## HISTORY

The Perpignan cathedral dates, for the part called "Old Saint John", to the XIth century. This building, originally the parish of Perpignan, consacrated in 1025, was disused in 1509, when the consecration of the collegiate church Saint John the Baptist would become a cathedral in 1601, following the transfer of the residence of the bishop and of the Elne chapter.

This building has reached our era in its totality. It is composed of Old Saint John, the first church, of the minor basilica cathedral Saint John the Baptist with a large, single nave, whose vaultes land on pillars of chapels, and the cloister-cemetery, with its funerary chapel.

The bell tower containing a carillon is located on the lateral nave of Old Saint John, and consecrated to worship. If the faithful or the visitor who makes their way towards the cathedral can notice on the facade the clock tower with its ironwork of the XVIIIth century, which holds the hour bell dated to 1418 , he must walk towards the church square of the first church to discover the carillon implanted on the northern part of the cathedral.

From an architectural point of view, the belfry of Old Saint John built with a square Roman base, with its original decorative sculptures, on which was raised an octogonal tower whose stories date successively from 1775,1776 and 1778 . This tower, of neoclassical style, is of red bricks and marble facing. Originally, the construction was meant to include, other than the worship services' bell ringing, a clock on the four faces of the tower. On the last story, the movable shutters show us the location of the second oldest of France's large carillons ${ }^{1}$, after Châtellerault ${ }^{2}$.


From its reconstruction in the XVIIIth century, the bell tower contains five bells, one of which is a swinging bell. Unfortunately, because of the state of the archives, it is not possible to precisely retrace the history behind these bells, a large number of which were melted down during the Revolution, by decree of 5 Thermidor of the year 1 (July 23, 1793), and the rest reorganized after the 1801 Concordat. According to the terms of the 1873 contract, the bells were sold to churches or returned to the bell founder Eugène Baudouin.

To our knowlege, only one bell exists, which is the bell founded in 1818 by JeanBaptiste De Charme to commorate the visit to the Roussillon by Louis-Antoine de Bourdon, Duke of Angoulême, and sold for 3,500 francs to the Rivesaltes parish church of Saint Andrew. Just by looking at its diameter, this bell, which is still in service, weighs approximately one ton.

The Saint John the Baptist Cathedral owes its carillon to the high priest Jean-François Metge who marked his function as priest (1864-1902) by his desire to restore and beautify the cathedral, as well as putting its furniture into value. As of 1872, he wished to reorganize the bell ringing using the existing bells. The future ringing must be an instrument equal to the cathedral itself, for the convocation of christians to prayer and to accompany the

[^0]important events in human life.
At first, upon request of the high priest and artisans, the treasure of the church parish, canon Thomas Bartre, asks his compatriot priest Barnole, economist of the Belsunce School of Marseille, to get information on the possibility of harmonizing the existing bells. Information found, " [...] les cloches peuvent être ramenées au ton que l'on désire, sans les refondre et sans les descendre du clocher, pourvu toutefois que l'écart ne soit à peine, au maximum que d'un demi-ton s'il faut les baisser et que d'un quart de ton s'il faut les hausser." ${ }^{3}$

Impossible to give an estimate for the transformation of the existing bells without them, Eugène Baudouin, bell founder in Marseille, came to Perpignan in May 1873. Following his visit, he prefered reharmonizing the existing bells, and proposed a ringing of eight bells based on the bourdon of 1,025 kilos.
"Si le Conseil décide de faire toute la sonnerie, ce serait beaucoup mieux que de faire ce replâtrage. Par la raison que l'harmonie des cloches serait beaucoup meilleurs, étant faites toutes dans les mêmes proportions du même métal et de la même fusion, engagez à suivre ce projet, je préférerais pour première cloche un mi de 1025 K . et la sonnerie toute neuve que ce que vous pouvez avoir en conservant vos vieilles cloches." ${ }_{4}$

To have the church council's support, in his lettre dated November 25, 1873 to canon Thomas Bartre, the bell founder again wishes to come to Perpignan to finish the project for the interest of all concerned. It is from this second visit that the project comes about on December 2, 1873 which will edify a carillon of 15 bells in the existing bell tower, without any modification.

The seven articles of the project give with precision the characteristics of the future carillon :

- 15 bells must cover two octaves, with a bourdon of C below middle C of approximately 2,000 kilos, for a total weight of 7,478 kilos of bronze. The metal fittings and fixtures have a total of 5,935 kilos ;
- the metal composition will be 78 parts red copper an 22 parts tin ;
- the instrument will be tuned just under the tuning fork note, put into force during the international Congress having taken place in Paris in 1859 ( 870 vibrations to the second at a temperature of $18^{\circ} \mathrm{C}$ );
- this carillon will be unique in that all of its 15 bells can be swung ;
- the conditions for the tuning of the bells between themselves has obviously been established, under penalty of refusal, at the charge of the founder to replace them ;
- the delivery will take place at the end of the month of May 1874.

The fabrication of the fifteen bells took place in the workshop, in Marseille, during the month of September 1874. The reason for the carillon being cast far from the belfry of Old Saint John to which it was destined, is explained by the numerous disruptions in the transportation field during the second half of the XIXth century, the era which sees the end the time that the bell founders moved from place to place at will in relations to work orders.

In his letter of September 20, 1874 to priest Jean-François Metge, Eugène Baudouin

[^1]related the evolution of the work : "[Les cloches] que j'ai juger de refaire ont été fondue[s] avant hier, la fonte a bien réussi, hier on les a sorti[es] de la fosse et rien n'annonce qu'il y ait le moindre défaut. Demain et après demain on va les débarasser des moules et Mercredi nous essayerons l'accord si tout va bien dans quinze jours tout sera pret à partir. Les deux premières et les 7 dernières sont complettement terminées depuis 15 jours. Nous touchons donc à la fin de cet important travail." 5

It is surprisin, in that this extract shows a high level of failure - six bells out of fifteen - for a foundry which had a fine reputation for over three centuries, a tradition handed down from father to son.

The bells, whose delivery was forseen at the end of the month of May, was hastily consecrated November 15, 1874, according to the ancient rite, by Monseigneur Etienne Ramadie in the nave of the cathedral, in front of the main alter. Installed on a temporary framework, under a peristyle ornated with hangings, garlands and flowers, the carillon had a great welcome. The commission was composed of musicians from the cathedral and from two regiments of Perpignan : Bonaventure Petit, organist, Alexis Sèbe, substitute organist, Emile Petit, chapel master, priest Julien Delhoste, retired chapel master and musicographer, the music leaders of the 15 th Line and of the Foot Soldiers battalions. Contrary to the religious or royalist press, the jury, presided by Bonaventure Petit, upon hearing the new carillon, "[...] éprouve la plus fâcheuse impression - sons confus - plusieurs notes fausses. Une note indiquant les cloches qui ne sont pas d'accord est remise par Mr Petit à Mr Baudouin. Celui-ci promet de corriger ces défauts. D'ailleurs la vérification faite dans l'église, vaisseau sonore est faite dans les plus mauvaises conditions. On consent à suspendre tout jugement." 6

Now, even thought it has hesitations, the commission cannot give a good judgement of the carillon, after what Eugène Baudouin said, and accepts its installation in the bell tower of Old Saint John. As one can expect, the sound was still off pitch, even though the responsibility was thrown on the inexperience of the cathedral carillonneur. To fix that, Clément fanot, carillonneur of the parish church Saint Didier of Avignon, was called upon, at the initiative of Eugène Baudouin, to give to "[...] sonneur des idées fixes sur le Carillon. ${ }^{7} 7$ Following his visit and upon request of the bishop of Perpignan, he writes a circumstantial report refusing the work by the founder.

After all these events, Eugène Baudouin, who said he was responsible for his work and would repair the imperfections to uphold his honour, begins on December 7, 1874, to fix certain bells, taking into consideration what was said by different experts. Nonetheless, since he always inspired confidence among the factory workers by his friendly manners, he skillfully clears himself from all responsibility in case of failure.
"Je soussigné Eugène Baudouin, fondeur à Marseille, M'engage envers la fabrique de l'Eglise Cathédrale de Perpignan de retoucher à mes frais la note d'une ou de plusieurs cloches de la sonnerie que j'ai fournie à la dite Cathédrale, si toute fois et par la suite la

[^2]fabrique trouve qu'il y en ait qui ne soient pas d'accord entre elles. Mais dans ce cas l'avis de la fabrique ayant été suivis par moi je ne serais plus responsable des suites de cette opération de l'accord." 8

The complexity of the experts and the parties' thoughts on the subject between the certificate of Eugène Baudouin, mentioned above, and the judgement of the Commerce Court of Perpignan of March 24, 1876, rapidly reached its height. During this period, two new commissions, composed of notables and new and important musicians, were reunited by the clergy's initiative. In response, the bell founder wished to have a second opinion by another commission who, according to him, must be more independant. At the same time, to slow down or divide the concerned parties by this affair, Eugène Baudouin wrote all those working for the cathedral and the diocese in charge of the dossier. At the same time, exasperation was hightened by the launching of treaties in the name of the bell founder and the complaints of those living in Perpignan, tired of hearing the out of tune carillon.

Confronted with this situation, on February 18, 1876, the Prefecture Council of the Pyrénées-Orientales gives its endorsement to the parish council to "[...] ester en justice contre le Sr Baudouin, fondeur à Marseille, pour le contraindre à remplir ses engagements au sujet du carillon par lui fourni à la dite Eglise [...]." ${ }^{\prime}$

Because the two parties could not agree, the church council of the cathedral finds itself before the Commercial Court of Perpignan. In its decision of March 24, 1876, the Court, to establish the truth, name independant experts Gabriel Baille, director of the Perpignan Conservatory, Joseph Coll, director of the Perpignan Theater, Paul Mériel, director of the Toulouse Conservatory, from which would be added the carillonneur of Saint Sernin church in Toulouse and the representative of the Ernest Bollée Foundry from Le Mans, Amédée Bollée.

After this judicial decision, Eugène Baudouin will propose several out of court arrangements, each one refused by the canon Thomas Bartre.
"Votre lettre, en date du 29 mai dernier, par laquelle vous répondez à celle que vous a fait écrire par moi, après en avoir délibéré le Conseil de fabrique de la cathédrale me fait de la peine par rapport à vous.

Elle me montre que vous ne voulez pas sérieusement arrêter le procès. Sans doute vous y faites diverses propositions pour un accommodement à l'amiable, mais ces propositions ne sont nullement acceptables. C'est ce qui me fait supposer que vous voulez plaider de nouveau." ${ }^{10}$

From now on, just before the trial, the parties do not communicate with one another except through their respective lawyers.

The Court of Montpellier in its decision on November 24, 1876 confirms the judgement of the firt judges dismissing the founder, condemned to pay all costs. Otherwise, the Court decides to confirm the nomination of the five experts, following the example of

[^3]the Commercial Court of Perpignan, to get to the bottom of things.
In front of this second judgement and the appraisal dated March 26, 1876 by Amédée Bollée representing the Ernest Bollée Foundry, Eugène Baudouin halts his efforts to continue the affair to his advantage. An important dossier, composed of letters, treaties and accounts, exchanges between the two parties, balance the difference to the profit of the cathedral council, which continued as owner of the out of tune carillon.

Having won, and far from being discouraged, the high priest Jean-François Metge undertakes the recasting of the carillon, keeping in mind its southern characteristics, within one month with Amédée Bollée. Nonetheless, in his letter dated April 21, 1877, the founder proposes an " $[\ldots]$ système de montage [...] à battant rétrograde, permettant la haute volée, tenant le milieu entre les systèmes Nord et Midi. [Selon lui, l'effet] des cloches est plus considérable qu'avec le système méridional." 11

Also, he suggest, in view of the World's Fair in Paris in 1878, to add two or three chromatic octaves in the upper register and a keyboard for his invention. All this would be at his entire charge, leaving the hight priest free for an eventual acquisition.

The estimate of June 7, 1877, outlined during an intermediary proposition in May 1877, immediately ends the contract between the Ernest Bollée Foundry, represented by Amédée Bollée, and the cathedral council.

The reading of the contract gives precise characteristics as to the new instrument:

- sixteen bells must cover two octaves, with a bourdon in D weighing 1,757 kilos, for an approximative total weight of 6,408 kilos of bronze ;
- the composition of the metal will be 785 parts red copper and 215 parts tin ;
- the instrument will be tuned to the tuning fork in vigor since 1859 ;
- the swinging bells, whose system will be designed for both northern and southern usages, will be composed of four bells (D, E, F\# and A) ;
- the church council reserves the right to resell all or a part of the old bells to the parishes, the founder engaging himself to take all those which are not sold ;
- the carillon will be presented at the World's Fair in Paris at the cost of the founder, following the conditions in the letter dated May 16, 1877 : complete with the upper octaves and the recently patented keyboard.

So, the future carillon for the cathedral will prove melodic and harmonious, as in the instruments found in the north of France. The bell's consonance and being in harmony with those around her are more important than a rhythmic approach. "Les carillons étendus, bien harmonisés et organisés pour l'exécution sérieuse de la musique, sont inconnus dans le Midi, le vôtre acquerrait promptement une bonne réputation. En vous faisant l'offre de l'exposer, c'est vous garantir le succès. Ma position par rapport à la fonderie ne me permet pas d'échouer. Mieux vaudrait ne pas exposer." ${ }^{12}$

The casting in the workshop and the assembly at the World's Fair were done in record time, since the casting took place at the end of January, beginning of February 1878

[^4]and that the carillon was complete May 1, 1878. For Amédée Bollée, "[...] jamais un carillon de 40 cloches [sic] n'aura été fait dans un si court espace de temps. Il est vrai que toutes les études en étaient faites." ${ }^{13}$

The World's Fair in Paris in 1878 was an enormous success - two million visitors the first day - but the financial results were disastrous. The Public Revenue Department had to pay the deficit of $37,704,764$ francs. This exposition, whose goal was to give publicity to the largest number of industries and to make the sciences more popular, reunited 52,835 exhibitors, took up 800,00 square meters of display area and took in 16,100,000 visitors.

As for the carillon, placed on the esplanade of the Champs de Mars, from Amédée Bollée's letter of August 10, 1878, the carillon was a great success, a few thousand people coming to hear the remarkable, daily concerts from 2:00 to 4:00 p.m.

The national press wrote about the instrument and had illustrated articles. The Magasin Pittoresque, for example, wrote about the patented keyboard :
"Les carillons sont généralement joués au moyen d’un gros cylindre armé de pointes, semblable aux cylindres des boîtes à musique : aussi donnent-ils toujours les mêmes airs tant que le pointage du cylindre n'est pas changé. Le grand carillon de l'Exposition, au contraire, se joue comme le piano, à l'aide d'un clavier sur lequel un pianiste, fût-ce une jeune fille de dix à douze ans, peut promener ses doigts selon sa fantaisie, et plaire à la population qui l'entend avec les airs nouveaux qu'elle voudra lui offrir.

Il y a eu et il y a encore des carillons à clavier ; mais ils causent à l'artiste une fatigue inouïe dans tous ses membres ; car il est obligé de fournir la puissance motrice nécessaire au tirage des battants des cloches souvent très-gros, et pour y suffire il frappe des pieds et des poings sur des leviers en bois.

Dans le nouveau système de M. Ernest Bollée, la force motrice est fournie soit par un ou deux manœuvres, soit par un moteur à vapeur ou à gaz. Il s'agit de la mettre à la disposition de l'artiste, et l'inventeur y est parvenu par une très-heureuse idée." 14

During the World's Fair in Paris, Aristide Cavaillé-Coll, the most well-known organ maker of the XIXth century, who was responsable for the reconstruction of the great cathedral organ - the facade pipes are 24 feet high - from 1854 to 1857, a masterwork of organ making of the Romantic Period, came to give his appraisal of the carillon upon the request of the high priest Jean-François Metge. Reading the letter from Amédée Bollée to Cavaillé-Coll, that we date to this period, it seems that the carillon should take its place in its entirety in Perpignan, with its 46 bells and its patented keyboard.


After the World's Fair, the carillon was brought to Le Mans to verify it and to install it in a temporary bell tower, most likely identical to that of the World's Fair, in the grounds of the Bollée family home. Until then, "[...] nous jouerons le carillon d'ici son départ qui

[^5]sera le plus rapproché que je le pourrai." ${ }^{15}$
It was sent by train on May 8, 1879. During this time in Perpignan, the work already begun on the existing bells upon request by the clergy, without authorization of the architect of the diocese Eugène Ewald, was stopped by order of the prefect Ange-Michel Filippini.

Between this date and the final installation of the instrument in the belfry, six long years would pass with many events taking place, two of which were quite significant.

In 1880 , the bell tower of Old Saint John could not house the carillon because of it not being covered as we know it today.
"Mon ouvrier monteur me dit que la tour est découverte et qu'il pleut à l'intérieur, il ajoute qu'il ne croit pas que l'on puisse dans ces conditions installer le clavier avec ses transmissions.

Je vous serai bien obligé de faire couvrir au moins provisoirement pour que notre installation ne subisse pas la détérioration.

De plus il y aura des précautions à prendre pour que le montage des barres de fer destinées à terminer vos travaux au sommet de la tour, ne brise pas nos transmissions, mais cela me paraît facile." 16

Five years later, on the March 13, 1885, the founder asks the Factory to decide whether the priest can financially acquire the thirty small bells. In other words, he finds himself yet again "[...] dans l'embarras en présence de trois projets d'installation qui ne se ressemblent aucunement :
$1^{\circ}$ Vos 16 cloches avec l'ancien clavier
$2^{\circ}$ Tout l'ensemble avec le clavier de l'exposition
$3^{\circ}$ Toutes les cloches avec un clavier du genre de celui que vous avez mais plus étendu." ${ }^{17}$

The forty-six carillon bells, who in the mean time were blessed in the nave of the cathedral by Monseigneur Emile Caraguel on Sunday May 2, 1880 after Vespers, would finally take their place with the traditional keyboard, called "punching keyboard", in the autumn of 1885 .

From this long period, one must recognize the perseverence of high priest JeanFrançois Metge since it took twelve long years to acquire a carillon worthy of his cathedral.


Between its final installation and the electrification of it in 1954, the people of Perpignan heard regularly the swinging bells, rung manually or with the feet.

Unfortunately, concerning the instrument itself, it was not used because the art of carillon was not a specialty in the south of France. Out of the sixty-nine years of inactivity,

[^6]we only possess the Angelus theme, from the organist Bonaventure Petit, that we can still hear today, since enriched with two variations.

At the end of the many years, the instrument was abandoned, and even the occupant, during the Second World War, did not exercise "the right of bells" following the custom dating to the Middle Ages.

In 1953, at the initiative of hight priest François Nuixa, of priest François Millasseau and of Marcel Bénavail, the parish decided to electrify and automize the carillon to return it to use, following the style of the automatic ringing to make up for those responsible for the bell ringing during the religious services and the carillonneur for the musical part of the service. The project proposed to automize the swinging bells and the sounding of the death knell as well reproducing the recorded pieces of music.

The electrification of the ringing during the religious services justified itself - and still does - because it easily replaced the use of four bell ringers, the musical part, by its unexpressive, electrical touch, ended up being in vain, because it was impracticable for the musicians.

The transformation of the carillon from September to December 1954 was made by the Bach Brothers of Metz. The instrument, welcomed on Christmas Eve, included "[...] un matériel très important, comprenant des centaines de mètres de câbles électriques, des électro-aimants, trois énormes tableaux de connexion, quatre moteurs pour la volée, neuf moteurs remplaçant l'électro-aimant des grosses cloches, etc... Une charpente en fer a été édifiée pour soutenir le matériel.

Dans la sacristie de la chapelle Saint-Gaudérique se trouve un tableau de commande sur lequel sont inscrits, au-dessus de boutons, les noms des sonneries rituelles nécessaires aux cérémonies : mariage, glas des enfants, glas des adultes, grande volée, etc...

Au premier étage de la sacristie est aménagée, dans une pièce à cet effet, une console avec un clavier identique au clavier d'un piano avec 46 touches, chaque touche correspondant à une cloche. Sur ce clavier, l'artiste exécutera des morceaux de musique appropriés aux cloches." 18

Very quickly, after use of the piano-like keyboard and the electrical striking of the bells, the system turns out to be an undeniable failure. For the second, consecutive time, only the Angelus, the four swinging bells and the death knell were used in the life of the Saint John the Baptist parish.


After the decree to make the carillon an Historic Monument on june 20, 1990, the State decided to begin a restoration project following the project developped and presented by Eric Brottier, advisorary technician for the Cultural Ministry.

[^7]The commission, being an expert in the organ and carillon field, sent a favorable opinion to the Regional Direction of Cultural Affairs of the Languedoc-Roussillon, who in turn called upon Brotttier, the advisory technician, to write up the needs permitting to publish an offer. Following the procedure, after opening the envelopes, the companies France Carillon of Hérépian (Hérault) and André Vœogelé of Strasbourg were retained for, respectively, the mechanical and the automatic parts of the project.

The dismantling, begun on february 6,1995 , followed the orientation chosen by the project manager. The restoration returned the carillon to its original state, in that the instrument would be the oldest example of a mechanical system conserved in its original state. Putting the instrument back into working order included the renovation of the movable shutters, of the mechanics, of the console and all the wiring that leads to the bells. They were taken down, cleaned, put back up and readjusted according to the plans.

After its reception on September 20, 1996, Perpignan and the Church now took charge of making the carillon an instrument of value, culturally and religiously.

The clergy recommends "[...] en qualité d'affectataire que soient prises toutes les dispositions utiles à sa mise en valeur et au bon fonctionnement du Carillon, instrument exceptionnel et sans égal dans tout le Midi de la France." ${ }^{19}$ and names the carillonneurs by episcopal nomination, a unique procedure in France. Moreover, each time the carillon is rung is controlled by a ruling, written after the restoration.

The regional groups - the town of Perpignan and the regional administrative bodies of the Pyrénées-Orientales (ADDMCT. 66) - , bring their financial backing and regularly ask for the carillon's participation in the diverse cultural activities.


So, as the State wished, the carillon became an instrument which could not only be found in the north of France and Benelux, but also in the extreme south of France.

The work engaged since 1996 by the State, its owner, by the clergy, its appointer, the regional groups ands its carillonneurs, the users, continues to put into value this unique part of the local heritage, silent for over 100 years.

English translation : Elizabeth Graves-Vitu

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[^0]:    1 "A carillon is a musical instrument composed of tuned bronze bells, which are played from a baton keyboard. Only those instruments having at least 23 bells will be taken into consideration." (Statutes of the World Carillon Federation, 1978)
    2 Saint-Jacques Church, fifty Bollée bells (1867) and, added in 1952, two Paccard bells. Bourdon weighing two tons.

[^1]:    3 " $[\ldots]$ the bells can be retuned, without recasting them and without taking them down from the bell tower, but only if tuned a minimal distance between each tone, at the maximum one-half a note if it needs to be lowered and but one-fourth a note if it needs to be raised." Archives Départementales des Pyrénées-Orientales (A.D.P.O). 22 J 104. Letter from priest Barnole, economist from Ecole Belsunce in Marseille, to canon [Thomas Bartre] (October 27, 1872).
    4 "If the Council decides to have recast all the bells, it would be much better than to replaster them. The harmony of the bells would be much better, considering that all the bells would be of the same proportion, the same metal and of the same smelting, if I take on this project, I prefer that the first bell is an E of 1,025 kilos and that the bells are new instead of what you could have in keeping the old bells." A.D.P.O. 22 J 104. Letter from Eugène Baudouin to canon [Thomas] Bartre (July 7, 1873).

[^2]:    5 "[The bells] that I felt needed to be redone were cast the day before yesterday, the casting a success, yesterday we took them out of the ditch and there are no signs of the least fault. Tomorrow and the day after tomorrow we will take off the molds and Wednesday will try the tuning. If all is well in fifteen days everything will be ready to go. The first two and the seven last have been completely finished for 15 days. We are reaching the end of this important job." A.D.P.O. 22 J 104. Letter from Eugène Baudouin to [Jean-François] Metge, priest of the cathedral (September 20, 1874).
    6 "[...] have the unfortunate impression - confused notes - many false notes. A letter was given by Mr. Petit to Mr. Baudouin indicating that certain bells were not in tune. He promised to correct the faults. Morever, the verification made in the church, thought a sonorious nave, was made in the worst conditions. We consent to suspend all judgement." A.D.P.O. 22 J 104. Taken from "Notes d'audience" of the church council of the decision of March 24, 1876 ordering an expert's opinion.
    7 "[...] the bell ringer an idea of the Carillon." A.D.P.O. 22 J 104. Report from Clément Fanot, carillonneur of the Saint-Didier parish in Avignon, to the bishop of Perpignan.

[^3]:    8 "I the undersigned Eugène Baudouin, bell founder of Marseille, commit myself concerning the Cathedral carillon of Perpignan to pay for any recasting of one or many bells of the carillon that I furnished to the said Cathedral, if however and following the casting there are bells which are out of tune. But in this case the advice of the factory having been followed by me, I will not be further responsible for the further results of this agreement." A.D.P.O. 22 J 104. Certificate from Eugène Baudouin (December 7, 1874).
    9 "[...] bring a lawsuit against Mr. Baudouin, bell founder of Marseille, to force him to fulfill his engagements concerning the carillon furnished by him of the said Church [...]." A.D.P.O. 22 J 104. Minutes of the Prefecture council of the Pyrénées-Orientales (February 16, 1876).
    10 "Following our correspondence and relating to your latest letter, dated May 29, the parish council of the cathedral and I are quite upset with you. / It shows me that you do not want to seriously stop the legal procedure. No doubt you make diverse propositions for an out of court settlement, but these propositions are in no wat acceptable. It is this makes me believe you want to plead again." A.D.P.O. 22 J 104. Letter from [canon Thomas Bartre] to Eugène Baudouin (June 1, 1876).

[^4]:    11 "[...] assembly system [...] a reactionary clapper, permitting the high swing, and reflecting both the northern and southern systems. [According to him, the effect] of the bells is more impressive than with only the southern system." A.D.P.O. 22 J 104. Letter from Amédée Bollée to [Jean-François Metge], priest of the Cathedral (April 21, 1877).
    12 "Extensive carillons, well harmonized and organized for the serious execution of music, are unknown in the south of France, but yours promptly acquired a good reputation. Giving you the opportunity to expose the carillon, it will guarantee you a success. My position in connection with the foundry doesn't permit me to fail. It would be better not to display it." A.D.P.O. 22 J 104. Letter from Amédée Bollée to [Jean-François Metge], priest of the Cathedral (May 16, 1877).

[^5]:    13 "[...] never has a carillon of 40 bells [sic] been made in such a short amount of time. It is true that all necessary reseach had been considered." A.D.P.O. 22 J 104. Letter from Amédée Bollée to church council treasurer (January 30, 1878).
    14 "Carillons are generally played by a large cylinder with points, much like music box cylinders : giving the same tunes as long as the points on the cylinder are not changed. The great carillon of the Exhibition, on the contrary, is played like a piano, with the help of a keyboard on which a pianist, even a young girl of ten to twelve years old, can easily play, and please those hearing it with new tunes that she would like to offer to them. / There have been carillons with keyboards ; but it was exhausting for the artist ; because he was obliged to be strong enough to bring the clappers to the sometimes very large bells, and to do it he struck his feet and his fists on wooden levers. / In Mr. Ernest Bollée's new system, one's strength is limited to one or two movements, either by a steam or gas motor. He means to make it available to the artist, and the inventor has done so and is quite pleased." S.N.A. "La fabrication des cloches. Mécanique du grand carillon de l'Exposition", Magasin Pittoresque, tome XLVII, livraison 39, Septembre 1879, pp. 311-312.

[^6]:    15 "[...] we will play the carillon from here, and whose departure will be made as soon as I can make it." A.D.P.O. 22 J 104. Letter from Amédée Bollée to [Jean-François Metge], high priest of the Cathedral (December 16, 1878).
    16 "My assembly worker tells me that the tower is open and that rain can fall inside, he adds that he doesn't believe that we can put the keyboard with its wire transmissions under these conditions. / I would be obliged to temporarily cover it, so that our installation does not deteriorate. / I may add that there are precautions to take so that the assembly of the steel bars used to finish the work at the height of the tower, does not break our transmissions, but that seems to me to be easy." A.D.P.O. 22 J 104. Letter from Amédée Bollée to [Cathedral treasurer] (April 21, 1880).
    17 " $[\ldots]$ in the predicament of offering three installation projects which are unlike each other : / $1^{\circ}$ Your 16 bells with the old keyboard $/ 2^{\circ}$ The entire carillon with the exhibition keyboard $/ 3^{\circ}$ All the bells with a keyboard like you have, but more extensive." A.D.P.O. 22 J 104. Letter from Amédée Bollée to Cathedral treasurer (March 13, 1885).

[^7]:    18 "[...] very important material, consisting of hundreds of meters of electrical cables, electrical magnets, three enormous connection tables, four motors for the swinging bells, nine moters replacing the electrical magnet of the larger bells, etc... A metal framework was built to support all the material. / In the sacristy of the Saint Gaudérique chapel one can find a command board where it is written, above the buttons, the names of the ritual ringing necessary for the ceremonies : marriage, the death knell for children, the death knell for adults, the four swinging bells, etc... / On the first floor of the sacristy a console with an identical keyboard like that of a piano keyboard with 46 keys, is installed in a room especially made for that. On this keyboard, the musician can play pieces of music appropriate for bells." CAFFE Henri. "L'électrification du Carillon de la Cathédrale permettra d'apprécier toute la richesse de ses harmonies", Le Journal L’Indépendant, n ${ }^{\circ}$ 306, 24 décembre 1954, p. 3 col. 4.

[^8]:    19 "[...] that all means be used to upgrade and upkeep the Carillon, an exceptional instrument and without comparison in all the south of France." FORT André (Monseigneur). "Nomination [des carillonneurs]", Peuple de Dieu: Revue diocésaine de Perpignan, $\mathrm{n}^{\circ} 13$, 10 juillet 1996, p. 419.

