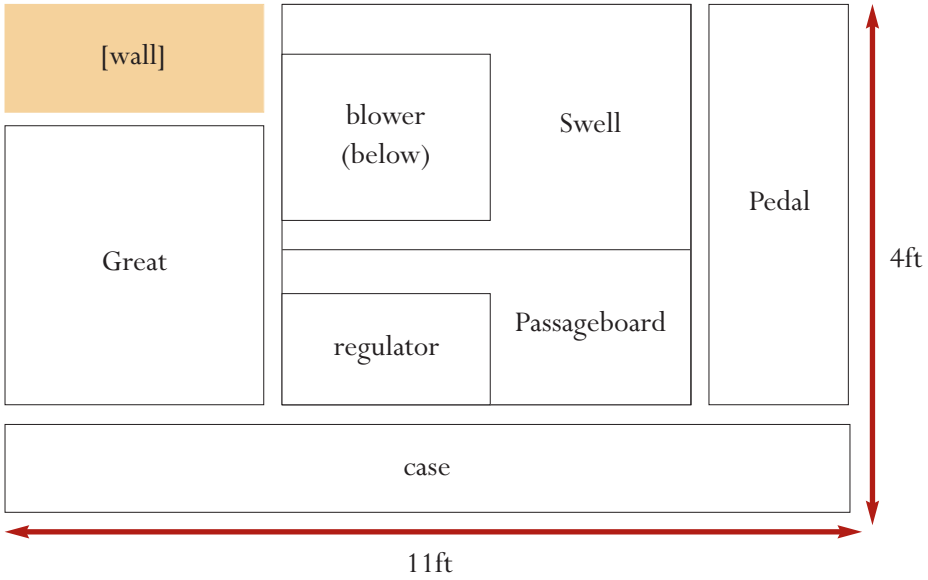
A detached console was requested which immediately made life easier as access to the organ could be gained from the front, below the impost. However, with such a tiny space, there was effectively no room for a wind system and access to actions would be extremely difficult. Groves came up with the idea of adopting the sort of principles employed by Austin in the USA – that of making walk-in wind-chests. How did this save space? Well it meant that the whole of the lower level of the organ could be inside the wind-chests – blower, electrical system and all – with the wind regulated by one sprung regulator mounted on the front panel and thus accessible from outside.

This is therefore what was built. It is a most uncanny experience entering the wind chest, shutting the door and feeling the slight pressure of wind on one's ear-drums once the blower is on. It means that everything is accessible from the inside – all magnets can be seen and adjusted with the organ playing, and there are, of course, no face-boards to remove. One walks (crawls) from one unit (Pedal, Great, Swell) to another, all of which are interconnected and thus part of a single wind system. The tremulant works by 'dumping' wind into the former organ chamber – perfectly silently and most effectively. The wind is steady but not 'dead', and pipe speech is set by

St Edmund's revised specification

GREAT		SWELL		PEDAL	
Open Diapason (A)	8	Lieblich Gedackt (C)	8	Bourdon (B)	16
Hohl Flute (B)	8	Echo Gamba (grooved)	8	Principal (A)	8
Lieblich Gedackt (C)	8	Voix Celeste	8	Bass Flute (B)	8
Principal	4	Gemshorn (E)	4	Fifteenth (A)	4
Open Flute (B)	4	Nazard (C)	2⅔	Swell to Pedal	
Fifteenth	2	Fifteenth (E)	2	Great to Pedal	
Mixture 19.22	II	Piccolo (C)	2	Gt & Pedal Combs	
Cornopean (D)	8	Cornopean (D)	8	Melodic Pedal (piston)	
Swell Sub Octave to Great		Swell Octave		Midi in/out/through	
Swell to Great		Tremulant (to whole organ)		Recording facility	

6 pistons to each department and six general pistons, setter and general cancel
reversible thumb and toe pistons to Gt to Ped and Sw to Gt
standard capture system for divisional and general pistons, with 12 memory levels



Internal layout of new instrument (not to scale)

adjusting the vertical pallet magnets. Thus the organ avoids both the unpleasant attack and release of many direct-electric actions and also the curiously lazy speech of the Austin 'Universal Wind Chest'.

This is the layout of this compact instrument: Great module 4ft wide x 2ft 9ins deep; Pedal module 2ft wide x 4ft deep; Swell module 5ft wide x 4ft deep including passage board, in which is a trapdoor for the tuner to ascend. Total width of organ is 11ft. All modules and windchests are made of medium density fibreboard (MDF).

From the stop list you will see that a limited amount of unification has been used, partially to save space, though mainly to enhance the tonal resources of a similar number of pipes to those the organ had before. The Willis had 668 pipes; the Groves rebuild – standing in much less space – has 674. The only pipes not re-used were portions of the Harmonic Flute and the treble of the Bass Flute. The added rank is the Swell Gemshorn/Fifteenth; the other new pipes are the trebles of the Gedackt/Piccolo unit.

The organ now peals down the church, filling it with sound; one feels that the Great upperwork is rejoicing in being liberated from its ignominious century inside a swell box.

The case fits the space well, having been extended minimally either side by using materials from the original case side 'returns'. The original console aperture in the front has been filled by the back panel, the new compact console being mobile. The front pipes – oxidised zinc and rather dull – have been sprayed gold to good effect against the oak of the case. A visual compromise is that the swell-box protrudes somewhat above the case, though finished in white it is not too obtrusive against a wall of the same colour.

This is an ingenious and attractive solution to a tricky problem. The central point to its success is the use of all-enclosing wind-chests so that most parts, including the wind system and tranmission, are contained within the very heart of the instrument. Who knows, perhaps this not so new idea is ready for a more general return?

St Edmund, Mansfield Woodhouse new organ