

MERTON COLLEGE OXFORD, UNITED KINGDOM DOBSON PIPE ORGAN BUILDERS LAKE CITY, IOWA

POLITICIANS have a term for it: the “Special Relationship.” First articulated by Winston Churchill in his 1946 “Sinews of Peace” speech at Westminster College in Fulton, Missouri, the phrase describes, with characteristic British understatement, that singular close bond between the United States and Britain. A common heritage and language, uniquely shared political, cultural, and religious values, and mutual support on innumerable levels during both war and peacetime have forged deep links between our two countries. Culture exchange has formed a significant part of this relationship, and not just jazz and the Beatles. Since 1945, dozens of organs by U.K. builders have come to our shores, but only recently have American organbuilders begun to return the favor. The 1976 Phelps at Hexham Abbey was the first postwar example. Last year, Saint George’s in Hanover Square, London, inaugurated a three-manual instrument by Richards, Fowkes & Co. At the time of this writing, Taylor & Boody was delivering an organ to Sidney Sussex College, Cambridge University. St. Bartholomew the Great in London has selected Schoenstein for a new instrument.

Standing among these is our new instrument for the Chapel of Merton College in Oxford. Although we have built organs for spaces in the United States of comparable enclosed volume and acoustical character, our feeling about this particular instrument is overwhelmingly affected by the ancient nature of the college and its chapel, which has been evident to every sense at every turn: enormous skeleton keys for the iron-bound oak doors, medieval stained glass (among the oldest in Oxford), a stone floor around the organ largely composed of memorial slabs dating to



The organ console, seen from the north transept

the 17th century, the 13th-century door of the hall on the way to meals, the quarter-hour clangor of the 17th-century bells, and more. Oxonians may be forgiven an indifference to the ubiquitous antiquity about them, but for an American with any feeling for history, working in such a place inspires awe and reflection.

From the start, our overarching goal has been to create for Merton College an instrument that would be a worthy servant of choral song, with its role as an interpreter of literature a lesser consideration. These goals are not mutually exclusive. However, in many organs of the last half-century, concern for a specific solo literature has driven the design, with the accompaniment of singing too often the poor stepchild. Taking great accompanied choral music as the starting point, our aim has been to provide resources consonant with the human instrument, so that the organist

might accompany with confidence anything from a single voice to a chapel full of vigorous singers.

To become familiar with our work, the Rev. Dr. Simon Jones, Merton’s chaplain, and Benjamin Nicholas, Reed Rubin Organist and Director of Music, traveled to see six of our instruments on the East Coast. In these, they discerned a sympathy for vocal music, a flexibility that accommodated the works of many eras, and a design approach that respected the needs of the performer and honored the architecture. In December 2010, we were delighted to learn that we had been chosen from an international field of builders to design an instrument for one of the oldest colleges in Oxford. The organ would be completed by 2014, the 750th anniversary of Merton’s founding.

Although Merton College Chapel, a Grade-I listed building,

is much admired for an acoustic that flatters choral music and is sought out as a recording venue, it presents challenges for the musical integration of a pipe organ. Construction of the chapel's quire began in 1290 and was completed four years later. The south and north transepts followed, with the tower completed by 1450. Plans to add a proper nave were abandoned early in the 16th century, as the ground on which it would have stood was leased to neighboring Corpus Christi College in 1517. As a result, the chapel floor plan describes a "T," a scheme that was intentionally emulated in the construction of later Oxbridge college chapels. The transepts and crossing, three steps below the quire, are known as the "antechapel" and impress one as a space that is separate, physically and acoustically, from the quire.

In 1484, a pipe organ costing £28 was provided by an unknown maker "in the Rood loft." It was removed in 1567 and not replaced for almost three centuries until, in 1860, William Hill installed a substantial three-manual organ under the antechapel's west window. Removed only nine years later for politico-religious reasons, it was replaced in 1872 with a two-manual Hill. That instrument was rebuilt by Rushworth & Dreaper in 1924 and was in turn replaced in 1968 by a two-manual organ by J.W. Walker and Sons. Like its immediate predecessors, this encased 21-stop mechanical-action instrument also stood before the west window, but on a new, purpose-built gallery.

The establishment of the Merton Choral Foundation in 2008, providing for a choir of 30 voices, of which 18 are scholarships, exposed the tonal limitations of this instrument as well as the difficulties of a placement so distant from those in the quire. Not only is the organ many feet from the nearest worshiper, but Christopher Wren's screen of 1671 also intervenes. The Walker, with its lightweight choruses and thin reeds conceived along neo-classical lines, made little impact in the quire.

As with most of our instruments, the tonal design of Opus 91 combines a classical framework with a 19th-century love of color and variety. The result is an instrument with finely differentiated foundations and a wide range of dynamic possibility. The design is framed around traditional choruses in each division. The Pedal is founded on the Open Diapason 16', while each manual division has a diapason voice at 8' pitch. The Great, in fact, has two, either of which can support the chorus, thanks to a Principal 4' that is scaled in between and is carefully graded to work with either. There are choruses of both diapasons and flutes on the Great: diapasons through mixture, and 16' through tierce; the foundations include both a colorful Chimney Flute and a soaring Harmonic Flute. A Trumpet of moderate scale with tapered shallots is designed for chorus use.

For subtlety of accompaniment, the Swell has a diapason chorus that is darker than the other manuals. The strings, however, are bright, with a celeste that runs to low F (uncommon in British-built organs), paired to a capped metal flute at 8' pitch and, unusual for us, a wooden chimney flute at 4'. The expected chorus reeds are built with parallel shallots, except for the bass of the full-length 16' Double Trumpet, which transitions into closed shallots to make it a more subtle voice when coupled as the Pedal's secondary 16' reed. The Oboe is carefully treated to blend with the fluework while remaining characterful for solo use, a nod to Stanford rather than Franck.

The Choir's chorus is both the softest and brightest, and is founded on the stringy Geigen Diapason, which is paired with the instrument's second celeste (again, to low F). Here the



A view from the bell ringers' gallery in the tower



Facade pipes

stopped metal 8' flute, larger in scale than the Swell's, combines with a 4' flute of open wood. The starchy, narrow-scaled Sesquialtera provides a fine contrast to the Great's wide-scale jeu de tierce, as does the Corno di Bassetto, which is voiced with both body and strength for uses as varied as French Classic literature and psalm accompaniment. The Choir is home to the higher-pressure Major Trumpet,

which is neither a broad Tuba nor narrow Bombarde but simply a full and robust Trumpet that, with greater power, still follows the lead of the other chorus reeds.

Much of the Pedal Open Diapason 16' stands in the facade; voiced with fullness and the encouragement of the fine acoustic, it supports full organ. The Principal and Fifteenth are darker than their brothers in the Great. The Subbass is fully as strong as the Open Diapason; the Bass Flute has pierced stoppers from 4' C to provide a bit of color. The full-length Trombone, which stands behind the organ, and the Trumpet are, like the Pedal diapasons, fuller and darker than their manual counterparts, and firmly underpin the entire instrument. To provide a bass for softer combi-



The organ, seen from the north transept



The center tower and zimbelstern

nations, the Great Bourdon 16' is also playable in the Pedal.

Well-regulated tremulants and effective swell enclosures are important features of all of our instruments. As is our custom, English nomenclature is used with only a few exceptions, not to indicate a particular aesthetic but to orthographically convey the fact that the tonal design is a well-considered and unified whole rather than a kit of varied stylistic bits. All of the pipes in the organ were made in the United States, either by A.R. Schopp's Sons or in our own workshop, with the exception of the 85% tin facade pipes, which were made in Germany by Laukhuff. All are voiced on 80 mm wind pressure, save the Trombone, which is voiced on 110 mm, and the Major Trumpet, which speaks on 200 mm pressure. Wind is supplied from large, weighted single-rise reservoirs.

The pipework of all divisions, including the Major Trumpet, stands on slider and pallet windchests, with the exception of the Pedal Trombone and the 32 notes of the Great Bourdon that are shared with the Pedal; these are placed on tubular-pneumatic windchests having a design borrowed from Ernest Skinner. The agreeable and responsive touch of the entirely mechanical key action comes from careful engineering and painstaking regulation. The combination action has 256 general memory levels and a piston sequencer, as well as 16 discrete levels for divisional pistons

(unusual for us at home, but common in the U.K.). Several other features conforming to English taste have been provided, such as toe pistons for the Swell divisionals (which can be converted to generals) and a knob linking Great and Pedal divisional pistons.

The inspirational medieval architecture of the chapel required a visual design of equal conviction. Small as it was, the Walker organ significantly obscured the west window, with its important 15th-century panels. Fitting an organ of 43 stops where one of 21 had been, however, required a fresh approach. The side towers of the new organ are very tall, and the central portion is significantly lower, leaving the west arch and a good portion of its window visible. Moreover, the Swell walkboard is at a level that permits close inspection of the minutest details of the ancient glass, something not possible in modern times.

Very few true Gothic cases survive in Europe; most were replaced amid the surging prosperity of the baroque era. The richly decorated 19th- and early 20th-century cases supplied for American Gothic revival buildings (St. Thomas Fifth Avenue, for instance, or Washington National Cathedral) generally took on baroque shapes with Gothic-style decoration. Although beautiful in their own way, these cases never seem as true to the Gothic aesthetic as the revival buildings themselves, a cautionary tale for our own work in an actual Gothic building.

Furthermore, our organ case houses an instrument whose size would have been unknown in the Gothic era; no precedent exists to which we might refer. Rather than attempt the academic creation of a purely Gothic case that never could have existed, we have instead designed one in the spirit of our architectural and organbuilding forebears, who acted under the artistic impulses of their own time. As a result, our design is a modern one of eclectic style, carefully detailed to be in sympathy with both the history and the spirit of college and chapel.

Designing so large an item requires intimate knowledge of a building. We spent days studying the chapel: inspecting, mea-

asuring, and photographing everything from the stones in the floor to the timbers of the roof, and much in between. Of course, the organ is hardly the first new element introduced into the medieval chapel. Later furnishings show the march of architectural history, including Wren's classical screen and William Butterfield's 1851 Gothic revival stalls and tile floor. Each addition reflected its own time while respecting the character of the chapel. Our case would need to do likewise.

The overall proportions of the building guided those of the new organ. Moldings in both the stonework and furnishings informed similar details in the case. The tracery of every window in the building has a different geometric design. Geometry being a preoccupation of the Gothic architect and craftsman, we likewise designed the pipe shades so that each took on a unique pattern. The chapel's painted wood ceiling suggested the use of polychromy and gilding in the case. Finally, the baroque monuments and Wren's screen are reflected in the baroque zimbelstern star with its gilded rays behind a rotating star of polished tin. All are assembled in a frankly modern way that nevertheless seems completely at home in the chapel.

The freestanding case is made of quarter-sawn American white oak. The organ's 34,000-pound weight is carried on two steel beams that rest on special footings located between the historic memorial slabs in the floor. To protect the organ from the west window's sun and drafts, the organ incorporates a 1½" wall of veneered medium-density fiberboard behind the walkboards, whose upper profile follows the overall arc of the case roof.

The attached console is placed on a platform several steps above the antechapel floor, with enough room to accommodate several students or assistants, and is surrounded by wrought-iron railings. To facilitate communication between the organist and choir, a dedicated monitor system has two cameras and its own audio system. Mounted in a drawer above the console, the control panel and screens disappear into the case when not needed.

It is not only Merton's historic buildings that have been inspiring. The lively interest in the organ shown both by the previous warden, Dame Jessica Rawson, and the current warden, Sir Martin Taylor, has been matched by their colleagues in the college, including John Gloag, estates bursar; Mike Jeffs, college surveyor; and Douglas Bamber, domestic bursar. Merton's organ advisor Paul Hale has been a valued source of both knowledge and wisdom. Kenneth Tickell and his colleagues, who will be tuning the organ, provided much appreciated assistance during the installation. And finally, the guidance and enthusiasm of Simon Jones and Ben Nicholas throughout the project has been sustaining.

It is always our goal to build instruments for the ages; these individuals and many others have shared this aim and contributed materially to Opus 91's success. May it long inspire worship and song at Merton College!

LYNN A. DOBSON
President and Artistic Director
JOHN A. PANNING
Vice President and Tonal Director

Cover photograph by Colin Dunn, courtesy of the Warden and Fellows of Merton College Oxford; all other photos courtesy of Dobson Pipe Organ Builders

Merton College Oxford, United Kingdom Dobson Pipe Organ Builders

Opus 91

GREAT (II)		CHOIR (I; enclosed)	
16	Bourdon	8	Geigen Diapason
8	Open Diapason I	8	Geigen Celeste FF
8	Open Diapason II	8	Gedeckt
8	Harmonic Flute	4	Gemshorn
8	Chimney Flute	4	Open Flute
4	Principal	2	Doublet
4	Spire Flute		Sesquialtera II (12.17)
2 ² / ₃	Nazard		Mixture III (26.29.33)
2	Fifteenth	8	Corno di Bassetto
2	Recorder		Tremulant
1 ³ / ₅	Tierce	8	Major Trumpet
	Mixture IV (19.22.26.29)		Swell to Choir
8	Trumpet		
	Tremulant	PEDAL	
	Swell to Great	16	Open Diapason
	Choir to Great	16	Subbass
		16	Bourdon (Gt.)
SWELL ORGAN (III, enclosed)		8	Principal
8	Open Diapason	8	Bass Flute
8	Lieblich Gedeckt	4	Fifteenth
8	Salicional	16	Trombone
8	Voix Celeste FF	8	Trumpet
4	Principal		Great to Pedal
4	Nason Flute		Swell to Pedal
2	Fifteenth		Choir to Pedal
	Mixture IV (15.19.22.26)		
16	Double Trumpet		Zimbelstern
8	Trumpet		Generals on Swell Toe Pistons
8	Hautboy		Great and Pedal Pistons Coupled
8	Vox Humana		Mechanical key action
4	Clarion		Electric stop and combination actions
	Tremulant		Compass: 61/32



Installation crew on Merton Chapel tower: (back row) Abe Batten, Donny Hobbs, Dean Zenor, Dean Heim, Bob Savage; (front row) Kent Brown, Jim Streufert

Dobson Pipe Organ Builders

William Ayers	Pat Lowry	John Streufert
Abraham Batten	Arthur Middleton	Jon H. Thieszen
Kent Brown	John Ourensma	Pat Thieszen
Lynn A. Dobson	John A. Panning	Sally J. Winter
Randy Hausman	Kirk P. Russell	Dean C. Zenor
Dean Heim	Robert Savage	
Donny Hobbs	Jim Streufert	