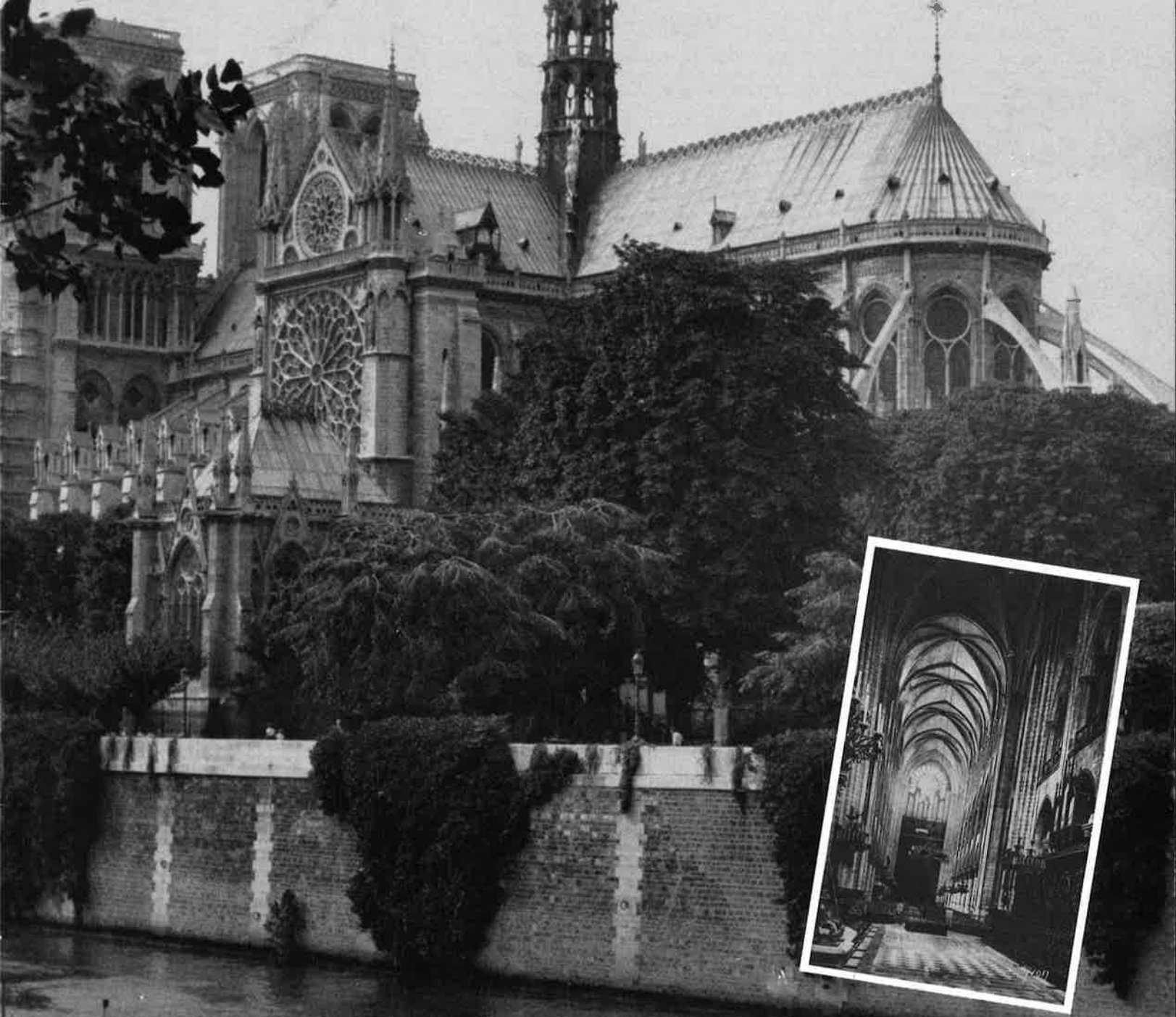
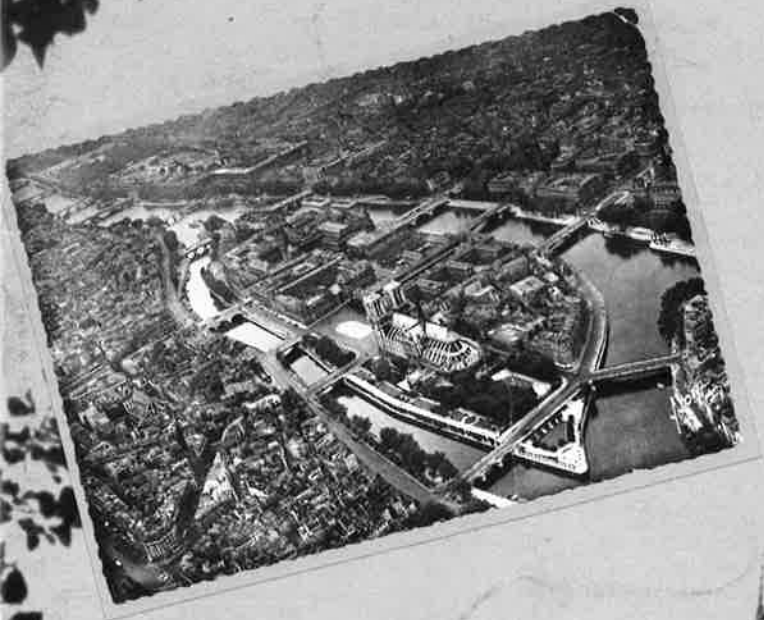


Volume 38, Number 2, 1994

THE TRACKER

JOURNAL OF THE ORGAN HISTORICAL SOCIETY





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THE TRACKER

JOURNAL OF THE ORGAN HISTORICAL SOCIETY

COVER: *The Cathedral of Notre-Dame, Paris, and vintage post card views: the aerial view is postmarked 1949; the interior view is ca. 1915. The history of Notre-Dame's organs and the rebuild of the present one, as well as other articles in this issue, are adapted and reprinted from The Sydney Organ Journal, with thanks to our Australian member Ralph W. Lane, editor and president of the Organ Society of Sydney.*

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GUEST EDITORIAL

Adjustable Hysteresis in Paris

“ADJUSTABLE HYSTERESIS.” Can this term possibly refer to the key action of a pipe organ? In Paris it does. Rather, it did, regarding the Grand Orgue at Notre Dame Cathedral.

Before the promising but vastly complex control systems collapsed in May, the gallery organ in Notre Dame had electric key action which, on a good day, could follow the finger of the organist. That is, the keyboard “contacts” (actually Hall effect transistors that work on a magnetic principle and have no “contacts” at all) could sense with the help of computers the velocity of the organist’s attack and release, and, through yet more computer stuff, transmit that same velocity of attack and release to the windchest pallet through an electromagnet, as if there were a direct mechanical linkage — a tracker. I say “on a good day” because a desire to cease further expenditures on developing the temperamental servo system led authorities to abandon daily use of it. Further, this marvel can (or could) allow the organist to adjust key depth and other keyboard characteristics to suit taste or music. That feature continued in use until the May collapse.

Hook & Hastings provided elegant knurled knobs on keycheeks in the 1870s and '80s for the purpose of conveniently allowing the organist to adjust keydepth of the tracker action. We will refrain from making a point of this and, instead, suggest that great promise resides in the new French departure, so much so as to somewhat redefine the pipe organ. When this new action is mastered, and it will be, the options available to the creative organist and talented organbuilder will be vast.

While the freshly rebuilt organ at Notre Dame was still working last summer, with seemingly all of its innovations intact, I watched while Olivier Latry improvised: he divided the Pedal at an appropriate note, registered each half of the Pedal differently, and played a melody on one half of the Pedal and accompaniment on the other; he played a repeating figuration with the left hand and, on several other manuals, various bits of improv with his right hand which would also occasionally bounce to a keyboard dedicated to provide sostenuto chords, automatically held until the next chord was played. I don't really recall upon which manual he played what, but it doesn't matter as you'll read in Pastór de Lasala's and Ralph Lane's article in this issue — the organist can assign any windchest or chests to any keyboard!

Ralph Lane, who is an OHS member and, as a resident of Australia, is editor of the *Sydney Organ Journal*, the journal of the

Organ Society of Sydney, of which he is President, graciously permits OHS' reprint of the French articles in this issue, updates them, and further permits modifications by *The Tracker's* Editorial Review Board.

Earlier, M. Latry mentioned that a telephone call to the Notre Dame organ would allow him to set his registrations from the telephone keypad. He said he could even play the organ from home if he connected a keyboard to the telephone. (Could a recital played simultaneously in Paris and New York be far behind? Remember, you read it in *The Tracker*, first!) The organ will record his improvisations on a sequencer and then play them back to him as if by an old-fashioned roll player, and it will convert his playing to musical notation on paper, if requested. Three monitor screens adorn the new console: two are located in the stop jams and display the condition of registration, keyboard assignments, Pedal divide compasses, sostenuto arrangements, etc. A third, atop the console, monitors activities in the chancel, seemingly blocks away, by TV in the vast building that receives 30,000-40,000 visitors daily. For the unsighted organist, the console speaks pertinent information. Behind doors in the main case is one of two IBM 486 computers which are only part of the system. On its monitor this day was a game of Solitaire until “showtime” arrived.

All of these technologies have been available for some time, and one or more of them may be had in new organs or retrofitted to old ones, usually through a MIDI interface. But, the electric key action that follows one's finger may be the great innovation, so far as music making is concerned. It is also the most complex, relying heavily on proprietary devices which are scattered throughout the beautifully rebuilt organ, and which failed in May, rendering the organ mute for at least three weeks but probably two months, until a more reliable incarnation of the system can be devised. Otherwise, the work on this much-enlarged organ represents sensitive concern for its core, a landmark Cavallé-Coll, the windchests and huge reservoirs of which have been meticulously restored, as have most of the pipes. There's little missing but the Barker-levers and console.


Consider electric or electropneumatic pull-downs for the notes of a conventional slider windchest. Many new organs are built this way, and many old trackers were similarly electrified: an electromagnet or an electropneumatic device replaces what would have been in 1850 a batch of trackers, squares, and rollerboards. Many, mostly OHS members, rightly lament the passing of those mechanical linkages and the intimate and reliable control they afforded. Barker levers sometimes give the illusion of control because they incorporate the inertia born of the key-action's mass, but Barker levers are really on-off devices, just like modern pull-downs.

The quest for a key action that follows the finger led OHS member Stephen Kowalyshyn of the Fisk firm to adapt E. M. Skinner's Swell engine to create Fisk's "Servopneumatic" action. It has been applied essentially as Barker levers were traditionally used in the U. S. by Hook and other builders, i. e., one machine to an organ, applied to the Great, to which other divisions with conventional (and usually comfortable) tracker action could be coupled and thus played with the Barker lever's aid. On the Continent, windpressures crept ever higher above the 3.5"-4" area where tracker action remains comfortable, so each division of very large organs in France had its own Barker lever; just “large” organs had one Barker lever. (The vast majority of organs, normally sized, almost everywhere used plain 'ole tracker action.) The Fisk firm also uses its Servopneumatic action on the high-pressure division (5-6.5") at the Meyerson in Dallas, and to aid coupling. In retrospect, Kowalyshyn learned that the Willis firm had devised a similar pneumatic device but eventually abandoned it because of its temperamental complexities. Willis said, and the Fisk firm concurs, that the benefit of either device when used as a coupling aid is not

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so much in following the finger, but in affording a somewhat gentler opening of the pallet than accomplished by conventional electromagnets or pneumatic devices. Great debates ensue regarding the benefit, if any, of intimate control of a coupled-up organ. But most everyone agrees its best to avoid forcefully abrupt opening of the pallet as delivered by strong electromagnets. Such pallet opening, even on slider chests, has a negative effect on the speech of both flues and reeds that can be somewhat corrected by alternative voicing techniques to the overall detriment of tone.

The French innovation appears to be developing separately by two parties. Jean Sellot, about whom OHS member Timothy Tikker writes in the February *Diapason*, was working with the folks at Notre Dame to develop his "proportional pull-downs", another term adopted for the follow-the-finger servo technology, and continues development of it. Separately, the Syncordia firm operated by M. Pierre-Yves Asselyn, now of Montreal but then located in France, received a grant to develop such a system for an organ to be constructed by the Spanish builder Gresing in Lyon, France. Syncordia now markets that system to organbuilders as all-electric proportional pull-downs for slider windchests. It appears simple and direct, relying on Hall-effect transistors at the keyboard and proprietary electronics to keep the pull-down magnet in synchronism with the key. The Fisk firm will build the first American organ to use it for All Saints Church, Ashmont, in the Dorchester section of Boston. There, the tracker-action Fisk will be located in the West gallery but will be playable from the console of the electropneumatic organ in the front of the church via the Syncordia system.

It must be a wave, if not *the* wave, of the future. Thus we note it as historians, advise caution, and beg that it remain applicable to organs of the future and not to fine ones of the present and past.

Having viewed the otherworldly opening ceremony of the '92 Winter Olympics in Albertville, the application of "adjustable hysteresis" to organs in Paris seems plausible. But adjustable hysteresis is likely to come to organs before the French Olympic costumes become typical streetwear. Thank you, France, for another civilizing influence. *William T. Van Pelt*

LETTERS

Editor:

I enjoyed reading ["Update," 38:1:19] about our Opus 55 being installed at Marylhurst College near Portland, Oregon. However, there is one slight misstatement. The 1901 Hutchings-Plaisted organ we salvaged for this project did *not* have slider chests. They were electropneumatic chests, but the toeboards were screwed on much like slider toeboards. All three manual chests had exactly the same scale. We salvaged these toeboards and their accompanying rackboards, and built new slider windchests on which to screw them. The similarity of chest scales gave us the freedom to move stops from one division to another. For example, the old Choir Concert Flute, a wood harmonic flute, became the new Grand-Orgue Flûte harmonique. Obviously, keeping pipes in their original racking on their old toeboards provided considerable economy.

George Bozeman, Deerfield, N. H.

Editor:

The last issue of *The Tracker* (38:1) was so filled with eye-popping color photographs that I had to run for my sunglasses in order to finish the magazine. Congratulations on a splendid issue, and thanks for printing my piece on the Woolsey Hall Orchestral Trombone.

I also enjoyed Scot Huntington's convention preview but was distressed to read twice that I was "curator of the Newberry organ in Woolsey Hall." In reality, this is an honor I am grateful to share with Nick Thompson-Allen; the two of us are actually associate Curators of Organs at Yale, as well as co-directors of the A. Thompson-Allen Company in New Haven. Nick and I and our staff of wonderfully eccentric individuals are responsible for the care of all fifteen of the Yale organs, as well as the other instruments which we maintain and restore. Perhaps this is a small point, but I wanted to set the record straight in any event.

Again, keep up the good work; it is heartening to see *The Tracker* become ever more impressive with each issue!

Joseph F. Dzeda, New Haven, Ct.

Barbara Owen Honored

Barbara Owen, a founding member of OHS and its first president, was given the Curt Sachs Award by the American Musical Instrument Society in May, 1994. Ms. Owen was cited for her achievements as an "eminent historian, sensitive restorer, consultant in organ design and preservation, musician and editor, and . . . tireless proponent of pipe organs and organ music." She is further recognized for her "professional leadership and influential advocacy of American organs and organ-builders in particular."



The American Musical Instrument Society promotes the study of the history, design, and use of musical instruments in all cultures and from all periods, publishing a journal and newsletters and holding annual meetings throughout the United States.

NOTES & QUERIES

Matthias Schwab's Relationship with the Silbermanns

I think I have at last solved the vexed question of Matthias Schwab's relationship with the Silbermanns. Here is some well-known data. In *The Tracker* (20:4:5) Kenneth Wayne Hart states that Schwab was born at Freiburg-im-Breisgau and that his wife Solomena Yock was born in Switzerland, citing Lewis A. Leonard's *Greater Cincinnati and its People* (1927).

The newspaper account of the opening of the 1838 Schwab organ in the Old Cathedral in St. Louis states that the bellows were made after the design of "Oleysius Moser." Hart suggests that Schwab might have been a pupil of "Moser." I believe Hart was right about this, and if so everything else becomes clear.

Aloys Mooser was an organbuilder who flourished in the late eighteenth and early nineteenth century. He trained under the sons of Andreas Silbermann. Later Mooser moved to Germany and eventually to Vienna. His *magnum opus* was the four-manual, sixty-one stop instrument at Fribourg Cathedral, Switzerland, built between 1824 and 1834, much of which survives. (See, for example, Bernard Sonnaillon, *King of Instruments*, p. 158.)

Thus, if Schwab was trained by Mooser, there is indeed a Silbermann connection. Furthermore Schwab was sixteen in 1824 and moved to the USA in 1831, so his time with Mooser would have been spent during the period when the Fribourg organ was under construction. It may be that Leonard was wrong in stating that Schwab came from Freiburg-im-Breisgau and that he in fact came from Fribourg, Switzerland. It certainly seems likely that Schwab met his Swiss wife while working on the Fribourg organ.

John L. Speller, St. Louis, Missouri

Research Proposals Invited for Archives Grants

Grants to a maximum of \$1,000 are offered by OHS to fund use of its extensive American Organ Archives housed at Westminster Choir College of Rider University, Princeton, New Jersey. Grants offset the cost of travel to and from the collection and maintenance during the grantee's stay. Proposals will be accepted until December 1, 1994. Awards will be announced by January 30, 1995.

The grants program was established to foster scholarship in the history of American organs, organists, and organbuilding. Grantees must agree to give the Society's journal and monograph series first refusal on any publishable research funded under this program.

The Archives is the largest collection of its type and contains literature and primary material on American organ history, including complete runs of most 19th-century American music periodicals, foreign journals, the business records of numerous organ-builders, drawings, photographs, and other related material.

The committee consists of William Paul Hays (Westminster Choir College), Stephen L. Pinel (Society Archivist), and John Ogasapian (University of Massachusetts at Lowell). Application information may be obtained by writing John Ogasapian, College of Music, 217 Durgin Hall, University of Massachusetts, Lowell, MA 01854.



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OBITUARIES

William Henry Bauer, 71, of Louisville, Kentucky, died March 5 after a long illness. A retired broadcast engineer, Mr. Bauer was an active historian especially in transportation and organbuilding. A member of the OHS Kentuckiana Chapter, he was particularly knowledgeable of the Pilcher's Louisville years. A memorial service was held March 12, assisted by members of the Kentuckiana Chapter OHS. He is survived by his wife, Mary Bill, and a brother.

Nelson E Buechner, 62, of Collingswood, New Jersey, died May 1, 1994. Best known for his work as curator of the world-famous organ at Wanamaker's, Philadelphia, Buechner also served as organist and choirmaster at several churches in the Philadelphia area. His serious interest in the Wanamaker organ began when he was in high school and continued until the end of his life. He became its curator in 1978 and was overseeing the massive restoration that has been set in motion.

David John Falconer, 40, of Los Angeles, was slain in front of a convenience store when he stopped there after choir rehearsal at St. James Episcopal Church and School, Hancock Park, where Falconer was a respected teacher and church musician. Falconer had secured unprecedented grants of more than \$750,000 for the restoration and installation of the Murray Harris organ from St. Paul's Pro-Cathedral (now demolished) given to St. James by the Diocese and awaiting installation.

Madeleine Gaylor of Fitchburg, Massachusetts, died in May after a short illness at age 92. An active music teacher and church musician, she taught at Cushing Academy, Ashburnham, for 25 years in addition to maintaining her own studio and was for more than 40 years organist and music director at First Parish Church. As a long-time member of OHS, she endeared herself during several OHS conventions by presenting flowers to recitalists.

Dr. Samuel John Swartz, of Redlands, California, died February 21, 1994. Swartz was professor of organ and harpsichord and university organist at University of Redlands where he had taught since 1986. His academic degrees were from Stanford University, and he had studied extensively in Europe. His specialty was 19th- and 20th-century organ performance, presenting many lectures, workshops, and recitals in the United States and Europe.

REVIEWS

BOOKS

Williams, Peter. *The Organ in Western Culture, 750-1250*. New York: Cambridge University Press, 1993. ISBN 0-521-41843-7. xvii + 397 pp. Available from OHS Catalog: \$74.95 to non-members; \$65 to members plus \$1.85 S&H.

Peter Williams has turned his formidable intellect and expertise on one of the knottiest problems in medieval musical studies and organ history. As he himself puts the question, "How did we come to have the organ in church, and what difference did it make?" The question is not presented as one to be answered, but rather as starting point for a search through surviving documents for pieces of a puzzle that clearly cannot be completed, and for hypotheses that can be inferred from those documents and fitted, albeit tentatively, into some of the empty spaces in that puzzle.

As may be inferred from the main sections of the books, "Organs, music and architecture," "Organs and documentation," "Organs and written technology," Dr. Williams goes about his quest by assembling the surviving sources, the written documents of the period and the iconography, and then sifting them critically for such substantive information as can be separated from the stylized writing, the allegory, and literary mannerisms of the time.

Now the Middle Ages is one of the best-plowed fields when it comes to manuscripts in general and music collections and writings in particular. Occasionally, individual leaves come to light as bindings for later books, for example; but barring some unexpected discovery (for instance, in some hitherto inaccessible Eastern European library), what survives is pretty well known and inventoried, and relatively available in microfilm copy in most well-stocked research libraries in this hemisphere.

Yet the period remains a frustrating wilderness for organ scholars, one in which trails trickle away into quicksand bogs of ambiguity, symbolism, legend, and speculation. Dr. Williams leads

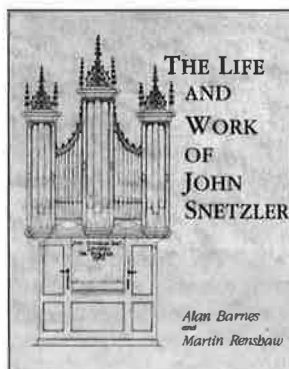
the expedition in his usual meticulous and scholarly way, but following him is not a task for the casual or the faint-hearted. The going is heavy and presumes some working knowledge of the terminology of medieval chant and polyphony, of theorists and manuscript sources. One must be prepared, for instance, to encounter such textual dragons as the multiple and all-too-frequently ambiguous use of the word *organum* to mean a musical instrument in general, an organ in particular, voices in polyphony, or even a piece of clever machinery.

Dr. Williams's speculations are ingenious, yet always carefully disciplined. He manages to extrapolate without interpolating. And if in the end not even his imposing scholarship could provide the answer to the question he posed himself (and again, it could not have been otherwise), he has accomplished no mean feat marshalling and interrogating the surviving literature, in bringing together the source documents and subjecting them to skilled and rigorous criticism and commentary. History may refuse to yield up the answer; but the questions have been framed and asked and the evidence, incomplete as it is, examined and interpreted by a brilliant scholar.

John Ogasapian, University of Mass., Lowell

The Life and Work of John Snetzler, by Alan Barnes and Martin Renshaw. Aldershot, England: Scolar Press; Brookfield, Vermont: Ashgate Pub. Co., 1994. 352pp. ISBN 0-85967-932-2. Available OHS Catalog, \$77.50 to members; \$84.95 to non-members, plus \$1.85 S&H.

This book was originally intended to be a companion to David Wickens' excellent book, *The Musical Instruments of Samuel Green*, but has in the event been produced by a different publisher. This has been fortuitous since Scolar Press has done an excellent job of publishing the book. As well as pictures of organs, there are some attractive prints of 18th-century London and of Snetzler's native Switzerland. The book is expensive but well worth its price.



Dr. Alan Barnes is a musicologist and Martin Renshaw an organ-builder who specializes in historic renovations. Their monograph on Snetzler is lucidly written and painstakingly researched. Like Wickens' book it is an object lesson in what a book about an 18th-century organbuilder should be. The account of Snetzler's life and work naturally begins with a biographical chapter. This traces the career of the organbuilder from his birth in Schaffhausen, Switzerland, where he was the son of a prosperous mill-owner, to his death in the same town in 1785. After an apprenticeship in organbuilding, probably with his cousin Johann Konrad Speisegger, he spent most of his life building organs in England. A striking aspect of the story is how the large contract for a new three-manual organ for St. Margaret's Church, King's Lynn, 1754 – the church where Charles Burney was organist – transformed Snetzler almost overnight from a small-time builder of small high-quality chamber organs to England's leading organbuilder of the 18th century. The biographical section of the book is followed by a chronological account of Snetzler's known instruments, of which the authors have traced at least 113, ranging from tiny bureau organs to large three-manual instruments. Snetzler's *magnum opus* was his 3-39 instrument of 1767-69 at Beverley Minster in Yorkshire. (This organ was illustrated in some Hook & Hastings catalogues where it was rather curiously misnamed Gloucester Minster.) After this there is a thorough analysis of the tonal and mechanical design of Snetzler's organs. The book concludes with a discussion of misattributed and spurious instruments and a number of useful appendices, including extant Snetzler correspondence, legal documents and other goodies. The whole book is quite fascinating and it is almost impossible to find any faults with it.

I say almost, because I should be failing in my duty as a nitpicking reviewer if I failed to find something. I am intrigued, for example, by a reference on page 7 to the work of Hancock in 1720 – was Hancock really at work as early as that, or have Barnes and Renshaw gotten the dates of Crang and Hancock muddled? Also,

David E. Wallace

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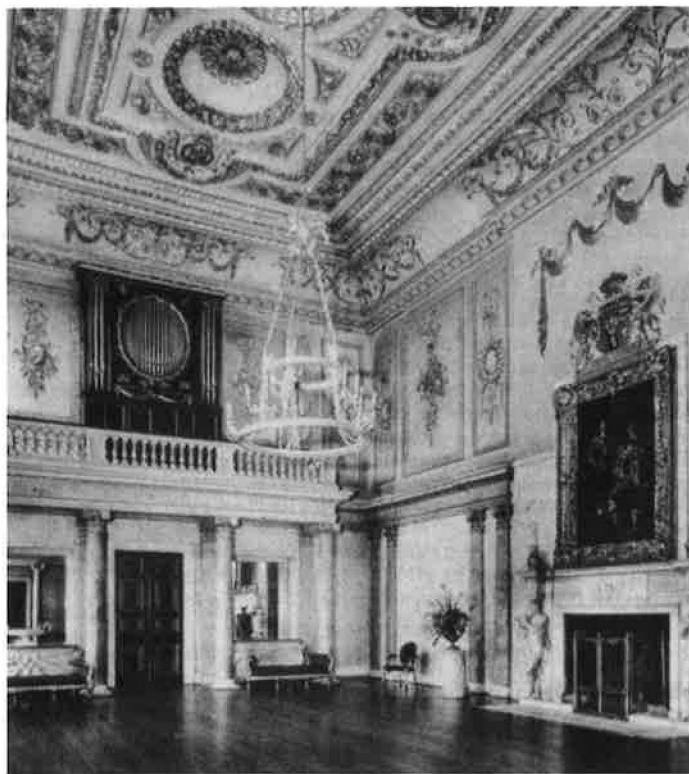
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The 1778 Snetzler at Cobham Hall in Kent, England

on p. 254 doubt is thrown on whether two hundred years ago Snetzler would have been able to calculate wooden pipescales from the circumferential plate widths of corresponding metals pipes. Snetzler would have performed the calculation quite easily with a sliderule — the same way I would have done before I purchased my first computer. Snetzler lived long after Napier had invented logarithms (and for that matter after Newton had invented his “Method of Fluxions,” now called the differential calculus.) Snetzler’s calculations would have been chicken-feed compared with the calculations carried out as a matter of daily routine by artillery and naval officers in the course of plotting trajectories and navigating vessels. Even in the late 17th-century, Bernard Smith and Renatus Harris would have been able to do similar calculations using “Napier’s Bones” — a primitive form of slide-rule consisting of bone or ivory sticks marked with logarithmic scales.

My only other picky criticism is that although Barnes and Renshaw explain extremely ably how Snetzler calculated his pipescales, it would have been good to have more technical information than is included in the book. It would be helpful to have data for the following pipe and voicing parameters for at least one or two representative church and chamber organs: pipescales, mouth widths, toehole diameters, cutups, nicks per inch, languid thicknesses, and pipebody metal thicknesses. I have heard, for example, that Snetzler saw his Fifteenths as being the main brightening agent of his choruses and made them relatively louder than the Sesquialteras, which were designed to add body rather than brilliance. It would be helpful to have the kind of data one needs to test such hypotheses.

I should also be failing in my duty if I failed to come up with a Snetzler organ that Barnes and Renshaw have missed. I had to go a very long way to find it — New Zealand. (Well, I didn’t literally go there, but you know what I mean.) There is an organ believed to be by Snetzler and dated 1769, formerly in Baschurch Parish Church, Shropshire, and now at St. Mark’s Church, Te Aroha, New Zealand (See *The Organ*, #188, pp. 189-90; *BIOS Reporter*, 3:2:9 and 4:1:10.)

But I have really had to scrape the barrel to come up with even these criticisms. I know that many OHS members enjoyed David Wickens’ book on Green, and I can assure all of them (and others) that they will find Barnes and Renshaw on Snetzler equally enjoyable if not more so.

John L. Speller, St. Louis, Missouri

RECORDING

Edward Cuthbert Bairstow, *The Complete Organ Works*. Francis Jackson, organ of York Minster, England. Prelude in C; Evening Song; Scherzo in A-Flat; Nocturne; Prelude on *Vexilla Regis*; Elegy; Toccata-Prelude on *Pange Lingua*; Meditation; Three Short Preludes; Legend; Sonata in E-Flat. Mirabilis CD-MRCD902; cassette MC902. Available from OHS, \$14.98 CD, \$12.00 cassette + \$1.85 S&H.

Bairstow seems to be back in favor nowadays, judging by recent additions to the record catalogs. Having been flattered by two fine CDs of his choral music — one from York Minster, the other from St. Thomas Church, New York — he receives here what is perhaps the ultimate tribute: a traversal of the complete organ works at York by his pupil and successor there, Francis Jackson.

The York organ has undergone certain transformations since Bairstow's days, notably the Walker rebuild in the early 1960s. (The present recording was made before the most recent work.) It is one of the finest instruments of its kind, possessing noble foundations and cohesive ensembles (flue and reed). Its solo voices are justly famous, ranging from the quieter flute and delicate reed stops to the phenomenal Tuba Mirabilis.

One could not hope to find a finer advocate for Bairstow's organ music than Francis Jackson. In addition to his sovereign musicianship and his close connections with Bairstow, Jackson's knowledge of the Minster organ and its acoustic is unique, dating from his early days there as a chorister (beginning in 1929) to his distinguished tenure as Organist and Master of the Choristers (1946-1982).

Over the years, Francis Jackson has made many outstanding recordings at York: great performances of repertoire such as Willan's Introduction, Passacaglia, and Fugue and his own Toccata, Chorale and Fugue (dedicated to Willan) spring readily to mind. Nevertheless, I would suggest that the present CD outdoes them all; for here we not only have a master musician at the height of his powers, but also a recording of equally high technical caliber.

The first track exemplifies the essential traits of Jackson's art: musical and rhythmical integrity of the highest order, allied to a thorough and inventive mastery of the instrument. His use of color is arresting in its variety, yet beautifully subtle: no throwing in the odd flute or clarinet here, there and everywhere! Phrases are shaped with exquisite finesse, and the rubato has a wonderfully natural feel to it. Crescendi and decrescendi are textbook models, as too is the exceptionally sophisticated use of the swell pedal.

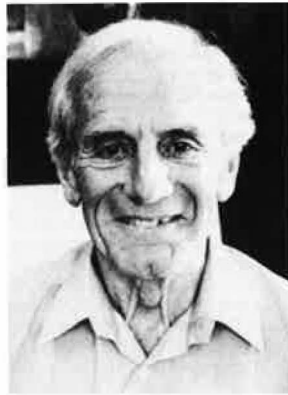
Without detracting from the essential character of the quieter, more ruminative works, Jackson does not allow them to meander, wallow, or stagnate. The playing is wonderfully refined, patrician almost. Yet, when required, there is the right amount of earthiness and swagger, as in the Prelude in C and the splendid Scherzo from the Sonata — as full-bodied as any good pint of real Yorkshire ale.

The recording certainly lives up to producer David Wyld's aim to present a "faithful representation of the actual sound in the building." It is a spectacular success in every way: listen, for example, to the last page or so of the Prelude in C; the Toccata-Prelude on *Pange Lingua* (an uncommonly good piece, deserving more attention than it generally receives); or the A-Flat Scherzo.

Aside, then, from producing a recording of invaluable music-documentary value, *Mirabilis* brings us an outstanding and substantial portrait of one of England's most venerable romantic organs. Furthermore, Francis Jackson's handling of the York instrument is a perfect lesson. A study of "Evening Song" (Track 2), for example, will impart much practical advice as to the English style of service accompaniment, with its seamless dynamic changes, use of tonal palette, sense of acoustic, and control of expressive divisions.

Bairstow's music is well-crafted and ingratiating; there is much food for thought here for those willing to till this particular field of English organ music. A landmark disc — highly recommended in every way.

Mark Buxton, Toronto, Ontario



Francis Jackson

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DAVID WALLACE

David Wallace's restoration of a mid-19th century organ attributed to John Roberts

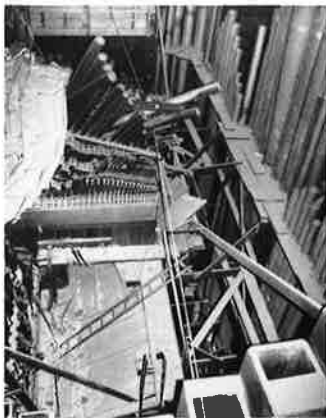
ORGAN UPDATE

THE CHURCH OF ST. MARGARET OF SCOTLAND in Conway, NH, received in 1993 a 1-5 restored by David Wallace of Gorham, ME. The organ is attributed to John Roberts, an Englishman who worked out of the shop of George Stevens of East Cambridge, MA, because it shares characteristics of the few known Roberts organs and of Stevens organs. The original location is unknown, but its ornate case suggests a residence. The earliest known location was the Church of the New Jerusalem (Swedenborgian) in Fryeburg, ME, from which it was moved in 1930 to the Swedenborgian church in Portland when the Fryeburg church bought a 2m Estey pipe organ. For the Portland church, Roger H. Lewis modified the organ by installing a 4' flute in place of the original Hautbois, adding a 17-note Pedal division, altering the central portion of the case. The names of C. P. Graves and E. S. Lehrer were placed in the organ when it was repaired on April 14, 1889, and again by Graves and Roger Lewis in November, 1902. David Wallace purchased the organ in 1991 and sold it in October, 1992 to the present owners. He removed the 4' Flute and re-installed an 8' Hautbois, provided a new blower, reinstalled the Swell shutters and frame removed in 1930, and retained the coupled pedal keyboard but omitted the poorly executed pipes and mechanism.

In St. Louis, John Speller reports that St. Anthony of Padua Church burned when struck by lightning during the Spring of 1994, destroying a 1947 Wicks 3-50 which incorporated parts and pipes of a 2m Schuelke of 1909.

The 85-rank 1947-51 Aeolian-Skinner op. 1141 was severely damaged at the First Church of Christ, Scientist, in Beverly Hills, CA, when the ceiling collapsed on it during a Spring aftershock to the January, 1994, earthquake.

The 1915 Austin op. 500 in the San Francisco Civic Auditorium will be completely restored by the Austin Organ Co. and is scheduled to be in the Austin shop in Hartford, CT, during the OHS convention in June, 1994. Severely damaged when a wall collapsed during the October 17, 1989, earthquake, the organ has been the object of a massive fund raising effort



CHARLES SWISHER

Austin op. 500, post earthquake

mounted by OHS member Charles Swisher, who had also raised funds for its refurbishment before the earthquake. Floyd Higgins of the Austin firm said many special arrangements have been made to accommodate the very large organ of five manual divisions constructed for the Panama-Pacific Exhibition in consultation with Edwin Lemare. Higgins said a special, end-loading railroad boxcar was located to ship the 32' Double Open Diapason of wood, each pipe of which was built without sections. Refurbished in 1963 with a new console but no other significant changes, the organ will receive no further changes and some earlier ones may be reversed. The organ is featured on the OHS 2-CD set, *Historic Organs of San Francisco*.

Destroyed with the building of First Methodist Church of Delta, CO, on November 6, 1993, was the 1911 Hinners which appears in the firm's records as having 18 stops and "Tr Pneu" action. Caused by a faulty furnace valve, the fire spared the walls of the church. Members will rebuild.

The case of the 1905 Henry Pilcher's Sons op. 516 tracker 2-24 at St. Patrick's Roman Catholic Church in Memphis, TN, was refurbished by parishioner Stan Opiel in 1991. The organ was featured in a concert conducted by the OHS Memphis Chapter on October 2, 1993, where Paul T. Hicks played Bach, Wesley, Dupré and Widor; violinists Arthur and Laura Manthey with cellist Shirley McCormack played a Haydn trio and the Dvorak Bagatelles with Lamar King, organist. In



JOHN PANNING

1904 Verney while still in Parkersburg, IA

need of restoration, the organ had received restorative repairs in 1984 from Robert Capra and Jim Schmidt of the Wicks firm. Among the larger extant Pilcher trackers of the period, the organ comprises: Gt. 8,8,8,8,4,4,2,111; Sw. 16,8,8,8,8,4,4,2,111,8; Pd. 16,16.

St. Michael's Episcopal Church in Cedar Rapids, IA, replaced an electronic in January, 1993, with the rare 1904 Verney Organ Co. 2-18 tracker restored in 1985 by the Dobson Organ Co. for First United Methodist Church of Parkersburg,



ED BELLY

1867 Evans 1-5 during '93 OHS Convention, Louisville



BILL VAN PELT

1894 Farrand & Votey, St. Martin's

IA. The Methodists demolished their handsome building in favor of a small new one which contains an electronic. William C. Verney established his firm in 1900 in Mason City, IA, apparently closing it by 1910 to work for Burlington (IA) Organ Co., then W. W. Kimball, Berry-Wood of Kansas City, KS, Casavant, Lyon & Healey, and Reuter.

The ca. 1867 W. Evans & Co. 1-5 built in Lockport, IL and played by Jonathan Crutchfield in the parish hall of Fourth Avenue United Methodist where it was temporarily erected for the 1993 OHS convention ('93 Handbook, page 57) has been sold to Christ Church United Methodist in Louisville by the previous owner, Herbert Brabandt.

Damage discovered in the beams of the roof of St. Martin of Tours R. C. Church in Louisville, KY, where James Hammann played the restored 1894 Farrand & Votey during the 1993 OHS convention, has caused the church to close for several months beginning in late May 1994 for extensive repairs, including the placement of scaffolding within the church to support the roof. Officials cite the winter's weather of 1993-94 as having caused cracks.

A 4-49 dedicated on October 10, 1993, at First United Methodist Church of Swainsboro, GA, claims a heritage of Skinner influence and parts. In the West end of the church, Mark R. Stewart of Albany, GA, built an enclosed Echo with six ranks from the Swell and Choir of E. M. Skinner's organ built 1902-'28 for Grace Episcopal Church in New York, most of which was installed at Covenant Presbyterian Church in Albany ca. 1962. In front, the 44-rank organ built ca. 1961 for Trinity Lutheran Church of Grand Rapids, MI, has been refurbished and installed by the Knowlton Organ Co. of Davidson, NC. All is controlled by solid-state works installed by the Knowlton firm in a 1924 E. M. Skinner 4m console of oak which had been part of the Trinity organ. The large dedication booklet identifies the front organ as an Aeolian-Skinner "which was to be a three-manual, 45-rank instrument, contracted for completion in early 1961." No record of the contract or an opus number has been found. The booklet continues, "... difficulties with the company required contracting with A. Blackmore Watson of The Michigan Organ Co. to furnish the entire organ action for the new instrument." Watson was an American representative of the Pels firm of Holland. OHS member Benjamin Williams of the Knowlton firm confirms that the pitman windchests and pipework (of high tin content) appear to have been built by Pels, though the pipes are voiced and scaled as if by Aeolian-Skinner. New casework wraps a round window and contains most of the Great; the rest is chambered.

William T. Van Pelt

Vierne's Pièces de fantaisie Textual corrections

by Olivier Latry

Translated by Pastor de Lasala & Ralph W. Lane

Reprinted with permission *The Sydney Organ Journal*

IN 1988 WHEN I UNDERTOOK TO RECORD the complete *Pièces de fantaisie* of Louis Vierne on the organ of Notre-Dame, I was already aware of the numerous textual errors in the printed edition which confront any performer of these works. The majority of these (often obvious) errors could be corrected without too much misgiving and with the exercise of some common sense. However, there remained some doubts that I did not wish to leave uninvestigated. To this end, I researched the manuscript sources which are now available, as well as the proofs of the original edition that had been corrected by Vierne himself. The manuscripts of the first three suites are kept in the Bibliothèque Nationale in Paris on shelf NS 18195 (1 to 3); the fourth, like all of the corrected proof copies, was still to be found at the original publishing house of Henri Lemoine.

A reading of the manuscripts alone is insufficient for an in-depth study: For the most part, Vierne, although practically blind, still wrote out his own music. As a result, his uncertain and imprecise methods of notation and, indeed, alteration of the manuscript made the engraver's task more difficult; the latter having to opt for solutions of his own on occasion with the result that the printed proofs could not guarantee to represent the composer's intentions. One should not forget that the organist of Notre-Dame used spectacles with especially thick lenses when he was engaged on the laborious work of copying, and these assured him of reasonably accurate vision only when he was at maximum proximity to the surface of the page; the lines of each stave were very widely spaced and the thick blue crayon that he used accounted for the rest!

Under such conditions, it is easy to understand and account for the multiple errors that pepper the pages of the four volumes; so many, in fact, that the corrected proofs give us a great deal of wrong information:

- In the first place, because of his weak eyesight, Vierne sometimes contributed to the errors when he was correcting certain pages of the proofs by seeking to rectify things that seemed, to him, to be mistakes;
- Certain other, anonymous, "editors" (whose handwriting, nevertheless, permits their identification), had, in spite of the warning of the composer, modified certain things which had been taken into account in the definitive edition. A number of people revised the text, each of them leaving their own imprint on the work, notwithstanding the fact that these precedents had already been indicated!
- Louis Vierne, with absolutely implacable logic, always indicated the manuals in the order then current — G.P.R., P.R. and so forth. However, the translator who anglicized these indications was never sure of making the distinction between Vierne's writing of the letter "P" — upper-case "P" for the Positif keyboard and lower-case "p" for the dynamic piano. Thus, it is not uncommon to find R.P (meaning Récit and Positif coupled) in places where it was meant to mean R. p (Récit, dynamic piano). All indications of this kind are erroneous.

So, here are the corrections; for ease of comprehension I have opted for the following notation: the numbers, in order, indicate the page (Lemoine Edition), followed by the system, the measure (bar), the beat and then the appropriate correction. Other indications are r.h. (right hand), l.h. (left hand), G. (Grand-Orgue), P (Positif), R. (Récit), Péd. (Pédale).



Louis Vierne at the Cavallé-Coll console of Notre-Dame Cathedral, Paris

FIRST SUITE

Prélude

PAGE SYSTEM MEASURE BEAT

				English translation of Positifregistration should be Flute 4 ft.
3	4	2	3	l.h., third semiquaver upper voice is F# not E natural.
4	2	1	4	r.h., fourth semiquaver is D not E.

Andantino

8	4	3	4	r.h., lower voice, stem missing from B-flat.
---	---	---	---	--

Caprice

				Pédale registration should read G.R not C.R.
12	1	1	4	l.h., lower voice A-flat is tied across bar line.
13	4	3	4	r.h., the F is tied to final chord.

Intermezzo

15	2	1	4	Péd., note is a B natural.
18	1	1	4	Péd., note is C not D.

Requiem aeternam

19	4	4	1	l.h., upper voice is B not C.
21	2	2	3	r.h., second quaver is F natural.
23	1	3	1	Péd., note is not dotted.

Olivier Latry, an outstandingly gifted performer and improviser among the present generation of French organists, was appointed titulaire of the Cathedral of Notre-Dame, Paris, in 1985 at the age of twenty-three. Initially trained in his native Boulogne-sur-Mer, he subsequently studied with the late Gaston Litaize at the Conservatoire of Saint-Maur, from which he graduated with high distinction and where he now teaches. In addition to an international concert career, Latry is also assistant to Michael Chapuis at the Paris Conservatoire.

Marche nuptiale

- 24 2 6 1 l.h., lowest note of chord is E flat.
 25 2 1 Coupling indication should read G.PR.
 25 3 2 2 The indication should be for Positif reeds.
 28 1 1 3 l.h., is two even quaver beats.
 28 3 1/2 Péd., should read thus:



- 30 3 3 1 l.h., add natural in front of the Bsemibreve.

SECOND SUITE

Lamento

- 2 2 3 2/3 l.h., the two Cs should be tied.
 2 2 6 4 l.h., the last quaver is A natural.
 3 2 2 Indication should be R. p[iano] and not R.P!
 3 2 4/5 l.h., both the G and E are tied to the following bar.
 4 1 4 3 l.h., C# second quaver is a D#.
 4 3 3/4 r.h., the D natural is tied across bar line.
 4 3 6 2 r.h., rhythm should be the same as the preceding beat.
 4 4 5/6 l.h., C# is tied across bar line.
 5 3 6 There should be a bracket to indicate that both hands are on the Positif.
 5 4 3 This, redundant, R. (Sw.) indication was confused with 'r' (= rit.).

Sicilienne

- 6 1 2 4 Transfer cresc. indication to 6 22 4.
 7 1 2 5 r.h., upper voice is A#.
 8 1 2 1 Péd., note is C not A.
 9 1 3 3 l.h., add a natural sign to the D.
 10 4 2 1 Péd., the slur starts here and not on the last beat of the previous bar.

Hymne au soleil

- 11 2 4 3 r.h., the semiquaver notes of this beat are, upwards, F and A not D and F.
 11 3 1 1 l.h., the C minim should not be dotted.
 11 4 3 3 Add cresc.
 12 2 1 1 The F naturals in both hands should be sharps.
 12 5 2 2 r.h., middle note of the chord is a B-flat, tied to the next chord.
 13 5 2 Péd., the rhythm of this bar is



- 15 3 3 1 This A is a natural, tied to the note in the previous bar.
 16 1 1 r.h., seventh quaver, upper voice, is G not A.

Feux follets

- 17 4 l.h., the quavers all lack a staccato mark.
 18 3 2 5 l.h., third demisemiquaver is B natural.
 18 4 1 4 The note A, in both hands, is a natural.
 19 1 3 The word here is simili, not simile.
 19 4 Péd., add staccato marks for entire system.
 20 1 1 Péd., add staccato marks.
 20 1 2 All the semiquavers should have a staccato mark, thus justifying the word "simili" in the next bar.

- 20 3 2 2 l.h., third semiquaver is A double sharp.
 22 4 1 1 l.h., the quaver is B# not C#.
 22 4 2 2 l.h., first semiquaver of triplet is B.
 25 2 2 5 l.h., second demisemiquaver is C.
 26 1 2 3 r.h., first note is B.
 26 2 1 3 Seventh note is D#.

Clair de lune

- 27 4 2 1 Add dynamic marking f.
 27 4 4 1/2 l.h., the note is A natural.
 28 3 4 4 l.h., the upper voice last quaver is F natural.
 29 2 1 1 The dynamic marking here should be mf.
 32 4 3 1 Add decrescendo sign from here to third beat of the next bar.
 32 5 3 1/2 r.h., rhythm of melody for these two beats should be dotted crotchet (F) and quaver (E-flat).
 32 5 3 3 l.h., add an E-flat to the second quaver (A-flat).
 32 5 4 3 Add cresc.
 33 3 1 l.h., the D natural should be a semibreve (cf. 27 4 3)
 33 4 4 1 r.h., lower note of chord is G.
 33 4 5 Add sign indicating crescendo through the whole bar.

Toccata

- Initial dynamic is fff.
 37 5 3 2 l.h., second semiquaver is A-flat.
 39 5 2 2 l.h., third semiquaver is G natural followed by E flat (not natural).

THIRD SUITE

Dédicace

- 4 1 1 2 l.h., the three notes are C double #, D# and D double # (no tie).
 4 4 1/2 r.h., the C#s are tied across the bar line.
 4 4 2/3 l.h., these notes are not slurred.
 6 2 5 1 r.h., the second alto quaver is B.
 6 4 2 This manual indication should not be there (confused with p subito).
 7 1 4 2 r.h., the alto rhythm is incorrect and should read:



- 8 3 3 2 Péd., the A flat should be a semi-quaver.

Impromptu

- 11 4 5 l.h., upper note of this chord is G natural.
 12 2 2 1 l.h., upper note of this chord is E double flat.
 12 2 3 Péd., the manuscript gives a different articulation: the two notes have staccato dots.
 13 1 5 2 There seems to be no reason why the order of notes is reversed and it would seem logical to play them the same way as in 9 4 3 2.
 13 2 4 1 l.h., the second semiquaver is G.

Etoile du soir

- 19 4 2 3 l.h., the first semiquaver should be A.
 19 4 3/4 l.h., there should be no tie from the B-flat to the B natural.
 20 3 7/8 r.h., tie the Ds in the top voice.

12/81

R. forts et au clef 16 8 u - *sw.* ^{and held} *Termination steps 16-8-4 ft.*
 P. forts 16 8 u - *ch.* *Termination steps 16-8-4 ft.*

Sur le Rhin from page 79 of Vierne's manuscript of the Third Suite.

Note the misinterpretation of R.p as Sw.Ch. and the style of the composer's notation.

Sur le Rhin from page 79 of Vierne's manuscript of the Third Suite shows misrepresentation of R.p as Sw.Ch., and the style of the composer's notation.

Fantômes

- 23 2 3 l.h., correct manual indication is R. (Sw).
 23 3 4 1 l.h., lower note of this chord is B flat.
 25 3 2 1 r.h., second semiquaver is B#.
 26 1 2 There are missing manual indications: first beat r.h., P, l.h., G.R.; at fourth beat both hands play on the Positif.
 26 4 1 Rather than G.R.P, this should read G.R. p[iano].
 27 1 3 4 r.h., add another B to the top of this chord.
 27 2 2 Metronome indication should be two bars earlier (27 1 3 1).
 28 2 5 1 Péd., the C should be dotted.
 28 3 5 1 l.h., the upper voice should be a dotted semibreve D, tied to the previous bar.
 28 3 5/6 l.h., there is no slur between the D just corrected (above) and the note in the following bar.

Sur le Rhin

- Name of dedicatee should be Maleingreau.
 29 2 7 3 l.h., add C minim.
 31 2 3 The chords in both hands should be played on the fourth beat (with two crotchet rests before).
 32 1 1 Manual indication should be R. p[iano].
 32 2 2 3 r.h., alto voice is G flat.
 33 2 2 1 l.h., top note of this chord is B.

Carillon de Westminster

- 37 1 1 1 Péd., B instead of A.
 37 1 2 1 l.h., second semiquaver is D.
 37 1 4 1 l.h., second semiquaver is D.
 37 4 2 Add decrescendo marking through the whole of this bar.
 37 4 3 1 Péd., no quaver rest after the pedal note.
 38 2 1 l.h., the R.P (Sw.Ch.) here should not be a coupling indication but the dynamic marking *pp*.
 42 1 1 2 l.h., and Péd., notation should both be the value of a crotchet with a quaver rest on the sixth beat.
 42 3 3 2 l.h., this chord, from bottom, should read A D G B.
 42 3 5 2 l.h., this chord should also read as above.
 43 1 3 1 l.h., first semiquaver is C not B.
 43 4 5 1 Péd., this octave is B-flat.
 44 1 2 2 l.h., sixth beat lacks a quaver rest.
 44 2 1 2 l.h., this chord should have an A at the bottom.

FOURTH SUITE**Aubade**

- 3 1 2 2 r.h., this chord should have an E flat above the B (cf. 6 2 5).
 3 4 6 Coupling indication, Péd. G.P is missing from under pedal system.

Résignation

- 7 4 4 This coupling indication should be Péd. PR.
 8 1 1 4 l.h., lower note is G natural.
 8 4 2 3 Both the manual staves lack pause signs.
 8 4 3 r.h., add manual indication R.
 11 1 2 4 r.h., second quaver is B#.

Cathédrales

- 12 1 1 Manual indication should be R. p[iano].
 13 3 2 Add Anches R. (Reeds Sw.) to G.PR. indication.
 14 4 2 l.h., the D# is a dotted semibreve followed, on the fourth beat, by B and D minims (cf. rhythm 14 3 4).
 15 2 4 1 l.h., top note of chord is A.
 16 2 1 2 l.h., the quavers are G E G E.
 16 4 1 1/2 l.h., tie the G# to the next note (A-flat).

Naïades

- 19 1 2 1 l.h., missing note in the middle of this chord is C.
 28 3 3 3 There should be no dynamic sign (*f*) under the l.h. semiquavers.

Gargouilles et Chimères

- 29 2 6 1 Péd., Add 'V' accent mark to head of note (cf. 32 1 3 1).
 29 3 2 1 ditto.
 29 3 2 4 Péd., add staccato dot to the quaver.
 29 4 5 l.h./r.h., these semibreves should not be dotted.
 30 2 2 Registration indication (G.) should be in parenthesis.
 31 1 7 ditto (R.).
 31 2 4 ditto (G.).
 31 3 5 1 r.h., lower note of second quaver is G flat.
 32 1 1 1 r.h., second semiquaver is E flat.
 32 1 1 1 l.h., lower note of second quaver is F#.
 32 1 3 4 Péd., add staccato dot to the note.
 32 1 4 1 Add dynamic marking *f*.
 32 2 1 Péd., Add 'V' accent to first beat and staccato dot to quaver.
 32 2 1 4 The chords in both hands should be identical to those at 29 3 2 4!
 33 1 6 Indications to prepare registrations are missing (cf. 30 2 2).
 33 2 3 r.h., lower voice of fourth semi- quaver is F double #.
 34 3 1 Lacks coupling indication Péd. R. below pedal stave.
 34 3 2 6 Péd., add staccato dot to the note.

Les cloches de Hinckley

- 37 2 5 5 l.h., this note is an E.
 38 1 2 l.h., add a dotted G semibreve in the fourth space and tie it to previous bar.
 38 4 3 3 r.h., this, above the stave note, is A flat.
 39 1 1 5 r.h., this note is F natural.
 39 3 1 2 Péd., this note is a D.
 39 3 2 5 r.h., second quaver is B natural not A natural.
 40 2 3 5 l.h., the crotchet should be B natural not A natural.
 41 2 2/3 r.h., top C is tied across the bar.
 42 2 2 r.h., small note at end of trill is D natural.
 43 3 2 l.h. add indication G.PR.
 44 1 2 1 l.h., middle note of this chord should be E.
 44 3 1 Péd., semibreve should not be dotted.

Evolution of the Grand Organ in Notre-Dame de Paris

by Pastór de Lasala & Ralph W. Lane

AFTER SOME 30 MONTHS AND 40,000 working hours by fifteen people, the voicing of 8,000 pipes over 100 nights, the utilization of 1,000 lambskins, the installation of six computers and attendant software and the expenditure of 11 million Francs, the renovation of France's largest organ was completed in late 1992, with opening events during the Christmas season. Refinements of its complex and advanced control systems continue as described in the editorial on page 3.

The Gothic Organ and the advent of a West End instrument

The first mention of a fixed instrument goes back to 1322. This instrument was cantilevered i.e. suspended in a "swallow's-nest" under a window high up in the nave at triforium level. This instrument had a single manual of thirty-six notes, was based on a six-foot principal and had four pipes per note in the bass. Also, by 25 October, 1403, another instrument had been installed in a shallow gallery high above the great west door. This instrument was the work of Frédéric Schambantz, personal organbuilder to the Duc de Berry who had been sought as a patron by the canons of the cathedral following the bemoaning of the state of the first organ by Renaut de Reims, appointed organist of Notre-Dame in 1392. By around 1425 this first instrument was considered to be in such a bad state and so obsolete that its pipework, some 800 pounds weight of tin, was melted down for scrap.

It is thought that the case of Schambantz's instrument consisted of three high-pointed pinnacled towers of twelve to fifteen feet each with three pipes, the largest central one being the highest and containing the longest pipe of eighteen feet. The flats had between eighteen and nineteen pipes. The single keyboard had a range of forty-six notes and rudimentary pedal pull-downs operated by ropes.

Within the case were housed approximately six hundred pipes on a single chest (Blockwerk) with eight pipes per note in the bass and between twenty to twenty-two in the treble. There were a dozen small bellows placed at the rear of the case.

This instrument survived intact until 1458 when it was restored without modification. Later however, in 1473, large numbers of pipes were remade by Jean Robelin, builder to the Bishop of Troyes. Then, between 1536 and 1540, the bass chests were repaired and the overall voicing revised by Pasquier Baullery, a Parisian builder. A further restoration was entrusted to Nicolas Dabenet in 1564 because of "pollution" and, at the same time, the compass of the manual was extended and the mechanism of the pedal pull-down

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device was improved. Despite these modifications and improvements this instrument still did not possess the variety of tonal colors of such contemporaneous organs as the one over which Titelouze presided at Rouen, for example.

The enlargement of the Gothic organ

In 1609, Valeran De Héman added a second manual to the existing instrument but suppressed the pedal mechanism. The instrument then possessed three varieties of stops: a plenum, a series of flutes and a battery of reed stops and consisted of about two thousand pipes in all. The small bellows were replaced by six larger ones and the new pipes were housed in an additional case on the edge of the gallery behind the player (Positif de dos).

At the initiative of the new organist of Notre-Dame, Charles Racquet (1618-1649), further additions, of new pipework and a third manual, were made. It is relevant to mention that the genesis of the French Classical organ school occurred around this time.

In 1646 Pierre Thierry, former employee of De Héman, modernized the Positif, added a fourth manual (at the behest of the Chapter), and installed another pedal division, this time of thirty-three notes, with its own independent stops. Alexandre Thierry, nephew of Pierre, restored this organ in 1691 and his nephew François, in turn, took over the maintenance and the eventual rebuilding of the instrument in 1730. Interestingly enough, despite numerous restorations of the Notre-Dame organ, twelve pipes dating from this period still remain in the Pedal division of the present organ.

The organ between 1730-1838

The radical modifications to the interior of Notre-Dame during the reign of Louis XV witnessed such things as the destruction of

Chronology of Notre-Dame Cathedral

- 1160** Maurice de Sully, founder of cathedral, consecrated first bishop of Paris;
1163 Building of Notre-Dame begins;
1182 Choir with double aisles completed;
1185-96 Structure of nave laid out;
1208-25 Nave raised to its summit;
1225-40 Western façade begun and completed along with south tower;
1248 North tower completed;
1250 Openwork gallery between towers completed;
1250-68 Completion of transepts;
1296-1330 Flying buttresses of apse completed.

Dimensions

Length	130 m
Length of Choir	38 m
Width	48 m
Width of Choir	12 m
Height	35 m
Height of towers	69 m

1730-33 François Thierry organ Notre-Dame de Paris

POSITIF	8' Flûte	BOMBARDE
50 notes C-d ³	8' Bourdon	16' Bombarde
8' Montre	4' Prestant	coupled to Grand- Orgue
8' Bourdon	5 1/3' Grand Nasard	RECIT 27 notes
4' Prestant	3 1/5' Grande Tierce	V Cornet
4' Flûte	2 2/3' Nasard	8' Trompette
2 2/3' Nasard	2' Quarte	ECHO 34 notes
2' Quarte	2' Doublette	V Cornet
2' Doublette	13 1/5' Tierce	8' Cromorne
13 1/5' Tierce	IV Fourniture	PEDALE 35 notes
V Cornet	V Fourniture	8' Grosse Flûte
VII Plein jeu	IV Grosse Cymbale	8' Flûte
8' Cromorne	III Cymbale	4' Grosse Flûte
8' Trompette	V Cornet	4' Flûte
4' Clairon	8' Grosse Trompette	16' Bombarde
GRAND-ORGUE	8' 2ème Trompette	8' Trompette
32' Montre	4' Clairon	4' Clairon
16' Montre	8' Voix humaine	
16' Bourdon	Deux Tremblants	
8' Montre		

stained glass in the clerestory (to improve the light!) and the removal of the mediaeval organ case. The large new case (in the white and gold Louis Quinze style) was to be positioned higher, thus blocking the lower half of the west rose window. The Positif was retained but flanked on either side by a new wrought-iron balustrade with many gilded finials.

The instrument of 1730 was conceived on an entirely new design: five manuals of fifty notes CC to d³. To the four standard manuals (Grand-Orgue, Positif, Récit, and Echo) was added a Bombarde division (this was a novelty!). The Grand-Orgue counted a 32' Montre and sixteen ranks of Mixtures; the battery of reeds included a Bombarde and a second Trompette and the Pedal division was enlarged to seven stops and its compass extended.

This new instrument, finished on 18 July 1733, had the distinction of being the largest, most complete and important organ in France. It was inaugurated by the organists Louis-Claude Daquin, Pierre Du Mage, Antoine Calvière and Louis-Nicolas Clérambault.

The blowing was done by four men working twelve bellows. The new instrument personified completely the aesthetic of the French Classical organ with its 23 ranks of plein jeu, powerful reeds, its tierces based on sixteen- and eight-foot choruses, solo reeds on the Récit and Echo and its battery of Pedal reeds.

This organ remained unaltered for some fifty years until 1783 when François-Henri Clicquot was entrusted with its restoration.

To make way for a larger complement of Positif stops, a new case for that division was made, in Louis XVI style, by Caillou. The pipes, with the exception of the Bourdon 8' and Cornet, were recast because of oxidization. A Bourdon 16' was added as well as a Flûte 8' in place of the 4'.

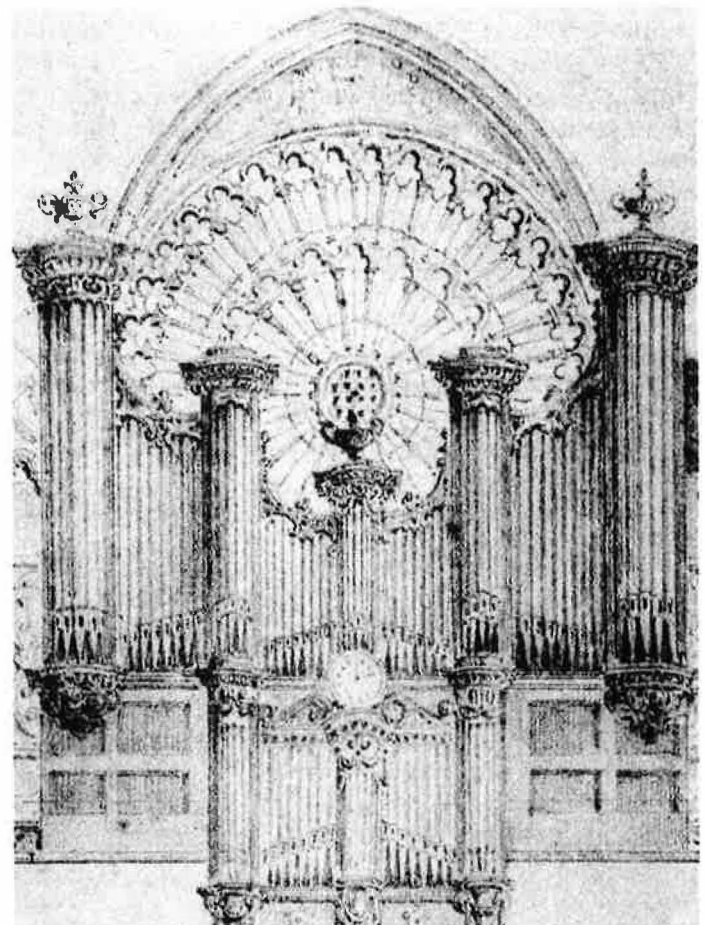
All the reeds of the Grand-Orgue were entirely new; a Trompette was added to the Bombarde division and the Echo was reconstructed in the style of Clicquot (namely Flûte, Bourdon, Trompette and Clairon). To accommodate an enlarged pedal division, the case was widened to the dimensions that it has today with the addition of a lateral flat and tower on each side of the then-existing case.

The organ survived the period of the Revolution (1789-1793) and its ravages through its being used to accompany festivities and entertainments (as was the case with the majority of organs in France) the only vandalism sustained being the excising of the fleurs-de-lys carvings on the pendants of the case towers.

In 1812 there was a general overhaul by Pierre-François Dallery, successor to Clicquot. This consisted of revoicing the foundation stops and some swapping between ranks. In addition, a clock was mounted on top of the Positif! No less than sixteen years later the general state of the organ left much to be desired.

Between 1833 and 1838, important modifications were brought about by Louis-Paul Dallery: changes to the blowing mechanism; reduction of the number of manuals from five to four; increase of manual compass; reinstatement of the 32' manual rank on the Grand-Orgue; swapping ranks and removal of the tierces and the addition of a Swell box. This restoration was short lived, however, for in 1840 general restoration work on the cathedral itself, under the direction of Lassus and Viollet-le-Duc, contributed to the deterioration of the instrument once again. Dust and exposure to the elements (caused by removal of the rose window for restoration) exacerbated the organs condition and in 1847 it ceased to function altogether.

When the progress of the general architectural restoration allowed for the envisaging of the organs restoration (an instrument



The Grand Organ in 1832 from an engraving by Armout



Aristide Cavallé-Coll

from Aristide Cavallé, *ses origines, sa vie, ses oeuvres*, Paris, 1929

no longer capable of performing the least liturgical function), it was convenient to pass over Dallery, an organbuilder no longer considered fashionable, to the advantage of the innovative master-builder Aristide Cavallé-Coll.

The Grand Symphonic Organ

Although by 1859 the restoration work on the building was absorbing all the funds, Viollet-le-Duc, nevertheless, asked Cavallé-Coll to provide an instrument worthy of a cathedral – without undue extravagance – and to reuse, as a measure of economy, as much of the existing material as possible. Following a detailed inspection of the organ on 30 March, 1860, the builder presented a proposal for “a first-class instrument of five manuals and pedals adequate for the size of the church,” which would cost 115,547.50 Francs. That sum was deemed somewhat expensive by the architect and, profiting from the lack of urgency of the situation, Viollet-le-Duc solicited a counter-quote from the builder Merklin. Ultimately, at the end of 1862, Cavallé-Coll was awarded the contract and his project was given approval to proceed on 15 July, 1863. The actual work began somewhat less than a year later, in June, 1864, and *in situ* – a situation which provoked the annoyance of the cathedral Chapter because Cavallé-Coll had set up his workshop in the southern gallery of the nave causing this area to be “thus removed from the use of the Church.”

The program of work was subject to a number of imposed limitations: viz., the conservation of the two organ cases, the stops of the Positif, the reeds of the Bombarde and the Pedal divisions plus the Bourdons and the Voix Humaine – all in all, twenty-one stops either retained or revoiced as opposed to thirty-three new ones. The specification was not radical but corresponded to the style of the time; there were no novelties. But that proposal was merely on paper! The dismantling began in June and, on seeing the cases empty of their pipes, Viollet-le-Duc (who didn't even know how he would commence paying for the work in the following year) was shocked by the way that the Louis XV casework had been so bastardized by the Louis XVI additions. All along, his mission had been to “unify” the Gothic style of the cathedral. The principal case,

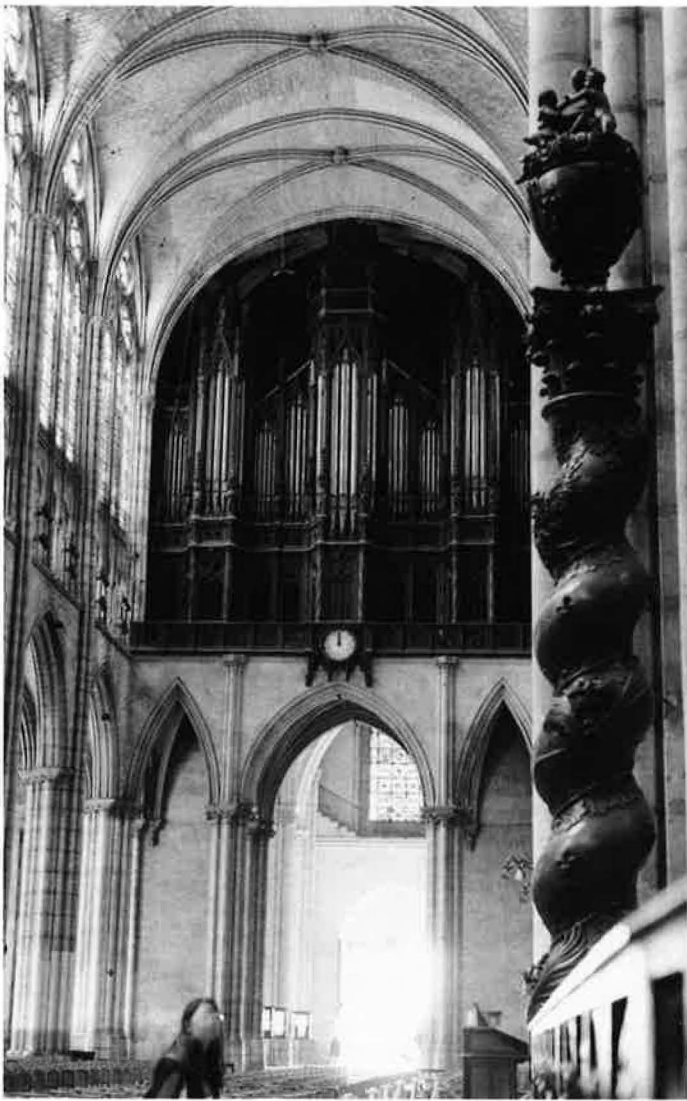
1868 Cavallé-Coll organ Notre-Dame de Paris

GRAND-CHOEUR	8' Unda Maris	22½' Quinte
56 notes	*4' Prestant	III-V Cornet harmonique
8' Principal	*4' Flûte douce	8' Basson-hautbois
+8' Bourdon	*2' Doublette	*8' Voix humaine
4' Prestant	1' Piccolo	8' Clarinette
2' Doublette	III-V Plein jeu harmonique	16' Bombarde
22½' Quinte	16' Clarinette basse	*8' Trompette
13½' Tierce	+8' Cromorne	*4' Clairon
11½' Larigot	4' Clarinette aiguë	PEDALE
117' Septième	BOMBARDE	32' Principal
1' Piccolo	+16' Principal basse	16' Contrebasse
16' Tuba-magna	16' Soubasse	+16' Soubasse
*8' Trompette	+8' Principal	*8' Flûte
*4' Clairon	8' Flûte harmonique	8' Violoncelle
GRAND-ORGUE	4' Octave	4' Flûte
*16' Montre	51½' Grande quinte	102½' Grande quinte
*16' Bourdon	31½' Grande tierce	62½' Grande tierce
+8' Montre	22½' Quinte	51½' Quinte
8' Flûte harmonique	22½' Septième	447' Septième
8' Viole de gambe	2' Doublette	+32' Contre-bombarde
8' Bourdon	+II-V Grand Cornet	+16' Bombarde
4' Prestant	+16' Bombarde	16' Basson
+4' Octave	+8' Trompette	8' Basson
*2' Doublette	+4' Clairon	8' Trompette
II-V Fourniture	RECIT	*4' Clairon
Cymbale harmonique II-V	16' Quintaton	* Indicates original ranks which were re-used, revoiced or completed.
16' Basson	8' Viole de gambe	+ Indicates important remaining stops.
8' Basson	8' Voix céleste	Keyboard compass increased from 50 to 56 notes.
4' Clairon	8' Quintaton	
POSITIF	4' Dulciane	
+16' Montre	8' Flûte traversière	
*16' Bourdon	4' Flûte octavante	
8' Flûte harmonique	2' Octavin	
8' Salicional		
+8' Bourdon		

when lit from behind by the rose window, offended him less than the Positif de dos and its flanking wrought-iron balustrade. These he decided to suppress, in 1863, as being “not Gothic enough” and, accordingly, Cavallé-Coll was informed to modify his plans and take into account a new gallery, one which was some three times the area of the previous one and which would now have a timber balustrade.

As drastic as this latest proposal might have seemed, Cavallé-Coll was not to be fazed. If deprived of a Positif and if faced with a new gallery, not only larger but lower as well, he could simply scrap the 1862 quote and treat the main case as he wished. Accordingly, he conceived an arrangement where the Grand-Orgue was to be surmounted, in the centre, by the Grand-Choer. It, in turn, would be flanked on the “C side” by the Positif division and, on the “C# side,” by the Bombarde (Solo) with the Récit, framed by the Pedal division, situated behind the Grand-Orgue. This very unified “architectural” approach conformed to the concept of a sonorous tiered pyramid: at its centre, a Grand-Choer of immense weight – the organs equivalent to the strings of an orchestra – capable of projecting into a nave of very large dimensions. From there, the addition of progressive mixtures and mutations up to septimes, graduated by virtue of their respective divisions, guaranteed cohesion between the foundations and reeds, as well as giving them brilliance. By adopting different wind pressures between the different divisions and, indeed, between the trebles and the basses of the same rank it was possible to achieve the effect of an ascending harmonic “crescendo.”

Cavallé-Coll incorporated into the Notre Dame organ Englishman Charles Spackman Barker's “lever” – a series of pneumatic engines, one for each note, to pull the trackers attached to the windchest pallets in response to the impulses delivered by trackers attached to each key. He had used Barker levers at Saint-Sulpice (1862), to make the keys able to play this enormous organ operating on various levels of windpressure, almost all of which were



BILL VAN PELT

The 1840-45 Cavaillé-Coll, the first with a Barker lever, was built for St. Denis in Paris, for a millennium the cite of burial and worship for France's royals.

higher than unassisted mechanical action could reasonably control. Barker first presented his device to Cavaillé-Coll circa 1839 (Barker had patented it in France in 1839), just as the builder was hatching his plans for the organ at St. Denis in Paris. Even before the organ was entirely complete in 1845, Barker's lever was celebrated as the key to building organs with ever higher wind consumption and wind pressures. Barker unlocked physical impossibilities so that Cavaillé-Coll's imagination could take practical flight. The St. Denis instrument, still almost entirely intact in its 69 stops but somewhat threatened, proved Cavaillé-Coll's imagination and skill to the Parisians and is recognized as perhaps the most influential organ in development of Romantic organbuilding.

Cavaillé-Coll's reconsidered conception of the Notre-Dame project was put into effect secretly, his declarations of the progress of the work invariably referring only to the initial concept. This was revealed when the organ was played, unofficially, at Christmas in the context of the Universal Exposition of 1867. In February of the following year the instrument was handed over to an international commission and members of the Chapter, it being reported that "on Friday, 6 March at 7 o'clock in the evening, Monsignor Darboy blessed the new organ, from his place in the nave, while a cleric from the choir mounted the stairs to the gallery and sprinkled the instrument with holy water."

"In addition to the works played by several artists," relates a contemporary writer, "the psalm *Laudate in sanctis eius* was sung with faux-bourdon and the *Domine salvum [fac regem]*. The "artists" were none other than an all-star cast consisting of Franck, Saint-Saëns, Loret, Chauvet, Guilmant, Durand and Widor whose varying styles of composition were greatly admired by the assembly. Only the *titulaire*, Eugène Sergent, was somehow circumspect in his exploration of the enormous tonal possibilities of the instrument, a circumstance of great disappointment to Cavaillé-Coll which caused him to remain removed from his masterpiece at Notre-Dame.

Then there was the real cost of the organ; not the original estimate but, that already large sum, increased by 65,899.40F, a figure more than fifty percent over and above the original! Enough to ruin the builder. Cavaillé-Coll, however, had demonstrated his goodwill during five years work and, by all accounts, had derived satisfaction from it.

Some rebuilding of the organ was effected in 1894 by Cavaillé-Coll who died in retirement on 13 October, 1899.

Louis Vierne was appointed *titulaire* on 21 May, 1900. Rarely had an organist-composer of Vierne's calibre been in command of



The 1862 organ at St. Sulpice set the stage for Cavaillé-Coll to build the Notre Dame organ in 1868. The organ was restored in 1991 with mechanisms, console, and most pipes intact.

such a magnificent instrument as the Notre-Dame organ and he soon requested that some "perfections" be made. Cavaillé-Coll's successor in the business was Charles Mutin who carried out minor modifications, in 1904, which touched principally on the Récit where the Clarinette and Dulciane were replaced by a Diapason 8', an Octave 4' and a Fourniture IV. Mutin added zinc basses to the Gamba rank on the same division and to the Salicional on the Positif as well as replacing the harmonic basses of the Bombarde and Trompette on the Récit with full-length resonators. This gesture was the first neo-Classical touch to the instrument. In 1924 the blowing apparatus was electrified which was also, perhaps, the occasion on which the wind pressures, in part, were unified. Another rebuild of the instrument, requested in 1912, eventuated in 1932; this time carried out by Joseph Beuchet who had been a one-time employee in the

Cavaillé-Coll business until its dissolution. Apart from a re-ordering of the manuals which Vierne had requested as being necessary for the convenience of the player, there were some changes:

- A Violoncelle 16' and Bourdon 8' were added to the Pedal and mounted on the roof of the case;
- A Flûte was added to the Grand-Choeur; on the Récit, a Cymbale replaced a Nazard which went to the Positif in place of a Piccolo;
- Beards were placed on the Montres and certain modifications were made to the composition of the pleins-jeux.

Pierre Cochereau as Titulaire

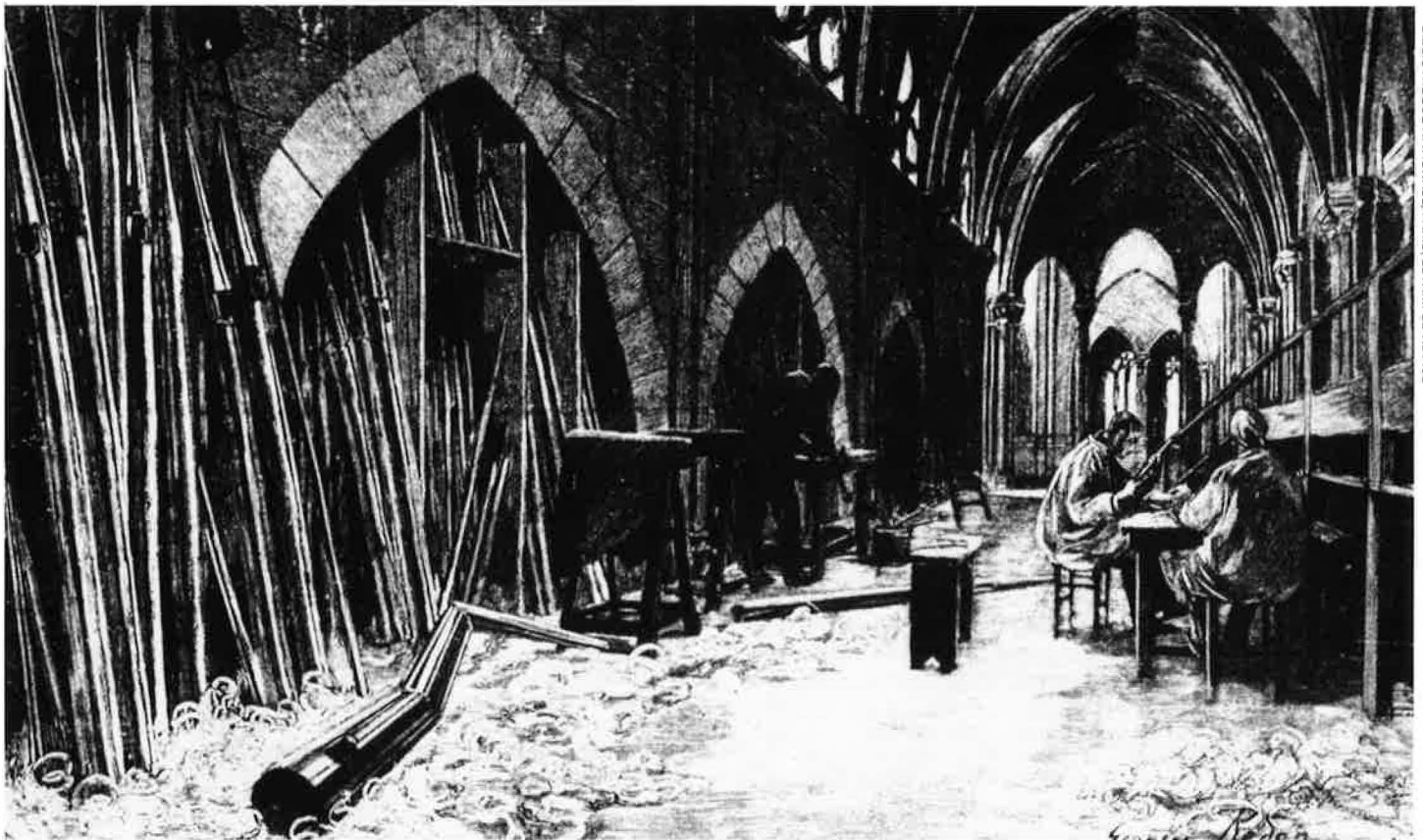
When Pierre Cochereau succeeded Léonce de Saint Martin as titular organist of Notre-Dame in 1955, the functioning of the instrument had become unreliable to the point where a restoration was envisaged. This was to be entrusted to the organbuilder Jean Hermann. However, it was soon realised that, with the mechanical action so worn, nothing short of a full-scale rebuilding of the instrument would suffice. It was also at this time that the decision was made to electrify the instrument — an option previously refused by Vierne in 1930 but advocated by Marcel Dupré who, in 1959, presented the Commission with what they considered to be the most viable course of action. The work would have all the Barker levers discarded, the pneumatic stop slider action retained, but the stop action electrified. In addition, a new console would be constructed.

The overall specification of this latest proposal was:

- The Pedal would be enlarged to 30 stops with the addition of a "Petite pédale" of 11 stops;
- The creation of a 32' Plenum in the Classical tradition, leading to the rearrangement of the Plein jeu ranks of the five manuals. It was the Solo division (formerly the Bombarde) which used to operate the 32' Plenum and the Spanish-style Chamade reeds placed on the impost. These reeds now passed to the Grand-Orgue;
- The creation of a more powerful, and a little more "Classical," ensemble of reed stops for the Grand-Choeur;
- The creation of a small, Classical Récit of two stops.



Pierre Cochereau was photographed at Cavaillé-Coll's "amphitheatre" console at Notre Dame when he became titulaire in 1955 (above) and 1961 (below).



Cavaillé-Coll's "workshop" at Notre Dame

FROM THE BOOKLET INCLUDED WITH SOLISTICE CD SOCOD94/96 PIERRE COCHEREAU L'ORGANISTE DE NOTRE DAME

BIBLIOTHÈQUE NATIONALE PARIS ESTAMPES H34498



FROM THE BOOKLET INCLUDED WITH SOLISTICE CD SOC034/96: PIERRE COCHEREAU, L'ORGANISTE DE NOTRE-DAME

Pierre Cochereau with the replacement console, photographed ca. 1968

The “amphitheatre” console constructed by Cavaillé-Coll was deposited in the museum of Notre-Dame and a new one, conceived on Anglo-american models, was installed. It had 113 stop knobs, 80 pistons, 33 tab stops below the music desk and 43 toe studs. It was also equipped with 8 general pistons, ten other combination pistons and six small switches that allowed the organist to combine all, or certain individual combinations onto six generals.

These modifications came to an end with the death of Jean Hermann in 1964. Further tonal additions, however, were made by Robert Boisseau at Cochereau's insistence. Boisseau reconstructed a double instrument, though nevertheless structured, which comprised a Cavaillé-Coll that had been denuded of its harmonic progressions and attached to a rehashed Clicquot. The work was considerably hampered by the stipulation imposed by the clergy — that the Grand Organ was never to be entirely out of action. To their credit, the cathedral Chapter also financed the construction of a new Choir organ out of the overall restoration budget.

Electric action, the transmission system most often misapplied in the case of instruments exposed to pollution and variations in temperature, was the weak link in the ensemble and the ultimate addition of an electronic capture device did not help matters. Cochereau, however, took pride in what the organ had become, in spite of its difference to the instrument that had been inaugurated in 1868.

The reorganization of the parish of Notre-Dame, following Vatican II, was entrusted to Canon Berrar in 1967. Each Sunday, the revitalised liturgy began to attract large numbers of worshippers, such as had always been the case in former times, and the Grand Organ was to be heard playing at nearly all the liturgical offices. In addition, a free Sunday afternoon organ recital at 5:45 p.m. became a regular feature and the best organists of France and, indeed, of the world came at their own expense — but also at the invitation of the *titulaire* — to concertize to a vast audience. The instrument over which Pierre Cochereau presided, from 1954 to 1984, was, with some 109 stops, the largest in France. Nevertheless, he wanted to enlarge it further. On 20 September, 1972 he wrote to Jacques Duhamel, the Minister of Culture (the Notre-Dame instrument is owned by the State), outlining the project:

- To reduce the forward area of the organ gallery because it partially reflected the sound of the instrument towards the vaulting;
- To re-establish the Positif de dos, suppressed by Viollet-le-Duc, of which the case was still preserved, and in storage, within the cathedral;
- To add 19 new stops and an electric combination system with 172 memories.
- To take further advantage of the moment he also proposed that the wrought-iron balustrade (also in storage) be reinstated and that the organ case be returned, once again, to its former Louis Quinze colour scheme of white and gold.

But the project was too ambitious: three commissioners, or departmental officials, (classified organs, music and architecture) were involved in deciding on the feasibility of the project, the budget of which was well outside the means that any of them could afford. Cochereau died on 5 March, 1984, without having seen his dream come true. The purely instrumental aspect of the project was subsequently presented to the Historic Monuments Commission by Norbert Dufourcq, but it again failed to gain acceptance.

Obviously, something needed to be done as a great deal of work was necessary to resuscitate an instrument which was benefiting only from periodic tunings. In 1985 the cathedral clergy re-instituted a former practice — which had been interrupted by the onset of the Revolution — the collective services of four organists who officiated on a quarterly basis. Two centuries on, after selection by way of competition, Yves Devernay, Olivier Latry, Philippe Lefebvre and Jean-Pierre Leguay were appointed as the new *titulaires*. The option of a major cleaning of the organ was offered to them at that time; however, this was a “bandaid” solution which would have done little in the long run for such an obviously ailing instrument.

Other solutions were then canvassed:

- A return to the exact Cavaillé-Coll scheme of 1868, complete with Barker lever and mechanical action. Re-instatement of the Positif case and the Cavaillé-Coll console. (The Superior Commission, however, while sensitive to this proposal, had reservations about a restoration which was not in keeping with the historic context of the organ and gallery).
- A double instrument with two consoles: the Cavaillé-Coll, operated by mechanical action and a Clicquot copy, operated electrically, allowing the possibility of the Positif and the main organ to be played simultaneously.
- The construction of a second Grand Organ, in Classical style, was also envisaged to be mounted in a “swallows-nest” and installed either in the nave or the south arm of the transept.

This last proposal had a certain consensus among the members of the two national Commissions and the new *titulaires*. However, the unusually narrow nave of Notre-Dame did not lend itself to this idea (unlike the cantilevered instruments which grace the cathedrals of Chartres, Toulouse and Strasbourg) and acoustic studies as well as architectural prerequisites also pre-empted this proposal.

Another solution, the one which ultimately prevailed, respected and supported patrimony (Cavaillé-Coll's stops and voicing), the architecture of Viollet-le-Duc (retention of “his” gallery) and the concept of the development of the Grand Organs at Notre-Dame: thus being faithful to its tradition of keeping abreast with modern trends, as it has done since the Middle Ages. Having reached agreement with the *titulaires* and the clergy on this last solution, Jean-Pierre Decavèle, technical advisor to the Ministry of Culture, defined the project thus:

It is planned to preserve the organ with its present specification, with a modern console and electric action and without any tonal additions such as a Positif de dos. The organ will be completely restored throughout. It will be a major restoration with complete renewal of its electric components, an improvement in winding and with the re-establishment of the multiple pressures and a return to the original Cavaillé-Coll Plenum with its harmonic progressions on the Grand-Orgue and Positif. There will also be a return to the original voicing of a number of altered Cavaillé-Coll stops and the re-composition of the, so-called, Classical mixtures which were checked on to the existing chests in the 60s. The

gallery would remain exactly as it was conceived by Viollet-le-Duc.

Tenders were called in the Spring of 1989. Needless to say, the stipulation for electric action was one of the decisive aspects in the awarding of the contract. Chapter Five of the "Schedule of Conditions" referred to it in detail:

The organ will be equipped with a modern capture and memory system . . . the electric action will be completely renewed and, as befits the instrument, equipped with every modern convenience that electronics can provide . . . which would, as well, take up the least possible space inside the case . . . the multiple contact systems for the repetition of notes which require numerous switches are to be avoided.

The contract was awarded to Jean-Loup Boisseau of Béthines and his associate Bertrand Cattiaux. Boisseau, faced with numerous foreign competitors (eleven other organ builders tendered for the restoration), also had the brilliant idea — for the first time in France — of forming a syndicate with two other colleagues, Philippe Emériaud of Angers and Michel Giroud of Grenoble. Just as important, he also became associated with the Synaptel Company, a computer engineering and telecommunications enterprise, known for its work in the transportation and broadcast industries, recommended to him by IBM because of his interest in the new domain of computer science.

On 22 April, 1990, after a recital given by Philippe Lefebvre and at the conclusion of the 6:30 p.m. Mass, the organ of Notre-Dame fell silent for the two and a half years period of work that was to follow.

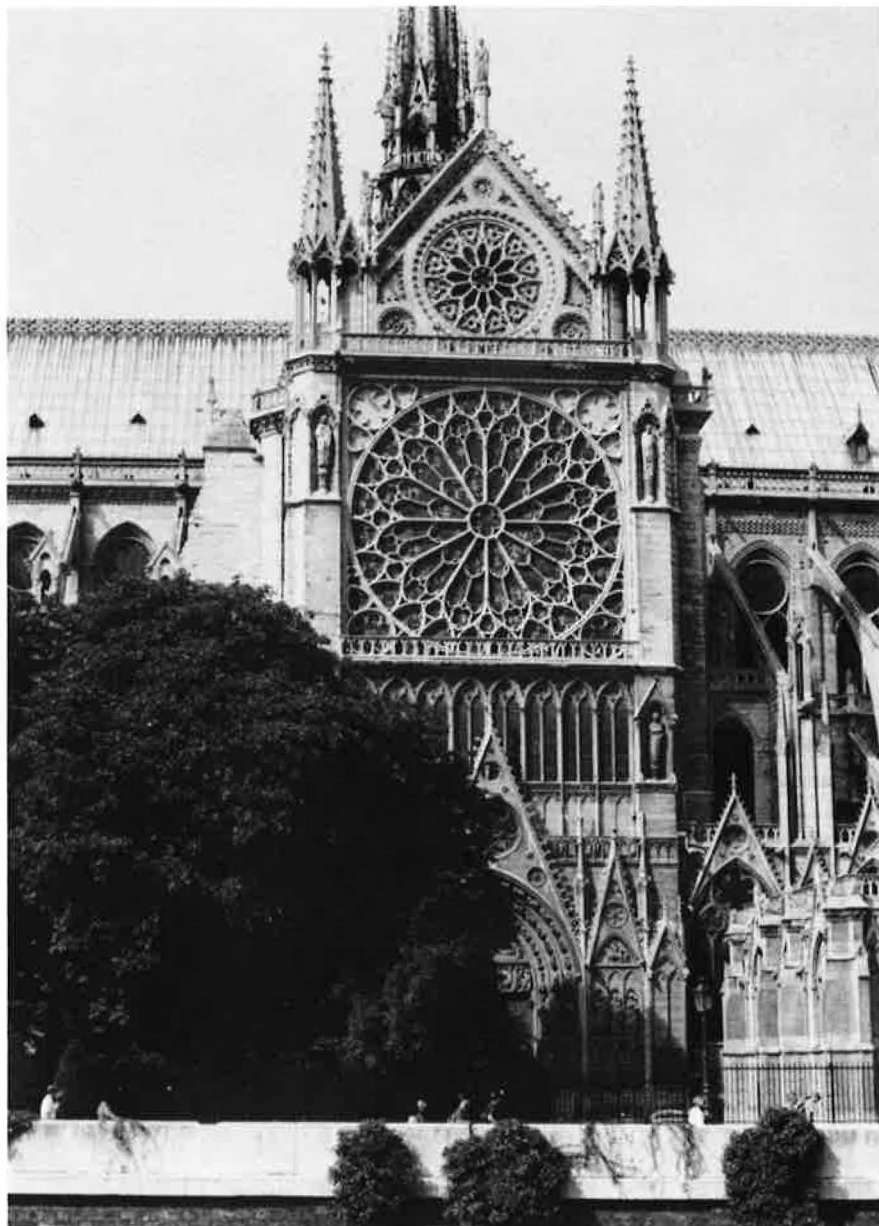
The latest restoration

Just as in 1960, there was a burning question which needed consideration before work began: should the instrument be restored one division at a time so as to assure its continued use in the liturgy? The clergy had the wisdom to forego this option and contented themselves, first of all, with restoring the Choir organ (itself a substantial instrument of two manuals and 30 stops) so that it could be used to accompany all the services. To ensure its adequacy and give the illusion of a more powerful instrument, the sound of the organ was boosted by means of an elaborate amplification system installed in the triforium.

As has been alluded to already, the restoration of the Grand Organ brought together two different worlds of expertise: one, the art of organbuilding, the other, computer technology. Organbuilding is a craft of the highest order, especially in a country such as France where the heritage of organs is very rich, and where the politics associated with the restoration of old organs has been so keenly fostered over the last twenty-five years by the State and local communities, that it has produced builders whose competence is of international renown. Computer science is a world of engineers, scientists and programmers who work in such industries as aeronautics, astronautics or telecommunications.

For the organbuilders there lay the double challenge of the immensity of the task where they not only had to respect three past centuries of their art but also to co-operate with engineers used to the most modern industrial standards. For the other group there was the novelty of entering an entirely new domain, and the obligation to invent new and original interfaces in such a non-industrial environment as the organ gallery of Notre-Dame; here, where the rose window concentrates the fierce rays of a summer sun and affords little protection from the chill of winter, not to mention the water vapour, the dust and particles emitted by burning candles and the carbon dioxide that emanates from the millions of people who enter this, the most visited monument in France.

A most cordial and efficient relationship and interaction existed between all parties from the start, each being disciplined in both



BILL VAN PELT

Notre-Dame de Paris

precision and competence. The brief of what needed to be done was clear and had been spelled out in the "Schedule of conditions," the book of special technical clauses being exact: "the dilapidation of the instrument, abundance of dust preventing pipe speech, a great number of pipes mute and others speaking badly, wires and unprotected contacts running the risk of causing fire, every wind leak to be checked, the bellows both large and small, the trunking, note motors . . . , all the leathers are in a bad state, the bases of the chests are in risk of collapse," *et cetera*.

With the exception of the 32' flutes and the Bombarde and the four principal wind reservoirs of Cavaillé-Coll, immovable without dismantling the entire casework, the instrument was taken out of the gallery. From June, 1990 onwards, visitors to Notre-Dame could see the lower medallions of the rose window through the gaping holes in the case, visible for the first time since 1730(!).

The work was then shared between the builders, as follows:

- Jean-Loup Boisseau and Bertrand Cattiaux were to restore and match up the old pipes, make new ones and do all the voicing;
- Philippe Emériaud would restore the main wind chests, the wind trunking and, more generally, the conduits;
- Restoration of the secondary reservoirs, concussion bellows, the Cavaillé-Coll drawstop mechanism, the remaking of the winding blocks for the old and new Chamades and the chests



PIÉRE-Louis ROBERT, 1976

The organ, Notre-Dame de Paris, ca. 1976

of the Small Pedal and Small Récit would be in the hands of Michel Giroud;

- Boisseau and Emériaux would share the remaking of the four large wind reservoirs *in situ*.

Not to be forgotten, the Synaptel company would remake the console electronics and all the action transmissions.

The Chests

Studded with screws from previous restorations, these were the most delicate to refurbish. The work entailed removal of the upper boards to re-glue the bars, the levelling of the tables, upper boards, sliders and rack boards, the sealing of splits within the soundboards, re-leathering of the sliders and pallet-boxes, the adjustment of springs, guide-pins, pull-down hooks and tracker wires, changing the sealing diaphragms and reinforcement of the bases of the chests.

This detailed and time-consuming task was carried out at Angers. For a better understanding of the complexity of the work, let Philippe Emériaux explain — the admiration of one builder at the end of the twentieth-century for his predecessor of 1860 sits well with what French organbuilding was and also attests to the ability of the artisans of today:

To penetrate the interior of a Cavaillé-Coll organ always has a fascinating side, especially the one at Notre-Dame; extreme and minute care being taken in every possible detail of its construction. For proof just look at the "finish" of the valves for letting wind into the bellows.

This apparatus, guided by the upper table of the bellows is composed of two inverted butterfly valves which remain open when air is taken into the bellows and which gradually close as it fills. This system is ingenious in practice because it acts as an equilibrium — the pressure exerted on the first valve is cancelled by the same pressure exercised by the reversal of the second; the

first forcing to a closed position, the second forcing, in the same way, to an open position.

To put it more simply, imagine, in place of the valve, an articulated plank of wood whose middle is covered with leather to make it airtight. Cavaillé-Coll, not satisfied with this, creates a mitred oak frame whose central section is crisscrossed with small pieces of wood. This is a true marvel of joinery — totally invisible at first glance because, first of all, the unit is lined with parchment inside and out and then re-covered with two layers of lambskin. The central articulation is achieved on an axis made from low-cut steel and screwed into the frame. The regulation is so precise that the slightest imperfection, inevitable because of variations in the thickness of the skin, such as would make one valve close a fraction of a second before the other, is corrected . . . with a piece of cigarette paper!

The Bellows and Drawstop mechanism

In the first place it was necessary to restore to service Cavaillé-Coll's regulation system, placed at the bottom of the bellows, as this had been rendered inoperable through wear. The cleaning of woodwork and scrubbing, removal of old papers, stripping bare the boards, restoration of altered parts, i.e. the preparation and cutting of leather into strips, chamfering and cutting up of ribbing, ungluing the old leather strips and replacing them and the ribbing of the bellows, being doubled inside and out: all this, of course, on a gigantic scale at Notre-Dame! For example, the twenty-two bellows and concussion bellows alone used up 1,200 metres of lambskin! Then, to restore to use the machines of the stop action, machines of superb manufacture, whose adjustable movements — despite uninterrupted use over so many years — had retained a remarkable degree of precision. This important mechanism, made from oak, incorporates a set of regulators, double action puffers, intake and release valves. These double action valves act against the transmission mechanism by way of levers and counterweights of iron. Of the 184 of these, 172 were from Cavaillé-Coll's time and 12 more were

reproductions for the stops that had been suppressed. Their remaking required 2,500 linear metres of leather strips of varying widths. The ribbing, which had been repaired many times, could not be reused and 1,472(!), were remade to match.

Lastly the bellows, mounted on a double hinge and with double ribbing, were covered, both inside and out, with paper — unbleached paper within and green crinkled paper without. As chance would have it, Boisseau could supply Giroud with paper from Cavaillé-Coll's original workshop! Faithful to nineteenth-century organbuilding, gluing was done with hot animal glue. All 344 valves of the system were each covered with three layers of skin, then one of animal membrane of a thickness of 7/100, advantageous for preventing sticking and the accumulation of dust. All the re-leathered parts of the organ are covered with this membrane.

The Console

Jean Hermann's console left for Boisseau's workshop in Béthines for what promised to be straightforward cabinet work and its preparation for the integration of the electronic circuitry. This was not to be the case for it was noticed that the console had been constructed from timber veneer, not solid timber, and that the quality of the joinery necessary for housing the two computers and two cathode tubes needed to be considerably better. In the meantime, the adaption of a new type of capture system (level with the keys) and new prospects with the computer system itself, led the builders, following agreement by all the parties (State commissioners, *titulaires* and technical advisor) to make a new console. Taller, by five centimetres, than the old one and built from solid oak, in imitation of the organ case, it was made by Philippe Emériaux and delivered to Synaptel laboratories in mid-March. On 1 October, 1992, after six months work, it was ready to be brought back to the

gallery to be fitted with the manuals, ivory stop knobs, toe pistons, pedal board (and bench) of Cochereau's old console.

The Winding

The shoddy workmanship of the console joinery wasn't the only surprise. The "Schedule of conditions" provided for the bellows and regulators to be restored, the cracked and dried-out leather to be replaced, the wind trunks checked and made air-tight and the replacement — in lead, of course — of the most damaged conduits except for where pipework had been removed. In the course of the 1933 restoration and, again, at the time of the additions requested by Cochereau, a large percentage of these conduits had been made in "Westaflex," a tubing of corrugated cardboard that had been treated with a plastic coating. This had been considered advantageous for its flexibility in installation without disturbing the normal functioning of the instrument. Naturally, this highly inferior substance had to be completely replaced since it was hardly sympathetic with the quality of Cavaillé-Coll's own materials. Accordingly, the entire wind conveying system was remade at Angers, partly in wood and partly in lead. This necessitated tens of metres of pine to be cut up, planed and glued; hundreds of metres of lead tubing to be shaped and sawn and thousands of joints to be soldered to link the multiple circuits, before ensuring their insulation with tow and connecting them, at one end, to the wind trunk and, at the other, to the wind chest. This work was completed by Summer, 1992.

The Pipework

The music room of the south tower of Notre-Dame had been converted into a makeshift workshop which, among other things, was used to store some 900 wooden pipes. These had to be brush cleaned, vacuumed, repainted (the pine pipes of Cavaillé-Coll) or restrained (Clicquot's and Thierry's oak pipes) and the stoppers releathered (in the case of the bourdons). On site, in the southern gallery, important work was carried out on the façade pipes. All of them, from 24 foot to 8 foot, were cleaned and rounded out for dents, the feet were straightened out and the stays remade, according to normal practice, in thick tin. The remaining pipes, some 7,000 odd, were taken to Boisseau's workshop to be treated with ultra-sound in alkaline baths (a process that had originated with Y. Burgues and G. Delcroix). They were cleaned and packed for storage so as to protect them from dust and temperature variations. It was vital that every possible effort be made to repair all pipes because, in the words of the "Schedule": ". . . in spite of the accretions and the mutilations the essence of Cavaillé-Coll is still present."

Certain Cavaillé-Coll stops that had had their tuning slots altered were corrected, if necessary, and returned to their original place.

On the Grand-Orgue:

- The Principal 8', Octave 4' and Doublette 2' were restored to their correct speaking lengths;
- The Mixtures were sorted out as to their proper harmonic progressions;
- A Tierce rank was added to the Cymbale as shown in Cavaillé-Coll's notebook
- A bass was made for the 16' Bombarde.

On the Positiv:

- The Mixtures were sorted out and put in place of an extra rank.
- On the Récit:
- The Diapason 8' and Prestant 4' had their original speaking lengths restored;
- The Mixtures, added in 1970, were removed;



The organ, Notre-Dame de Paris, before the most recent restoration and console.

- A Quinte 2 $\frac{2}{3}$ ' and a replica Cavaillé-Coll Clarinette 8' were made.

On the Grand-Choer:

- The composition of the Mixture, added in 1970, was changed.

On the Small Pedal:

- A Clairon 2' was added on a spare slide;
- The composition of the Mixture was changed.

On the Solo and the Pedal:

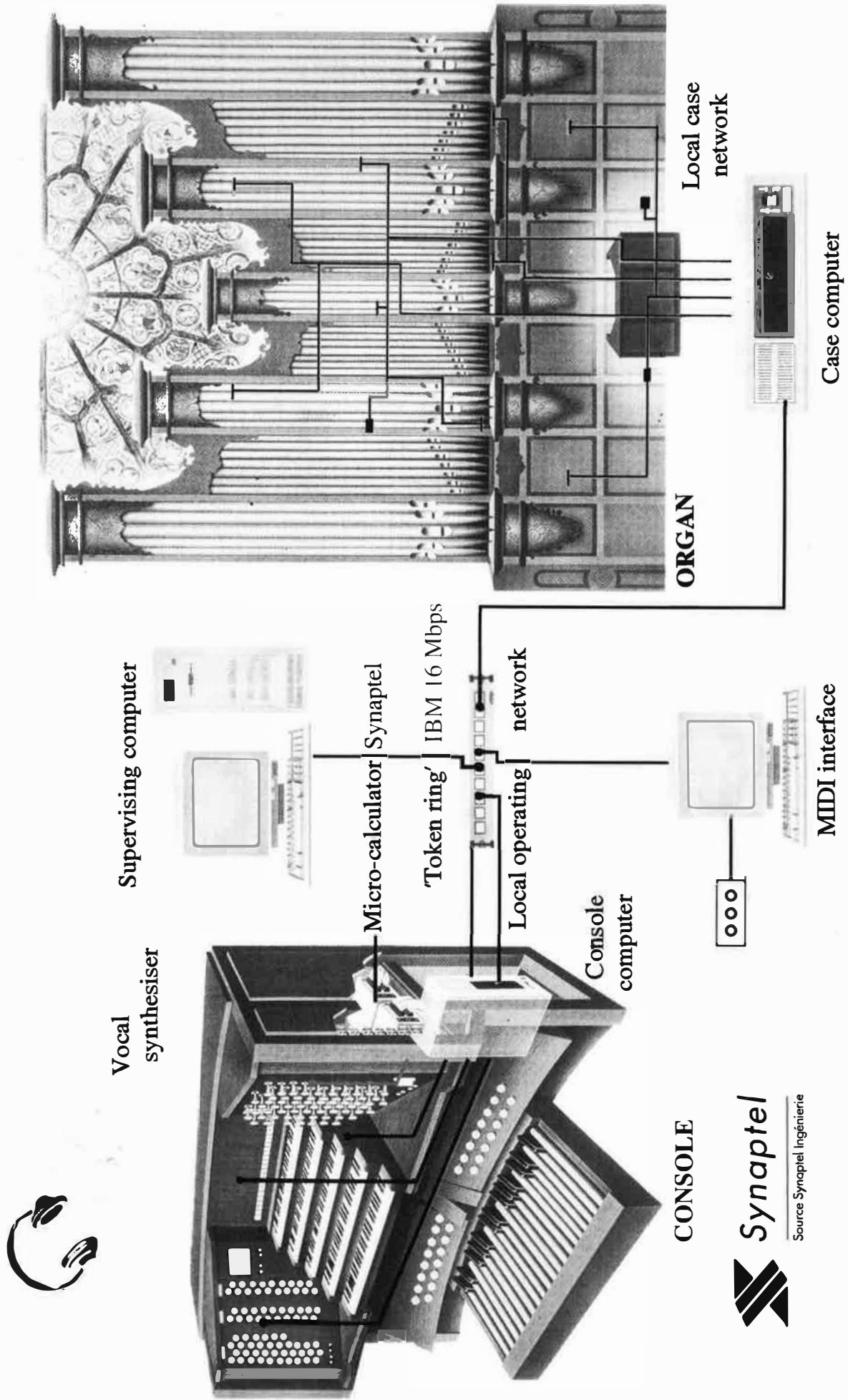
- There was no alteration. Robert Boisseau's Mixture on the Solo stayed as before, just as did the Grand Pedal, which is completely Cavaillé-Coll.

The Chamades:

These were re-distributed and completed by the addition of a Trompette 8' and Clairon 4' copied from similar stops by Cavaillé-Coll at Saint-Sernin, Toulouse.

The return of the pipework began towards the end of September, when all the conduits had been put into place; starting with the Grand-Choer, then the Récit, the Solo, the Positif, the Chamades and the Pedal. A voicing machine, essential to this task, was installed and used during the course of one hundred nights (one night for each stop of the organ) as it was impossible for it to be utilized during services or, indeed, while the thirty to forty thousand

Integrated digital transmission network of the Grand Organ in Notre-Dame, Paris



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visitors who daily flock to the cathedral are conducted by guides speaking practically all the languages of the world, and where the noise level in the "cathedral" can often attain a level of fifty decibels!

The action and computer component

The computer component had been proposed to respond to the requirements for reliability of the action, the flexibility of the stop combinations and the limited space within the case. Initially, it was to be limited to two computers — one in the console and one in the case with, between the two, a central transmission network where information (what note, on what keyboard, with what stops) was digitally processed and transmitted, at a speed of 16 Megabytes per second, to operate the corresponding pallets (in real time) via some 800 "activators."

The "requirements for reliability" wanted by the French subsidiary of IBM, who had donated the data processing material, and the potentialities of the computer system resulted, after further research, in a much more elaborate, sophisticated and complex layout. For example, five Synaptel employees notched up some 1,800 hours writing software programs for the computer system and their engineers also designed a new copper network to replace the one-time maze of electrical wiring.

The Layout of the System

The computer system which relays the activators in the case to different command modules, is composed of a network of interconnected stations and sub-stations which transmit the organists playing to terminal stations. These, in turn, activate the electro-magnets. From station to station, these coded messages can be modified in terms of the configuration of stops chosen by the organist (manual or pedal coupler, *sostenuto* etc.). The networks also allow all the necessary information for the functioning of the combination memory software to be exchanged between the console and a master computer.

The main network, called the "local operating network," is the relay between the console station, master computer and case station. The central sub-network allows the console station to communicate with its sub-stations and for the case station to also "talk to itself." The layout conceived on the networks allows the connection, or otherwise, of different specific computer stations; also, the presence of device interfaced with the network MIDI allows the organist to store a performance in the memory and to reproduce it.

The Console station

The device which controls this station is the consoles management computer. This consists of two IBM PS/2 computers (industrial models specifically designed to withstand high vibrations and dust in factories) with an 80486 microprocessor, the second being there



The organ as rebuilt, photographed in 1992

only as a back-up. The computer communicates with the microprocessor by way of two local sub-networks which manage, on the one hand, the sensors for measuring the displacement of the keys and, on the other, the controls located on the stop jams and the rocker tabs underneath the music desk. Each manual and pedal note is fitted with a Hall effect sensor which allows the position of every key to be accurately measured; the nature of the sensor being such as to remain impervious to foreign matter, especially dust.

The measurement is converted into a numeric (digital) value which is then processed by the computers. In particular, the organist can personally regulate the depth of key touch which corresponds to the opening threshold of a pallet as well as the lower *a priori* degree by which the pallet will be released. Thus, a phenomenon of adjustable hysteresis is achieved which allows the flexibility of an almost limitless setting up of the organ, tailoring it for specific needs or to individual requirements.

The endowment of the instruments potentialities was set to result in an increase in the number of pistons, couplers and other buttons that the stop jams could not possibly have accommodated, the management of these accessories being overcome by placing a new tool for "talking" to the computer at the disposal of the organists. This consists of two small (cathode) colour screens, each with four push buttons. It is via these that the organists can access information on the piston settings in the memory, recall a previously recorded combination or engage the MIDI interface.

Vocal synthesis software is also integrated into the console. The synthetic voice alerts a sight-impaired person (one of the *titulaires*, Jean-Pierre Leguay, is blind) of a modification to the state of the console or, if asked, will let the person know about the software set-up at any given moment. In fact, just as the normal features of a console (stop knobs, tabs etc.) allow the player to know the position of a register or a coupler, it is the same with the new buttons provided and the information displayed on the two screens. A last

Principal characteristics of the computer system

Micro-computer stations of the console and case: "Industrial" IBM PS2 computer with 80486, 32 bit, microprocessor (20 million cycles per second);

Micro-computer supervisor station: IBM PS2 computer with 80486, 32 bit, micro-processor (25 million cycles per second);

Local operating network: IBM "Token Ring" network with a transmission speed of 16 megabytes per second. Distance 500 m;

Micro-calculator sub-station for management of the capture system: 80186 micro-processor board with 8-bit digital to analogue converter. Each board can digitalise the movement of 32 captors in less than a millisecond;

Micro-calculator sub-station for management of the binary interfaces: 80186 "Europe" format microprocessor boards, each with power to command a maximum of 8 interfaces for control of the pistons, rocker tabs, stop action and electro-magnets.

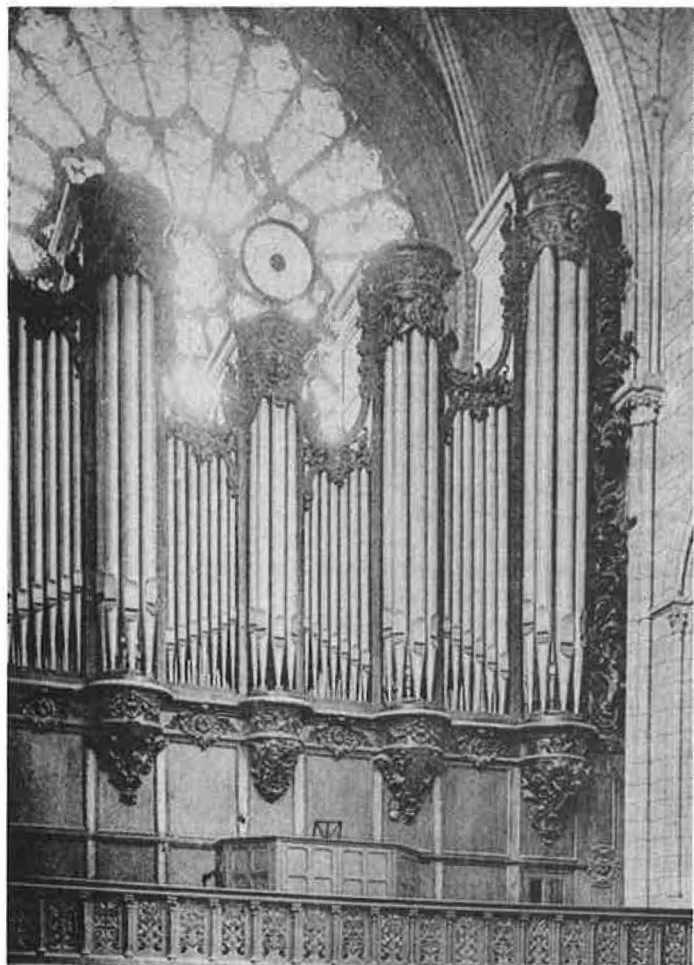
Specification of the rebuilt organ, Notre Dame, Paris

GRAND-ORGUE	SOLO
16' Violon-Basse	32' Bourdon
16' Bourdon	16' Principal
8' Montre	8' Montre
8' Vièle de gambe	8' Flûte harmonique
8' Flûte harmonique	4' Prestant
8' Bourdon	2' Doublette
4' Prestant	5 1/3' Quinte
4' Octave	3 1/5' Tierce
2' Doublette	2 2/3' Quinte
II-V Fourniture	2 2/7' Septième
II-V Cymbale	II Grosse fourniture
16' Bombarde	V Fourniture
8' Trompette	V Cymbale
4' Clairon	II-V Cornet
8' Chamade	8' Cromorne
4' Chamade	(Chamade G.O. 8)
	(Chamade G.O. 4)

POSITIF	GRAND-CHOEUR
16' Montre	8' Principal
16' Bourdon	8' Bourdon
8' Salicional	4' Prestant
8' Flûte harmonique	2' Doublette
8' Bourdon	2 2/3' Quinte
8' Unda Maris	1 3/5' Tierce
4' Prestant	1 1/3' Larigot
4' Flûte douce	1 1/7' Septième
2' Doublette	1' Piccolo
2 2/3' Nazard	IV-VI Cymbale
1 3/5' Tierce	16' Tuba-magna
V Fourniture	8' Trompette
V Cymbale	4' Clairon

PEDALETTE	
16' Clarinette	32' Principal
8' Clarinette	16' Contrebasse
4' Clarinette	16' Soubasse
	8' Flûte
	8' Bourdon
	8' Violoncelle
	4' Octave
	4' Flûte
	2' Flûte
	1' Piccolo
	10 2/3' Quinte
	6 2/5' Tierce
	5 1/3' Quinte
	4 4/7' Septième
	3 1/5' Tierce
	2 2/3' Quinte
	1 3/5' Tierce
	1 1/3' Larigot
	III Fourniture
	IV Cymbale
	32' Bombarde
	16' Bombarde
	16' Basson
	16' Sordun
	8' Trompette
	8' Basson
	4' Clairon
	4' Chalumeau
	2' Clairon

Comp	Comp
PED	Pos
PED	Pos
8	CO
8	CO
8	POS
8	REC
8	PED
8	SOUL
8	GC
4	POS
4	PED
4	REC
4	SOL
	PED
	PED
	Anches
	Anches
	Anches
	Anches
	POS
	Anches
	REC
	Anches
	GC
	Anches
CH	CH
	Anches
	SOS
	TUT
	INV
GO	POS
	GO
	I
	I
	I
	I
	II
	III
	IV
	V
	VI
	VII
	VIII
	IX
	X
	XI
	XII
	XIII
	XIV
	XV
	XVI
4	REC
4	REC
	ACC
	ACC
16	GO



The organ with the original console in position.

The Supervisor station

This station, comprising an IBM PS/2 microprocessor computer, is both a memory and system administrator. The organist uses this station – with its conventional computer keyboard, mouse and monitor – to preset his registrations, these pre-programmed registrations being recorded onto a magnetic disk. The information processing commands of the action permit combinations that would otherwise be impossible to obtain by using the console pistons alone. Furthermore, the system allows a player the freedom to couple any chest division to any manual, which now means that control is no longer via the keyboards but the keys.

Access to the new combinations and editing software is by way of a capture system generator. This allows the organist to create, modify and memorise an infinite number of combinations and to put them onto the magnetic disk.

Once recorded, the organist can call up the combinations at the console. This is a far cry from the fourteen generals and six pistons per division of the former capture system whose memory was wiped once the organ had been turned off! The supervising computer system has a "log book" of all the systems functions.

A telephone line and a modem allows the maintenance division of the Synaptel company to monitor the system from their laboratory at Le Mermoz, near Versailles, thereby being able to diagnose problems from a distance.

The MIDI link station

The MIDI link station conducts a bi-directional conversation – in real time – between the local operating network and a normal MIDI network. This means that any equipment which can command the MIDI interface can be connected to the Grand Organ.

Also, from now on, the organist has a sequencer and a musical score writer at his disposal. The sequencer allows the organists playing to be recorded onto the magnetic disk and then to be recalled. This unit and the MIDI link station play an identical role to the unit in the console on the local operating network.

refinement of this station has been to dispense with the console key altogether, substituting for it an individual "smart card" (identical in appearance to the normal credit card with a magnetised strip) which contains information about each of the users and identifies the particular configurations that they prefer the organ to be in when they are in command of the console.

The Case station

This is made up of two IBM computers identical to those of the console station; the Case station receiving all the mechanical information. Its role is to decode this information and to direct it through three sub-networks into the sub-station unit in the Case. The sub-stations are the microprocessor boards which control the pallets, the registers or the tremulants.



BILL VAN PELT

The new console, Notre-Dame de Paris, in August, 1993

So now, the organist, having played, can listen to his playing, can modify either it or the registration or even play at the console, simultaneously with the sequencer, and record it all. With the aid of the software in the sequencer it is also possible to modify the stop combinations as they were remembered. If required, the music writer can supply a hard copy of the music which is printed in normal musical script by a laser printer.

From now on, then, there is a sure means of preserving an improvisation that would otherwise be lost. What would one give to have those of Vierne and Cochereau!

The Voicing

To voice a large instrument like that of Notre-Dame might seem simple enough. However, it's really more a matter of making a homogeneous blend of sonorities, a well-defined aesthetic that corresponds with a definite historical period. Inevitably, each century has brought both innovation and destruction to the instrument. From Thierry to Boisseau, and with Clicquot, Dallery, Cavaillé-Coll, Mutin, Brechet and others between, each builder acted with the best intentions but with varying degrees of expertise, bringing with him notable improvements and different dimensions to this, at all times, prestigious instrument.

This said, one might think that nothing original remains in the Grand Organ of Notre-Dame. Thankfully, quality endures and we can again see and hear homogeneous ensembles of stops by Clicquot (mainly reeds), of Cavaillé-Coll (the foundations — often touched up originals by Clicquot) and the chamades and 32-foot plenum of Robert Boisseau. The large families of stops have to blend harmoniously in a powerful but non-aggressive tutti (visitors finding themselves inside the case would be saturated with decibels!).

Jean-Loup Boisseau, who has maintained the organ for the last quarter of a century, carried out the revoicing program. Faced with a compromise between the Classical plenum and the organ of Cavaillé-Coll, he succeeded in correcting altered stops to restore their Cavaillé-Coll voicing while integrating the newer stops.

Having tirelessly experimented among the best preserved flue and reed pipes, he was able to re-establish the different pressures very precisely, as well as restore their individual character, their relative power in particular registers, and their blending, both by families and full ensembles.

Thus, one can hear today the organ of Cavaillé-Coll — more especially in the foundation stops than in the mutations and harmonic progressions and the battery of reeds and tutti, crowned by chamades which are styled after his — and a contemporary organ with a myriad possibilities thanks to the link of computer science with the ancient tradition of this organ and its 32-foot plenum of cathedral dimensions.

The Grand Organ of Notre-Dame? An historic organ or an organ for the future? Either way, it is a grand Cavaillé-Coll renewed and enhanced with the riches of both past and present and, indeed, an instrument always in a state of evolution.

References:

1. *Notre-Dame de Paris — Les Orgues*, Association Maurice de Sully, 1992, Paris.
2. *Mon patrimoine* (Monograph) 1992, Paris (Contributions by Jean-Marie Cardinal Lustiger, Archbishop of Paris; Jean-Pierre Decavèle, technical advisor in charge of the restoration; Loïc Metrope, Bureau for historic organs; B. Fonquernie, architect in charge of historic monuments; Christian Roussel and Miguel Ruiz, project heads of Synaptel and others).
3. Bernadette Gerard and Roberte Machard, *Le Grand Orgue et les Organistes de Notre-Dame de Paris*, 1980, Paris.
4. Jean Favier, *Les Orgues de Paris*, Délégation à l'Action Artistique de la Ville de Paris, 1992, Paris.
5. Claude Noisette de Crauzat, *L'orgue français*, Ed. Atlas, 1986, Paris.
6. Tara Patel, *New Scientist*, 19-26 December, 1992 p.18.
7. Helen Pike, *The Christian Science Monitor* (World Edition), 22-28 January, 1993 p.10C
8. *Dictionary of computing . . . technology*, S.M.H. Collin (French-English/English-French), Peter Collin Pub. Ltd., 1991, Middlesex.

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Registration Practice in France after 1920: Its development related to the aspect of fantasy in the 24 Pièces de Fantaisie of Louis Vierne

by Robert Wagner

This paper was prepared for a lecture/recital given by the author in 1991 at St James' Church, King Street, Sydney, as part of his qualification for the degree of B.Mus at Sydney Conservatory.

THE 24 PIÈCES DE FANTAISIE of Louis Vierne (1870-1937), written in four suites between 1925 and 1927, are representative of the age of the concert organist, which has been apparent since the mid nineteenth-century. Organists such as Adolf Hesse, Jaak Lemmens, and Alexandre Guilmant were among the first to maintain a busy concert schedule.

Having broken away totally from the influence of his *maître*, Charles-Marie Widor, it seems that Vierne was determined to overcome adversity, including his almost total lack of sight, through the composition of well-developed character pieces, while continuing the ever-developing tradition of the "fantasy." André Fleury and Olivier Latri speak of Vierne's use of composition as an outlet for his emotions and, in the case of the 24 Pièces de Fantaisie, perhaps, his imagination with titles such as "Clair de lune," "Fantômes," "Naiades," and "Hymne au soleil."¹

One of the earliest definitions of "fantasy" is found in the Renaissance where it describes an instrumental composition whose form and invention spring "solely from the fantasy and skill of the author who created it" (Luis de Milan, 1535).² Almost every major school of music since the sixteenth-century has developed the notion of fantasy, often emerging from improvisation.

The first examples of French fantasies (or *fantaisie*) date from the mid-sixteenth century with Guillaume Morlaye (1558), Grégoire Brayssing (1553), Julien Belin (1556) and Adrian le Roy (1551) publishing lute and guitar music. The *fantaisie* seems to have lost its popularity in the seventeenth century; there were very few composed for lute, and keyboard *fantaisies* were almost unknown. An exception is the *fantaisie* of Charles Racquet, organist of Notre-Dame from 1618 to 1659, a structured work much in the style of Sweelinck.³

During the Romantic period, composers saw the potential of the fantasy as a medium to break away from the sonata, which had developed into a fairly rigid structure. Composers such as Schubert

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(the "Wanderer" Fantasy for piano), Liszt (*Fantasia and Fugue on Ad nos, ad salutarem undam*) and Schumann (*Phantasiestücke*) grasped the opportunity with enthusiasm, developing this freedom into large-scale works for solo (especially piano) or accompanied instruments.

During the period of musical wilderness experienced after the French Revolution, the only composer to maintain the tradition of *fantaisie* in France was the organist of the Parisian church of Saint-Germain-l'Auxerrois, Alexandre-Pierre-François Boëly (1785-

1858), whose music exhibits many features of classical style. As its title implies, his Fantasy and Fugue in B-flat contrasts the improvisatory quality of *fantaisie* with the contrapuntal discipline of fugue. Responding to the possibilities offered by the new organs of Aristide Cavaillé-Coll, César Franck (1822-1890) wrote two *fantaisies*: in C, Op. 16 (the first of a set of *Six pièces pour Grand-Orgue*, 1862) and in A (the first of a set in *Trois pièces pour Grand-Orgue*, 1878).

The French school, however, did not make much progress in the development of the *fantaisie*, moving towards more structured forms such as the sonata. Guilmant composed eight sonatas, also writing versions of the first and eighth sonatas for organ and orchestra. Widor also developed this style, which he called the organ symphony, after Franck's *Grande pièce symphonique* (Op.17).

It can therefore be seen that the 24 Pièces de Fantaisie broke new ground in the French Romantic school of organ music. They also represent a significant departure from the organs of Cavaillé-Coll, the traditional medium and inspiration of this school. Written after Vierne was firmly established as a travelling concert organist, a career in which he encountered many different types of organs, Vierne merely states in his preface to 24 Pièces that they are

intended for performance on a three-manual organ with pedals. While the organs of Cavaillé-Coll are without doubt a successful medium for the performance of these works, it is clear that Vierne was expecting them to be played on a variety of instruments.

As with the entire repertoire from Vierne's school, however, registration remains inseparable from these works. Registration practice of the French school of organ playing in the nineteenth and twentieth-century has been subject to widespread generalization. This has been due largely to extensive documentation of the organs of Aristide Cavaillé-Coll (1811-1899), which are given the credit for inspiring the music of this school. Characteristics of these organs is the separation of the foundation stops (up to and including some 4' ranks) and upperwork (4' and above, reeds and mixtures) by placing them on separate chests, and bringing them into operation



Louis Vierne (1870-1937)



Charles-Marie Widor at the Cavallé-Coll organ of Saint Sulpice in Paris

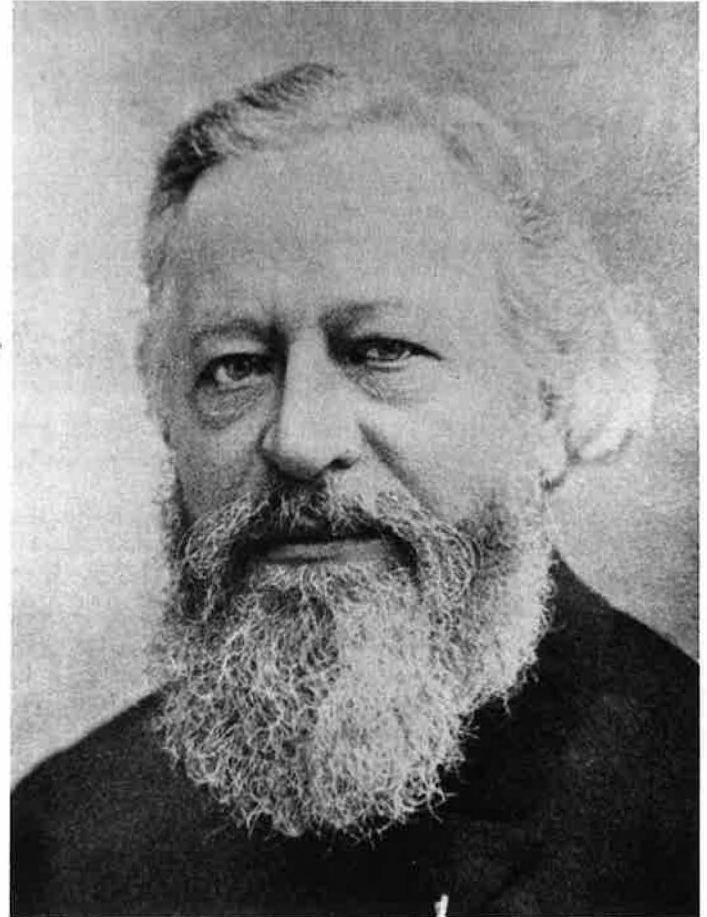
by means of a ventil system. Also placed on the foundation chest of the Récit division were the Hautbois 8' and Vox Humana 8'.⁴ This gave rise to a well documented method of registration which, while effective, seems quite limiting and predictable. It was César Franck who first used this method in his compositions and improvisations, a practice that was continued by every organist through the French school of the nineteenth and twentieth-centuries.

Not so well documented are the deviations from this registration practice taken by some organists, leading to a number of inconsistencies and ambiguities in their indication for registration. There seems to be a definite period of transition from a rigid adherence to the limitations of the ventil system offered by Cavallé-Coll to a far more free and flexible method made possible by the development of adjustable registration aids.

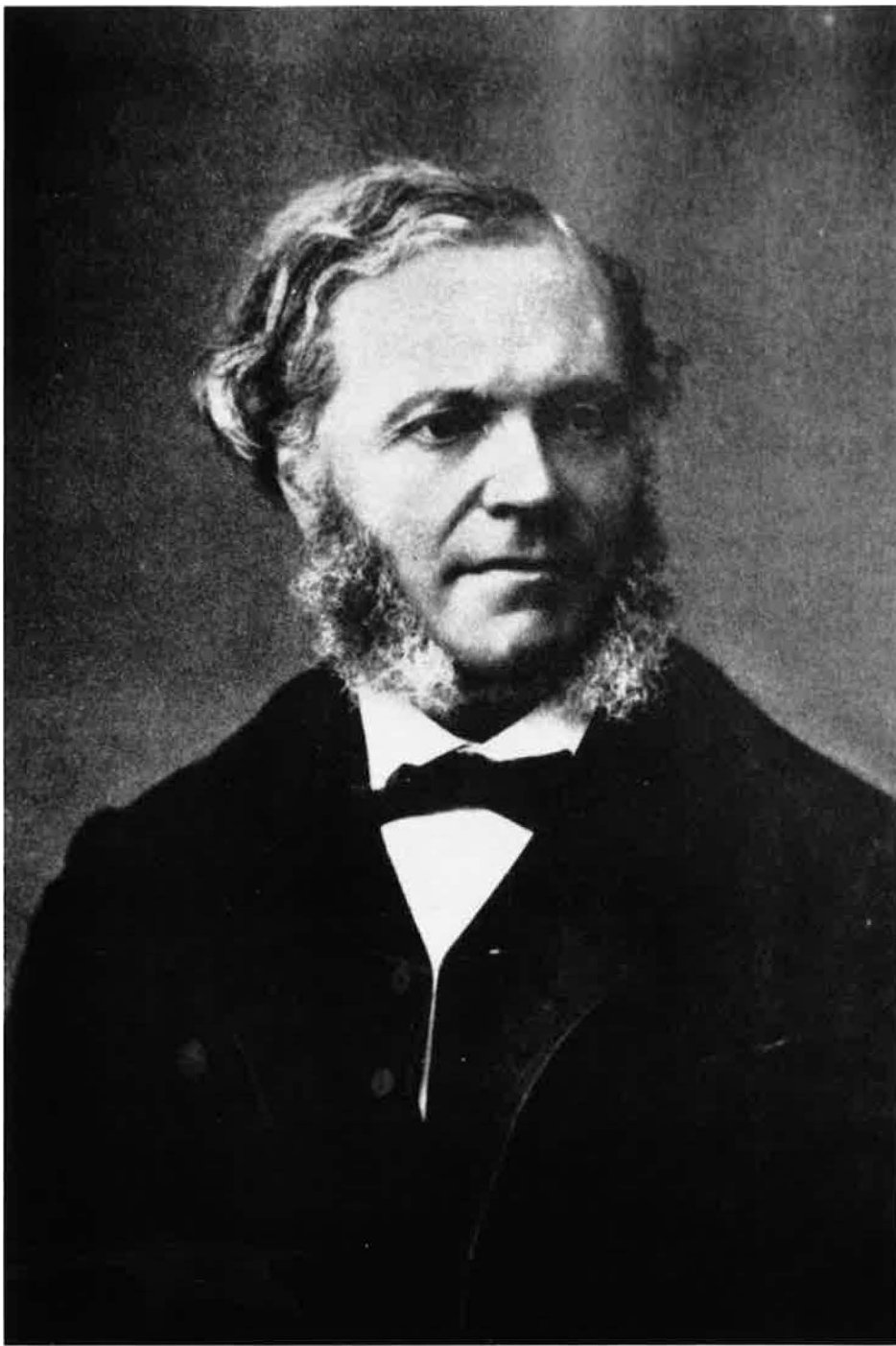
There were a number of influences on the French Romantic school which must be evaluated to help understand this development.

Despite the ravages of the Revolution of 1789 on the development of French music, there were some who remained loyal to the old classical traditions. In the face of the more popular frivolity of Batiste and Lefébure-Wély was Boëly, who continued in a classical style composing fugues as well as maintaining the liturgical tradition of organ music that had been so firmly established. Coinciding with Cavallé-Coll's growing reputation as an organbuilder were the visits to France, in 1852 and 1860, of Jaak Nikolaas Lemmens (1823-1881), a Belgian organist who brought the classical German tradition of composition and technique to the French. Among his pupils were Alexandre Guilmant and Charles-Marie Widor, who were possibly the most influential of all the French organists of the Romantic school.

An indication of the extent to which Guilmant and Widor were influenced by these German principles is their enthusiasm for the music of J. S. Bach, which they used extensively in their teaching programmes at the Paris Conservatoire (Widor from 1890 to 1896 and Guilmant from 1896 to 1911). Vierne tells of this in his



Alexandre Guilmant (1837-1911)



Cesar Franck (1822-1890)

memoirs, reporting that the class, at one stage, spent three months on the eighteen "Leipzig" chorales alone.⁵

The influence of old registration practices combined with the new directions offered by Cavallé-Coll led to some peculiar requests from Widor in particular. In his ten symphonies for organ which, it is assumed, were intended for performance on the organs of Cavallé-Coll, he is often unclear, sometimes specifying only "Mixtures" or "Cornets" or "Anches" [reeds] (which were all on the same chest), without any mention of foundation stops. At other times he has written only dynamic markings, which are usually associated with the dynamic level of the enclosed *Récit* division only. In his *Symphonic Gothique* of 1895, dedicated to the Gothic abbey of Saint-Ouen at Rouen, he notes at the beginning that *fff*=Tutti.⁶

Of all Widor's pupils, Louis Vierne was probably the most admiring disciple of his teacher (nicknamed "Widor junior"), producing six symphonies of his own. Vierne, however, was far more meticulous in his registration directions, clearly indicating what tone colours, pitches, and position of the *Récit* expression pedal he

desired. Preparation of stops is also clearly marked. Vierne rarely strayed from a Franck-like adherence to the vent system in his first four symphonies, but in the Fifth (1923) and Sixth (1930) Symphonies he starts to separate the ranks of the Anches chest, requesting the use of the 2-foot and mixtures in addition to the reeds.

A clue to the reason for this change may be found in the nine years that had passed since the composition of the Fourth Symphony (1914) and the dedication of the Fifth Symphony to Joseph Bonnet, a colleague and concert organist. While the influence of the large Cavallé-Coll organs of Saint-Sulpice and Notre-Dame is obvious in the first four symphonies, Vierne was becoming increasingly aware of organs and the organ world outside of Paris, largely due to the beginnings of his popularity as a touring concert organist, with tours to Germany, Belgium, Austria and Spain in 1921/22.⁷ In 1924 Joseph Bonnet and Henry Willis, the English organbuilder to whom Vierne dedicated his "Carillon de Westminster," arranged a concert tour of England and Scotland. The success of this tour encouraged Vierne to set up a fund for his organ at Notre-Dame, which he sought to increase by embarking on an extensive four-month concert tour of the United States in 1927. This tour was organized by an American organist, Alexander Russell, and the impresario Rodman Wanamaker.⁸

Vierne was impressed with the instruments that he played while in America and, on his return to Paris, began to plan a proposal of modifications to the Notre-Dame organ. This proposal included electrification of the console, including adjustable combination pistons, addition of upperwork and *en chamade* reeds (after the examples at Rouen and Toulouse), as well as increasing the compass of the manuals and enclosure of the Grand-Orgue and Positif in swell boxes. Victor Gonzales advised against the last two modifications, considering them too difficult to carry out.

Funds did not permit realization of these plans; the organ received only a cleaning and the following modifications in 1932:

1. Addition to the Pedal of a Violoncello 16' and Bourdon 8';
2. Addition of a Flûte 8' and Cymbale III to the Grand-Choer;

3. Addition of six Pedal pistons (pneumatic);
4. Replacement of the hitch-down swell pedal with a balanced one, placed centrally.⁹

It can be seen that Vierne had moved quite a way from the rigidity of the vent system, and this is well illustrated in the 24 *Pièces de Fantaisie*. He takes advantage of this new flexibility to use registration as a significant element to communicate the notion of *fantaisie*.

Although Vierne gives the interpreter of his music much license, stating in his preface that "The registration is by no means inflexible . . . it can be modified according to the possibilities offered by the instruments on which they are to be performed,"¹⁰ he is very specific about the types of colours and effects that he wants, occasionally demanding quick changes of registration.

A dream-like quality is desired through careful selection of foundation stops exclusively at 8' pitch in "Requiem aeternam," "Lamento," "Clair de lune," "Dédicace," "Etoile du soir," "Aubade," and "Résignation." The atmospheric nature of these pieces demands a sympathetic acoustic. Apart from use of solo flutes or the Voix

where possible "to give them greater resonance and a characteristic mellowness."¹¹

Vierne's fondness for mutations can be found in the symphonies, such as the "Scherzo" of No. 2, the "Intermezzo" of No. 3 and the "Scherzo" of No. 6. This style of writing, with similar registration, is found in the "Intermezzo" and "Impromptu" of the 24 *Pièces*. The same combination of texture and timbre evokes the "Feux follets" (Will o' the wisps) and "Naiades" (Water nymphs). In his 1988 recording of the 24 *Pièces de Fantaisie*, Olivier Latry exploits Vierne's license in registration with sympathetic use of a Septième 1 1/7' in some of them.¹¹

An atmosphere of darkness and mystery is achieved through the use of reeds such as the Hautbois, Cromorne, Voix Humaine and Clarinette in the low registers, with or without tremulant or other stops. In "Gargouilles et Chimères," Vierne also uses the Récit Quintaton 16' and Flûte 4', an empty-sounding registration, to contrast the slow-moving chords on the Clarinette. As in "Fantômes," a variety of colours is explored in very sectional writing. Again, a resonant building is essential for the successful performance of these pieces.

Perhaps the most suitable of the 24 *Pièces* for performance on Cavaillé-Coll organs are the ones that mostly require terraced registration changes, made possible by vented chests. "Marche nuptiale," "Hymne au soleil," "Toccata," "Sur le Rhin," "Carillon de Westminster," "Cathédraux" and "Les cloches des Hinckley" all adhere in the main to this style, although Vierne is often not clear whether or not he desires the separation of reed and mixture stops, a similar ambiguity found in the Fifth and Sixth Symphonies. Fullness and grandeur are the desired elements here, with crescendo and diminuendo effects adding greatly to the feeling of *fantaisie*. In the final piece of the fourth suite, "Les cloches des Hinckley" we find the only example in Vierne's entire output for organ of the dynamic marking *ffff*.

The later works of Vierne mark a point of significant change for the French school with the rebuilding of the organs, almost exclusively in Paris, affecting compositions after this time. This "modernization" of organs in Paris proved to be a popular activity, and the advent of electric action was considered a vast improvement on the old Barker/mechanical actions. Jean Langlais at Sainte-Clotilde, Maurice Duruflé at Saint-Etienne-du-Mont and Olivier Messiaen at La Trinité are just three significant organists who have overseen this type of major alteration of their instruments since Vierne, and all have written music specifically for this "new" type of organ. Pierre Cochereau, titulaire of Notre-Dame from 1954 to 1984, completed Vierne's unrealized intentions for the organ, with electrification being carried out in 1960, and various other additions, including reeds *en chamade* being completed in 1965.

(It is interesting to note that most of the original Cavaillé-Coll actions that have survived are only just coming to the end of their useful life, while the electrifications that took their place are already being replaced. At the time of writing [1991], both Saint-Etienne-du-Mont and Notre-Dame are being receiving new electric actions.)

This trend of modernization has continued until the present day, although historical restoration, it seems, is becoming more common as evidenced by the recently completed restoration of the Cavaillé-

Coll organ of Saint-Sulpice in Paris. Jean Guillou recently oversaw the construction of a new instrument with both mechanical/Barker and electric actions, with two consoles, for Saint-Eustache. This organ is based on Cavaillé-Coll lines, but with some quite bizarre deviations from tradition in the composition of mixtures and abundance of mutations.

With the recent deaths of organists such as Jean Langlais, Gaston Litaize, and Olivier Messiaen, the last living links with the French Romantic school have now been broken. It is the current generation of organist/composers such as Guillou and Naji Hakim who will determine the next chapter of the French tradition of *fantaisie*.

Notes

1. Christiansen, R. "Hommage à Louis Vierne — a conversation with André Fleury," *The American Organist*, (Dec., 1987) Vol.21, No.12. p.62.

2. ed. Sadie, S. "Fantaisie," *The New Grove Dictionary of Music and Musicians* (London: McMillian Press, 1980) vol. 6, p. 380.

3. *Ibid.*, p.385.

4. Sanger, D. Sleeve notes: *César Franck — the complete organ music* BIS CD-214/215.

*For more information on these organs, see Douglass, F. *Cavaillé-Coll and the Musicians*, Chapel Hill, NC: Sunbury Press, 1980.

5. Vierne, L. (trans. Esther E. Jones) "Memoirs of Louis Vierne; his life and contacts with famous men", *The Sydney Organ Journal* (Oct., 1984) Vol.15, No.5, p.26.

6. Roth, D. Sleeve notes: *Charles-Marie Widor — Sämtliche Symphonien Vol.5 Motette* CD 11141.

7. Oosten, B van. Sleeve notes: *Louis Vierne — Symphonien für Orgel Nr.4-6*, p.23 MD+G CD L3213/14.8

8. *Ibid.*, p.24.

9. Vierne, L. (trans. Esther E. Jones) *Memoirs of Louis Vierne; his life and contacts with famous men*, *The Sydney Organ Journal* (August, 1986) Vol.17, No.4, p.41.

10. Vierne, L. *Pièces de Fantaisie pour Grand-Orgue (1^{re} suite)*, Editions Lemoine 1925, Paris.

11. Latry, O. Sleeve notes: 24

Pièces de Fantaisie, p. 9 BNL CD 112742 A/B



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PLANAYAVSKY: Improvisation - Peter Planayavsky (1966 Aeolian-Skinner/1st United Methodist Church, Houston)

DAVID ASHLEY WHITE: Hymn, When in our music God is glorified

PAUL COOPER: Anthem, To every thing there is a season - Choralis Brass; Convention Choir/Gerre Hancock, cond; Robert Brewer

(1959 Möller/St. Luke's United Methodist Church, Houston)

CALVIN HAMPTON: 3 Dances - David Higgs (1st United Methodist Church)

JEHAN ALAIN: Aria - Kevin Jones (1974 Beckerath/Univ. of Houston)

ROBINSON: Improvisation - McNeil Robinson (1st United Methodist Church)

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MOZART: Adagio & Fugue in c, K. 546 - E. Power Biggs (1738 Müller/St. Bavo Church, Haarlem)

MOZART: Fugue in g, K. 154; Gigue in G, K. 574; Fugue in g, K. 401 - Martin Haselböck (1758 Pirschner/Brixen Cathedral) Novalis CD 150054-2 (QI)

MOZART: Festival Sonatas in C, K. 329/336 - Ian Watson, o (Sillman); The King's Consort/Robert King, cond. Hyperion CDA-66377 (HM)

MOZART: Adagio in C, K. 536 - Martin Haselböck (see above)

MOZART: Chorale-pretude, Ach Gott, vom Himmel sieh darein, fr Die Zauberpfeife, K. 621 - Gerhard Weinberger (see above)

MOZART: Prelude & Fugue in c, K. 394 - Johannes Pröger (1745 Stumm/Kirchheimbölden Monastery) Musical Heritage Society MHS-1399

MOZART: (arr. Czerny): Molto allegro, fr Symphony No. 40 in g, K. 550 - Hans van Nieuwkoop, Jacques van Oortmerssen (1827 Bätz/Grotekerk, Hardewijk) BIS CD-418 (QI)

MOZART: (arr. Novello): Benedictus, K. 275; Fugue in E flat, K. 153 - Martin Haselböck (1773 Pfiögler/Altenburg Monastery) Koch-Schwann CD 317 003 (KIS)

MOZART: Festival Sonata in E flat, K. 67 - The King's Consort

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News from New Haven. . . encore of concert performances featuring several new works and historic instruments.

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JAMES WOODMAN: Sinfonia pour orgue (premiere) - Thomas Murray

(1928 E. M. Skinner/Woolsey Hall, Yale Univ.)

ROBERT SIROTA: Concerto for Organ, Strings and Percussion (1985) - Victoria Rasmeyer Sirota (1951 Holtkamp/Battell Chapel, Yale Univ.); Orchestra New England/James Sinclair, cond.

BRUCE SIMONDS: Prelude on lam sol recedit igneus - Thomas Murray

DUPRÉ: 5 Antiphons, Op. 18 (1920)

EMMA LOU DIEMER: Fantasié (1967) - Christa Rakich

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Program No. 9431 8/1/94

Ames to Please . . . performances from inaugural recitals on the recent John Brombaugh mechanical-action organ at Iowa State Univ.

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BACH: 2 Neumeister Chorales *Herr Gott, nun schleuss den Himmel auf*, S. 1092; *Machts mit mir, Gott*, S. 957a

BACH: Chorales & Preludes on *Allein Gott in der Höh sei Ehr*, S.716/711/663/715

PINKHAM: Revelations

GIGOUT: Scherzo

SCHEIDEMANN: 2 Chorale-pretudes *Jesu, wollst uns weisen, Vater unser im Himmelreich*

BACH: Contrapunctus No. 11, fr The Art of Fugue, S. 1080

BYRD: Fantasia in C

BACH: Fugue in F, S. 540

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BACH: Prelude & Fugue in b, S. 544

BACH: 2 Chorale-pretudes on *Wer nur den lieben Gott*

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HANDEL: Royal Fireworks Music Overture

HANDEL: Concerto in B-flat, fr *Select Harmony*

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MICHAEL McCABE: Flourish & Chorale (1987)

Dr. Mason has commissioned at least one new work during each of the forty-plus

years she's been on the faculty of the Univ. of Michigan. She was honored by the New York City chapter of the American Guild of Organists, as **1988 International Performer of the Year**. This program also presents a performance by Catherine Rodland (*), winner of the 1988 International Organ Competition held at the Univ. of Michigan (instrument by C. B. Fisk). Dr. Mason's Riverside recording of the Fourth Book of William Bolcom's Gospel Pretudes appears on the *Pipedreams Premieres* Compact Disc (CD-1001, available from MPR).

Program No. 9434 8/22/94

A Well-paced Trotter . . . not just horsing around at Milwaukee's Performing Arts Center and the Birmingham (England) Town Hall, in concert and conversation with virtuoso British organ talent Thomas Trotter.

WAGNER (trans. Lemare): Die Meistersinger Overture

C.P.E. BACH: Organ Sonata in D, Wq. 70, no. 5

WEBER (trans. W.T. Best): Jubel Overture

SAIN TSAENS (trans. Guilment): The Swan, fr "Carnival of the Animals"

JOSEPH ERMEND-BONNAL: Paysages Euskariens (La vallée de Béhorléguy, au matin; Le Berger d'Ahusquy; Cloches dans le ciel)

MENDELSSOHN: (trans. Warren): Scherzo, fr A Midsummer Night's Dream

PROKOFIEV (trans. Guillou): Toccata, Op. 11

Mr. Trotter was taped in recital on the Aeolian-Skinner organ at Uihlein Hall, Milwaukee (9/28/87) as part of the Miller Organ Concert Series (for more information, write: 1489 N. Farwell Ave.; Milwaukee, WI 53202). Birmingham performances appear on Hyperion CDA-66216.

Program No. 9435 8/29/94

Marie-Claire Alain: A Life in Music . . . reflections in words and music featuring this famous French teacher and performer, whose many recordings document an impressive dedication and passion.

BACH: Prelude & Fugue in a, S. 543 (1982 Metzler/Jesuit Church, Lucerne) Erato NUM-75294

DAQUIN: Noël No. 11 (Noël en recit de taille)

BALBASTRE: Noël, Tous les bourgeois de Chatre (St. Theodorit Cathedral, Uzès) Erato ECD-88161

BACH: Trio Sonata No. 1 in E-flat, S. 525 (Marcussen organ at Varde Church, Denmark; Schwenkedel organ at St. Donat Church, Drome) MHS-534; Erato EPR-15559

BACH: Chorale-pretude, *An Wasserflüssen Babylon*, S. 653 (Schnitger-Ahrend organ/Martini Church, Groningen) Erato NUM-75250

JEHAN ALAIN: Second Fantasy; Postlude pour L'Office de Complies (Schwenkedel organ/St. Christopher Basilica, Belfort) MHS 8042454

ALBERT ALAIN: Toccata on Cantemus Domino (1880 Cavaille-Coll/Orleans Cathedral) Erato STU-71415

Program No. 9436 9/5/94

Byzantine Sketches . . . a cycle of exquisite organ tone poems, and other music inspired by or performed in the landmark Basilica of the Sacred Heart in Paris.

MULET: Carillon-Sortie - John Balka (1970 Ruffatti/St. Mary's Cathedral, San Francisco, CA) TBG Productions CD-8509 (Organ Literature Foundation)

MULET: Esquisses Byzantines (10 piece composed in tribute to the Basilique du Sacré-Coeur) - Thomas Murray (1927 Skinner and 1963 Aeolian-Skinner organs/St. Paul Cathedral, St. Paul, MN)

TOURNEMIRE: Prelude et Fresque, fr Office for the Feast of the Sacred Heart of

Jesus (fr L'Orgue Mystique, Op. 57, no. 28) MULET: Toccata, *Tu es petra*, fr Byzantine Sketches - Naji Hakim (1898 Cavaille-Coll/Sacred Heart Basilica, Paris) Motette CD-40081

Program No. 9437 9/12/94

Americana Revisited . . . a collection of historic New England pipe organs playing the music of American composers . . . recorded during the 1987 national convention of the **Organ Historical Society**

JOHN ZUNDEL: Introduction & Fugue in d - Victoria Sirota (1856 Stevens & Jewett/Orthodox Congregational Church, Laneyville, MA)

RAYNOR TAYLOR: Variations on Adeste fidelis - Clark Rice (1875 Ryder/Community United Methodist Church, Byfield, MA)

HORATIO PARKER: Novelette, Op. 68, no. 3 - Jane Edge (1885 Hook & Hastings/Portland Street Baptist Church, Haverhill, MA)

ARTHUR FOOTE: Prelude on Greensleeves - Ruth Tweenet (1893 Hutchings/Independent Christian Church, Gloucester, MA)

AMY BEACH: Prelude on a Folk Tune, ALEXANDER MATTHEWS: Song of the Sea - John Ogasapian (1867 Hook/Ipswich United Methodist Church, MA)

ERNEST BACON: Spirits & Places (selections) JOHN COOK: Scherzo - Marian Ruhl Metson (1875 Hutchings/Immaculate Conception Church, Newburyport, MA)

ALEXANDER REINAGLE: Federal March - Lois Regeston (1861 Hook/1st Parish Church, Manchester, MA)

EUGENE THAYER: La Devotion, Op. 8, no. 2. J. VARLEY ROBERTS: Postlude in F - Rosalind Mohsen (1885 Adams/St. Anne's Church, Salem, MA)

ROGER HAHHAHS: Suite of Miniatures - Susan Armstrong-Ouelette (1838 Morss/Historical Society, Seabrook, NH)

C. H. SWIFT: March in C. ERNEST BLOCH: Andante. HERBERT FROMM: Hassidic Interlude - Earl Miller (1853 Simmons/Temple Ahavath Achem, Gloucester, MA)

JOHN KNOWLES PAINE: Austria Variations - Bradley Rule (1867 Stevens/Belleville Congregational Church)

Program No. 9438 9/19/94

A Mexican Organ Odyssey . . . with organologist and restorer Susan Tattershall, we explore the musical legacy of the Spanish conquest of the New World, visiting historic instruments in the regions of Oaxaca, Tlaxcala and Mexico City. Less than a century after the first expedition of Christopher Columbus, the art of organbuilding, taught by Spanish monks and practiced by indigenous artisans, was firmly established.

In January 1995, Ms. Tattershall will lead a 10-day tour of the Historic Organs of Mexico in conjunction with the Westfield Center for Early Keyboard Studies. For more information, contact: The Westfield Center, 1 Cottage Street, Easthampton, MA 01027; phone 413/527-7664

Program No. 9438 9/19/94

Olivier Latry in Concert . . . the exceptional Frenchman, youngest of three organists of Notre Dame Cathedral in concert at Hennepin Avenue U. Meth., Minneapolis

FRANCK: Choral No. 2 in b

MESSIAEN: Chants d'oiseaux and Les Yeux dans les Roues (Songs of Birds and The Eyes of the Wheels), fr Livre d'orgue (1951)

VIERNE: Symphony No. 3 in #, Op. 28

LATRY: Improvisation on Minnesota Sports Themes

Program No. 9439 9/26/94

Olivier Latry in Concert . . . the exceptional Frenchman, youngest of three organists of Notre Dame Cathedral in concert at Hennepin Avenue U. Meth., Minneapolis

FRANCK: Choral No. 2 in b

MESSIAEN: Chants d'oiseaux and Les Yeux dans les Roues (Songs of Birds and The Eyes of the Wheels), fr Livre d'orgue (1951)

VIERNE: Symphony No. 3 in #, Op. 28

LATRY: Improvisation on Minnesota Sports Themes