

The “Carillon” organ stop: A short history – with a special focus on Cavallé-Coll

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The Carillon serves as imitation of the glockenspiel or steel bars. This stop has always 3 ranks and consists of the trebles of the Fluit or Roerfluit 4 foot, third $1\frac{3}{5}$ foot, of an average scale, and Flageolet 1 foot; it has no break. The most important merit of this stop is the fast speech of the pipes. In large organs, it is sometimes found in the Rückpositiv, but mostly in the Oberwerk; the latter position creates the best effect, because it is far remote from the audience.¹

Origin

The origin of this type of Glockenspiel (by means of a compound stop of flue pipes) is to be found in the Rhine region in the early decades of the eighteenth century.² The organ built in 1727 by Balthasar König (1684–1756) for the Steinfelden Basilica St. Potentinus (Eifel region) holds a treble stop called *Tintinabulum* that consists of two ranks ($1\frac{3}{5}$ and 1 foot) and this is so far the earliest known example. In some of his other in-

1 Jan van Heurn, *De Orgelmaaker*, facsimile ed. (Dordrecht: Blussé, 1804–5; Buren: Knuf, 1988), 3: 265, § 40: “CARILLON diend tot nabootsing van het Klokken of Staafspel. Deze Stem is altoos 3 Sterk, en bestaat uit de Discanten der *Fluit* of *Roerfluit* 4 Voet, *Terz* $1\frac{3}{5}$ Voet, middelbaare mensuur, en *Flageolet* 1 Voet; zij wordt niet gerepeteerd. De voornaamste deugd dezer Stem bestaat in de vlugge aanspraak der Pijpen. Zij wordt in groote Orgelen zomtjids in het Rugpositief, doch meest altoos in het Bovenmanuaal geplaatst; deze laatste doet de beste uitwerking, om dat zij ver van het gehoor staat.”

2 Roland Eberlein, *Orgelregister, ihre Namen und ihre Geschichte* (Köln: Siebenquart, 2016), 75–7. He even refers to a very early record of a registration called “le jeuix de petit carillons” in a document, along with the contract that was signed in 1531 with organ builder Jacques Cormier in Toulouse, St. Etienne; see also Fenner Douglass, *The Language of the Classical French Organ. A Musical tradition Before 1800*, new and expanded ed. (New Haven: Yale University Press, 1995), 40–3. The various combinations that one can find for the Carillon stop with a third-rank create intervals of a minor sixth ($1\frac{3}{5}$ and 1 foot), a major sixth ($2\frac{2}{3}$ and $1\frac{3}{5}$ foot), or a minor third ($1\frac{3}{5}$ and $1\frac{1}{3}$ foot), or even combinations of these if ranks are added. They all serve to imitate the typical bell sound.

struments the stop is called *Klockenspiel* or *Carillon*.³ From his son Ludwig König (1717–1789), three examples of a three-rank *Carillon* stop have been preserved, one in Schleiden, Schlosskirche (1770) and two in the Oberwerk and Rückpositiv in Nijmegen, Stevenskerk (1776), and these are composed as specified by van Heurn, except the one in the Nijmegen Rückpositiv which has a 1/2-foot rank instead of a 1 foot. Eberlein (see footnote 2) lists further eighteenth-century examples of Carillon stops by other builders in the Rhine region.

Unprecedented popularity in the Netherlands

Once Ludwig König had introduced the stop in the Netherlands, the Carillon's fame spread over the country. In his 1782 publication about the instrument, the Nijmegen organist Petrus Beyen highlights the Carillon:

most of all it creates a special effect to the ears, if one adds the Bourdon 16 foot. / Although they are meant for jolly pieces, one can, however, use the *Carillons* in the full organ; they have 3 ranks and have a very penetrating and clear sound. Using them alone, one has to act with caution, and one must always play *staccato*; no finger may be kept down the shortest time: then the pipes produce a sound as small bells do. Even the best organ connoisseur, who does not know in advance that it is pipes [which produce the sound], won't reach another conclusion (if it is played in the highest octave) than that the sound is coming from metal-cast small bells. – To my knowledge, one can find them nowhere in our whole country except for here [Nijmegen] and in Tiel.⁴

3 See also Herman Fischer and Theodor Wohnhaas, "Die Orgelbauerfamilien König in Ingolstadt, Münstereifel und Köln," in *Dulce Melos Organorum: Festschrift Alfred Reichling zum 70. Geburtstag*, ed. Roland Behrens and Christoph Grohmann (Mettlach: Gesellschaft der Orgelfreunde, 2005), 111–68.

4 Petrus Beyen, *Beschryving van het nieuw en uitmuntend Orgel in de St. Stephanus of Grote Kerk binnen Nijmegen*, facsimile ed. (Nijmegen: A. van Goor, 1782; Buren: Knuf, 1980), 15: "vooral brengt dit een byzonder geluid tot het gehoor, als men 'er de Bourdon 16. v. by trekt. / (continued as footnote:) De *Carillons*, of schoon ze voor vrolyke stukken zyn, kan men echter by het volle werk gebruiken; ze zyn 3 sterk, en hebben een zeer doordringend en helder geluid. In de behandeling, op zich zelve, moet men omzichtig te werk gaan, en altoos *Stakato* spelen; geen vinger mag den minsten tyd nêr gehouden worden: dan geeft dit Pypwerk een geluid als van kleine Klokjes. Ook de beste Orgelkenner, welke vooraf niet weet dat het Pypwerk is, zal niet anders denken, (en wel zo het in de bovenste Octaaf gespeeld word) als dat het van Metaal gegoten Klokjes zyn. – Myns wetens vind men, nergens in ons gansche Land, dese soort van Pypwerken in Orgels,

Consequently, there were plans to build a Carillon in new organs and added in other instruments, or it could replace an existing stop elsewhere.⁵ Even the famous Christian Müller organ at St. Bavo in Haarlem (1738) saw its three-rank Cimbale in the Rückpositiv replaced by a Carillon in 1783!

Johann Andreas Silbermann (1712–1783)

Four two-rank Carillons, like Balthasar König’s consisting of 1^{3/5}- and 1-foot pipes, are known to have been built by Johann Andreas Silbermann: in the Ensisheim, Parish Church (1742); Soultz (1750); Colmar, Cathedral (1755); and Sankt-Blasien, Abbey Church (1774).⁶ Preserved comments from Colmar and Soultz provide additional information. In Colmar, one of the consultants, the chaplain François Michel von Esch, notes: “*Cimbale carillonnante* two ranks,” and “*Carillon* that, due to its effect, also serves as a *cimbale*,”⁷ whereas Johann Andreas states in Sankt-Blasien: “When the keys are only tapped or when the fingers release the keys as fast as possible, the Carillon in the Rückpositiv, with addition of Coppel [8] and Nazard [2^{2/3}], creates the effect of a steel bar or a small bell is being struck.”⁸ The latter comment shows as well how Johann Andreas wanted the stop to be used: together with a Bourdon (or Coppel) 8 and a Nazard 2^{2/3}. This brings the Gottfried Silbermann (1683–1753) registration indications for Fraureuth

als hier Nijmegen] en te Thiel.” The stop in Tiel replaced a three rank Cornet and was installed 1780 by Antonius F. G. Heyneman.

5 See Hans van Nieuwkoop, *Haarlemse orgelkunst van 1400 tot heden. Orgels, organisten en orgelgebruik in de Grote of St.-Bavokerk te Haarlem* (Utrecht: Vereniging voor Nederlandse Muziekgeschiedenis, 1988), 223–25, and Paul Peeters, “Zur Baugeschichte der ehemaligen Orgel der Großen oder Eusebiuskirche zu Arnheim (Niederlande). Erbaut 1768–1770 von den Gebr. Johann Michael und Johann (Christoph) Wagner aus Schmiedefeld bei Suhl,” *Acta Organologica* 29 (2006): 126–28.

6 I am grateful to the Silbermann expert Dr. Marc Schaefer (Strasbourg), who provided me with extensive documentation regarding these four Carillon stops, including references to Marc Schaefer, ed., *Das Silbermann-Archiv. Der handschriftliche Nachlaß des Orgelmachers Johann Andreas Silbermann (1712–1783)* (Winterthur: Amadeus, 1994), 459 (Ensisheim), 500 (Colmar); and to Rudolf Walter, “Der Orgelbau für die Fürstabtei St. Blasien 1772/75,” in *Musicae Sacrae Ministerium. Beiträge zur Geschichte der kirchenmusikalischen Erneuerung im XIX. Jahrhundert*, 5, Festgabe für Karl Gustav Fellerer zur Vollendung seines 60. Lebensjahrs, ed. Johannes Overath (1962): 284, 286.

7 “*Cimbale carillonnante à deux rangées*” and “*Carillon qui servira en même temps par son effet de cimbale.*”

8 Walter, “Der Orgelbau,” 286: “Das Carillon im Ruckwerck mit Zuziehung Coppel und Nazard, wan die Claves nur gedupfft oder geschneelt werden, macht den Effect, als wan ein Streich an ein Stück Stahl oder ein Glöcklein geschehe.”

and Großhartmannsdorf to mind, where the *Stahlspiel* registrations specify Gedackt 8, Nassat $2\frac{2}{3}$, Tertia $1\frac{3}{5}$ and Suffloet 1 in the Oberwerk (additionally a Quinta $1\frac{1}{3}$ in Großhartmannsdorf), and Rohrflöth 8 plus Spitzflöth 4 for the accompaniment on the Manual.⁹ The Fraureuth solo combination is exactly the same as Johann Andreas indicates for the Carillon registration in Sankt-Blasien. Roland Eberlein has concluded that Johann Andreas's first application of the stop in Ensisheim took place after he had returned from his 1741 journey to Saxony, where he had visited his uncle Gottfried. This led Eberlein to the hypothesis that Johann Andreas got the idea for his Carillon stop through Gottfried's *Stahlspiel* combination – a hypothesis that is most likely and that is shared by Marc Schaefer as well.¹⁰ Typical for these Silbermann examples is that the four-foot rank is excluded from the Carillon sound.

Not a Carillon but a Sesquialtera

Organ builder Georg Friedrich Schmahl (1700–1773) did not build Carillon stops, but in some of his one-manual instruments he provided a two-rank Sesquialtera with $1\frac{3}{5}$ - and 1-foot pipes.¹¹ The author of the article about Schmahl, Hans-Martin Braunwarth, reported that this two-rank Sesquialtera stop only was found on organs with a Mixture that did not have a third rank. By combining Mixture and Sesquialtera, a Mixture sound with a third could be created. As far as Braunwarth can tell, these Sesquialteras were

9 *Stahlspiel*: playing on steel bars. Although not written down by Gottfried Silbermann himself, these indications are believed to be his own; see Susanne Diederich, *Originale Registrieranweisungen in der französischen Orgelmusik des 17. und 18. Jahrhunderts. Beziehungen zwischen Orgelbau und Orgelkomposition im Zeitalter Ludwigs XIV* (Kassel: Bärenreiter, 1975), 139–42, and Frank-Harald Greß, *Die Klanggestalt der Orgeln Gottfried Silbermanns* (Leipzig: Breitkopf & Härtel, 1989), 127–30. The third rank in Fraureuth is called Sesquialtera; it consists of only one rank and is composed: C $\frac{4}{5}$, c° $1\frac{3}{5}$.

10 E-mail communications with Dr. M. Schaefer and Dr. R. Eberlein from May 9, 2011; February 25 and 27, 2012; June 6, 2012; and July 6, 2013.

11 Hans-Martin Braunwarth, "Der Orgelmacher Georg Friedrich Schmahl und sein Wirken in der Reichsstadt Ulm und im Herzogtum Württemberg," *Ars Organi* 61, no. 1 (2013): 17–18; and e-mail communication with the author from March 19 and 20, 2017. Schmahl was born in Heilbronn and moved to Ulm in 1731. In his article, Braunwarth provides two specifications of Schmahl instruments with such a Sesquialtera stop: Holzkirch (Ev. Kirche 1757, I/8) and Aalen (Ev. Stadtkirche 1767–68, II/P/20). Braunwarth's more recent research has made him doubt that two-manual instruments, like the one in Aalen, had such a two-rank Sesquialtera: It is more likely that they had a different three-rank model. Other one-manual instruments with a two-rank Sesquialtera like the one in Holzkirch were: Mercklingen (Ev. Kirche 1748–51, I/12), Neenstetten (Ev. Kirche 1768–70, I/8), and Ulm-Jungingen (Ev. Kirche 1770–71, I/8).

built from bass C, had principal scaling and no breaks (except – perhaps – in the highest octave). Although not a Carillon in the strict sense of the term, this Sesquialtera could generate similar sound effects as a two-rank Carillon with the same pipe ranks.

François Callinet (1754–1820)

Born in Rouffach (Alsace), François Callinet started his education in 1768 with the Parisian organ builder Adrien Lépine, brother-in-law to François-Henri Clicquot. After a stay of some ten years in Paris, working with several builders, amongst them Clicquot, he returned to the Alsace in 1786. He might have been acquainted with Johann Andreas Silbermann’s examples of the Carillon, or learned about the stop elsewhere, or even figured out a composition himself. At any rate, in 1788 he built a three-rank Carillon treble into the Positif of Karl Joseph Riepp’s organ (1754) in the Collegiate Church at Dole. Other examples by him are known from Auxonne (1790); Valence, Cathedral (1813); and from proposals for Annonay (1817); as well as Besançon, Cathedral (1820). Curiously, organ builder and organist Antoine Lerouge called the stop in Dole a Harmonica, when he made an inventory of the instrument in 1798!¹² As far as is known, Callinet’s Carillons had a composition with 4-, 1³/₅-, and 1-foot ranks, but based on his investigation of the pipes of the incomplete preserved Carillon stop in Auxonne during the recent restoration project, organ builder Laurent Plet concluded that three different compositions of that particular stop could have been possible; nevertheless it was decided to reconstruct the stop with the composition typical for Callinet.¹³

12 For the organs in Dole, Auxonne, Annonay, and Besançon, see Pierre-Marie Guéritey, *Karl Joseph Riepp et l’orgue de Dole*, 2 vols. (Lyon: Impr. Ferreol, 1985), 276–7, 307, 583, 585, 591; for Varenne, see Roland Galtier, *La facture d’orgues en France de 1800 à 1870*, 2 vols. (Villeneuve d’Ascq: Presses Universitaires du Septentrion, 1997), 42–3. The Callinet brothers, Joseph (1795–1857) and Claude-Ignace (1803–1874), built a Carillon (with 4-, 1³/₅-, and 1-foot ranks) in the instrument at St. Pierre in Saint-Chamond (1837) and had planned to install a three-rank Carillon treble in the Positif of Karl Joseph Riepp’s organ (1773) at the Cathedral of Dijon in 1836, but their restoration plans in Dijon were not carried out; for Saint-Chamond see Guéritey, *Riepp et l’orgue de Dole*, 277; and for Dijon see Pierre-Marie Guéritey, *Le grand orgue de la cathédrale Saint-Bénigne de Dijon 1745–1995* ([Dijon]: EuroMuses; Les Amis de l’Orgue de la Cathédrale, 1995), 64–5.

13 “Auxonne,” Laurent Plet: *Factures d’Orgues*, Accessed February 15, 2016, <http://lplet.org/orgues/auxonne/>. The three hypothetical compositions are: 2²/₃, 1³/₅ and 4¹/₃; 4, 2²/₃ and 1³/₅; 2²/₃, 2 and 1¹/₃.

Abbé Vogler (1749–1814)

Abbé Georg Joseph Vogler introduced a stop with the name *Rossignol-cimbalino* in his travelling orchestrion. The instrument was built by Johannes Pieter Künckel (1750–1805) in Rotterdam and completed in 1790.¹⁴ It included free reed stops built by the Swedish organ builder Georg Christoffer Rackwitz (1760–1844). With its composition of 1, $\frac{4}{5}$, $\frac{2}{3}$ and $\frac{1}{2}$, the *Rossignol-cimbalino* resembled the Carillon, whereas its Campanella stop was a single rank at $1\frac{1}{3}$. The bell effect of the latter stop must have been the result of how it was played and of the probable combination with the Jeu d'Acier stop at $1\frac{3}{5}$.¹⁵ When Vogler played instruments without a Carillon-like stop and wanted to imitate the Glockenspiel, "he combined the Quint $\frac{2}{3}$ and Terz $\frac{4}{5}$ stops, or else Gemshorn 2 and Terz $1\frac{3}{5}$, to which the addition of a Quintatön 8 added the illusion of bass bells."¹⁶

Developments in the nineteenth century

In the Netherlands, the Rhine region, and in Westphalia, the tradition of building Carillon stops went on as late as the second half of the century, but then gradually disappeared. Elsewhere though, organ builders and organists showed an interest in the stop and perhaps we can find most examples in the late work of Aristide Cavaillé-Coll (1811–1899).

Between 1877 and 1899, Cavaillé-Coll built the stop, as far as is known, eighteen times; a complete list is shown in appendix 1. Mostly, the stop is found on the Positif, but there are some exceptions. It is striking that the Carillon never is found in instruments that have a Picolo 1-foot stop. Of this Picolo [sic] stop we find, as far as is known, 24 examples in 23 organs that were built between 1856 and 1875 (see appendix 2) and it seems as if the Carillon has taken over the Picolo's place ever since. Kurt Lueders has forwarded the hypothesis that Cavaillé-Coll may have become acquainted

14 Bart van Buitenen, "Das Orchestrion des Abt Vogler und dessen Erbauer Johannes Pieter Künckel," in *Georg Joseph Vogler. Umbrüche im Orgelbau – Band II. Bericht über die Tagung der Internationalen Arbeitsgemeinschaft für Orgeldokumentation (IAOD) in Stockholm (Mai/Juni 2003)*, ed. Uwe Pape (Berlin: Pape Verlag, 2007), 149–202.

15 See van Buitenen, *Orchestrion*, 175; and Paul Peeters, "Leben und Werk von Abbé Georg Joseph Vogler (Würzburg 1749 – Darmstadt 1814) – Versuch einer kurzen Bilanz," in *Georg Joseph Vogler. Umbrüche im Orgelbau – Band II. Bericht über die Tagung der Internationalen Arbeitsgemeinschaft für Orgeldokumentation (IAOD) in Stockholm (Mai/Juni 2003)*, ed. Uwe Pape (Berlin: Pape Verlag, 2007), 32–3.

16 Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony. The Teachings of Abbé Georg Joseph Vogler* (Lincoln: University of Nebraska Press, 1987), 299, footnote 22.

with the stop during his visit to the organ of the Utrecht Cathedral in October 1844 or that August Neuburger (at that time working for the Bätz brothers company in Utrecht) provided him with more information about the stop.¹⁷ That might indeed be the case, as we find the typical Dutch composition of the stop in two of Cavaillé-Coll’s notebooks (see appendix 3 for details). Whether Cavaillé-Coll might have had knowledge about Carillons built in France by Johann Andreas Silbermann or members of the Callinet family, can hardly be proven. Nevertheless, it would take until 1877 before Cavaillé-Coll built his first Carillon and of the thirteen compositions of his three-rank Carillons known to me, none have ever had a 4-foot rank (see appendix 3).¹⁸

Cavaillé-Coll’s main competitor, Joseph Merklin (1819–1905), introduced a Clochette I–II-rank stop (1 foot from C and $1\frac{3}{5}$ foot from c^0) in the organ that he built for St. Epvre in Nancy and which previously had been presented at the 1867 World Exhibition in Paris.¹⁹ Merklin must have learned about the Carillon stop when he worked for Wilhelm Korfmacher (1787–1860), a builder who belonged to the König organ-building tradition and built Carillon stops in several of his instruments.²⁰ Apparently, Merklin’s use of the stop in France²¹ did not evoke a wider adoption of it

17 Kurt Lueders, “Reflections on the Esthetic Evolution of the Cavaillé-Coll Organ,” in *Charles Brenton Fisk Organ Builder*, ed. Fenner Douglass, Barbara Owen, and Owen Jander, vol. 1 (Easthampton: Westfield Center for Early Keyboard Studies, 1986), 127. The Organ in Utrecht Cathedral was built by the Bätz brothers Jonathan (1787–1849) and Johan (1789–1836) in 1831; it still has a three-rank Carillon in the Oberwerk with the composition that is typical for the Netherlands (including a 4 foot). August Neuburger (1820–1885) would later move to Cavaillé-Coll and finally become his *contremaître*.

18 All the Carillon examples that I have been able to include here, have a 1-foot rank (with one exception, where the highest rank is $1\frac{1}{3}$ foot).

19 Christian Rieger, “Die Merklin-Orgel der Kirche St. Epvre in Nancy,” *Ars Organi* 36, no. 2 (1988): 95.

20 This line of tradition includes Balthasar König – Johann Odenthal – Peter Kemper – Wilhelm Korfmacher; see Clemens Reuter, “Der Orgelbau in den katholischen Kirchen des Rheinlands von 1700 bis 1900,” *Acta Organologica* 2 (1968): 35–6.

21 Two other examples by Merklin, but with a different composition, can be found in the Moulins Cathedral, 1880: Clochette I, consisting of a 1-foot rank only; and in Lyon St. Nizier, 1886: Clochettes II ($2\frac{2}{3}$ - and 1-foot; stop name “Timbre Harmonique”, inscription on the pipes “Clochettes”); see Olaf Dalsbaek and Roland Galtier, “L’orgue Merklin-Schütze de l’église Saint-Eugène-Sainte-Cécile à Paris. Une singularité dans la facture du Second Empire,” *La Flûte Harmonique*, no. 92 (2011): 69. In two early proposals for a new organ for St. Barthélemy at Liège (1843), Merklin offered a two-rank Carillon of which we do not know the composition; the specification of the final contract from 1847, however,

in modern French organ building until Cavaillé-Coll equipped the 1878 Trocadéro organ with a Carillon.

Did the idea to introduce the Carillon stop in the 1877 Manchester Town Hall organ come from Cavaillé-Coll himself? Why would it have taken him so long to use the stop, if he already had become acquainted with it in 1844 and apparently had written down compositions in his notebooks that can be related to the time period 1855–1868? Had he not seen a good purpose for introducing such a stop or was there simply no interest amongst organists?

Might the idea have originated with William T. Best instead? For the project at Manchester Town Hall, Best had become joint advisor to Benjamin Joule in 1874 or 1875.²² Gerald Sumner has recently established that the *Explanatory Memorandum* written by Cavaillé-Coll in 1877, on completion of the organ, includes a comparison of the early suggested stop list by Joule and Best with what was actually supplied by Cavaillé-Coll, and the “Carillon I–III” is listed in both stop lists.²³ This strengthened my hypothesis that it might have been William T. Best who proposed the Carillon stop for Manchester. If correct, the question is, where did Best get the idea for the Carillon stop – perhaps from William Hill?

William Hill (1789–1870) had already started to build *Glockenspiel* stops in the 1840s.²⁴ Where Hill might have gotten the idea from is not known. Nicholas Thistlethwaite pointed out to me that Hill travelled on the continent in the early 1840s, and may have seen something there that he later adapted.²⁵ Hill’s *Glockenspiel* was composed of 2²/₃- and 1³/₅-foot ranks, started at tenor c and should be combined with the Stopped Diapason 8.

no longer had a Carillon stop; see Jean-Pierre Felix, *Histoire des orgues de l’église St-Barthélemy à Liège* (Bruxelles: Publ. by the author, 1999), 66, 68, 81.

22 Gerald Sumner, “The Cavaillé-Coll organs in England and Scotland, II,” *The Organ Yearbook* 40 (2011): 142, footnote 89.

23 E-mail communication from Dr. Gerald Sumner, June 26, 2012; in his opinion this cannot have been a simple error either, because all the other changes imposed by Cavaillé-Coll are listed correctly.

24 Nicholas Thistlethwaite, *The Making of the Victorian Organ* (Cambridge: Cambridge University Press, 1990), 199, 201, 203, 405, 535.

25 E-mail communication from Dr. Nicholas Thistlethwaite, July 16, 2012; he also noted that the *Glockenspiel* might be related to Hill’s Doublette – a two-rank mixture (with probably no breaks) of 2- and 1-foot ranks, of which, unfortunately, none survives. See also Thistlethwaite, *Victorian Organ*, 201, 243, 257.

This very combination is referred to by Best in several of his publications and editions:

Best rarely gives indication in his writings or in his registration directions as to how he made use of such stops.²⁶ One exception is his edition of Giovanni Morandi’s Rondo de Campanelli, where, in a footnote, he adds: If the Organ does not possess a Gamut of Bells, (composed of Steel-Bars, sounding with the Flute stops) the following G[rea]t Org[an] stops may be used instead, – Flute 8, 12th and Tierce (17th) – WTB. As Best included such stops in his designs it is likely that he would have made regular use of them, when they were available, in his playing. Although Best (1853:11) described the Piccolo as “the highest flute register in an organ,” he recommended a Tierce, as mentioned above, and also an Octave Flageolet of 1-foot pitch in the organ he designed for Nathaniel J. Holmes, of The Hall, Primrose Hill, Regent’s Park, London.²⁷

Thus, according to his 1853 *Modern School for the Organ*, Best had at least included both a third and a 1-foot rank in his design for Holmes’s organ.

Be that as it may, the basic idea for the Carillon stop in Manchester might have come from William T. Best, the final composition of the stop might have been designed by Cavaillé-Coll or have been the result of his discussions with Best.²⁸

A few descriptions from noteworthy persons in Cavaillé-Coll’s environment reveal how the stop was used.²⁹ Charles-Marie Philbert, lifelong friend and confidant, describes its solo use following the nature of its origin: when played *sempre stacatissimo*, it creates jolly, imitating effects. If one uses it as a mutation stop, it can be useful in the tutti, where it provides brilliance, due to its 1-foot rank. Therefore it is analogous to the German

26 The author points to the Nazard $2^{2/3}$ and Tierce $1^{3/5}$, referring to the *First Organ Book* of 1883.

27 Roger D. Tebbet, “W. T. Best and Organ Design,” *Organists’ Review* 87 (2001): 116.

28 Audsley gives the composition of a Carillon, designed by W. T. Best, that has breaks at c^0 , c^1 , and c^2 ; only in the two bottom octaves does it have a 1-foot rank and in the second and third octaves, it has only a $1^{3/5}$ -foot rank; see George Ashdown Audsley, *The Art of Organ-Building* (New York: Dodd, Mead and Company, 1905), 1: 450.

29 Jesse E. Eschbach, “Carillon,” ed. Douglas E. Bush and Richard Kassel, *The Organ: An Encyclopedia*, 2nd ed. (New York: Routledge, 2015), 92–3.

Scharf, a stop that organists should observe not to abuse.³⁰ Alexandre Guilmant considers it a very peculiar stop, suitable for concerts. One should add the Bourdon 8, using high tessitura and playing detached. Apart from this solo use, Guilmant provides a trio registration in adding the left hand, playing a soft Trompette stop (swell box closed) and supported by some pedal notes. This creates a light and jolly effect that prudently should not be overused.³¹ Finally, Charles Mutin, Cavaillé-Coll's successor, confirms its solo function as an imitation of small bells (adding the Bourdon 8 and playing staccato) and its role to substitute a mutation on its division.³² Guilmant's trio registration is a new way of using the stop, while the other two have their roots in eighteenth-century practice.

Epilogue

It was the 1810 Abraham Meere organ (II/P/17) of the Church of Our Lady's Ascension in Utrecht, an inspiring instrument that I played during my organist tenure from 1980–95, that raised my interest in the Carillon stop. It has a Great and an Oberwerk, to which a two-stop Pedal was added in 1895. The Oberwerk has both a Flageolet 1 and a three-rank Carillon stop as described by van Heurn (on the stop label, in Meere's spelling: "Carrlion 3 sterk Disc"!). Inspired by Beyens's description, I learned to use and appreciate the Carillon as a solo stop and to imitate the "Glockenspiel," to couple it to the Great plenum (whose mixture contains a third rank) or to use it in other combinations.

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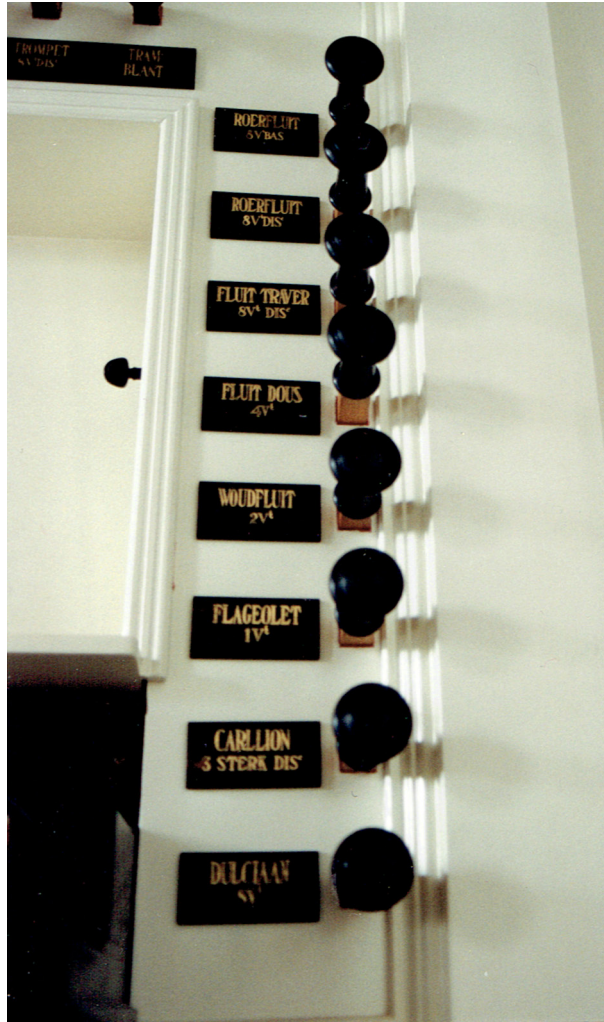
30 Charles Marie Philbert, *Causerie sur Le Grand Orgue de la Maison A. Cavaillé-Coll à Saint-Ouen de Rouen* (Avranches: Henri Gibert, 1890), 28.

31 Alexandre Guilmant, "La musique d'orgue," *Encyclopédie de la Musique et Dictionnaire du Conservatoire*, 2 (Paris: Delagrave, 1925), 1176. Kurt Lueders also mentions Guilmant's use of the stop, together with the Bourdon 8, in Nicolas Clérambault's *Basse et Dessus de Trompette* (see Lueders, "Reflections," 127).

32 Charles Mutin, "L'Orgue," *Encyclopédie de la Musique et Dictionnaire du Conservatoire*, 2 (Paris: Delagrave, 1925), 1107.



The 1810 Abraham Meere organ, here at its present location in the St. Aloysius Church in Utrecht. Photo: Cultural Heritage Agency of the Netherlands, Amersfoort, 1999.



Stop label detail; photo: Paul Peeters, 1993.

Appendix 1

*Organs by Cavallé-Coll with a Carillon stop*³³

- 1877: Manchester, Town Hall (III/P/43): Pos. Expr.: Carillon I–III
1878: Paris, Trocadéro (IV/P/66): Réc.: Carillon I–III
1880: Brussels, Royal Conservatory of Music (III/P/44):
Pos. Expr.: Carillon I–III
1880: Lyon, Saint-François-de-Sales (III/P/45): Pos. Expr.: Carillon I–III
1884: Paris, Comte de Chambrun (II/pdP/14 + 3 borrowed):
GO Expr.: Carillon III³⁴
1885: Saint-Servan, Sainte-Croix (III/P/37): Pos. Expr.: Carillon I–III
1885: Caen, Saint-Etienne (III/P/50): Pos.: Carillon I–III
1889: Toulouse, Saint-Sernin (III/P/54): Pos.: Carillon III
1889: Azpeitia, Basilica (III/P/36): Pos.: Carillon I–III
1889: Amiens, Cathedral (III/P/51): Pos.: Carillon III
1890: Rouen, Saint-Ouen (IV/P/64): Rec.: Carillon I–III
1894: Paris, Baron de l’Espée (III/P/40): Réc.: Carillon III
[now in Paris, Saint-Antoine des Quinze-Vingts]
1897: Lourdes, Basilique (III/P/40): Pos. Expr.: Carillon III
1898: Biarritz, Baron de l’Espée (IV/P/70): Pos Expr.: Carillon III
[now in Paris, Sacré-Cœur]
1898: Azkoitia, Santa-Maria (III/P/40): Pos. Expr.: Carillon I–III
1898: Armentières, Saint-Waast (III/P/50): Pos. Expr.: Carillon I–III
1898: Saint-Séver-sur-Adour, Abbey Church (III/P/36):
Pos. Expr.: Carillon I–III
1899: Paris, Saint-Augustin (III+P/52): Pos.: Carillon [I–III or III?]

33 The data about the organs and the stop names here below are taken from Jesse E. Eschbach, *A Compendium of Known Stoplists by Aristide Cavallé-Coll 1838–1898*, vol. 1, Aristide Cavallé-Coll. Aspects of his Life and Work (Paderborn: Peter Ewers, 2003).

34 Carolyn Shuster specifies the stop as Plein-jeu III, see Carolyn Jean Shuster-Fournier, “Les orgues de salon d’Aristide Cavallé-Coll,” *L’Orgue. Cahiers et Mémoires*, no. 57–58 (1997): 78. Originally the organ had only 12 stops; at some point, two unknown stops were added (e-mail communication from Jesse Eschbach, July 11, 2013); presently there is a Plein-jeu III, but it contains pipes from what had been a $1\frac{3}{5}$ rank, so one of the additional stops might have been a Carillon (e-mail communication from organ builder Nicholas Toussaint, July 10, 2013). The organ presently is in the Church of Saint-Christophe, Nort-sur-Endre.

In 1885, Gabriel Reinburg signed a proposal on behalf of Cavaillé-Coll for an organ to be built for Saint-Georges in Vesoul (II/P/30), with a Carillon I–III (130 tuyaux, i.e. two ranks start at g°, see appendix 3) on the Récit, but the instrument was never built.³⁵

Due to an unfortunate printing error, one could think that the organ of the Saint-Rémy at Amiens (rebuilt by Adrien and Salomon van Bever in 1900), already had a Carillon III in 1874. Salomon van Bever studied with Cavaillé-Coll in 1879–1880 and certainly became acquainted with the Carillon stop during his stay with Cavaillé-Coll, but the van Bever brothers started their own company in 1880 and they installed the Carillon stop in Amiens first in 1900.³⁶

In the organs listed in appendix 1, no division with a Carillon stop also has a Mixture. The Carillon may be considered a kind of substitute for a Mixture, providing brilliance.

35 Jean-Christophe Tosi, “Le grand orgue de l’église Saint-Georges de Vesoul au XIXe siècle.” *L’Orgue*, no. 251 (1999): 87–8.

36 See Marcel Degrutère, “Autour des orgues Van Bever du département de la Somme,” in *Mélanges d’organologie offerts à Jean-Pierre Felix par ses collègues et amis à l’occasion de ses septante ans*, ed. Jean Ferrard (Bruxelles: SIC, 2013), 149–50.

Appendix 2

*Organs by Cavallé-Coll with a Picolo 1 foot stop*³⁷

- 1856: Gent, Sint-Niklaas (III/P/40): Pos.: Flageolet 1
1858: Elbeuf, Saint-Jean (III/P/39): Pos.: Flageolet 1
1860: Mulhouse, Saint-Etienne (Rom. Cath.) (III/P/ 40):
Pos. Expr.: Picolo 1
1860: Carcassonne, Cathedral (III/P/42): Pos.: Flageolet 1
1861: Nancy, Cathedral (IV/P/63): Pos.: Picolo 1
1862: Paris, Saint-Sulpice (V/P/100): Pos.: Picolo 1
1862: Castelnaudary, Saint-Michel (III/P/39): Pos.: Picolo 1
1862: Bayeux, Cathedral (III/P/43): Pos.: Picolo 1
1863: San Sebastian, Santa Maria del Coro de Donostia (III/P/44):
Pos.: Picolo 1
1863: Versailles, Cathedral (III/P/46): Pos.: Picolo 1
1863: Paris, Notre-Dame de la Gare (II/pdP/22): Réc.: Picolo 1
1865: Gerbéviller, Mr. Ernest de Lambertye-Fornielle (III/P/37):
Pos. Expr.: Piccolissimo 1 [now in Bécon-les-Bryères, Saint-Maurice]
1865: Cologny, Mr. Maracci (III/P/44): Pos.: Piccolo 1
[now in Royaumont, Abbey Church]
1868: Paris, Notre-Dame (V/P/86): Grand-Chœur and
Pos.: Picolo 1 [two stops!]
1868: Paris, Trinité (III/P/46): Pos.: Picolo 1
1868: Marseille, Saint-Joseph (III/P/44): Pos.: Picolo 1
1869: Epernay, Notre-Dame (III/P/44): Pos.: Picolo 1
1870: Skipton, Bracewell Hall, Mr. Hopwood (III/P/41):
Pos. Expr.: Picolo 1 [now in Warrington, Parr Hall]
1872: Chaumont, Saint-Jean-Baptiste (III/P/36): Pos. Expr.: Piccolo 1
1873: Sheffield: Albert Hall (IV/P/64): Pos. Expr.: Piccolo 1
1874: Rennes, Cathedral (III/P/46): Réc.: Piccolo 1
1874: Lisieux, Cathedral (III/P/46): Réc.: Piccolo 1
1875: Amsterdam, Paleis voor Volksvlijt (III/P/46): Réc.: Piccolo 1
[now in Haarlem, Philharmonie]

37 The data about the organs and the stop names in Appendix 2 are taken from Eschbach, *Compendium*.

In 1875, Cavaillé-Coll made a proposal for a large organ for St. Peter's in Rome (V/P/124), an instrument that unfortunately never was built. The Solo-Expressif division would receive a Picolo 1, but also a Nazard $2^{2/3}$ and a Tierce $1^{3/5}$ – in other words both a Picolo 1 and a “Carillon décomposé.” The Grand-Chœur division was going to have a Sesquialtera III, based on 8 foot, of which the composition is not known.

The Picolo stop could be seen as a kind of substitute for a Mixture; in some organs, however, the Picolo is to be found on a division that also has a Mixture (for example: Lisieux 1874 and Amsterdam 1875, and Skip-ton 1870, where a Plein-Jeu was added, when the organ was enlarged and moved to Ketton Hall in 1875).

Appendix 3

Aristide Cavaillé-Coll: known compositions of Carillon stops

Two compositions for the Carillon stop can be found in two of Cavaillé-Coll’s notebooks, one two-rank, one three-rank, but basically they both point to the typical Dutch, three-rank composition:

1. “Différent notes,” Paris BnF, Rés. Vmd. ms. 50 (dated 1855–1868), n.p.

This small-sized notebook has two entries; the first one states that the Carillon has two ranks, $1\frac{3}{5}$ - and 1-foot, starts at c^1 and that it should be combined with an open 4-foot flute, thus creating the composition of 4-, $1\frac{3}{5}$ -, and 1-foot at the key of c^1 . The second entry specifies three ranks, starting at c^1 : Prestant 4, Tierce de la Doublette 2 [= $1\frac{3}{5}$], and Picolo 1.

2. Untitled and undated notebook (part of the Lapresté collection), by Jesse Eschbach (see Eschbach, *Compendium*, xvi) referred to as the “Shop Register,” Oberlin College, Oberlin (OH), Special Collections of the Conservatory Library of the Oberlin College and Conservatory.

The entry on p. 91 specifies three ranks, starting at c^1 : Prestant 4, Tierce de la Doublette 2 [= $1\frac{3}{5}$], and Picolo 1. A note is added, saying that if you have an open 4-foot flute, you do not have to build the largest rank [Prestant 4].

Known compositions of Carillon stops

Amongst the known compositions, four types can be discerned: type 1 and 2 have three ranks at $2\frac{2}{3}$ -, $1\frac{3}{5}$ -, and 1-foot, but their entries differ. Type 3 has only ranks at $1\frac{3}{5}$ - and 1-foot, but is the result of reducing the number of ranks from I–III to I–II. Type 4 does not have a $1\frac{3}{5}$ -foot rank, which is highly remarkable and creates some doubt about its authenticity.

Type 1

C $2^{2/3}$
g⁰ $2^{2/3}$ $1^{3/5}$ 1

Found in the following five organs:

1. Manchester Town Hall, 1877. Pos. Expr.: I–III.³⁸
2. Paris Trocadéro, 1878. Récit: I–III.³⁹ There is some uncertainty whether the first rank starting at C is $2^{2/3}$, and whether the additional ranks join at g⁰.
3. Caen St. Etienne, 1885. Pos.: I–III.⁴⁰
4. Toulouse St. Sernin, 1889. Pos.: I–III.⁴¹
5. Saint-Séver-sur-Adour Abbey Church, 1898. Pos.: I–III.⁴²

Type 1a

C $2^{2/3}$
c¹ $2^{2/3}$ $1^{3/5}$ 1

Found in the following two organs:

1. Lyon St.-Francois-de-Sales, 1880. Pos. Expr.: I–III.⁴³
2. Azpeitia Basilica, 1889. Pos.: Carillon I–III.⁴⁴

38 Audsley, *Art of Organ Building*, 1: 450.

39 Claude Noisette de Crauzat, *Aristide Cavaillé-Coll* (Paris: La Flûte de Pan, 1984), 34.

40 Robert Davy, *Die Orgel der Abteikirche St. Etienne in Caen 1885–1985* (Schwarzach: Glatter-Götz, 1985), 48.

41 Pierre Salies et al., *L'Orgue de l'Insigne Basilique Saint-Sernin de Toulouse* [avec plans] (Toulouse: Orgues Méridionales, 1979), 124.

42 E-mail communication from organ builder Robert Chauvin, August 8, 2013; probably due to a printing error, a Carillon II–III is given in Robert Chauvin, "La restauration du grand orgue Aristide Cavaillé-Coll de Saint Sever Cap de Gascogne," *Les Facteurs d'Orgues Français*, no. 23 (1999): 23.

43 Jean Fellot, "Cavaillé-Coll et l'école d'orgue française," in *Orgues Historiques* 11 (booklet accompanying the EP of the Cavaillé-Coll organ in Saint-François-de-Sales (Lyon: no pub., 1965,) 27.

44 E-mail communication from organ builder Denis Lacorre, September 15, 2014.

Type 1b

C			1
f#°	2 ² /3	1 ³ /5	1

Found in one organ: Rouen St. Ouen, 1890. Récit: I–III.⁴⁵ The pipework arrangement is rather special: the 1-foot rank from C-f° is placed on the windchest, whereas the three ranks from f#° are mounted.

Type 2

C	2 ² /3	1 ³ /5	1
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Found in the following three organs:

1. Paris, Baron de l’Espee, 1894. Grand-Rec. Expr. III.⁴⁶ Most likely the composition was as is shown here in type 2.
2. Azkoitia, Santa-Maria, 1898. Pos. Expr.: Carillon III.⁴⁷
3. Biarritz, Baron de l’Espee, Château Ilbaritz, 1898. Pos. Expr.: III.⁴⁸

Type 3

C		1
g°	1 ³ /5	1

Found in one organ: Saint-Servan, Sainte-Croix, 1885. Pos. Expr.: I–II. The originally planned composition (I–III) was most likely of type no. 1. After separation of the 2²/3-foot rank into an individual stop, the composition probably became what it is now (type 3). In the present stop, only three

45 René Verwer, *Die Cavallé-Coll-Orgel der Abteikirche St. Ouen in Rouen* (Langen bei Bregenz: Günter Lade, 1991), 96.

46 Jean-Louis Coignet, “Le Grand Orgue de Saint-Antoine,” in *Les orgues Cavallé-Coll – Merklin de l’église Saint-Antoine des Quinze-Vingts à Paris*, ed. Jean-Claude Castagneyrol et al. (Paris: Cariscript, 2005), 24–6.

47 E-mail communication from organ builder Denis Lacorre, September 15, 2014; Elizondo Iriarte also specifies III ranks, see Esteban Elizondo Iriarte, “La organería romántica en el país Vasco y Navarra (1856–1940)” (PhD thesis, Universidad de Barcelona, 2001), 165; Eschbach gives I–III (see Eschbach, *Compendium*, 581).

48 Daniel Roth and Günter Lade, *Die Cavallé-Coll-Mutin-Orgel der Basilika Sacré-Cœur in Paris* (Langen bei Bregenz: G. Lade, 1992), 136. Pipe work documentation by René Verwer and Günter Lade.

pipes survive from the original one: two of a $1\frac{3}{5}$ -foot rank and one of a 1-foot rank; in 1962, the original stop was changed into a new Carillon I–II ($1\frac{3}{5}$ and $1\frac{1}{3}$), with the $1\frac{3}{5}$ -foot rank starting at g° .⁴⁹

Type 4

C	$2\frac{2}{3}$		
g°	$2\frac{2}{3}$	2	
$d^{\#1}$	$2\frac{2}{3}$	2	$1\frac{1}{3}$

Found in one organ: Brussels Royal Conservatory of Music, 1880. Pos. Expr.: I–III.⁵⁰ This Carillon is exceptional, because it lacks a $1\frac{3}{5}$ -rank and has a $1\frac{1}{3}$ -rank instead. On being asked, the author confirmed to me, that this seems to be the original composition.⁵¹

Charles Mutin composes the stop of the same ranks as those in types 1 and 2, but does not specify at which key each of the ranks starts. He scales the pipes like the open ranks of a Cornet.⁵²

49 E-mail communication from organist Eric Cordé, July 11, 2013; Prod'homme specifies 168 pipes, which would make a three rank-stop from C, but this is not correct; see Francis Prod'homme, "Discovering important organs in Brittany and Manche," *Organists' Review* 91 (2005): 106.

50 Luk Bastiaens, "Het Aristide Cavaillé-Coll Orgel van het Koninklijk Conservatorium te Brussel," *Orgelkunst* 23, no. 2 (2000): 108.

51 I found another composition with a $1\frac{1}{3}$ -foot rank (but it also has a 1-foot rank), built by the Stoltz brothers in their 1889 instrument for the church of San Pedro Apóstol in Bergara (Spanish Basque); the stop is II–III and has ranks at 4-, $1\frac{1}{3}$ - and 1-foot, see Elizondo Iriarte, *organería romántica*, 216, 233; the author does not provide a detailed composition.

52 Mutin, "L'orgue," 1107.

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