St Denis de Paris

Paris St. Clotilde facade

An appreciation of Aristide Cavaillé-Coll on the 120th anniversary of his death

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2019 marks the 120th anniversary of the death of the father of symphonic organs, Aristide Cavaillé-Coll. On this occasion, it is worth recalling this monumental figure, who in the 19th-century changed the image of French instruments, and thus influenced organ building in Europe and in many parts of the world, radiating in a unique way to the present day.

Reading the source materials about Aristide Cavaillé-Coll (his publications, scientific articles, notes, correspondences, etc), the literature on the subject allows us thoroughly to follow his entire life story. Below, I present a silhouette of Aristide Cavaillé-Coll, first of all as a man, emphasising important moments in his life, which he experienced in parallel with the idea of symphonic organs evolving in his mind.

Prologue

Aristide Cavaillé-Coll's family were for for generations organ builders, with roots in French and Spanish; which explains his two-part name. His great-grandfather, Gabriel Cavaillé (1699-1745), was a weaver in the village of Tarn. The first organ builder in the family was Gabriel's brother, Joseph Cavaillé (1700-1767), a disciple of the Isnards brothers,[1] leading his workshop in Toulouse; he built many instruments in the south of France and Catalonia. The grandfather of Aristide, and the son of Gabriel, Jean-Pierre Cavaillé (1743-1809), also an organ builder, married Maria-Francesca Coll on February 12, 1767, a young woman from Barcelona (daughter of a weaver and producer of canvas). From the marriage of Jean-Pierre Cavaillé and Maria-Francesca Coll, Dominique-Hyacinth Cavaillé-Coll (1771-1862) was born, an organ builder and father of Aristide. Dominique Cavaillé-Coll on April 26, 1810, at the age of 39, married 22-year-old Jeanne Autard (1788-1864), with whom he fathered an illegitimate son, Vincent, born October 30, 1808. Less than a year after his marriage, on February 3, 1811[2] in Montpellier, southern France, Aristide Cavaillé-Coll was born, a man who revolutionised the French and international organ architecture of the 19th century.

We should also mention a half-brother of Dominique Cavaillé-Coll, uncle Aristide, Martin Cavaillé (1785-1862), son of Jean-Pierre Cavaillé and his second wife (after the death of Maria-Francesca in 1780) Marguerite Fabry from Saint-Thibéry; Martin was also an organ builder. The descendants of Martin Cavaillé-Coll were for some time representing the already famous Aristide Cavaillé-Coll and his brother Vincent in minor organ works

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constructed in the south of France. Jean-Pierre Cavaillé, Dominique Cavaillé-Coll and his sons, Vincent and Aristide, were professionally active in southern France (Montréal, Gaillac, Perpignan, Albi, Toulouse) and in Spain (Barcelona, Puigcerdá and Lérida).

Youthful years, Toulouse, 1811-1833

Owing to the Napoleonic wars and post-revolutionary events, the young couple and their children had to change their place of residence several times, travelling between France and Spain. These relocations significantly worsened their financial situation. Eventually, in 1827, Dominique Cavaillé-Coll settled in Toulouse, where – accompanied by his sons who sought and supported him – he continued his organ building activity.

Toulouse, the largest city in the region, allowed 16-year-old Aristide to develop under the wings of eminent architects, technicians, mathematicians and physicists. Contact with experienced professors and Aristide's technical capabilities resulted in him effectively becoming apprenticed to Charles Mallet (1766-1853), a regional inspector of roads and bridges. This well-known engineer introduced the circular saw designed by Aristide to the esteemed 'Royal Académie des Sciences, Inscriptions et Belles Lettres de Touluse' on March 7, 1833. The modernised circular saw was recognised by the Academy as an important technical invention; though never patented, it helped young Aristide to start an independent career

and opened the door for him to enter other scientific institutions and his recognition by many influential scientists and engineers. The invention allowed for precise cutting of wood (often exotic and expensive), which was an indispensable material in the construction of precise mechanisms in these musical instruments.

The second important fruit of Aristide's creativity was the keyboard, aerophonic and variable dynamics, a completely new musical instrument, the construction of which – together with his father and brother – he finalised in 1832; they called it 'poïkelorgue' or 'orgue expressif'.[3] Poïkilorgue was the first step – a kind of experimental field – for Aristide on the way to creating symphonic organs. From the musical side, the Cavaillé-Colls' invention was supported by Gioacchino Rossini (1792-1868), who during one of the concert tours visited the inventors in 1832 in Toulouse and – delighted with the expressive capabilities of the instrument – persuaded Aristide to present it in the French capital city.[4] The cholera epidemic that raged in Paris stopped their intention of visiting and promoting the poïkilorgue in the Paris salons.

Thanks to Dominique's acquaintance with the Haute-Garonne prefect Jacques Barennes (1777-1863), who in turn was a friend of France's interior minister, Adolphe Thiers (1797-1877), a great art friend, critic and art collector, the company 'Cavaillé-Coll Père & Fils' (father and sons) was included in the protectorate of Minister Thiers. The relations between Cavaillé-Colls and the Minister were so good that in 1833, according to the suggestion of Dominique Cavaillé-Coll, Minister Thiers created a special commission in Paris to examine the possibilities of poïkelorgue. This fact ultimately determined Dominique's decision to move the entire family and the company from Toulouse to Paris. Equipped with a refined circular saw, two instruments invented by himself, the poïkilorgue and his piano-poïkilorgue hybrid, along with their references, they set out to move north to Paris.

Years of development, 1833-1853

At the time of the 660-kilometre travel by post stagecoach (that began on September 17, 1833, and lasted 4.5 days) the Cavaillé-Colls made the acquaintance of Prosper Faugères (1810-1887), who worked with Minister Adolphe Thiers. Thanks to the fact that they became friends, the Cavaillé-Coll family received advance information and protection in the project supervised by Minister Thiers – of the construction of the organ in the magnificent royal cathedral of Saint-Denis, financed by government funds. By an Act of June 27 1833, the French government allocated 1,350,000 francs for the renovation of the royal cathedral in Saint-Denis; 100,000 francs were ear-marked for the purchase of the clock and organ.

Arriving to Paris, the Cavaillé-Coll family lived at 11 Quai Voltaire, and their first workshop was opened at 14 Rue Notre-Dame-de-Lorette (later no 42). They developed earlier contacts and made new, even more valuable, ones. Aristide, now 22, using the references he received from the 'Académie des Sciences, Inscriptions et Belles Lettres' in Toulouse, had the opportunity to meet personally the greatest learned technical minds of that time: mathematician Sylvester-François Lacroix (1765-1843), physicist Félix Savart (1791-1841), engineer and geographer Charles Cagniard-Latour (1777-1859), head of the department of bridges and roads Baron Gaspard Riche de Prony (1755-1839), musicians Louigi Cherubini (1760-1842), Henri-Montan Berton (1767-1844), François-Adrien Boieldieu (1775-1834) and Ferdinando Paër (1771-1839). Rossini visited the organ concerts several times in the assembly hall of the Cavaillé-Coll workshop. His presence – always recorded by the press – was significant in building the Cavaillé-Coll position in the organ world of Paris.[5]

Aristide was constantly working on organ improvement in the spirit of symphonism; its scientific, acoustic and technical studies lasted continuously. He was repeatedly quoted by the 'Committee of Mechanical Arts' ('Société d'Encouragement à l'Industrie Nationale', La S.E.I.N.); his work on organ pipes being particularly appreciated. Aristide was highly esteemed and congratulated by the scientists from the Société d'Encouragement: Baron Armand, Pierre Séguier, born in Montpellier (1803-1876), head of the 'Ecole des Ponts et Chaussées' ('School of Bridges and Roads'), Baron Gaspard Riche de Prony,

St Sulpice de Paris

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marine engineer Henry de La Morinière, who was at the time a member of the church council of Saint-Sulpice and a friend of banker Henri Place and painter Eugène Isabey.

Although Aristide's creativity and vision for organ building with new sound possibilities and technical solutions began to dominate in the company, the idea of the family (a company of father, mother and two sons) was present in all their undertakings; all the time, however, invariably from the time of Toulouse, the business was headed by her family father, Dominique Cavaillé-Coll. The role of Dominique in the development of the genius of his outstanding son should be emphasised. Reasonably and successfully, he led the company, simultaneously motivating Aristide to seek new solutions. We can see from one example how important the coexistence of many factors is in achieving outstanding results.

At the end of the third decade of the 19th century, Aristide worked on the next organ refinement in the spirit of symphonism; the aim of the search was to emphasise the melody in relation to the accompaniment played on the same manual, which resulted from the domination of homophonic thinking. In 1839, at one of the then fashionable Industrial Exhibitions, the Cavaillé-Colls company presented an instrument equipped with innovative windchests consisting of two-to-three sections differentiated in terms of air pressure (higher pressure in the windchest part, in which there were pipes of higher sounds; lower pressure in the windchest part, in which there were pipes of lower sounds). The presentation of the instrument built in the Billettes church in Paris was successfully accomplished by the then popular and talented Parisian virtuoso, 22-year-old Louis-James-Alfred Lefébure-Wély (1817-1869), in the presence of Chevalier Sigismond Neukomm, who was delighted. Neukomm had good connections at the court of Louis-Philippe, which helped the organ company strongly to enter the market and become even more competitive.

A carefully organised combination of many events finally led the company to victory in the competition for the building of a great organ for the royal cathedral of Saint-Denis. It was the largest instrument designed in the company's workshop so far. It turned out, however, that with such dimensions, the comfort of the organist would

St Etienne de Caen

be very bad; they would have a problem in overcoming the weight of mechanically connected keys with extensive windchests. In this instrument, the company used for the first time in history (patented in 1839 by English constructor Charles Spackman Barker (1806-1879)) the so-called pneumatic lever.[6] After the implementation of this instrument (completed in 1841), the name Cavaillé-Coll became widely known and valued in the organ industry, paving the way for further great realisations. In 1844, as one of the two largest organ-builders of Paris – alongside the Daublaine-Callinet company – Aristide exhibited his instrument at the Industrial Exhibition.[7]

In 1844, Cavaillé-Coll travelled around Europe to learn about the achievements of the leading continental creators. During the visit in England he was impressed by the English high-pressure stops, especially the stop of Ophicleide in the Hill organ in Birmingham Town Hall (built in 1834) and the strongest stop of English instruments – English Tuba, which he transplanted into his works. As part of the same trip, he also visited a leading company in Prussia by Eberhard Friedrich Walcker (1794-1872) in Ludwigsburg and his instrument (74/3M+2P) from 1833 in Paulskirche in Frankfurt am Main. The English and Prussian organ builders also visited Paris. Henry Willis 'the father' (1821-1901) undertook a return visit to Cavaillé-Coll at the turn of 1848-1849 and expressed his satisfaction with the influence of English construction in French instruments (i.e. Barker lever, high-pressure stops) and full of inspiration from Aristide Cavaillé-Coll's hitherto achievements returned to his homeland.[8] It is known that during the organological journeys Cavaillé-Coll visited the following cities (in addition to those mentioned above): Brno, Zurich, Stuttgart, Hamburg, Haarlem, Rotterdam, Fribourg, Wintertuhr, Utrecht, Cologne and London.[9]

The French revolution of 1848 hurt the developing company, resulting in the necessity to suspend business for a period of 6 months.[10] In 1849, Aristide published his theoretical thesis 'Etudes expérimentales sur les tuyaux d'orgue' ('Experimental Studies on organ pipes'). At the end of 1849, the father and sons' company, 'Dominique Cavaillé-Coll père et fils', was dissolved. The company 'Cavaillé-Coll fils' appears in its place. After the success of the construction of organs for the royal cathedral of Saint-Denis, The new French ruler Napoleon III entrusted Cavaillé-Coll with the

Notre Dame de Paris

reconstruction of a number of important cathedral organs. In 1853, in the Paris church of Sainte-Geneviève, he built small choir organ and immediately offered his readiness to build the main organ there.

Years of maturity, 1854-1890

At the age of 43, on February 3, 1854, in the Paris church La Trinité, Aristide Cavaillé-Coll married a 26-year-old Miss Adèle Blanc (1828-1868). It was a marriage of convenience common to these times; the Blanc family was wealthy and influential – Aristide could not dismiss such a dowry. As a result of his marriage, Aristide gained direct access to the administrative files of the French Republic, professionally occupied by his brother-in-law, Hippolyte Blanc, in the Administration de Cultes (Ministry of Denominations). Thanks to this protection, Cavaillé-Coll became a privileged beneficiary of the government. Already two days before the wedding, the government commission appointed Cavaillé-Coll's company as organ contractor for the Saint-Jean cathedral in Perpignan (completed in 1857, and inaugurated by Louis-James-Alfred Lefébure-Wély).

In 1854, the first daughter of Aristide and Adèle, Cécile (1854-1944), was born. In 1855, Aristide appears at the Exposition Universelle in Paris and the presented instrument was then located in the church of Saint-Vincent-de-Paul.[11] The wedding changed the balance of power in the family business. Two years later, in 1856, a joint-stock company 'A. Cavaillé-Coll Fils & Cie' (sons and company) was created. In the new organisation, the family and the company council – consisting of influential members of the Paris community – formed a pervasive team of people who created favourable conditions for running a business. The head of this business was, not only conceptually, but also officially, the 45-year-old Aristide – a visionary and great artist in his profession. The idea of Cavaillé-Coll, in this field of company management, was to preserve the family character with the least number of external shareholders, which translated directly to the smallest possible number of people who have the right to interfere in the company's activities. He was a loner who was not willing to share his duties; he used his own investment income by using loans only with friends (e.g. banker Henri Place). He independently negotiated contracts on instruments himself even with bishops, sometimes using mediation through his

brother-in-law, Hippolyte Blanc. By building salon organs, he cultivated prestigious social contacts and sought luxurious clients.[12]

In 1856, he published the dissertation 'De l'orgue et son architecture'. In 1860, his son Emmanuel (1860-1922) was born, later becoming a renowned architect and interior decorator. The years between 1850 and 1860 were the most hard-working for the company; in this period, on average, twelve instruments were under construction on a yearly basis permanently, about 140 stops were produced per month and about 20 keyboards.[13]

In the course of its activity, Aristide refined Baker's pneumatic lever and, based on the idea of a pneumatic lever, he invented a system for pneumatic switching of organ stops – individually and in sets (Appel d'Anches). Before then, the registration of large mechanical organs required considerable efficiency from the player, and in the case of expressive symphonic organs, variety of colours and intensity was one of the important features. He installed all his inventions and improvements in the monumental organ (100/5M+P) in the Saint-Sulpice church in Paris. He finished it in 1862 and considered it as a bridge between the old and the new art of organ building. This instrument showed quite clearly some of the weaknesses of Aristide: the organ master focused more on the possibilities of creating a work and realising his symphonic sound vision of the instrument than on the project's financial side; for the organs in Saint-Sulpice he received 47,000 francs (plus probably an additional 20,000 francs), however, the real cost of producing them amounted to 146,000 francs, and according to his later update of his own calculations from 1882 – even 250,000 francs.[14]

The year 1862 was – besides the death of his father, Dominique, from whom Aristide had inherited his personality and temperament – also the year of the birth of his next son, Joseph (1862-1884). In 1864, the last son, Gabriel (1864-1916), came to the world, who was fascinated by the novelty of those times – electricity and its use in organ building. Unfortunately, the relationship with his father did not go well, which prompted Gabriel to open his own company, which went bankrupt after a year. He then went to Spain, where he was involved in the electrification of the mines there until his death.

After the organ of Saint-Sulpice, Aristide was looking for another challenge; he wanted to fill the cathedral Notre-Dame in Paris, in which the most eminent religious and national celebrations were held, with the sound of one of his organs. He believed the first cathedral of France should have an organ not inferior to that he had built in the neighbouring church Saint-Sulpice. Driven by passion for art and inspired by the majestic architecture of the cathedral, and additionally encouraged by a great renovation, he realised his assumptions by installing a monumental instrument (83/5M+P) inaugurated in 1867.[15] This instrument was also not profitable for the organ builder; he suffered a high financial loss on it. Generally, only the medium and smaller church organs and salon organs, bought by wealthy music lovers, were profitable for the company. The great and home-training organs were produced more 'for the sake of art' than for their financial benefits,[16] despite the fact that prices were market-wide. 'Despite what is said about Cavaillé-Coll's prices, the value of organs, even from a purely material point of view, far exceeds their price, and their great builder receives much more respect for them than profit.'[17]

In the years 1866-1867, he built a new workshop and flat at Avenue de Maine No. 13-15,[18] which – as a building – exists to the present day. In October 1868, when he was 57, his wife, Adèle Blanc, died at 40 years of age. Two years later, the war of 1870 slowed down the company's operations. In 1871 he made a second trip to England[19]; but he failed to get the order to build the organ for the prestigious Royal Albert Hall in London. However, a number of other English projects managed to lead him to a happy finale.

From around 1872, a tablet with the inscription 'A. Cavaillé-Coll' appears on their instruments, which means that until then Aristide's brother Vincent worked in the company. In 1873, the company built a magnificent instrument (64/4M+P) for the Royal Albert Hall concert hall in Sheffield, England, inaugurated on May 5, which became the symbol of the best works of the organ builder and is often seen in comparisons as a model of completeness and quality. It is known that Aristide personally oversaw its assembly in Sheffield and was present at the inauguration.

Despite his advancing age, Aristide's mind was still creative. The great Paris organs in Saint-Sulpice and Notre-Dame, together with his international fame, led him, with the participation of architect Alphonse Simil (1841-1916) and influential friends, to submit in

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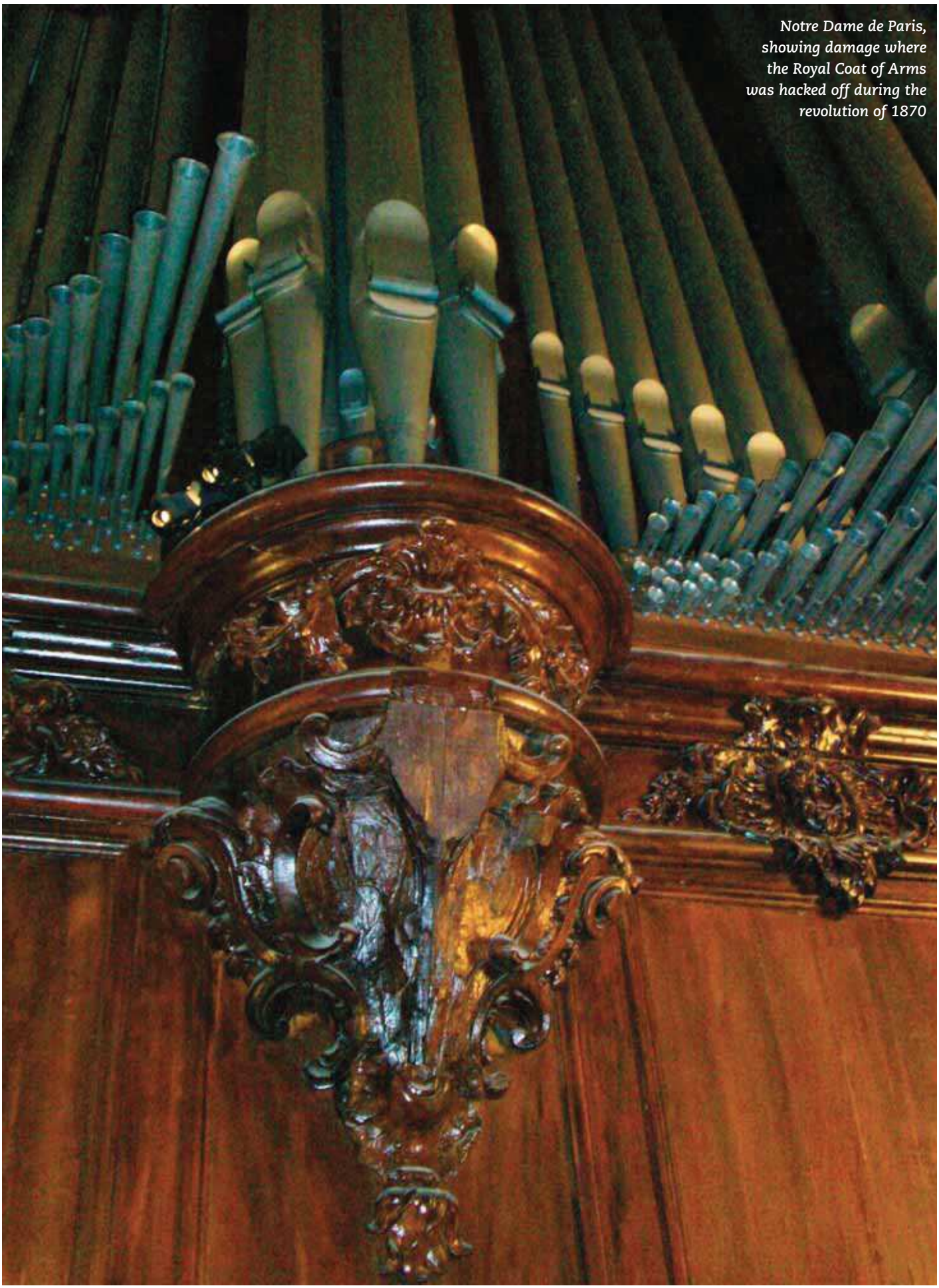

Notre Dame de Paris, showing damage where the Royal Coat of Arms was hacked off during the revolution of 1870

1875 a project for a monumental organ (124/5M+P) for the Basilica of Saint Peter in Rome – it was to be the largest instrument of the world built in the largest and the most known church in the world, as the crowning achievement of his work and the peak achievement of the idea of symphonic organs. Unfortunately, despite many years of efforts by Aristide and an international group of ambassadors – among whom there were crowned heads – the project was never implemented.

In 1875 Aristide finished the organ (46/3M+P) at the Palais de l'Industrie in Amsterdam; its organ case was designed by architect Simil. In 1875, he finished the organ (12/2M+P) for one of

St Ouen de Rouen

the Paris operas, the Palais Garnier. The devotion in the Paris circles to the Sacred Heart of Jesus resulted in the more frequent appearance of religious scenes in composed operas, to which composers wrote organ parts. This trend caused the then decision makers of the Palais Garnier to order a Cavaillé-Coll instrument. It was small in size, but the strength of the sound was powerful. Its characteristic feature was the unique arrangement of the sections: Grande-Orgue and Grand-Chœur.[20] It is worth mentioning that in the 60 years of the presence of Cavaillé-Coll in Paris (from 1833 to 1899), about 40 opera titles were staged in the city, in which there were passages performed on the organ.[21]

During the World Exhibition in 1878, for which the beautiful Trocadero Palace was built in Paris, in a huge concert hall Aristide installed a monumental organ (66/4M+P). From July 25, the best and most popular organists (Guilmant, Lemmens, Saint-Saëns, Widor, Franck and others) played concerts there to great applause. At this time, at the height of his fame, Aristide opened another workshop at the Avenue du Maine. Throughout this whole period, Cavaillé-Coll ran internships for organ builders from various countries, spreading his achievements outside of France. At the peak of 1878, he employed 75 employees, many of whom had worked in the company for over 20 years.

During the last twenty years of his life (1879-1899), more instruments confirmed that he achieved mastery in his style: he materialised the idea of the symphonic organ. In 1880, he built an organ in the church of Saint-Jean-Saint-François, the parish of Charles-Marie Widor. In the years 1882-1884 he installed the organ in Saint-Etienne (50/3M+P) in Caen. In 1885, he took part in the competition (next to Gray & Davidson from London, Brindley & Foster from Sheffield, Jardine & Son from New York and E.F. Walcker & Co from Ludwigsburg) for building the organ at the City Hall in Sydney, Australia; he proposed an instrument with 128 stops, but lost to the London company William Hill & Son.[22]

On October 25, 1884, at the age of 22, during a war escapade against China, one of Aristide's sons, Joseph Cavaillé-Coll, who had enlisted as a sailor, died.

At the beginning of 1885, the company began to make significant reductions in employment; from 70 employees at the beginning of the year down to 40 at the end of the year. The global recession, which in 1885-1888 deepened

The organ within the Palais de l'Industrie, Amsterdam

even more, reached the Cavaillé-Coll company. By 1887, the company employed only 20 workers. It should be noted that the company employed the majority of employees at a daily rate, without long-term contracts; hence the number of employees is not a reliable indicator of the condition of the company. The workers were employed depending on temporary needs, for example in the parallel implementation of many projects, and the company did not invariably have an equal workforce.

In the years 1869-1888, Aristide took out seven loans for a total of 700,000 francs to maintain the company's financial liquidity.

In the years 1869-1888, Aristide took out seven loans for a total of 700,000 francs[23] to maintain the company's financial liquidity and not wanting to give up lucrative contracts should there be delays in the payment of agreed tranches by investors. Unfortunately, the main problem of the situation of the company's liquidity was the low profitability of the entire business, undermined by financial losses on large projects. Cavaillé-Coll did not save on materials or performance, however, and his customers were not able to pay high amounts for the extraordinary works they received in this way. The discrepancy between these issues ultimately led the great organ builder to bankruptcy.

In 1888, the papal authorities were again attempting to build a grand project monumental organ for the Basilica of Saint Peter in Rome by presenting the project and scale 1:10 to Pope Leo XIII. Finally, without success. In April 1889, the inauguration of another work took place in his home town of Toulouse in the church of Saint-Sernin; organ (54/3M+P) was presented by Alexandre Guilmant. Finally, in 1890, in the church of Saint-Ouen in Rouen, Cavaillé-Coll installed the last big organ (64/4M+P) before the bankruptcy of his company.

In addition to the above-mentioned great organs, each of which made an important contribution to the evolution of the idea of symphonic instruments, Cavaillé-Coll also produced a large number of smaller instruments that equally met the symphonic organ's assumptions. At the end of 1889, the number of instruments built from scratch was estimated at 479, of which 364 instruments were built within France, while 115 were exported world-wide – mainly to England, with the other major destinations of large organs were: 8 to Spain, 5 to Brazil and Venezuela, 3 to Mexico, 2 to China, one to Chile, Belgium and Denmark.[24] With large instruments, the company sent its employees to quite distant places; in the case of the export of smaller instruments, along with the boxes containing parts of the instruments, detailed assembly instructions were sent for local organ builders. In total, Aristide Cavaillé-Coll conducted organ work on 678 opuses.

Last years, 1890-1899

In 1890, due to the ravaging economic crisis and the effects of not always accurate decisions in the area of finance, he was forced to close the workshop.[25] Cavaillé-Coll's business philosophy is best summarised by Paul Chandon de Briailles, the director of Moët & Chandon Company from Epernay, one of the main protectors and saviours of the organ master: 'You are a great artist and gentleman, but a very weak businessman. In this world, my poor dear Master, now more than ever you can do nothing that does bring profit.' In November 1891, the company's building was occupied for the second time, which led to the liquidation of the company in the spring of 1892. Liquidation documents showed that the company employed 48 workers at the time of closure.[26] In subsequent years, Cavaillé-Coll was professionally active thanks to the protectorate and private orders of the great organ lover and his friend Baron Albert de l'Espée. In 1894, Cavaillé-Coll built the organ (41/3M+P) in the baron's residence in Paris, and in 1898 another instrument (70/4M+P) in his residence in the south of France in Biarritz-Bidart. This second instrument is the largest instrument built from the beginning to the end by Aristide Cavaillé-Coll in all of his history. Larger organs, e.g. in the Paris cathedral Notre Dame (83/5M+P) or in Saint-Sulpice (100/5M+P) used material from previous instruments. In 1898, he named his student, Charles Mutin (1861-1931) as his successor, who operated until March 15, 1924 under the name 'Cavaillé-Coll-Mutin'. Then the plant passed into the hands of Auguste Convers and operated under the name 'Société Cavaillé-Coll'.[27]

Despite financial perturbations, Cavaillé-Coll was a respected member of the Paris business community. Until 1897, at the age of 86, he held one of ten places at the 'La Chambre Syndicale Patronale de la Facture Instrumentale' ('Chamber of Employers of the Instrumentation Industry'). Aristide Cavaillé-Coll, having no successors among his sons, sold the remains of the company to Charles Mutin[28] and became a parishioner of Saint-Sulpice, where he listened to the largest instrument ever built by him. He died at the age of 88, on October 13, 1899 in Paris. The obituary in the 'Le Monde Musicale' in Paris says: 'He honoured art that was his only goal, his constant concern in life was to strive for perfection; for him organs were an instrument in the service of God and he wanted them to be worthy of God. He honoured science because we owe him the greatest improvements in a very complex and difficult field of industry.'[29]

Epilogue

Vision and creativity are individual features, more innate than learned.

Nevertheless, they must find favourable conditions to produce an impressive fruit. Looking at the entire career of Aristide Cavaillé-Coll, we see an intelligent evolution, not a crazy revolution. His innate traits needed appropriate stimulation and a favourable environment to bring to the conservative art of organ building the idea of expression and dynamics, which crystallised in the concept of organ symphonism.

Analysing the life of Aristide Cavaillé-Coll and the historical and cultural context of the 19th century, specific factors that led to the creation of the idea of symphonic organs and its implementation by the organ builder in his works, can be distinguished. First of all, the family tradition and the well-functioning company of his father gave him technical facilities and a tranche of knowledge which he absorbed in a natural way during adolescence, as well as a field for using and developing his innate technical abilities. In addition, his personal character trait– creativity and vision, as well as readiness for change and the ability to take advantage of opportunities – constituted him as a man who looks forward and does not focus on problems. Initially, the father-mentor, the family of Aristide's wife, and a group of favourable and influential friends and musicians, gave him a sense of relative security in realising his vision. To this must be added a kind of 'hunger for organs', which – after the events of the Revolution of 1789-1799 – were heavily damaged. The changes in sound aesthetics, which could not be realised on 18th-century instruments, gave birth to a monumental figure for organ building industry not only in France and Europe, but all around the world. ■

Notes

1 Hamel Marie-Pierre, 'Nouveau Manuel Complet du Facteur d'Orgues', t. III, Librairie Encyclopédique de Roret, Paris 1849, s. 399.
2 Some sources also provide February 2 (see: Hamel Marie-Pierre, 'Nouveau manuel complet du facteur d'orgues', L.Mulo, Librarie-Éditeur, Paris, 1903, p. 401), other February 4.
3 Small parts of this instrument were produced thanks to a circular saw modernised by Cavaillé-Colls.
4 'Encyklopedia Britanica': Aristide Cavaillé-Coll. After: https://www.britannica.com/biography/Aristide-Cavaille-Coll [2017/12/16].
5 Ochse Orpha Caroline, 'Organists and Organ Playing in Nineteenth-Century France and Belgium', Indiana University Press, Bloomington 2000, p. 38.
6 Barker had invented the lever already by 1830 in York. However, he did not meet with the favour of the English organ builders. Undeterred, he travelled to France to interest Aristide Cavaillé-Coll with his invention. The fact that Barker came directly to Aristide Cavaillé-Coll testifies that the young Cavaillé-Coll must have been a fairly familiar figure in the organ-world. Barker patented his lever in Paris in 1839, and the fame of this solution brought it in the cathedral of Saint-Denis in a new instrument completed in 1841 by Aristide Cavaillé-Coll. After: Bush, Douglas Earl; Kassel, Richard, editors (2006). The Organ: An Encyclopedia. Psychology Press, p. 49 and Hinton, T.W. (September 1921), 'The Inventor of the pneumatic action', 'The Etude', 39 (9), p. 608.
7 Ochse Orpha Caroline, 'Organists and Organ Playing in Nineteenth-Century France and Belgium', Indiana University Press, Bloomington 2000, p. 38.
8 Ebrecht Ronald, 'Cavaillé-Coll's Monumental Organ Project for Saint Peter's, Rome. Bigger Than Them All', Lanham et al., Lexington Books, USA, 2013, pp. 17-19.
9 Cavaillé-Coll Cécile i Cavaillé-Coll Emmanuel, 'Aristide Cavaillé-Coll. Ses origines, sa vie, ses œuvres', Paris, Fischbacher, 1929, pp. 48-68.
10 Ochse Orpha Caroline, 'Organists and Organ Playing in Nineteenth-Century France and Belgium', Indiana University Press, Bloomington 2000, p. 45.
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