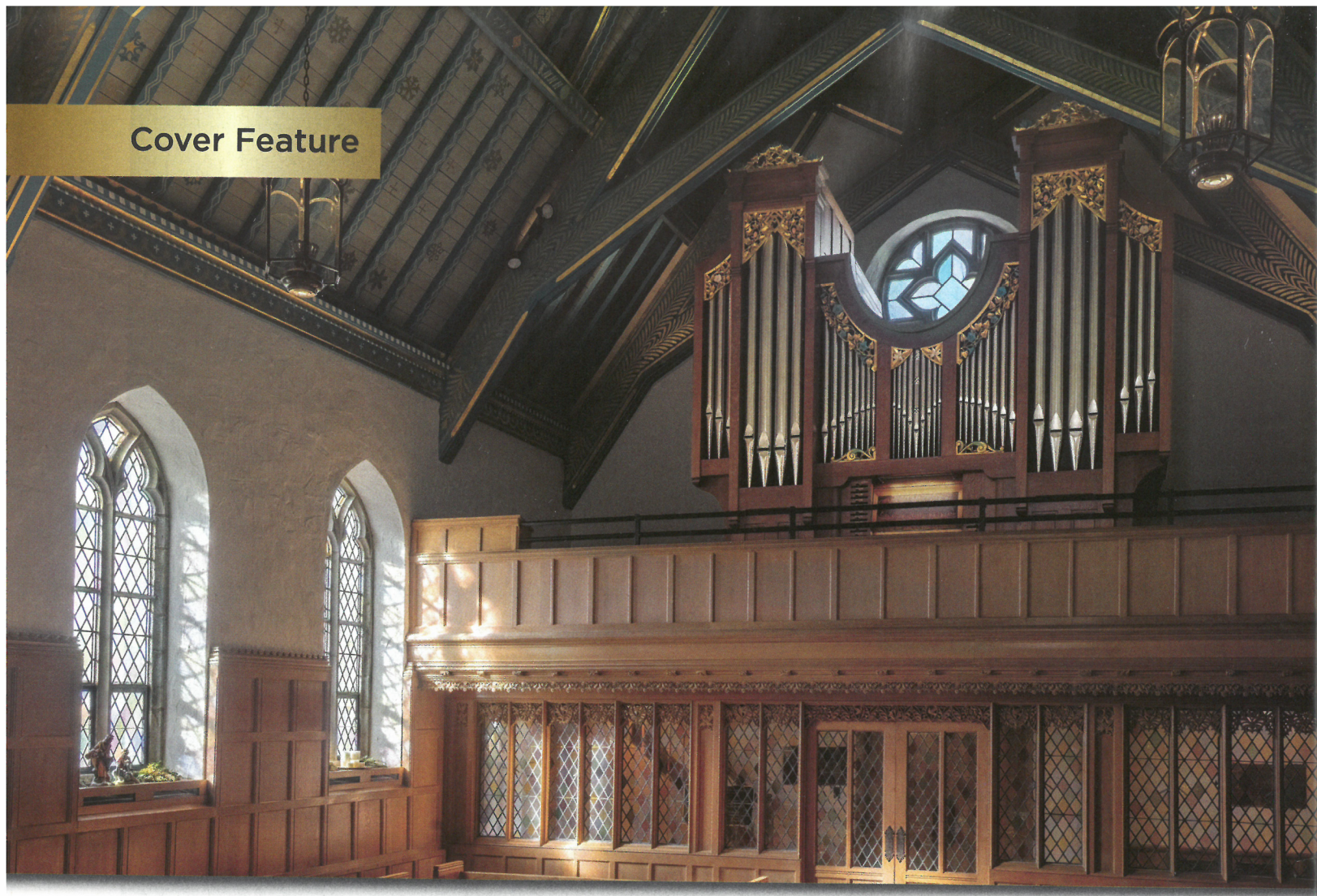


# THE American Organist

JOURNAL OF THE AMERICAN GUILD OF ORGANISTS AND THE ASSOCIATED PIPE ORGAN BUILDERS OF AMERICA

APRIL 2023





## Chapel of the Christ Child Christ Church Christiana Hundred Wilmington, Delaware C.B. Fisk Inc. • Gloucester, Massachusetts

By David C. Pike

Sometimes, timing is everything. As regards Fisk Opus 164 in the Chapel of the Christ Child at Christ Church Christiana Hundred, Wilmington, Delaware, time began in June 2020, or smack-dab in the middle of high COVID-tide. It was then that Fisk president Michael Kraft and I first joined up, via Zoom, with director of music Bruce Barber. As it happened, this was the first of what would be a series of remote but downright inspiring and enjoyable meetings, the purpose of which was to kick around possibilities for a new mechanical-action organ to occupy the rear gallery of the chapel at CCCH. We were well aware that the main church was home to John Brombaugh's Opus 32 (1990), a landmark instrument in late 20th-century American organbuilding. That fact alone significantly added to the attractiveness of placing an organ in the strikingly beautiful Chapel of the Christ Child just across the drive.

Christ Church Christiana Hundred was founded as an Episcopal congregation in 1848, not far from the banks of the Brandywine River. In 1851 the cornerstone was laid for a new church building, and the first service was held in it on May 4, 1856. Nearly a century later, as the congregation swelled with children and youth in the early 1950s, a new Parish House was built, including the Chapel of the Christ Child for children's worship. The chapel was fitted out with pews and choir stalls sized smaller than, but in a style similar to, those in the "big church." Its decorative wood carvings of native flora and fauna, the Scandinavian-style ceiling, and the altarpiece—a hand-carved triptych of the Christ Child—together contribute to the chapel's beautifully detailed and welcoming impression.



The console features natural keys of grenadilla and rosewood sharps topped with bone.

All that was missing was a pipe organ in the rear gallery, included in the original 1950s plan but never realized. However, by the time Bruce contacted us in 2020, a careful restoration and revitalization of the chapel was underway, and plans included the commissioning of a pipe organ, as initially envisioned by the chapel's designers. The hope was to have an instrument installed and playing in time for the church's 175th anniversary in 2023. In July 2021, following a year of conversations and creative imagining with three organbuilders, Christ Church chose C.B. Fisk to design and build the chapel organ.

The Fisk process is, first of all, one of listening carefully to a client's objectives for a new organ and, secondly, one of genuine collaboration. In his characteristically honest and straightforward manner, Bruce Barber issued a challenge to the builders under consideration. Essentially, it was this: Using all of your creative powers, and staying within a limited number of ranks due to both space and budgetary constraints, devise a scheme that will set the organ world on its ear. The place where we ended up wasn't arrived at overnight, but it resulted from the fortuitous coming together of two elements with which we had had recent but unconnected encounters—a particular historical style of organbuilding and a clever system of mechanical stop action.

A few years earlier we were given the opportunity to build an organ, predominantly in late 16th-century northern Italian style, for the Centennial Chapel at Christ Church Cathedral in Cincinnati. In-depth on-site research of various organs by the Antegnati family in and around Milan, Brescia, Mantua, and Bologna informed the tonal design and voicing of Opus 148. Factors such as very low wind pressures (typically

45 mm water column), pipes constructed of hammered tin or lead made to small scales with narrow mouths, appropriately low cut-ups, and modified meantone temperament enabled us to re-create the inimitable sonic impression of the northern Italian organ from that era. In Wilmington, the Chapel of the Christ Child's cozy scale and intimate ambience suggested to us that another opportunity to create an instrument after the early Italian models might be on our doorstep. Bruce was intrigued, and he encouraged us to send him some specifications.

Around this same time, as we were in dialogue with a potential client about a new two-manual organ, limited in scope, for a large church in midtown Manhattan, we became aware of a German system of stop control known as *wechselschleifen*. *Wechsel* is a German noun meaning "change" or "alternation." *Schleifen* is the term for "sliders." Frequently used in practice organs, this technology allows for playing designated ranks of pipes on a single windchest from two different keyboards. To accomplish this, the chests must be built with two keyboards' worth of channels, each slider must be drilled with two complete sets of holes that correspond to the two keyboards' chest table borings, and the stop action must provide for two "on" positions for each slider. It follows that whichever stops use the *wechselschleifen* system cannot be drawn on both keyboards at once. For this, the player must rely on coupling.

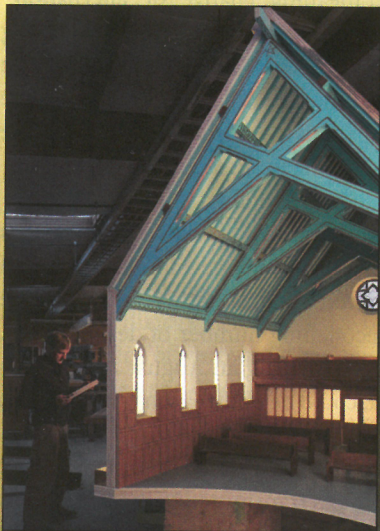
Following our initial conversations with Bruce, we generated a series of one- and two-manual stoplists based on early Italian models. Each was in the neighborhood of twelve independent voices and included Manual to Pedal transmissions. In ensuing conversations, we explored options that would offer more flexibility in terms of repertoire—French Classic in particular. Reconciling number of desired stops, available space, and stated budget became increasingly knotty. It was during an August 2020 Zoom meeting that Bruce wondered if the two 4' voices, Ottava and Flauta, could be available on both manuals as either/or stops. That triggered a flash insight in Michael's mind that enabled us to move forward—*wechselschleifen*. Using this technology, what if we devised an efficient Italian-based two-manual spec in which all stops could be drawn on either manual, with selected voices transmitted to the Pedal? This could be accomplished by means of a single windchest, albeit with 138 channels (!). Moreover, with a bit of R & D, we could devise a double-acting version of the early Italian stop action lever system we had used on Opus 148. At Bruce's encouragement we set ourselves to developing these ideas.



A view inside the lower case showing wedge bellows, coupler frame, and key and stop action mechanisms



Manual stop levers incorporate a *wechschleifen* mechanism, enabling stops to be drawn on either manual.



The organ's visual design was developed within a 1:16 scale model of the chapel. Physical modeling conveys sight lines, light, and volume in a direct and accessible manner.

In the meantime, Bruce arranged for a visit to Christ Church Cathedral in Cincinnati and spent some time with our Centennial Chapel organ. He came away with very positive impressions; this experience not only convinced him of the validity of the early Italian idea but also gave the concept some wings and propelled it forward. So it was that a bit of fortuitous timing, together with a smidge of creative thinking, brought us to the place where we ended up—an imaginative coupling of early Italian tonal elements, including very low wind pressure, with a German-devised system of stop control that offers the player remarkable registrational flexibility.

At the console, the twelve manual stop levers are to the left of the keyboards in a single column. Each is held securely in neutral, or “off,” position by heavy-duty magnets. Pulling a lever to the right places that stop on Manual I; pushing it to the left places it on Manual II. The five Pedal stop levers, which only move in one direction, are to the right of the keyboard. The four couplers, which include a Manual II to Pedal Super, are hookdown pedals, as is the Tremblant doux. All tonal resources are accessed via a sensitive, elegant mechanical key action.

One particular stop, the 16' Bordone, is worthy of special mention. It was initially intended as a Pedal-only voice, but Bruce, reflecting on a late version of the stoplist, wondered if it could serve double duty and also be available on the manuals. His sense that this would increase the organ's efficacy in both service playing and repertoire has proven true over and over again. Its 8' extension in the Pedal has also shown itself to be indispensable. Another comment-worthy stop is the Voce Umana. An undulant with the Principale, it is ubiquitous in late 16th-century Italian organs. During windchest design, I realized that, regarding its compass, we could have our cake and eat it too. Antegnati's Voce Umana typically started at middle D—this is what Frescobaldi and his contemporaries knew. However, an organ in a 21st-century Episcopal chapel, for both service playing and repertoire, would benefit from having its lone undulant start from tenor C, more than an octave lower. Enter *wechschleifen*. The realization was that we could provide for the appropriate 16th-century Italian compass on Manual I but have a tenor C compass on Manual II—simply depending on how the Voce Umana chest slider was drilled.

To accomplish the visual design, in accordance with customary Fisk procedure we built a 1:16 scale model to serve as our principal design development tool. The directives were that the organ's appearance in every respect honor the chapel's diminutive scale and distinctive architectural character, and that the historically important circular window remain visible. Our friends at Christ Church enjoyed in-depth involvement in the case design process. The organ project team, led by Rev. Ruth Beresford, rector, and Bruce Barber, traveled to Gloucester in November 2021

and, under the guidance of Fisk designer Charles Nazarian, spent two days exploring design options in the model. For the duration of the project, the CCCH project team was conscientious and communicative, and they made timely and solid decisions. Fisk sculptor Morgan Faulds Pike, who grew up in Wilmington, designed and executed the gilded, polychromed wood carvings mirroring native Delaware flora.

Opus 164 was delivered to Christ Church on July 10, 2022. Adding yet another level of fortuity to the project, Fisk pipemaker Elsa Nelson, whose father had helped build and voice the Brombaugh in the main church 32 years earlier, took part in the two-week setup. Finish voicing was carried out in August and September. The organ was dedicated over the weekend of November 11–13 with recitals by Nathan Laube, who played music of Storace, Frescobaldi, Rossi, Handel, Muffat, and Vivaldi-Bach.



Morning glory and trillium, a native flower of Delaware, appear in case decorations designed and carved by Morgan Faulds Pike.

**David C. Pike** is executive vice president and tonal director of C.B. Fisk Inc.

Photographs courtesy of C.B. Fisk Inc.

## Chapel of the Christ Child Christ Church Christiana Hundred Wilmington, Delaware

**C.B. Fisk Inc.**

Opus 164

### MANUALS I + II

- 16 Bordone
- 8 Principale
- 4 Ottava
- 2 Quintadecima
- 1½ Decima nona
- 1 Vigesima seconda
- 8 Flutta Camino
- 4 Flauto in Ottava
- 2½ Flauto in XII (c–f<sup>3</sup>)
- 1¾ Flauto in XVII (c–f<sup>3</sup>)
- 8 Voce Umana (Man. I: d<sup>1</sup>–f<sup>3</sup>,  
Man. II: c–f<sup>3</sup>)
- 8 Trombe

### PEDAL

- 16 Bordone
- 8 Principale
- 8 Bordone
- 4 Ottava
- 8 Trombe

### Couplers

- Manual II to Manual I
- Manual I to Pedal
- Manual II to Pedal
- Manual II to Pedal Super

Mechanical key action  
Mechanical stop action, with *wechselschleifen* (“either/or”) on manuals  
Manual key compass: 54 notes, C–f<sup>3</sup>  
Pedal key compass: 30 notes, C–f<sup>1</sup>  
Wind pressure: 45 mm  
Fisk II temperament  
Tremblant doux