Music for the Mayor

The Lord Mayor's Chapel, Bristol

Paul Hale

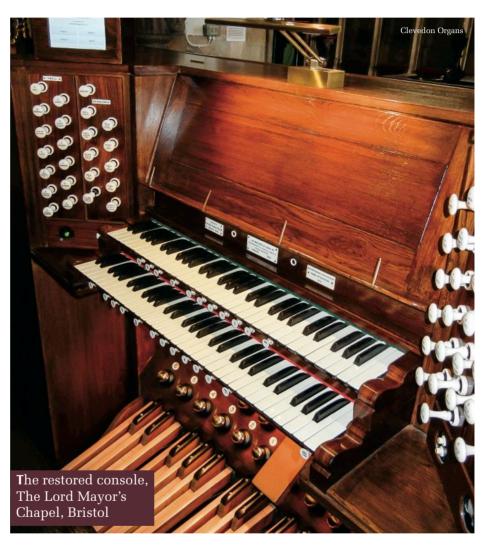
Clevedon Organs has recently reconstructed the well-known organ in the Lord Mayor's Chapel, Bristol. Technically they have achieved a "first" in a British organ, as will be seen below.

Before that, Anthony Hall (of Clevedon Organs) gives some background to the project:

The Lord Mayor's Chapel, Bristol, formerly the Hospital of St Mark, is the only place of worship in the UK belonging to a Lord Mayor and Commonality and as such is a "civic peculiar". The hospital was founded in 1220 by Maurice Berkeley de Gaunt to look after the sick, feed 100 poor people daily and educate children.

For 300 years it fulfilled these functions when, in 1539, it was surrendered to the Commissioners of King Henry VIII, who shortly afterwards sold it to the then Mayor and Corporation of Bristol for their own uses. All the ancillary buildings were soon used for secular purposes. The Chapel alone was retained, and through many vicissitudes has ever since continued to be used for public worship. It is full of items of architectural and historic interest, including splendid stained glass and notable monuments and draws thousands of visitors every year.

In 1888 a major restoration of the fabric of the building was undertaken and the scheme included the provision of a new organ. The instrument was entrusted to W.G. Vowles of Bristol and the organ was built on a new platform under the tower on the south side of the chancel, some eight feet above floor level to allow access to the Tudor Poyntz Chapel



The 1888 specification

GREAT ORGAN		
Double Diapason	16 ft	1888/1830
Open Diapason	8	1888
Horn Diapason	8	1888/1830
Stopped Diapason	8	1888
Dulciana	8	1888
Principal	4	1830
Flute	4	1888
Twelfth	$2^{2}/_{3}$	1830
Fifteenth	2	1830
Trumpet	8	1888

16 ft	1888	
16	1888	
8	1888	
	16	16 1888

SWELL ORGAN Lieblich Bourdon 1888/1830 16 ft 1888/1830 Open Diapason 8 Stopped Diapason 1888 Salicional 1888 Voix Celestes 1888 Gemshorn 1830 Flute 1830 Fifteenth 1830 Mixture Ш 1880 Cornopean 1888 8 Oboe 1888 COUPLERS

Great to Pedal Swell to Pedal

Swell to Great



on the east side of the tower itself. The console remained at floor level and the case filled the upper part of the tower arch, designed and executed by Mr Thomas Sarkey. It is believed ten ranks from a previous instrument, dating from 1830, were incorporated into the scheme. The organ had mechanical key and drawstop actions, with pneumatic action to the pedals. In 1948, J.W. Walker & Sons Ltd re-voiced the reeds, re-composed the Swell Mixture, installed a RCO pedalboard and fitted a balanced Swell pedal. The organ was also cleaned and overhauled at this time. In 1962 the organ was completely rebuilt by Walker in consultation with the then Director of Music, Graham Hooper. The action was electrified, and a detached console was rather oddly positioned on a raised platform located in the north transept on the opposite side of the chancel, facing north. This arrangement opened up access to the Tudor Poyntz Chapel under the tower, but removed the necessary structural support for the upper case facade, which led to subsidence. The tonal scheme was enlarged and modified, including replacing the Swell Mixture, revoicing the reeds with harmonic re-balancing trebles and the choruses to enable more sensitive accompaniment of the Choir seated below.

In 1978, further repairs and tonal revisions were undertaken by Percy Daniel & Co. Ltd. These included substituting the Great Horn Diapason with a two rank Mixture, and replacing the bottom octave of the Great Double Diapason/ Pedal Open Diapason with a new haskelled bass, positioned behind the Swell box. The Pedal Octave Wood was replaced with metal pipes formed from the Horn Diapason. The specification in 1978 can be seen on the right.

The organ gave several decades' worthy service, until in recent years serious problems began materialise, most alarming to and noticeable of which was the subsidence of the casework impost structure which had started to drop away from the base of the casework uprights. Attempts had been made to halt further subsidence by adding temporary (and unsightly) wooden support brackets under each end of the impost, but clearly something more radical had to be considered as a matter of urgency. In addition, the soundboards had dried out and cracked, the wind system was somewhat chaotic and the electrical systems were becoming unreliable. Also, it had come to be felt that the "neo-Baroque" makeovers the organ had suffered were distinctly dated.

When approaching the rebuilding project it became clear that, tonally, the nucleus of the 1888 Vowles organ remained largely intact, despite having

been re-voiced. However, there was an appreciable reluctance to lose some of the 1962 tonal additions and extended manual and pedal compasses. Therefore, the approach of the selected restorers – Clevedon Organs – was to reverse the tonal re-balancing made to the original 1830/1888 pipework. With this in mind, married to the desire to simplify and tidy up the interior of the instrument, the decision was made to design and manufacture new manual soundboards with integral underactions. The opportunity was also taken to incorporate new slider solenoids and Swell engine, thus eliminating the need for a cumbersome high-pressure wind system and saving valuable space in what is a very cramped organ chamber.

which А scheme would respect the Vowles material, yet complement it sympathetically with later/new material, was drawn up by Anthony Hall in consultation with Dr John Marsh, Director of Music. The Great organ remained largelv unchanged. though the 1962 Wald Flute was removed in favour of a beautiful, mellifluous Victorian Stopped Diapason from Clevedon stock. which was deemed more in keeping with the original Vowles tonal concept. The Daniels Mixture was re-composed and extended to three ranks, with lower breaks to promote better integration with the original chorus. In addition, a Seventeenth 13/5ft was added, utilising the narrow-scale pipes of the 1962 Swell Sifflöte.

The Swell specification also remains largely as Vowles 1962 The Walker intended. Mixture was re-composed with lower breaks and complements the Great Mixture in composition. The fluework responded with relief to being returned to its original voicing and the Oboe returned to the soundboard after 52 years on a unit chest. A 16ft Double Trumpet was added on a chest for use on the Swell and as a Pedal reed, which the organ otherwise lacks,

Tł	ne 1978 specifica	tion	
	-	GREAT	ORGAN
1	Double Diapason	16 ft	1830/1888/1978 Daniel 1–32 on chests
2	Open Diapason	8	1888
3	Wald Flute	8	1962 Walker, replaced Stopped Diapason
4	Dulciana	8	1888
5	Principal	4	1830
6	Flute	4	1888
7	Twelfth	$2^{2}/_{3}$	1830
8	Fifteenth	2	1830
9	Mixture 19.22	II	1978, Daniel
10	Trumpet	8	1888
	r		
		SWELL (ORGAN
11	Lieblich Bourdon	16 ft	1888 1–32 on chest
12	Open Diapason	8	1888 1–8 on chest
13	Stopped Diapason	8	1888
14	Salicional	8	1888 1–12 on chest
15	Voix Celestes	8	1888
16	Gemshorn	4	1830
17	Flute	4	1830
18	Fifteenth	2	1830
19	Sifflöte	1	1962, Walker
20	Mixture 22.26.29	III	1962, Walker
21	Contra Fagotto	16	1888, 1–12 Walker 1962, all on chest
22	Cornopean	8	1888
23	Oboe	8	1888, from no.21
		PEDAL (DRGAN
24	Open Wood	16 ft	1888
25	Open Diapason	16	1978, from no.1
26	Bourdon	16	1888
27	Lieblich Bourdon	16	1962, from no.11
28	Octave	8	1962, from no.1
29	Bass Flute	8	1962, from no.26
30	Octave Quint	5 ¹ / ₃	1962, from no.26
31	Octave Flute	4	1962, from no.26
32	Mixture 19.22	II	1962, Walker
33	Fagotto	16	1962, from no.21
	-		

there being no further space.

The Pedal division presented real challenge owing to the narrow, deep chamber. The Pedal has always been buried, and due to budget and space limitations had to remain something of a Cinderella department. Nonetheless, the new Double Trumpet at 16/8/4 has added drive and clarity, even if the Pedal as a whole still lacks a certain weight and projection. It is hoped that, eventually, funds will permit an independent Pedal Octave and Fifteenth to be added, there being just enough space at the rear of the chamber.

The new slider soundboards incorporate heavy-duty а lever magnet to open the main soundboard assisted pallets by auxiliary relief pallets to aid repetition, championed by John Norman, the late Andrew Pennells and recently employed by the late Kenneth Tickell Worcester Cathedral. Such at actions are extremely compact

in design, silent in operation and are comparable in speed and repetition to a triple stage electropneumatic underaction.

Anthony Hall explains a clever new transmission mechanism:

The unique feature of this organ lies in the design of a new organ control system. This has been developed over the past two years, working closely with Slovakian hardware/software development companies, INICS and SoftArt, whose background is in satellite communication systems and industrial control systems. Having successfully developed a piston combination system controlled via a touch screen interface for our previous project, Inkberrow Parish Church, we worked with them to develop a multi-system for The Lord Mayor's Chapel organ. The design brief was that the system had to last for at least 30 years, every component being carefully sourced and over-specified to ensure reliability and longevity

and that it must be lightening fast in terms of responsiveness, avoiding issues such as slow scanning rates. The unusual design realised comprises a completely modular system of extremely compact electronic boxes, which are identical in design and can either be configured via address code as an input module, an output module, or main control module, depending on the specific requirement of a particular organ. The boxes also include incredibly compact and powerful drivers for the action magnets and also feature an integral MIDI facility, should it be required. The installation is extremely neat and as one who despises any kind of electronic paraphernalia inside an organ it is not immediately apparent that there is any obvious or cumbersome wiring or large circuit boards or rack mounts upon entering the organ interior. Also developed was a very compact rotary Swell engine, potentiometer controlled, in tandem with equally compact slider solenoid control units, also modular in concept, mounted close to the slider solenoids.

The whole system is controlled via a touch screen interface at the

console, where each parameter is adjustable, including slider solenoid controls, key action dvnamics and swell engine operation, the shutter opening ratio being easily adjustable by tracing ones finger on a graph on the touch screen. The screen also controls the piston system. General including Stepper. Sequencer, Crescendo. and features several user accounts with multiple memory levels, protected by either pin number or swipe tags for instant access.

Of greater significance is the elimination of any data cable between console and organ. For perhaps the first time in British organ building, the organ utilises Wi-Fi transmitters to pass data organ. between console and including the facility to initiate the blower. This offers huge potential for mobile consoles and instances where different sections of the organ are spread around the building. Early indications are that this is extremely responsive and reliable, with minimal transmission delay (an imperceptible 3.5 milliseconds more than a conventional cable *link) and filtering out any possible* interference from external electronic sources. The type of Wi-Fi transmitters and systems employed are highly specialised, utilising an Ethernet platform which cannot be interfered with, or accessed by, external devices, operating on an extremely high frequency within a localised transmission field.

Another unique feature is the remote diagnostics facility, whereby the organ can be connected via the Internet to the Slovakian HQ for analysis should a fault arise. Indeed, it is possible to play the organ through the Internet, although not for one minute would I suggest doing so! Potentially, it is a very simple procedure to change a system box, should a fault arise, with no re-programming involved, merely plugging in the connectors and re-setting a four digit address code, and this can be undertaken in a matter of minutes. These recent developments do present some very interesting possibilities for the future, particularly where detached consoles are employed. We are happy to provide further information to any interested members.

Organist Alastair Johnson writes about the opening recital:

+	LIVER RECITAL	POOL CATHEDRAL LS 2015	
6 APRIL		GANIST TITULAIRE, LIVERPOOL CATHEDRAL)	
4 MAY		RING RECITAL (LIVERPOOL ORGAN DAY) (ORGANIST, LICHFIELD CATHEDRAL)	SATURDAY SUMMER RECITAL SERIES 12.30pm – 1.00pm on
26 MAY		IT RECITAL (DIRECTOR OF MUSIC, LIVERPOOL CATHEDRAL)	Saturdays 25 th July – 12 th September 2015S
20 JUNE	7.30pm ORC	GAN GALA I ENTERTAIN'	Admission by donation, £1
26 DECEMBER		XING DAY HOLIDAY JTY ORGANIST, LIVERPOOL CATHEDRAL)	
17 OCTOBER		H ANNIVERSARY RECITAL GANIST TITULAIRE, LIVERPOOL CATHEDRAL)	

I attended the concert at the Lord Mayor's Chapel and it was an interesting event complete with a few of the "great and good" of the organ world in attendance due to a RCO day running in Bristol. David Saint played BWV 565, Franck no.3, Mendelssohn no.6, Bridge Adagio and the Peeters Suite Modale.

The organ was introduced as being run on Wi-Fi. The Wi-Fi aspect worried me a little but it need not have done, as all sounded as speedy as was required as far as note response was concerned. The registration changes were silent and the Swell pedal action seemed to do all it should without the more lumpy effects of some nonmechanical linkages.

To me the organ sounded like a mid- to late-Victorian instrument

The present specification

that had received a makeover. The stopped and open flutes were all nicely even and the main choruses likewise though with more modern sounding mixtures and probable realigning of the rest to match. The reeds were effective and not likely to cause offence and apart from the usual pedal extensions the only example on the manuals was a 4ft from the Sw 16ft Trumpet. The Great Dulciana and Swell strings were also suitably mild and certainly they had not been beefed up for Vierne et al.

Overall it was nice not to find odd little aspects that the organ builder had forgotten about or alternatively could not rework from older pipework. The voicing/ revoicing was conspicuously even and easy on the ears. The company's work seemed to be rather nicely carried out.

So, will wireless remote-control for mobile consoles catch on and prove reliable? Well, Clevedon are about to install it in the 1966 Grant, Degens & Bradbeer organ at the University of Sussex, on a new mobile console, a restoration/ development project which will feature in a future article.

		GREA	AT ORGAN
1	Double Diapason	16 ft	1830/1888/1978, 1–32 on chests
2	Open Diapason	8	1888, re-intonated
3	Stopped Diapason	8	2014, utilising historic pipework
4	Dulciana	8	1888
5	Principal	4	1830, re-intonated
6	Flute	4	1888
7	Twelfth	$2^{2}/_{3}$	1830, re-intonated
8	Fifteenth	2	1830, re-intonated
9	Seventeenth	$1^{3}/_{5}$	1962/2014, ex Sw Sifflöte transposed
10	Mixture 19.22.26	IIĬ	1978/2014, extended and revised
11	Trumpet	8	1888
		SWE	LL ORGAN
12	Lieblich Bourdon	16 ft	1888, 1–32 on chest
13	Open Diapason	8	1888, 1–8 on chest, re-intonated
14	Stopped Diapason	8	1888
15	Salicional	8	1888, 1–12 on chest
16	Voix Celestes	8	1888
17	Gemshorn	4	1830, re-intonated
18	Flute	4	1830
19	Fifteenth	2	1830, re-intonated
20	Mixture 22.26.29	III	1962/2014, revised
21	Double Trumpet	16	2014, all on chest
22	Cornopean	8	1888
23	Oboe	8	1888, returned to soundboard
24	Clarion	4	2014, from no.21
	Tremulant		
		PEDA	AL ORGAN
25	Gravitas	32 ft	2014, acoustic, from no.28
26	Open Wood	16	1888
27	Open Diapason	16	From no.1
28	Bourdon	16	1888
29	Lieblich Bourdon	16	From no.12
30	Octave	8	From no.1
31	Bass Flute	8	From no.28
32	Fifteenth	4	2014, from no.1
33	Octave Flute	4	From no.28
34	Mixture 19.22	II	1962
35	Double Trumpet	16	2014, from no.21
36	Trumpet	8	2014, from no.21
37	Clarion	4	2014, from no.21
			ESSORIES

Touch screen interface with multiple parameter adjustment

Multi system with remote diagnostics and optional Wi-Fi console control

Paul Hale is Cathedral Organist at Southwell and a professional organ consultant.

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, Chairman of the RSCM in area, and has been h i s



awarded honorary fellowships by GCM and RSCM for his contribution church music. More information is available at W w PaulHale.org